ESG-VERIFICATION FOR THE EU-TAXONOMY: NEW CONSTRUCTION

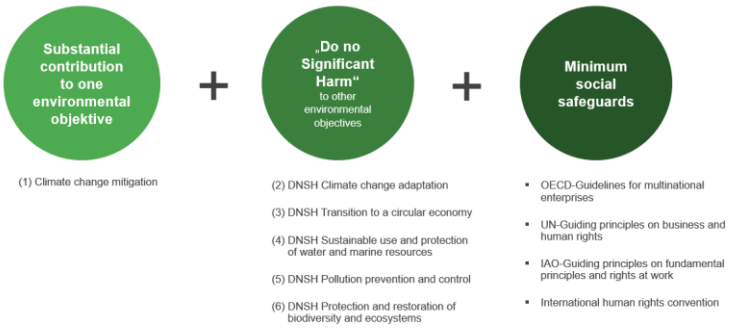
The following table shows the taxonomy requirements for the new construction industry.

For the concretizations of the requirements arising from external bodies, adjustments may be made to the present document. For the classification of the economic activity as taxonomy compliant, one can choose either the environmental objective 1: climate change mitigation OR the environmental objective 2: climate change adaptation OR the environmental objective 3: Transition to a circular economy.

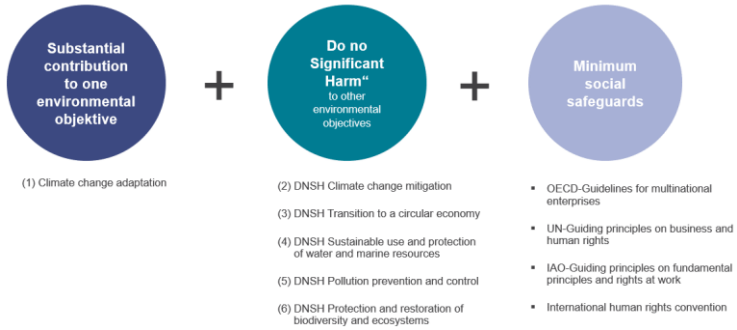
To be classified as taxonomy compliant, all relevant criteria for a significant contribution, DNSH requirements, and minimum requirements must be met. For a better understanding, the currently possible constellations are shown graphically in the following figure.

Date: 29.09.23

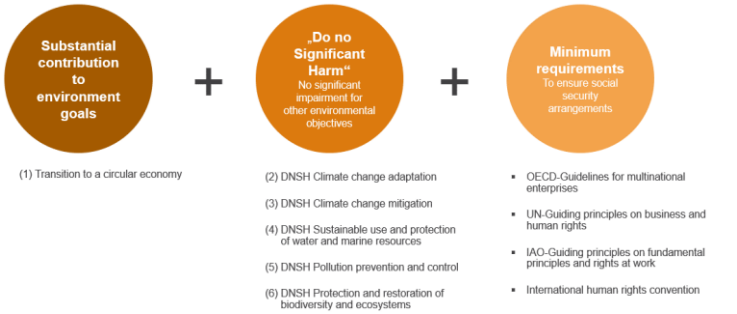
Alternative 1: Substantial contribution – Climate change mitigation



