Official Journal
of the European Union

EN
L series

2023/2486

21.11.2023

COMMISSION DELEGATED REGULATION (EU) 2023/2486

of 27 June 2023

supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives and amending Commission Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 ([1]), and in particular Articles 8(4), 12(2), 13(2), 14(2) and 15(2) thereof,

Whereas:

(1) Regulation (EU) 2020/852 establishes the general framework for determining whether an economic activity qualifies as environmentally sustainable for the purposes of establishing the degree to which an investment is environmentally sustainable. That Regulation applies to measures adopted by the Union or by Member States that set out requirements for financial market participants or issuers in respect of financial products or corporate bonds that are made available as environmentally sustainable, to financial market participants that make available financial products, and to undertakings that are subject to the obligation to publish a non-financial statement pursuant to Article 19a of Directive 2013/34/EU of the European Parliament and of the Council ([2]) or a consolidated non-financial statement pursuant to Article 29a of that Directive. Economic operators or public authorities that are not covered by Regulation (EU) 2020/852 may also apply that Regulation on a voluntary basis.

(2) Articles 12(2), 13(2), 14(2) and 15(2) of Regulation (EU) 2020/852 require the Commission to adopt delegated acts establishing the technical screening criteria for determining the conditions under which a specific economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control or to the protection and restoration of biodiversity and ecosystems, respectively, and to establish, for each relevant environmental objective laid down in Article 9 of that Regulation, technical screening criteria for determining whether that economic activity causes no significant harm to one or more of those environmental objectives.

(3) The Communication from the Commission of 6 July 2021 'Strategy for Financing the Transition to a Sustainable Economy' ([3]) announced the establishment of technical screening criteria for environmental objectives covering the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution

([1]) OJ L 198, 22.6.2020, p. 13.

([2]) Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC (OJ L 182, 29.6.2013, p. 19).

([3]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Strategy for Financing the Transition to a Sustainable Economy (COM(2021) 390 final).

prevention and control, and to the protection and restoration of biodiversity and ecosystems. Those technical screening criteria should be adopted in addition to the technical screening criteria established in Commission Delegated Regulation (EU) 2021/2139 ([4]).

(4) The technical screening criteria for environmental objectives covering the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems, should, like the technical screening criteria established in Delegated Regulation (EU) 2021/2139, where possible, follow the classification of economic activities laid down in the NACE Revision 2 classification system of economic activities established by Regulation (EC) No 1893/2006 of the European Parliament and of the Council ([5]). To facilitate the identification by undertakings and financial market participants of the relevant economic activities for which technical screening criteria should be established, the specific description of an economic activity should also include indicative references to NACE codes that can be associated with that activity. Those references should be understood as indicative and should not prevail over the specific definition of the economic activity provided in its description.

(5) The technical screening criteria for economic activities that contribute substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, and to the protection and restoration of biodiversity and ecosystems should ensure that the economic activity concerned has a positive impact on one of those objectives. Those technical screening criteria should therefore refer to thresholds or performance levels that the economic activity should achieve to qualify as contributing substantially to one of those objectives. The technical screening criteria for 'do no significant harm' (DNSH) should ensure that the economic activity has no significant negative environmental impacts, including climate-related impacts. Consequently, those technical screening criteria should specify the minimum requirements that the economic activity should meet to qualify as environmentally sustainable.

(6) The technical screening criteria for determining whether an economic activity contributes substantially to one of the environmental objectives laid down in Article 9 of Regulation (EU) 2020/852 and does no significant harm to any of the other environmental objectives should, where relevant build, on existing Union law, best practices, standards and methodologies, and well-established standards, practices and methodologies developed by internationally reputed public entities. Where those standards, practices and methodologies are not available for a specific policy area, the technical screening criteria should build on well-established standards developed by internationally reputed private bodies.

(7) Pursuant to Article 19(1), point (h), of Regulation (EU) 2020/852, the technical screening criteria should take into account the nature and the scale of the economic activity and sector that they refer to, and whether the economic activity is an enabling activity as referred to in Article 16 of that Regulation. For the technical screening criteria to meet the requirements of Article 19 of Regulation (EU) 2020/852 in an effective and balanced way, those technical screening criteria should be set as a quantitative threshold or minimum requirement, a relative improvement, a set of qualitative performance requirements, process or practice-based requirements, or a precise description of the nature of the economic activity itself where that activity by its nature can contribute substantially to the environmental objectives.

([4]) Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (OJ L 442, 9.12.2021, p. 1).

([5]) Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains (OJ L 393, 30.12.2006, p. 1).

(8) The technical screening criteria for determining under which conditions an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources should reflect the need to achieve good status for all water bodies and good environmental status for marine waters, and to prevent the deterioration of water bodies that already have good status or marine waters that are already in good environmental status. It is therefore appropriate to focus first on those economic activities and sectors that have the greatest potential to achieve those aims.

(9) The Union framework for water protection ([6]) ensures an integrated approach to water management, respecting the integrity of whole ecosystems. The technical screening criteria should therefore aim at addressing the adverse effects of urban and industrial waste water discharges, protecting human health from the adverse impact of any contamination of water intended for human consumption, improving water management and the efficiency of water use, ensuring the sustainable use of marine ecosystem services, contributing to the good environmental status of marine waters and to the overall achievement and maintenance of good status or good potential of bodies of water, including bodies of surface water and groundwater. Technical screening criteria for urban waste water treatment as activity providing a substantial contribution to one or more environmental objectives should be reviewed and where necessary revised, taking into account relevant Union law, including Council Directive 91/271/EEC ([7]).

(10) As regards solutions inspired and supported by nature, which provide environmental, social and economic benefits and help build resilience, the technical screening criteria should aim at preventing and protecting against floods or droughts while enhancing natural water retention, biodiversity and water quality.

(11) The transition to a circular economy is an enabler of environmental sustainability that generates significant benefits for the sustainable management of water, the protection and conservation of biodiversity, the prevention and control of pollution and the mitigation of climate change. The circular economy reflects the need for economic activities to promote efficient use of resources through appropriate re-use and recycling of resources. The technical screening criteria for determining under which conditions an economic activity qualifies as contributing substantially to the transition to a circular economy should therefore ensure that in the design and production phase, the operator takes into account the long-term value retention and waste reduction of the product over its lifecycle. During its use phase, the product should be subject to maintenance to extend its life, while reducing the amount of waste. The product should be dismantled or treated after its use to ensure that it can be re-used or recycled for the manufacturing of another product. That approach can limit the dependency of the Union's economy on materials imported from third countries, which is particularly important in respect of critical raw materials. It is therefore appropriate to focus first on those economic activities and sectors that have the greatest potential to achieve those aims.

([6]) In particular Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1), Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council (OJ L 348, 24.12.2008, p. 84), Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration (OJ L 372, 27.12.2006, p. 19), Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40), Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (OJ L 435, 23.12.2020, p. 1), Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) (OJ L 164, 25.6.2008, p. 19), Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC (OJ L 64, 4.3.2006, p. 37) and Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1).

([7]) Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40).

(12) When considering the circularity of a product, the design and production phases are key for ensuring durability and potential re-use of the product and for its recyclability. Those phases are also imperative for reducing the content of hazardous substances and substituting substances of very high concern in materials and products throughout their life cycle. The technical screening criteria for manufacturing activities that substantially contribute to the transition to circular economy should therefore set design requirements for products' longevity, reparability and reuse, as well as requirements on the use of materials, substances and processes that allow for quality recycling of the product. The use of hazardous substances should be minimised. Where possible, the criteria should also require the use of recycled materials for the manufacturing of the product itself.

(13) In the follow-up to Communications from the Commission of 11 December 2019 'The European Green Deal' ([8]), of 11 March 2020 on a new Circular Economy Action Plan ([9]), of 16 January 2018 on a European Strategy for Plastics ([10]) and of 30 November 2022 on an EU policy framework on biobased, biodegradable and compostable plastics ([11]), the technical screening criteria for plastic packaging manufacturing should be complemented, reviewed and where necessary revised and taking into account relevant Union law, including Directive 94/62/EC of the European Parliament and of the Council ([12]) and its future revisions.

(14) In the absence of legally agreed sustainability criteria on the role of biomass in plastic packaging, the technical screening criteria for manufacturing of plastic packaging making substantial contribution to the transition to a circular economy focus on use of bio-waste feedstock. Taking into account future technology and policy developments, including the review of Directive (EU) 2018/2001 of the European Parliament and of the Council ([13]), as well as possible contribution to other environmental objectives, those criteria may need to be reviewed.

(15) Good waste management is a building block of the circular economy and helps prevent waste from having a negative impact on the environment and human health. The Union legislation on waste ([14]) improves waste management by setting out a 'waste hierarchy' under which waste prevention, preparing for re-use and recycling are the preferred options, followed by other recovery, including energy recovery and only as a last resort, disposal such as incineration without energy recovery or landfilling. The technical screening criteria for determining the conditions under which a specific economic activity qualifies as contributing substantially to the transition to a circular economy should therefore aim at preventing or reducing waste generation, increasing the preparation for re-use and recycling of waste, avoiding down cycling and disposal of waste. Taking into account that materials suitable for being reintroduced into the circular economy, such as metals and inorganic salts, can be recycled from combustion products, in particular from bottom ashes from non-hazardous waste incineration, the establishment of technical screening criteria for that recycling activity is to be considered.

([8]) Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal (COM(2019) 640 final).

([9]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A new Circular Economy Action Plan – For a cleaner and more competitive Europe (COM(2020) 98 final).

([10]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European Strategy for Plastics in a Circular Economy (COM(2018) 28 final).

([11]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU policy framework on biobased, biodegradable and compostable plastics (COM(2022) 682 final).

([12]) Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10).

([13]) Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).

([14]) See in particular Article 4 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

(16) Construction and demolition is responsible for 37 % of waste in the Union ([15]). Ensuring that the materials used in the construction and maintenance process of buildings and other civil engineering objects come mainly from re-used or recycled (secondary raw) materials; and are in turn prepared for re-use or recycling when the built asset is demolished, can therefore play an important role in the transition to a circular economy. Technical screening criteria therefore should be laid down for the construction of new buildings, renovation of existing buildings, demolition or wrecking of buildings and other structures, maintenance of roads and motorways and for the use of concrete in civil engineering projects. Considerations of the circularity of the materials and the built asset need to be taken into account in the design phase, up until the dismantling phase. The technical screening criteria should therefore follow the principles of circular design and production of the built asset, as well as a circular use of materials used to produce that asset.

(17) A whole new range of sustainable services, product-as-a-service business models and digital solutions brings about a better quality of life, innovative jobs and upgraded knowledge and skills. In line with the Communication 'A new Circular Economy Action Plan – For a cleaner and more competitive Europe', circular economy provides high-quality, functional and safe products, which are efficient and affordable, last longer and are designed for re-use, repair and high-quality recycling. The technical screening criteria for determining the conditions under which innovative sustainable services qualify as contributing substantially to the transition to a circular economy should therefore be laid down for activities that contribute to prolonging the life of products.

(18) Digital solutions, including the use of digital product passports, can provide real-time data about an item's location, condition, and availability, and increase the traceability of materials and that way enhance value retention in every design, manufacturing and consumer decision. That in turn enables economic actors to move to circular business models, including product-as-a-service business model, ultimately decoupling economic activities from the use of natural resources and improving an economic activity's environmental impacts. Technical screening criteria should therefore be established for new digital solutions that can improve the transparency and efficiency of environmental monitoring and regulatory enforcement, including decision-making within integrated water resources management.

(19) The technical screening criteria for determining under which conditions an economic activity qualifies as contributing substantially to pollution prevention and control should reflect the need to eliminate pollution in air, water, soil, living organisms and food resources. Pollution can cause illnesses and in consequence may lead to premature deaths. Its most harmful impacts on human health are typically borne by the most vulnerable groups ([16]). Pollution also threatens biodiversity and contributes to the mass extinction of species. As outlined in the Communication from the Commission of 12 May 2021, Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' ([17]), the economic benefits of fighting pollution are substantial and the benefits for society far outweigh the required costs.

(20) Following the ambition of the Communication from the Commission of 14 October 2020 'Chemicals Strategy for Sustainability Towards a Toxic-Free Environment' ([18]), to help to prevent and control pollution it is particularly important to progressively phase out the most harmful substances from products for consumer or professional use except when their use has been proven to be essential for society and to substitute or minimise the production and use of substances of concern, as far as possible.

([15]) Eurostat Statistics Explained database, presenting data collected in accordance with Regulation (EC) No 2150/2002 of the European Parliament and of the Council of 25 November 2002 on waste statistics (OJ L 332, 9.12.2002, p. 1).

([16]) European Environmental Agency Report No 22/2018, Unequal exposure and unequal impacts: social vulnerability to air pollution, noise and extreme temperatures in Europe.

([17]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' (COM(2021) 400 final).

([18]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (COM(2020) 667 final).

(21) Pollution caused by certain pharmaceutical ingredients may pose risks to the environment and to human health as outlined in the Communication from the Commission of 11 March 2019 'European Union Strategic Approach to Pharmaceuticals in the Environment' ([19]). Technical screening criteria for the manufacturing of active pharmaceutical ingredients or active substances and for the manufacturing of medicinal products should therefore aim at promoting the production and use of ingredients that are naturally occurring substances or are classified as readily biodegradable.

(22) Preventing and reducing emission of pollutants in the end-of-life phase of products, and the cleaning-up of existing pollution, have a significant potential to protect the environment from pollution and to improve the state of the environment. Technical screening criteria should therefore be established for the collection, transport and treatment of hazardous waste which poses a greater risk to the environment and human health than non-hazardous waste, as well as for remediation of non-conforming landfills and abandoned or illegal waste dumps and of contaminated sites and areas.

(23) The technical screening criteria for determining under which conditions an economic activity qualifies as contributing substantially to the protection and restoration of biodiversity and ecosystems should reflect the need to protect, conserve or restore biodiversity to achieve the good condition of ecosystems or to protect ecosystems that are already in good condition. Loss of biodiversity and collapse of ecosystems are one of the biggest threats facing humanity in the next decade ([20]).

(24) Conservation of biodiversity has direct economic benefits for many sectors of the economy. The technical screening criteria should therefore aim at maintaining or improving the status and trends of terrestrial, freshwater and marine habitats, ecosystems and populations of related fauna and flora species.

(25) The value of biodiversity and of the associated services provided by healthy ecosystems is important for tourism as it contributes significantly to the attractiveness and quality of tourism destinations, and therefore to their competitiveness. Technical screening criteria should therefore be established for tourism accommodation activities and should aim at ensuring that those activities follow appropriate principles and minimum requirements to protect and sustain the biodiversity and ecosystems, and to contribute to their conservation.

(26) The technical screening criteria for determining whether the economic activities that contribute substantially to one of the environmental objectives cause no significant harm to any of the other environmental objectives should aim at ensuring that contribution to one of the environmental objectives is not made at the expense of other environmental objectives. The 'do no significant harm' criteria play therefore an essential role in ensuring the environmental integrity of the classification of environmentally sustainable activities. The 'do no significant harm' criteria for a given environmental objective should be specified for those activities that present a risk of causing significant harm to that objective. Those criteria should take into account and build upon the relevant requirements of existing Union law.

(27) The technical screening criteria for ensuring that activities that contribute substantially to one of the environmental objectives do not cause significant harm to climate change mitigation should ensure that economic activities that have the potential to contribute substantially to environmental objectives other than climate change mitigation do not lead to significant greenhouse gas emissions.

(28) Climate change is likely to affect all sectors of the economy. The technical screening criteria for ensuring that economic activities that contribute substantially to one of the environmental objectives do not cause significant harm to climate change adaptation should therefore apply to all of those economic activities. Those criteria should ensure that existing and future risks that are material to the economic activity are identified and that adaptation solutions are implemented to minimise or avoid possible losses or impacts on business continuity.

([19]) Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, European Union Strategic Approach to Pharmaceuticals in the Environment (COM(2019) 128 final).

([20]) World Economic Forum (2020), The Global Risks Report 2020.

(29) The technical screening criteria for 'do no significant harm' to sustainable use and protection of water and marine resources should be specified for all activities that may hinder such sustainable use and protection. Those criteria should aim at avoiding that economic activities are detrimental to the good status or the good ecological potential of water bodies, including surface water and groundwater, or to the good environmental status of marine waters, by requiring that environmental degradation risks are identified and addressed, in accordance with a water use and protection management plan or with the Member States' marine strategies.

(30) The technical screening criteria for 'do no significant harm' to transition to a circular economy should be tailored to specific economic activities to ensure that those activities do not lead to inefficiencies in the use of resources or to lock-in linear production models, and that waste is avoided or reduced and, where unavoidable, managed in accordance with the waste hierarchy. Those criteria should also ensure that economic activities do not undermine the objective of transitioning to a circular economy.

(31) The technical screening criteria for 'do no significant harm' to pollution prevention and control should reflect sector specificities to address the relevant sources and types of pollution into air, water or land, referring, where relevant, to best available techniques conclusions established under Directive 2010/75/EU of the European Parliament and of the Council ([21]).

(32) The criteria for 'do no significant harm' to protection and restoration of biodiversity and ecosystems should be specified for all activities that can pose risks to the status or condition of habitats, species or ecosystems and should require that, where relevant, environmental impact assessments or other appropriate assessments are undertaken and the conclusions from such assessments are implemented. Those criteria should ensure that even in the absence of a requirement to perform an environmental impact assessment or other appropriate assessment, activities do not lead to the disturbance, capturing or killing of legally protected species or the deterioration of legally protected habitats.

(33) As climate change is likely to affect all sectors of the economy, all sectors of the economy will need to be adapted to the adverse impact of the current climate and the expected future climate. Technical screening criteria for substantial contribution to climate change adaptation are to be therefore established in the future for all sectors and economic activities that are covered by the technical screening criteria for substantial contribution to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control or to the protection and restoration of biodiversity and ecosystems set out in this Regulation.

(34) The inclusion of new economic activities contributing to environmental objectives pursuant to Articles 12(2), 13(2), 14(2), and 15(2) of Regulation (EU) 2020/852 will widen the coverage of disclosures laid down in Article 8 of that Regulation. Commission Delegated Regulation (EU) 2021/2178 ([22]), which was adopted on the basis of Article 8(4) of Regulation (EU) 2020/852, should therefore be amended to reflect that widened scope. To address certain technical and legal inconsistencies identified since the application of Delegated Regulation (EU) 2021/2178, targeted amendments should also be introduced to that Regulation.

(35) Delegated Regulation (EU) 2021/2178 should therefore be amended accordingly.

([21]) Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

([22]) Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation (OJ L 443, 10.12.2021, p. 9).

(36) The four environmental objectives referred to in Article 9, points (c) to (f), of Regulation (EU) 2020/852 and in Articles 12, 13, 14 and 15 of that Regulation are closely interlinked in terms of the means by which an objective is achieved and the benefits that achieving one of the objectives may have on other objectives. The provisions determining whether an economic activity contributes substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control or to the protection and restoration of biodiversity and ecosystems, are thus closely interrelated, and are closely linked to the need to widen the disclosure obligations laid down in Delegated Regulation (EU) 2021/2178. To ensure coherence between those provisions, which should enter into force at the same time, to facilitate a comprehensive view of the legal framework for stakeholders and to facilitate the application of Regulation (EU) 2020/852, it is necessary to include those provisions in a single Regulation.

(37) To ensure that the application of Regulation (EU) 2020/852 evolves with scientific, technological, market and policy developments, this Regulation should be regularly reviewed and, where appropriate, amended as regards the activities considered to be contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, to the protection and restoration of biodiversity and ecosystems, and the corresponding technical screening criteria.

(38) This Regulation is consistent with the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119 of the European Parliament and of the Council ([23]) and ensures progress on adaptation as referred to in Article 5 of that Regulation. The Commission assessed the consistency of the technical screening criteria for ensuring that economic activities that contribute substantially to one of the environmental objectives do not cause significant harm to climate change mitigation and climate change adaptation with the objective and targets of Regulation (EU) 2021/1119 as required by Article 6(4) of that Regulation.

(39) It is necessary to provide non-financial and financial undertakings with sufficient time to assess whether their economic activities comply with the technical screening criteria laid down in this Regulation, and to report on the basis of that assessment in accordance with Delegated Regulation (EU) 2021/2178. The date of application of this Regulation should therefore be deferred, while the amendments to Delegated Regulation (EU) 2021/2178 should ensure that non-financial and financial undertakings have sufficient time to comply with their reporting requirements under that Regulation,

HAS ADOPTED THIS REGULATION:

Article 1

Technical screening criteria related to the sustainable use and protection of water and marine resources

The technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources and for determining whether that economic activity causes no significant harm to any of the other environmental objectives laid down in Article 9 of Regulation (EU) 2020/852 are set out in Annex I to this Regulation.

Article 2

Technical screening criteria related to the transition to a circular economy

The technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the transition to a circular economy and for determining whether that economic activity causes no significant harm to any of the other environmental objectives laid down in Article 9 of Regulation (EU) 2020/852 are set out in Annex II to this Regulation.

([23]) Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).

Article 3

Technical screening criteria related to pollution prevention and control

The technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to pollution prevention and control and for determining whether that economic activity causes no significant harm to any of the other environmental objectives laid down in Article 9 of Regulation (EU) 2020/852 are set out in Annex III to this Regulation.

Article 4

Technical screening criteria related to the protection and restoration of biodiversity and ecosystems

The technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives laid down in Article 9 of Regulation (EU) 2020/852 are set out in Annex IV to this Regulation.

Article 5

Amendments to Delegated Regulation (EU) 2021/2178

Delegated Regulation (EU) 2021/2178 is amended as follows:

(1) in Article 8, paragraph 5 is deleted;

(2) in Article 10, the following paragraphs 6 and 7 are added:

'6. From 1 January 2024 until 31 December 2024, non-financial undertakings shall only disclose the proportion of Taxonomy-eligible and Taxonomy non-eligible economic activities pursuant to Delegated Regulation (EU) 2023/2486 and Sections 3.18 to 3.21, Sections 6.18 to 6.20 of Annex I to Delegated Regulation (EU) 2021/2139 and Sections 5.13, 7.8, 8.4, 9.3, 14.1 and 14.2 of Annex II to Delegated Regulation (EU) 2021/2139 in their total turnover, capital and operational expenditure and the qualitative information referred to in Section 1.2 of Annex I relevant for that disclosure.

The key performance indicators of non-financial undertakings shall cover the economic activities set out in Delegated Regulation (EU) 2023/2486 and Sections 3.18 to 3.21, Sections 6.18 to 6.20 of Annex I to Delegated Regulation (EU) 2021/2139 and Sections 5.13, 7.8, 8.4, 9.3, 14.1 and 14.2 of Annex II to Delegated Regulation (EU) 2021/2139 from 1 January 2025.

7. From 1 January 2024 until 31 December 2025, financial undertakings shall only disclose:

(a) the proportion in their covered assets of exposures to Taxonomy non-eligible and Taxonomy-eligible economic activities pursuant to Delegated Regulation (EU) 2023/2486 and Sections 3.18 to 3.21, Sections 6.18 to 6.20 of Annex I to Delegated Regulation (EU) 2021/2139 and Sections 5.13, 7.8, 8.4, 9.3, 14.1 and 14.2 of Annex II to Delegated Regulation (EU) 2021/2139;

(b) the qualitative information referred to in Annex XI relating to economic activities referred to in point (a).

The key performance indicators of financial undertakings shall cover the economic activities set out in Delegated Regulation (EU) 2023/2486 and Sections 3.18 to 3.21, Sections 6.18 to 6.20 of Annex I to Delegated Regulation (EU) 2021/2139 and Sections 5.13, 7.8, 8.4, 9.3, 14.1 and 14.2 of Annex II to Delegated Regulation (EU) 2021/2139 from 1 January 2026.';

(3) Annexes I, II, III, IV, V, VII, IX and X are amended in accordance with Annex V to this Regulation;

(4) Annex VI is replaced by the text set out in Annex VI to this Regulation;

(5) Annex VIII is replaced by the text set out in Annex VII to this Regulation.

Article 6

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 1 January 2024.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 27 June 2023.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX I

Technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources and for determining whether that economic activity causes no significant harm to any of the other environmental objectives

Table of Contents

1. *Manufacturing*

1.1. Manufacture, installation and associated services for leakage control technologies enabling leakage reduction and prevention in water supply systems

Description of the activity

The economic activity manufactures, installs, or provides associated services for leakage control technologies that enable leakage reduction and prevention in water supply systems (WSSs).

The economic activities in this category could be associated with several NACE codes, in particular E36 and F42.99, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An economic activity in this category is an enabling activity in accordance with Article 12(1), point (e), of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources

1. The activity manufactures, installs or provides maintenance, repairs or professional services for leakage control technologies in new or existing water supply systems, aimed at controlling the pressure in district metered areas (DMAs) of the water supply system to a minimum pressure. The leakage control technologies include in particular pressure control valves, pressure transmitters, flow meters and communication devices and special civil works, including manholes to maintain the pressure control valves.

2. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC ([1]) and in line with a water use and protection management plan, developed in accordance with that Directive for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU of the European Parliament and of the Council ([2]) and where that assessment contains an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	The activity assesses the availability of and, where feasible, adopts techniques that support: (a) reuse and use of secondary raw materials and reused components in products manufactured; (b) design for high durability, recyclability, easy disassembly and adaptability of products manufactured; (c) waste management that prioritises recycling over disposal, in the manufacturing process; (d) information on and traceability of substances of concern throughout the life cycle of the manufactured products.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2. ***Water supply, sewerage, waste management and remediation activities***

2.1. **Water supply**

Description of the activity

Construction, extension, operation, and renewal of water collection, treatment and supply systems intended for human consumption based on the abstraction of natural resources of water from surface or ground water sources.

([1]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided.

([2]) Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1).

The economic activity includes abstraction of the water resource, necessary treatment to make the quality of water compliant with the applicable legislation and distribution to the population and food business operators in piped systems.

The economic activity does not cover irrigation and abstraction of water resources for desalination of marine or brackish water.

The economic activities in this category could be associated with several NACE codes, in particular E36.00 and F42.9, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources

1. For the operation of an existing water supply system providing water supply in a sufficient and healthy quality to consumers, and contributing to water resource efficiency, the activity complies with the following criteria:

(a) the water supply system complies with Directive (EU) 2020/2184, Commission Implementing Decision (EU) 2022/679 ([3]), and delegated and implementing acts adopted under that Directive;

(b) the leakage level of the system is either calculated using the Infrastructure Leakage Index (ILI) ([4]) rating method and the threshold value equals to or is lower than 2,0, or is calculated using another appropriate method and the threshold value is established in accordance with Article 4 of Directive (EU) 2020/2184. That calculation is to be applied across the extent of a specified part of a water supply (distribution) network, i.e. at water supply zone level, district metered area(s) (DMAs) or pressure managed area(s) (PMAs);

(c) the water supply systems include metering at consumer level, where water is delivered to a contractual delivery point of the consumers' own drinking water distribution system.

2. For the construction and operation of a new water supply system, or an extension of an existing water supply system that provides water to new areas or improves that water supply to existing areas, the activity complies with the following criteria:

(a) the water supply system complies with Directive (EU) 2020/2184, including the requirements set out in Article 13(8) of that Directive, in Implementing Decision (EU) 2022/679, and in delegated and implementing acts adopted under that Directive;

(b) the leakage level of the new or extension system is either calculated using the Infrastructure Leakage Index (ILI) rating method and the threshold value equals to or is lower than 1,5 or is calculated using another appropriate method and the threshold value is established in accordance with Article 4 of Directive (EU) 2020/2184. That calculation is to be applied across the extent of the affected and specified part of a water supply (distribution) network where the works are carried out, i.e. at water supply zone level, district metered area(s) (DMAs) or pressure managed area(s) (PMAs);

(c) the water supply system includes metering at consumer level, where water is delivered to a contractual delivery point of the consumers' own drinking water distribution system.

3. For renewal of existing water supply systems, the activity complies with the following criteria:

([3]) Commission Implementing Decision (EU) 2022/679 of 19 January 2022 establishing a watch list of substances and compounds of concern for water intended for human consumption as provided for in Directive (EU) 2020/2184 of the European Parliament and of the Council (OJ L 124, 27.4.2022, p. 41).

([4]) The Infrastructure Leakage Index (ILI) is calculated as current annual real losses (CARL)/unavoidable annual real losses (UARL). The current annual real losses (CARL) represent the amount of water that is actually lost from the distribution network (i.e. not delivered to final users). The unavoidable annual real losses (UARL) take into consideration that there will always be some leakage in a water distribution network. The UARL is calculated based on factors such as the length of the network, the number of service connections and the pressure at which the network is operating.

(a) the activity closes the gap by at least 20 % either between the current leakage level averaged over three years, calculated using the Infrastructure Leakage Index (ILI) rating method and an ILI of 1,5 or between the current leakage level averaged over three years, calculated using another appropriate method, and the threshold value established in accordance with Article 4 of Directive (EU) 2020/2184. The current leakage level averaged over three years is calculated across the extent of the affected and specified part of a water supply (distribution) network where the works are carried out, i.e. for the renewed water supply (distribution) network at district metered area(s) (DMAs) or pressure managed area(s) (PMAs);

(b) a plan with goals and timelines for implementing metering at consumer level is issued by the water supplier and approved by the competent authorities.

4. The water supply system has received the necessary permits for water abstraction. Those abstractions are included in the register for water abstractions, in accordance with Directive 2000/60/EC. An assessment of the actual potential for abstraction has been performed, to ensure that the available groundwater resource is not exceeded by the long-term annual average rate of abstraction or that the surface water body from which water is abstracted is not prevented from achieving good ecological status and ecological potential and the abstractions do not deteriorate status or potential of those water bodies.

The operation of the water supply system does not result in a deterioration of the status of the affected water bodies, nor does it prevent the water body from achieving good status and good ecological potential in accordance with Directive 2000/60/EC ([5]).

The information in relation to the abstractions, register of abstractions, status of water bodies and pressures and impacts on these is included in a river basin management plan, or, for activities in third countries, in an equivalent water use and protection management plan.

The activity does not involve construction of new supply systems or extensions of existing supply systems where they potentially affect one or more water bodies which are not in good status or potential for reasons related to quantity.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	N/A
(5) Pollution prevention and control	N/A
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([5]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided.

2.2. **Urban waste water treatment**

Description of the activity

Construction, extension, upgrade, operation and renewal of urban waste water infrastructure including treatment plants, sewer networks, storm water management structures, connections to the waste water infrastructure, decentralised wastewater treatment facilities, including individual and other appropriate systems, and discharge structures for treated effluent. The activity may include innovative and advanced treatments, including the removal of micropollutants.

The economic activities in this category could be associated with several NACE codes, in particular E37.00 and F42.9, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources

1. The waste water treatment system does not result in a deterioration of the good status and good ecological potential of any of the affected water bodies and it contributes significantly to the achievement of good status and potential of the affected water bodies, in accordance with Directive 2000/60/EC ([6]).

The information related to the status of water bodies, to the activities potentially impacting the status and to the measures taken to avoid or minimize such impacts, is included in a river basin management plan, or, for activities in third countries, in an equivalent water use and protection management plan. The waste water treatment system fulfils the discharge requirements set up by the competent local authorities. The waste water treatment system also contributes to achieve or maintain the good environmental status of marine waters in accordance with Directive 2008/56/EC, where applicable.

2. The waste water treatment system has a collecting system and the provision of secondary treatment. The waste water treatment system complies with the relevant, size-specific requirements for discharges from urban waste water treatment plants set out in Directive 91/271/EEC, in particular Articles 3 to 8 and Article 13 of that Directive and Annex I to that Directive.

3. Where the waste water treatment plant has a capacity of 100 000 population equivalent (p.e.) ([7]) or more, or of a daily inflow of a five-day biochemical oxygen demand (BOD5) load of more than 6 000 kg, it uses a sludge treatment such as anaerobic digestion or a technology with the same or a lower net energy demand (considering both energy generation and consumption), to stabilise the sludge.

Do no significant harm ('DNSH')

(1) Climate change mitigation	An assessment of the direct GHG emissions from the centralised waste water system, including collection (sewer network) and treatment, has been performed. The results are disclosed to investors and clients on demand ([8]). For anaerobic digestion of sewage sludge, a monitoring plan is in place for methane leakage at the facility.

([6]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided.

([7]) Population equivalent (p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day.

([8]) For example, in line with IPCC guidelines for national GHG inventories for waste water treatment, version of 27.6.2023 available at: https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/5_Volume5/19R_V5_6_Ch06_Wastewater.pdf.

(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	N/A
(5) Pollution prevention and control	Discharges to receiving waters meet the requirements laid down in Directive 91/271/EEC or as required by national provisions stating maximum permissible pollutant levels from discharges to receiving waters. Measures have been implemented to avoid and mitigate harmful storm water overflows from the waste water collection system, which may include nature-based solutions, separate storm water collection systems, retention tanks and treatment of the first flush. Sewage sludge is used in accordance with Council Directive 86/278/EEC ([9]) or as required by national law relating to the spreading of sludge on the soil or any other application of sludge on and in the soil.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2.3. **Sustainable urban drainage systems (SUDS)**

Description of the activity

Construction, extension, operation and renewal of urban drainage systems facilities that mitigate pollution and flood hazards due to discharges of urban runoff and improve the urban water quality and quantity, by harnessing natural processes, such as infiltration and retention.

The activity includes SUDS promoting infiltration, evaporation and other stormwater treatments (including water butts, site layout and management, pervious pavements, filter drains, swales, filter strips, ponds, wetlands, soakaways, infiltration trenches and basins, green roofs, bioretention areas and stormwater pre-treatment devices, including sand filters or silt removal devices ([10])) and other innovative systems.

The activity does not include nature-based solutions for flood and drought risk prevention and protection outside the urban environment (see Section 3.1 of this Annex).

The economic activities in this category could be associated with several NACE codes, in particular E36.00, E37.00 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([9]) Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (OJ L 181, 4.7.1986, p. 6).

([10]) As defined in the document JRC Publications Repository – Best Environmental Management Practice for the Public Administration Sector (europa.eu).

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources

The activity leads to a retention of rainwater in a specific area or to an improvement in water quality by complying with the following criteria:

(a) the construction and operation of the sustainable urban drainage system is integrated in the urban drainage and waste water treatment system, as demonstrated by means of a flood risk management plan or of other relevant urban planning tools. The activity contributes substantially to achieving the good status and good ecological potential of bodies of surface water and groundwater or to preventing the deterioration of bodies of water that already have good status and good potential, and is carried out to ensure compliance with Directive 2000/60/EC ([11]) and Directive 2008/56/EC;

(b) information is provided on the percentage of a specific area, such as a residential or commercial area, where rainwater is not directly drained but retained within the area site;

(c) the design of the sustainable urban drainage system achieves at least one of the following effects:

  (i) a quantified percentage of rainwater in the catchment area of the drainage system is retained and discharged with a staggered delay to the receiving water bodies;

  (ii) a quantified percentage of pollutants, including oil, heavy metals, hazardous chemicals and microplastics, is removed from urban runoff before discharge to the receiving water bodies;

  (iii) runoff peak flow, with a return period in line with the requirements of flood risk management plans or other local provisions in place, is reduced by a quantified percentage.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	N/A
(5) Pollution prevention and control	Depending on the origin of the received water and the different pollutant load, such as rainwater, rainfall run-offs from roofs, rainfall run-offs from roads, or stormwater, SUDS treat these waters before discharging or infiltrating the water into other environmental media.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. The introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014 of the European Parliament and of the Council ([12]).

([11]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan, developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided.

([12]) Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species (OJ L 317, 4.11.2014, p. 35).

3. ***Disaster risk management***

3.1. **Nature-based solutions for flood and drought risk prevention and protection**

Description of the activity

Planning, construction, extension, and operation of large-scale nature-based flood or drought management and coastal, transitional or inland aquatic ecosystem restoration measures contributing to preventing and protecting against flooding or droughts, and enhancing natural water retention, biodiversity and water quality.

These large-scale nature-based flood or drought management measures are applied in peri-urban, rural and coastal areas and are coordinated at river basin, regional or local, such as municipal, scale.

The economic activity includes:

(a) river or lake related measures, including:

  (i) riparian or floodplain vegetation development or floodplain restoration, including re-connection of a river or lake with its floodplain or off-channel/lateral connectivity improvement to restore the retention capacity of the floodplain and its ecosystem's function;

  (ii) re-meandering river courses by creating a new meandering course or reconnecting cut-off meanders or reconnecting a lake or group of lakes to a river;

  (iii) restoration of the longitudinal and lateral connectivity of a river (including oxbow lakes) by removing obsolete barriers, including dams and weirs or small barriers across or along the river;

  (iv) substitution of artificial riverbank or lake shore protection with nature-based solutions for bank or bed stabilisation as measures for river or lake restoration;

  (v) measures aimed to improve the diversification of river or lake depth and width to increase habitat variety;

(b) wetland measures, including:

  (i) installation of ditches for rewetting, removal of drainage installations, replacement with installations that control the discharge, or setting back of dykes to enable flooding;

  (ii) implementation of constructed wetlands for water retention and treatment, both on land and along unvegetated water bodies, in rural and urban contexts;

  (iii) detention basins and retention ponds;

(c) coastal measures, including:

  (i) conservation or restoration of coastal wetlands including mangrove forests or seagrass beds, which operate as a natural barrier;

  (ii) measures consisting of morphological changes and the removal of barriers to minimise the need of artificial beach nourishment and enhance the conditions of coastal ecosystems, justified on the basis of a sediment balance study;

  (iii) dune reinforcement and restoration, including the planting of dune vegetation;

  (iv) coastal reef conservation or restoration;

  (v) sand nourishments in the coastal zone;

(d) river basin-wide management measures, including:

  (i) land management measures, including afforestation of reservoir catchments areas, spring or wellhead protection areas and river basin headwaters in general;

  (ii) restoration of natural infiltration for groundwater recharge by facilitating or augmenting soil retention capacity and infiltration;

  (iii) managed aquifer recharge (MAR) ([13]).

([13]) Managed aquifer recharge is 'the process of intentionally recharging an aquifer with water from a different place for subsequent recovery or for environmental benefits'.

The activity does not include small-scale nature-based solutions to reduce flood and drought, including green and blue solutions applied in an urban setting, such as green roofs, swales, permeable surfaces and infiltration basins for urban storm water management purposes or Sustainable Urban Drainage Systems (see Section 2.3 of this Annex).

The economic activities in this category could be associated with NACE code F42.91 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources

1. The activity is a quantifiable and time bound measure to achieve the objectives for flood risk reduction in accordance with a flood risk management plan coordinated at river basin scale and developed under Directive 2007/60/EC of the European Parliament and of the Council ([14]). In relation to drought risk reduction, the activity is a quantifiable and time bound measure to achieve the objectives of Directive 2000/60/EC in accordance with a river basin management plan, or a drought management plan which is part of a river basin management plan.

For activities in third countries, the activity is identified as a flood risk reduction or a drought risk reduction measure either in a water use and protection management plan at river basin scale or in an integrated coastal zone management plan along a coast. Those plans pursue the objectives for the management of flood and drought risks to reduce adverse consequences, where applicable for human health, the environment, cultural heritage and economic activity.

2. Environmental degradation risks related to preserving water quality and avoiding water stress and preventing deterioration of the status of the affected water bodies are identified and addressed to achieve good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC, and in line with a river basin management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Environmental degradation risks related to preserving marine environment are identified and addressed with the aim of achieving or maintaining good environmental status as defined in point 5 of Article 3 of Directive 2008/56/EC.

3. The activity includes nature restoration or conservation actions that demonstrate specific ecosystem co-benefits, which contribute to achieving good water status or potential in accordance with Directive 2000/60/EC, good environmental status in accordance with Directive 2008/56/EC, and the nature restoration and conservation targets specified in the Communication from the Commission of 20 May 2020 on 'EU Biodiversity Strategy for 2030' ([15]). The activity contains clear and binding targets on nature restoration or conservation over a clearly defined timeframe and describes measures to achieve those targets. Local stakeholders are involved from the outset in the planning and design phase. The activity is based on the principles outlined by the IUCN Global Standard for nature-based solutions.

