

1 Comparison for Commercial Buildings

Note: The EU does not differentiate between Residential and Commercial. Climate Bonds tend to cater to building typologies and has specific criteria set for commercial and residential buildings. The below differentiates between them and a separate guide has been given to each of these.

1.1 Acquisition and ownership of buildings

The following table provides elements of comparison between the Climate Bonds Buildings criteria and the Substantial Contribution criterion for Climate Mitigation under “Acquisition and ownership of buildings”, i.e., Buying real estate and exercising ownership of that real estate.

EU Taxonomy criteria	Climate Bonds requirement	Comparison
For buildings built before 31 December 2020, the building has at least an Energy Performance Certificate (EPC) class A. As an alternative, the building is within the top 15% 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.	Zero carbon trajectory established for 15% baselines of regional stock expressed as Emissions (kgCO ₂ e), or for near zero carbon electricity grid, as Energy Demand (kWh), demonstrated by annual verification. Equivalence of emissions (kgCO ₂ e) and Energy demand against PED requirements has been demonstrated.	Climate Bonds standard is more demanding than the EU Taxonomy. Climate Bonds criteria of commercial building is based on operating performance, so it is a higher standard
For buildings built after 31 December 2020, the building meets the criteria specified in Section 7.1 of the Annex that are relevant at the time of the acquisition. (New Buildings Criteria apply)	Climate Bonds requires same in EU but will also maintain additional requirements for operational verification of reporting.	Higher standard.
Where the building is a large non-residential building (with an effective rated output for heating systems, systems for combined space heating and ventilation, air-conditioning systems or systems for combined air-conditioning and ventilation of over 290 kW) it is efficiently operated through energy performance monitoring and assessment	Climate Bonds requires annual verification of performance over the term of a bond.	Equivalent

Appendix I addresses the comparison of the Climate Bonds Buildings Standard with the Do No Significant Harm to other objectives for climate mitigation of this activity in the EU Taxonomy. demonstrates alignment with the climate mitigation do no significant harm criteria of the EU Taxonomy.

1.2 Construction of New Buildings

Development of building projects for residential and non-residential buildings by bringing together financial, technical and physical means to realise the building projects for later sale as well as the construction of complete residential or non-residential buildings, on own account for sale or on a fee or contract basis.

Climate Bonds Initiative has adopted a new set of criteria to align with the EU taxonomy. Previously, CLIMATE BONDS did not distinguish between the new or existing assets when measured against the net zero trajectories. The new criteria adopted globally by CLIMATE BONDS include requirements that all new buildings use only

electricity for normal operational energy requirements and that the new buildings provide the necessary infrastructure to support full future e-mobility. In addition, EU-specific industrial requirements are adopted within the EU.

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Construction of New Buildings”.

Taxonomy criteria	CLIMATE BONDS requirement	Status
<p>The Primary Energy Demand (PED), defining the energy performance of the building resulting from the construction, is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council. The energy performance is certified using an as-built Energy Performance Certificate (EPC)</p>	<p>All-electric building with all necessary infrastructure for full future e-mobility.</p> <p style="text-align: center;"><i>and</i></p> <p>Annual verification of operating performance for the duration of the bond.</p> <p style="text-align: center;"><i>and additionally</i></p> <p>In the EU have a PED that is at least 10% lower than the national NZEB threshold</p>	<p>Higher standard.</p>
<p>For buildings larger than 5,000 m² (292), upon completion, the building resulting from the construction undergoes testing for airtightness and thermal integrity, and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative, where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing.</p>	<p>Annual verification of operating performance for the duration of the bond.</p>	<p>Higher standard.</p>
<p>For buildings larger than 5,000 m², the life-cycle Global Warming Potential 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.</p>	<p>Reporting and disclosure of Module A (cradle to key) and Module C (end of life) GWP.</p> <p>Operational emissions already disclosed.</p>	<p>Equivalent</p>

Appendix I addresses comparison with the climate mitigation do no significant harm criteria of the EU Taxonomy for Construction of New Buildings.

1.3 Renovation of existing buildings

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.

An economic activity in this category is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

CLIMATE BONDS has adopted new criteria requiring that any financing to upgrade works must not be used for any plant of equipment powered by fossil fuels.

