



Rules for the performance of activities in projects with infrastructural components, ensuring their compliance with the ‘do no significant harm’ principle¹

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¹ Prepared on the basis of: 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.

Bicycle paths infrastructure

In order not to cause significant harm to individual environmental objectives, the bicycle path infrastructure co-financed by the programme will be carried out taking into account the following principles.

Environmental objective	Principle applied by beneficiaries
Sustainable use and protection of water and marine resources	<p>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/EC² and a water use and protection management plan, for the potentially affected water body or bodies, in consultation with relevant stakeholders, developed on its basis.</p> <p>Where an environmental impact assessment is conducted in accordance with Directive 2011/92/EU and it includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of the impact on water status is required, provided that the identified risks have been taken into account.</p>
Transition to a circular economy	<p>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/EC³) generated at 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 Protocol⁴. Operators limit waste generation in processes related to construction and demolition, in accordance with the EU Construction and</p>

² 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.

³ 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).

⁴ EU Construction and Demolition Waste Protocol (version dated 4 June 2021: https://ec.europa.eu/growth/content/eu-construction-and-demolition-waste-protocol-0_en).

	Demolition Waste Management Protocol and taking into account best available techniques and using selective demolition to enable removal and safe handling of hazardous substances and facilitate reuse and high-quality recycling by selective removal of materials, using available sorting systems for construction and demolition waste.
Pollution prevention and control	Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.
Protection and restoration of biodiversity and ecosystems	An environmental impact assessment (EIA) or a qualification ⁵ in accordance with Directive 2011/92/EU ⁶ has been carried out. 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 ⁷ , where applicable, has been conducted and based on its conclusions, the necessary mitigation measures ⁸ are implemented.
Adaptation to climate change	The physical climate risks that are material to the activity have been identified from those listed in the table below in the result of 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 below may affect the performance of the economic activity during its expected lifetime; b) where the activity is assessed to be subject to risk from one or more of the physical climate risks listed in the table below, 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 risks.

⁵ Procedure according to which the competent authority determines whether the projects listed in Annex II to Directive 2011/92/EU are to undergo an environmental impact assessment (referred to in Article 4(2) of the Directive).

⁶ For activities conducted in third countries, in accordance with applicable national law or international standards that require an environmental impact assessment (EIA), IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks.

⁷ 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.

⁸ 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.



	<p>The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:</p> <ul style="list-style-type: none"> 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 range of future scenarios⁹ consistent with the expected lifetime of the activity, including at least 10 to 30 year climate projections scenarios for major investments. <p>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 reports¹⁰, scientific peer-reviewed publications, and open source¹¹ or paid models.</p> <p>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.</p> <p>For existing activities and new 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.</p> <p>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</p>
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⁹ Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

¹⁰ 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/>.

¹¹ Such as Copernicus services managed by the European Commission.

adaptation strategies and plans; and consider the use of nature-based solutions¹² or rely on blue or green infrastructure¹³ to the extent possible.

Classification of climate-related hazards:

	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 and/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,	Subsidence

¹² 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.

wpływają korzystnie na bioróżnorodność i wspierają świadczenie szeregu usług ekosystemowych. (version of 4.6.2021: <https://ec.europa.eu/research/environment/index.cfm?pg=nbs>).

¹³ See: 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/2013/0249 final).

				ground water)	
				Glacial lake outburst	

Renovation of existing buildings

In order not to cause significant harm to individual environmental objectives, the renovation of buildings co-financed by the programme will be carried out taking into account the following principles.

Environmental objective	Principle applied by beneficiaries
Sustainable use and protection of water and marine resources	<p>With the exception of renovation works in dwellings, in the case of the following water-related devices installed as part of the renovation work, water consumption is confirmed by a product data sheet, a building certificate, or a product label in force in the Union, in accordance with the technical specifications set forth in Appendix E to this Annex:</p> <ul style="list-style-type: none"> 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. <p>Specification set forth in Appendix E:</p> <ol style="list-style-type: none"> 1. The flow rate is recorded at the standard reference pressure 3 – 0/+ 0,2 bar or 0,1 – 0/+ 0,02 for products limited to low pressure. 2. The flow rate at the lower pressure 1,5 – 0/+ 0,2 bar is ≥ 60 % of the maximum available flow rate. 3. For mixer showers, the reference temperature is 38 ± 1 °C. 4. Where the flow has to be lower than 6 L/min, it complies with the rule set out in point 2. 5. For taps the procedure described in clause 10.2.3 of EN 200 is followed, with the following exceptions: <ul style="list-style-type: none"> a) for taps that are not limited to low pressure applications only: apply a 3 – 0/+ 0,2 bar pressure to both the hot and the cold inlets, alternatively; b) for taps that are limited to low pressure applications only: apply a 0,4 – 0/+ 0,02 bar pressure to both the hot and the cold inlets and fully open the flow control.
Transition to a circular economy	At least 70 % (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material referred to in