For activities in third countries, the activity takes into account National Biodiversity Strategies and Action Plans for the setting of nature conservation and restoration targets and for the description of the measures to achieve these targets.

4. A monitoring programme is in place to evaluate the effectiveness of a nature-based solution scheme in improving the status of the affected water body, achieving the conservation and restoration targets and in adapting to changing climate conditions. The programme is reviewed following the periodic approach of the river basin management plans (including drought management plans, where relevant) and the flood risk management plans.

([14]) Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (OJ L 288, 6.11.2007, p. 27).

([15]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU Biodiversity Strategy for 2030 – Bringing nature back into our lives, COM(2020) 380 final.

For activities in third countries, the programme is reviewed at least once per programming period and in any case every 10 years. The programme adheres to and aligns with the prevailing legal and regulatory provisions, being clear on where legal responsibilities and liabilities lie. The programme actively engages local communities and other affected stakeholders.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The activity does not involve the degradation of land and marine environment with high carbon stock ([16]).
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	Operators limit waste generation in processes related to construction and demolition and take into account best available techniques. At least 70 % (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC) generated on the construction site is prepared for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, in accordance with the waste hierarchy and the EU Construction and Demolition Waste Management Protocol ([17]). Operators use selective demolition to enable removal and safe handling of hazardous substances and facilitate reuse and high-quality recycling.
(5) Pollution prevention and control	The use of pesticides is minimised and alternative approaches or techniques, which may include non-chemical alternatives to pesticides, are favoured, in accordance with Directive 2009/128/EC of the European Parliament and of the Council ([18]), with exception of occasions where the use of pesticides is needed to control outbreaks of pests and diseases. The activity minimises the use of fertilisers and does not use manure.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. In addition, the following is to be ensured: (a) in the EU, in relation with Natura 2000 sites: the activity does not have significant effects on Natura 2000 sites in view of their conservation objectives on the basis of an appropriate assessment carried out in accordance with Article 6(3) of Council Directive 92/43/EEC ([19]);

([16]) Land with high-carbon stock means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).

([17]) EU Construction & Demolition Waste Management Protocol, September 2016: https://ec.europa.eu/docsroom/documents/20509/.

([18]) Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p. 71).

([19]) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7).

	(b) in the EU, in any area: the activity is not detrimental to the recovery or maintenance of the populations of species protected under Directive 92/43/EEC and Directive 2009/147/EC of the European Parliament and of the Council ([20]) at a favourable conservation status. The activity is also not detrimental to the recovery or maintenance of the habitat types concerned and protected under Directive 92/43/EEC at a favourable conservation status; (c) in the EU, the introduction of invasive alien species is prevented, or their spread is managed in accordance with Regulation (EU) No 1143/2014; (d) outside of the EU, activities are conducted in accordance with applicable law related to the conservation of habitats, species and the management of invasive alien species.

4. ***Information and communication***

4.1. **Provision of IT/OT data-driven solutions for leakage reduction**

Description of the activity

The activity manufactures, develops, installs, deploys, maintains, repairs or provides professional services, including technical consulting for design or monitoring, for information technology (IT) or operational technology (OT) data driven solutions ([21]) to control, manage, reduce and mitigate leakage in water supply systems (WSSs).

The economic activities in this category could be associated with several NACE codes, in particular E36, F42.99 and J62 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An economic activity in this category is an enabling activity in accordance with Article 12(1), point (e), of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

Technical screening criteria

Substantial contribution to the sustainable use and protection of water and marine resources
1. The economic activity manufactures, develops, installs, deploys, maintains, repairs or provides professional services, including technical consulting for design or monitoring, to one or more of the following IT/OT data-driven solutions to control, manage, reduce and mitigate leakage in the new or existing water supply systems: (a) monitoring systems including holistic IT/OT suites/tools, or add-ons/extensions to such tools that provide identification, tracking and tracing water leakage; (b) IT/OT solutions, or add-ons/extensions to such tools, that provide controlling, managing and mitigating water leakage; (c) IT/OT solutions, or add-ons/extensions to such tools, that ensure interoperability of systems in district metered areas when new monitoring systems or IT/OT solutions are installed.

([20]) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7).

([21]) 'IT or OT data-driven solutions' include connectable products, sensors, analytics and other software, and information and communication technologies (ICT) for the transmission, storage and display of data and system management.

2. Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed to achieve good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC ([22]) and in line with a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(4) Transition to a circular economy	Measures are in place to manage and recycle waste at the end-of life, including through decommissioning contractual agreements with recycling service providers, reflection in financial projections or official project documentation. These measures ensure that components and materials are segregated and treated to maximise recycling and reuse in accordance with the waste hierarchy, EU waste regulation principles and applicable regulations, in particular through the reuse and recycling of batteries and electronics and the critical raw materials therein. These measures also include the control and management of hazardous materials. Preparation for re-use, recovery or recycling operations, or proper treatment, including the removal of all fluids and a selective treatment are performed in accordance with Annex VII to Directive 2012/19/EU of the European Parliament and of the Council ([23]).
(5) Pollution prevention and control	The equipment used meets the requirements laid down in Directive 2009/125/EC of the European Parliament and of the Council ([24]) for servers and data storage products. The equipment used does not contain the restricted substances listed in Annex II to Directive 2011/65/EU of the European Parliament and of the Council ([25]), except where the concentration values by weight in homogeneous materials do not exceed the maximum values listed in that Annex.
(6) Protection and restoration of biodiversity and ecosystems	N/A

([22]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided.

([23]) Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).

([24]) Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p. 10).

([25]) Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 174, 1.7.2011, p. 88).

Appendix A

Generic criteria for DNSH to climate change adaptation

I. **Criteria**

The physical climate risks that are material to the activity have been identified from those listed in the table in Section II of this Appendix by performing a robust climate risk and vulnerability assessment with the following steps:

(a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;

(b) where the activity is assessed to be at risk from one or more of the physical climate risks listed in Section II of this Appendix, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;

(c) an assessment of adaptation solutions that can reduce the identified physical climate risk.

The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:

(a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;

(b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios ([1]) consistent with the expected lifetime of the activity, including, at least, 10- to 30-year climate projections scenarios for major investments.

The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports ([2]), scientific peer-reviewed publications, and open source ([3]) or paying models.

For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.

For new activities and existing activities using newly-built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.

The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions ([4]) or rely on blue or green infrastructure ([5]) to the extent possible.

([1]) Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

([2]) Assessment Reports on Climate Change: Impacts, Adaptation and Vulnerability, published periodically by the Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change produces, https://www.ipcc.ch/reports/.

([3]) Such as Copernicus services managed by the European Commission.

([4]) Nature-based solutions are defined as 'solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions'. Therefore, nature-based solutions benefit biodiversity and support the delivery of a range of ecosystem services (version of 27.6.2023: https://ec.europa.eu/research/environment/index.cfm?pg=nbs).

([5]) See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Green Infrastructure (GI) – Enhancing Europe's Natural Capital (COM(2013) 249 final).

II. **Classification of climate-related hazards** ([6])

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

([6]) The list of climate-related hazards in this table is non-exhaustive, and constitutes only an indicative list of most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment.

Appendix C

Generic criteria for DNSH to pollution prevention and control regarding use and presence of chemicals

The activity does not lead to the manufacture, placing on the market or use of:

(a) substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021 of the European Parliament and of the Council ([1]), except in the case of substances present as an unintentional trace contaminant;

(b) mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852 of the European Parliament and of the Council ([2]);

(c) substances, whether on their own, in mixture or in articles, listed in Annexes I or II to Regulation (EC) No 1005/2009 of the European Parliament and of the Council ([3]);

(d) substances, whether on their own, in mixtures or in articles, listed in Annex II to Directive 2011/65/EU, except where there is full compliance with Article 4(1) of that Directive;

(e) substances, whether on their own, in mixtures or in an article, listed in Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council ([4]), except where there is full compliance with the conditions specified in that Annex;

(f) substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), and meeting the criteria laid down in Article 57 of Regulation (EC) No 1907/2006 and that were identified in accordance with Article 59(1) of that Regulation for a period of at least 18 months, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([5]).

In addition, the activity does not lead to the manufacture, presence in the final product or output, or placing on the market, of other substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), that meet the criteria of Regulation (EC) No 1272/2008 for one of the hazard classes or hazard categories mentioned in Article 57 of Regulation (EC) No 1907/2006, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([6]).

([1]) Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (OJ L 169, 25.6.2019, p. 45).

([2]) Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury, and repealing Regulation (EC) No 1102/2008 (OJ L 137, 24.5.2017, p. 1).

([3]) Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer (OJ L 286, 31.10.2009, p. 1).

([4]) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).

([5]) The Commission will review the exceptions from the prohibition from manufacturing, placing on the market or use of the substances referred to in point (f) once it will have published horizontal principles on essential use of chemicals.

([6]) The Commission will review the exceptions from the prohibition from manufacture, presence in the final product or output, or placing on the market of the substances referred to in this paragraph once it will have published horizontal principles on essential use of chemicals.

Appendix D

Generic criteria for DNSH to protection and restoration of biodiversity and ecosystems

An Environmental Impact Assessment (EIA) or screening [1] has been completed in accordance with Directive 2011/92/EU [2].

Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.

For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment [3], where applicable, has been conducted and based on its conclusions the necessary mitigation measures [4] are implemented.

[1] The procedure through which the competent authority determines whether projects listed in Annex II to Directive 2011/92/EU is to be made subject to an environmental impact assessment (as referred to in Article 4(2) of that Directive).

[2] For activities in third countries, in accordance with equivalent applicable national law or international standards requiring the completion of an EIA or screening, for example, IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks.

[3] In accordance with Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7). For activities located in third countries, in accordance with equivalent applicable national law or international standards, that aim at the conservation of natural habitats, wild fauna and wild flora, and that require to carry out (1) a screening procedure to determine whether, for a given activity, an appropriate assessment of the possible impacts on protected habitats and species is needed; (2) such an appropriate assessment where the screening determines that it is needed, for example IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

[4] Those measures have been identified to ensure that the project, plan or activity will not have any significant effects on the conservation objectives of the protected area.

ANNEX II

Technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the transition to a circular economy and for determining whether that economic activity causes no significant harm to any of the other environmental objectives

Table of Contents

1. ***Manufacturing***

1.1. **Manufacture of plastic packaging goods**

Description of the activity

Manufacture of plastic packaging goods.

The economic activities in this category could be associated with NACE code C22.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The activity complies with one of the following criteria:

(a) use of circular feedstock: until 2028, at least 35 % of the packaging product by weight consists of recycled post-consumer material for non-contact sensitive packaging and at least 10 % for contact sensitive packaging ([1]). From 2028, at least 65 % of the packaging product by weight consists of recycled post-consumer material for non-contact sensitive packaging and at least 50 % for contact sensitive packaging;

(b) design for reuse: the packaging product has been designed to be reusable within a reuse system ([2]) and fulfils the requirements for the use of circular feedstock, as set in point 1(a) with 35 % and 10 % targets for recycled feedstock applying as of 2028 and 65 % and 50 % targets applying as of 2032. The system for reuse is established in a way that ensures the possibility of reuse in a closed-loop or open-loop system which:

(i) provides a defined governance structure and keeps records on the number of fillings, re-uses, rejects, collection rate, amount of reusable packaging placed on the market and units of sales or equivalent units;

(ii) provides rules on the product scope and packaging formats, as well as on the collection of reusable packaging, including incentives for consumers;

([1]) 'Contact sensitive packaging' means packaging that is intended to be used in any packaging applications in the scope of Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition (OJ L 268, 18.10.2003 p. 29), Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC (OJ L 338, 13.11.2004, p. 4), Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC (OJ L 229, 1.9.2009, p. 1), Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products (OJ L 342, 22.12.2009, p. 59), Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (OJ L 117, 5.5.2017, p. 1), Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on *in vitro* diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU (OJ L 117, 5.5.2017, p. 176), Regulation (EU) 2019/4 of the European Parliament and of the Council of 11 December 2018 on the manufacture, placing on the market and use of medicated feed, amending Regulation (EC) No 183/2005 of the European Parliament and of the Council and repealing Council Directive 90/167/EEC (OJ L 4, 7.1.2019, p. 1), Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 43), Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use (OJ L 311, 28.11.2001, p. 67), or Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (OJ L 260, 30.9.2008, p. 13).

([2]) 'Reusable' and 'reuse system' are defined and implemented in accordance with the requirements on packaging reuse systems in the Union legislation on packaging and packaging waste, including any standards related to the number of rotations in a system for reuse.

(iii) ensures open and equal access and conditions for all economic operators wishing to become part of it, including proportionate distribution of costs and benefits for all system participants ([3]);

(c) use of bio-waste feedstock: at least 65 % of the packaging product by weight consists of sustainable bio-waste feedstock ([4]). Agricultural based bio-waste used for the manufacture of plastic packaging complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest based bio-waste used for the manufacture of plastic packaging complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive.

2. The packaging product is recyclable in practice and at scale. The packaging product demonstrates recyclability in practice and at scale by complying with all of the criteria specified below ([5]).

2.1. The unit of packaging ([6]) is designed to be recyclable, so that it can be sorted and recycled at the end of life and that the resulting recycled material is of such quality that it can be used again in packaging applications. Colours, additives or design elements of the packaging that contaminate the recycling stream once packaging becomes waste and substantially reduce the quality of the resulting recyclates are not used. At best, the unit of packaging is made from the same material (mono-material solution) or, as a minimum, the materials present in the packaging are compatible with the existing recycling streams and sorting processes. Where all packaging components are not compatible with the existing recycling streams and processes, the packaging must allow for separation of its non-recyclable components, either manually by consumers or within the existing sorting and recycling processes.

2.2. In addition, the packaging is evaluated as recyclable at scale where it complies with one of the following criteria:

(a) collection, sorting, and recycling is proven to work in practice and at scale: the plastic packaging material of the unit of packaging achieves the minimum recycling rate ([7]) target for plastic packaging waste set by the Directive 94/62/EC, either in the national jurisdiction where the packaging is put on the market, regardless of the jurisdiction's size, or in Member States that collectively represent at least 100 million inhabitants;

(b) collection, sorting and recycling is proven to be on track to work in practice and at scale: sorting and recycling processes are available at the Technology Readiness of Level 9 as defined by ISO 16290:2013 ([8]).

3. When the packaging material is produced, the following substances presenting hazardous properties specified below are not added to the feedstock:

(a) substances meeting the criteria laid down in Article 57 and identified in accordance with Article 59(1) of Regulation (EC) No 1907/2006;

(b) substances meeting the criteria for classification as carcinogenic category 1 or 2 in accordance with Regulation (EC) No 1272/2008 of the European Parliament and the Council ([9]);

(c) substances meeting the criteria for classification as mutagenic category 1 or 2 in accordance with Regulation (EC) No 1272/2008;

([3]) The Commission will review these conditions once the revision of Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10) will be adopted.

([4]) Sustainable bio-waste feedstock refers to industrial bio-waste and municipal bio-waste, it excludes primary biomass in the absence of legally agreed sustainability criteria.

([5]) The Commission will review these conditions once the revision of Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10) will be adopted.

([6]) 'Unit of packaging' means a unit as a whole, including any integrated or separate components, which together serve a packaging function such as the containment, protection, handling, delivery, storage, transport and presentation of products, and including independent units of grouped or transport packaging where they are discarded prior to the point of sale.

([7]) 'Recycling rate' is the proportion of waste generated that is recycled.

([8]) ISO 16290:2013, Space systems – Definition of the Technology Readiness Levels (TRLs) and their criteria of assessment (version of 27.6.2023: https://www.iso.org/obp/ui/#iso:std:iso:16290:ed-1:v1:en).

([9]) Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1).

(d) substances meeting the criteria for classification as toxic for reproduction category 1 or 2 in accordance with Regulation (EC) No 1272/2008;

(e) substances meeting the criteria for classification as endocrine disruption for human health category 1 or as endocrine disruption for environment category 1 in accordance with Regulation (EC) No 1272/2008;

(f) substances meeting the criteria for classification as persistent, bioaccumulative and toxic in accordance with Regulation (EC) No 1272/2008;

(g) substances meeting the criteria for classification as very persistent and very bioacumulative in accordance with Regulation (EC) No 1272/2008;

(h) substances meeting the criteria for classification as persistent, mobile and toxic in accordance with Regulation (EC) No 1272/2008;

(i) substances meeting the criteria for classification as very persistent and very mobile in accordance with Regulation (EC) No 1272/2008;

(j) substances meeting the criteria for classification as respiratory sensitiser category 1 in accordance with Regulation (EC) No 1272/2008, except enzymes;

(k) substances meeting the criteria for classification as skin sensitiser category 1 in accordance with Regulation (EC) No 1272/2008;

(l) substances meeting the criteria for classification as having chronic hazard to the aquatic environment category 1, 2, 3 or 4 in accordance with Regulation (EC) No 1272/2008;

(m) substances meeting the criteria for classification as hazardous to the ozone layer in accordance with Regulation (EC) No 1272/2008;

(n) substances meeting the criteria for classification as having specific target organ toxicity – repeated exposure category 1 or 2 in accordance with Regulation (EC) No 1272/2008;

(o) substances meeting the criteria for classification as having specific target organ toxicity – single exposure category 1 or 2 in accordance with Regulation (EC) No 1272/2008.

4. Compostable plastic materials in packaging applications are used only for very lightweight plastic carrier bags; tea, coffee or other beverage bags; tea, coffee or other beverage pads and sticky labels attached to fruit and vegetables.

Do no significant harm ('DNSH')

(1) Climate change mitigation	For plastic manufactured from chemical recycled feedstock, life-cycle GHG emissions of the manufactured plastic, excluding any calculated credits from the production of fuels, are lower than the life-cycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock. Life-cycle GHG emissions are calculated using Commission Recommendation (EU) 2021/2279 ([10]) or, alternatively, using ISO 14067:2018 ([11]) or ISO 14064-1:2018 ([12]). Quantified life-cycle GHG emissions are verified by an independent third party.

([10]) Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations (OJ L 471, 30.12.2021, p. 1).

([11]) ISO Standard 14067:2018, Greenhouse gases – carbon footprint of products – requirements and guidelines for quantification (version of 27.6.2023: https://www.iso.org/standard/71206.html).

([12]) ISO standard 14064-1:2018, Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals (version of 27.6.2023: https://www.iso.org/standard/66453.html).

	Life-cycle GHG emissions of plastic manufactured from sustainable bio-waste feedstock are lower than the life-cycle GHG emissions of the equivalent plastics in primary form manufactured from fossil fuel feedstock. Life-cycle GHG emissions are calculated using Commission Recommendation 2013/179/EU ([13]) or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life-cycle GHG emissions are verified by an independent third party.
(2) Climate change adaptation	The activity complies with criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with criteria set out in Appendix C to this Annex. For the products manufactured from plastic materials in primary form, emissions from the manufacturing of those plastic materials are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the relevant best available techniques (BAT) conclusions, including: (a) the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector ([14]), for emissions to water where relevant emission thresholds apply; (b) the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector ([15]) for emissions to air of new installations (or for existing installations within 4 years of the BATC publication) where relevant conditions apply; (c) the Best Available Techniques Reference Document (BREF) for the Production of Polymers ([16]) for the production processes under conditions not covered by the BATC mentioned above; (d) the Best Available Techniques Reference Document (BREF) for the Large Volume Inorganic Chemicals – Solids and Others industry ([17]); (e) the Best Available Techniques Reference Document (BREF) for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers ([18]);

([13]) Commission Recommendation of 9 April 2013 on the use of common methods to measure and communicate the life cycle environmental performance of products and organisations (OJ L 124, 4.5.2013, p. 1).

([14]) Commission Implementing Decision (EU) 2016/902 of 30 May 2016 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for common waste water and waste gas treatment/management systems in the chemical sector (OJ L 152, 9.6.2016, p. 23).

([15]) Commission Implementing Decision (EU) 2022/2427 of 6 December 2022 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, for common waste gas management and treatment systems in the chemical sector (OJ L 318, 12.12.2022, p. 157).

([16]) Best Available Techniques (BAT) Reference Document for the Production of Polymers (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/pol_bref_0807.pdf).

([17]) Best Available Techniques (BAT) Reference Document for the Large Volumes Inorganic Chemicals- Solids and Others industry (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic-s_bref_0907.pdf).

([18]) Best Available Techniques (BAT) Reference Document for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic_aaf.pdf).

	(f) the Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals ([19]); (g) the Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) ([20]). No significant cross-media effects occur.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with criteria set out in Appendix D to this Annex.

1.2. **Manufacture of electrical and electronic equipment**

Description of the activity

Manufacturing of electrical and electronic equipment for industrial, professional and consumer use.

This activity includes manufacturing of rechargeable and non-rechargeable portable batteries ([21]). The activity does not include manufacturing of other battery categories.

The economic activities in this category could be associated with several NACE codes, in particular C26 and C27 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. Where the economic activity manufactures electrical and electronic equipment complying with all EU Ecolabel criteria applicable to that specific product category, in accordance with Regulation (EC) No 66/2010 of the European Parliament and of the Council ([22]), the operator of the activity provides the proof of compliance with all requirements listed, in accordance with the verification criteria foreseen by the EU Ecolabel criteria.

2. Where no product-specific EU Ecolabel criteria exist, or the operator of the activity has not used them, the economic activity manufacturing electrical and electronic equipment complies with all of the following criteria applicable to a relevant product:

2.1. Design for long lifetime

2.1.1. Where the product contains software that requires updates, all versions of software components, software support and software/firmware, including updates, are made available to users for the lifetime of an item as defined under Directive 2009/125/EC and implementing acts adopted under that Directive. Where the availability of software updates is not regulated, the availability is at least eight years. Functionality and lifetime of the product are not reduced through software updates or lack of software updates.

([19]) The Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/ofc_bref_0806.pdf).

([20]) The Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/reference/production-speciality-inorganic-chemicals).

([21]) 'Portable battery' means any battery that is sealed and weighs less than or equal to 5 kg and it is not designed for industrial purposes. Portable battery is neither an electric vehicle battery nor an automotive battery.

([22]) Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel (OJ L 27, 30.1.2010, p. 1).

2.1.2. Products incorporating portable batteries ensure that those batteries are readily removable and replaceable by the end-user at any time during the lifetime of the product, without requiring the use of specialised tools (unless the tools are provided free of charge with the product), proprietary tools, thermal energy, or solvents to disassemble, except when batteries are designed in such way to make battery removable and replaceable only by independent professionals in the following case:

(a) appliances specifically designed to operate primarily in an environment that is regularly subject to splashing water, water streams or water immersion and that are intended to be washable or rinseable and where it is required to ensure the safety of the user and the appliance;

(b) professional medical imaging and radiotherapy devices, as defined in Article 2(1) of Regulation (EU) 2017/745 of the European Parliament and of the Council ([23]), and *in vitro* diagnostic medical devices, as defined in Article 2(2) of Regulation (EU) 2017/746 of the European Parliament and of the Council ([24]);

(c) where continuity of power supply is necessary and a permanent connection between the product and the respective portable battery is required to ensure the safety of the user and of the appliance or, for products that collect and supply data as their main function, for data integrity reasons.

2.1.3. Software is not used in order to negatively affect the circularity of the product, including replacement of a portable battery, and correct battery replacement does not degrade the functioning of the product.

2.2. Design for repair and guarantee

2.2.1 Where a product-specific repair scoring systems is established in accordance with the Union Law, the operator of the activity ensures that products have the highest populated reparability class ([25]).

2.2.2. The operator of the activity provides access to information to professional repairers ([26]) throughout the lifetime of the product. The information includes the following elements, where applicable:

(a) the unequivocal appliance identification;

(b) a disassembly map or exploded view;

(c) list of necessary repair and test equipment;

(d) technical details of the components and diagnosis information, such as minimum and maximum theoretical values for measurements;

(e) wiring and connection diagrams;

(f) diagnostic fault and error codes, including manufacturer-specific codes;

(g) data records of reported failure incidents stored on the product;

(h) technical manual of instructions for repair of the product, including simple electronic board diagrams, that includes marking of the individual steps;

(i) instructions for software and firmware, including reset software;

(j) information on how to access data records of reported failure incidents stored on the device, where applicable, with the exception of personal identifiable information such as related to user behaviour and location information.

([23]) Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices (OJ L 117, 5.5.2017, p. 1).

([24]) Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on *in vitro* diagnostic medical devices (OJ L 117, 5.5.2017, p. 176).

([25]) 'Reparability class' means a class expressing the capacity of a good to be repaired, based on a method established in accordance with Union law (Article 16 of Regulation (EU) 2017/1369).

([26]) 'Professional repairer' means an operator or undertaking which provides services of repair and professional maintenance of products under this activity.

2.2.3. Key spare parts ([27]), whether new or used, such as motors, batteries, circuit boards and any part or component essential to the good functioning of the product, are available to professional repairers and end-users, after placing the last unit of the model on the market, for one additional year compared to the requirements on the availability of spare parts under Directive 2009/125/EC and implementing acts adopted under that Directive. Where the availability of spare parts for the relevant products is not regulated, key spare parts are available for at least eight years after placing the last unit of the model on the market.

2.2.4. Where there are no significant health and safety risks presented by the product repair, the operator of the activity provides clear disassembly and repair instructions, including through hard or soft copy or a video, and make them publicly available for the lifetime of the product, to enable a non-destructive disassembly of products for the purpose of replacing key components or parts for upgrades or repairs. Where significant safety concerns connected to the repair of the product exist, the operator ensures access to independent certified professional repairers. The operator's website indicates the process for professional repairers to register for access to relevant information or share the information on a publicly available free access website.

2.2.5. For electrical and electronic equipment designed for consumer use, the operator of the activity provides commercial guarantee for minimum of 3 years and in line with requirements under Article 17 of Directive (EU) 2019/771 of the European Parliament and of the Council ([28]) at no extra cost.

2.3. Design for reuse and remanufacturing

2.3.1. Where the products are able to store data, and the data is encrypted, a software function that resets the device to its factory settings and erases by default the encryption key is required.

2.3.2. Where products can transfer stored data, the stored data can be easily and fully transferred to another product, securing data privacy and confidentiality of the data.

2.4. Design for dismantling

2.4.1. Information on product's end-of-life management is publicly available for the lifetime of the product, including all information required under Directive 2012/19/EU. For each type of new product placed for the first time on the Union market, the operator of the activity shares, free of charge, relevant information with centres which prepare for re-use and treatment and recycling facilities through Information for Recyclers Platform ([29]) or through another relevant channel in accordance with Article 15(1) of Directive 2012/19/EU. Dismantling information includes the sequence of dismantling steps, tools or technologies needed to access the targeted component.

2.4.2. For electrical and electronic equipment containing printed circuit boards, hard disc drives (HDDs), electric motors, permanent magnets, batteries, fluorescent powders, or any other components identified in Union legislation to be of high critical raw materials recovery potential, the information on product's end-of-life management referred to under point 2.4.1 includes an indication of the critical raw materials ([30]) typically contained in the components, information on the location of those components, and on the steps required for their separate removal.

([27]) Key spare parts are parts that are used for the repair or refurbishment of a defective product. For products covered by requirements on the availability of spare parts under Directive 2009/125/EC and implementing acts adopted under that Directive, key spare parts are considered to be those listed in Annex to the most recent implementing act for each product group.

([28]) Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC (OJ L 136, 22.5.2019, p. 28).

([29]) I4R Platform (version of 27.6.2023: available at: https://i4r-platform.eu/about/).

([30]) Critical raw materials are defined as the elements listed in the EU Critical Raw Materials List (established through Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of The Regions, Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability (COM(2020) 474 final)) or other relevant Union legislation.

2.4.3. The activity provides tracking information on substances identified as substance of very high concern (SVHC) and for substances meeting the criteria for substance of very high concern (SVHC), by complying with at least one of the two disclosure frameworks listed below:

(a) product information on substances is available publicly, in SCIP database ([31]) for products that contain > 0,1 % (w/w) of an identified substance of very high concern or in a specific public tool provided by company;

(b) product information on substances is available publicly, following IEC62474 ([32]) (for electrical and electronic equipment) and future IEC82474-1 ([33]) (dual logo project).

2.5. Design for recyclability

The economic activity manufactures products with demonstrated superior recyclability. Assessment of recyclability relies on EN 45555:2019 ([34]) or on any product-specific EN standard relying on EN 45555:2019. The economic activity complies with the following requirements:

(a) single polymer or recyclable polymer blends are used;

(b) plastic enclosures do not contain moulded-in or glue-on metal;

(c) materials which cannot be recycled together are easy to access and have the ability to be separated;

(d) improving recyclability does not harm the durability of the system itself;

(e) parts of the product containing substances, mixtures and components that are to be removed during depollution are easy to identify, such as through marking for sorting provided by the manufacturer, and visible on the product;

(f) printed circuit boards, hard disc drives (HDDs), electric motors, permanent magnets, batteries, fluorescent powders, or any other components identified in Union legislation to be of high critical raw materials recovery potential are easy to access and to remove from the product;

(g) parts that reduce the recyclability according to the reference scenario for the end-of-life treatment of products, such as plastic using certain fillers or certain flame retardants, are easy to access and remove;

(h) joining, fastening or sealing techniques do not prevent the safe and readily achievable removal of the components specified in Directive 2012/19/EU or in Regulation (EU) 2023/1542 of the European Parliament and of the Council on batteries and waste batteries ([35]), where present.

2.6. Proactive substitution of hazardous substances

2.6.1. The economic activity manufactures products which demonstrate proactive substitution of hazardous substances.

2.6.2. The product does not contain substances of very high concern included in Annex XIV to Regulation (EC) No 1907/2006.

2.6.3. Exemptions to Restrictions of Hazardous Substances are limited to the following cases:

(a) lead in high melting temperature type solders covered by the exemption entry 7(a) in Annex III to Directive 2011/65/EU;

(b) electrical and electronic components containing lead in a glass or ceramic covered by the exemption entries under 7(c) in Annex III to Directive 2011/65/EU.

([31]) Version of 16 June 2023; available at: https://echa.europa.eu/scip-database.
([32]) IEC 62474 – Material Declaration for Products of and for the Electrotechnical Industry.
([33]) IEC 82474 – Material declaration – Part 1: General requirements.
([34]) EN 45555:2019 General methods for assessing the recyclability and recoverability of energy-related products.
([35]) Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC (OJ L 191, 28.7.2023, p. 1).

2.6.4. The hazardous substances specified in table below are not introduced to or formed in the specified sub-assemblies and component parts at or above the specified concentration limit.

Substance group	Scope of restriction	Concentration limits (where applicable)
(i) Polymer stabilisers, colourants and contaminant	The following organotin stabiliser compounds are not present in external cables: Dibutyltin oxide Dibutyltin diacetate Dibutyltin dilaurate Dibutyltin maleate Dioctyl tin oxide Dioctyl tin dilaurate External housing do not contain the following colourants: Azo dyes that may cleave to the carcinogenic aryl amines listed in Appendix 8 of the Regulation (EC) No 1907/2006, or Colourant compounds included in the IEC 62474 declarable substances list.	N/A
(ii) Polymer stabilisers, colourants and contaminant	Polycyclic Aromatic Hydrocarbons (PAHs) are not present at concentrations greater than or equal to individual and sum total concentration limits in any external plastic or man-made rubber surfaces. The presence and concentration of the following PAHs is verified: PAHs restricted by the Regulation (EC) No 1907/2006: Benzo[a]pyrene Benzo[e]pyrene Benzo[a]anthracene Chrysen Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Dibenzo[a,h]anthracene Additional PAHs subject to restriction: Acenaphthene Acenaphthylene Anthracene Benzo[ghi]perylene Fluoranthene Fluorene	The individual concentration limits for PAHs restricted under Regulation (EC) No 1907/2006 is 1 mg/kg The sum total concentration limit for the 18 listed PAHs is not greater than 10 mg/kg

	Indeno[1,2,3-cd]pyrene Naphthalene Phenanthrene Pyrene	
(iii) Biocidal products	Biocidal products intended to provide an anti-bacterial function Derogation for materials sold in hospitals and for healthcare applications	N/A
(v) Glass fining agents	Arsenic and its compounds is not used in the manufacturing of LCD display unit glass and screen cover glass.	0,0050 % w/w
(vi) Chlorine-based plastics	Plastic parts > 25 g do not contain chlorinated polymers. Note: For this specific sub-requirement, plastic cable housing is not considered as a 'plastic part'.	N/A

2.6.5. The products do not contain halogen beyond the limits which can be detected in line with the measurement specified in existing standards for all its components: cables (EN IEC 60754-3), plastic parts (EN50642), electronic components (EN IEC 61249-2-21 or JS709C), consumables (EN IEC 61249-2-21 and IPC J-STD-004B).

2.6.6. The products do not contain fluor gas.

2.6.7. Use of Tetrabromobisphenol A (TBBPA) is allowed as reactive component for Printed Circuit Boards only.

2.7. Information to customers:

2.7.1. The operator of the activity provides information to customers regarding options to use the product considering the environmental benefits, in particular the lifetime extension of the products associated with the different modes of the product.

2.7.2. The operator of the activity provides information to customers regarding the buy-back, sell-back and take-back options for the product, information on separate collection and collection points for waste electrical and electronic equipment (WEEE), as well as information on re-use options. For portable batteries, information is provided on separate collection and collection points for waste batteries.

2.7.3. For electrical and electronic equipment, the operator of the activity appropriately marks the product with the symbol indicating separate collection for waste electrical and electronic equipment as set out in Annex IX to the Directive 2012/19/EU. The operator of the activity provides the consumer with relevant information on costs of collection, treatment and disposal of the product in an environmentally sound way as set out in Article 14(1) of that Directive.

2.8. Producer responsibility:

2.8.1. The operator of the activity, when placing electrical and electronic equipment on the market of the Member States, establishes an individual extended producer responsibility scheme or participates in collective extended producer responsibility schemes in all the Member States in which the product is placed on the market, in line with Directive 2012/19/EU. The financial contributions to the collective schemes are based on eco modulation and cover the costs of separate collection and treatment of WEEE.

2.8.2. For portable batteries, the producer establishes waste portable battery take-back and collection systems, which include collection points, in all Member States in which the product is placed on the market.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the manufactured product contains refrigerants, it complies with the GWP performance laid down in the Regulation (EU) No 517/2014 of the European Parliament and of the Council ([36]). The activity does not manufacture products containing Sulfur hexafluoride (SF6). Where applicable, the manufactured product does not score lower than the third significantly populated class ([37]) of energy efficiency in accordance with Regulation (EU) 2017/1369 of the European Parliament and of the Council ([38]) and delegated acts adopted under that Regulation.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with criteria set out in Appendix C to this Annex. For manufacturing of portable batteries, batteries comply with the applicable sustainability rules on the placing on the market of batteries in the Union, including restrictions on the use of hazardous substances in batteries, including Regulation (EC) No 1907/2006 and Directive 2006/66/EC of the European Parliament and of the Council ([39]).
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([36]) Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 (OJ L 150, 20.5.2014, p. 195).

([37]) The requirement targets the three highest classes of energy efficiency that are populated, in which at least some products are on the market. To understand which classes are the highest populated in which at least some products are on the market, an overview of the available products on the market (based on official data) is provided by European Product Database for Energy Labelling.

([38]) Regulation (EU) 2017/1369 of the European Parliament and of the Council 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1).

([39]) Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (OJ L 266, 26.9.2006, p. 1).

2. ***Water supply, sewerage, waste management and remediation activities***

2.1. **Phosphorus recovery from waste water**

Description of the activity

Construction, upgrade, operation and renewal of facilities for recovery of phosphorus from urban waste water treatment plants (WWTP) (aqueous phase and sludge) and from materials (i.e. ashes) after thermal oxidation (i.e. incineration) of sewage sludge.

The economic activity only includes the facilities and processes that make phosphorus recovery possible, not the previous steps, such as waste water treatment or incineration facilities.

The economic activities in this category could be associated with several NACE codes, in particular E37.00, E38.32 and F42.99 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. For the process integrated at the waste water treatment plant, covering typically phosphorus salts such as struvite–magnesium ammonium phosphate ($NH_4MgPO_4 \bullet 6H_2O$), the phosphorus recovery process recovers at least 15 % of the incoming phosphorus load. Only the harvested material, such as struvite, is counted for the calculation of this threshold.

2. For down-stream recovery after sewage sludge thermal oxidation with chemical phosphorus recovery or after sewage sludge thermal oxidation with thermo chemical phosphorus recovery, the process recovers at least 80 % of the incoming phosphorus load from the respective input material, such as sewage sludge ash.

3. The phosphorus extracted out of the system is used either as a component material in a fertilising product compliant with Regulation (EU) 2019/1009 of the European Parliament and of the Council ([40]) or national fertiliser legislation where it is more stringent, or in another field of application where the recovered phosphorus fulfils specified functions in accordance with the respective regulations.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	Key performance parameters, including a mass balance for phosphorus pentoxide (P_2O_5) and key environmental parameters in relation to the identity and quantity of emissions and waste streams generated, are monitored.

([40]) Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003 (OJ L 170, 25.6.2019, p. 1).

(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2.2. **Production of alternative water resources for purposes other than human consumption**

Description of the activity

Construction, extension, operation and renewal of facilities for producing reclaimed water ([41]), facilities for harvesting rain and storm water and facilities for collection and treatment of grey water ([42]).

These alternative water resources are used to replace water from abstraction or from the drinking water supply systems and can be used for aquifer recharge, irrigation, industrial reuse, recreation and any other municipal use.

The economic activity only includes the facilities and processes that make it possible for the water to be reused, such as facilities for recharging aquifers or surface water storages, and does not include the previous steps, such as primary and secondary steps in the waste water treatment plant or the subsequent steps, necessary for the final reuse of these alternative water resources, such as irrigation systems.

The economic activity does not include desalination (see Section 5.13 of Annex II to Delegated Regulation (EU) 2021/2139).

This economic activity does not include supply of water for the purpose of human consumption (see Section 2.1 of Annex I).

The economic activities in this category could be associated with several NACE codes, in particular E37.00 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. For production of reclaimed water, the activity complies with the following criteria:

(a) the reclaimed water is suitable for reuse. For use in agriculture, the reclaimed water complies with EU requirements, such as those set out in Regulation (EU) 2020/741 of the European Parliament and of the Council ([43]) and national legislation. For uses other than agricultural irrigation, the final quality of reclaimed water is fit for purpose and compliant with existing national legislation and standards;

(b) the water reuse project has been authorised by the competent authority, in the framework of integrated water management, having as a priority taken into account viable water demand management and efficiency measures, in consultation with the water management authorities. This may be proven by its inclusion in a water management plan or drought management plan. For reuse in agriculture, the assessments of the environmental risks, including those related to the quantitative status of water bodies, are fully taken into account in the risk management plans, required by Regulation (EU) 2020/741.

([41]) 'Reclaimed water' means urban waste water that has been treated in compliance with the requirements set out in Directive 91/271/EEC and which results from further treatment in a reclamation plant.

([42]) 'Grey water' means untreated waste water that has not been contaminated by any toilet discharge. Grey water includes waste water from bathtubs, showers, bathroom sinks, clothes washing machines and laundry sinks.

([43]) Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse (OJ L 177, 5.6.2020, p. 32).

2. For facilities for harvesting rain and storm water, the activity complies with the following criteria:
(a) the resource (rain or storm water) is segregated at source and does not include waste water;

(b) the water is suitable for use after proper treatment depending on the level of contamination and subsequent use;

(c) the facility is included in an instrument of urban planning or permitting, such as Master Plan or municipal planning.

3. For facilities for collection and treatment of grey waters, the activity complies with the following criteria:
(a) the resource (grey water) is segregated at source;

(b) the water is suitable for reuse after proper treatment depending on the level of contamination and subsequent reuse;

(c) the performance is attested by a building certification or is available in the technical design documents.

