

# Appendix 8: Make Significant Contribution and Do No Significant Harm criteria for the Construction sector

## 8.1. Construction of new buildings

*KeSIC code: 4100*

### Description of economic activity

Construction of new buildings. This relates to activities under KeSIC codes construction of buildings

### Make Significant Contribution Criteria

#### A) Climate Change Mitigation

##### Objective

The construction of new buildings designed to minimise energy use and carbon emissions throughout the lifecycle can make a substantial contribution to climate change mitigation by saving large part of the energy and carbon emissions that would be associated with conventionally designed buildings.

Condition for non-eligibility: to avoid lock-in and undermining the climate mitigation objective, the construction of new buildings designed for the purpose of extraction, storage, transportation, or manufacture of fossil fuels is not eligible. Coal, liquid fuel and gas companies, operational facilities and infrastructure are therefore not eligible.

Use of alternative schemes as proxies, established schemes such as 'green building' certifications or building regulations and standards may be used as alternative proof of eligibility. The organisation responsible for the scheme will be able to apply for official recognition of its scheme by presenting evidence that a specific level of certification/regulation can be considered equivalent (or superior) to the taxonomy mitigation and DNSH threshold for the relevant climatic zone and building type. The official recognition of a scheme is confirmed and identified through inclusion in the relevant metrics and thresholds as an alternative approach in future taxonomy updates (as relevant).

##### Metrics and thresholds

Constructions of new buildings for which:

1. 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 requirements in national measures. The

energy performance is certified using an as built Energy Performance Certificate (EPC).

2. For buildings larger than 5000 m<sup>2</sup>, upon completion, the building resulting from the construction undergoes testing for air-tightness 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.
3. For buildings larger than 5000 m<sup>2</sup>, the life-cycle Global Warming Potential (GWP) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand.

## **B) Climate Change Adaptation**

Generic screening criteria for activities Making a Substantial Contribution to climate change adaptation Section 8.2.

## **Do No Significant Harm Assessment**

The main potential for significant harm to the other environmental objectives associated with the construction of new buildings is determined by:

1. Lack of resistance to extreme weather events (including flooding), and lack of resilience to future temperature increases in terms of internal comfort conditions.
2. Excessive water consumption due to inefficient water appliances and/or poor water use amenities design.
3. Landfill and/or incineration of construction and demolition waste that could be otherwise recycled/reused.
4. A failure to operationalise strategic national waste management practices.
5. Failure to design for disassembly and increased circularity.
6. Through materials use and operations, increased emissions of VOCs and formaldehyde.
7. Presence of asbestos and/or substances of very high concern in the building materials.
8. Presence of hazardous contaminants in the soil of the building site.
9. Inappropriate building location: impacts on ecosystems if built on greenfield and especially if in a conservation area or high biodiversity value area.
10. Indirect damage to ecosystems due to the use of materials and products originating from virgin sources that are not sustainably managed (refers to forestry and mining, for instance)

## **A) Climate Change Mitigation**

The building must comply with all applicable mandatory **Energy (Energy Management) Regulations (2012)**.

To avoid lock-in and undermining the climate mitigation objective, the construction of new buildings designed for the purpose of extraction, storage, transportation, or manufacture of fossil fuels is not eligible for the Taxonomy.

Buildings' design must accommodate support for alternative transportation modes appropriate to the intended users of the building..

## **B) Climate Change Adaptation**

Generic DNSH criteria section 8.3.1.

## **C) Sustainable use of water and marine resources**

Where installed, the specified water use for the following water appliances are attested by product datasheets and/or a building certification in accordance with the technical specifications laid down per EDGE Water Efficiency measures

An IFC EDGE Level 1 certification is acceptable for demonstrating this DNSH requirement is met.

To avoid impact from the construction site, activity complies with the criteria set out in the Generic DNSH criteria section 8.3.2.

## **D) Ecosystem protection and restoration**

The new construction must not be built on protected natural areas, such as land designated as UNESCO World Heritage and Critical Biodiversity Areas (CBAs), or equivalent as defined by **THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (CONSERVATION OF BIOLOGICAL DIVERSITY AND RESOURCES, AND ACCESS TO GENETIC RESOURCES AND BENEFITS SHARING) REGULATIONS, 2006**, UNESCO and / or the International Union for Conservation of Nature (IUCN) under the following categories:

Category Ia: Strict Nature Reserve

Category Ib: Wilderness Area

Category II: National Park

Buildings that are associated supporting infrastructure to the protected natural area, such as visitor centres, museums or technical facilities are exempted from this criterion.