Alternative 2: Substantial contribution – Climate change adaptation



Alternative 3: Substantial contribution – Transition to a circular economy



Questions
General Information
Is it a residential building or non- residential building?
Date of submission of the building permit application ready for approval
(Expected) Date of completion
What is the gross floor area (GFA) of the building under consideration?
General information about the building
At what stage is the project and the submitted data?
Minimum social safeguards
Has the company committed itself to corporate responsible governance and due diligence in accordance with the following principles and guidelines? • OECD Guidelines for Multinational Enterprises (OECD MNE Guidelines) • UN Guiding Principles on Business and Human Rights (UNGPs), including the fundamental principles and rights set out in the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work • International Charter on Human Rights (OHCHR)
Have appropriate procedures (processes, mechanisms) been implemented in the company to ensure fulfillment of the above-mentioned guidelines and principles in the following areas? • Human rights including labor rights • Anti-bribery and anti-corruption • Levy of taxes • Fair competition/ fair business practices
Have there been in the past or are there currently any violations of human rights including labor rights, anti-bribery and corruption laws, tax law or fair competition that have been adjudicated by a court of law? or Allegations made against the company by, for example, the OECD National Contact Point or the Business and Human Rights Resource Centre and the company refuses to cooperate or make contact. or Has the company been non-compliant with the OECD Guidelines by the OECD National Contact Point?
Substantial contribution: Climate change mitigation
Is the annual primary energy demand at least 10 % below the local NZEB (nearly zero energy building) standard?
For buildings with GFA >5000m² Is the building checked for airtightness and a thermographic measurement performed after completion and are deviations from the performance levels defined in the planning phase or deficiencies in the building envelope disclosed to investors and clients? OR As an alternative to thermal integrity testing, have robust and traceable quality control processes been employed during the construction process?
For buildings with GFA >5000m² Has the life cycle GHG potential of the building resulting from construction been calculated for each phase in the life cycle and is it disclosed to investors and clients upon request?

Substantial contribution: Climate change adaptation
Has a robust climate risk and vulnerability analysis been conducted on the key hazards in Annex 2 that assesses the likelihood of occurrence and the extent of damage in relation to the performance of economic activity and meets the following additional requirements? • Period under consideration is forward-looking and, as far as possible, in line with the expected lifetime (at least 30 years) • Assessment of future risks using future scenarios based on the climate models from the latest IPCC report (at least RCP 8.5 as worst-case scenario; if a hazard has become material several times in the past, additionally a good-case scenario, e.g., RCP 2.6 or RCP4.5) • Assessment of risk and vulnerability of the individual system elements
If significant risks or vulnerabilities are identified, does economic activity implement adaptation solutions that significantly reduce the key physical climate risks? In doing so, the adaptation solutions meet the following requirements: a) Do the implemented adaptation solutions do not lead to a degradation of adaptation efforts or levels of resilience in people, nature, cultural heritage, assets, and other economic activities? b) Were nature-based solutions or solutions relying on blue and green infrastructure considered and preferred where possible in the adaptation solutions implemented? c) Do the implemented adaptation solutions coincide with local, sectoral, regional, or national adaptation plans and strategies? d) Are implemented adaptation solutions monitored and measured against predefined indicators, and are remedial actions considered when indicators are not met? e) If the implemented adaptation solutions are physical and correspond to an activity, where the Taxonomy has defined technical screening criteria, do they meet the corresponding DNSH criteria?
Substantial contribution: Transition to a circular economy
Has all construction and demolition waste generated managed in accordance with EU waste legislation and the EU Demolition and Waste Management Protocol checklist? Is at least 90% (by weight) of the non-hazardous construction and demolition waste generated at the construction site processed for reuse or recycled?
Has the life cycle GWP of the building calculated for each phase in the life cycle and is it disclosed to investors and clients upon request?
Does building design and construction technology support the circular economy by making it more resource efficient, adaptable, flexible, and dismantable?
The following requirements are met for the use of secondary raw materials and for the three heaviest material categories [measured in mass in kg]: concrete, natural stone, agglomerated stone: max. 70% primary raw materials Bricks, tiles, ceramics: max. 70% primary raw materials Bio-based materials: max. 80% primary raw materials Glass and mineral insulating materials: max. 70% primary raw materials Non-biobased plastics: max. 50% primary raw materials Metals: max. 30% from primary raw materials Gypsum: max. 65% primary raw materials
Are digital tools used to show the characteristics of the building, materials and building products - for future maintenance, deconstruction, and reuse? Is the information provided to the investor/customer?
DNSH-Climate change adaptation