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Renovation of existing Buildings”.

Taxonomy criteria	CLIMATE BONDS requirement	Status
The building renovation complies with the applicable requirements for major renovations. Alternatively, it leads to a reduction of primary energy demand (PED) of at least 30%.	Buildings renovation at to achieve an Emission reduction (kgCO ₂ e) of not less than 30-50%, depending on the tenor of the bond. Equivalence of emissions (kgCO ₂ e) and Energy demand against PED requirements has been demonstrated, noting the emission reporting used by CLIMATE BONDS is also better in line with the EU Taxonomy objectives than PED	Higher standard.

Adaptation of DNSH: Same as New Buildings (Refer to Appendix I)

2 Residential Buildings

2.1 Acquisition and ownership of buildings

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Acquisition and ownership of buildings”. Buying real estate and exercising ownership of that real estate.

The economic activities in this category could be associated with NACE code L68 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Acquisition and ownership of Buildings.”

EU Taxonomy criteria	CLIMATE BONDS requirement	Status
For buildings built before 31 December 2020, the building has at least an Energy Performance Certificate (EPC) class A. As an alternative, the building is within the top 15% 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.	Proxy qualification based on a baseline of top 15% of market and zero carbon trajectory of incremental increases in requirements. Proxies are EPCs of region or building codes (such as NZEB) where sufficient stringency is demonstrated. Fallback position of class A EPC qualification adopted in markets where CLIMATE BONDS has not been able to define a proxy based on proper profiling of the market	CLIMATE BONDS has established Energy Performance Certificate that falls under top 15% best performing in a particular location. Class A EPC available rest of EU
For buildings built after 31 December 2020, the building meets the criteria specified in Section 7.1 of the Annex	CLIMATE BONDS requires the same in the EU	Equivalent

EU Taxonomy criteria	CLIMATE BONDS requirement	Status
that are relevant at the time of the acquisition. (New Buildings Criteria apply)		

Appendix I addresses comparison with the climate mitigation do no significant harm criteria of the EU Taxonomy.

2.2 Construction of New Buildings

CLIMATE BONDS has adopted a new set of criteria to be better in line with the EU taxonomy. Previously, CLIMATE BONDS did not distinguish between the new or existing assets when measured against the net zero trajectories. The new criteria adopted globally by CLIMATE BONDS include requirements that all new buildings are now Net-zero or Net-zero ready by 2050 and use only electricity for normal operational energy requirements and that the new buildings provide the necessary infrastructure to support full future e-mobility. In addition, EU-specific requirements are adopted within the EU.

Development of building projects for residential and non-residential buildings by bringing together financial, technical and physical means to realise the building projects for later sale 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 and F41.2, including also activities under F43, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Construction of New Buildings.”

Taxonomy criteria	CLIMATE BONDS requirement	Status
The Primary Energy Demand (PED), defining the energy performance of the building resulting from the construction, is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council. The energy performance is certified using an as built Energy Performance Certificate (EPC)	All-electric building with all necessary infrastructure for full future e-mobility. and In the EU, have a PED that is at least 10% lower than the NZEB threshold (per Taxonomy)	Higher standard.
For buildings larger than 5,000 m ² (292), upon completion, the building resulting from the construction undergoes testing for airtightness and thermal integrity, and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative, where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing.	Taxonomy requirements adapted in the EU and Annual verification of operating performance for the duration of the bond.	Higher standard.

Taxonomy criteria	CLIMATE BONDS requirement	Status
For buildings larger than 5,000 m ² , the life-cycle Global Warming Potential 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.	Reporting and disclosure of Module A (cradle to key), Module B (operations) and Module C (end of life) GWP.	

Adaptation of DNSH: Same as Commercial New Buildings (Refer to the Appendix I)

2.3 Renovation of existing buildings

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.

An economic activity in this category is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

CLIMATE BONDS has adopted new criteria requiring that any financing to upgrade works must not be used for any plant of equipment powered by fossil fuels.

The following table provides elements of comparison between the CLIMATE BONDS Buildings Standard and the Substantial Contribution criterion for Climate Mitigation of the Economic Activity “Renovation of existing Buildings.”