Do no significant harm ('DNSH')

(1) Climate change mitigation	For the production of reclaimed water, an assessment of the direct GHG emissions from the reuse treatment, has been performed ([44]). The results are disclosed to investors and clients on demand.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	For the uses prescribed in the EU Regulation (EU) 2020/741, the activity complies with that Regulation or with applicable national legislation where it is stricter. Aquifer recharge and infiltration of surface runoff waters comply with the Directive 2006/118/EC or with applicable national legislation where it is stricter.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([44]) For example, following IPCC guidelines for national GHG inventories for waste water treatment (version of 27.6.2023: https://www.ipccnggip.iges.or.jp/public/2019rf/pdf/5_Volume5/19R_V5_6_Ch06_Wastewater.pdf).

2.3. **Collection and transport of non-hazardous and hazardous waste**

Description of the activity

Separate collection and transport of non-hazardous and hazardous ([45]) waste aimed at preparing for re-use ([46]) or recycling ([47]), including the construction, operation and upgrade of facilities involved in the collection and transport of such waste, such as civic amenity centres and waste transfer stations, as a means for material recovery.

The economic activities in this category could be associated with several NACE codes, in particular E38.11, E38.12 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. All separately collected and transported waste that is segregated at source is intended for preparation for reuse or recycling operations.

2. Source segregated waste consisting of (i) paper and cardboard; (ii) textiles ([48]); (iii) biowaste; (iv) wood; (v) glass; (vi) waste from electrical and electronic equipment (WEEE); or (vii) any type of hazardous waste is collected separately (i.e. in single fractions) and not commingled with other waste streams.

For source segregated non-hazardous waste other than the fractions mentioned above, collection in commingled fractions takes place only where it meets one of the conditions laid down in Article 10, paragraph 3, indents (a), (b) or (c) of Directive 2008/98/EC of the European Parliament and of the Council ([49]).

Different types of hazardous waste may be placed together in a hazardous waste box, cabinet or similar solution under the condition that each waste type is properly packaged to keep the waste separate in the box or cabinet and that hazardous waste is sorted in waste types after collection from households.

3. For municipal waste streams, the activity complies with one of the following criteria:

(a) the activity carries out municipal solid waste collection mainly via door-to-door collection schemes or supervised collection points to ensure a high level of separate collection and low rates of contamination;

(b) the activity carries out separate waste collection within publicly organised waste management systems where waste producers are charged based on a pay-as-you-throw (PAYT) mechanism, at least for the residual waste stream or there are other types of economic instruments in place that incentivise waste segregation at source ([50]);

([45]) 'Hazardous waste' is waste which displays one or more of the hazardous properties listed in Annex III of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3). It includes streams such as hazardous waste fractions produced by households, waste oils, batteries, non-depolluted waste from electrical and electronic equipment (WEEE), non-depolluted end-of-life vehicle, medical waste, etc. A comprehensive classification of hazardous waste can be found in the European List of Waste (Decision 2000/532/EC).

([46]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing.

([47]) 'Recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([48]) This includes textiles, clothes/wearing apparel, footwear and accessories, such as belts or hats.

([49]) Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

([50]) See European Commission 'Guidance for separate collection of municipal waste', Section 3.1 (Economic incentives), available at: https://op.europa.eu/en/publication-detail/-/publication/bb444830-94bf-11ea-aac4-01aa75ed71a1.

(c) the activity carries out separate waste collection outside of publicly organised waste management systems that apply deposit and refund systems or other types of economic instruments that directly incentivise waste segregation at source.

4. The activity continuously monitors and assesses the quantity and quality of wastes collected based on predefined Key Performance Indicators (KPIs) to comply with all of the following criteria:

(a) fulfilling reporting obligations vis-a-vis relevant stakeholders, such as public authorities, Extended Producer Responsibility (EPR) schemes;

(b) periodically communicating relevant information to waste producers and the public in general, in cooperation with relevant stakeholders, such as public authorities, EPR schemes;

(c) identifying needs for and undertaking corrective action where the KPIs deviate from applicable targets or benchmarks, in cooperation with relevant stakeholders, such as public authorities, EPR schemes, value chain partners.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	1. The activity utilises waste collection vehicles which conform to at least Euro V standards ([51]). 2. Hazardous waste is collected separately from non-hazardous waste to prevent cross-contamination. Appropriate measures are taken to ensure that during separate collection and transport, hazardous waste is not mixed either with other categories of hazardous waste or with other waste, substances or materials. Mixing includes the dilution of hazardous substances. 3. Proper collection and handling prevent leakage of hazardous waste during collection, transport, storage and delivery to the treatment facility permitted to treat hazardous waste. 4. Hazardous waste is packaged and labelled in accordance with the international and Union standards in force in the course of collection, transport and temporary storage. 5. The operator collecting hazardous waste complies with record-keeping obligations, including as regards quantity, nature, origin, destination, frequency of collection, mode of transport and treatment method, set out in applicable Union and national legislation 6. For waste from electrical and electronic equipment (WEEE): (a) the main categories of end-of-life electrical and electronic equipment (EEE) set out in Annex III to Directive 2012/19/EU are collected separately;

([51]) In accordance with Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1).

	(b) collection and transport preserve the integrity of WEEE and prevent the leakage of hazardous substances, such as ozone-depleting substances, fluorinated greenhouse gases or mercury contained in fluorescent lamps. 7. A management system is set up by the collection and logistics operator to manage environmental, health and safety risks.
(6) Protection and restoration of biodiversity and ecosystems	N/A

2.4. **Treatment of hazardous waste**

Description of the activity

Construction, upgrade, and operation of dedicated facilities for the treatment of hazardous waste as a means for material recovery operations.

This economic activity covers both *in situ* and *ex situ* material recovery operations of waste classified as hazardous waste in accordance with the European List of Waste established by Commission Decision 2000/532/EC ([52]) and in accordance with Annex III to Directive 2008/98/EC. This includes the following streams:

(a) solvent reclamation or regeneration;

(b) regeneration of acids and bases;

(c) recycling or reclamation of inorganic materials other than metals or metal compounds;

(d) recovery of components used for pollution abatement;

(e) recovery of components from catalysts;

(f) re-refining of oil lubricants and other industrial waste oils (excluding for use as fuel or incineration).

The economic activity does not include the reuse of substances that do not qualify as waste, such as by-products or residues from production activities, in accordance with Article 5 of Directive 2008/98/EC.

The economic activity does not include recovery of materials from batteries, Waste from Electrical and Electronic Equipment (WEEE), End-of-Life Vehicles (ELV), inorganic materials from incineration processes, such as ashes, slags or dust. The economic activity does not include the treatment and recovery of nuclear waste.

The economic activities in this category could be associated with several NACE codes, in particular E38.22, E38.32, F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([52]) Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (OJ L 226, 6.9.2000, p. 3).

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The activities consist of the material recovery of secondary raw materials (including chemical substances and critical raw materials) from source segregated hazardous waste.

2. The recovered materials are substituting primary raw materials, including critical raw materials, or chemicals in production processes ([53]).

3. The recovered materials comply with the applicable industry specifications, harmonised standards, or end-of-waste criteria, as well as relevant applicable Union and national legislation.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The activity, on a life-cycle basis, does not increase GHG emissions as compared to the production based on the equivalent primary raw material(s). Life-cycle greenhouse gas emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 ([54]) or ISO 14064-1:2018 ([55]). Quantified life-cycle GHG emissions are verified by an independent third party.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex. Relevant techniques are deployed for the protection of water and marine resources, as set out in the best available techniques (BAT) conclusions for waste treatment ([56]).
(5) Pollution prevention and control	All substances, and mixtures recovered comply with the applicable relevant legislation, such as Regulation (EC) No 1907/2006, Regulation (EU) 2019/1021, Regulation (EC) No 1272/2008 and Directive 2008/98/EC. The activity deploys relevant techniques for pollution prevention and control, as set out in the best available techniques (BAT) conclusions for waste treatment ([57]). The activity meets the relevant associated emission limits (BAT-AELs).
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([53]) Production processes refer to any kind of economic activity that produces a material, product or asset; recovered materials refer to the output of the recovery process.

([54]) ISO 14067:2018(en), Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification (version of 27.6.2023: https://www.iso.org/obp/ui#iso:std:iso:14067:ed-1:v1:en).

([55]) ISO 14064-1:2018(en), Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals (version of 27.6.2023: https://www.iso.org/obp/ui/#iso:std:iso:14064:-1:en).

([56]) Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council (OJ L 208, 17.8.2018, p. 38).

([57]) Implementing Decision (EU) 2018/1147.

2.5. **Recovery of bio-waste by anaerobic digestion or composting**

Description of the activity

Construction and operation of facilities for the treatment of separately collected bio-waste through anaerobic digestion or composting with the resulting production and utilisation of biogas, biomethane, digestate, compost or chemicals.

The economic activities in this category could be associated with several NACE codes, in particular E38.21 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to circular economy

1. The bio-waste that is used for anaerobic digestion or composting is source segregated and collected separately. Where bio-waste is collected in biodegradable bags, the bags have the appropriate compostable certification standard EN 13432:2000 ([58]).

2. In these anaerobic digestion plants, source segregated bio-waste from separate collection constitutes at least 70 % of the input feedstock, measured in weight, as an annual average. Co-digestion may cover up to 30 % of the input feedstock of advanced bioenergy feedstock listed in Annex IX to Directive (EU) 2018/2001, which may not include contaminated feedstock coming from biomass fraction of mixed municipal and industrial waste. The input does not include feedstock excluded in Part II of Annex II to Regulation (EU) 2019/1009, for Component Material Category (CMC) 3 (Compost) in accordance with point (c) of that category and for Component Material Category (CMC) 5 (Digestate other than fresh crop digestate) in accordance with point (c) of that category.

3. The activity produces one of the following:

(a) compost or digestate complying with Regulation (EU) 2019/1009, in particular with requirements of Annex II on the Component Material Categories (CMC), referring specifically to CMC 3 (Compost) and CMC 5 (Digestate other than fresh crop digestate) or with national rules on fertilisers or soil improvers, with equal or stricter requirements compared to those of Regulation 2019/1009;

(b) chemicals through the conversion of organic waste to carboxylates, carboxylic acids or polymers by fermentation with mixed cultures.

4. Quality assurance of the production process is performed using Module D1 set out in Regulation (EU) 2019/1009.

5. Compost and digestate complying with Regulation (EU) 2019/1009 or equivalent national rules is not landfilled.

The digestate is preferably composted after anaerobic digestion to maximise benefits to the soil it is applied to afterwards, and minimises some potential agro-environmental issues such as release of ammonia and nitrates.

6. Where anaerobic digestion is installed, the produced biogas is used directly for the generation of electricity or heat, upgraded to bio-methane for use as a fuel, directly injected in the gas grid and further used for energy purposes by replacing natural gas, used as industry feedstock to produce other chemicals or converted into hydrogen for use as a fuel.

Do no significant harm ('DNSH')

(1) Climate change mitigation	A monitoring and contingency plan is in place to minimise methane leakage at the facility.

([58]) EN 13432:2000 Packaging – Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging.

(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	For anaerobic digestion plants treating over 100 tonnes per day and for composting plants treating over 75 tonnes per day, the activity complies with best available techniques (BAT) conclusions for waste treatment ([59]) or equal or stricter national regulation, in order to reduce emissions to air and to improve the overall environmental performance as well as to select the waste input and to monitor or control the key waste and process parameters. Emissions to air and water are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set for, respectively, anaerobic and aerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for waste treatment ([60]). For anaerobic digestion, the nitrogen content of the digestate used as fertilisers or soil improver is communicated to the buyer or the entity in charge of taking off the digestate, either in compliance with Regulation (EU) 2019/1009, or with tolerance level ± 25 %.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2.6. **Depollution and dismantling of end-of-life products**

Description of the activity

Construction, operation and upgrade of facilities dismantling and depolluting complex end-of-life products, movable assets and their components for materials recovery or preparation for re-use of components.

The economic activity includes the dismantling of end-of-life products and movable assets and their components of any type, such as automobiles, ships and electrical and electronic equipment (EEE) for material recovery.

The economic activity does not include the treatment of batteries stemming from separate collection or removed during dismantling and depollution activities, and the demolition and wrecking of buildings and other structures (see Section 3.3 of this Annex).

The economic activities in this category could be associated with several NACE codes, in particular E38.31, E38.32 and E42.99 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([59]) Implementing Decision (EU) 2018/1147.
([60]) Implementing Decision (EU) 2018/1147.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity dismantles and depollutes separately collected waste, in state-of-the-art facilities, from complex end-of-life products, such as automobiles, electrical and electronic equipment (EEE) or ships, in order to:

(a) harvest parts and components that are suited for re-use;

(b) separate non-hazardous and hazardous waste fractions suited for material recovery including recovery of critical raw materials;

(c) remove hazardous substances, mixtures and components, so that these are contained in an identifiable ([61]) stream or that are an identifiable part of a stream within the treatment process, and send them to facilities permitted for proper treatment including disposal of hazardous waste;

(d) enclose documentation of the materials that are sent for further treatment or reuse.

2. The economic activity dismantling and depolluting waste electrical and electronic equipment (WEEE) complies with the requirements set out in Article 8 of Directive 2012/19/EU and in Annexes VII and VIII to that Directive. The economic activity dismantling and depolluting end-of-life vehicles (ELVs) complies with the requirements set out in Article 6 and 7 of Directive 2000/53/EC and in Annex I to that Directive.

3. For the dismantling and depollution of scrap ships, the facility is included in the European List of ship recycling facilities as laid down in Commission Implementing Decision (EU) 2016/2323 ([62]). For the construction of a new facility or the upgrade of an existing facility which is not yet included in the European List of ship recycling facilities, the facility fulfils all requirements set out in Article 13 of Regulation (EU) No 1257/2013 of the European Parliament and of the Council ([63]) and has applied to be included in the European List of ship recycling facilities.

4. For the dismantling and depollution of Waste from Electrical and Electronic Equipment (WEEE) and End-of-Life vehicles (ELVs), waste originates from collection points meeting the applicable requirements set by Union ([64]) and national legislation.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.

([61]) A substance, mixture or component is identifiable if it can be monitored to verify environmentally safe treatment.
([62]) Commission Implementing Decision 2016/2323 establishing the European List of ship recycling facilities pursuant to Regulation (EU) No 1257/2013 of the European Parliament and of the Council on ship recycling (OJ L 345, 20.12.2016, p. 119).
([63]) Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC (OJ L 330, 10.12.2013, p. 1).
([64]) At Union level, applicable requirements are set for WEEE by Directive 2012/19/EU and for ELVs by Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles (OJ L 269, 21.10.2000, p. 34).

(5) Pollution prevention and control	1. The facility is equipped to manage and store safely and in an environmentally sound manner hazardous substances, mixtures and components removed during the depollution operations. 2. For end-of-life vehicles (ELVs), the facility complies with the requirements for sites for storage and treatment, depollution and treatment operations set in Annex I to Directive 2000/53/EC. 3. For waste from electrical and electronic equipment (WEEE), the facility complies with the requirements for proper treatment set out in Article 8 of Directive 2012/19/EU, in particular with the requirements for selective treatment for materials and components of WEEE set out in Annex VII to Directive 2012/19/EU and for storage and treatment operations set out in Annex VIII to Directive 2012/19/EU. The facility complies with normative requirements relevant to its activities for de-pollution set out in the standards EN 50625-1:2014 ([65]), EN 50625-2-1:2014 ([66]), EN 50625-2-2:2015 ([67]), EN 50625-2-3:2017 ([68]) and EN 50625-2-4:2017 ([69]). Implementation of such measures can also be demonstrated through compliance with regulatory requirements that are equivalent to those set out in the EN standards mentioned above. For the treatment of WEEE containing volatile fluorocarbons (VFCs) and volatile hydrocarbons (VHCs) and WEEE containing mercury, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges as set out in the best available techniques (BAT) conclusions for waste treatment ([70]). 4. For ship recycling, the facility complies with the requirements set out in Article 13 of Regulation (EU) No 1257/2013 and is included in the European List of ship recycling facilities established under that Regulation. The facility complies with the requirements set out in Article 7 of that Regulation with regards to the preparation of a ship-specific recycling plan prior to any recycling of a ship.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2.7. **Sorting and material recovery of non-hazardous waste**

Description of the activity

Construction, upgrade, and operation of facilities for the sorting or recovery of non-hazardous waste streams into high quality secondary raw materials using a mechanical transformation process.

([65]) EN 50625-1:2014 Collection, logistics & Treatment requirements for WEEE – Part 1: General treatment requirements.
([66]) EN 50625-2-1:2014 Collection, logistics and treatment requirements for WEEE – Part 2-1: Treatment requirements for lamps.
([67]) EN 50625-2-2:2015 Collection, logistics & Treatment requirements for WEEE – Part 2-2: Treatment requirements for WEEE containing CRTs and flat panel displays.
([68]) EN 50625-2-3:2017 Collection, logistics & treatment requirements for WEEE – Part 2-3: Treatment requirements for temperature exchange equipment and other WEEE containing VFC and/or VHC.
([69]) EN 50625-2-4:2017 Collection, logistics & treatment requirements for WEEE – Part 2-4: Treatment requirements for photovoltaic panels.
([70]) Implementing Decision (EU) 2018/1147.

The economic activity does not include sorting and recovery of combustible fractions from mixed residual waste for the production of refuse-derived fuel, such as in mechanical and biological treatment plants.

The economic activities in this category could be associated with several NACE codes, in particular E38.32 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. Origin of the feedstock material

The non-hazardous waste feedstock originates from one or multiple of the following sources:

(a) separately collected and transported waste, including in commingled fractions ([71]);

(b) non-hazardous waste fractions originating from dismantling and depollution activities from end-of-life products;

(c) construction and demolition waste from selective demolition or otherwise segregated at source;

(d) non-hazardous waste fractions originating from sorting of mixed waste intended for recycling where the facility meets a defined quality criteria of performance and the waste is coming from areas complying with separate collection obligations laid out in Directive 2008/98/EC.

2. Material recovery

The activity attains or exceeds existing plant-specific material recovery rates by competent authorities set in applicable waste management plans, permits or contracts or by Extended Producer Responsibility (EPR) schemes. The facility implements internally defined Key Performance Indicators (KPIs) to track performance or attainment of applicable recovery rates.

For materials for which separate collection is mandatory, the activity converts at least 50 %, in terms of weight, of the processed separately collected non-hazardous waste into secondary raw materials that are suitable for the substitution of primary raw materials in production processes.

3. Proper management of waste

The facility recovering non-hazardous waste has implemented Best Available Techniques (BAT) based on BAT 2 on improving overall environmental performance of the plant set out in the best available techniques (BAT) conclusions for waste treatment ([72]) including:

(a) a waste characterisation procedure and a strict waste acceptance procedure regarding the quality of incoming waste;

(b) a tracking system and inventory aiming to track the location and quantity of waste in the plant;

(c) an output quality management system to ensure that the output of the waste treatment is in line with applicable quality requirements or standards, using for example existing EN or ISO standards;

(d) the relevant waste segregation measures or procedures to ensure that waste, after separation, is kept separated depending on its properties in order to enable easier and environmentally safer storage and treatment;

([71]) In accordance with Article 10(3) of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3) and with the national legislation and waste management plans.
([72]) Implementing Decision (EU) 2018/1147.

(e) the relevant measures to ensure waste compatibility prior to mixing or blending of waste;

(f) the facility has installed the sorting and material recovery technology and processes to meet relevant technical specifications, quality standards or end-of-waste criteria. The activity uses state-of-the-art technologies suited to the waste fractions processed including optical separation by near-infrared spectroscopy or X-ray systems, density separation, magnetic separation or size separation.

4. Quality of secondary raw materials

The activity converts or allows the conversion of waste into secondary raw materials, including critical raw materials, that are suitable for the substitution of primary raw materials in production processes.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	For activities falling under the scope of the best available techniques (BAT) conclusions for waste treatment ([73]), the activity implements the relevant techniques for pollution prevention and control and meets the relevant associated emission limits (BAT-AELs). Plastics recycling facilities have filtration installed prior to wash discharge that is capable of removing at least 75 % of microplastics > 5 μm.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

3. ***Construction and real estate activities***

3.1. **Construction of new buildings**

Description of the activity

The development of construction projects for residential and non-residential buildings by combining financial, technical, and physical means with a view to sell the building upon delivery or at a later date, as well as the construction of complete residential or non-residential buildings, on own account for sale or on a fee or contract basis.

The economic activities in this category could be associated with several NACE codes, in particular F41.1, F41.2 and F43, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([73]) Implementing Decision (EU) 2018/1147.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. All generated construction and demolition waste is treated in accordance with Union waste legislation and with the full checklist of the EU Construction and Demolition Waste Management Protocol, in particular by setting sorting systems and pre-demolition audits ([74]). The preparing for re-use ([75]) or recycling ([76]) of the non-hazardous construction and demolition waste generated on the construction site is at least 90 % (by mass in kilogrammes), excluding backfilling ([77]). This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC. The operator of the activity demonstrates compliance with the 90 % threshold by reporting on the Level(s) indicator 2.2 ([78]) using the Level 2 reporting format for different waste streams.

2. The life-cycle Global Warming Potential (GWP) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand ([79]).

3. Construction designs and techniques support circularity via the incorporation of concepts for design for adaptability and deconstruction as outlined in Level(s) indicators 2.3 and 2.4 respectively. Compliance with this requirement is demonstrated by reporting on the Level(s) indicators 2.3 ([80]) and 2.4 ([81]) at Level 2.

([74]) EU Construction and Demolition Waste Management Protocol, Annex F (version of 27.6.2023: https://ec.europa.eu/docsroom/documents/20509/).

([75]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. This includes, for instance, the preparation for re-use of certain parts of buildings like roof elements, windows, doors, bricks, stones or concrete elements. A pre-requisite for the preparation for re-use of building elements is usually the selective deconstruction of buildings or other structures.

([76]) 'Recycling' means any recovery operation, by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([77]) 'Backfilling' means any recovery operation where suitable non-hazardous waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping. Waste used for backfilling must substitute non-waste materials, be suitable for the aforementioned purposes, and be limited to the amount strictly necessary to achieve those purposes.

([78]) See Level(s) indicator 2.2: Construction and demolition waste and materials, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.2_v1.1_40pp.pdf. For reporting, the Excel spreadsheet available on the Commission website is to be used: Construction and Demolition Waste (CDW) and materials Excel template: for estimating (Level 2) and recording (Level 3) amounts and types of CDW and their final destinations (version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents.

([79]) The GWP is communicated as a numeric indicator for each life cycle stage expressed as $kgCO_2e/m^2$ (of useful internal floor area) averaged for one year of a reference study period of 50 years. The data selection, scenario definition and calculations are carried out in accordance with EN 15978 (BS EN 15978:2011). The scope of building elements and technical equipment is as defined in the Level(s) common EU framework for indicator 1.2. Following the Level(s) indicator 1.2 reporting format, the indicator is communicated as GWP fossil, GWP biogenic, GWP land use and land use change, as well as the sum of these (GWP overall). Where a national calculation tool exists or is required for making disclosures or for obtaining building permits, the respective tool may be used to provide the required disclosure. Other calculation tools may be used if they fulfil the minimum criteria laid down by the Level(s) common EU framework, see Level(s) indicator 1.2: Lifecycle Global Warming Potential (GWP), user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2021-01/UM3_Indicator_1.2_v1.1_37pp.pdf.

([80]) See Level(s) indicator 2.3: Design for adaptability and renovation, user manual: introductory briefing, instruction and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.3_v1.1_23pp.pdf.

([81]) See Level(s) indicator 2.4: Design for deconstruction user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2021-01/UM3_Indicator_2.4_v1.1_18pp.pdf.

4. The use of primary raw material in the construction of the building is minimised through the use of secondary raw materials ([82]). The operator of the activity ensures that the three heaviest material categories used to construct the building, measured by mass in kilogrammes, comply with the following maximum total amounts of primary raw material used:

(a) for the combined total of concrete ([83]), natural or agglomerated stone, a maximum of 70 % of the material comes from primary raw material;

(b) for the combined total of brick, tile, ceramic, a maximum of 70 % of the material comes from primary raw material;

(c) for bio-based materials ([84]), a maximum of 80 % of the total material comes from primary raw material;

(d) for the combined total of glass, mineral insulation, a maximum of 70 % of the total material comes from primary raw material;

(e) for non-biobased plastic, a maximum of 50 % of the total material comes from primary raw material;

(f) for metals, a maximum of 30 % of the total material comes from primary raw material;

(g) for gypsum, a maximum of 65 % of the material comes from primary raw material.

The thresholds are calculated by subtracting the secondary raw material from the total amount of each material category used in the works measured by mass in kilogrammes. Where the information on the recycled content of a construction product is not available, it is to be counted as comprising 100 % primary raw material. In order to respect the Waste Hierarchy and thereby favour re-use over recycling, re-used construction products, including those containing non-waste materials reprocessed on site, are to be counted as comprising zero primary raw material. Compliance with this criterion is demonstrated by reporting in accordance with the Level(s) indicator 2.1 ([85]).

5. The operator of the activity uses electronic tools to describe the characteristics of the building as built, including the materials and components used, for the purpose of future maintenance, recovery, and reuse, for example using EN ISO 22057:2022 to provide Environmental Product Declarations ([86]). The information is stored in a digital format and is made available to investors and clients on demand. In addition, the operator ensures the long-term preservation of this information beyond the useful life of the building by using the information managing systems provided by national tools, such as cadastre or public register.

([82]) For the purposes of the Delegated Act, 'secondary raw materials' means materials that have been prepared for re-use or recycled in accordance with Article 3 of the Waste Framework Directive and have ceased to be waste under Article 6 of that Directive.

([83]) This concerns the material concrete, including its constituent ingredients (for example, aggregates). Any steel reinforcement is excluded since this is a different material which can be accounted for under metals.

([84]) Bio-based materials are made using biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), as defined in COM(2018) 673. They include conventional bio-based materials made traditionally from biomass (such as wood, cork, natural rubber, paper, textiles, wooden construction materials) and more recently developed materials such as bio-based chemicals or bio-based plastics.

([85]) See Level(s) indicator 2.1: Bill of Quantities, materials and lifespans, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.1_v1.1_34pp.pdf. For reporting, the Excel spreadsheet available on the Commission website is to be used: Bill of Quantities, materials and lifespans Excel template: for estimating (Level 2) and recording (Level 3) purchases of material quantities and costs (version 1.2), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents.

([86]) ISO standard 22057:2022, Sustainability in buildings and civil engineering works – Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM) (version of 27.6.2023: https://www.iso.org/standard/72463.html).

Do no significant harm ('DNSH')

(1) Climate change mitigation	The building is not dedicated to extraction, storage, transport or manufacture of fossil fuels. The Primary Energy Demand (PED) ([87]) setting out the energy performance of the building resulting from the construction does not exceed the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation implementing Directive 2010/31/EU of the European Parliament and of the Council ([88]). The energy performance is certified using an as built Energy Performance Certificate (EPC).
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	Where installed, except for installations in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to Delegated Regulation (EU) 2021/2139: (a) washhand basin taps and kitchen taps have a maximum water flow of 6 litres/min; (b) showers have a maximum water flow of 8 litres/min; (c) WCs, including suites, bowls and flushing cisterns, have a full flush volume of a maximum of 6 litres and a maximum average flush volume of 3,5 litres; (d) urinals use a maximum of 2 litres/bowl/hour. Flushing urinals have a maximum full flush volume of 1 litre. To avoid impact from the construction site, the activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	Building components and materials used in the construction comply with the criteria set out in Appendix C to this Annex. Building components and materials used in the construction that may come into contact with occupiers ([89]) emit less than 0,06 mg of formaldehyde per m^3 of test chamber air upon testing in accordance with the conditions specified in Annex XVII to Regulation (EC) No 1907/2006 and less than 0,001 mg of other categories 1A and 1B carcinogenic volatile organic compounds per m^3 of test chamber air, upon testing in accordance with CEN/EN 16516 ([90]) or ISO 16000-3:2011 ([91]) or other equivalent standardised test conditions and determination methods ([92]).

([87]) The calculated amount of energy needed to meet the energy demand associated with the typical uses of a building expressed by a numeric indicator of total primary energy use in kWh/m^2 per year and based on the relevant national calculation methodology and as displayed on the Energy Performance Certificate (EPC).

([88]) Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (OJ L 153, 18.6.2010, p. 13).

([89]) Applying to paints and varnishes, ceiling tiles, floor coverings, including associated adhesives and sealants, internal insulation and interior surface treatments, such as those to treat damp and mould.

([90]) CEN/TS 16516: 2013, Construction products – Assessment of release of dangerous substances –Determination of emissions into indoor air.

([91]) ISO 16000-3:2011, Indoor air – Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method.

([92]) The emissions thresholds for carcinogenic volatile organic compounds relate to a 28-day test period.

	Where the new construction is located on a potentially contaminated site (brownfield site), the site has been subject to an investigation for potential contaminants, for example using standard ISO 18400 ([93]). Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. The new construction is not built on one of the following: (a) arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity as referred to the EU LUCAS survey ([94]); (b) greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species (flora and fauna) listed on the European Red List ([95]) or the IUCN Red List ([96]); (c) land matching the definition of forest as set out in national law used in the national greenhouse gas inventory, or where not available, is in accordance with the FAO definition of forest ([97]).

3.2. **Renovation of existing buildings**

Description of the activity

Construction and civil engineering works or preparation thereof.

The economic activities in this category could be associated with several NACE codes, in particular F41 and F43 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([93]) ISO 18400 series on Soil quality – Sampling.
([94]) JRC ESDCA, LUCAS: Land Use and Coverage Area frame Survey (version of 27.6.2023: https://esdac.jrc.ec.europa.eu/projects/lucas).
([95]) IUCN, The IUCN European Red List of Threatened Species (version of 27.6.2023: https://www.iucn.org/regions/europe/our-work/biodiversity-conservation/european-red-list-threatened-species).
([96]) IUCN, The IUCN Red List of Threatened Species (version of 27.6.2023: https://www.iucnredlist.org).
([97]) Land spanning more than 0,5 hectares with trees higher than five metres and a canopy cover of more than 10 %, or trees able to reach those thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use, FAO Global Resources Assessment 2020. Terms and definitions (version of 27.6.2023: http://www.fao.org/3/I8661EN/i8661en.pdf).

Technical screening criteria

Substantial contribution to the transition to a circular economy
1. All generated construction and demolition waste is treated in accordance with Union waste legislation and the full checklist of the EU Construction and Demolition Waste Management Protocol, in particular by setting sorting systems and pre-demolition audits ([98]). The preparing for re-use ([99]) or recycling ([100]) of the non-hazardous construction and demolition waste generated on the construction site is at least 70 % (by mass in kilogrammes), excluding backfilling ([101]). This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC. The operator of the activity demonstrates compliance with the 70 % threshold by reporting on the Level(s) indicator 2.2 ([102]) using the Level 2 reporting format for different waste streams. 2. The life cycle Global Warming Potential (GWP) ([103]) of the building's renovation works has been calculated for each stage in the life cycle, from the point of renovation, and is disclosed to investors and clients on demand. 3. Construction designs and techniques support circularity via the incorporation of concepts for design for adaptability and deconstruction as outlined in Level(s) indicators 2.3 and 2.4 respectively. The operator of the activity demonstrates compliance with this requirement by reporting on the Level(s) indicators 2.3 ([104]) and 2.4 ([105]) at Level 2.

([98]) EU Construction and Demolition Waste Management Protocol, Annex F (version of 27.6.2023: https://ec.europa.eu/docsroom/documents/20509/).

([99]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. This includes, for instance, the preparation for re-use of certain parts of buildings like roof elements, windows, doors, bricks, stones or concrete elements. A pre-requisite for the preparation for re-use of building elements is usually the selective deconstruction of buildings or other structures.

([100]) 'Recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([101]) 'Backfilling' means any recovery operation where suitable non-hazardous waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping. Waste used for backfilling must substitute non-waste materials, be suitable for the aforementioned purposes, and be limited to the amount strictly necessary to achieve those purposes.

([102]) See Level(s) indicator 2.2: Construction and demolition waste and materials, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.2_v1.1_40pp.pdf. For reporting, the Excel spreadsheet available on the Commission website is to be used: Construction and Demolition Waste (CDW) and materials Excel template: for estimating (Level 2) and recording (Level 3) amounts and types of CDW and their final destinations (version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents.

([103]) The GWP is communicated as a numeric indicator for each life cycle stage expressed as $kgCO_2e/m^2$ (of useful internal floor area) averaged for one year of a reference study period of 50 years. The data selection, scenario definition and calculations are carried out in accordance with EN 15978 (BS EN 15978:2011. Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method). The scope of building elements and technical equipment is as defined in the Level(s) common EU framework for indicator 1.2. Where a national calculation tool exists, or is required for making disclosures or for obtaining building permits, the respective tool may be used to provide the required disclosure. Other calculation tools may be used if they fulfil the minimum criteria laid down by the Level(s) common EU framework, see Level(s) indicator 1.2: Lifecycle Global Warming Potential (GWP), user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2021-01/UM3_Indicator_1.2_v1.1_37pp.pdf.

([104]) See Level(s) indicator 2.3: Design for adaptability and renovation, user manual: introductory briefing, instruction and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.3_v1.1_23pp.pdf.

([105]) See Level(s) indicator 2.4: Design for deconstruction user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2021-01/UM3_Indicator_2.4_v1.1_18pp.pdf.

4. At least 50 % of the original building is retained. This is to be calculated based on the gross external floor area retained from the original building using the applicable national or regional measurement methodology, alternatively using the definition of 'IPMS 1' contained in the International Property Measurement Standards ([106]).

5. The use of primary raw material in the renovation of the building is minimised through the use of secondary raw materials ([107]). The operator of the activity ensures that the three heaviest material categories that have been newly added to the building in the renovation of the building, measured by mass in kilogrammes, comply with the following thresholds regarding the maximum amount of primary raw material used:

(a) for the combined total of concrete ([108]), natural or agglomerated stone, a maximum of 85 % of the material comes from primary raw material;

(b) for the combined total of brick, tile, ceramic, a maximum of 85 % of the material comes from primary raw material;

(c) for bio-based materials ([109]), a maximum of 90 % of the material comes from primary raw material;

(d) for the combined total of glass, mineral insulation, a maximum of 85 % of the material comes from primary raw material;

(e) for non-biobased plastic, a maximum of 75 % of the material comes from primary raw material;

(f) for metals, a maximum of 65 % of the material comes from primary raw material;

(g) for gypsum, a maximum of 83 % of the material comes from primary raw material.

The thresholds are calculated by subtracting the secondary raw material from the total amount of each material category used in the works measured by mass in kilogrammes. Where the information on the recycled content of the construction product is not available, it is to be counted as comprising 100 % primary raw material. In order to respect the Waste Hierarchy and thereby favour re-use over recycling, re-used construction products, including those containing non-waste materials reprocessed on site, are to be counted as comprising zero primary raw material. Compliance with this criterion is demonstrated by reporting in accordance with the Level(s) indicator 2.1 ([110]).

([106]) International Property Measurement Standards: All Buildings. Published by the International Property Measurement Standards Coalition (IPMSC), https://ipmsc.org/.

([107]) For the purposes of the Delegated Act, 'secondary raw materials' means materials that have been prepared for re-use or recycled in accordance with Article 3 of the Waste Framework Directive and have ceased to be waste under Article 6 of that Directive.

([108]) This concerns the material concrete, including its constituent ingredients (for example, aggregates). Any steel reinforcement is excluded since this is a different material which can be accounted for under metals.

([109]) Bio-based materials are made using biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), as defined in COM(2018) 673. They include conventional bio-based materials made traditionally from biomass (such as wood, cork, natural rubber, paper, textiles, wooden construction materials) and more recently developed materials such as bio-based chemicals or bio-based plastics.

([110]) See Level(s) indicator 2.1: Bill of Quantities, materials and lifespans, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.1_v1.1_34pp.pdf. For reporting, the Excel spreadsheet available on the Commission website is to be used: Bill of Quantities, materials and lifespans Excel template: for estimating (Level 2) and recording (Level 3) purchases of material quantities and costs (version 1.2), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents.

6. The operator of the activity uses electronic tools to describe the characteristics of the building as built, including the materials and components used, for the purpose of future maintenance, recovery, and reuse, for example using EN ISO22057:2022 to provide Environmental Product Declarations ([111]). The information is stored in a digital format and is made available to investors and clients on demand. In addition, the operator of the activity ensures the long-term preservation of this information beyond the useful life of the building by using the information managing systems provided by national tools, such as cadastre or public register.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The building is not dedicated to extraction, storage, transport or manufacture of fossil fuels.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	Where installed as part of the renovation works, except for renovation works in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to Delegated Regulation (EU) 2021/2139: (a) wash-hand basin taps and kitchen taps have a maximum water flow of 6 litres/min; (b) showers have a maximum water flow of 8 litres/min; (c) WCs, including suites, bowls and flushing cisterns, have a full flush volume of a maximum of 6 litres and a maximum average flush volume of 3,5 litres; (d) urinals use a maximum of 2 litres/bowl/hour. Flushing urinals have a maximum full flush volume of 1 litre.
(5) Pollution prevention and control	Building components and materials used in the construction comply with the criteria set out in Appendix C to this Annex. Building components and materials used in the construction that may come into contact with occupiers ([112]) emit less than 0,06 mg of formaldehyde per m^3 of test chamber air upon testing in accordance with the conditions specified in Annex XVII to Regulation (EC) No 1907/2006 and less than 0,001 mg of other categories 1A and 1B carcinogenic volatile organic compounds per m^3 of test chamber air, upon testing in accordance with EN 16516 or ISO 16000-3:2011 ([113]) or other equivalent standardised test conditions and determination methods. Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.

([111]) ISO standard 22057:2022, Sustainability in buildings and civil engineering works – Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM) (version of April 2022), https://www.iso.org/standard/72463.html.

([112]) Applying to paints and varnishes, ceiling tiles, floor coverings (including associated adhesives and sealants), internal insulation and interior surface treatments, such as to treat damp and mould.

([113]) ISO 16000-3:2011, Indoor air – Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method (version of 27.6.2023: https://www.iso.org/standard/51812.html).

(6) Protection and restoration of biodiversity and ecosystems	N/A

3.3. **Demolition and wrecking of buildings and other structures**

Description of the activity

The demolition and wrecking of buildings, roads and runways, railways, bridges, tunnels, waste water treatment works, water treatment works, pipelines, wells and boreholes, power-generating plants, chemical plants, dams and reservoirs, mines and quarries, offshore structures, near shore works, ports, waterway works or land formation and reclamation ([114]).

For projects associated with the activities 'Construction of New Buildings' or 'Renovation of existing buildings' (see Sections 3.1 and 3.2 of this Annex), where the demolition works and the construction or renovation works are procured under the same contract, the technical screening criteria for the construction or renovation activities apply.

The economic activity does not include the demolition and wrecking of buildings and other structures carried out as part of the activity 'Remediation of contaminated sites and areas' (see Section 2.4 of Annex III).

The economic activities in this category could be associated with NACE code F43.1 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. Prior to the start of the demolition or wrecking activity, at least the following aspects from the Level 1 design concept checklist of the Level(s) indicator 2.2 ([115]) checklist are discussed and agreed upon with the client:

(a) definition of key performance indicators and target ambition level;

(b) identification of project-specific constraints that may compromise the target ambition level (such as time, labour and space) and how to minimise these constraints;

(c) details of the pre-demolition auditing procedure;

(d) an outline waste management plan that prioritises selective deconstruction, decontamination and source separation of waste streams. Where these actions are not prioritised, an explanation is provided to justify why selective deconstruction, decontamination or source separation of waste streams are not technologically feasible in the project. Cost or financial considerations are not an acceptable reason to avoid complying with this requirement.

([114]) See activities listed by the International Cost Management Standard in the 'ICMS: Global Consistency in Presenting Construction Life Cycle Costs and Carbon Emissions 3rd edition, Table 1: ICMS Projects with their corresponding codes', https://icmscblog.files.wordpress.com/2021/11/icms_3rd_edition_final.pdf.