The new construction must not be built on arable or greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species (flora and fauna) listed on the IUCN Red List.

At least 50% of all timber products used in the new construction for structures, cladding and finishes must have been either recycled/reused or sourced from sustainably managed forests as certified by third-party certification audits performed by accredited certification bodies, e.g., FSC/PEFC standards or equivalent.

Buildings' design must prioritise avoidance of environmental impacts to sensitive landscapes and include hard surfaces and building exterior maintenance practices that reduce the environmental impact and improve ecological value.

## **E) Pollution prevention**

It is ensured that building components and materials do not contain asbestos and the use of chemicals adhere to the **ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT, 1999 (ACT NO 8 OF 1999), Environment Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2018, and the Occupational Health and Safety Act 2007**. Building components and materials used in the construction that may come into contact with occupiers emit less than 0,06 mg of formaldehyde per m<sup>3</sup> of material or component and less than 0,001 mg of categories 1A and 1B carcinogenic volatile organic compounds per m<sup>3</sup> of material or component, upon testing in accordance with CEN/TS 16516522 and ISO 16000-3523 or other comparable standardised test conditions and determination methods.

A GBCSA Green Star certification that provides evidence that VOC and Formaldehyde credits are pursued, is acceptable for demonstrating this DNSH requirement is met.

**F) Sustainable resource use and circularity**

The building should minimise waste from construction or destruction going to landfill and maximise reuse and/or recycling of materials.

Under this green building's definition, at least 50% (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use or sent for recycling or other material recovery, including backfilling operations that use waste to substitute other materials.

Disposal of waste must be compliant with the requirements of the **ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (WASTE MANAGEMENT) REGULATIONS 2006, Drafted Sustainable Waste Management Act no. 31 of 2022**

Building designs and construction techniques support circularity and demonstrate, with reference to ISO 20887 or other standards for assessing the ease of disassembly for reuse of materials or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and dismantlable to enable reuse and recycling.

Building design that provides for recycling during operation is required.

## 8.2. Building renovation

**KeSIC code: 4100**

### Description of economic activity

Renovation of existing buildings (residential and non-residential). This relates to activities under KeSIC code.

### Make Significant Contribution Criteria

#### A) Climate Change Mitigation

##### Objective

The renovation of existing buildings to improve their energy performance makes a substantial contribution to climate change mitigation by reducing energy consumption and GHG emissions for the remaining operational phase of the buildings, and by avoiding emissions that would be associated with the construction of new buildings. The detailed technical screening criteria for MSC climate change mitigation are similar for renovation as for new build, given that the same end performance is the objective. Additional DNSH details apply for renovations.

Condition for non-eligibility: to avoid lock-in and undermining the climate mitigation objective, the renovation of buildings occupied for the purpose of extraction, storage, transportation or manufacture of fossil fuels is not eligible.

Use of alternative schemes as proxies, established schemes such as 'green building' certifications or building regulations and standards may be used as alternative proof of eligibility. The organisation responsible for the scheme will be able to apply for official recognition of its scheme by presenting evidence that a specific level of certification/regulation can be considered equivalent (or superior) to the taxonomy mitigation and DNSH threshold for the relevant climatic zone and building type. The official recognition of a scheme is confirmed and identified through inclusion in the relevant metrics and thresholds as an alternative approach in future taxonomy updates (as relevant).

##### Metrics and thresholds

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%.

#### B) Climate Change Adaptation

Generic screening criteria for activities Making a Substantial Contribution to climate change adaptation Section 8.2.

### Do No Significant Harm Assessment

The main potential for significant harm to the other environmental objectives associated with the renovation of existing buildings is determined by:

1. Lack of resistance to extreme weather events (including flooding), and lack of resilience of to future temperature increases in terms of internal comfort conditions.
2. Excessive water consumption due to inefficient water appliances and/or poor water use amenities design.
3. Landfill and/or incineration of construction and demolition waste that could be otherwise recycled/reused.
4. A failure to operationalise strategic national waste management practices.
5. Failure to design for disassembly and increased circularity.
6. Through materials use and operations, increased emissions of VOCs and formaldehyde.
7. Presence of asbestos and/or substances of very high concern in the building materials.
8. Presence of hazardous contaminants in the soil of the building site.
9. Inappropriate building location: impacts on ecosystems if built on greenfield and especially if in a conservation area or high biodiversity value area.
10. Indirect damage to ecosystems due to the use of materials and products originating from virgin sources that are not sustainably managed (refers to forestry and mining, for instance)

#### **A) Climate Change Mitigation**

The measures adopted to improve the resilience of the building must not increase the rates of operational carbon emissions of the building. Exceptions are allowed if it can be demonstrated that increase in emissions is necessary to carry out the measures, and there is a positive trade-off.

