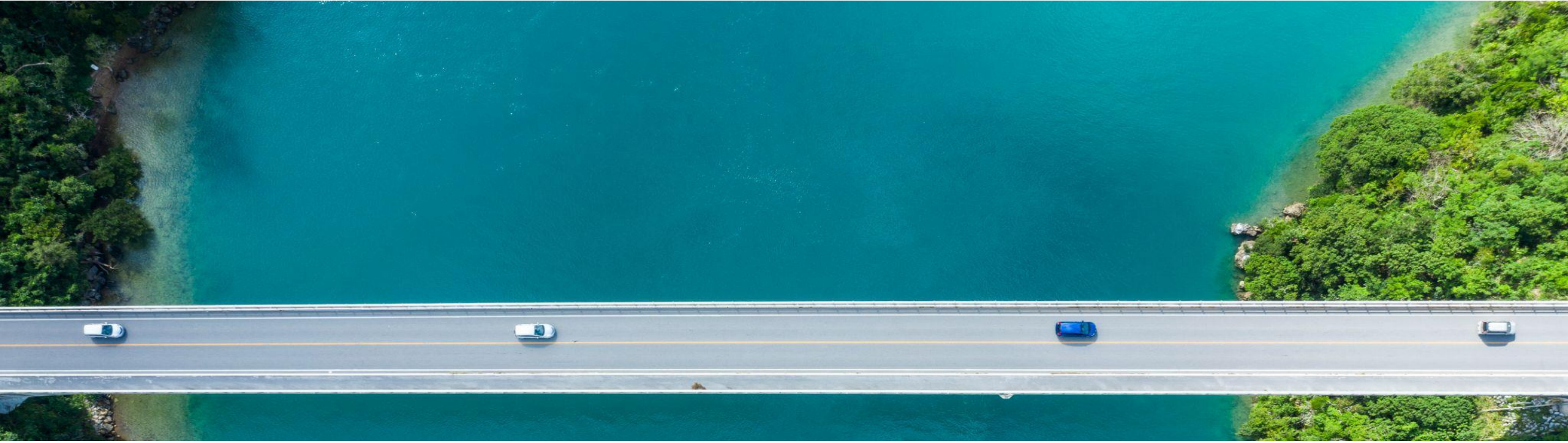


REFORM/SC2021/129RRF

General Technical Support for the Implementation of Slovenia's Recovery and Resilience Plan

Do no significant harm (DNSH) workshop, 15 September 2022

pwc

European Commission

Proposed agenda

Time	Activity
09:00 – 09:20	Keynote addresses
09:20 – 09:40	Overview of key DNSH legislation, guidance and principles
09:40 – 10:10	Overview of the DNSH review approach
10:10 – 10:40	Key observations from review of project examples – Part 1
10:40– 11:00	Coffee break
11:00 – 11:30	Key observations from review of project examples – Part 2
11:30 – 12:00	Implementation and monitoring of DNSH: a project example
12:00 – 12:30	Observations from other member states
12:30 – 13:00	Q&A session

1

Keynote addresses

2

Overview of key DNSH legislation, guidance and principles

Environmental objectives

1 Climate change mitigation	2 Climate change adaptation	3 Protection of water and marine resources	4 Transition to a circular economy	5 Prevention of pollution	6 Protection of biodiversity & ecosystems
Activity leads to significant greenhouse gas emissions	Activity leads to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets.	Activity is detrimental: • 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.	• Activity leads to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources at one or more stages of the life cycle of products; or • Activity leads to a significant increase in the generation, incineration or disposal of waste; or • The long-term disposal of waste may cause significant and long-term harm to the environment.	Activity leads to a significant increase in the emissions of pollutants into air, water or land, as compared with the situation before the activity started.	Activity is: • Significantly detrimental to the good condition and resilience of ecosystems; or • Detrimental to the conservation status of habitats and species, including those of EU interest.

DNSH review possible outcomes

For the assessment of DNSH, the European Commission has only two rating options:

- A if no measure leads to significant harm to any of the six environmental objectives
- C if one or more measures lead to significant harm to any of the six environmental objectives

The European Commission can only endorse an RRP if no assessment criteria is rated with a 'C'.

The result is always binary: compliant / not compliant.