([115]) See Level(s) indicator 2.2: Construction and Demolition waste and materials, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.2_v1.1_40pp.pdf.

2. The operator of the activity conducts a pre-demolition audit in line with the EU Construction and Demolition Waste Management Protocol ([116]).

3. All demolition waste generated during the demolition or wrecking activity is treated in accordance with Union waste legislation and the full checklist of the EU Construction and Demolition Waste Management Protocol ([117]).

4. The preparing for re-use ([118]) or recycling ([119]) of the non-hazardous construction and demolition waste generated on the construction site is at least 90 % (by mass in kilogrammes), excluding backfilling ([120]). This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC. The operator of the activity demonstrates compliance with the 90 % threshold by reporting on the Level(s) indicator 2.2 ([121]) using the Level 3 reporting format for different waste streams. Alternatively, at least 95 % of the mineral ([122]) fraction and 70 % of the non-mineral fraction of the non-hazardous demolition waste is separately collected and prepared for reuse or recycled.

Do no significant harm ('DNSH')

([116]) Guidelines for the waste audits before demolition and renovation works of buildings. EU Construction and Demolition Waste Management, May 2018: https://ec.europa.eu/docsroom/documents/31521/attachments/1/translations/en/renditions/native. For reporting the estimates of Level 2 Demolition Waste, the Excel spreadsheet available on the Commission website is to be used: Construction and Demolition Waste (CDW) and materials Excel template: for estimating (Level 2) and recording (Level 3) amounts and types of CDW and their final destinations (version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents.

([117]) Guidelines for the waste audits before demolition and renovation works of buildings. EU Construction and Demolition Waste Management, May 2018: https://ec.europa.eu/docsroom/documents/31521/attachments/1/translations/en/renditions/native. For reporting the estimates of Level 3 Construction and Demolition Waste, the Excel spreadsheet available on the Commission website is to be used: Construction and Demolition Waste (CDW) and materials Excel template: for estimating (Level 2) and recording (Level 3) amounts and types of CDW and their final destinations (version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents. For this, each type of demolition waste is tagged with the appropriate six-digit code from the European List of Waste established by Decision 2000/532/EC. When including the type of waste treatment in the Excel spreadsheet (i.e. preparation for reuse, for recycling, material recovery, energy recovery or disposal), evidence is included that the economic operators receiving the waste have the technical capability to carry out this treatment. Such evidence may consist in a link to the company's webpages where this is documented or a signed statement from a representative of the company. Where the treatment takes place on the demolition site, such as onsite reuse or recycling, acceptable evidence may consist in a signed statement from a representative of the company.

([118]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. This includes, for instance, the preparation for re-use of certain parts of buildings like roof elements, windows, doors, bricks, stones or concrete elements. A pre-requisite for the preparation for re-use of building elements is usually the selective deconstruction of buildings or other structures.

([119]) 'Recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([120]) 'Backfilling' means any recovery operation where suitable non-hazardous waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping. Waste used for backfilling must substitute non-waste materials, be suitable for the aforementioned purposes, and be limited to the amount strictly necessary to achieve those purposes.

([121]) See Level(s) indicator 2.2: Construction and demolition waste and materials, user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.2_v1.1_40pp.pdf.

([122]) See Annex III to Commission Regulation (EU) No 849/2010 for a categorisation of mineral non-hazardous construction and demolition waste, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R0849&from=EN.

(1) Climate change mitigation	The building owner or contractor ensures that during renovation, refurbishing or demolition activities implying the removal of foam panels, or laminated boards installed in cavities or built up structures, that contain foams with Fluorinated greenhouse gases, saturated and unsaturated Hydrofluorocarbons, and Ozone Depleting Substances, as defined in Regulation (EU) No 517/2014 and in Regulation (EU) No 1005/2009, the emissions are avoided to the extent possible by handling the foams or the gases contained therein in a way that ensures the reuse or destruction of the foam panels or the gases contained in the foams. The recovery of the gases contained in the foams is carried out by appropriately trained personnel. Where recovery of these foams is not technically feasible, the operator draws up documentation providing evidence for the infeasibility of the recovery in the specific case. Such documentation is retained for five years and is made available, on demand.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	Measures are taken to reduce noise, dust and pollutant emissions during demolition and wrecking works.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

3.4. **Maintenance of roads and motorways**

Description of the activity

Maintenance of streets, roads and motorways, other vehicular and pedestrian ways, surface work on streets, roads, highways, bridges, tunnels, aerodrome runways, taxiways and aprons, defined as all actions undertaken to maintain and restore the serviceability ([123]) and level of service of roads ([124]). For bridges and tunnels, the economic activity only includes the maintenance of the road that runs on the bridge or through the tunnel. It does not include the maintenance of the bridge or tunnel itself.

The economic activity includes routine maintenance, which can be scheduled on a periodical basis. The economic activity also includes preventive maintenance and rehabilitation which are defined as works undertaken to preserve or restore serviceability and to extend the service life ([125]) of an existing road. The maintenance operation is mainly dedicated to pavement management and concerns only the following main elements of the road: binder course, surface course and concrete slabs. The roads in the scope of this economic activity are made of asphalt, concrete or a combination of the two.

The economic activities in this category could be associated with NACE code F42.11 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([123]) 'Serviceability' refers to the conditions under which a built asset is still considered safe to use.
([124]) 'Level of service' refers to a qualitative or quantitative measure to assess the infrastructure's ability to cater to the traffic demands placed on it.
([125]) 'Service life' refers to the period of use in service, i.e. from the date of construction until the date of reconstruction or demolition.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. Where main road elements (binder course, surface course or concrete slabs) are demolished or removed, the preparing for re-use ([126]) or recycling ([127]) of the non-hazardous waste generated onsite is 100 % (by mass in kilogrammes), excluding backfilling ([128]). This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC.

2. Where the road elements (binder course, surface course and concrete slabs) are newly installed after demolition or removal, including any roads which are built on a temporary basis for the purpose of carrying out the maintenance works, at least 50 % (by mass in kilogrammes) of the structural road elements used are re-used or recycled materials or non-hazardous industrial by-products.

3. The re-used or recycled materials are not moved over distances greater than 2,5 times the distance between the construction site and the nearest production facility for equivalent primary raw materials, to avoid that the use of re-used or recycled materials leads to higher CO_2 emissions than the use of primary raw materials.

4. Where newly installed, the binder course has a service lifetime no shorter than 20 years ([129]).

5. The use of primary raw material for road furniture is minimised through the use of secondary raw materials ([130]). The operator of the activity ensures that for metals, such as steel restraint systems, a maximum of 30 % of the material come from primary raw material. The threshold is calculated by subtracting the secondary raw material from the total amount of each material category used in the works measured by mass in kilogrammes. Where the information on the recycled content of the construction product is not available, it is to be counted as comprising 100 % primary raw material. In order to respect the Waste Hierarchy and thereby favour re-use over recycling, re-used construction products, including those containing non-waste materials reprocessed on site, are to be counted as comprising zero primary raw material.

Do no significant harm ('DNSH')

(1) Climate change mitigation	A traffic congestion mitigation plan to be implemented during the maintenance works is presented.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.

([126]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. This includes, for instance, the preparation for re-use of certain parts of buildings like roof elements, windows, doors, bricks, stones or concrete elements. A pre-requisite for the preparation for re-use of building elements is usually the selective deconstruction of buildings or other structures.

([127]) 'Recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([128]) 'Backfilling' means any recovery operation where suitable non-hazardous waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping. Waste used for backfilling must substitute non-waste materials, be suitable for the aforementioned purposes, and be limited to the amount strictly necessary to achieve those purposes.

([129]) Commission Staff Working Document. EU Green Public Procurement Criteria for Road Design, Construction and Maintenance (SWD (2016) 203), 2016, p. 17, column 'comprehensive criteria', (version of 27.6.2023: https://ec.europa.eu/environment/gpp/pdf/toolkit/roads/EN.pdf).

([130]) For the purposes of the Delegated Act, 'secondary raw materials' means materials that have been prepared for re-use or recycled in accordance with Article 3 of the Waste Framework Directive and have ceased to be waste under Article 6 of that Directive.

(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	Measures are taken to reduce noise, vibrations, dust and pollutant emissions during construction or maintenance works. When choosing road surface types, low noise road surfaces are preferred, in accordance with the comprehensive criterion B7 'minimum requirements for low-noise pavement design' of the EU Green Public Procurement Criteria for Road Design, Construction and Maintenance ([131]), and considering low-noise road surfaces a priority for all roads under the scope of Directive 2002/49/EC.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

3.5. **Use of concrete in civil engineering**

Description of the activity

Use of concrete for new construction, reconstruction, or maintenance ([132]) of civil engineering objects, except concrete road surfaces on the following elements: streets, motorways, highways, other vehicular and pedestrian ways, bridges, tunnels and aerodrome runways, taxiways and aprons that are covered under the economic activity 'Maintenance of roads and motorways' (See Section 3.4 of this Annex).

An economic activity in this category could be associated with several NACE codes, in particular F42.12, F42.13, F42.2, F42.9, in accordance with the statistical classification for economic activities established by Regulation (EC) No 1893/2006.

([131]) Commission Staff Working Document. EU Green Public Procurement Criteria for Road Design, Construction and Maintenance (SWD (2016) 203), 2016, p. 15, column 'comprehensive criteria', (version of 27.6.2023: https://ec.europa.eu/environment/gpp/pdf/toolkit/roads/EN.pdf).

([132]) 'Maintenance of civil engineering objects' is defined as all actions undertaken to maintain and restore the serviceability and level of service of roads.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. All generated construction and demolition waste is treated in accordance with Union waste legislation and the full checklist of the EU Construction and Demolition Waste Management Protocol, in particular by setting sorting systems ([133]). The preparing for re-use ([134]) or recycling ([135]) of the non-hazardous construction and demolition waste generated on the construction site is at least 90 % (by mass in kilogrammes), excluding backfilling ([136]). This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC. The operator of the activity demonstrates compliance with the 90 % threshold by reporting on the Level(s) indicator 2.2 using the Level 2 reporting format for different waste streams.

2. Construction designs and techniques support circularity via the incorporation of concepts for design for adaptability and deconstruction as outlined in Level(s) indicators 2.3 and 2.4 respectively. Compliance with this requirement is demonstrated by reporting on the Level(s) indicators 2.3 ([137]) and 2.4 ([138]) at Level 2.

3. The use of primary raw material is minimised through the use of secondary raw materials ([139]). For concrete, a maximum of 70 % of the material comes from primary raw material. This criterion applies to *in situ* poured concrete, pre-cast products, and all constituent materials, including any reinforcement. The threshold is calculated by subtracting the secondary raw material from the total amount of material used measured by mass in kilogrammes. Where the information on the recycled content of the construction product is not available, it is to be counted as comprising 100 % primary raw material. In order to respect the Waste Hierarchy and thereby favour re-use over recycling, re-used construction products, including those containing non-waste materials reprocessed on site, are to be counted as comprising zero primary raw material.

4. The secondary raw materials are not moved over distances greater than 2,5 times the distance between the construction site and the nearest production facility for equivalent primary raw materials, to avoid that the use of re-used or recycled materials leads to higher CO_2 emissions than the use of primary raw materials.

([133]) EU Construction and Demolition Waste Management Protocol, Annex F (version of 27.6.2023: https://ec.europa.eu/docsroom/documents/20509/).

([134]) 'Preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. This includes, for instance, the preparation for re-use of certain parts of buildings like roof elements, windows, doors, bricks, stones or concrete elements. A pre-requisite for the preparation for re-use of building elements is usually the selective deconstruction of buildings or other structures.

([135]) 'Recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

([136]) 'Backfilling' means any recovery operation where suitable non-hazardous waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping. Waste used for backfilling must substitute non-waste materials, be suitable for the aforementioned purposes, and be limited to the amount strictly necessary to achieve those purposes.

([137]) See Level(s) indicator 2.3: Design for adaptability and renovation, user manual: introductory briefing, instruction and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau//sites/default/files/2021-01/UM3_Indicator_2.3_v1.1_23pp.pdf.

([138]) See Level(s) indicator 2.4: Design for deconstruction user manual: introductory briefing, instructions and guidance (Publication version 1.1), https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2021-01/UM3_Indicator_2.4_v1.1_18pp.pdf.

([139]) For the purposes of the Delegated Act, 'secondary raw materials' means materials that have been prepared for re-use or recycled in accordance with Article 3 of the Waste Framework Directive and have ceased to be waste under Article 6 of that Directive.

5. The operator of the activity uses electronic tools to describe the characteristics of the building as built, including the materials and components used, for the purpose of future maintenance, recovery, and reuse, for example using EN ISO 22057:2022 to provide Environmental Product Declarations ([140]). The information is stored in a digital format and is made available to investors and clients on demand. In addition, the operator ensures the long-term preservation of this information beyond the useful life of the building by using the information managing systems provided by national tools, such as cadastre or public register.

6. Bridges, tunnels, dikes and sluices are inspected regularly by a nationally approved inspector and the data is used to predict maintenance needs.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The built asset is not dedicated to the extraction, storage, transport or manufacture of fossil fuels. For the cement used in this activity, the greenhouse gas emissions ([141]) from the production processes are: (a) for grey cement clinker, lower than 0,816 ([142]) tCO_2e per tonne of grey cement clinker; (b) for cement from grey clinker or alternative hydraulic binder, lower than 0,530 ([143]) tCO_2e per tonne of cement or alternative binder manufactured.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.

([140]) ISO standard 22057:2022, Sustainability in buildings and civil engineering works – Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM) (version of April 2022), https://www.iso.org/standard/72463.html.

([141]) Calculated in accordance with Regulation (EU) 2019/331.

([142]) Reflecting the median value of the installations in 2016 and 2017 (t CO_2 equivalents/t) of the data collected in the context of establishing the Commission Implementing Regulation (EU) 2021/447, determined on the basis of verified information on the greenhouse gas efficiency of installations reported pursuant to Article 11 of Directive 2003/87/EC.

([143]) Reflecting the median value of the installations in 2016 and 2017 (t CO_2 equivalents/t) of the data collected for grey cement clinker in the context of establishing the Commission Implementing Regulation (EU) 2021/447, multiplied by the clinker to cement ratio (0,65), determined on the basis of verified information on the greenhouse gas efficiency of installations reported pursuant to Article 11 of Directive 2003/87/EC.

(5) Pollution prevention and control	Components and materials used in the construction comply with the criteria set out in Appendix C to this Annex. Components and materials used in the construction that may come into contact with occupiers ([144]) emit less than 0,06 mg of formaldehyde per m^3 of test chamber air upon testing in accordance with the conditions specified in Annex XVII to Regulation (EC) No 1907/2006 and less than 0,001 mg of other categories 1A and 1B carcinogenic volatile organic compounds per m^3 of test chamber air, upon testing in accordance with CEN/EN 16516 ([145]) or ISO 16000-3:2011 ([146]) or other equivalent standardised test conditions and determination methods ([147]). Where the new construction is located on a potentially contaminated site (brownfield site), the site has been subject to an investigation for potential contaminants, for example by using standard ISO 18400. Measures are taken to reduce noise, vibrations, dust and pollutant emissions during construction or maintenance works. Where appropriate, given the sensitivity of the area affected, in particular in terms of the size of population and fauna affected, noise and vibrations from construction, use and maintenance of infrastructure are mitigated by acoustical planning introducing open trenches, wall barriers or other appropriate measures in compliance with Directive 2002/49/EC of the European Parliament and of the Council ([148]).
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. In addition, the following is to be ensured: (a) in the EU, in relation with Natura 2000 sites: the activity does not have significant effects on Natura 2000 sites in view of their conservation objectives on the basis of an appropriate assessment carried out in accordance with Article 6(3) of Directive 92/43/EEC; (b) in the EU, in any area: the activity is not detrimental to the recovery or maintenance of the populations of species protected under Directive 92/43/EEC and Directive 2009/147/EC at a favourable conservation status. The activity is also not detrimental to the recovery or maintenance of the habitat types concerned and protected under Directive 92/43/EEC at a favourable conservation status; (c) outside of the EU, activities are conducted in accordance with applicable law related to the conservation of habitats and species.

([144]) Applying to paints and varnishes, ceiling tiles, floor coverings, including associated adhesives and sealants, internal insulation and interior surface treatments, such as those to treat damp and mould.
([145]) CEN/TS 16516: 2013, Construction products – Assessment of release of dangerous substances –Determination of emissions into indoor air.
([146]) ISO 16000-3:2011, Indoor air – Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method.
([147]) The emissions thresholds for carcinogenic volatile organic compounds relate to a 28-day test period.
([148]) Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise – Declaration by the Commission in the Conciliation Committee on the Directive relating to the assessment and management of environmental noise (OJ L 189, 18.7.2002, p. 12).

4. ***Information and communication***

4.1. **Provision of IT/OT data-driven solutions**

Description of the activity

The activity manufactures, develops, installs, deploys, maintains, repairs or provides professional services, including technical consulting for design or monitoring of:

(a) software ([149]) and information technology (IT) or operational technology (OT) systems ([150]), including artificial intelligence (AI) based solutions, such as for automated machine learning, built for the purpose of remote monitoring and predictive maintenance, including systems for:

   (i) remotely collecting, processing, transferring, and storing data from equipment, products or infrastructure during their use or operation;

   (ii) analysing the data and generating insights about the operational performance and condition of the equipment, product or infrastructure;

   (iii) providing remote maintenance and recommendations about measures required to avoid operational failure and maintain the equipment, product or infrastructure in an optimal operating condition and prolong their useful life and reduce resource use and waste;

(b) tracking and tracing software and IT or OT systems built for the purpose of providing identification, tracking and tracing of materials, products and assets through their respective value chains (including digital material and product passports) with the predominant objective to support the circularity of material flows and products or other objectives set out in Regulation (EU) 2020/852;

(c) lifecycle assessment software supporting the lifecycle assessment and related reporting for products, equipment or infrastructures;

(d) design and engineering software supporting the eco-design of products, equipment, and infrastructure, including waste management and resource efficiency;

(e) supplier management software supporting green procurement of materials, products and services with low environmental impact, but excluding the operation of market places supporting the trading of such goods;

(f) lifecycle performance management software supporting the monitoring and assessment of the circularity performance of products, equipment, or infrastructures during their lifecycle.

The economic activities in this category could be associated with several NACE codes, in particular C26, C27, J58.29, J61, J62 and J63.1 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An economic activity in this category is an enabling activity in accordance with Article 13(1), point (l), of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

([149]) 'Software' includes on-premises and cloud-based software.

([150]) 'IT or OT systems' include connectable products, sensors, analytics and other software, and information and communication technologies (ICT) for the transmission, storage and display of data and system management.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity manufactures, develops, installs, deploys, maintains, repairs or provides professional services, including technical consulting for design or monitoring, to one or more of the following IT/OT data-driven solutions that provide the capabilities listed below. Such IT/OT data-driven solutions include sensors (such as power, temperature, vibration, video, sound, viscosity), data collection and communication equipment, data repository (edge or cloud), and software. Where these capabilities are part of a broader software or IT/OT offering, only specific software add-ons implementing these capabilities qualify.

2. For remote monitoring and predictive maintenance systems, at least two of the following capabilities specified in points (a) to (d) are met in their full scope:

(a) alerting the user to abnormal sensor values, and assessing the status of the product, equipment, or infrastructure, detecting wear and tear or electrical issues, and drawing conclusions about the exact nature of abnormal operating conditions by means of advanced analytical methods;

(b) predicting the expected remaining lifetime of a product, equipment, or infrastructure, and recommending measures to extend the remaining lifetime;

(c) predicting an upcoming product, equipment or infrastructure failure and recommending measures to prevent such failure;

(d) providing recommendations about the highest value next use cycle, such as reuse, recovering components through parts harvesting for remanufacture, or recycling, taking into consideration a combination of factors regarding the product's condition.

IT/OT systems aimed at (i) monitoring for the replacement of consumables ([151]), such as printer ink; (ii) remote monitoring and remote maintenance of power generation plants that are more greenhouse gas intensive than 100 gCO_2e/kWh; or (iii) monitoring and remote management of any type of fossil fuel engine; do not qualify.

3. For tracking and tracing software and IT/OT systems, at least one of the following capabilities specified in points (a) to (d) is met in its full scope:

(a) providing identification, tracking and tracing of materials, products and assets through value chains in order to make accessible structured data (such as material content, substances, environmental information) required for lifecycle assessments or material declarations according to relevant standards, such as Recommendation (EU) 2021/2279, ISO 14067:2018 ([152]) or ISO 14040:2006 ([153]), and sharing of such data with value chain partners, consumers, and other economic actors in compliance with relevant standards regarding data modelling, interoperability, data privacy and data security;

(b) provisioning and sharing of documents and data directly supporting the repair and maintenance of products and equipment, such as repair instruction, test equipment, wiring and connection diagrams, diagnostic fault and error codes, disassembly instructions;

(c) supporting reverse logistics, including the take-back of products for remanufacturing, refurbishment or recycling, by managing steps and transactions in the take-back process, such as pick-up order placement, tracking of sales transaction data, decomposition of product into materials to be re-injected into circular material flows, and by optimising decisions to prevent downcycling and maximise resource recovery. Digital product passports meeting the minimum requirements in Union law are not considered as taxonomy aligned;

([151]) 'Consumables' are non-durable commodities that are intended to be used, depleted or replaced. They may be required for the functioning of a consumer product, or be used in fabrication, without being incorporated into the finished product.

([152]) ISO standard 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification (version of 27.6.2023: https://www.iso.org/standard/71206.html).

([153]) ISO standard 14040:2006, Environmental management – Life cycle assessment – Principles and framework (version of 27.6.2023: https://www.iso.org/standard/37456.html).

(d) supporting optimisation and intensification of the use of products, through circular business models such as providing products as a service or peer-to-peer sharing.

4. For lifecycle assessment software, at least one of the following capabilities specified in points (a) to (c) is met in its full scope:

(a) supporting the life cycle assessment of products, equipment or infrastructure with software-implemented methods and algorithms according to relevant standards such as Recommendation (EU) 2021/2279, ISO 14067:2018 ([154]) or ISO 14040:2006 ([155]);

(b) providing data required for lifecycle analysis, such as standard carbon emission values and other environmental impacts for frequently used products and materials or production steps;

(c) providing recommendations for improving the design of a product, equipment, or infrastructure so as to minimise their material and carbon footprint.

5. For design and engineering software, at least one of the following capabilities specified in points (a) to (e) is met in its full scope:

(a) supporting users to formulate, document and manage product-specific circularity and other environmental design goals and requirements, such as design-for-remanufacturability, design-for-serviceability, minimal environmental impact from using or operating the product, minimal waste during production or construction and tailored production to eliminate over-specification and reduce material inputs;

(b) supporting users to explore product designs for the purpose of assessing and optimising product designs against specified circular or other environmental objectives, or finding the best trade-off between conflicting design goals, such as robustness v material use, greener material v costing or installing schedule or cost of downstream reuse and recycling systems;

(c) validating a design through analysis and simulation against specified circularity and other environmental design goals and requirements;

(d) supporting the computer-aided product design process – including mechanical, electrical, electronic or recipe design – with data and information about the impact of design and construction decisions on circularity and environmental performance;

(e) supporting the selection of materials and components with a low environmental impact through the provision of data about market-available materials and components and their cost.

6. For supplier management software, at least one of the following capabilities specified in points (a) to (e) is met in its full scope:

(a) providing the user with information about suppliers and supplies of circular products, immediate products, components and materials that are designed for closed loop systems, reuse, remanufacturing or repurposing. The information provided exceeds the minimum information requirements in existing Union law ([156]);

(b) supporting the management and tracking suppliers' compliance with standards and certifications related to the provision of such materials, products, and components;

(c) supporting the exchange with suppliers of data required to verify the environmental performance of supplied materials, products, and components;

(d) supporting the trading and matchmaking between suppliers and purchasers of circular, eco-designed or otherwise eco-friendly products, materials, and components;

([154]) ISO standard 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification (version of 27.6.2023: https://www.iso.org/standard/71206.html).

([155]) ISO standard 14040:2006, Environmental management – Life cycle assessment – Principles and framework (version of 27.6.2023: https://www.iso.org/standard/37456.html).

([156]) Minimum information include energy labelling requirements under Union's energy labelling framework regulation, information under the scope of Regulation (EC) No 1272/2008, information on the Substances of Very High Concern in articles as such or in complex objects (Products) established under Directive 2008/98/EC or information on safety or warranty.

(e) supporting reverse logistics.

7. For lifecycle performance management software, at least one of the following capabilities specified in points (a) to (e) is met in its full scope:

(a) supporting the monitoring and assessment of the circularity performance ([157]) of a product, equipment or infrastructure during its lifecycle over time;

(b) comparing circularity performance against original circularity design goals, analysing deviations and their root causes;

(c) supporting the planning and documentation of measures required to prolong the useful life of the product, equipment or infrastructure, such as maintenance, retrofit, or other services;

(d) supporting the impact assessment of such measures on circularity performance;

(e) providing the user with data required to take decisions on the future use of the product, equipment, or infrastructure, such as retrofit, change of use, decommissioning and recycling.

8. All IT/OT data-driven solutions should meet the following criteria:

(a) techniques are adopted that support the reuse and use of secondary raw materials and reused components, and the solutions are designed for high durability, recyclability, easy disassembly, adaptability and upgradability;

(b) measures are in place to manage and recycle waste at the end-of life, including through decommissioning contractual agreements with recycling service providers, reflection in financial projections or official project documentation. These measures ensure that components and materials are segregated and treated to maximise recycling and reuse in accordance with the waste hierarchy, EU waste regulation principles and applicable regulations, in particular through the reuse and recycling of batteries and electronics and the critical raw materials therein. These measures also include the control and management of hazardous materials;

(c) preparation for re-use, recovery or recycling operations, or proper treatment, including the removal of all fluids and a selective treatment are performed in accordance with Annex VII to Directive 2012/19/EU.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.

([157]) 'Circularity performance' is to be assessed on the basis of: (i) product durability, reliability, reusability, upgradability, reparability, ease of maintenance and refurbishment; (ii) presence of substances that inhibit the circularity of products and materials; (iii) energy use or energy efficiency of products; (iv) resource use or resource efficiency of products; (v) recycled content in products; (vi) ease of disassembly, remanufacturing and recycling of products and materials; (vii) life-cycle environmental impact of products, including their carbon and environmental footprints; (viii) preventing and reducing waste, including packaging waste.

(5) Pollution prevention and control	The equipment used to operate the software meets the requirements laid down in Directive 2009/125/EC for servers and data storage products. The equipment used does not contain the restricted substances listed in Annex II to Directive 2011/65/EU, except where the concentration values by weight in homogeneous materials do not exceed the maximum values listed in that Annex.
(6) Protection and restoration of biodiversity and ecosystems	N/A

5. ***Services***

5.1. **Repair, refurbishment and remanufacturing**

Description of the activity

Repair ([158]), refurbishment ([159]) and remanufacturing ([160]) of goods that have been used for their intended purpose before by a customer (physical person or legal person).

The economic activity does not include replacement of consumables ([161]), such as printer ink, toner cartridges, lubricants for moving parts or batteries.

The economic activity relates to products that are manufactured by economic activities classified under the NACE codes C13 Manufacture of textiles, C14 Manufacture of wearing apparel, C15 Manufacture of leather and related products, C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, C22 Manufacture of rubber and plastic products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C25.1 Manufacture of structural metal products, C25.2 Manufacture of tanks, reservoirs and containers of metal, C25.7 Manufacture of cutlery, tools and general hardware, C25.9 Manufacture of other fabricated metal products, C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools, C28.25 Manufacture of non-domestic cooling and ventilation equipment, C28.93 Manufacture of machinery for food, beverage and tobacco processing, excluding machinery for tobacco processing, C28.94 Manufacture of machinery for textile, apparel and leather production, C28.95 Manufacture of machinery for paper and paperboard production, C28.96 Manufacture of plastic and rubber machinery, C31 Manufacture of furniture and C32 Other manufacturing.

The economic activities in this category have no dedicated NACE codes as referred to in the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

([158]) 'Repair' means the process of returning a faulty product to a condition where it can fulfil its intended use, either as a service or with a view to the subsequent resale of the repaired product.

([159]) 'Refurbishment' means testing and where necessary repairing, cleaning or modifying a used product to increase or restore its performance or functionality or to meet applicable technical standards or regulatory requirements, with the result of making a fully functional product to be used for a purpose that is at least the one that was originally intended and to maintain its compliance with applicable technical standards or regulatory requirements originally conceived at the design stage.

([160]) 'Remanufacturing' means a standardised industrial process that takes place within industrial or factory settings, in which products are restored to original as-new condition and performance or better, typically placed on the market with a commercial guarantee.

([161]) Goods, components or materials that must be replaced regularly because they either wear out or are used up.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity consists of extending the lifetime of products by repairing, refurbishing or remanufacturing products that have already been used for their intended purpose by a customer (physical person or legal person).

2. The economic activity complies with the following criteria:

(a) the replaced parts, the refurbished products or the remanufactured products are covered by a sales contract where relevant and in accordance with provisions as regards conformity of the product, liability of the seller ([162]) (including the option of a shorter liability or limitation period for second-hand products), burden of proof, remedies for lack of conformity, the modalities for the exercise of those remedies, repair or replacement of the goods, and commercial guarantees;

(b) the economic activity implements a waste management plan that ensures that the product's materials, particularly critical raw materials, and components that have not been reused in the same product are reused elsewhere, or, where reuse is not possible (due to damage, degradation or hazardous substances), are recycled, or, only where reuse and recycling is not viable, are disposed of in accordance with applicable Union and national legislation. For remanufacturing, the waste management plan is accessible to the public.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. Spare parts installed through repair, refurbishment or remanufacturing comply with all relevant Union rules on the restriction of the use of hazardous substances, of generic nature or with specific relevance to that product category, such as Regulation (EC) No 1907/2006, Directive 2011/65/EU, and Directive (EU) 2017/2102 of the European Parliament and of the Council ([163]). For repair or refurbishment activities, those requirements do not apply to the original components that have been retained in the product. For installations falling within the scope of Directive 2010/75/EU, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions and ensures at the same time that no significant cross-media effects occur.

([162]) The conformity of the product and the period of liability of the seller are set in accordance with the relevant provisions of Directive (EU) 2019/771.

([163]) Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 305, 21.11.2017, p. 8).

(6)	Protection and restoration of biodiversity and ecosystems	N/A

5.2. **Sale of spare parts**

Description of the activity

Sale of spare parts ([164]).

The economic activity does not include replacement of consumables, such as printer ink, toner cartridges, lubricants for moving parts or batteries and maintenance.

The economic activity relates to spare parts that are used in products manufactured by economic activities classified under the NACE codes C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools and C31 Manufacture of furniture.

The economic activities in this category could be associated with several NACE codes, in particular G46 and G47 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity consists of the sale of spare parts beyond legal obligations.

2. The economic activity complies with the following criteria:

(a) each sold spare part is covered by a sales contract where relevant and in accordance with provisions as regards conformity of the product, liability of the seller ([165]) (including the option of a shorter liability or limitation period for second-hand products), burden of proof, remedies for lack of conformity, the modalities for the exercise of those remedies, repair or replacement of the goods, and commercial guarantees;

(b) each sold spare part for a product replaces, or intends to replace in the future, an existing part in order to restore or upgrade the product's functionality, in particular in case where the existing part is broken.

3. Where the economic activity involves delivery of packaged products to customers (physical person or legal person) including when the activity is operated as an e-commerce ([166]), the primary and secondary packaging of the product complies with one of the following criteria:

([164]) 'Spare part' means a separate part of a product that can replace a part of a product with the same or similar function. The product cannot function as intended without that part of the product. The functionality of a product is restored or is upgraded when the part is replaced by a spare part in line with Directive 2011/65/EU. Spare parts may be used parts.

([165]) The conformity of the product and the period of liability of the seller are set in accordance with the relevant provisions of Directive (EU) 2019/771.

([166]) 'E-commerce' can be defined generally as the sale or purchase of goods or services, whether between businesses, households, individuals or private organisations, through electronic transactions conducted via the internet or other computer-mediated (online communication) networks, see Eurostat Statistics Explained Glossary, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Category:Glossary.

(a) the packaging is made of at least 65 % recycled material. Where the packaging is made from paper or cardboard, the remaining primary raw material are certified by the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC International), or equivalent recognised schemes. Coatings with plastics or metals are not used. For plastic packaging only mono-materials without coatings are used, halogen-containing polymers are not used. A declaration of compliance is provided specifying the material composition of the packaging and the shares of recycled and primary raw material;

(b) the packaging has been designed to be reusable within a reuse system ([167]). The system for reuse is established in a way that ensures the possibility of reuse in a closed-loop or open-loop system.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh. The activity develops a strategy to account for and reduce the GHG emissions arising from transport along the value chain, including shipping and returns, to the extent these are traceable.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. Sold spare parts comply with all relevant EU rules on the restriction of the use of hazardous substances, of generic nature or with specific relevance to that product category, such as Regulation (EC) No 1907/2006, Directive 2011/65/EU, and Directive (EU) 2017/2102.
(6) Protection and restoration of biodiversity and ecosystems	N/A

5.3. **Preparation for re-use of end-of-life products and product components**

Description of the activity

Preparation for re-use of products and components at the end of life ([168]).

The economic activity does not include repair activities, which are performed during the product's use stage.

([167]) 'Reusable' and 'reuse system' are defined and implemented in accordance with the requirements on packaging reuse systems in the Union legislation on packaging and packaging waste, including any standards related to the number of rotations in a system for reuse.

([168]) Preparing for re-use is an operation or set of operations by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing. It is the highest waste treatment option on the waste hierarchy (after waste prevention).

The economic activity relates to products and their components manufactured by economic activities classified under the NACE codes C13 Manufacture of textiles, C14 Manufacture of wearing apparel, C15 Manufacture of leather and related products, C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, C18 Printing and reproduction of recorded media, C22 Manufacture of rubber and plastic products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C25.1 Manufacture of structural metal products, C25.2 Manufacture of tanks, reservoirs and containers of metal, C25.7 Manufacture of cutlery, tools and general hardware, C25.9 Manufacture of other fabricated metal products, C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools, C28.25 Manufacture of non-domestic cooling and ventilation equipment, C28.93 Manufacture of machinery for food, beverage and tobacco processing, excluding machinery for tobacco processing, C28.94 Manufacture of machinery for textile, apparel and leather production, C28.95 Manufacture of machinery for paper and paperboard production, C28.96 Manufacture of plastic and rubber machinery, C29 Manufacture of motor vehicles, trailers and semi-trailers, C30.1 Building of ships and boats, C30.2 Manufacture of railway locomotives and rolling stock, C30.3 Manufacture of air and spacecraft and related machinery, C30.9 Manufacture of transport equipment n.e.c., C31 Manufacture of furniture and C32 Other manufacturing.

The economic activities in this category have no dedicated NACE code as referred to in the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The activity prepares for re-use products or components of products that have become waste so that they can be re-used without any other pre-processing.

2. The activity's waste feedstock originates from separately collected and transported waste in source segregated or commingled fractions ([169]).

3. The activity has implemented acceptance, safety and inspection procedures that comply with the following criteria:

(a) a procedure is in place to check the suitability for preparing for re-use or recycling, and that the activity implements a publicly available waste management plan, which ensures that discarded end-of-life products not suitable for preparing for re-use (due to damage, degradation or hazardous substances) are sent for recycling or, only where reuse and recycling is not viable, disposed of;

(b) the procedure which can be based on visual or manual external inspection against pre-determined criteria is suited to the category of discarded end-of-life products, which are prepared for re-use;

(c) proper training is provided and ensures that the re-use operators are qualified for the preparing for re-use activities of the discarded end-of-life products at stake.

4. The activity uses the tools and equipment suited for the preparation for re-use of discarded end-of-life products.

5. The activity has a system to report recovery rate and, where applicable, targets for preparing for re-use or recycling set out by Union or national legislation.

([169]) In the Union, the activity is in line with Article 10(3) of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3), or sectoral Union legislation related to waste and the national legislation and waste management plans.

6. The activity complies with the following criteria:

(a) the output of the activity are products or components of products which are suitable for re-use without any other processing;

(b) sold goods are covered by a sales contract where relevant and in accordance with provisions as regards conformity of the product, liability of the seller ([170]) (including the option of a shorter liability or limitation period for second-hand products), burden of proof, remedies for lack of conformity, the modalities for the exercise of those remedies, repair or replacement of the goods, and commercial guarantees.

7. For the preparation for re-use of Waste from Electrical and Electronic Equipment (WEEE), the economic activity is permitted to treat waste and implements an environmental management system using ISO 14001:2015 ([171]), the EU Eco-Management and Audit Scheme (EMAS) in accordance with Regulation (EC) No 1221/2009 of the European Parliament and of the Council ([172]) or equivalent and a Quality management system using ISO 9001:2015 ([173]).

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. The activity implements safety procedures required to protect the health and safety of workers carrying out preparing for re-use operations.
(6) Protection and restoration of biodiversity and ecosystems	N/A

5.4. **Sale of second-hand goods**

Description of the activity

Sale of second-hand goods that have been used for their intended purpose before by a customer (physical person or legal person), possibly after repair, refurbishment or remanufacturing.

([170]) The conformity of the product and the period of liability of the seller are set in accordance with the relevant provisions of Directive (EU) 2019/771.

([171]) ISO 14001:2015, Environmental management systems – Requirements with guidance for use (version of 27.6.2023: https://www.iso.org/standard/60857.html).

([172]) Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC (OJ L 342, 22.12.2009, p. 1).

([173]) ISO 9001:2015, Quality management systems – Requirements (version of 27.6.2023: https://www.iso.org/standard/62085.html).

The economic activity relates to products manufactured by economic activities classified under the NACE codes C13 Manufacture of textiles, C14 Manufacture of wearing apparel, C15 Manufacture of leather and related products, C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, C18 Printing and reproduction of recorded media, C22 Manufacture of rubber and plastic products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C25.1 Manufacture of structural metal products, C25.2 Manufacture of tanks, reservoirs and containers of metal, C25.7 Manufacture of cutlery, tools and general hardware, C25.9 Manufacture of other fabricated metal products, C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools, C28.25 Manufacture of non-domestic cooling and ventilation equipment, C28.93 Manufacture of machinery for food, beverage and tobacco processing, excluding machinery for tobacco processing, C28.94 Manufacture of machinery for textile, apparel and leather production, C28.95 Manufacture of machinery for paper and paperboard production, C28.96 Manufacture of plastic and rubber machinery, C29 Manufacture of motor vehicles, trailers and semi-trailers, C31 Manufacture of furniture, C32 Other manufacturing.

The economic activities in this category could be associated with several NACE codes, in particular G46 and G47 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity consists of selling a second-hand product that had been used for its intended purpose by a customer (physical person or legal person), potentially after its prior cleaning, repair, refurbishment or remanufacturing.

2. The sold product is covered by a sales contract where relevant and in accordance with provisions as regards conformity of the product, liability of the seller ([174]) (including the option of a shorter liability or limitation period for second-hand products), burden of proof, remedies for lack of conformity, the modalities for the exercise of those remedies, repair or replacement of the goods, and commercial guarantees.

3. Where the product has been repaired, refurbished or remanufactured before reselling, the activity implements a waste management plan that ensures that the product's materials and components that have not been reused in the same product, are reused elsewhere, or where reuse is not possible (for example due to damage, degradation or hazardous substances), are recycled, or, only where reuse and recycling are not viable, are disposed of. For remanufacturing, the waste management plan is accessible to the public.