	<p>category 17 05 04 in the European List of Waste established by Decision 2000/532/EC¹⁴) generated at 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 Protocol¹⁵. Operators limit waste generation in processes related to construction and demolition, in accordance with the EU Construction and Demolition Waste Management Protocol and taking into account best available techniques and using selective demolition to enable removal and safe handling of hazardous substances and facilitate reuse and high-quality recycling by selective removal of materials, using available sorting systems for construction and demolition waste.</p> <p>Building designs and construction techniques support the circular economy and, in particular, indicate - with reference to the ISO 20887 standard¹⁶ or other standards applicable to the assessment of the feasibility of disassembly or adapting buildings - how the project has provided a higher level of resource efficiency, adaptability, flexibility, and possibility of disassembly to enable reuse and recycling.</p>
<p>Pollution prevention and control</p>	<p>Building components and materials used in the construction comply with the following criteria.</p> <p>The activity does not lead to the manufacture, placing on the market or use of:</p> <ul style="list-style-type: none"> 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 Annex 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) 1907/2006, except where there is full compliance with the conditions specified in that Annex;

¹⁴ 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).

¹⁵ EU Construction and Demolition Waste Protocol (version dated 4 June 2021: https://ec.europa.eu/growth/content/eu-construction-and-demolition-waste-protocol-0_en).

¹⁶ ISO 20887:2020, Sustainability in buildings and civil engineering works — Design for disassembly and adaptability — Principles, requirements and guidance (version dated 4 June 2021: <https://www.iso.org/standard/69370.html>).



	<p>f) substances, whether on their own, in mixtures or in an article, meeting the criteria laid down in Article 57 of Regulation (EC) 1907/2006 and identified in accordance with Article 59(1) of that Regulation, except where their use has been proven to be essential for the society;</p> <p>g) other substances, whether on their own, in mixtures or in an article, that meet the criteria laid down in Article 57 of Regulation (EC) 1907/2006, except where their use has been proven to be essential for the society.</p> <p>Building components and materials used in the building renovation that may come into contact with occupiers¹⁷ emit less than 0,06 mg of formaldehyde per m³ of material or component 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 m³ of material or component, upon testing in accordance with CEN/EN 16516 or ISO 16000-3:2011¹⁸ or other equivalent standardised test conditions and determination methods¹⁹.</p> <p>Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.</p>
<p>Adaptation to climate change</p>	<p>The physical climate risks that are material to the activity have been identified from those listed in the table below in the result of performing a robust climate risk and vulnerability assessment with the following steps:</p> <ul style="list-style-type: none"> a) screening of the activity to identify which physical climate risks from the list below may affect the performance of the economic activity during its expected lifetime; b) where the activity is assessed to be subject to risk from one or more of the physical climate risks listed in the table below, 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. <p>The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:</p> <ul style="list-style-type: none"> 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 range

¹⁷ 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).

¹⁸ 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 4.6.2021: <https://www.iso.org/standard/51812.html>).

¹⁹ The emissions thresholds for carcinogenic volatile organic compounds relate to a 28-day test period.

	<p>of future scenarios²⁰ consistent with the expected lifetime of the activity, including at least 10 to 30 year climate projections scenarios for major investments.</p> <p>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 reports²¹, scientific peer-reviewed publications, and open source²² or paid models.</p> <p>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.</p> <p>For existing activities and new 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.</p> <p>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 solutions²³ or rely on blue or green infrastructure²⁴ to the extent possible.</p> <p>Classification of climate-related hazards:</p>
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²⁰ Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

²¹ 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/>.

²² Such as Copernicus services managed by the European Commission.

²³ 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 4.6.2021: <https://ec.europa.eu/research/environment/index.cfm?pg=nbs>).

²⁴ See: 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/2013/0249 final).

	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 and/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	

Wastewater treatment plants

In order not to do serious harm to individual environmental objectives, the upgrade, construction, expansion, and operation of centralized sewerage systems, including collection (sewerage network) and treatment of wastewater co-financed by the program will be carried out taking into account the following principles.

Environmental objective	Principle applied by beneficiaries
Sustainable use and protection of water and marine resources	<p>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/EC²⁵ and a water use and protection management plan, for the potentially affected water body or bodies, in consultation with relevant stakeholders, developed on its basis.</p> <p>Where an environmental impact assessment is conducted 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 the impact on water status is required, provided that the identified risks have been taken into account.</p> <p>Where the waste water is treated to a level suitable for reuse in agricultural irrigation, the required risk management actions to avoid adverse environmental impacts have been defined and implemented²⁶.</p>
Pollution prevention and control	<p>Discharges to receiving waters meet the requirements laid down in Directive 91/271/EEC²⁷ or as required by national provisions stating maximum permissible pollutant levels from discharges to receiving waters.</p> <p>Appropriate measures have been implemented to avoid and mitigate excessive 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.</p> <p>Sewage sludge is used in accordance with Directive 86/278/EEC²⁸ 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.</p>

²⁵ In the case of activities carried out in third countries, in accordance with applicable national law or international standards that achieve the equivalent objectives of good water status and good ecological potential, through equivalent procedural and material provisions, i.e., a management plan for the use and protection of water prepared in consultation with relevant stakeholders, which ensures that 1) the impact of the activities on the specific ecological status or potential of the potentially exposed water body(-ies) is assessed, 2) deterioration or prevention of good ecological status/potential is avoided or, where this is not possible, 3) any action of a technical nature is justified by the lack of feasible ecological alternatives that are not disproportionate in terms of cost or technically impossible, and all possible measures have been carried out to reduce negative impacts on the status of the water body.