EU Taxonomy criteria	CLIMATE BONDS requirement	Status
The building renovation complies with the applicable local requirements for major renovations. Alternatively, it leads to a reduction of primary energy demand (PED) of at least 30%.	Buildings’ renovation is to achieve an Emission reduction (kgCO ₂ e) of not less than 30-50%, depending on the tenor of the bond. CLIMATE BONDS proxies provide that this can be demonstrated by necessary incremental improvements to EPC ratings. Equivalence of emissions (kgCO ₂ e) and Energy demand against PED requirements has been demonstrated, noting the emission reporting used by CLIMATE BONDS is also better in line with the EU’s overarching Taxonomy objectives than PED.	Higher standard.

Adaptation of DNSH: Same as Commercial New Buildings (Refer to the Appendix)

3 Appendix I: EU Taxonomy Do no Significant Harm (DNSH) criteria comparison with CLIMATE BONDS low-carbon Buildings Criteria

The following tables are a snapshot of the EU Taxonomy DNSH requirements and how to achieve compliance with the EU requirements for the economic activities of the Construction of new buildings (7.1), Renovation of existing buildings (7.2) and Acquisition and ownership of buildings (7.7) according to the best available knowledge and documentation.

Note: The EU DSNH criteria mostly refer to EU legislation, so, the comparison below only applies to buildings in the EU or outside building finances in the EU.

3.1 New Construction:

DNSH criteria in Climate Bonds Initiative - New Building 7.1		
DNSH Category	Taxonomy criteria	CLIMATE BONDS requirement
Climate adaptation	<p>The activity complies with the criteria set out in Appendix A for the Delegated Act (Annex 1):</p> <p>The physical climate risks that are material to the activity have been identified from those listed in Table 1 below by performing a robust climate risk and vulnerability assessment following steps as those referred in Appendix A from the delegated Act (Annex 1).</p>	<ul style="list-style-type: none"> Climate risk and vulnerability assessment in line with Appendix A requirements. Climate Risk Register should include all risks material to the activity according to Table 1 below. The physical risk data for the paths for the RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5 risk scenarios should be provided by a mandated third party. The assessment is to be provided for future scenarios of 2030 and 2050. <ul style="list-style-type: none"> The result of the data analysis should be able to prove that there are no high climate risks in accordance with appendix A
Sustainable Use and Protection of Water and Marine Resources	<ol style="list-style-type: none"> 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 EU, in accordance with the following technical specifications: 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 	<ul style="list-style-type: none"> BoQ and Design Specification sheets for the pre-issuance requirements Verification of the As-built Specification sheets and procurement for the post-issuance requirements An Environmental Impact Assessment Report to be prepared that sets out the requirement for the Contractor to develop a Construction Environmental Management Plan, which should incorporate a water use and protection management plan. <ul style="list-style-type: none"> Construction Initiatives and Schemes or Industry Codes where water management during all relevant construction phases is part

DNSH criteria in Climate Bonds Initiative - New Building 7.1		
DNSH Category	Taxonomy criteria	CLIMATE BONDS requirement
	<p>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> <p>2. To avoid impact from the construction site, the Case Study should follow Appendix B requirements of the delegated Act (Annex 1) and identify and address environmental degradation risks related to preserving water quality and avoiding water stress 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 of the European Parliament and of the Council and a water use and protection management plan should be developed 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 and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of the impact on water is required, provided the risks identified have been addressed.</p>	<p>of the scheme (and/or the code) can be used as a suitable proxy for Appendix B requirements e.g., Considerate Construction Scheme (CCS).</p>
Transition to a Circular Economy	<p>1. 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. Operators should 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 the best available techniques and using selective demolition to enable removal and safe handling of hazardous substances and</p>	<ul style="list-style-type: none"> • Site Waste Management Plan (SWMP) following the local/national laws set in that jurisdiction. • Life-Cycle Assessment Module D (beyond systems boundary) accounting and report following the CLIMATE BONDS criteria. • Disclosure of design specifications to ascertain whether the building design and construction techniques used, support resource efficiency, and result in buildings that are adaptable, flexible and dismantlable to enable future reuse and recycling of resources <ul style="list-style-type: none"> ○ Referenced standards (ISO 20887) or other equivalent standards can be used to prove compliance with the CLIMATE BONDS standard