4. Where the economic activity involves delivery of packaged products to customers (physical person or legal person) including when the activity is operated as an e-commerce ([175]), the primary and secondary packaging of the product complies with one of the following criteria:

(a) the packaging is made of at least 65 % recycled material. Where the packaging is made from paper or cardboard, the remaining primary raw material are certified by the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC International), or equivalent recognised schemes. Coatings with plastics or metals are not used. For plastic packaging only mono-materials without coatings are used, halogen-containing polymers are not used. A declaration of compliance is provided specifying the material composition of the packaging and the shares of recycled and primary raw material;

([174]) The conformity of the product and the period of liability of the seller are set in accordance with the relevant provisions of Directive (EU) 2019/771.

([175]) 'E-commerce' can be defined generally as the sale or purchase of goods or services, whether between businesses, households, individuals or private organisations, through electronic transactions conducted via the internet or other computer-mediated (online communication) networks, see Eurostat Statistics Explained Glossary, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Category:Glossary.

(b) the packaging has been designed to be reusable within a reuse system ([176]). The system for reuse is established in a way that ensures the possibility of reuse in a closed-loop or open-loop system.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh. The activity develops a strategy to account for and reduce the GHG emissions arising from transport along the value chain, including shipping and returns, to the extent these are traceable. Where the sold product is initially produced by the activities classified under NACE codes C29, and is a vehicle, mobility component, system, separate technical unit, part or a spare part as defined in Regulation (EU) 2018/858, when sold in the secondary market after 2025 and before 2030 the following criteria apply: (a) vehicles of category M_1 and N_1 classified as light-duty vehicles comply with specific emissions limits of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631 of the European Parliament and of the Council ([177]), lower than 50 gCO_2/km (low- and zero-emission light-duty vehicles); (b) vehicles of category L ([178]) with tailpipe CO_2 emissions equal to 0 g CO_2e/km calculated in accordance with the emission test laid down in Regulation (EU) 168/2013 of the European Parliament and of the Council ([179]); (c) vehicles of categories N_2 and N_3, and N_1 classified as heavy-duty vehicles, not dedicated to transporting fossil fuels with a technically permissible maximum laden mass not exceeding 7,5 tonnes that are 'zero-emission heavy-duty vehicles' as defined in Article 3, point (11), of Regulation (EU) 2019/1242; (d) vehicles of categories N_2 and N_3 not dedicated to transporting fossil fuels with a technically permissible maximum laden mass exceeding 7,5 tonnes that are 'zero-emission heavy-duty vehicles', as defined in Article 3, point (11), of Regulation (EU) 2019/1242 or 'low-emission heavy-duty vehicles' as defined in Article 3, point (12) of that Regulation. Where the product, initially produced by the activities classified under NACE codes C29, and being a vehicle, mobility component, system, separate technical unit, part or a spare part as defined in Regulation (EU) 2018/858, is sold in the secondary market after 2030 specific emissions of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631 are zero.

([176]) 'Reusable' and 'reuse system' are defined and implemented in accordance with the requirements on packaging reuse systems in the Union legislation on packaging and packaging waste, including any standards related to the number of rotations in a system for reuse.

([177]) Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO_2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 (OJ L 111, 25.4.2019, p. 13).

([178]) As defined in Article 4 of Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).

([179]) Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).

	Where product sold is initially produced by the activities classified under NACE codes C26 or C27, the product complies with Directive 2009/125/EC and the implementing regulations adopted under that Directive.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. Where the sold product is initially produced by the activities classified under NACE codes C29, and is a vehicle, mobility component, system, separate technical unit, part or a spare part as defined in Regulation (EU) 2018/858, it complies with the requirements of the most recent applicable stage of the Euro VI heavy duty emission type approval set out in accordance with Regulation (EC) No 595/2009 or with the requirements of the most recent applicable stage of the Euro 6 light-duty emission type-approval set out in accordance with Regulation (EC) No 715/2007 or their successors. For road vehicles of categories M and N, tyres, except re-treated tyres, comply with external rolling noise requirements in the highest populated class and with Rolling Resistance Coefficient (influencing the vehicle energy efficiency) in the highest two populated classes as set out in Regulation (EU) 2020/740 of the European Parliament and of the Council and as can be verified from the European Product Registry for Energy Labelling (EPREL), where applicable. Tyres comply with successors of Regulation (EC) No 715/2007 and Regulation (EC) No 595/2009.
(6) Protection and restoration of biodiversity and ecosystems	N/A

5.5. **Product-as-a-service and other circular use- and result-oriented service models**

Description of the activity

Providing customers (physical person or legal person) with access to products through service models, which are either use-oriented services, where the product is still central, but its ownership remains with the provider and the product is leased, shared, rented or pooled; or result-oriented, where the payment is pre-defined and the agreed result (i.e. pay per service unit) is delivered.

The economic activity covers products that are manufactured by economic activities classified under the NACE codes C13 Manufacture of textiles, C14 Manufacture of wearing apparel, C15 Manufacture of leather and related products, C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, C22 Manufacture of rubber and plastic products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C25.1 Manufacture of structural metal products, C25.2 Manufacture of tanks, reservoirs and containers of metal, C25.7 Manufacture of cutlery, tools and general hardware, C25.9 Manufacture of other fabricated metal products, C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools, C28.25 Manufacture of non-domestic cooling and ventilation equipment, C28.93 Manufacture of machinery for food, beverage and tobacco processing, excluding machinery for tobacco processing, C28.94 Manufacture of

machinery for textile, apparel and leather production, C28.95 Manufacture of machinery for paper and paperboard production, C28.96 Manufacture of plastic and rubber machinery, C31 Manufacture of furniture and C32 Other manufacturing.

The economic activities in this category could be associated with several NACE codes, in particular G46, G47, and N.77 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The activity provides the customer (physical or legal persons) with access to, and use of product(s), while ensuring that the ownership remains with the company providing this service, such as a manufacturer, specialist or retailer. The contractual terms and conditions ensure that all the following sub-criteria are met:

(a) there is an obligation for the provider of the service to take back the used product at the end of the contractual agreement;

(b) there is an obligation for the customer to give back the used product at the end of the contractual agreement;

(c) the provider of the service remains owner of the product;

(d) the customer pays for access to and use of the product, or the result of access to and use of this product.

2. The activity leads to an extended lifespan or increased use intensity of the product in practice.

3. Where the economic activity involves delivery of packaged products to customers (physical person or legal person) including when the activity is operated as an e-commerce ([180]), the primary and secondary packaging of the product complies with one of the following criteria:

(a) the packaging is made of at least 65 % recycled material. Where the packaging is made from paper or cardboard, the remaining primary raw material are certified by the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC International), or equivalent recognised schemes. Coatings with plastics or metals are not used. For plastic packaging only monomaterials without coatings are used, halogen-containing polymers are not used. A declaration of compliance is provided specifying the material composition of the packaging and the shares of recycled and primary raw material;

(b) the packaging has been designed to be reusable within a reuse system ([181]). The system for reuse is established in a way that ensures the possibility of reuse in a closed-loop or open-loop system.

4. For wearing apparel, where the economic activity involves laundry and dry-cleaning of used wearing apparel, the activity complies with an ISO type 1 ecolabel or equivalent.

([180]) 'E-commerce' can be defined generally as the sale or purchase of goods or services, whether between businesses, households, individuals or private organisations, through electronic transactions conducted via the internet or other computer-mediated (online communication) networks, see Eurostat Statistics Explained Glossary, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Category:Glossary.

([181]) 'Reusable' and 'reuse system' are defined and implemented in accordance with the requirements on packaging reuse systems in the Union legislation on packaging and packaging waste, including any standards related to the number of rotations in a system for reuse.

Do no significant harm ('DNSH')	
(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh. The activity develops a strategy to account for and reduce the GHG emissions arising from the services upstream and downstream of the value chain, including: (a) intermediate products and raw materials; (b) transport along the value chain, including shipping and returns; (c) maintenance and operations, including laundry and cleaning; (d) end of life, including waste management.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex.
(6) Protection and restoration of biodiversity and ecosystems	N/A

5.6. **Marketplace for the trade of second-hand goods for reuse**

Description of the activity

Development and operation of marketplaces ([182]) and classifieds ([183]) for the trade (sale or exchange) of second-hand products, materials or components for reuse, where the marketplaces and classifieds act as an intermediary to match buyers seeking a service or product with sellers or providers of those products or services.

The economic activity covers marketplaces and classifieds supporting B2B, B2C and Customer to Customer (C2C) sales. The activity covers services such as buyer-seller linking, payment or delivery service.

The economic activity does not include the wholesale or retail trade of second-hand goods.

The economic activity relates to products that are manufactured by economic activities classified under the NACE codes C10 Manufacture of food products, C11 Manufacture of beverages, C13 Manufacture of textiles, C14 Manufacture of wearing apparel, C15 Manufacture of leather and related products, C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, C17 Manufacture of paper and paper products, C18 Printing and reproduction of recorded media, C22 Manufacture of rubber and plastic products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C24 Manufacture of basic metals, C25.1 Manufacture of structural metal products, C25.2 Manufacture of tanks, reservoirs and containers of metal, C25.7 Manufacture of cutlery, tools and general hardware, C25.9 Manufacture of other fabricated metal products, C26 Manufacture of computer, electronic and optical products, C27 Manufacture of electrical equipment, C28.22 Manufacture of lifting and handling equipment, C28.23 Manufacture of office machinery and equipment (except

([182]) 'Marketplaces' are platforms that connect buyers and sellers and facilitate transaction via technology enablement or services, such as payment gateway or logistics services.
([183]) 'Classifieds' are platforms that connect buyers and sellers.

computers and peripheral equipment), C28.24 Manufacture of power-driven hand tools, C28.25 Manufacture of non-domestic cooling and ventilation equipment, C28.93 Manufacture of machinery for food, beverage and tobacco processing, excluding machinery for tobacco processing, C28.94 Manufacture of machinery for textile, apparel and leather production, C28.95 Manufacture of machinery for paper and paperboard production, C28.96 Manufacture of plastic and rubber machinery, C31 Manufacture of furniture and C32 Other manufacturing.

The economic activities in this category could be associated with several NACE codes, in particular J58.29, J61, J62 and J63.1 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An economic activity in this category is an enabling activity in accordance with Article 13(1), point (l), of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

Technical screening criteria

Substantial contribution to the transition to a circular economy

1. The economic activity consists of developing and operating marketplaces or classifieds to support the sale or reuse of second-hand products, components or materials.

The activity enables the trade (sale or exchange) for reuse of second-hand goods as specified in the activity description that have already been used for their intended purpose before by a consumer or an organisation, with or without repair.

2. Where servers and data storage products are being used:

(a) the equipment used comply with the requirements for servers and data storage products set out in accordance with Directive 2009/125/EC;

(b) the equipment used does not contain the restricted substances listed in Annex II to Directive 2011/65/EU, except where the concentration values by weight in homogeneous materials do not exceed those listed in that Annex;

(c) a waste management plan is in place to favour reuse as a priority and recycling at the end of life of electrical and electronic equipment, such as contractual agreements with recycling partners;

(d) at its end of life, equipment undergoes preparation for reuse, recovery or recycling operations, or proper treatment, including the removal of all fluids and a selective treatment in accordance with Annex VII to Directive 2012/19/EU.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where data centres are being used and operated, the activity has demonstrated best efforts to implement the relevant practices listed as 'expected practices' in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency, or in CEN-CENELEC document CLC TR50600-99-1 'Data centre facilities and infrastructures – Part 99-1: Recommended practices for energy management' ([184]) and has implemented all expected practices that have been assigned the maximum value of 5 according to the most recent version of the European Code of Conduct on Data Centre Energy Efficiency.

([184]) Issued on 1 July 2019 by the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) (version of 27.6.2023: https://www.cenelec.eu/dyn/www/f?p=104:110:508227404055501::::FSP_ORG_ID,FSP_PROJECT,FSP_LANG_ID:1258297,65095,25).

(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex.
(6) Protection and restoration of biodiversity and ecosystems	N/A

Appendix A

Generic criteria for DNSH to climate change adaptation

I. **Criteria**

The physical climate risks that are material to the activity have been identified from those listed in the table in Section II of this Appendix by performing a robust climate risk and vulnerability assessment with the following steps:

(a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;

(b) where the activity is assessed to be at risk from one or more of the physical climate risks listed in Section II of this Appendix, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;

(c) an assessment of adaptation solutions that can reduce the identified physical climate risk.

The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:

(a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;

(b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios ([1]) consistent with the expected lifetime of the activity, including, at least, 10- to 30-year climate projections scenarios for major investments.

The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports ([2]), scientific peer-reviewed publications, and open source ([3]) or paying models.

For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.

For new activities and existing activities using newly-built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.

The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions ([4]) or rely on blue or green infrastructure ([5]) to the extent possible.

([1]) Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

([2]) Assessments Reports on Climate Change: Impacts, Adaptation and Vulnerability, published periodically by the Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change produces, https://www.ipcc.ch/reports/.

([3]) Such as Copernicus services managed by the European Commission.

([4]) Nature-based solutions are defined as 'solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions'. Therefore, nature-based solutions benefit biodiversity and support the delivery of a range of ecosystem services (version of 27.6.2023: https://ec.europa.eu/research/environment/index.cfm?pg=nbs).

([5]) See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Green Infrastructure (GI) – Enhancing Europe's Natural Capital (COM(2013) 249 final).

II. **Classification of climate-related hazards** ([6])

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

([6]) The list of climate-related hazards in this table is non-exhaustive, and constitutes only an indicative list of most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment.

Appendix B

Generic criteria for DNSH to sustainable use and protection of water and marine resources

Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC ([1]) and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.

The activity does not hamper the achievement of good environmental status of marine waters or does not deteriorate marine waters that are already in good environmental status as defined in point 5 of Article 3 of Directive 2008/56/EC ([2]), taking into account the Commission Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors.

([1]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided; or, where this is not possible, (3) justified by the lack of better environmental alternatives which are not disproportionately costly/technically unfeasible, and all practicable steps are taken to mitigate the adverse impact on the status of the body of water.

([2]) The definition laid down in point 5 of Article 3 of Directive 2008/56/EC provides in particular that good environmental status is to be determined on the basis of the qualitative descriptors laid down in Annex I to that Directive.

Appendix C

Generic criteria for DNSH to pollution prevention and control regarding use and presence of chemicals

The activity does not lead to the manufacture, placing on the market or use of:

(a) substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021, except in the case of substances present as an unintentional trace contaminant;

(b) mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852;

(c) substances, whether on their own, in mixture or in articles, listed in Annexes I or II to Regulation (EC) No 1005/2009;

(d) substances, whether on their own, in mixtures or in an articles, listed in Annex II to Directive 2011/65/EU, except where there is full compliance with Article 4(1) of that Directive;

(e) substances, whether on their own, in mixtures or in an article, listed in Annex XVII to Regulation (EC) No 1907/2006, except where there is full compliance with the conditions specified in that Annex;

(f) substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), and meeting the criteria laid down in Article 57 of Regulation (EC) No 1907/2006 and that were identified in accordance with Article 59(1) of that Regulation for a period of at least 18 months, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([1]).

In addition, the activity does not lead to the manufacture, presence in the final product or output, or placing on the market, of other substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), that meet the criteria of Regulation (EC) No 1272/2008 for one of the hazard classes or hazard categories mentioned in Article 57 of Regulation (EC) No 1907/2006, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([2]).

([1]) The Commission will review the exceptions from the prohibition from manufacturing, placing on the market or use of the substances referred to in point (f) once it will have published horizontal principles on essential use of chemicals.

([2]) The Commission will review the exceptions from the prohibition from manufacture, presence in the final product or output, or placing on the market of the substances referred to in this paragraph once it will have published horizontal principles on essential use of chemicals.

Appendix D

Generic criteria for DNSH to protection and restoration of biodiversity and ecosystems

An Environmental Impact Assessment (EIA) or screening [1] has been completed in accordance with Directive 2011/92/EU [2].

Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.

For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment [3], where applicable, has been conducted and based on its conclusions the necessary mitigation measures [4] are implemented.

[1] The procedure through which the competent authority determines whether projects listed in Annex II to Directive 2011/92/EU is to be made subject to an environmental impact assessment (as referred to in Article 4(2) of that Directive).

[2] For activities in third countries, in accordance with equivalent applicable national law or international standards requiring the completion of an EIA or screening, for example, IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks.

[3] In accordance with Directives 2009/147/EC and 92/43/EEC. For activities located in third countries, in accordance with equivalent applicable national law or international standards, that aim at the conservation of natural habitats, wild fauna and wild flora, and that require to carry out (1) a screening procedure to determine whether, for a given activity, an appropriate assessment of the possible impacts on protected habitats and species is needed; (2) such an appropriate assessment where the screening determines that it is needed, for example IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

[4] Those measures have been identified to ensure that the project, plan or activity will not have any significant effects on the conservation objectives of the protected area.

ANNEX III

Technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to pollution prevention and control and for determining whether that economic activity causes no significant harm to any of the other environmental objectives

Table of Contents

1. *Manufacturing*

1.1. **Manufacture of active pharmaceutical ingredients (API) or active substances**

Description of the activity

Manufacture of active pharmaceutical ingredients (API) or active substances.

The economic activities in this category could be associated with NACE code C21.1 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. The activity complies with all of the requirements specified below relating to product substitution.

1.1. The API complies with one of the following requirements:

(a) the API is a naturally occurring substance, such as vitamins, electrolytes, amino acids, peptides, proteins, nucleotides, carbohydrates and lipids, and, in line with the European Medicines Agency Guideline on the environmental risk assessment of medicinal products for human use (EMA ERA guideline) ([1]), is generally considered to be degradable in the environment ([2]);

([1]) European Medicines Agency Guidelines on the environmental risk assessment of medicinal products for human use, version of 27.6.2023 available at: https://www.ema.europa.eu/en/environmental-risk-assessment-medicinal-products-human-use-scientific-guideline.

([2]) Key metabolites are human metabolites likely to be excreted into the environment. Those metabolites are identified in (non-)clinical studies on the metabolism of medicinal products available in the marketing authorisation applications. Such metabolites are to be identified according to EMA/CPMP/ICH/286/1995, page 8. Key transformation products (TP) of these key human metabolites of the parent compound (API) are those that exceed 10 % of Dissolved Organic Carbon (DOC) or Total Organic Carbon (TOC) of the parent compound.

(b) where the API does not comply with the requirements specified in point (a), the API, its key human metabolites and its key transformation products in the environment comply with one of the following:

(i) are classified as readily biodegradable based on at least one of the test methods from the OECD Guidelines for the Testing of Chemicals, Test 301 (A-F), Ready Biodegradability ([3]), in accordance with the pass value for ready biodegradability as defined in that guideline;

(ii) can be concluded to be mineralised based on a specific Test No 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems (OECD 308) ([4]) of the OECD Guidelines for the Testing of Chemicals ([5]) compared to persistence criteria as defined in the EMA ERA guideline.

1.2. The API qualifies as an appropriate substitute to another API, within the same therapeutic area or the substance class, that is available in the market or was available during last 5 years and that does not comply with the requirements described in point 1.1.

Compliance with this requirement is demonstrated through a publicly available analysis verified by an independent third party.

1.3. The manufacturing process of the API does not involve the use of substances, whether on their own or in mixtures, that meet the criteria set out in Article 57 of Regulation (EC) No 1907/2006 except where it is assessed and documented by the operator that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([6]).

2. The activity complies with the following requirements regarding the emission of pollutants:

2.1. Where the activity falls within its scope, the emission limit values are lower than the mid-point of the BAT-AEL ranges ([7]) set out in:

(a) the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector for emissions to air of new installations (or for existing installations within 4 years of the BATC publication) where relevant conditions apply ([8]);

(b) the Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals (OFC) ([9]) for the manufacturing activity under conditions not covered by the BATC mentioned above;

([3]) OECD Guidelines for the Testing of Chemicals, Test 301 (A-F), Ready Biodegradability, version of 27.6.2023 available at: https://www.oecd.org/chemicalsafety/risk-assessment/1948209.pdf. OECD 301 (A-F) test is used to identify substances which are assumed to rapidly and ultimately biodegrade, i.e. mineralised under aerobic environmental conditions.

([4]) Higher-tier studies (OECD 308) result with so-called half-lives indicating the time after which 50 % biodegradation of the API is achieved. Half-lives acceptable to demonstrate sufficiently quick biodegradation, i.e. non-persistence, according to the Regulation (EC) No 1907/2006, Annex XIII, which is also referenced in the EMA ERA guideline, apply.

([5]) OECD Guidelines for the Testing of Chemicals, Test No 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems, version of 27.6.2023 available at: https://www.oecd-ilibrary.org/environment/test-no-308-aerobic-and-anaerobic-transformation-in-aquatic-sediment-systems_9789264070523-en.

([6]) The Commission will review the exceptions from the prohibition from manufacturing, placing on the market or use of the substances referred to in points (f) and (g) once it will have published horizontal principles on essential use of chemicals.

([7]) The requirements under this point tackle the pollutants identified under the key environmental issues of each BREF document or the BAT-AEL of the relevant BAT conclusions Commission Implementing Decisions. Where BAT-AEL differentiate between 'existing' and 'new plants', operators demonstrate compliance with BAT-AEL for new plants. When there is not a BAT-AEL range but a single value, emission levels are below such value. When the BAT-AEL range is expressed as follows: '<x-y unit' (i.e. the lower-end BAT-AEL of the range is expressed as 'lower than'), the mid-point is calculated using x and y. Averaging periods are the same as in the BAT-AEL of the BREF documents outlined above.

([8]) Commission Implementing Decision (EU) 2022/2427 of 6 December 2022 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, for common waste gas management and treatment systems in the chemical sector (OJ L 318, 12.12.2022, p. 157).

([9]) The Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals, available at: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/ofc_bref_0806.pdf.

(c) the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector ([10]);

(d) the Best Available Techniques Reference Document (BREF) for the Large Volume Inorganic Chemicals – Solids and Others industry ([11]);

(e) the Best Available Techniques Reference Document (BREF) for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers ([12]);

(f) the Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) ([13]); for the manufacturing activity under conditions not covered by the BATC mentioned above.

Plants within the BAT-AEL range(s) moving to the mid-point ambition do not trigger any significant cross-media impact. Installations that have been granted a derogation in accordance with the procedure set out in Article 15(4) of Directive 2010/75/EU are not considered as fulfilling the technical screening criteria for the period of the derogation.

2.2. Where a continuous measurement methodology for a certain pollutant is available, the operator applies Continuous Emission Monitoring Systems (CEMS), Continuous Effluent Quality Monitoring Systems (CEQMS) and other measures ensuring the regular verification of non-deterioration of environment.

2.3. The operator applies solvent waste segregation for solvent recovery from concentrated waste streams, where technically applicable.

Solvents included in Table 1 of the European Medicines Agency ICH guideline Q3C (R8) on impurities: guideline for residual solvents ([14]) are avoided.

The maximum solvents loss from total inputs does not exceed a 3 % loss. Total volatile organic compound (VOC) recovery efficiency is at least 99 %.

The operator verifies that no fugitive VOC emission occurs beyond the criteria specified below as to the parts per million volumetric (ppmv) thresholds by carrying out Leak detection and repair (LDAR) campaigns, at least every 3 years. Investments for the use of high integrity equipment are recommended, provided that these are installed in existing plants for cases mentioned under BAT 23 point (b) of the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector (WGC), whereas the pressure threshold is brought to 200 bar. The minimal verification schedule may be reduced in cases where quantification of total VOC emissions from the plant is periodically qualified with tracer correlation (TC) or with optical absorption-based techniques, such as differential absorption light detection and ranging (DIAL) or solar occultation flux (SOX) or other measures of equivalent performance.

Diffuse emissions of substances or mixtures classified as CMR1A or 1B from leaky equipment do not exceed a concentration of 100 ppmv ([15]).

([10]) Commission Implementing Decision (EU) 2016/902 of 30 May 2016 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for common waste water and waste gas treatment/management systems in the chemical sector (OJ L 152, 9.6.2016, p. 23).

([11]) Best Available Techniques (BAT) Reference Document for the Large Volumes Inorganic Chemicals- Solids and Others industry (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic-s_bref_0907.pdf).

([12]) Best Available Techniques (BAT) Reference Document for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic_aaf.pdf).

([13]) The Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/reference/production-speciality-inorganic-chemicals).

([14]) European Medicines Agency ICH guideline Q3C (R8) on impurities: guideline for residual solvents. Step 5, 2022, version of 27.6.2023 available at: https://www.ema.europa.eu/en/documents/scientific-guideline/international-conference-harmonisation-technical-requirements-registration-pharmaceuticals-human-use_en-33.pdf.

([15]) Where the exemption under criterion 1.3 applies.

The LDAR campaigns have the features described in BAT19 of the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector, which include detecting, repairing and maintaining leaks within 30 days of detection and a leak threshold that is lower than or equal to 5 000 ppmv for substances or mixtures other than those classified as CMR 1A or 1B, which are reviewed and updated for the continuous improvement of the installation. Solvent losses and recovery efficiency of VOC are monitored based on a solvent management plan using a mass balance for verification of compliance, in accordance with Chapter V of Directive 2010/75/EU.

2.4. Sewage, refuse, and other waste (including solids, liquids, or gaseous by-products from manufacturing) are disposed of in a safe, timely and sanitary manner. Containers or pipes for waste material are clearly identified. Analytical data demonstrating the conversion of these substances and their residues to non-hazardous waste materials are available at the facility and kept up to date.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh. For the refrigerant threshold, the Global Warming Potential does not exceed 150 in cooling of the substance. Where active pharmaceutical ingredients (API) or active substances are made from substances listed in Sections 3.10 to 3.16 of Annex II to Delegated Regulation (EU) 2021/2139, the GHG emissions do not exceed the limits set out in their respective criteria for DNSH to climate change mitigation. The substitution does not lead to an increment of lifecycle GHG emissions. Lifecycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 ([16]) or ISO 14064-1:2018 ([17]). Quantified life-cycle GHG emissions are verified by an independent third party.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	1. Waste water treatment The performance of waste water treatment processes conducted by or on behalf of the manufacturing plant does not lead to any deterioration of water bodies and marine resources. When activities fall within their scope, they meet the requirements of Directives 91/271/EEC, 2008/105/EC, 2006/118/EC, 2010/75/EU, 2000/60/EC, (EU) 2020/2184, 76/160/EEC, 2008/56/EC and 2011/92/EU.

([16]) ISO standard 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification, version of 27.6.2023 available at: https://www.iso.org/standard/71206.html.

([17]) ISO standard 14064-1:2018, Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, version of 27.6.2023 available at: https://www.iso.org/standard/66453.html.

	The activity implements best practices specified in the Joint Research Centre Best Environmental Management Practice for the Public Administration Sector ([18]). Where waste water treatment is conducted by an urban waste water treatment plant on behalf of the manufacturing plant, it is ensured that: (a) the load of pollutants released by the manufacturing plant has no negative effect in the treatment process of the urban waste water treatment plant; (b) the load and characteristics of pollutants do not pose any risk or harm to the health of the staff working in waste water treatment plants; (c) the urban waste water treatment plant is designed and equipped appropriately to abate the released polluting substances; (d) the overall load of the concerned pollutants discharged to the water body is not increased compared to the situation where the emissions from the installation concerned remained compliant with emission limit values set for direct releases; (e) the usability of the sewage sludge for nutrient (re)cycling is not affected. For installations where additional pollutant limits or stricter conditions have been included in their environmental permit compared to the requirements of the legislation mentioned above, these stricter conditions apply. 2. Soil and groundwater protection Appropriate measures are in place to prevent emissions to soil and regular surveillance is conducted to avoid leaks, spills, incidents or accidents occurring during the use of equipment and during storage. 3. Water consumption Operators assess the water footprint of the chemical production processes in line with ISO 14046:2014 ([19]) and ensure that they do not contribute to water scarcity. Based on this assessment, operators provide a declaration that they do not contribute to water scarcity which is verified by an independent third party. 4. The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	The activity assesses the availability of and, where feasible, adopts techniques that support: (a) reuse and use of secondary raw materials and reused components in products manufactured; (b) design for high durability, recyclability, easy disassembly and adaptability of products manufactured;

([18]) Joint Research Centre, Best Environmental Management Practice for the Public Administration Sector, 2019, version of 27.6.2023 available at: https://op.europa.eu/en/publication-detail/-/publication/6063f857-7789-11e9-9f05-01aa75ed71a1/language-en.

([19]) ISO 14046:2014 Environmental management – Water footprint – Principles, requirements and guidelines, version of 27.6.2023 available at: https://www.iso.org/standard/43263.html.

	(c) waste management that prioritises recycling over disposal, in the manufacturing process; (d) information on product ingredients along the supply chain.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

1.2. **Manufacture of medicinal products**

Description of the activity

Manufacture of medicinal products.

The economic activities in this category could be associated with NACE code C21.2 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. The activity complies with one of the following sets of requirements set out in point 1.1 or 1.2 relating to product substitution. In any case, the activity complies with the requirements set out in point 1.3.

1.1. The medicinal product complies with the following requirements set out in points 1.1.1 and 1.1.2:

1.1.1. The medicinal product complies with one of the following requirements:

(a) the ingredients that constitute the formulation of the medicinal product are naturally occurring substances such as vitamins, electrolytes, amino acids, peptides, proteins, nucleotides, carbohydrates and lipids, and, in line with European Medicines Agency Guideline on the environmental risk assessment of medicinal products for human use (EMA ERA guideline) ([20]), are generally considered to be degradable in the environment ([21]);

(b) where the ingredients that constitute the formulation of the medicinal product do not comply with the requirements specified in point (a), those ingredients, their key human metabolites and their key transformation products in the environment comply with one of the following:

(i) are classified as readily biodegradable based on at least one of the test methods from the OECD Guidelines for the Testing of Chemicals, Test 301 (A-F), Ready Biodegradability ([22]), in accordance with the pass value for ready biodegradability as defined in that guideline;

([20]) European Medicines Agency Guidelines on the environmental risk assessment of medicinal products for human use, version of 27.6.2023 available at: https://www.ema.europa.eu/en/environmental-risk-assessment-medicinal-products-human-use-scientific-guideline.

([21]) Key metabolites are human metabolites likely to be excreted into the environment. Those metabolites are identified in (non-)clinical studies on the metabolism of medicinal products available in the marketing authorisation applications. Such metabolites are to be identified according to EMA/CPMP/ICH/286/1995, page 8. Key transformation products (TP) of these key human metabolites of the parent compound (API) are those that exceed 10 % of Dissolved Organic Carbon (DOC) or Total Organic Carbon (TOC) of the parent compound.

([22]) OECD Guidelines for the Testing of Chemicals, Test 301 (A-F), Ready Biodegradability, version of 27.6.2023 available at: https://www.oecd.org/chemicalsafety/risk-assessment/1948209.pdf. OECD 301 (A-F) test is used to identify substances which are assumed to rapidly and ultimately biodegrade, i.e. mineralised under aerobic environmental conditions).

(ii) can be concluded to be mineralised based on a specific Test No 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems (OECD 308) ([23]) of OECD Guidelines for the Testing of Chemicals ([24]) compared to persistence criteria as defined in the EMA ERA guideline.

1.1.2. The medicinal product qualifies as an appropriate substitute to another medicinal product, within the same therapeutic area or the substance class, that is available in the market or was available during last 5 years and that does not comply with the requirements described in point 1.1.1.

Compliance with this requirement is demonstrated through a publicly available analysis verified by an independent third party.

1.2. The manufacturer proves that there are no ingredients to produce an alternative medicinal product that qualifies as an appropriate substitute, within the same therapeutic area or the substance class, that comply with the requirements described in point 1.1.1. The activity complies with all the requirements specified in points 1.2.1 to 1.2.6.

1.2.1. The manufacturer performs an analysis that there is no appropriate substitute to the produced medicinal product, publishes the core results of that analysis and demonstrates that they started initiatives to develop that alternative.

1.2.2. In line with the EMA ERA guidelines, the PEC/PNEC ratio for the medicinal product obtained in the Environmental Risk Assessment is below 1.

1.2.3. Packaging and distribution systems allow adjusting the sold amount to the required amount by the treatment/s, taking into account the applicable national legislation.

1.2.4. Public information, such as leaflets or websites, updated according to the state of the art, is provided about dose and dosing method to minimise the excess of dosed API.

1.2.5. Packaging and distribution systems allow using the most efficient dosing system available according to the state of the art and considering the kind of administration, such as by healthcare professionals or domestic. The manufacturer publishes the main results of that analysis.

1.2.6. The manufacturer contributes to mitigating the environmental impact of incorrect waste disposal of unused medicinal product, including by providing relevant information to the downstream users on appropriate disposal of unused medicinal product.

1.3. The manufacturing process does not involve the use of substances, whether on their own or in mixtures, that meet the criteria set out in Article 57 of Regulation (EC) No 1907/2006 except where it is assessed and documented by the operator that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([25]).

2. The activity complies with the following requirements regarding the emission of pollutants:

([23]) Higher-tier studies (OECD 308) result with so-called half-lives indicating the time after which 50 % biodegradation of the API is achieved. Half-lives acceptable to demonstrate sufficiently quick biodegradation, i.e. non-persistence, according to the Regulation (EC) No 1907/2006, Annex XIII, which is also referenced in the EMA ERA guideline, apply.

([24]) OECD Guidelines for the Testing of Chemicals, Test No 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems, version of 27.6.2023 available at: https://www.oecd-ilibrary.org/environment/test-no-308-aerobic-and-anaerobic-transformation-in-aquatic-sediment-systems_9789264070523-en.

([25]) The Commission will review the exceptions from the prohibition from manufacturing, placing on the market or use of the substances referred to in points (f) and (g) once it will have published horizontal principles on essential use of chemicals.

2.1. Where the activity falls within its scope, the emission limit values shall be lower than the mid-point of the BAT-AEL ranges ([26]) set out in:

(a) the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector ([27]) for emissions to air of new installations (or for existing installations within 4 years of the BATC publication) where relevant conditions apply;

(b) the Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals (OFC) ([28]); for the manufacturing activity under conditions not covered by the BATC mentioned above;

(c) the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector ([29]);

(d) the Best Available Techniques Reference Document (BREF) for the Large Volume Inorganic Chemicals – Solids and Others industry ([30]);

(e) the Best Available Techniques Reference Document (BREF) for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers ([31]);

(f) the Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) for the manufacturing activity under conditions not covered by the BATC mentioned above ([32]).

Plants within the BAT-AEL range(s) moving to the mid-point ambition do not trigger any significant cross-media impact.

Installations that have been granted a derogation in accordance with the procedure set out in Article 15(4) of Directive 2010/75/EU are not considered as fulfilling the technical screening criteria for the period of the derogation.

2.2. Where a continuous measurement methodology for a certain pollutant is available, the operator applies Continuous Emission Monitoring Systems (CEMS), Continuous Effluent Quality Monitoring Systems (CEQMS) and other measures ensuring the regular verification of non-deterioration of environment.

2.3. The operator applies solvent waste segregation for solvent recovery from concentrated waste streams, where technically applicable.

Solvents included in Table 1 of the European Medicines Agency ICH guideline Q3C (R8) on impurities as specified in the guideline for residual solvents ([33]) are avoided in medicinal products.

([26]) The requirements under this point tackle the pollutants identified under the key environmental issues of each BREF document or the BAT-AEL of the relevant BAT conclusions Commission Implementing Decisions. Where BAT-AEL differentiate between 'existing' and 'new plants', operators demonstrate compliance with BAT-AEL for new plants. When there is not a BAT-AEL range but a single value, emission levels are below such value. When the BAT-AEL range is expressed as follows: '<x-y unit' (i.e. the lower-end BAT-AEL of the range is expressed as 'lower than'), the mid-point is calculated using x and y. Averaging periods are the same as in the BAT-AEL of the BREF documents outlined above.

([27]) Implementing Decision (EU) 2022/2427.

([28]) The Best Available Techniques Reference Document (BREF) for Manufacture of Organic Fine Chemicals (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/ofc_bref_0806.pdf).

([29]) Implementing Decision (EU) 2016/902.

([30]) Best Available Techniques (BAT) Reference Document for the Large Volumes Inorganic Chemicals- Solids and Others industry (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic-s_bref_0907.pdf).

([31]) Best Available Techniques (BAT) Reference Document for the manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/lvic_aaf.pdf).

([32]) The Best Available Techniques Reference Document (BREF) for the production of speciality inorganic chemicals (SIC) (version of 27.6.2023: https://eippcb.jrc.ec.europa.eu/reference/production-speciality-inorganic-chemicals).

([33]) European Medicines Agency ICH guideline Q3C (R8) on impurities: guideline for residual solvents. Step 5, 2022 (version of 27.6.2023 available at: https://www.ema.europa.eu/en/documents/scientific-guideline/international-conference-harmonisation-technical-requirements-registration-pharmaceuticals-human-use_en-33.pdf).

The maximum solvents loss from total inputs does not exceed a 3 % loss. Total volatile organic compound (VOC) recovery efficiency is at least 99 %.

The operator verifies that no fugitive VOC emission occurs beyond the criteria specified below as to the parts per million volumetric (ppmv) thresholds by carrying out Leak detection and repair (LDAR) campaigns, at least every 3 years. Investments for the use of high integrity equipment are recommended, provided that these are installed in existing plants for cases mentioned under BAT 23b of the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector, whereas the pressure threshold is brought to 200 bar. The minimal verification schedule may be reduced in cases where quantification of total VOC emissions from the plant is periodically qualified with tracer correlation (TC) or with optical absorption-based techniques, such as differential absorption light detection and ranging (DIAL) or solar occultation flux (SOX) or other measures of equivalent performance.

Diffuse emissions of substances or mixtures classified as CMR1A or 1B from leaky equipment do not exceed a concentration of 100 ppmv ([34]).

The LDAR campaigns have the features described in BAT19 of the best available techniques (BAT) conclusions for common waste gas management and treatment systems in the chemical sector, which include detecting, repairing and maintaining leaks within 30 days of detection and a leak threshold is lower than or equal to 5 000 ppmv for substances or mixtures other than those classified as CMR 1A or 1B, which are reviewed and updated for the continuous improvement of the installation. Solvent losses and recovery efficiency of VOC are monitored based on a solvent management plan using a mass balance for verification of compliance, in accordance with Chapter V of Directive 2010/75/EU.

2.4. Sewage, refuse, and other waste (including solids, liquids, or gaseous by-products from manufacturing) are disposed of in a safe, timely, and sanitary manner. Containers or pipes for waste material are clearly identified. Analytical data demonstrating the conversion of these substances and their residues to non-hazardous waste materials are available at the facility and kept up to date.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the activity involves on-site generation of heat/cool or co-generation including power, the direct GHG emissions of the activity are lower than 270 gCO_2e/kWh. For the refrigerant threshold, the Global Warming Potential does not exceed 150 in cooling of the substance. Where medicinal products are made from substances listed in Sections 3.10 to 3.16 of Annex II to Delegated Regulation (EU) 2021/2139, the GHG emissions do not exceed the limits set out in their respective technical screening criteria for DNSH to climate change mitigation. The substitution does not lead to an increment of lifecycle GHG emissions. Lifecycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 ([35]) or ISO 14064-1:2018 ([36]). Quantified life-cycle GHG emissions are verified by an independent third party.

([34]) Where the exemption under criterion 1.3 applies.

([35]) ISO standard 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification, version of 27.6.2023 available at: https://www.iso.org/standard/71206.html.

([36]) ISO standard 14064-1:2018, Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, version of 27.6.2023 available at: https://www.iso.org/standard/66453.html.