To avoid lock-in and undermining the climate mitigation objective, the renovation of buildings designed for the purpose of extraction, storage, transportation, or manufacture of fossil fuels is not eligible for the Taxonomy. Such use cases to be phased out and buildings repurposed as appropriate, for which renovations to improve performance as detailed above ought to be undertaken.

Buildings' design must accommodate support for alternative transportation modes appropriate to the intended users of the building.

#### **B) Climate Change Adaptation**

Generic DNSH criteria section 8.3.1.

#### **C) Sustainable use of water and marine resources**

Where installed, the specified water use for the following water appliances are attested by product datasheets, a building certification, in accordance with the technical specifications laid down per EDGE Water Efficiency measures

An IFC EDGE Level 1 certification is acceptable for demonstrating this DNSH requirement is met.

To avoid impact from the construction site, activity complies with the criteria set out in Generic DNSH criteria section 8.3.2.

**D) Ecosystem protection and restoration**

N/A

**E) Pollution prevention**

It is ensured that building components and materials do not contain asbestos and the use of chemicals adhere to the **ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT, 1999 (ACT NO 8 OF 1999), Environment Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2018, and the Occupational Health and Safety Act 2007**. Building components and materials used in the construction that may come into contact with occupiers emit less than 0,06 mg of formaldehyde per m<sup>3</sup> of material or component and less than 0,001 mg of categories 1A and 1B carcinogenic volatile organic compounds per m<sup>3</sup> of material or component, upon testing in accordance with CEN/TS 16516522 and ISO 16000-3523 or other comparable standardised test conditions and determination methods .

**F) Sustainable resource use and circularity**

The building should minimise waste from renovation waste going to landfill and maximise reuse and/or recycling of materials.

Under this green building's definition, at least 50% (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use or sent for recycling or other material recovery, including backfilling operations that use waste to substitute other materials.

Disposal of waste must be compliant with the requirements of the **ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (WASTE MANAGEMENT) REGULATIONS 2006, Drafted Sustainable Waste Management Act no. 31 of 2022**

Building renovation plans and techniques support circularity and demonstrate, with reference to ISO 20887 or other standards for assessing the ease of disassembly for reuse of materials or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and dismantlable to enable reuse and recycling.

## 8.3. Individual measures and professional services

**KeSIC code: 43**

### Description of economic activity

Individual measures and professional services. this relates to activities under KeSIC codes 43 Specialised construction activities.

### Make Significant Contribution Criteria

#### A) Climate Change Mitigation

##### Objective

Individual measures contribute to climate change mitigation by reducing energy use and carbon emissions for the operational phase of the building. Professional services are a necessary support and validation mechanism, especially for building renovation. The investment linked to the individual measure(s) must be aimed at improving energy performance and/or reduction of carbon emissions. The motivation can be demonstrated through an energy audit, an Energy Performance Certificate (EPC) or any other transparent and proportionate method.

##### Metrics and thresholds

There are no defined metrics across the individual measures and professional services. The following individual measures are eligible if compliant with minimum requirements set for individual components and systems in the applicable national regulations.

- a. Addition of insulation to the existing envelope components, such as external walls, roofs (including green roofs), lofts, basements and ground floors (including measures to ensure air-tightness, measures to reduce the effects of thermal bridges and scaffolding) and products for the application of the insulation to the building envelope (mechanical fixings, adhesive).
- b. Replacement of existing windows with new energy efficient windows.
- c. Replacement of existing external doors with new energy efficient doors.
- d. installation and replacement of heating, ventilation and air-conditioning (HVAC) and water heating systems, including equipment related to district heating and cooling services, with highly efficient technologies;
- e. Replacement of inefficient boiler or stove with highly efficient condensing boiler. The following individual measures are eligible if specific requirements are met:
- f. Replacement of old pumps with efficient circulating pumps g. Installation of efficient LED lighting appliances and systems.
- g. installation of low water and energy using kitchen and sanitary water fittings which comply with technical specifications set out in Appendix B: Technical specification for water appliances and, in case of shower solutions, mixer showers, shower outlets and taps, have a max water flow of 6 L/min or less

attested by an existing label in the market. The following individual measures are eligible:

- h. Installation of zoned thermostats, smart thermostat systems and sensing equipment, e.g., motion and day light control.
- i. Installation of Building Management Systems (BMS) and Energy Management Systems (EMS).
- j. Installation of charging stations for electric vehicles.
- k. Installation of smart meters for gas, heat, cool and electricity.
- m. Installation of façade and roofing elements with a solar shading, solar reflectivity or solar control

The following individual measures are eligible if installed on-site as building services:

- l. Installation of solar photovoltaic systems (and the ancillary technical equipment).
- m. Installation of solar hot water panels (and the ancillary technical equipment).
- n. Installation, maintenance, repair and upgrade of heat pumps contributing to the targets for renewable energy in heating and cooling.
- o. Installation of wind turbines (and the ancillary technical equipment).
- p. Installation of solar transpired collectors (and the ancillary technical equipment).
- q. Installation of thermal or electric energy storage units (and the ancillary technical equipment).
- r. Installation of High Efficiency Micro CHP (combined heat and power) plant
- s. Installation of heat exchanger/recovery systems.

The following professional services are eligible:

- t. Technical consultations (energy consultants, Green Star accredited professionals, EDGE experts, energy simulation, project management, production of EPC, dedicated training, etc.) linked to the individual measures mentioned above.
- u. Accredited energy audits and building performance assessments (EDGE auditors).
- v. Energy Management Services.
- w. Energy Performance Contracts.
- x. Energy Services provided by Energy Service Companies (ESCOs)

## **B) Climate Change Adaptation**

Generic screening criteria for activities Making a Substantial Contribution to climate change adaptation Section 8.2.

### **Do No Significant Harm Assessment**

The main potential for significant harm to the other environmental objectives associated with individual measures is determined by:

- Excessive water consumption due to inefficient water appliances.

- The handling of building components that are likely to contain substances of concern (e.g. asbestos containing materials) and of any hazardous construction and demolition waste arising from the building renovation;
- Ensuring the future possibility of reusing and recycling building component and materials through careful selection of components/materials that prioritises recyclable materials and avoids hazardous substances.

**A) Climate Change Mitigation**

N/A

**B) Climate Change Adaptation**

Any potential risks to the good status or the good ecological potential of bodies of water, including surface water and groundwater, or to the good environmental status of marine waters from the researched technology, product or other solution are evaluated and addressed.

**C) Sustainable use of water and marine resources**

N/A

**D) Ecosystem protection and restoration**

It is ensured that building components and materials do not contain asbestos and the use of chemicals adhere to the **ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT, 1999 (ACT NO 8 OF 1999), Environment Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2018, and the Occupational Health and Safety Act 2007**

**E) Pollution prevention**

In case of addition of thermal insulation to the existing building envelope: a building survey must be carried out in accordance with national legislation by a competent specialist with training in asbestos surveying and in identification of other materials containing substances of concern. Any stripping of lagging that contains or is likely to contain asbestos, breaking or mechanical drilling or screwing and/or removal of insulation board, tiles and other asbestos containing materials shall be carried out by appropriately trained personnel, with health monitoring before, during and after the works, in accordance with national legislation.

**F) Sustainable resource use and circularity**

N/A

## **8.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)**

**KeSIC code:** *No specific KeSIC code*

### **Description of economic activity**

Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)

### **Make Significant Contribution Criteria**

**A) Climate Change Mitigation**

Installation, maintenance or repair of charging stations for electric vehicles.

**B) Climate Change Adaptation**

Generic screening criteria for activities Making a Substantial Contribution to climate change adaptation Section 8.2.

### **Do No Significant Harm Assessment**

**C) Climate Change Mitigation**

The building is not dedicated to extraction, storage, transport or manufacture of fossil fuels.

**D) Climate Change Adaptation**

Generic DNSH criteria section 8.3.1.

**E) Sustainable use of water and marine resources**

N/A

**F) Ecosystem protection and restoration**

N/A

**G) Pollution prevention**

N/A

**H) Sustainable resource use and circularity**

N/A

Activities eligible in the KGFT first edition but without technical screening criteria developed:

**8.5. Sustainable cities/resilient infrastructure**

**8.6. Spatial Planning**