DNSH criteria in Climate Bonds Initiative - New Building 7.1		
DNSH Category	Taxonomy criteria	CLIMATE BONDS requirement
	<p>facilitate reuse and high-quality recycling by selective removal of materials, using available sorting systems for construction and demolition waste.</p> <p>2. Building designs and construction techniques support circularity and in particular demonstrate, with reference to ISO 20887 or other standards for assessing the disassemblability or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and dismantlable to enable reuse and recycling.</p>	
Pollution Prevention and Control	<p>1. Building components and materials used in the construction that may come into contact with occupiers(298) 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(299) or ISO 16000-3:2011(300) or other equivalent standardised test conditions and determination methods(301).</p> <p>2. 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(302).</p> <p>3. Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.</p> <p>4. The construction of new buildings should follow Appendix C requirements below and must not lead to the manufacture, placing on the market or use of:</p> <p>a. Substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021 (Recast Regulation on Persistent Organic Pollutants), except in the case of substances present as an unintentional trace contaminant;</p>	<ul style="list-style-type: none"> • Disclosure of the design specifications in order to assess whether the project meets this criterion. <ul style="list-style-type: none"> ○ Specified materials must meet the relevant EUT criteria, following the national regulations and hold a proof of their registration to ECHA central European Authority (e.g. REACH Certificate of Compliance by third party testing agent, CLP Safety Data Sheets - SDS) • Post-Construction and Pre-Occupancy Air Quality Monitoring and Assessment following the testing and methodology requirements as per the EUT requirements. • Preliminary Site Assessment ("PSA") and Detailed Site Assessment ("DSA") should be prepared to support the assessment of land contamination and are included in the Environmental Impact Assessment Report (if relevant) along with solutions to ensure the site is fit for purpose as well as proposing measures to protect: the people and the environment surrounding the site. • Contractor to develop a Construction Environmental Management Plan, which should incorporate measures to reduce noise, dust and air pollutant emissions protection management plan to fulfil the EU Taxonomy requirement. <ul style="list-style-type: none"> ○ Construction Initiatives and Schemes or Industry Codes where air quality management and noise impact assessment during all relevant construction phases are parts of the scheme (and/or the

DNSH criteria in Climate Bonds Initiative - New Building 7.1		
DNSH Category	Taxonomy criteria	CLIMATE BONDS requirement
	<p>b. Mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852 (Regulation on Mercury);</p> <p>c. Substances, whether on their own, in mixture or in articles, listed in Annex I or II to Regulation (EC) No 1005/2009 (Regulation on Substances that Deplete the Ozone Layer);</p> <p>d. Substances, whether on their own, in mixtures or in an articles, listed in Annex II to Directive 2011/65/EU (Recast Regulation on the restriction of the use of certain hazardous substances in electrical and electronic equipment), 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 (Regulation on the registration, evaluation, authorisation and restriction of chemicals), except where there is full compliance with the conditions specified in that Annex;</p> <p>e. Substances, whether on their own, in mixtures or in an article, meeting the criteria laid down in Article 57 of Regulation (EC) 1907/2006 (Regulation on the registration, evaluation, authorisation and restriction of chemicals) and identified in accordance with Article 59(1) of that Regulation, except where their use has been proven to be essential for the society; and</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 (Regulation on the registration, evaluation, authorisation and restriction of chemicals), except where their use has been proven to be essential for the society.</p>	<p>code) can be used as suitable proxies for this requirement for CLIMATE BONDS e.g. Considerate Construction Scheme (CCS).</p>
Protection and Restoration of Biodiversity and Ecosystems	<p>1. An Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU (Directive on the assessment of the effects of certain public and private projects on the environment) and the required mitigation and compensation measures for protecting the environment must be implemented.</p>	<ul style="list-style-type: none"> Local Authorities to determine if a project is subject to an EIA following the screening procedures on the basis of thresholds/criteria or on the basis of case-by-case examination taking into account all relevant criteria in the referred Directive.