(2)	Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3)	Sustainable use and protection of water and marine resources	1. Waste water treatment The performance of waste water treatment processes conducted by or on behalf of the manufacturing plant does not lead to any deterioration of water bodies and marine resources. When activities fall within their scope, they meet the requirements of Directives 91/271/EEC, 2008/105/EC, 2006/118/EC, 2010/75/EU, 2000/60/EC, (EU) 2020/2184, 76/160/EEC, 2008/56/EC and 2011/92/EU. The activity implements best practices specified in the Joint Research Centre Best Environmental Management Practice for the Public Administration Sector ([37]). Where waste water treatment is conducted by an urban waste water treatment plant on behalf of the manufacturing plant, it is ensured that: (a) the load of pollutants released by the manufacturing plant has no negative effect in the treatment process of the urban waste water treatment plant; (b) the load and characteristics of pollutants do not pose any risk or harm to the health of the staff working in waste water treatment plants; (c) the urban waste water treatment plant is designed and equipped appropriately to abate the released polluting substances; (d) the overall load of the concerned pollutants discharged to the water body is not increased compared to the situation where the emissions from the installation concerned remained compliant with emission limit values set for direct releases; (e) the usability of the sewage sludge for nutrient (re)cycling is not affected. For installations where additional pollutant limits or stricter conditions have been included in their environmental permit compared to the requirements of the legislation mentioned above, these stricter conditions apply. 2. Soil and groundwater protection Appropriate measures are in place to prevent emissions to soil and regular surveillance is conducted to avoid leaks, spills, incidents or accidents occurring during the use of equipment and during storage. 3. Water consumption Operators assess the water footprint of the chemical production processes in line with ISO 14046:2014 ([38]) and ensure that they do not contribute to water scarcity. Based on this assessment, operators provide a declaration that they do not contribute to water scarcity which is verified by an independent third party.

([37]) Joint Research Centre, Best Environmental Management Practice for the Public Administration Sector, 2019, version of 27.6.2023 available at: https://op.europa.eu/en/publication-detail/-/publication/6063f857-7789-11e9-9f05-01aa75ed71a1/language-en.

([38]) ISO 14046:2014 Environmental management – Water footprint – Principles, requirements and guidelines, version of 27.6.2023 available at: https://www.iso.org/standard/43263.html.

	4. The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	The activity assesses the availability of and, where feasible, adopts techniques that support: (a) reuse and use of secondary raw materials and reused components in products manufactured; (b) design for high durability, recyclability, easy disassembly and adaptability of products manufactured; (c) waste management that prioritises recycling over disposal, in the manufacturing process; (d) information on product ingredients along the supply chain.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

2. ***Water supply, sewerage, waste management and remediation activities***

2.1. **Collection and transport of hazardous waste**

Description of the activity

Separate collection and transport of hazardous waste ([39]) prior to treatment, material recovery or disposal, including the construction, operation and upgrade of facilities involved in the collection and transport of such waste, such as hazardous waste transfer stations, as a means for appropriate treatment.

The economic activities in this category could be associated with several NACE codes, in particular E38.12 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. Hazardous waste is source segregated and collected separately from non-hazardous waste to prevent cross-contamination. Appropriate measures are taken to ensure that during separate collection and transport, hazardous waste is not mixed nor diluted either with other categories of hazardous waste or with other waste, substances or materials.

2. Proper collection and handling prevent leakage of hazardous waste during collection, transport, storage and delivery to the treatment facility, which is permitted to treat hazardous waste, according to national legislation.

3. Where a given waste classified as hazardous has also a transport status of dangerous goods under the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) ([40]), the transport complies with the relevant requirements set by the ADR.

([39]) Hazardous waste is waste which displays one or more of the hazardous properties listed in Annex III of Directive 2008/98/EC. It includes streams such as hazardous waste fractions produced by households, waste oils, batteries, non-depolluted waste from electrical and electronic equipment (WEEE), non-depolluted end-of-life vehicle, certain healthcare waste, such as infectious and cytotoxic waste, etc. A comprehensive classification of hazardous waste can be found in the European List of Waste (established by Commission Decision 2000/532/EC).

([40]) Version of 27.6.2023, available at: https://unece.org/transport/standards/transport/dangerous-goods/adr-2023-agreement-concerning-international-carriage.

4. The activity uses waste collection vehicles which conform to at least Euro V standards ([41]).

5. During collection and transport, hazardous waste is packaged and labelled in accordance with the international and Union standards in force.

6. The operator collecting hazardous waste complies with record-keeping obligations including as regards quantity, nature, origin, destination, frequency of collection, mode of transport and treatment method set out by applicable Union and national legislation.

7. For waste from electrical and electronic equipment (WEEE):

(a) the main categories of WEEE set out in Annex III to Directive 2012/19/EU are collected separately;

(b) collection and transport preserve the integrity of WEEE and prevent the leakage of hazardous substances such as ozone-depleting substances, fluorinated greenhouse gases or mercury contained in fluorescent lamps;

(c) a management system is set up by the collection and logistics operator to manage environmental, health and safety risks.

Compliance with normative requirements for collection and logistics set in CLC/EN 50625-1:2014 ([42])and CLC/TS 50625-4:2017 ([43]) or with regulatory requirements that are equivalent to those set in CLC/EN 50625-1 and CLC/TS 50625-4 is a proof of compliance with the requirement that the collection and transport preserve the integrity of WEEE and batteries and prevents the leakage of hazardous substances.

8. When the waste is stored, the activity complies with the requirements set out in BAT 4 of the best available techniques (BAT) conclusions for waste treatment ([44]).

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	Separately collected waste is not mixed in waste storage and transfer facilities with other waste or materials with different properties. Recyclable ([45]) waste is not disposed of, incinerated or co-incinerated.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([41]) In accordance with Regulation (EU) 2018/858.
([42]) CLC/EN 50625-1: 2014 Collection, logistics & Treatment requirements for WEEE – Part 1: General treatment requirements.
([43]) Collection, logistics & treatment requirements for WEEE – Part 4: Specification for the collection and logistics associated with WEEE.
([44]) Implementing Decision (EU) 2018/1147.
([45]) 'Recyclable waste' is waste that can be recycled in accordance with Article 3(17) of Directive 2008/98/EC.

2.2. **Treatment of hazardous waste**

Description of the activity

Construction, repurposing, upgrade, and operation of dedicated facilities for the treatment of hazardous waste, including the incineration of non-recyclable hazardous waste ([46]) (operations D10), biological treatment of hazardous waste (operations D8) and physico-chemical treatment (operations D9) ([47]).

The activity does not include:

(a) disposal operations (as set out in Annex I to the Directive 2008/98/EC) of hazardous waste such as landfilling or permanent storage;

(b) incineration of recyclable hazardous waste and incineration of non-hazardous waste;

(c) treatment and disposal of toxic live or dead animals and other contaminated waste;

(d) treatment and disposal of radioactive nuclear waste.

The economic activities in this category could be associated with several NACE codes, in particular E38.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. For all waste treatment processes, the activity complies with the following criteria:

1.1. According to the type of activity, the activity complies with the requirements set out either in the best available techniques (BAT) conclusions for waste treatment ([48]) or the best available techniques (BAT) conclusions for waste incineration ([49]).

Facilities that have been granted a derogation in accordance with the procedure set out in Article 15(4) of Directive 2010/75/EU are not considered as compliant with the Technical Screening Criteria.

1.2. During the pre-acceptance procedures, at least the following information is gathered:

(a) expected date of arrival at the waste treatment plant;

(b) contact details of the waste producer, the sector which the waste originates from and the nature of process producing the waste, including the variability of the process;

(c) the estimated quantity expected to be delivered to the operator per delivery and per year;

(d) description of the waste, including composition, hazardous properties of the waste, waste code and the suitable treatment route.

1.3. During the acceptance procedures, the following elements are in place:

(a) a reception facility equipped with a laboratory to analyse samples on site and documented analytical standard operating procedures, with the option to sub-contract analyses to accredited external contract laboratories;

([46]) 'Non-recyclable waste' is waste that cannot be recycled in accordance with Article 3(17) of Directive 2008/98/EC.
([47]) As set out in Annex I to Directive 2008/98/EC.
([48]) Implementing Decision (EU) 2018/1147.
([49]) Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration (OJ L 312, 3.12.2019, p. 55).

(b) documented sampling procedure consistent with relevant standards, such as EN 14899:2005 ([50]);

(c) documented analysis of the relevant physico-chemical parameters for the treatment;

(d) a dedicated quarantine waste storage area, as well as written procedures to manage non-accepted waste.

The personnel dealing with the pre-acceptance and acceptance procedures is able, due to their profession or experience, to deal with all necessary questions relevant for the treatment of the wastes in the waste treatment facility. The procedures are intended to pre-accepting and accepting wastes at the waste treatment plant only if a suitable treatment route is available and the disposal or recovery route for the output of the treatment is determined.

For 'blending or mixing activities' (as set out in Annex I, Section 5.1(c) of Directive 2010/75/EU), the operator is not using dilution to lower the concentration of one or more hazardous substances present in the waste, with the aim for the resulting waste mix to be declassified and become 'non-hazardous waste' and thus be subsequently treated in facilities non-dedicated to the treatment of hazardous waste. Dilution is not used as a 'substitute' to the adequate treatment of the waste.

2. For the physico-chemical treatment of solid or pasty waste, any treatment for the purpose of treating waste prior to final disposal, such as in hazardous waste landfills, is designed to fullfil the following requirements:

(a) limit at 6 % the Total Organic Carbon (TOC) maximum concentration in each single input waste to the landfill;

(b) limit at 1 000 mg/kg dry matter Dissolved Organic Carbon (DOC) content of the output waste after a leaching test with L/S = 10 l/kg based on EU Standard EN 12457-2:2002 ([51]).

3. For the physico-chemical treatment of waste with calorific value, measures are taken in order to avoid dilution and dispersion of hazardous substances, and to avoid any high loads released into the air due to inappropriate final treatment of waste with calorific value. Any treatment installation prior to final thermal treatments (incineration or co-incineration) is to be designed with the purpose of limiting the content of hazardous substances (and meet other related criteria) for each single input waste treated at the physico-chemical treatment installation, so that the acceptance levels at the entrance of the final thermal treatment installations are respected.

4. For the treatment of aqueous liquid waste, the biological treatability of the waste water resulting from the treatment of the water-based liquid waste in a biological waste water treatment plant is judged based on the following criterion:

Dissolved Organic Carbon DOC elimination of > 70 % in 7 days (> 80 % when adapted inoculum is used) in accordance with EN ISO 9888 ([52]) (Zahn Wellens), or other commonly accepted, equivalent industry standards and methodologies used to assess bio-elimination and related performances.

5. For the treatment of waste containing Persistent Organic Pollutants (POP), all waste containing POP substances listed in Annex IV to Regulation (EU) 2019/1021 are controlled and traced as hazardous waste in accordance with Article 17 of Directive 2008/98/EC. Specific requirements of Articles 7(4), 17, 18 and 19 of Directive 2008/98/EC apply. In case of transboundary movement, requirements of Chapter I of the Regulation (EC) No 1013/2006 of the European Parliament and of the Council ([53]) apply.

([50]) EN 14899:2005 Characterization of waste – Sampling of waste materials – Framework for the preparation and application of a Sampling Plan.

([51]) EN 12457-2:2002 Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 2: One stage batch test at a liquid to solid ratio of 10 l/kg for materials with particle size below 4 mm (without or with size reduction).

([52]) EN ISO 9888:1999 Water quality – Evaluation of ultimate aerobic biodegradability of organic compounds in aqueous medium – Static test (Zahn-Wellens method) (version of 27.6.2023, available at: https://www.iso.org/standard/28121.html).

([53]) Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (OJ L 190, 12.7.2006, p. 1).

The tracking system in place in the installations based on the best practices referred to above allows the monitoring of:

(a) the effective separation of each part of a product or waste such as waste equipment, containing or contaminated with POP above the levels defined in Annex IV to Regulation (EU) 2019/1021;

(b) the effective destruction or irreversible transformation of the POP waste in compliance with Articles 7(2) – 7(4) and Annex V to Regulation (EU) 2019/1021.

6. For the treatment of mercury-containing waste ([54]), all installations likely to treat waste consisting of, containing or contaminated with mercury or mercury compounds (as defined in Article 11 of the Minamata Convention), implement the traceability system set out in Article 14 of Regulation (EU) 2017/852 or a similar traceability system. Based on this tracking system, the installations treating mercury-containing waste monitor the effective safe fate of mercury and mercury compounds in appropriate final destination.

7. For the (non-combustion) treatment of healthcare waste, the installation implements the best practices set out in the WHO handbook on safe management of wastes from healthcare activities ([55]).

A non-combustion healthcare waste installation has specific acceptance procedure, monitors and can prove that the following types of healthcare waste are not accepted for treatment:

(a) cytotoxic waste;

(b) pharmaceutical waste;

(c) chemical waste;

(d) radioactive waste.

The technologies used are certified by an independent certification body.

Do no significant harm ('DNSH')

(1) Climate change mitigation	N/A
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex. Relevant techniques are deployed for the protection of water and marine resources, as set out in the best available techniques (BAT) conclusions for waste treatment ([56]).
(4) Transition to a circular economy	N/A
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.

([54]) Mercury-containing waste means waste consisting of, containing or contaminated with mercury or mercury compounds.
([55]) WHO, Safe management of wastes from health-care activities, 2nd edition, 2014 (version of 27.6.2023 available at: https://www.euro.who.int/__data/assets/pdf_file/0012/268779/Safe-management-of-wastes-from-health-care-activities-Eng.pdf).
([56]) Implementing Decision (EU) 2018/1147.

2.3. **Remediation of legally non-conforming landfills and abandoned or illegal waste dumps**

Description of the activity

Remediation of legally non-conforming landfills ([57]) and of abandoned or illegal waste dumps ([58]) that have been closed and are not taking in further waste other than possibly inert or biostabilised waste to be used as landfill cover material (as far as allowed in the environmental permit for the remediation project).

The activity may include any of the following remediation strategies and sub-activities typically implemented as part of projects aimed at removing, controlling, containing or diminishing polluting emissions ([59]) from non-conforming landfills and abandoned or illegal dumpsites:

(a) remediation through environmental isolation of non-conforming or illegal landfills or dumpsites at the present site, including:

  (i) physical isolation, concentration, structural stabilisation and protection of the non-conforming or illegal landfill or dumpsite, including application of hydraulic barriers, sealing, drainage and cover layers;

  (ii) installation, operation and maintenance of drainage and separate collection and treatment systems for leachates and run-off water prior to discharge;

  (iii) installation, operation and maintenance of landfill gas collection, abatement and control systems, including wells, piping and flaring systems;

  (iv) application of top soil and vegetation cover for renaturation purposes;

(b) remediation through excavation and removal of non-conforming or illegal landfills or dumpsites with subsequent treatment, recovery or disposal of excavated waste, including:

  (i) selective excavation of the waste deposited on the site, loading and transport to existing permitted treatment, recovery or disposal facilities with separate management of non-hazardous and hazardous waste;

  (ii) sorting and recovery of materials and fuels from excavated non-hazardous waste, including the installation, operation and maintenance of dedicated facilities and equipment for the duration of the remediation project;

(c) remediation through decontamination of soils, surface and groundwater at the place of pollution, including the following:

  (i) selective excavation, loading, transport, temporary storage, backfilling of soil, with separate management of non-contaminated and contaminated soils;

  (ii) treatment of contaminated soil or water, either in situ or ex situ, using in particular physical, chemical or biological methods, including the installation, operation and maintenance of dedicated facilities for the duration of the remediation project;

  (iii) application of hydraulic barriers, active and passive barriers intended to limit/prevent migration of pollutants.

([57]) The term 'landfill' is defined in Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1) as a 'waste disposal site for the deposit of the waste onto or into land (i.e. underground)' including both non-hazardous and hazardous waste.
A 'legally non-conforming' landfill is a landfill that does not comply with the operational and technical requirements defined in relevant EU or national legislation.

([58]) A 'waste dump' is a site used for the disposal of waste that is not equipped with pollution abatement systems.

([59]) 'Emission' means the release in the environment, as a result of human activities, of substances, preparations, organisms or micro-organisms (as set out in Article 2 of Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p. 56)).

The activity also includes all of the following sub-activities that are required to prepare, plan, monitor and follow-up on the above remediation measures:

(a) preparatory investigations, including data collection and surveying activities (in particular geological or hydrological), technical feasibility and environmental impact studies required to define the remediation project;

(b) site preparation, including earth moving and levelling works, construction or reinforcement of perimeter walls or fences, primary access and internal roads, demolition of buildings or other structures on the landfill site;

(c) monitoring and control of the remediation measures, including:

(i) sampling of soil, water, sediment, biota or other materials;

(ii) laboratory analysis of samples to identify the nature and concentration of pollutants;

(iii) installation, operation and maintenance of monitoring facilities and equipment such as observation wells in and outside the perimeter of the landfill site;

(d) implementation of other environmental protection and pollution prevention and control measures to comply with the conditions imposed in the environmental permit for the remediation project, including measures for safeguarding safety of operations on-site and health of workers, such as for fire control, flood protection, hazardous waste management.

The activity does not include:

(a) the permanent closure, rehabilitation and after care of existing or new landfills that comply with the Council Directive 1999/31/EC ([60]), or for activities located in third countries having equivalent national legislation or otherwise aligned with recognised international industry standards ([61]);

(b) landfill gas transformation for utilisation as energy carrier or industry feedstock;

(c) redevelopment of the remediated site for other economic use such as recreational, residential or commercial areas, installation of photovoltaic (PV) panels;

(d) compensatory measures for pollution caused by the landfill or dumpsite such as the development and operation of alternative water supply systems for affected population living in the surrounding area.

The economic activities in this category could be associated with several NACE codes, in particular E39, E38.2, E38.32 and F42.9 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. The activity complies with all of the following criteria:

(a) the remediation activity is not undertaken by the operator ([62]) that caused the pollution or a producer of waste or a person acting on behalf of that operator or producer in order to comply with the Directive 2004/35/CE of the European Parliament and of the Council ([63]) or, for activities located in third countries, with an equivalent national legislation or international standards that apply the polluter-pays-principle to the remediation of environmental pollution caused by economic activities;

([60]) Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1).
([61]) Such as, at the international level, landfill operational guidelines published by the International Solid Waste Association (ISWA).
([62]) As defined in Article 2, point 6, of Directive 2004/35/CE.
([63]) Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p. 56).

(b) relevant contaminants are removed, controlled, contained or diminished using physical, chemical, biological or other methods to ensure that the landfill and the contaminated area (land, water body or other), taking into account its use at the time of the damage or approved future use of the area, no longer pose any significant risk of adversely affecting human health and the environment, as specified in national regulatory standards or, where such standards are not available, in an internal risk-assessment taking into account the characteristic and the extent of the impacted area (land, water body or other), the type, properties (persistence, mobility and toxicity) and concentration of the substances, preparations, organisms or micro-organisms, possible migration pathways and the probability of dispersion ([64]).

2. The activity is prepared and conducted in line with best industry practice and includes all of the following elements:

(a) the non-conforming or illegal landfill or dumpsite to be remediated has been closed and is not taking in further waste other than possibly inert or biostabilised waste to be used as landfill cover material (as far as allowed in the environmental permit for the remediation project);

(b) preparatory investigations including site-specific surveys and physical, chemical or microbiological data collection are carried out in line with best industry practice and best available techniques to establish:

(i) the location, characteristics and extent of the landfill and the polluted area;

(ii) the underlying geological and hydrological conditions;

(iii) the likely quantity, composition and sources of the landfilled waste;

(iv) soil and water pollution originating from it as well as the risks to human health and the environment;

(c) the results of such remedial investigations are inputs for a feasibility study that defines the objectives, targets and scope for the remediation and evaluates alternative remedial options;

(d) the remedial options are analysed in accordance with the requirements set out in Annex II to Directive 2004/35/CE and in Annexes I and III to Directive 1999/31/EC, or for activities located in third countries in equivalent national law or commonly accepted international standards ([65]), and described in a feasibility study produced for the landfill remediation project that convincingly demonstrates how the selected remedial option is the overall best solution to meet the defined remediation objectives and targets;

(e) the landfill remediation project, including accompanying monitoring and control plan, is approved by the competent authority and consulted on with local stakeholders in accordance with national legal requirements;

(f) all materials and fuels recovered from landfilled waste meet relevant quality standards or user specifications for the intended recovery operations and do not represent a risk for the environment or human health;

(g) any hazardous waste extracted or otherwise produced by the remediation activity is subject to appropriate collection, transport, treatment, recovery or disposal by an authorised operator, in accordance with national legal requirements;

(h) soil and groundwater remediation methods based exclusively on reducing pollutant concentrations through dilution or watering down are not used;

([64]) See Directive 2004/35/CE , Annex II, point 2. For remediation activities outside the EU, unless equal or more stringent standards are mandatory under national legislation, reference is made to the UNEP Guidance on the management of contaminated sites.

([65]) See Directive 2004/35/CE, Annex II, point 1.3.1. For remediation activities outside the EU, reference is made to the UNEP Guidance on the management of contaminated sites and the standards and guidance documents for landfill management published by the International Solid Waste Association, including International Guidelines for Landfill Evaluation (2011), Roadmap for Closing Waste Dumpsites (2016) and Landfill Operational Guidelines (2014, 2019).

(i) a control and monitoring plan is implemented, including measures to control the impacts of the remediation activities and to verify the achievement of the remediation objectives and targets, for at least 10 years in case of excavation and removal of the landfill or dumpsite and for at least 30 years in case of environmental isolation of the landfill or dumpsite, unless a different duration sufficient to guarantee long-term risk control is defined in national legislation or by the competent regulatory authority for the specific remediation project.

Do no significant harm ('DNSH')

(1) Climate change mitigation	Where the landfill body contains significant amounts of biodegradable waste, a system for landfill gas capture and abatement and a monitoring plan for landfill gas leakage is in place in accordance with operational and technical requirements of Directive 1999/31/EC, or for activities located in third countries in accordance with equivalent national law or commonly accepted international industry standards ([66]).
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex. Remedial measures are protective of water and marine resources and apply best industry practices and technology ([67]) with the aim of: (a) reducing the generation of leachates from the landfill and avoiding outflow or infiltration of leachates into the surrounding soil and any potential hazard to groundwater and surface water; (b) separately collecting and appropriately treating run-off water and leachates before discharge; (c) tracking and analysing leachate generation rates and leachate concentration and composition in the after-care period through appropriate control and monitoring systems and processes; (d) separately collecting and appropriately treating polluted soil in and around the landfill in order to block the pathway from the landfill to waterbodies through heavily soaked soil.
(4) Transition to a circular economy	Where the remediation project foresees the excavation and removal of the existing landfill or dumpsite, the excavated waste is managed in accordance with the waste hierarchy principle, prioritising recycling over other types of material recovery, over incineration and disposal, to the extent that this is technically feasible and does not increase risks for the environmental or human health.

([66]) For remediation activities outside the EU, reference is made to the UNEP Guidance on the management of contaminated sites and the standards and guidance documents for landfill management published by the International Solid Waste Association, including International Guidelines for Landfill Evaluation (2011), Roadmap for Closing Waste Dumpsites (2016) and Landfill Operational Guidelines (2014, 2019).

([67]) For remediation activities outside the EU, reference is made to the UNEP Guidance on the management of contaminated sites and the standards and guidance documents for landfill managament published by the International Solid Waste Association, including International Guidelines for Landfill Evaluation (2011), Roadmap for Closing Waste Dumpsites (2016) and Landfill Operational Guidelines (2014, 2019).

(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. Where applicable, the introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014.

2.4. **Remediation of contaminated sites and areas**

Description of the activity

The activity includes:

(a) decontamination or remediation of soils and groundwater in the polluted area, either *in situ* or *ex situ*, in particular using physical, chemical or biological methods;

(b) decontamination or remediation of contaminated industrial plants or sites;

(c) decontamination or remediation of surface water and its shores following accidental pollution, such as through collection of pollutants or through physical, chemical or biological methods;

(d) cleaning up oil spills and other types of pollutants on or in:

  (i) surface water including rivers, lakes, coastal waters or transitional waters;

  (ii) groundwater as defined in Directive 2000/60/EC;

  (iii) marine water as defined in Directive 2008/56/EC;

  (iv) sediments (for all surface water types);

  (v) aquatic ecosystems;

  (vi) buildings;

  (vii) soil;

  (viii) terrestrial ecosystems;

(e) material abatement of hazardous substances, mixtures or products, such as asbestos or lead-based paint;

(f) other specialised pollution-control activities;

(g) clean-up after disasters from natural hazards, such as flooding, or earthquake;

(h) remediation of disused mining sites or legacies not associated with extraction revenues;

(i) containment operations, hydraulic barriers, active and passive barriers intended to limit or prevent migration of pollutants.

The activity also includes all activities that are required to prepare, plan, monitor and follow-up the decontamination or remediation activity itself, such as:

(a) preparatory investigations, including data collection and surveying activities (in particular geological or hydrological), technical feasibility and environmental impact studies required to define the remediation project;

(b) monitoring and control of the remediation measures, including:

  (i) sampling of soil, water, sediment, biota or other materials;

  (ii) laboratory analysis of samples to identify the nature and concentration of pollutants;

(iii) installation, operation and maintenance of monitoring facilities and equipment such as observation wells in and outside the perimeter of the remediation site;

(c) demolition of contaminated buildings or other structures, dismantling large-scale machinery and equipment (i.e. decommissioning) and removal of surface sealing and concreting;

(d) earth moving or dredging, including excavation, landfilling, levelling, construction or reinforcement of perimeter walls or fences, primary access and internal roads and any other activities necessary to operate the decontamination;

(e) implementation of other environmental protection and pollution prevention and control measures to comply with the conditions imposed in the environmental permit for the remediation project, including measures for safeguarding safety of operations on-site and health of workers (such as for fire control, flood protection, hazardous waste management), protection of workers, site access control, management of invasive species before or during decontamination or remediation, reinforcement operations carried out prior to or during decontamination.

This economic activity does not include:

(a) pest control in agriculture;

(b) purification of water for water supply purposes;

(c) decontamination or remediation of nuclear plants and sites;

(d) treatment and disposal of hazardous or non-hazardous waste unrelated to the site contamination problem;

(e) morphological remediation;

(f) remediation of legally non-conforming landfills and abandoned or illegal waste dumps unrelated to the site under remediation (See Section 2.3 of this Annex);

(g) emergency services (see Section 14.1 of Annex II to Delegated Regulation (EU) 2021/2139);

(h) outdoor sweeping and watering of streets.

The economic activities in this category could be associated with several NACE codes, in particular 39, 33.20, 43.11, 43.12, 71.12, 71.20, 74.90, 81.30 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to pollution prevention and control

1. Remediation activities are not carried out by the operator ([68]) that caused the pollution or a person acting on behalf of that operator in order to comply with the requirements of Directive 2004/35/CE or, for activities located in third countries, with environmental liability provisions based on the 'polluter-pays' principle according to national law.

2. The relevant contaminants are removed, controlled, contained or diminished using mechanical, chemical, biological or other methods so that the contaminated area (land, water body or other), taking into account its use at the time of the damage or approved future use of the area, no longer poses any significant risk of adversely affecting human health and the environment ([69]), as set out in one of the following:

([68]) As defined in Article 2, point 6, of, Directive 2004/35/CE.
([69]) See Directive 2004/35/CE, Annex II, point 2.

(a) national regulatory standards;

(b) where these standards are not available, an internal site-specific risk-assessment taking into account the characteristic and the extent of the impacted area (land, water body or other), the type, properties (persistence, mobility and toxicity) and concentration of the substances, preparations, organisms or micro-organisms, possible migration pathways and the probability of dispersion ([70]).

3. The remediation activity is conducted in line with best industry practice and includes all of the following elements:

(a) the original operational activity or defective plant and ancillary equipment that led to the contamination has been stopped or addressed so as not to be a potential source of further contamination before any assessment or remediation activity is undertaken (except long-range transboundary air pollution or other unidentifiable diffuse sources);

(b) preparatory investigations including site-specific surveys and physical, chemical or microbiological data collection are carried out in line with best industry practice and best available techniques to establish the following elements used to define the environmental targets for the remediation and evaluate the remedial options:

  (i) the location, characteristics and extent of the contaminated site;

  (ii) the underlying geological and hydrological conditions;

  (iii) the likely quantity, composition and sources of contamination;

  (iv) soil and water pollution originating from it as well as the risks to human health and the environment.

(c) the remedial options are analysed in line with Annex II to Directive 2004/35/CE ([71]) and the most suitable remedial measures are defined in a dedicated remediation plan, including monitoring requirements and plan;

(d) any hazardous or non-hazardous waste or contaminated soils extracted or otherwise produced by the remediation activity is subject to appropriate collection, transport, treatment, recovery or disposal by an authorised operator, in accordance with legal requirements and care is taken to prevent any mixing of excavated contaminated soils and non-contaminated soils;

(e) remediation methods do not include reducing pollutant concentrations through dilution or watering down, unless a full justification, for reason other than cost considerations, is provided in the remediation plan;

(f) control, monitoring or maintenance activities are carried out in the after-care phase of at least 10 years, unless a different duration sufficient to guarantee long-term risk control is defined in the national law or in the remediation and monitoring plan (see point 4).

4. The specific remediation and monitoring plan is approved by the competent authority in accordance with national legal requirements, following consultation with local stakeholders.

([70]) See Directive 2004/35/CE, Annex II, point 2. For activities in third countries, unless more stringent standards are mandatory under national legislation, UNEP Guidance on the management of contaminated sites (UNEP/MC/COP.3/8/Rev.1) – Guidance_Contaminated_Sites_EN.pdf (mercuryconvention.org) are applied.

([71]) See Directive 2004/35/CE, Annex II, point 1.3.1.
For activities in third countries, in accordance with equivalent applicable national law or international standards (such as UNEP Guidance on the management of contaminated sites (UNEP/MC/COP.3/8/Rev.1) – Guidance_Contaminated_Sites_EN.pdf (mercuryconvention.org)) requiring remediation based on an alternative, transparently described process and valuation approach to define a suitable strategy, which comprises primary remedial measures (including monitoring requirements), complementary and compensatory remedial measures in a dedicated remediation plan.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The activity does not involve the degradation of land with high carbon stock ([72]). Measures to reduce scope 1 and scope 2 GHG emissions ([73]) of the full removal or treatment process are included in the remediation plan.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	At least 70 % (by weight) of the non-hazardous construction, demolition or other waste materials (excluding naturally occurring material defined in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC) generated on the site under remediation is prepared for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, in accordance with the waste hierarchy and the EU Construction and Demolition Waste Management Protocol ([74]), unless a clear justification is given in the approved Remediation Plan based on technical or environmental reasons, other than cost considerations.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex. The following is to be ensured: (a) in the Union, in relation with Natura 2000 sites: the activity does not have significant effects on Natura 2000 sites in view of their conservation objectives on the basis of an appropriate assessment carried out in accordance with Article 6(3) of Directive 92/43/EEC; (b) in the Union, in any area: the activity is not detrimental to the recovery or maintenance of the populations of species protected under Directives 92/43/EEC and 2009/147/EC at a favourable conservation status. The activity is also not detrimental to the recovery or maintenance of the habitat types concerned and protected under Directive 92/43/EEC at a favourable conservation status; (c) the introduction of invasive alien species is prevented, or their spread is managed in accordance with Regulation (EU) No 1143/2014.

([72]) Land with high-carbon stock means wetlands, including peatland, and continuously forested areas grasslands, mangroves and seagrass meadows within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001.

([73]) 'Scope 1 GHG emissions' means the direct greenhouse gas emissions occurring from sources that are owned or controlled by the operator. 'Scope 2 GHG emissions' means the indirect greenhouse gas emissions from the generation of the electricity consumed by the operator.

([74]) EU Construction & Demolition Waste Management Protocol, September 2016: https://ec.europa.eu/docsroom/documents/20509/.

Appendix A

Generic criteria for DNSH to climate change adaptation

I. **Criteria**

The physical climate risks that are material to the activity have been identified from those listed in the table in Section II of this Appendix by performing a robust climate risk and vulnerability assessment with the following steps:

(a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;

(b) where the activity is assessed to be at risk from one or more of the physical climate risks listed in Section II of this Appendix, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;

(c) an assessment of adaptation solutions that can reduce the identified physical climate risk.

The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:

(a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;

(b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios ([1]) consistent with the expected lifetime of the activity, including, at least, 10- to 30-year climate projections scenarios for major investments.

The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports ([2]), scientific peer-reviewed publications, and open source ([3]) or paying models.

For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.

For new activities and existing activities using newly-built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.

The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions ([4]) or rely on blue or green infrastructure ([5]) to the extent possible.

([1]) Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

([2]) Assessments Reports on Climate Change: Impacts, Adaptation and Vulnerability, published periodically by the Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change produces, https://www.ipcc.ch/reports/.

([3]) Such as Copernicus services managed by the European Commission.

([4]) Nature-based solutions are defined as 'solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions'. Therefore, nature-based solutions benefit biodiversity and support the delivery of a range of ecosystem services (version of 27.6.2023: https://ec.europa.eu/research/environment/index.cfm?pg=nbs).

([5]) See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Green Infrastructure (GI) – Enhancing Europe's Natural Capital (COM(2013) 249 final).

II. **Classification of climate-related hazards** ([6])

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

([6]) The list of climate-related hazards in this table is non-exhaustive, and constitutes only an indicative list of most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment.

Appendix B

Generic criteria for DNSH to sustainable use and protection of water and marine resources

Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC ([1]) and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.

The activity does not hamper the achievement of good environmental status of marine waters or does not deteriorate marine waters that are already in good environmental status as defined in point 5 of Article 3 of Directive 2008/56/EC ([2]), taking into account the Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors.

([1]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided; or, where this is not possible, (3) justified by the lack of better environmental alternatives which are not disproportionately costly/technically unfeasible, and all practicable steps are taken to mitigate the adverse impact on the status of the body of water.

([2]) The definition laid down in point 5 of Article 3 of Directive 2008/56/EC provides in particular that good environmental status is to be determined on the basis of the qualitative descriptors laid down in Annex I to that Directive.

Appendix D

Generic criteria for DNSH to protection and restoration of biodiversity and ecosystems

An Environmental Impact Assessment (EIA) or screening ([1]) has been completed in accordance with Directive 2011/92/EU ([2]).

Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.

For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment ([3]), where applicable, has been conducted and based on its conclusions the necessary mitigation measures ([4]) are implemented.

([1]) The procedure through which the competent authority determines whether projects listed in Annex II to Directive 2011/92/EU is to be made subject to an environmental impact assessment (as referred to in Article 4(2) of that Directive).

([2]) For activities in third countries, in accordance with equivalent applicable national law or international standards requiring the completion of an EIA or screening, for example, IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks.

([3]) In accordance with Directives 2009/147/EC and 92/43/EEC. For activities located in third countries, in accordance with equivalent applicable national law or international standards, that aim at the conservation of natural habitats, wild fauna and wild flora, and that require to carry out (1) a screening procedure to determine whether, for a given activity, an appropriate assessment of the possible impacts on protected habitats and species is needed; (2) such an appropriate assessment where the screening determines that it is needed, for example IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

([4]) Those measures have been identified to ensure that the project, plan or activity will not have any significant effects on the conservation objectives of the protected area.

ANNEX IV

Technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives

Table of Contents

1. *Environmental protection and restoration activities*

1.1. **Conservation, including restoration, of habitats** ([1])**, ecosystems** ([2]) **and species**

Description of the activity

Initiation, development and realisation on own account or on a fee or contract basis, of conservation activities, including restoration activities, aimed at maintaining or improving the status and trends of terrestrial, freshwater and marine habitats, ecosystems and populations of related fauna and flora species.

The economic activity includes:

(a) activities of *in situ* conservation, defined by the Convention on Biological Diversity (CBD) ([3]) as the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings;

(b) activities of restoration defined as activities actively or passively assisting the recovery (i) of an ecosystem towards or to good condition ([4]); (ii) of a habitat type to the highest level of condition attainable and to its favourable reference area or natural extent; (iii) of a habitat of a species ([5]) to a sufficient quality and quantity; or (iv) of species populations to satisfactory levels.

The economic activity does not include *ex situ* conservation of components of biological diversity, including in botanical gardens, zoos, aquaria or seed banks.

The economic activities in this category have no dedicated NACE code but are partially covered under NACE code R91.04 as referred to in the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activities relate to Class 6 of the statistical classification of environmental protection activities (CEPA) established by Regulation (EU) No 691/2011 of the European Parliament and of the Council ([6]).

([1]) 'Habitat' means a terrestrial or aquatic area distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural, in accordance with Article 1, point (b) of Directive 92/43/EEC.

([2]) 'Ecosystems' means a dynamic complex of plant, animal, and microorganism communities and their non-living environment, interacting as a functional unit, and includes habitat types, habitats of species and species populations.

([3]) Article 2 'Use of Terms' of the Convention on Biological Diversity (CBD) (version of 27.6.2023: available at https://www.cbd.int/convention/articles/?a=cbd-02).

([4]) 'Good condition' means a state where the key characteristics of an ecosystem, namely its physical, chemical, compositional, structural and functional state, and its landscape and seascape characteristics, reflect the high level of ecological integrity, stability and resilience necessary to ensure its long-term maintenance, without prejudice to more specific definitions of 'good condition' under different legal frameworks.

([5]) 'Habitat of a species' means an environment defined by specific abiotic and biotic factors, in which the species lives at any stage of its biological cycle.

([6]) Regulation (EU) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts (OJ L 192, 22.7.2011, p. 1).

Technical screening criteria

Substantial contribution to protection and restoration of biodiversity and ecosystems

1. General conditions

1.1. The activity contributes to at least one of the following:

(a) maintaining good condition of ecosystems, species, habitats or of habitats of species;

(b) re-establishing or restoring ecosystems, habitats or habitats of species towards or to good condition, including through increasing their area or range.

1.2. The activity may be carried out by any type of operator irrespective of the main domain of activity.

2. Initial description of the area covered by the conservation activity

2.1. The activity takes place in an area with a detailed description of its initial ecological conditions which contains the following elements:

(a) mapping of the current habitats and their condition;

(b) where applicable, the protection status of the area;

(c) characterisation of the situation of the main species in terms of conservation relevance present in the area (including list of species, approximate size of the population, approximate size of the habitat of the species and its quality, period during which the area is used by the species);

(d) the importance of the area to reaching good condition of species, habitats or habitats of species at regional, national or international level as appropriate;

(e) where relevant, the potential for improving the condition of species, habitats or habitats of species present on the area or re-establishing habitats or habitats of species in the area or to enhance connectivity between habitats.

3. Management plan or equivalent instrument

3.1. The area is covered by a management plan or by an equivalent instrument, such as a restoration plan ([7]), which is regularly updated and in any case at least every ten years, and contains the following information:

(a) a description of the expected contribution of the area to the nature conservation objectives set by the competent nature or environment authority considering the regional, national, Union and international legal and policy context;

(b) the list of species, habitats and habitats of the species that will benefit from the conservation measures (hereafter 'targeted habitats and species');

(c) the duration of the plan and a clear description of the conservation objectives for each targeted habitat and species and of the corresponding conservation measures that address identified pressures and threats, including the expected deadline for the achievement of the conservation objectives. In case the deadlines exceed the duration of the management plan, the expected progress (milestones) towards achievement is defined;

(d) a description of the threats and pressures that could hinder the achievement of the conservation objectives, including projected habitat transformations caused by climate change;

(e) the measures to ensure that all DNSH criteria for this activity are achieved;

(f) consideration of societal issues (including preservation of landscape, consultation of stakeholders in accordance with the terms and conditions laid down in national law);

([7]) The restoration plan can be part of a management plan. Where the area is covered by a management plan, no additional restoration plan is required.

(g) where applicable, a description of enhanced ecosystem services, such as carbon storage, water purification, flood protection, erosion prevention, pollination, recreational opportunities, and wider socio-economic benefits;

(h) a monitoring scheme with specific and relevant indicators, allowing to measure progress towards achieving the conservation objectives and an identification of corrective measures as necessary;

(i) the persons and organisations involved in the management or restoration of the area and, if relevant, the necessary collaborations or partnerships to put in place to achieve the conservation objectives;

(j) the measures taken to ensure transparency about the conservation objectives, the conservation measures and the monitoring and its results;

(k) the funding necessary for implementing the conservation measures, for the monitoring of the area and its audit.

3.2. Where the management plan or the equivalent instrument does not contain all the elements specified in point 3.1, the information is provided by the operator of the activity.