²⁶ As specified in Annex II to 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).

²⁷ Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40).

²⁸ 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).

<p>Protection and restoration of biodiversity and ecosystems</p>	<p>An Environmental Impact Assessment (EIA) or screening²⁹ has been completed in accordance with Directive 2011/92/EU³⁰.</p> <p>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</p> <p>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 assessment³¹, where applicable, has been conducted and based on its conclusions the necessary mitigation measures³² are implemented.</p>
<p>Climate change mitigation</p>	<p>An assessment of the direct greenhouse emissions from the centralised waste water system, including collection (sewer network) and treatment, has been performed³³. The results are disclosed to investors and clients on demand.</p>
<p>Adaptation to climate change</p>	<p>The physical climate risks that are material to the activity have been identified from those listed in the table below in the result of performing a robust climate risk and vulnerability assessment with the following steps:</p> <ul style="list-style-type: none"> a) screening of the activity to identify which physical climate risks from the list below 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 the table below, 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.

²⁹ 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).

³⁰ 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.

³¹ 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.

³² 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.

³³ For example, following IPCC guidelines for national GHG inventories for waste water treatment (version of 4.6.2021: https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/5_Volume5/19R_V5_6_Ch06_Wastewater.pdf).



	<p>The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:</p> <ul style="list-style-type: none"> 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 range of future scenarios³⁴ consistent with the expected lifetime of the activity, including, at least, 10 to 30 year climate projections scenarios for major investments. <p>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 reports³⁵, scientific peer-reviewed publications, and open source³⁶ or paid models.</p> <p>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.</p> <p>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.</p> <p>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</p>
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³⁴ Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

³⁵ 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/>.

³⁶ Such as Copernicus services managed by the European Commission.

adaptation strategies and plans; and consider the use of nature-based solutions³⁷ or rely on blue or green infrastructure³⁸ to the extent possible.

Classification of climate-related hazards:

	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 and/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

³⁷ 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 4.6.2021: <https://ec.europa.eu/research/environment/index.cfm?pg=nbs>).

³⁸ See: 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/2013/0249 final).

				Glacial lake outburst	
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Electricity generation, distribution, storage

In order not to do serious harm to individual environmental objectives, activities involving the production, distribution, or storage of electricity co-financed by the programme will be carried out taking into account the principles established in detail, for individual technologies and processes, in the 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.

The principles common to all types of technologies and processes apply to the following two environmental objectives.

Environmental objective	Principle applied by the beneficiaries
Protection and restoration of biodiversity and ecosystems	<p>An Environmental Impact Assessment (EIA) or screening³⁹ has been completed in accordance with Directive 2011/92/EU⁴⁰.</p> <p>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</p> <p>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 assessment⁴¹, where applicable, has been conducted and</p>

³⁹ 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).

⁴⁰ 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.

⁴¹ 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.



	<p>based on its conclusions the necessary mitigation measures⁴² are implemented.</p>
<p>Adaptation to climate change</p>	<p>The physical climate risks that are material to the activity have been identified from those listed in the table below in the result of performing a robust climate risk and vulnerability assessment with the following steps:</p> <ul style="list-style-type: none"> a) screening of the activity to identify which physical climate risks from the list below may affect the performance of the economic activity during its expected lifetime; b) where the activity is assessed to be subject to risk from one or more of the physical climate risks listed in the table below, 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. <p>The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:</p> <ul style="list-style-type: none"> 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 range of future scenarios⁴³ consistent with the expected lifetime of the activity, including, at least, 10 to 30 year climate projections scenarios for major investments. <p>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 reports⁴⁴, scientific peer-reviewed publications, and open source⁴⁵ or paid models.</p> <p>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</p>

⁴² 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.

⁴³ Future scenarios include Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5.

⁴⁴ Assessments Reports on Climate Change: Impact, Adaptation and Vulnerability, published periodically by the Intergovernmental Panel on Climate Change (IPCC), the UN body for assessing scientific research related to climate change, <https://www.ipcc.ch/reports/>.

⁴⁵ Such as Copernicus services managed by the European Commission.

<p>material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.</p> <p>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.</p> <p>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 solutions⁴⁶ or rely on blue or green infrastructure⁴⁷ to the extent possible.</p> <p>Classification of climate-related hazards:</p>				
	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 and/or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	

⁴⁶ 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 4.6.2021: <https://ec.europa.eu/research/environment/index.cfm?pg=nbs>).

⁴⁷ See: 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/2013/0249 final).



	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	