DNSH criteria in Climate Bonds Initiative - New Building 7.1		
DNSH Category	Taxonomy criteria	CLIMATE BONDS requirement
	<p>2. 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, where applicable, must be conducted and based on its conclusions the necessary mitigation measures implemented.</p> <p>3. The new construction is not built on one of the following:</p> <ol style="list-style-type: none"> Arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity as referred to in the EU Land Use and Coverage Area frame survey; 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 or the International Union for Conservation of Nature's Red List of Threatened Species; or 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 Food and Agriculture Organization of the United Nations definition of forest. 	<ul style="list-style-type: none"> Sites located in designated areas under the Habitats Directive, either as "Special Area of Conservation - SAC" or "Special Protection Area- "SPA" an appropriate assessment and permitting procedure should be followed. The building permit provided by local planning authorities can be used as proof of compliance to show that new construction is not built on the land types referred in the EUT relevant requirement (points a, b, and c). <ul style="list-style-type: none"> This criterion is always met if according to the applicable laws and spatial planning regime, a project would be allowed or permitted by the authorities to build on the parcel of land. The required information can also be obtained by LUCAS Survey

4 Renovation of Existing Buildings:

DNSH criteria in Climate Bonds Initiative - Retrofit and Refurbishment Building 7.2		
DNSH Category	Taxonomy criteria	Climate Bonds requirement
Climate adaptation	<p>The activity complies with the criteria set out in Appendix A for the Delegated Act (Annex 1):</p> <p>The physical climate risks that are material to the activity have been identified from those listed in Table 1 below by performing a robust climate risk and vulnerability assessment following steps as those referred in Appendix A from the delegated Act (Annex 1).</p>	<ul style="list-style-type: none"> • Climate risk and vulnerability assessment in line with Appendix A requirements. • Climate Risk Register should include all risks material to the activity according to Table 1 below. • The physical risk data for the paths for the RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5 risk scenarios should be provided by a mandated third party. The assessment is to be provided for future scenarios of 2030 and 2050 <ul style="list-style-type: none"> ◦ The result of the data analysis should be able to prove that there are no high climate risks in accordance with appendix A
Sustainable Use and Protection of Water and Marine Resources	<p>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 EU, in accordance with the following technical specifications: 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>	<ul style="list-style-type: none"> • BoQ and Design Specification sheets for the pre-issuance requirements • Verification of the As-built Specification sheets and procurement for the post-issuance requirements
Transition to a Circular Economy	<ol style="list-style-type: none"> 1. 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. Operators should 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 the best 	<ul style="list-style-type: none"> • Site Waste Management Plan (SWMP) following the local/national laws set in that jurisdiction. • Life-Cycle Assessment Module D (beyond systems boundary) accounting and report following the Climate Bonds criteria. • Disclosure of design specifications to ascertain whether the building design and construction techniques used, support resource efficiency, and result in buildings that are adaptable, flexible and dismantlable to enable future reuse and recycling of resources

DNSH criteria in Climate Bonds Initiative - Retrofit and Refurbishment Building 7.2		
DNSH Category	Taxonomy criteria	Climate Bonds requirement
	<p>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>2. Building designs and construction techniques support circularity and in particular demonstrate, with reference to ISO 20887 or other standards for assessing the disassembly or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and dismantlable to enable reuse and recycling.</p>	
Pollution Prevention and Control	<p>1. The construction of new buildings should follow Appendix C requirements below and must not lead to the manufacture, placing on the market or use of:</p> <ol style="list-style-type: none"> Substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021 (Recast Regulation on Persistent Organic Pollutants), except in the case of substances present as an unintentional trace contaminant; Mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852 (Regulation on Mercury); Substances, whether on their own, in mixture or in articles, listed in Annex I or II to Regulation (EC) No 1005/2009 (Regulation on Substances that Deplete the Ozone Layer); Substances, whether on their own, in mixtures or in an articles, listed in Annex II to Directive 2011/65/EU (Recast Regulation on the restriction of the use of certain hazardous substances in electrical and electronic equipment), 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 (Regulation on the registration, evaluation, authorisation and restriction of chemicals), except where there is full compliance with the conditions specified in that Annex; Substances, whether on their own, in mixtures or in an article, meeting the criteria laid down in Article 57 of Regulation (EC) 1907/2006 (Regulation on the registration, evaluation, authorisation 	<ul style="list-style-type: none"> • Disclosure of the design specifications in order to assess whether the project meets this criterion. <ul style="list-style-type: none"> ○ Specified materials must meet the relevant EUT criteria, following the national regulations and hold a proof of their registration to ECHA central European Authority (e.g. REACH Certificate of Compliance by third party testing agent, CLP Safety Data Sheets - SDS) • Post-Construction and Pre-Occupancy Air Quality Monitoring and Assessment following the testing and methodology requirements as per the EUT requirements. <ul style="list-style-type: none"> • • Preliminary Site Assessment ("PSA") and Detailed Site Assessment ("DSA") have been prepared to support the assessment of land contamination and are included in the Environmental Impact Assessment Report (if relevant) along with solutions to ensure the site is fit for purpose as well as proposing measures to protect: the people and the environment surrounding the site. <ul style="list-style-type: none"> • • Contractor to develop a Construction Environmental Management Plan, which should incorporate measures to reduce noise, dust and air pollutant emissions protection management plan to fulfil the EU Taxonomy requirement. <ul style="list-style-type: none"> ○ Construction Initiatives and Schemes or Industry Codes where air quality management and noise impact assessment during all relevant construction phases are parts of the scheme (and/or the