4. Audit

4.1. The initial description of the conservation area and the management plan or equivalent instrument specified in points 2 and 3 are verified by an independent third-party certifier at the start of the conservation activity.

4.2. At the end of the duration of the management plan or equivalent instrument and at least every ten years, the achievement of the objectives set at the start of the management plan and the respect of the DNSH criteria are verified.

The verification includes an updated detailed description of the ecological conditions of the area as specified in point 2, an evaluation of the effectiveness of the conservation measures, and of the achievement of the conservation objectives, an evaluation of an updated version of the management plan or equivalent instrument, and the recommendations for the next management plan or equivalent instrument.

4.3. The verification in accordance with points 4.1 and 4.2 is carried out by either of the following:

(a) the relevant national competent authorities;

(b) an independent third-party certifier, at the request of national authorities or the operator of the activity.

In order to reduce costs, audits may be performed together with any forest certification, land-use certification, biodiversity certification, climate certification or other audit.
The independent third-party certifier may not have any conflict of interest with the owner or the funder and may not be involved in the development or operation of the activity.
As a result of the verification, the certifier issues an audit report.

5. Guarantee of permanence

5.1. In accordance with national law, the area on which the activity takes place is covered by one of the following measures:

(a) the area is classified as a protected area in line with the IUCN Protected Area Categories System ([8]), as a Natura 2000 site under Directive 92/43/EEC, or as an Other Effective area-based Conservation Measure (OECM) ([9]), by national law or under an international convention to which the country is signatory and is effectively managed to prevent deterioration and enable the recovery of species and habitats or habitats of species;

([8]) See https://www.iucn.org/theme/protected-areas/about/protected-area-categories (version of 27.6.2023).
([9]) The definition of OECM and a guidance for its application is set out in Decision 14/8 of the UN Convention on Biological Diversity (version of 27.6.2023: https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf).

(b) the area is destined to restoration or conservation in a statutory land, freshwater or maritime use plan approved by the competent authorities;

(c) the area is the subject to a public or private contractual arrangement that can ensure that the conservation objectives can be achieved and maintained.

5.2. The operator of the area where the conservation activity takes place commits that a new management plan or equivalent instrument in line with the conservation objectives will be produced before the end of the previous plan.

6. Additional minimum requirements

6.1. The offsetting of the impacts of another economic activity is excluded under this activity ([10]). Only net biodiversity gains resulting from conservation/restoration can be accounted for as substantial contribution under this activity ([11]).

6.2. The introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014.

Do no significant harm ('DNSH')

(1) Climate change mitigation	The activity does not involve the degradation of land with high carbon stock ([12]) nor the degradation of marine environment with high carbon stock.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	N/A
(5) Pollution prevention and control	The use of pesticides is minimised and alternative approaches or techniques, which may include non-chemical alternatives to pesticides are favoured, in accordance with Directive 2009/128/EC, with exception of occasions where the use of pesticides is needed to control outbreaks of pest and diseases. The activity minimises the use of fertilisers, including manure, to ensure it does not go beyond what is necessary to achieve the conservation and restoration objectives of the area and complies with the Codes of Good Agricultural Practices and with the Nitrates Action Plans in Nitrates Vulnerable Zones established in accordance with Council Directive 91/676/EEC ([13]). The activity complies with Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.

([10]) Biodiversity offsets are measurable conservation outcomes resulting from measures designed to compensate for residual, unavoidable, adverse biodiversity impacts arising from an activity or project after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to conserve the same biodiversity values (habitats, species or ecosystems) that are negatively impacted by the activity or project.

([11]) This can include additional conservation/restoration outcomes beyond offsetting measures.

([12]) 'Land with high-carbon stock' means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001.

([13]) Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1).

	Well documented and verifiable measures are taken to avoid the use of active ingredients that are listed in Annex I, Part A, of Regulation (EU) 2019/1021 ([14]), the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade, the Minamata Convention on Mercury, the Montreal Protocol on Substances that Deplete the Ozone Layer, and of active ingredients that are listed as classification Ia ('extremely hazardous') or Ib ('highly hazardous') in the WHO recommended Classification of Pesticides by Hazard ([15]). Pollution of water and soil is prevented and cleaning up measures are undertaken when pollution occurs. The activity complies with the relevant national law on active ingredients.

2. ***Accommodation activities***

2.1. **Hotels, holiday, camping grounds and similar accommodation**

Description of the activity

The provision of short-term tourism ([16]) accommodation with or without associated services, including cleaning, food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities as well as conference and convention facilities.

This includes accommodation provided by:

(a) hotels and motels of all kinds;

(b) holiday homes;

(c) visitor flats, bungalows, cottages and cabins;

(d) youth hostels and mountain refuges;

(e) campgrounds and trailer parks;

(f) space and facilities for recreational vehicles;

(g) recreational camps and fishing and hunting camps;

(h) protective shelters or plain bivouac facilities for placing tents or sleeping bags.

This category does not include:

(a) provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis;

(b) cruise ships.

Conservation or restoration offsets of impacts defined at the stage of formal authorisation of the tourism activity are not considered as a contribution to conservation or restoration measures.

([14]) Which implements in the Union the Stockholm Convention on persistent organic pollutants (OJ L 209, 31.7.2006, p. 3).

([15]) The WHO Recommended Classification of Pesticides by Hazard (version 2019) (version of 27.6.2023: https://apps.who.int/iris/bitstream/handle/10665/332193/9789240005662-eng.pdf?ua=1).

([16]) 'Tourism' means the activity of visitors taking a trip to a main destination outside their usual environment, for less than a year, for any main purpose, including business, leisure or other personal purpose, other than to be employed by a resident entity in the place visited, see Eurostat Statistics Explained glossary (version of 27.6.2023: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Tourism).

The economic activities in this category could be associated with several NACE codes, in particular I55.10, I55.20 and I55.30 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Technical screening criteria

Substantial contribution to protection and restoration of biodiversity and ecosystems

1. Contribution to conservation or restoration activities

1.1. The activity contributes to conservation or restoration measures which comply with the technical screening criteria for activity 'Conservation, including restoration, of habitats, ecosystems and species' set out in Section 1.1 of this Annex, in clearly identified areas, within or in the proximity of the same tourism destination ([17]) as the accommodation. The area can be any type of area with high nature conservation value covered by a management plan or an equivalent instrument such as a restoration plan (referred to 'conservation area' below).

1.2. The activities contributing to conservation or restoration measures as referred to in point 1.1 are defined in a specific contractual agreement or equivalent instrument between the operator of the activity and the organisation in charge of the conservation or restoration of the area. The agreement covers a minimum of five years and is regularly reviewed, in any case at least every five years. It defines clear time-bound targets for contribution to the conservation or restoration area. The contribution to conservation or restoration measures as referred to in point 1.1 can be financial or in kind and may take one of the following forms:

(a) offer or organisation of visits to a conservation area where entrance or permit or user fees are applied;

(b) operation of concessions and leases for services directly related to a conservation area (issued by the organisation in charge of the management of the area);

(c) operation of tourist accommodation establishments within a conservation area but not subject to concession (in agreement with the organisation in charge of the management of the area);

(d) offer or management of volunteers for activities directly related to conservation (in accordance with the conservation objectives of the conservation area);

(e) offer or management of educational opportunities directly related to conservation and appropriate behaviour (in accordance with the conservation objectives of the conservation area);

(f) purchase of products of any kind, including food, beverages, handcrafts, for re-selling or for direct use, derived from sustainable practices in a conservation area, in agreement with the organisation in charge of the management of the area;

(g) purchase of merchandise from a conservation area for re-selling (or other commercial arrangements that guarantees that the revenue from selling of merchandise accrues to the conservation area);

(h) payment of copyrights, including images or names, directly to the organisation in charge of the management of a conservation area;

(i) collection of tourists' voluntary donations to be transferred to a dedicated fund or account set up by the organisation in charge of the management of a conservation area on a regular basis.

1.3. The percentage (%) contribution defined in the contractual agreement is at least equivalent to:

(a) 1 % of the annual turnover of an individual tourist accommodation establishment, where the contractual agreement includes only one establishment;

([17]) 'Tourism destination' is defined in this context as a geographic area visited, consisting of a set of resources and attractions that usually is promoted by a Destination Management Organisation or by a local, subnational or national tourism organisation.

(b) 0,7 % of the annual turnover of an individual tourist accommodation establishment, where the contractual agreement or equivalent is collective and includes a group of two to ten establishments;

(c) 0,5 % of the annual turnover of an individual tourist accommodation establishment, where the contractual agreement or equivalent is collective and includes a group of over ten establishments.

Mandatory financial contributions applied to the activity in the context of the national or local regulatory framework, including eco-taxes or tariffs, are not considered as a contribution to the conservation or restoration activity.

2. Action plan for contributing to nature conservation

2.1. The activity has developed and implemented an action plan specific to the tourism service or offer provided, which defines how the activity can be carried out in a way which is compatible with and contributes to the implementation of the management plan or equivalent instrument of the conservation area to which the activity intends to contribute. The plan includes all of the following measures relevant for the conservation or restoration objectives of the area:

(a) a clear set of objectives and activities aimed at avoiding or minimising direct negative impacts on biodiversity, including an analysis of the carrying capacity or limit of acceptable change ([18]) of the area developed by the organisation in charge of the conservation or restoration of the area or by the operator of the activity in cooperation with that organisation ([19]), including the following elements ([20]):

(i) for visits to natural sites: avoiding direct damage on ecosystems or habitats through management of tourist flows and movements;

(ii) for wildlife interaction:

— avoiding direct harm and disturbance through detrimental actions such as animal feeding, destruction or damaging eggs and nests, destruction or removal of plants or corals,

— avoiding indirect harm and disturbance on species from tourists' local movements, such as littering, noise, plastic, chemical or light pollution,

— prevention and avoidance of introduction of invasive alien species ([21]);

(iii) for wildlife harvesting and trade ([22]): protected wildlife species are not harvested, consumed, sold;

([18]) The 'carrying capacity' is defined as the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction (UNEP/MAP/PAP, 1997).

([19]) The carrying capacity can be also developed as part of the Environmental Impact Assessment (EIA) or screening refereed to in point 4.1.

([20]) In line with the Global Sustainable Tourism Council (GSTC) Industry Criteria for Hotels (version of 27.6.2023: https://www.gstcouncil.org/gstc-criteria/gstc-industry-criteria-for-hotels/).

([21]) The introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species (OJ L 317, 4.11.2014, p. 35). Outside of the EU reference is made to the national legislation and to the CBD Supplementary Voluntary Guidance for Avoiding Unintentional Introductions of Invasive Alien Species Associated with Trade in Live Organisms (version of 27.6.2023) available at 14/11. Invasive alien species (cbd.int).

([22]) In accordance with Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein (OJ L 61, 3.3.1997, p. 1) and Commission Regulation (EC) No 865/2006 of 4 May 2006 laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein (OJ L 166, 19.6.2006, p. 1), which implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) within the Union. For activity in third countries, in line with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

(b) where applicable, a description of partnership agreements with conservation management entities, local NGOs or communities to contribute to the conservation or restoration of the area to which it intends to contribute;

(c) a biodiversity information and awareness plan linked to the specific impacts arising from tourism activities ([23]);

(d) a clear framework for the continuous monitoring and measuring of the effectiveness of the contribution, including an adaptive approach allowing for the identification of corrective actions, where necessary.

3. Sustainable Supply Chain and Environmental Management System

3.1. The establishment has a fair share of products in line with market best practices (such as food and beverages, wood, including furniture, paper, board and plastic products) certified according to environmental standards ([24]). The establishment commits to a continuous improvement of the share of the products certified by an independent third party.

3.2. For accommodation establishments with over 50 employees, the activity complies with one of the following criteria:

(a) the establishment has an environmental management system (EMS) requiring third-party certification, such as the EU Eco-Management and Audit Scheme ([25]) (EMAS), ISO 14001:2015 ([26]) or equivalent, aligned with best environmental management practice and benchmark performances such as the EMAS Reference Document for the Tourism Sector ([27]) or equivalent national or international standard;

(b) the establishment was awarded with an EU Ecolabel for tourist accommodation or an equivalent EN ISO 14024:2018 ([28]) type I Ecolabel or an equivalent voluntary label meeting equivalent requirements ([29]).

4. Minimum requirements

4.1. An Environmental Impact Assessment (EIA) or a screening ([30]) has been completed in accordance with Directive 2011/92/EU ([31]). Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.

([23]) In line with the EU Ecolabel for tourist accommodation services Criterion 26a: The tourist accommodation shall provide environmental communication and education notices on local biodiversity, landscape and nature conservation measures to guests.

([24]) Such as the EU Ecolabel for tourist accommodation, in accordance with Commission Decision (EU) 2017/175 of 25 January 2017 on establishing EU Ecolabel criteria for tourist accommodation (notified under document C(2017) 299) (OJ L 28, 2.2.2017, p. 9), EU organic-certification for foods and drinks in accordance with Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007 (OJ L 150, 14.6.2018, p. 1), the FSC label for wood and paper products (version of 27.6.2023: https://fsc.org/en) or the Rainforest Alliance for certain commodities (version of 27.6.2023: https://www.rainforest-alliance.org/for-business/2020-certification-program/).

([25]) In accordance with Regulation (EC) No 1221/2009.

([26]) ISO 14001:2015 Environmental management systems – Requirements with guidance for use.

([27]) Commission Decision (EU) 2016/611 of 15 April 2016 on the reference document on best environmental management practice, sector environmental performance indicators and benchmarks of excellence for the tourism sector under Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (notified under document C(2016) 2137) (OJ L 104, 20.4.2016, p. 27).

([28]) ISO 14024:2018 Environmental labels and declarations – Type I environmental labelling – Principles and procedures.

([29]) In particular, requirements include: following a multi-criteria approach; criteria are developed through an independent science-based process, are publicly available and go beyond what is required by legislation; that the label is based on impartial control procedure through third party verification.

([30]) The procedure through which the competent authority determines whether projects listed in Annex II to Directive 2011/92/EU is to be made subject to an environmental impact assessment (as referred to in Article 4(2) of that Directive).

([31]) For activities in third countries, in accordance with equivalent applicable national law or international standards requiring the completion of an EIA or screening, for example, IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks.

The activity does not have significant adverse effects on protected areas (UNESCO World Heritage sites, Key Biodiversity Areas, as well as other protected areas than Natura 2000 sites) and protected species, based on an assessment of its impact that takes into account the best available knowledge ([32]). The activity is not detrimental to the recovery or maintenance of the populations of the species and of the habitat types protected under national law at a favourable conservation status.

In the Union, in relation to Natura 2000 sites, the activity does not have significant effects on Natura 2000 sites in view of their conservation objectives on the basis of an appropriate assessment carried out in accordance with Article 6(3) of Directive 92/43/EEC.

In the Union, in any area, the activity is not detrimental to the recovery or maintenance of the populations of the species protected under Directives 92/43/EEC and 2009/147/EC at a favourable conservation status. The activity is also not detrimental to the recovery or maintenance of the habitat types protected under Directive 92/43/EEC at a favourable conservation status.

4.2. The introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014.

4.3. Recreational hunting and fishing activities are allowed only where they are explicitly included as part of the conservation or management plan of the conservation area as established by the management entity and carried out in accordance with applicable Union and national law.

5. Audit
At the beginning of the activity and at least every five years thereafter, the compliance with the technical screening criteria is controlled by the relevant national competent authorities or by an independent third-party certifier, such as a dedicated certification or accreditation scheme, at the request of national authorities or the operator of the activity.

The independent third-party certifier may not have any conflict of interest, in particular with the owner or the funder, and may not be involved in the development or operation of the activity.

In order to reduce costs, audits may be performed together with any other audit.

Do no significant harm ('DNSH')

(1) Climate change mitigation	For buildings built before 31 December 2020, the building has at least an Energy Performance Certificate (EPC) class C. As an alternative, the building is within the top 30 % of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings. For buildings built after 31 December 2020, the Primary Energy Demand (PED) ([33]) defining the energy performance of the building resulting from the construction does not exceed the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation implementing Directive 2010/31/EU. The energy performance is certified by an Energy Performance Certificate (EPC).

([32]) For activities located in third countries, in accordance with equivalent applicable national law or international standards, that aim at the conservation of natural habitats, wild fauna and wild flora, and that require to carry out (1) a screening procedure to determine whether, for a given activity, an appropriate assessment of the possible impacts on protected habitats and species is needed; (2) such an appropriate assessment where the screening determines that it is needed, for example IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

([33]) The calculated amount of energy needed to meet the energy demand associated with the typical uses of a building expressed by a numeric indicator of total primary energy use in kWh/m^2 per year and based on the relevant national calculation methodology and as displayed on the Energy Performance Certificate (EPC).

	The activity does not involve the degradation of land with high carbon stock ([34]) nor the degradation of marine environment with high carbon stock.
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	The accommodation establishment: (a) does not make any use of or offer to its guests any of the items listed in Part B of Annex to Directive (EU) 2019/904 of the European Parliament and of the Council ([35]); (b) separates at source paper, metal, plastic, glass and biowaste where separate collection for these materials is available in the area ([36]); (c) has a food waste prevention plan with a specific time-bound quantitative target of reduction of food waste ([37]).
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. The activity is in line with Directive (EU) 2015/2193 of the European Parliament and of the Council ([38]). Noise, plastic, light and chemical pollution are minimised.

([34]) 'Land with high-carbon stock' means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001.
([35]) Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (OJ L 155, 12.6.2019, p. 1).
([36]) Only the materials for which the separate collection exists need to be separated at source by the establishment.
([37]) 'Food waste' as defined in Article 3, point 4a; of Directive 2008/98/EC.
([38]) Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1).

Appendix A

Generic criteria for DNSH to climate change adaptation

I. **Criteria**

The physical climate risks that are material to the activity have been identified from those listed in the table in Section II of this Appendix by performing a robust climate risk and vulnerability assessment with the following steps:

(a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;

(b) where the activity is assessed to be at risk from one or more of the physical climate risks listed in Section II of this Appendix, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;

(c) an assessment of adaptation solutions that can reduce the identified physical climate risk.

The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:

(a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;

(b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios ([1]) consistent with the expected lifetime of the activity, including, at least, 10- to 30-year climate projections scenarios for major investments.

The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports ([2]), scientific peer-reviewed publications, and open source ([3]) or paying models.

For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.

For new activities and existing activities using newly-built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.

The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions ([4]) or rely on blue or green infrastructure ([5]) to the extent possible.

([1]) Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

([2]) Assessments Reports on Climate Change: Impacts, Adaptation and Vulnerability, published periodically by the Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change produces, https://www.ipcc.ch/reports/.

([3]) Such as Copernicus services managed by the European Commission.

([4]) Nature-based solutions are defined as 'solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions'. Therefore, nature-based solutions benefit biodiversity and support the delivery of a range of ecosystem services (version of 27.6.2023: https://ec.europa.eu/research/environment/index.cfm?pg=nbs).

([5]) See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Green Infrastructure (GI) – Enhancing Europe's Natural Capital (COM(2013) 249 final).

II. **Classification of climate-related hazards** ([6])

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

([6]) The list of climate-related hazards in this table is non-exhaustive, and constitutes only an indicative list of most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment.

Appendix B

Generic criteria for DNSH to sustainable use and protection of water and marine resources

Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC ([1]) and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.

Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.

The activity does not hamper the achievement of good environmental status of marine waters or does not deteriorate marine waters that are already in good environmental status as defined in point 5 of Article 3 of Directive 2008/56/EC ([2]), taking into account the Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors.

([1]) For activities in third countries, in accordance with applicable national law or international standards which pursue equivalent objectives of good water status and good ecological potential, through equivalent procedural and substantive rules, i.e. a water use and protection management plan developed in consultation with relevant stakeholders which ensures that (1) the impact of the activities on the identified status or ecological potential of potentially affected water body or bodies is assessed; and (2) deterioration or prevention of good status/ecological potential is avoided; or, where this is not possible, (3) justified by the lack of better environmental alternatives which are not disproportionately costly/technically unfeasible, and all practicable steps are taken to mitigate the adverse impact on the status of the body of water.

([2]) The definition laid down in point 5 of Article 3 of Directive 2008/56/EC provides in particular that good environmental status is to be determined on the basis of the qualitative descriptors laid down in Annex I to that Directive.

Appendix C

Generic criteria for DNSH to pollution prevention and control regarding use and presence of chemicals

The activity does not lead to the manufacture, placing on the market or use of:

(a) substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021, except in the case of substances present as an unintentional trace contaminant;

(b) mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852;

(c) substances, whether on their own, in mixture or in articles, listed in Annexes I or II to Regulation (EC) No 1005/2009;

(d) substances, whether on their own, in mixtures or in articles, listed in Annex II to Directive 2011/65/EU, except where there is full compliance with Article 4(1) of that Directive;

(e) substances, whether on their own, in mixtures or in an article, listed in Annex XVII to Regulation (EC) No 1907/2006, except where there is full compliance with the conditions specified in that Annex;

(f) substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), and meeting the criteria laid down in Article 57 of Regulation (EC) No 1907/2006 and that were identified in accordance with Article 59(1) of that Regulation for a period of at least 18 months, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([1]).

In addition, the activity does not lead to the manufacture, presence in the final product or output, or placing on the market, of other substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w), that meet the criteria of Regulation (EC) No 1272/2008 for one of the hazard classes or hazard categories mentioned in Article 57 of Regulation (EC) No 1907/2006, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions ([2]).

([1]) The Commission will review the exceptions from the prohibition from manufacturing, placing on the market or use of the substances referred to in point (f) once it will have published horizontal principles on essential use of chemicals.

([2]) The Commission will review the exceptions from the prohibition from manufacture, presence in the final product or output, or placing on the market of the substances referred to in this paragraph once it will have published horizontal principles on essential use of chemicals.

ANNEX V

Amendments to Annexes I, II, III, IV, V, VII, IX and X to Delegated Regulation (EU) 2021/2178

(1) Annex I is amended as follows:

(a) in Section 1.1.2.2, the fifth paragraph is replaced by the following:

'The numerator shall contain the part of CapEx referred to in the first paragraph of this point that contributes substantially to any of the environmental objectives. The numerator shall provide for a breakdown for the part of CapEx allocated to substantial contribution to each environmental objective.';

(b) in Section 1.1.3.2, the fourth paragraph is replaced by the following:

'The numerator shall include the part of OpEx referred to in the first paragraph of this point that contributes substantially to any of the environmental objectives. The numerator shall provide for a breakdown for the part of the OpEx allocated to substantial contribution to each environmental objective.';

(c) in Section 1.2.1, the second paragraph is replaced by the following:

'For turnover and capital expenditure, non-financial undertakings shall include references to the related line items in the financial statements.';

(d) in Section 2, point (e) is replaced by the following:

'(e) non-financial undertakings shall identify Taxonomy-non-eligible economic activities and disclose the proportion in the denominator of the turnover, CapEx and OpEx KPIs of those economic activities at the level of the undertaking or group;';

(2) Annex II is replaced with the following Annex:

'ANNEX II

TEMPLATES FOR THE KPIs OF NON-FINANCIAL UNDERTAKINGS

Template: Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering year N

Financial year N	**Year**			**Substantial contribution criteria**						**DNSH criteria ("Does Not Significantly Harm")** [h]									
Economic Activities (1)	**Code** [a] **(2)**	**Turnover (3)**	**Proportion of Turnover, year N (4)**	**Climate Change Mitigation (5)**	**Climate Change Adaptation (6)**	**Water (7)**	**Pollution (8)**	**Circular Economy (9)**	**Biodiversity (10)**	**Climate Change Mitigation (11)**	**Climate Change Adaptation (12)**	**Water (13)**	**Pollution (14)**	**Circular Economy (15)**	**Biodiversity (16)**	**Minimum Safeguards (17)**	**Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) turnover, year N-1 (18)**	**Category enabling activity (19)**	**Category transi-tional activity (20)**
Text		*Currency*	*%*	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*E*	*T*
A. **TAXONOMY-ELIGIBLE ACTIVITIES**																			
A.1. **Environmentally sustainable activities (Taxonomy-aligned)**																			
Activity 1			%							Y	Y	Y	Y	Y	Y	Y	%		
Activity 1 [d]			%							Y	Y	Y	Y	Y	Y	Y	%	E	
Activity 2			%							Y	Y	Y	Y	Y	Y	Y	%		T
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)			**%**	**%**	**%**	**%**	**%**	**%**	**%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**%**		
Of which enabling			%	%	%	%	%	%	%	Y	Y	Y	Y	Y	Y	Y	%	E	
Of which transitional			%	%						Y	Y	Y	Y	Y	Y	Y	%		T
A.2. **Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)** [g]																			
				EL; N/EL [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]										

Activity 1 (c)			%	*EL*	*EL*			*EL*			%	
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)			%	%	%	%	%	%	%		%	
A. **Turnover of Taxonomy-eligible activities *(A.1+A.2)***			%	%	%	%	%	%	%			

B. **TAXONOMY-NON-ELIGIBLE ACTIVITIES**		
Turnover of Taxonomy-non-eligible activities		%
TOTAL		**100 %**

(a) The Code constitutes the abbreviation of the relevant objective to which the economic activity is eligible to make a substantial contribution, as well as the section number of the activity in the relevant Annex covering the objective, i.e.:
- Climate Change Mitigation: CCM
- Climate Change Adaptation: CCA
- Water and Marine Resources: WTR
- Circular Economy: CE
- Pollution Prevention and Control: PPC
- Biodiversity and ecosystems: BIO.

For example, the Activity "Afforestation" would have the Code: CCM 1.1.

Where activities are eligible to make a substantial contribution to more than one objective, the codes for all objectives should be indicated.
For example, if the operator reports that the activity "Construction of new buildings" makes a substantial contribution to climate change mitigation and circular economy, the code would be: CCM 7.1. / CE 3.1.

The same codes should be used in Sections A.1 and A.2 of this template.

(b) Y – Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N – No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL – Not eligible, Taxonomy-non-eligible activity for the relevant environmental objective.

(c) Where an economic activity contributes substantially to multiple environmental objectives, non-financial undertakings shall indicate, in bold, the most relevant environmental objective for the purpose of computing the KPIs of financial undertakings while avoiding double counting. In their respective KPIs, where the use of proceeds from the financing is not known, financial undertakings shall compute the financing of economic activities contributing to multiple environmental objectives under the most relevant environmental objective that is reported in bold in this template by non-financial undertakings. An environmental objective may only be reported in bold once in one row to avoid double counting of economic activities in the KPIs of financial undertakings. This shall not apply to the computation of Taxonomy-alignment of economic activities for financial products defined in point (12) of Article 2 of Regulation (EU) 2019/2088. Non-financial undertakings shall also report the extent of eligibility and alignment per environmental objective, that includes alignment with each of environmental objectives for activities contributing substantially to several objectives, by using the template below:

	Proportion of turnover / Total turnover	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	%	%
CCA	%	%
WTR	%	%
CE	%	%
PPC	%	%
BIO	%	%

(d) The same activity may align with only one or more environmental objectives for which it is eligible.

(e) The same activity may be eligible and not aligned with the relevant environmental objectives.

(f) EL – Taxonomy-eligible activity for the relevant objective
N/EL – Taxonomy-non-eligible activity for the relevant objective.

(g) Activities shall be reported in Section A.2 of this template only if they are not aligning to any environmental objective for which they are eligible. Activities that align to at least one environmental objective shall be reported in Section A.1 of this template.

(h) For an activity to be reported in Section A.1 all DNSH criteria and minimum safeguards shall be met. For activities listed under A2, columns (5) to (17) may be filled in on a voluntary basis by non-financial undertakings. Non-financial undertakings may indicate the substantial contribution and DNSH criteria that they meet or do not meet in Section A.2 by using: (a) for substantial contribution – Y/N and N/EL codes instead of EL and N/EL; and (b) for DNSH – Y/N codes.

Template: Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year N

Financial year N	**Year**			**Substantial contribution criteria**						**DNSH criteria ("Does Not Significantly Harm")** [h]									
Economic Activities (1)	**Code** [a] **(2)**	**CapEx (3)**	**Proportion of CapEx, year N (4)**	**Climate Change Mitigation (5)**	**Climate Change Adaptation (6)**	**Water (7)**	**Pollution (8)**	**Circular Economy(9)**	**Biodiversity(10)**	**Climate Change Mitigation (11)**	**Climate Change Adaptation (12)**	**Water (13)**	**Pollution (14)**	**Circular Economy (15)**	**Biodiversity (16)**	**Minimum Safeguards (17)**	**Proportion of Taxonomy-aligned (A.1.) or eligible (A.2.) CapEx, year N-1 (18)**	**Category enabling activity (19)**	**Category transi-tional activity (20)**
Text		*Currency*	*%*	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*E*	*T*
A. **TAXONOMY-ELIGIBLE ACTIVITIES**																			
A.1. **Environmentally sustainable activities (Taxonomy-aligned)**																			
Activity 1			%							Y	Y	Y	Y	Y	Y	Y	%		
Activity 1 [d]			%							Y	Y	Y	Y	Y	Y	Y	%	E	
Activity 2			%							Y	Y	Y	Y	Y	Y	Y	%		T
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)			**%**	**%**	**%**	**%**	**%**	**%**	**%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**%**		
Of which enabling			%	%	%	%	%	%	%	Y	Y	Y	Y	Y	Y	Y	%	E	
Of which transitional			%	%						Y	Y	Y	Y	Y	Y	Y	%		T
A.2. **Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)** [g]																			
				EL; N/EL [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]	*EL; N/EL* [f]										
Activity 1 [e]			%														%		

CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		%	%	%	%	%	%	%		%	
A. **CapEx of Taxonomy-eligible activities *(A.1+A.2)***		%	%	%	%	%	%	%			

B. **TAXONOMY-NON-ELIGIBLE ACTIVITIES**		
CapEx of Taxonomy-non-eligible activities		%
TOTAL		**100 %**

([a]) The Code constitutes the abbreviation of the relevant objective to which the economic activity is eligible to make a substantial contribution, as well as the section number of the activity in the relevant Annex covering the objective, i.e.:
- Climate Change Mitigation: CCM
- Climate Change Adaptation: CCA
- Water and Marine Resources: WTR
- Circular Economy: CE
- Pollution Prevention and Control: PPC
- Biodiversity and ecosystems: BIO.

For example, the Activity "Afforestation" would have the Code: CCM 1.1.

Where activities are eligible to make a substantial contribution to more than one objective, the codes for all objectives should be indicated.
For example, if the operator reports that the activity "Construction of new buildings" makes a substantial contribution to climate change mitigation and circular economy, the code would be: CCM 7.1. / CE 3.1.

The same codes should be used in Sections A.1 and A.2 of this template.

([b]) Y – Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N – No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL – not eligible, Taxonomy-non-eligible activity for the relevant environmental objective.

(c) Where an economic activity contributes substantially to multiple environmental objectives, non-financial undertakings shall indicate, in bold, the most relevant environmental objective for the purpose of computing the KPIs of financial undertakings while avoiding double counting. In their respective KPIs, where the use of proceeds from the financing is not known, financial undertakings shall compute the financing of economic activities contributing to multiple environmental objectives under the most relevant environmental objective that is reported in bold in this template by non-financial undertakings. An environmental objective may only be reported in bold once in one row to avoid double counting of economic activities in the KPIs of financial undertakings. This shall not apply to the computation of Taxonomy-alignment of economic activities for financial products defined in point (12) of Article 2 of Regulation (EU) 2019/2088. Non-financial undertakings shall also report the extent of eligibility and alignment per environmental objective, that includes alignment with each of environmental objectives for activities contributing substantially to several objectives, by using the template below:

	Proportion of CapEx / Total CapEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	%	%
CCA	%	%
WTR	%	%
CE	%	%
PPC	%	%
BIO	%	%

(d) The same activity may align with only one or more environmental objectives for which it is eligible.

(e) The same activity may be eligible and not aligned with the relevant environmental objectives.

(f) EL – Taxonomy-eligible activity for the relevant objective
N/EL – Taxonomy-non-eligible activity for the relevant objective.

(g) Activities shall be reported in Section A.2 of this template only if they are not aligning to any environmental objective for which they are eligible. Activities that align to at least one environmental objective shall be reported in Section A.1 of this template.

(h) For an activity to be reported in Section A.1 all DNSH criteria and minimum safeguards shall be met. For activities listed under A2, columns (5) to (17) may be filled in on a voluntary basis by non-financial undertakings. Non-financial undertakings may indicate the substantial contribution and DNSH criteria that they meet or do not meet in Section A.2 by using: (a) for substantial contribution – Y/N and N/EL codes instead of EL and N/EL; and (b) for DNSH – Y/N codes.

Template: Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year N

Financial year N	**Year**			**Substantial contribution criteria**						**DNSH criteria ("Does Not Significantly Harm")** [f]								
Economic Activities (1)	**Code** [a] **(2)**	**OpEx (3)**	**Proportion of OpEx, year N (4)**	**Climate Change Mitigation (5)**	**Climate Change Adaptation (6)**	**Water (7)**	**Pollution (8)**	**Circular Economy (9)**	**Biodiversity (10)**	**Climate Change Mitigation (11)**	**Climate Change Adaptation (12)**	**Water (13)**	**Pollution (14)**	**Circular Economy (15)**	**Biodiversity (16)**	**Minimum Safeguards (17)**	**Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) OpEx, year N-1 (18)**	**Category enabling activity (19)**	**Category transi-tional activity (20)**
Text		*Currency*	*%*	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y; N; N/EL* [b] [c]	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*E*	*T*
A. **TAXONOMY-ELIGIBLE ACTIVITIES**																			
A.1. **Environmentally sustainable activities (Taxonomy-aligned)**																			
Activity 1			%							Y	Y	Y	Y	Y	Y	Y	%		
Activity 1 [*]			%							Y	Y	Y	Y	Y	Y	Y	%	E	
Activity 2			%							Y	Y	Y	Y	Y	Y	Y	%		T
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)			**%**	**%**	**%**	**%**	**%**	**%**	**%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**%**		
Of which enabling			%	%	%	%	%	%	%	Y	Y	Y	Y	Y	Y	Y	%	E	
Of which transitional			%	%						Y	Y	Y	Y	Y	Y	Y	%		T
A.2. **Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)** [f]																			
				EL; N/EL [e]	*EL; N/EL* [e]	*EL; N/EL* [e]	*EL; N/EL* [e]	*EL; N/EL* [e]	*EL; N/EL* [e]										
Activity 1 [d]			%														%		

OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		%	%	%	%	%	%	%		%	
A. **OpEx of Taxonomy eligible activities *(A.1+A.2)***		%	%	%	%	%	%	%			

B. **TAXONOMY-NON-ELIGIBLE ACTIVITIES**		
OpEx of Taxonomy-non-eligible activities		%
TOTAL		**100 %**

([a]) The Code constitutes the abbreviation of the relevant objective to which the economic activity is eligible to make a substantial contribution, as well as the section number of the activity in the relevant Annex covering the objective, i.e.:
- Climate Change Mitigation: CCM
- Climate Change Adaptation: CCA
- Water and Marine Resources: WTR
- Circular Economy: CE
- Pollution Prevention and Control: PPC
- Biodiversity and ecosystems: BIO.

For example, the Activity "Afforestation" would have the Code: CCM 1.1.

Where activities are eligible to make a substantial contribution to more than one objective, the codes for all objectives should be indicated.
For example, if the operator reports that the activity "Construction of new buildings" makes a substantial contribution to climate change mitigation and circular economy, the code would be: CCM 7.1. / CE 3.1.

The same codes should be used in Sections A.1 and A2 of this template.

([b]) Y – Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective
N – No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective
N/EL – not eligible, Taxonomy-non-eligible activity for the relevant environmental objective.

(c) Where an economic activity contributes substantially to multiple environmental objectives, non-financial undertakings shall indicate, in bold, the most relevant environmental objective for the purpose of computing the KPIs of financial undertakings while avoiding double counting. In their respective KPIs, where the use of proceeds from the financing is not known, financial undertakings shall compute the financing of economic activities contributing to multiple environmental objectives under the most relevant environmental objective that is reported in bold in this template by non-financial undertakings. An environmental objective may only be reported in bold once in one row to avoid double counting of economic activities in the KPIs of financial undertakings. This shall not apply to the computation of Taxonomy-alignment of economic activities for financial products defined in point (12) of Article 2 of Regulation (EU) 2019/2088. Non-financial undertakings shall also report the extent of eligibility and alignment per environmental objective, that includes alignment with each of environmental objectives for activities contributing substantially to several objectives, by using the template below:

	Proportion of OpEx / Total OpEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	%	%
CCA	%	%
WTR	%	%
CE	%	%
PPC	%	%
BIO	%	%

(*) The same activity may align with only one or more environmental objectives for which it is eligible.
(d) The same activity may be eligible and not aligned with the relevant environmental objectives.
(e) EL – Taxonomy-eligible activity for the relevant objective
N/EL – Taxonomy-non-eligible activity for the relevant objective.
(f) Activities shall be reported in Section A.2 of this template only if they are not aligning to any environmental objective for which they are eligible. Activities that align to at least one environmental objective shall be reported in Section A.1 of this template.