Has a robust climate risk and vulnerability analysis conducted on the key hazards in Annex 2 that assesses the likelihood of occurrence and the extent of damage (Vulnerability) in relation to the performance of the economic activity and meets the following additional requirements: • Period under consideration is forward-looking and in line with the expected lifetime (at least 30 years) • Assessment of future risks using future scenarios based on the climate models from the latest IPCC report (at least RCP 8.5 as worst-case scenario; if a hazard has become material several times in the past, additionally a good-case scenario, e.g., RCP 2.6 or RCP 4.5) • Assessment of risk and vulnerability of the individual system elements?
If risks or vulnerabilities are identified as significant in the analysis: has an adaptation plan been established that includes adaptation solutions for each identified hazard that significantly reduces the risk? The adaptation solutions in the adaptation plan must be implemented within the next 5 years. For hazards classified as "medium", the person responsible in the implementing company can decide on a case-by-case basis whether it makes sense to implement the adaptation solution(s). In each case, the responsible person must explain and justify the decision within a statement. The adaptation solutions must fulfil the following requirements: a) Do the implemented adaptation solutions do not lead to a degradation of adaptation efforts or levels of resilience in people, nature, cultural heritage, assets, and other economic activities? b) Were nature-based solutions or solutions relying on blue and green infrastructure considered and preferred where possible in the adaptation solutions implemented? c) Do the implemented adaptation solutions coincide with local, sectoral, regional, or national adaptation plans and strategies?
DNSH-Climate change mitigation
The building is not intended for the extraction, storage, transportation, or production of fossil fuels. Note: This does not include the storage of small quantities of fossil fuels to secure on-site energy production.
Does the building meet the primary energy requirements for the national NZEB standard?
DNSH-Water
Does not apply to residential buildings developed by private individual Have water fixtures that are installed that meet the specifications in Appendix 3?
To avoid adverse effects from the construction site, have risks to the environment been identified in terms of maintaining water quality and avoiding water shortages?
To avoid site degradation, have the identified risks to degradation been addressed to achieve good waterbody condition and ecological potential on the site, and has a water use and protection plan been developed for the potentially affected waterbodies?
DNSH-Transition to a circular economy
Is at least 70% (by weight) of the non-hazardous construction and demolition waste generated at the site processed for reuse or recycled or otherwise recovered, including backfilling operations that use waste as a substitute for other materials?
Has the amount of waste generated during construction and demolition work been limited by the contractors, considering the aspects listed below? • Using the best available techniques. • selective demolition to enable removal and safe handling of hazardous substances • facilitating reuse and high-quality recycling by selective removal of materials using construction and demolition waste sorting systems

Does building design and construction technology support the circular economy by making it more resource efficient, adaptable, flexible and dismantable?
DNSH-Pollution and prevention control
Do all building materials used comply with the requirements specified in Annex 4a and 4b?
Were only components and materials used that emit less than 0.06 mg of formaldehyde per m^3 of material or component and less than 0.001 mg of other category 1A and 1B carcinogenic VOCs per m^3 of material or component? [This requirement applies to the following products used in new construction: Paints, varnishes, ceiling tiles, floor coverings, including associated adhesives and sealants, interior insulation, and interior surface treatments, e.g., to treat moisture and mold].
Has the site been inspected for contaminants?
Have measures been taken to reduce noise, dust, and pollutant emissions during construction or maintenance activities?
DNSH-Protection and restoration of biodiversity and ecosystems
Does an environmental impact assessment need to be conducted in accordance with Directive 2011/92/EU and if so, has it been conducted? If an environmental impact assessment must be conducted, are the necessary remedial and compensatory measures implemented?
Has an appropriate impact assessment been conducted in accordance with Directives? • 2009/147/EC on the conservation of wild birds and • 92/43/EEC on the conservation of natural habitats and of wild fauna and flora This is required for construction projects in proximity to biodiversity-sensitive area (including the Natura 2000 network of protected areas, UNESCO World Heritage Sites and Biodiversity Focus Areas, and other protected areas)? If an impact assessment is conducted, have the necessary mitigation measures been implemented?
The new construction is not built on one of the following: a) Arable land and crop land with moderate to high level of soil fertility and below ground biodiversity (according to EU LUCAS survey)? b) Greenfield land of recognized high biodiversity value and land serving as habitats of endangered species (flora and fauna) listed on the European Red List or the IUCN Red List? c) Land that meets the definition of "forest" as set out in national law used in the national greenhouse gas inventory or, in the absence of such a definition, the FAO definition of "forest"? FAO 1. minimum area size: 5000m^2 2. minimum degree of canopy: >10%.