DNSH criteria in Climate Bonds Initiative - Retrofit and Refurbishment Building 7.2

DNSH Category	Taxonomy criteria	Climate Bonds requirement
	<p>and restriction of chemicals) and identified in accordance with Article 59(1) of that Regulation, except where their use has been proven to be essential for the society; and 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 (Regulation on the registration, evaluation, authorisation and restriction of chemicals), except where their use has been proven to be essential for the society.</p> <ol style="list-style-type: none"> 2. Building components and materials used in the construction that may come into contact with occupiers 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 (Regulation on the registration, evaluation, authorisation and restriction of chemicals) 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 16000-3:2011 or other equivalent standardised test conditions and determination methods. 3. 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 4. Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works 	<p>code) can be used as suitable proxies for this requirement e.g. Considerate Construction Scheme (CCS).</p>
Protection and Restoration of Biodiversity and Ecosystems	n/a	n/a

5 Acquisition and ownership of buildings:

DNSH criteria in Climate Bonds Initiative - building Acquisition 7.7		
DNSH Category	Taxonomy criteria	Climate Bonds requirement
Climate adaptation	The activity complies with the criteria set out in Appendix A for the Delegated Act (Annex 1): The physical climate risks that are material to the activity have been identified from those listed in Table 1 below by performing a robust climate risk and vulnerability assessment following steps as those referred in Appendix A from the delegated Act (Annex 1).	<ul style="list-style-type: none"> Climate risk and vulnerability assessment in line with Appendix A requirements. Climate Risk Register should include all risks material to the activity according to Table 1 below. The physical risk data for the paths for the RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5 risk scenarios should be provided by a mandated third party. The assessment is to be provided for future scenarios of 2030 and 2050 <ul style="list-style-type: none"> The result of the data analysis should be able to prove that there are no high climate risks in accordance with appendix A
Sustainable Use and Protection of Water and Marine Resources	n/a	n/a
Transition to a Circular Economy	n/a	n/a
Pollution Prevention and Control	n/a	n/a
Protection and Restoration of Biodiversity and Ecosystems	n/a	n/a

Table 1. DNSH to Climate change adaptation

	Temperature Related	Wind Related	Water Related	Solid Mass Related
C h r o n i c	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		
A c	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche

u t e	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	

5.1 DNSH Checklist linked document required:

1. Climate risk and vulnerability assessment ¹
2. Climate Risk Register ²
3. BoQ and Design Specification sheets
4. As-built Specification
5. Environmental Impact Assessment Report ³
6. Post-Construction and Pre-Occupancy Air Quality Monitoring and Assessment
7. Preliminary Site Assessment ("PSA") and Detailed Site Assessment ("DSA")
8. Site Waste Management Plan (SWMP)
9. Life-Cycle Assessment Module D (Circular economy)
10. ISO/DIS 59004 - Terminology, principles and guidance for implementation ⁴
11. Construction Environmental Management Plan
12. Special Area of Conservation - SAC or Special Protection Area - SPA Assessment
13. Local Authority Building Permit

¹ www.eea.europa.eu/publications/national-climate-change-vulnerability-2018

² [European Climate Risk Assessment \(europa.eu\)](http://European Climate Risk Assessment (europa.eu))