(g) For an activity to be reported in Section A.1 all DNSH criteria and minimum safeguards shall be met. For activities listed under A2, columns (5) to (17) may be filled in on a voluntary basis by non-financial undertakings. Non-financial undertakings may indicate the substantial contribution and DNSH criteria that they meet or do not meet in Section A.2 by using: (a) for substantial contribution – Y/N and N/EL codes instead of EL and N/EL; and (b) for DNSH – Y/N codes.';

(3) In Annex III, Section 1.1, the following fourth paragraph is added:

'By way of derogation from the first subparagraph of this Section, investments in real estate shall be included in the numerator to the extent and in the proportion in which they finance Taxonomy-aligned economic activities.';

(4) Annex IV is amended as follows:

(a) in section 'Breakdown of the numerator of the KPI per environmental objective' the words 'Transitional activities: A % (Turnover; CapEx)' are deleted from lines (2) to (6);

(b) the eighth row is replaced by the following:

'The proportion of **exposures to other counterparties and assets over** total assets covered by the KPI: X %	Value **of exposures to other counterparties and assets:** [monetary amount]'

(c) the thirteenth row is replaced by the following:

'The proportion of **Taxonomy-aligned exposures to other counterparties and assets** over total assets covered by the KPI: Turnover-based: % Capital expenditures-based: %	Value of **Taxonomy-aligned exposures to other counterparties and assets**: Turnover-based: [monetary amount] Capital expenditures-based: [monetary amount]'

(5) Annex V is amended as follows:

(a) in Section 1.1.2, the third paragraph is replaced by the following:

'The following assets shall be excluded from the numerator of the GAR:

(a) financial assets held for trading;

(b) on-demand interbank loans;

(c) exposures to undertakings that are not obliged to publish non-financial information pursuant to Article 19a or 29a of Directive 2013/34/EU;

(d) derivatives;

(e) cash and cash-related assets;

(f) other categories of assets (such as goodwill, commodities, etc.).';

(b) in Section 1.2.1, the fifth paragraph is replaced by the following:

'In addition to GAR, credit institutions shall disclose the percentage of their total assets that are excluded from the numerator of the GAR in accordance with Article 7(2) and (3) of this Regulation and point 1.1.2 of this Annex.';

(c) in Section 1.2.1.1, in the first paragraph, the table is replaced with the following table:

'Environmental objectives	First step	Second step	Green asset ratio (GAR)
Climate change mitigation (CCM)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of climate change mitigation as compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of climate change mitigation, compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of climate change mitigation Of which: use of proceeds Of which: enabling activities Of which: transitional activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of climate change mitigation, compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** **Of which: transitional activities** *Stock and flow*
Climate change adaptation (CCA)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of climate change adaptation compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of climate change adaptation compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of climate change adaptation Of which: use of proceeds Of which: enabling activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of climate change adaptation compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** *Stock and flow*

Water and marine resources (WTR)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of sustainable use and protection of water and marine resources compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of sustainable use and protection of water and marine resources compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of sustainable use and protection of water and marine resources Of which: use of proceeds Of which: enabling activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of sustainable use and protection of water and marine resources compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** *Stock and flow*
Circular economy (CE)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of transition to a circular economy compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of transition to a circular economy compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of transition to a circular economy Of which: use of proceeds Of which: enabling activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of transition to a circular economy compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** *Stock and flow*

Pollution (PPC)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of pollution prevention control compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of pollution prevention control compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of pollution prevention control Of which: use of proceeds Of which: enabling activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of pollution prevention and control compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** *Stock and flow*
Biodiversity and Ecosystems (BIO)	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-eligible economic activities for the objective of protection and restoration of biodiversity and ecosystems compared to total loans to/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets	Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of protection and restoration of biodiversity and ecosystems compared to loans and advances/debt securities/equity instruments financing economic activities in sectors covered by the Taxonomy for the objective of protection and restoration of biodiversity and ecosystems Of which: use of proceeds Of which: enabling activities	**Proportion of loans and advances/debt securities/equity instruments financing Taxonomy-aligned economic activities for the objective of protection and restoration of biodiversity and ecosystems compared to total loans and advances/debt securities/equity instruments of non-financial undertakings and all other covered on-balance sheet assets** **Of which: use of proceeds** **Of which: enabling activities** *Stock and flow'*

(d) in Section 1.2.1.1, the heading of point (i) is replaced by the following:

'(i) GAR for lending activities to non-financial undertakings *(loans and advances – GAR L&A)*';

(e) in Section 1.2.1.1., point (i), the second paragraph is replaced by the following:

'The amount for the purpose of (1)(c) shall be calculated by using the following formula 1(c) = (1)(c)(1) + (1)(c)(2) where:

(1)(c)(1) represents loans and advances where the use of proceeds is known, including specialised lending as referred to in Article 147(8) of Regulation (EU) No 575/2013;

(1)(c)(2) represents loans and advances where the use of proceeds is unknown (general loans).';

(f) in Section 1.2.1.1, point (i), the third paragraph is replaced by the following:

'For the purposes of point (1)(c)(1), credit institutions shall consider the gross carrying amount of the exposures where the use of proceeds is known, including specialised lending exposures, to the non-financial undertaking to the extent and proportion that they finance a Taxonomy-aligned economic activity. The assessment of whether that requirement has been met shall be based on information provided by the counterparty on the project or activities to which the proceeds will be applied. Credit institutions shall provide information on the type of economic activity that is financed. Double counting shall not be allowed. Where the same specialised lending exposure is relevant for two environmental objectives, credit institutions shall allocate it to the most relevant objective.';

(g) in Section 1.2.1.1, the sixth paragraph of point (i) is replaced by the following:

'**GAR L&A (for each environmental objective) = (1)(c)/(1)(a)**. Credit institutions shall disclose the GAR based on CapEx and turnover KPIs and separately the part of the KPI that refers to enabling and transitional activities, where relevant.';

(h) in Section 1.2.1.1, point (ii), the third paragraph is replaced by the following:

'For the purposes of point 2(c)(1), credit institutions shall consider the following:

(2)(c)(1)(a) the total gross carrying amount of exposures to environmentally sustainable bonds issued in accordance with Union legislation. Current bond issuances qualified as green bonds by issuers whose use of proceeds have to be invested in Taxonomy-eligible economic activities shall be assessed depending on the level of Taxonomy-alignment of economic activities in accordance with Regulation (EU) 2020/852 or of projects financed, based on specific information provided by the issuer for an issuance. Credit institutions shall provide transparency on the kind of economic activity that is being financed. Double counting is not allowed. Where the same green bond can be relevant for two environmental objectives, credit institutions shall allocate it to the most relevant objective.

(2)(c)(1)(b) the gross carrying amount of debt securities invested in exposures where the use of proceeds is known, including specialised lending exposures, to the extent that the activities financed are Taxonomy-aligned economic activities. The assessment shall be based on specific information provided by the issuer for that issuance. Double counting is not allowed. Where the same specialised lending exposure can be relevant for two environmental objectives, credit institutions shall allocate it to the most relevant objective. Credit institutions shall provide transparency on the type of economic activity that is financed.';

(i) in Section 1.2.1.2, the second, third and fourth paragraphs are replaced by the following:

'This GAR shall contain disclosures for all the environmental objectives, with a breakdown for enabling activities. For the climate change mitigation, the GAR shall also contain disclosures of transitional activities. Credit institutions shall also provide disclosures of stock and flow.

For exposures where the use of proceeds is known, credit institutions shall consider, for the numerator of the GAR for financial undertakings, the gross carrying amount of loans and advances and debt securities of relevant accounting portfolios to financial undertakings to the extent and proportion in which those exposures finance Taxonomy-aligned economic activities. The assessment of whether that requirement has been met shall be based on information provided by the counterparty. Double counting shall not be allowed. Where the same exposure is relevant for two environmental objectives, credit institutions shall allocate it to the most relevant objective.

For exposures where the use of proceeds is not known, the numerator of the GAR for financial undertakings shall be calculated based on the counterparties' KPIs calculated under this Regulation. The amount of loans and advances, debt securities and equity holdings of relevant accounting portfolios to financial undertakings to be considered in the numerator of the ratio shall be the sum of their gross carrying amount, weighted by the proportion of Taxonomy-aligned economic activities with breakdown for all the environmental objectives and enabling activities for each counterparty. For the climate change mitigation objective, the breakdown shall also contain transitional activities for each counterparty.

Where the counterparty is another credit institution as defined in Article 4(1), point (1), of Regulation (EU) No 575/2013, and, only for this purpose, a multilateral development bank referred to in Article 117(1), second subparagraph, or Article 117(2) of that Regulation, the turnover-based and CapEx based KPIs used shall be the gross carrying amount of debt securities, loans and advances and equity instruments of relevant accounting portfolios weighted by the "Total GAR of the counterparty", that is gross carrying amount multiplied by "Total GAR" of the counterparty.';

(j) in Section 1.2.1.3, the first paragraph is replaced by the following:

'GAR for retail exposures to residential real estate or house renovation loans shall be calculated as a proportion of loans to households collateralised by residential immovable property or granted for house renovation purposes that is Taxonomy-aligned in accordance with the relevant technical screening criteria for buildings, in particular renovation and acquisition and ownership in accordance with Sections 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, and 7.7 respectively of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486, compared to total loans to households collateralised by residential immovable property or granted for house renovation purposes. This GAR shall include disclosures of transitional activities, and disclosures of stock and flow.';

(k) in Section 1.2.1.3, in point (i) the first and second paragraphs are replaced by the following:

'"Credit institutions" KPI disclosure shall cover the retail lending portfolio, in particular the mortgage lending portfolio. This KPI shall be disclosed by taking into account compliance with the technical screening criteria for buildings as laid down in Sections 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 and 7.7 of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486.

Credit institutions shall disclose the KPI for their residential real estate lending portfolio as a proportion of loans to households collateralised by residential immovable property contributing to the relevant environmental objectives as laid down, in particular, in Sections 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 and 7.7 of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486, compared to total loans to households collateralised by residential immovable property.';

(l) in Section 1.2.1.3, in point (i) the fifth paragraph is replaced by the following:

'In the numerator of the ratio credit institutions shall also consider those loans granted for the renovation of a building or of a house in accordance with the relevant technical screening criteria for buildings, in particular, in accordance with Sections 7.1, 7.2, 7.3, 7.4, 7.5 and 7.6 of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486.';

(m) in Section 1.2.1.4, the first paragraph is replaced by the following:

'Where credit institutions have a business model based to a great extent on financing public housing, they shall disclose a KPI concerning the proportion of exposures to public authorities financing activities in compliance with the relevant technical screening criteria, in particular, in accordance with Sections 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 and 7.7 of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486. This GAR shall be estimated and disclosed by the credit institution as a proportion of loan or debt securities exposures to municipalities financing public housing compliant with the relevant technical screening criteria, in particular, in accordance with Sections 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 and 7.7 of Annex I or Annex II to Delegated Regulation (EU) 2021/2139 or Sections 3.1 and 3.2 of Annex II to Delegated Regulation (EU) 2023/2486 compared to total loans to municipalities financing public housing. The credit institution shall include disclosures of stock and flow.';

(n) in Section 1.2.1.4, the third paragraph is replaced by the following:

'For the financing of other activities and assets than public housing where the use of proceeds is known, credit institutions shall consider the gross carrying amount of those exposures, including specialised lending exposures, to the public authority to the extent and proportion that the lending finances a Taxonomy-aligned economic activity. The assessment of whether that requirement has been met shall be based on information provided by the public authority on the project or activities to which the proceeds will be applied. Credit institutions shall provide information on the type of economic activity that is funded. Double counting shall not be allowed. Where the same specialised lending exposure is relevant for two environmental objectives, credit institutions shall allocate it to the most relevant objective.';

(o) Section 1.2.1.6. is replaced by the following:

'**1.2.1.6. Total GAR**

Credit institutions shall disclose information on the total GAR. This shall reflect the cumulative value of the exposure-based KPIs, by including in the denominator the total on-balance sheet assets without exposures referred to in Article 7(1) and by adding in the total numerator the numerators of environmentally sustainable exposures of the exposure-based KPIs:

(a) total GAR for financing activities directed at financial undertakings, for all the environmental objectives;

(b) total GAR for financing activities directed at non-financial undertakings, for all the environmental objectives;

(c) GAR for residential real estate exposures, including house renovation loans, for the objectives of climate change mitigation, climate change adaptation, and circular economy;

(d) GAR for retail car loans, for the objective of climate change mitigation;

(e) GAR for use of proceeds financing local governments, for all the environmental objectives;

(f) GAR for commercial and residential repossessed real estate collateral held for sale, for climate change objectives.

Together with the total GAR, credit institutions shall disclose the percentage of assets that are excluded from the numerator of the GAR in accordance with Article 7 (2) and (3) and Section 1.1.2 of this Annex.';

(p) in Section 1.2.2.1, the first paragraph is replaced by the following:

'The green ratio for financial guarantees to undertakings shall be defined as a proportion of financial guarantees supporting loans and advances and debt securities financing Taxonomy-aligned economic activities compared to all financial guarantees supporting loans and advances and debt securities to undertakings. This shall include disclosures of stock and flow, for all the environmental objectives. For climate change mitigation, this shall also include disclosures of which are enabling and transitional activities. For other environmental objectives, this shall include disclosures of which are enabling activities.';

(q) in Section 1.2.2.2, the first paragraph is replaced by the following:

'The green ratio for assets under management shall be the proportion of assets under management (equity, debt instruments and real estate) from undertakings financing Taxonomy-aligned economic activities, compared to total assets under management (equity, debt instruments and other assets). This shall include disclosures of stock and flow, for all the environmental objectives. For climate change mitigation, this shall also include disclosures of which are enabling and transitional activities. For other environmental objectives, this shall include disclosures of which are enabling activities.';

(r) in Section 1.2.3, second and third paragraphs, the words 'Implementing Regulation (EU) 680/2014' are replaced by the words 'Implementing Regulation (EU) 2021/451';

(s) in Annex V, the words 'equity holdings' are replaced by the words 'equity instruments';

(6) in Annex VII, Section 2.4, the following paragraph is inserted after the fifth paragraph:

'By way of derogation from the second and third subparagraph of this point 2.4, investments in real estate shall be included in the numerator to the extent and proportion in which they finance Taxonomy-aligned economic activities.';

(7) in Annex IX, the sixth paragraph of point 1 is replaced by the following paragraph:

'By way of derogation from the first and fifth paragraph of this point 1, debt securities with the purpose of financing specific identified activities or projects or environmentally sustainable bonds issued by an investee undertaking shall be included in the numerator up to the value of Taxonomy-aligned economic activities that the proceeds of those bonds and debt securities finance, on the basis of information provided by the investee undertaking.';

(8) in Annex IX, the following paragraph is added at the end of point 1:

'By way of derogation from the first and fifth paragraphs of this point 1, investments in real estate shall be included in the numerator to the extent and proportion in which they finance Taxonomy-aligned economic activities.';

(9) in Annex IX, the first paragraph of Section 2 is replaced by the following:

'Insurance and reinsurance undertakings other than life insurance undertakings shall calculate the KPI related to underwriting activities and present the "gross premiums written" non-life insurance revenue or, as applicable, reinsurance revenue corresponding to Taxonomy-aligned insurance or reinsurance activities in accordance with points 10.1 and 10.2 of Annex II to Climate Delegated Act. The KPI shall be depicted in percentage terms relative to, as applicable, one of the following:

(a) total non-life insurance gross premiums written;

(b) total non-life reinsurance gross premiums written;

(c) total non-life insurance revenue;

(d) total non-life reinsurance revenue.';

(10) in Annex X, the first template is replaced by the following template:

'ANNEX X

TEMPLATES FOR KPIs OF INSURANCE AND REINSURANCE UNDERTAKINGS

Template: The underwriting KPI for non-life insurance and reinsurance undertakings

	Substantial contribution to climate change adaptation			DNSH (Do No Significant Harm)					
Economic activities (1)	**Absolute premiums, year t (2)**	**Proportion of premiums, year t (3)**	**Proportion of premiums, year t-1 (4)**	**Climate change mitigation (5)**	**Water and marine resources (6)**	**Circular economy (7)**	**Pollution (8)**	**Biodiversity and ecosystems (9)**	**Minimum safeguards (10)**
	Currency	**%**	**%**	**Y/N**	**Y/N**	**Y/N**	**Y/N**	**Y/N**	**Y/N**
A.1. **Non-life insurance and reinsurance underwriting Taxonomy-aligned activities (environmentally sustainable)**									
A.1.1. Of which reinsured									
A.1.2. Of which stemming from reinsurance activity									
A.1.2.1. Of which reinsured (retrocession)									
A.2. **Non-life insurance and reinsurance underwriting Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)**									
B. **Non-life insurance and reinsurance underwriting Taxonomy-non-eligible activities**									
Total (A.1 + A.2 +B)		**100 %**	**100 %**						

"Premiums" in columns (2) and (3) shall be reported as gross premiums written or, as applicable, turnover relating to non-life insurance or reinsurance activity.
The information in column (4) shall be reported in disclosures in the year 2024 and thereafter.
Non-life insurance and reinsurance can only be aligned with Regulation (EU) 2020/852 as activity that enables climate change adaptation.';

(11) in Annex X, in the second template, in the Section 'Breakdown of the numerator of the KPI per environmental objective' the words 'Transitional activities: A % (Turnover; CapEx)' are deleted from lines (2) to (6);

(12) in Annex X, in the second template, the eighth row is replaced by the following:

'The proportion of **exposures to other counterparties and assets over** total assets covered by the KPI:	Value of **exposures to other counterparties and assets:**
X %	[monetary amount]'

(13) in Annex X in the second template, the fifteenth row is replaced by the following:

'The proportion of **Taxonomy-aligned exposures to other counterparties and assets** over total assets covered by the KPI:	Value of **Taxonomy-aligned exposures to other counterparties and assets over** total assets covered by the KPI:
Turnover-based: %	Turnover-based: [monetary amount]
Capital expenditures-based: %	Capital expenditures-based: [monetary amount]'

ANNEX VI

'ANNEX VI

Template for the KPIs of credit institutions

Template number	Name
0	Summary of KPIs
1	Assets for the calculation of GAR
2	GAR sector information
3	GAR KPI stock
4	GAR KPI flow
5	KPI off-balance-sheet exposures
6	KPI on fees and commissions income from services other than lending and asset management
7	KPI Trading book portfolio

0. **Summary of KPIs to be disclosed by credit institutions under Article 8 Taxonomy Regulation**

		Total environmentally sustainable assets	**KPI** (****)	**KPI** (*****)	**% coverage (over total assets)** (***)	**% of assets excluded from the numerator of the GAR (Article 7(2) and (3) and Section 1.1.2 of Annex V)**	**% of assets excluded from the denominator of the GAR (Article 7(1) and Section 1.2.4 of Annex V)**
Main KPI	**Green asset ratio (GAR) stock**						
		Total environmentally sustainable activities	KPI	KPI	% coverage (over total assets)	**% of assets excluded from the numerator of the GAR (Article 7(2) and (3) and Section 1.1.2 of Annex V)**	**% of assets excluded from the denominator of the GAR (Article 7(1) and Section 1.2.4 of Annex V)**
Additional KPIs	*GAR (flow)*						
	Trading book (*)						
	Financial guarantees						
	Assets under management						
	Fees and commissions income (**)						

(*) For credit institutions that do not meet the conditions of Article 94(1) of the CRR or the conditions set out in Article 325a(1) of the CRR.

(**) Fees and commissions income from services other than lending and AuM.
Instutitons shall disclose forward-looking information for these KPIs, including information in terms of targets, together with relevant explanations on the methodology applied.

(***) % of assets covered by the KPI over banks' total assets.

(****) Based on the Turnover KPI of the counterparty.

(*****) Based on the CapEx KPI of the counterparty, except for lending activities where for general lending Turnover KPI is used.

Note 1: Across the reporting templates: cells shaded in black should not be reported.

Note 2: Fees and Commissions (sheet 6) and Trading Book (sheet 7) KPIs shall only apply starting 2026. SMEs' inclusion in these KPI will only apply subject to a positive result of an impact assessment.

1. **Assets for the calculation of GAR**

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	z	aa	ab	ac	ad	ae	af
	Million EUR	Total [gross] carrying amount	Disclosure reference date T																													
			Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)				
			Of which towards taxonomy relevant sectors (Taxonomy-eligible)					Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)								
				Of which environmentally sustainable (Taxonomy-aligned)					Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)			
					Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
	GAR - Covered assets in both numerator and denominator																															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation																															
2	**Financial undertakings**																															
3	Credit institutions																															
4	Loans and advances																															
5	Debt securities, including UoP																															
6	Equity instruments																															
7	Other financial corporations																															
8	of which investment firms																															
9	Loans and advances																															
10	Debt securities, including UoP																															
11	Equity instruments																															
12	of which management companies																															
13	Loans and advances																															
14	Debt securities, including UoP																															
15	Equity instruments																															
16	of which insurance undertakings																															
17	Loans and advances																															
18	Debt securities, including UoP																															
19	Equity instruments																															
20	**Non-financial undertakings**																															
21	Loans and advances																															
22	Debt securities, including UoP																															
23	Equity instruments																															
24	**Households**																															
25	of which loans collateralised by residential immovable property																															
26	of which building renovation loans																															
27	of which motor vehicle loans																															
28	**Local governments financing**																															
29	Housing financing																															
30	Other local government financing																															
31	**Collateral obtained by taking possession: residential and commercial immovable properties**																															
32	**Assets excluded from the numerator for GAR calculation (covered in the denominator)**																															
33	**Financial and Non-financial undertakings**																															
34	SMEs and NFCs (other than SMEs) not subject to NFRD disclosure obligations																															
35	Loans and advances																															
36	of which loans collateralised by commercial immovable property																															
37	of which building renovation loans																															
38	Debt securities																															
39	Equity instruments																															
40	Non-EU country counterparties not subject to NFRD disclosure obligations																															
41	Loans and advances																															
42	Debt securities																															
43	Equity instruments																															
44	**Derivatives**																															
45	**On demand interbank loans**																															
46	**Cash and cash-related assets**																															
47	**Other categories of assets (e.g. goodwill, commodities, etc.)**																															
48	**Total GAR assets**																															
49	**Assets not covered for GAR calculation**																															
50	**Central governments and Supranational issuers**																															
51	**Central banks exposure**																															
52	**Trading book**																															
53	Total assets																															
Off-balance sheet exposures – Undertakings subject to NFRD disclosure obligations																																
54	Financial guarantees																															
55	Assets under management																															
56	Of which debt securities																															
57	Of which equity instruments																															

1. This template shall include information for loans and advances, debt securities and equity instruments in the banking book, towards financial corporations, non-financial corporations (NFC), including SMEs, households (including residential real estate, house renovation loans and motor vehicle loans only) and local governments/municipalities (house financing).

2. The following accounting categories of financial assets should be considered: Financial assets at amortised cost, financial assets at fair value through other comprehensive income, investments in subsidiaries, joint ventures and associates, financial assets designated at fair value through profit or loss and non-trading financial assets mandatorily at fair value through profit or loss, and real estate collaterals obtained by credit institutions by taking possession in exchange in of cancellation of debts.

3. Banks with non-EU subsidiaries should provide this information separately for exposures towards non-EU counterparties. For non-EU exposures, while there are additional challenges in terms of absence of common disclosure requirements and methodology, as the EU taxonomy and the NFRD apply only at EU level, given the relevance of these exposures for those credit institutions with non-EU subsidiaries, these institutions should disclose a separate GAR for non-EU exposures, on a best effort basis, in the form of estimates and ranges, using proxies, and explaining the assumptions, caveats and limitations.

4. For motor vehicle loans, institutions shall only include those exposures generated after the date of application of the disclosure.

		ag	ah	ai	aj	ak	al	am	an	ao	ap	aq	ar	as	at	au	av	aw	ax	ay	az	ba	bb	bc	bd	be	bf	bg	bh	bi	bj	bk
	Million EUR		Disclosure reference date T-1																													
		Total [gross] carrying amount	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)				
			Of which towards taxonomy relevant sectors (Taxonomy-eligible)					Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (Taxonomy-eligible)				
			Of which environmentally sustainable (Taxonomy-aligned)					Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				Of which environmentally sustainable (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling				Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling
	GAR - Covered assets in both numerator and denominator																															
1	Loans and advances, debt securities and equity instruments not HFT eligible for GAR calculation																															
2	Financial undertakings																															
3	Credit institutions																															
4	Loans and advances																															
5	Debt securities, including UoP																															
6	Equity instruments																															
7	Other financial corporations																															
8	of which investment firms																															
9	Loans and advances																															
10	Debt securities, including UoP																															
11	Equity instruments																															
12	of which management companies																															
13	Loans and advances																															
14	Debt securities, including UoP																															
15	Equity instruments																															
16	of which insurance undertakings																															
17	Loans and advances																															
18	Debt securities, including UoP																															
19	Equity instruments																															
20	Non-financial undertakings																															
21	Loans and advances																															
22	Debt securities, including UoP																															
23	Equity instruments																															
24	Households																															
25	of which loans collateralised by residential immovable property																															
26	of which building renovation loans																															
27	of which motor vehicle loans																															
28	Local governments financing																															
29	Housing financing																															
30	Other local government financing																															
31	Collateral obtained by taking possession: residential and commercial immovable properties																															
32	Assets excluded from the numerator for GAR calculation (covered in the denominator)																															
33	Financial and Non-financial undertakings																															
34	SMEs and NFCs (other than SMEs) not subject to NFRD disclosure obligations																															
35	Loans and advances																															
36	of which loans collateralised by commercial immovable property																															
37	of which building renovation loans																															
38	Debt securities																															
39	Equity instruments																															
40	Non-EU country counterparties not subject to NFRD disclosure obligations																															
41	Loans and advances																															
42	Debt securities																															
43	Equity instruments																															
44	Derivatives																															
45	On demand interbank loans																															
46	Cash and cash-related assets																															
47	Other categories of assets (e.g. goodwill, commodities, etc.)																															
48	Total GAR assets																															
49	Assets not covered for GAR calculation																															
50	Central governments and Supranational issuers																															
51	Central banks exposure																															
52	Trading book																															
53	Total assets																															
Off-balance sheet exposures –																																
54	Financial guarantees																															
55	Assets under management																															
56	Of which debt securities																															
57	Of which equity instruments																															

2. GAR sector information

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	aa	ab
	Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)			
	Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject		Non-Financial corporates (Subject		SMEs and other NFC not subject	
Breakdown by sector – NACE 4 digits level (code and label)	[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount		[Gross] carrying amount	
	Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCM)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (CCA)	Mn EUR	Of which environmentally sustainable (WTR)	Mn EUR	Of which environmentally sustainable (WTR)	Mn EUR	Of which environmentally sustainable (CE)	Mn EUR	Of which environmentally sustainable (CE)	Mn EUR	Of which environmentally sustainable (PPC)	Mn EUR	Of which environmentally sustainable (PPC)	Mn EUR	Of which environmentally sustainable (BIO)	Mn EUR	Of which environmentally sustainable (BIO)	Mn EUR	Of which environmentally sustainable (CCM + CCA + WTR + CE + PPC + BIO)	Mn EUR	Of which environmentally sustainable (CCM + CCA + WTR + CE + PPC + BIO)
1																												
2																												
3																												
4																												
...																												

1. Credit institutions shall disclose in this template information on exposures in the banking book towards those sectors covered by the Taxonomy (NACE section 4 levels of detail), using the relevant NACE Codes on the basis of the principal activity of the counterparty.

2. The counterparts NACE sector allocation shall be based exclusively on the nature of the immediate counterparts. The classification of the exposures incurred jointly to more than one obligor shall be done on the basis of the characteristics of the obligor that was the more relevant, or determinant, for the institution to grant the exposure. The distribution of jointly incurred exposures to NACE codes shall be driven by the characteristics of the more relevant or determinant obligor. Institutions shall disclose information to NACE codes with the level of disaggregation required in the template.

ELI: http://data.europa.eu/eli/reg_del/2023/2486/oj

3. GAR KPI stock

1.	Institution shall dislcose in this template the GAR KPIs on stock of loans calculated based on the data disclosed in template 1, on covered assets, and by applying the formulas proposed in this template
2.	Information on the GAR (green asset ratio of 'eligible' activities) shall be accompanied with information on the proportion of total assets covered by the GAR
3.	Credit institutions can, in addition to the information included in this template, show the proportion of assets funding taxonomy relevant sectors that are environmentally sustainable (Taxonomy-aligned). This information would enrich the information on the KPI on environmentally sustainable assets compared to total covered assets
4.	Credit institutions shall duplicate this template for revenue-based and CapEx-based disclosures

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	z	aa	ab	ac	ad	ae	af
		Disclosure reference date T																														
	% (compared to total covered assets in the denominator)	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)				
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total assets covered
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
	GAR – Covered assets in both numerator and denominator																															
1	Loans and advances, debt securities and equity instruments not HFI eligible for GAR calculation																															
2	**Financial undertakings**																															
3	Credit institutions																															
4	Loans and advances																															
5	Debt securities, including UoP																															
6	Equity instruments			[redacted]					[redacted]				[redacted]				[redacted]				[redacted]				[redacted]				[redacted]			
7	Other financial corporations																															
8	of which investment firms																															
9	Loans and advances																															
10	Debt securities, including UoP																															
11	Equity instruments			[redacted]					[redacted]				[redacted]				[redacted]				[redacted]				[redacted]				[redacted]			
12	of which management companies																															
13	Loans and advances																															
14	Debt securities, including UoP																															
15	Equity instruments			[redacted]					[redacted]				[redacted]				[redacted]				[redacted]				[redacted]				[redacted]			
16	of which insurance undertakings																															
17	Loans and advances																															
18	Debt securities, including UoP																															
19	Equity instruments			[redacted]					[redacted]				[redacted]				[redacted]				[redacted]				[redacted]				[redacted]			
20	**Non-financial undertakings**																															
21	Loans and advances																															
22	Debt securities, including UoP																															
23	Equity instruments			[redacted]					[redacted]				[redacted]				[redacted]				[redacted]				[redacted]				[redacted]			
24	**Households**										[redacted]								[redacted]														
25	of which loans collateralised by residential immovable property										[redacted]								[redacted]														
26	of which building renovation loans										[redacted]								[redacted]														
27	of which motor vehicle loans						[redacted]																										
28	**Local government financing**																															
29	Housing financing																															
30	Other local government financing																															
31	**Collateral obtained by taking possession: residential and commercial immovable properties**																															
32	**Total GAR assets**																															

		ag	ah	ai	aj	ak	al	am	an	ao	ap	aq	ar	as	at	au	av	aw	ax	ay	az	ba	bb	bc	bd	be	bf	bg	bh	bi	bj	bk
		Disclosure reference date T-1																														
	% (compared to total covered assets in the denominator)	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)					
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which specialised lending	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
																												Of which Use of Proceeds	Of which transitional	Of which enabling		
	GAR – Covered assets in both numerator and denominator																															
1	Loans and advances, debt securities and equity instruments not HFT eligible for GAR calculation																															
2	Financial undertakings																															
3	Credit institutions																															
4	Loans and advances																															
5	Debt securities, including UoP																															
6	Equity instruments																															
7	Other financial corporations																															
8	of which investment firms																															
9	Loans and advances																															
10	Debt securities, including UoP																															
11	Equity instruments																															
12	of which management companies																															
13	Loans and advances																															
14	Debt securities, including UoP																															
15	Equity instruments																															
16	of which insurance undertakings																															
17	Loans and advances																															
18	Debt securities, including UoP																															
19	Equity instruments																															
20	Non-financial undertakings																															
21	Loans and advances																															
22	Debt securities, including UoP																															
23	Equity instruments																															
24	Households																															
25	of which loans collateralised by residential immovable property																															
26	of which building renovation loans																															
27	of which motor vehicle loans																															
28	Local government financing																															
29	Housing financing																															
30	Other local government financing																															
31	Collateral obtained by taking possession: residential and commercial immovable properties																															
32	Total GAR assets																															

4. **GAR KPI flow**

1. Institutions shall disclose in this template the GAR KPIs on flow of loans calculated (new loans on a net basis) based on the data disclosed in template 1, on covered assets, and by applying the formulas proposed in this template
2. Credit institutions shall duplicate this template for revenue based and CapEx based disclosures

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	z	aa	ab	ac	ad	ae	af
	% (compared to flow of total eligible assets)	Disclosure reference date T																														
		Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)					Proportion of total new assets covered
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					
			Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				
				Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
	GAR – Covered assets in both numerator and denominator																															
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation																															
2	**Financial undertakings**																															
3	Credit institutions																															
4	Loans and advances																															
5	Debt securities, including UoP																															
6	Equity instruments																															
7	Other financial corporations																															
8	of which investment firms																															
9	Loans and advances																															
10	Debt securities, including UoP																															
11	Equity instruments																															
12	of which management companies																															
13	Loans and advances																															
14	Debt securities, including UoP																															
15	Equity instruments																															
16	of which insurance undertakings																															
17	Loans and advances																															
18	Debt securities, including UoP																															
19	Equity instruments																															
20	**Non-financial undertakings**																															
21	Loans and advances																															
22	Debt securities, including UoP																															
23	Equity instruments																															
24	**Households**																															
25	of which loans collateralised by residential immovable property																															
26	of which building renovation loans																															
27	of which motor vehicle loans																															
28	**Local government financing**																															
29	Housing financing																															
30	Other local government financing																															
31	**Collateral obtained by taking possession: residential and commercial immovable properties**																															
32	**Total GAR assets**																															

5. **KPI off-balance-sheet exposures**

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	z	aa	ab	ac	ad	ae
	Disclosure reference date t																													
	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)				Water and marine resources (WTR)				Circular economy (CE)				Pollution (PPC)				Biodiversity and Ecosystems (BIO)				TOTAL (CCM + CCA + WTR + CE + PPC + BIO)				
% (compared to total eligible off-balance-sheet assets)	Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-eligible)				
		Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)					Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)				Proportion of total covered assets funding taxonomy relevant sectors (Taxonomy-aligned)			
		Of which Use of Proceeds	Of which transitional	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which enabling			Of which Use of Proceeds	Of which transitional	Of which enabling	
1 Financial guarantees (FinGuar KPI)																														
2 Assets under management (AuM KPI)																														

1. Institutions shall disclose in this template the KPIs for off-balance-sheet exposures (financial guarantees and AuM) calculated based on the data disclosed in template 7 on covered assets, and by applying the formulas proposed in this template.

2. Institutions shall duplicate this template to disclose stock and flow KPIs for off-balance-sheet exposures.

x

6. **KPI on fees and commissions income from services other than lending and asset management**

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x
	F&C KPI - Disclosure reference date T																							
	Total (Million EUR)	Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			Water and marine resources (WTR)			Circular economy (CE)			Pollution (PPC)			Biodiversity and Ecosystems (BIO)			TOTAL (CCM + CCA + WTR + CE + PPC + BIO)			
		Of which towards taxonomy-relevant sectors (%) (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			
			Of which environmentally sustainable (%) (Taxonomy-aligned)				Of which environmentally sustainable			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-aligned)		
				Of which transitional	Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which transitional	Of which enabling
1	**Fees and commission income from NFRD corporates – Services other than lending**																							
2	**Services towards financial undertakings**																							
3	Credit institutions																							
4	Other financial undertakings																							
5	of which investment firms																							
6	of which management companies																							
7	of which insurance insurance undertakings																							
8	**Non-financial undertakings**																							
9	**Counterparties not subject to NFRD disclosure obligations, including third-country counterparties**																							

2. Institutions shall disclose in this template information on the percentage (%) of fees and commission income related to taxonomy-relevant sectors and environmentally sustainable activities (with breakdown for transitional and enabling activities) compared to total fees and commission income from NFRD corporates for services other than lending and asset management.

	z	aa	ab	ac	ad	ae	af	ag	ah	ai	aj	ak	al	am	an	ao	ap	aq	ar	as	at	au	av	aw
	F&C KPI - Disclosure reference date T-1																							
	Total (Million EUR)	Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			Water and marine resources (WTR)			Circular economy (CE)			Pollution (PPC)			Biodiversity and Ecosystems (BIO)			TOTAL (CCM + CCA + WTR + CE + PPC + BIO)			
		Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)				Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			Of which towards taxonomy relevant sectors (%) (Taxonomy-eligible)			
			Of which environmentally sustainable (%) (Taxonomy-aligned)				Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-			Of which environmentally sustainable (%) (Taxonomy-aligned)		
				Of which transitional	Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which enabling			Of which transitional	Of which enabling
1	**Fees and commission income from NFRD corporates – Services other than lending**																							
2	**Services towards financial undertakings**																							
3	Credit institutions																							
4	Other financial undertakings																							
5	of which investment firms																							
6	of which management companies																							
7	of which insurance insurance undertakings																							
8	**Non-financial undertakings**																							
9	**Counterparties not subject to NFRD disclosure obligations, including third-country counterparties**																							

7. **KPI Trading book portfolio'**

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	aa	ab	ac	ad
			Climate Change Mitigation (CCM)							Climate Change Adaptation (CCA)							Water and marine resources (WTR)							Circular economy (CE)						
		Fair value	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI
				Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)			Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)			Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)			Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)	
1	Financial assets held for trading (debt securities and equity instruments) – NFRD corporates																													
2	Financial undertakings																													
3	Credit institutions																													
4	Debt securities																													
5	Equity instruments																													
6	Other financial undertakings																													
7	of which investment firms																													
8	Debt securities																													
9	Equity instruments																													
10	of which asset managers																													
11	Debt securities																													
12	Equity instruments																													
13	of which insurance companies																													
14	Debt securities																													
15	Equity instruments																													
16	Non-financial undertakings																													
17	Debt securities																													
18	Equity instruments																													
19	Counterparties not subject to NFRD disclosure obligations, including third-country counterparties																													
20	Debt securities																													
21	Equity instruments																													

		ad	ae	ae	af	ag	ah	ai	aj	ak	al	am	an	ao	ap	aq	ar	as	at	au	av	aw	ax
			Pollution (PPC)							Biodiversity and Ecosystems (BIO)							TOTAL (CCM + CCA + WTR + CE + PPC + BIO)						
		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI	Absolute purchases		Absolute sales		Absolute purchases plus absolute sales		Trading KPI
				Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)			Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)			Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)		Of which environmentally sustainable (Taxonomy-aligned)	
1	Financial assets held for trading (debt securities and equity instruments) – NFRD corporates																						
2	Financial undertakings																						
3	Credit institutions																						
4	Debt securities																						
5	Equity instruments																						
6	Other financial undertakings																						
7	of which investment firms																						
8	Debt securities																						
9	Equity instruments																						
10	of which asset managers																						
11	Debt securities																						
12	Equity instruments																						
13	of which insurance companies																						
14	Debt securities																						
15	Equity instruments																						
16	Non-financial undertakings																						
17	Debt securities																						
18	Equity instruments																						
19	Counterparties not subject to NFRD disclosure obligations, including third country counterparties																						
20	Debt securities																						
21	Equity instruments																						

ANNEX VII

'ANNEX VIII

Template for KPIs of investment firms

Template number	Name
0	Summary of KPIs to be disclosed by investment firms under Article 8 Taxonomy Regulation
1	KPI IF – Dealing on own account services
2	KPI IF – Other services

0. **Summary of KPIs to be disclosed by investment firms under Article 8 Taxonomy Regulation**

		Total environmentally sustainable assets	**KPI** (***)	**KPI** (****)	**% coverage (over total assets)** (**)
Main KPI (for dealing on own account)	**Green asset ratio**				
		Total revenue from environmentally sustainable services and activities	**KPI**	**KPI**	**% coverage (over total revenue)**
Main KPI (for services and activities other than dealing on own account)	**KPI on Revenue** (*)				

(*) Fees, commissions and other monetary benefits.
(**) % of assets covered by the KPI over total assets.
(***) Based on the Turnover KPI of the counterparty.
(****) Based on the CapEx KPI of the counterparty.

ELI: http://data.europa.eu/eli/reg_del/2023/2486/oj

1. **KPI IF – Dealing on own account services**

	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
			Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			Water and marine resources (WTR)			Circular economy (CE)			Pollution (PPC)			Biodiversity and Ecosystems (BIO)			TOTAL (CCM + CCA + WTR + CE+ PPC + BIO)			
			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)				Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (taxonomy-eligible)			
				Of which linked to activities aligned with the EU Taxonomy (%) (taxonomy-aligned)				Of which linked to activities aligned with the EU Taxonomy			Of which linked to activities aligned with the EU Taxonomy			Of which linked to activities aligned with the EU Taxonomy			Of which linked to activities aligned with the EU Taxonomy			Of which linked to activities aligned with the EU Taxonomy			Of which linked to activities aligned with the EU Taxonomy (%) (taxonomy-aligned)			
					Of which transitional (%)	Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which transitional (%)	Of which enabling (%)
1	Total assets invested under investment firms' activities dealing on own account (as per Section A of Annex I to Directive 2014/65/EU)																								
2	Of which: on own behalf																								
3	Of which: on behalf of clients																								

2. **KPI IF – Other services'**

	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
			Climate Change Mitigation (CCM)				Climate Change Adaptation (CCA)			Water and marine resources (WTR)			Circular economy (CE)			Pollution (PPC)			Biodiversity and Ecosystems (BIO)			TOTAL (CCM + CCA + WTR + CE + PPC + BIO)			
			Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)				Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (Taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (Taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (Taxonomy-eligible)			Of which assets covered by the EU Taxonomy (%) (Taxonomy-eligible)			Of which Revenue (fees, commissions and other monetary benefits) from services and activities towards sectors covered by the EU Taxonomy (%) (Taxonomy-eligible)			
				Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)				Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)			Of which linked to activities aligned with the EU Taxonomy (%) (Taxonomy-aligned)			Of which linked to activities aligned with the EU Taxonomy (%) (Taxonomy-aligned)			Of which linked to activities aligned with the EU Taxonomy (%) (Taxonomy-aligned)			Of which linked to activities aligned with the EU Taxonomy (%) (Taxonomy-aligned)			Of which from services and activities linked to activities aligned with EU Taxonomy (%) (Taxonomy-aligned)		
					Of which transitional (%)	Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)			Of which enabling (%)				Of which transitional (%)	Of which enabling (%)
1	**Revenue (i.e. fees, commissions and other monetary benefits) from investment and services and activities other than dealing on own account (as per Section A of Annex I to Directive 2014/65/EU)**																								
2	Reception and transmission of orders in relation to one or more financial instruments																								
3	Execution of orders on behalf of clients																								
4	Portfolio management																								
5	Investment advice																								
6	Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis																								
7	Placing of financial instruments without a firm commitment basis																								
8	Operation of an MTF																								
9	Operation of an OTF																								

ELI: http://data.europa.eu/eli/reg_del/2023/2486/oj