³ [Environmental assessments \(europa.eu\)](http://Environmental assessments (europa.eu))

⁴ www.iso.org/standard/80648.html

6 EU Taxonomy and Climate Bonds activity alignment

DNSH criteria in Climate Bonds Initiative - building Acquisition 7.7			
Sector Asset Type (Climate Bonds)	Sector EU Taxonomy (activity)	Asset specifics (Climate Bonds)	Climate Bonds : EU alignment
Commercial Buildings	<ul style="list-style-type: none"> Construction and real estate activities - New Buildings 	<ul style="list-style-type: none"> Including offices, hotels, retail buildings, public buildings, educational and health care, etc. 	Aligned
Commercial Buildings	<ul style="list-style-type: none"> Construction and real estate activities - Renovation of existing Buildings 	<ul style="list-style-type: none"> Including offices, hotels, retail buildings, public buildings, educational and health care, etc. 	Aligned
Residential Buildings	<ul style="list-style-type: none"> Construction and real estate activities - New Buildings 	<ul style="list-style-type: none"> Private dwellings Multifamily residential Buildings Mixed use where more than 50% of the asset is for residential purposes. 	Aligned
Residential Buildings	<ul style="list-style-type: none"> Construction and real estate activities - Renovation of existing Buildings 	<ul style="list-style-type: none"> Private dwellings Multifamily residential Buildings Mixed use where more than 50% of the asset is for residential purposes. 	Aligned
Other buildings type	<ul style="list-style-type: none"> Construction and real estate activities - New Buildings 	<ul style="list-style-type: none"> Data centres Stations and related buildings for eligible transport Industrial buildings 	Aligned
Other buildings type	<ul style="list-style-type: none"> Information and communication - Data processing, hosting and related activities 	<ul style="list-style-type: none"> Data centres Stations and related buildings for eligible transport Industrial buildings 	Aligned
Other buildings type	<ul style="list-style-type: none"> Construction and real estate activities - Installation, maintenance and repair of charging stations for electric vehicles in buildings and parking spaces attached to buildings 	<ul style="list-style-type: none"> Data centres Stations and related buildings for eligible transport Industrial buildings 	Partially Aligned
Commercial and Residential Buildings	<ul style="list-style-type: none"> Construction and real estate activities - Acquisition and ownership of buildings 	<ul style="list-style-type: none"> Commercial and residential buildings 	Aligned
Built environment - Urban or semi-urban areas	<ul style="list-style-type: none"> Construction and real estate activities - Installation, maintenance and repair of energy efficiency equipment 	<ul style="list-style-type: none"> Such as neighbourhood level works, upgrades and retrofits such as street lighting. 	Aligned
Infrastructure	<ul style="list-style-type: none"> Construction and real estate activities - Installation, maintenance and repair of renewable energy equipment 	<ul style="list-style-type: none"> District heating for residential and commercial applications Building, maintenance or upgrading utilities tunnel for cables or pipelines 	Aligned
Infrastructure	<ul style="list-style-type: none"> Energy - district heating/cooling distribution 	<ul style="list-style-type: none"> District heating for residential and commercial applications Building, maintenance or upgrading utilities tunnel for cables or pipelines 	Aligned
Products and Systems for Building Efficiency (energy)	<ul style="list-style-type: none"> Manufacturing - Of Energy efficiency equipment for buildings 	<ul style="list-style-type: none"> Facilities dedicated to manufacturing energy efficient components 	Partially Aligned

DNSh criteria in Climate Bonds Initiative - building Acquisition 7.7

Sector Asset Type (Climate Bonds)	Sector EU Taxonomy (activity)	Asset specifics (Climate Bonds)	Climate Bonds : EU alignment
Products and Systems for Building Efficiency (Low carbon building materials)	<ul style="list-style-type: none"> Manufacturing - Manufacture of Cement 	<ul style="list-style-type: none"> Low carbon alternative building materials such as alternatives to cement and concrete/steel 	Aligned
n/a	<ul style="list-style-type: none"> Construction and real estate activities 	<ul style="list-style-type: none"> Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 	Not covered in Climate Bonds Taxonomy
Urban Planning	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Urban Policies and regulations directed to climate change mitigation. E.g., car-free areas 	Not covered in EU Taxonomy