Key DNSH principles

1. Complying with the applicable EU and national environmental law is a separate obligation. ***It does not waive the need for a DNSH assessment.***

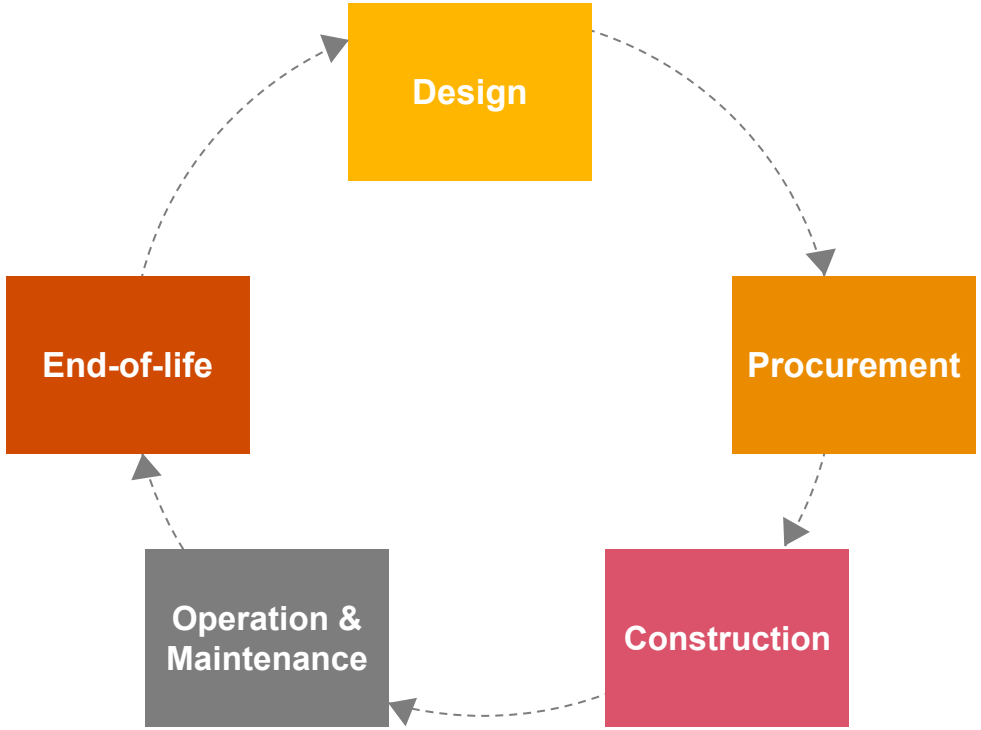
2. Environmental impact assessments (EIAs, SEAs) and sustainability proofing of a measure/project do not automatically entail that no significant harm is done – but should be taken into account for the DNSH assessment.

3. The DNSH assessment needs to consider the life cycle of the activity that results from the measure (i.e. apply life cycle considerations) - ***Applying life cycle considerations rather than carrying out a life cycle assessment suffices for the purposes of the DNSH assessment in the context of the RRF (measure/ project dependent).***

4. Ensure that measures/ projects are ***future-proof and do not lead to harmful lock-in effects***, and to promote beneficial dynamic effects, accompanying reforms and investments may be required.

5. The ***direct and primary indirect impacts*** of a measure/ project are relevant for the DNSH assessment.

Addressing the whole life cycle



EU legislation

1. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Article 17)

2. Regulation (EU) 2021/241 Of The European Parliament And Of The Council of 12 February 2021 establishing the Recovery and Resilience Facility

- *"The RRF shall only support measures respecting the principle of do no significant harm."*

EU guidance

1. Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation, February 2021

2. Annexes to the Commission Notice Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation, February 2021

3. ‘Do no significant harm’ Technical Guidance by the Commission, Recovery and Resilience Facility ECCWG, February 2021

DNSH compliance

1. Slovenia Recovery and Resilience Plan, July 2021

2. Recovery and Resilience Facility Operational arrangements between the European Commission and Slovenia, July 2021

3. Council Implementing Decision (CID) on the approval of the assessment of the recovery and resilience plan for Slovenia, July 2021

For elements clearly pinpointed in general DNSH documents and specific to Slovenia => *compliance*

- *"The Commission will notably assess such DNSH eligibility conditions when the CID specifies so."*

  -> the need of proof must be take into account from the start

  -> all procedure must be well documented

Responsibility of public authorities

In the RRF, the responsibility of public authorities is to:

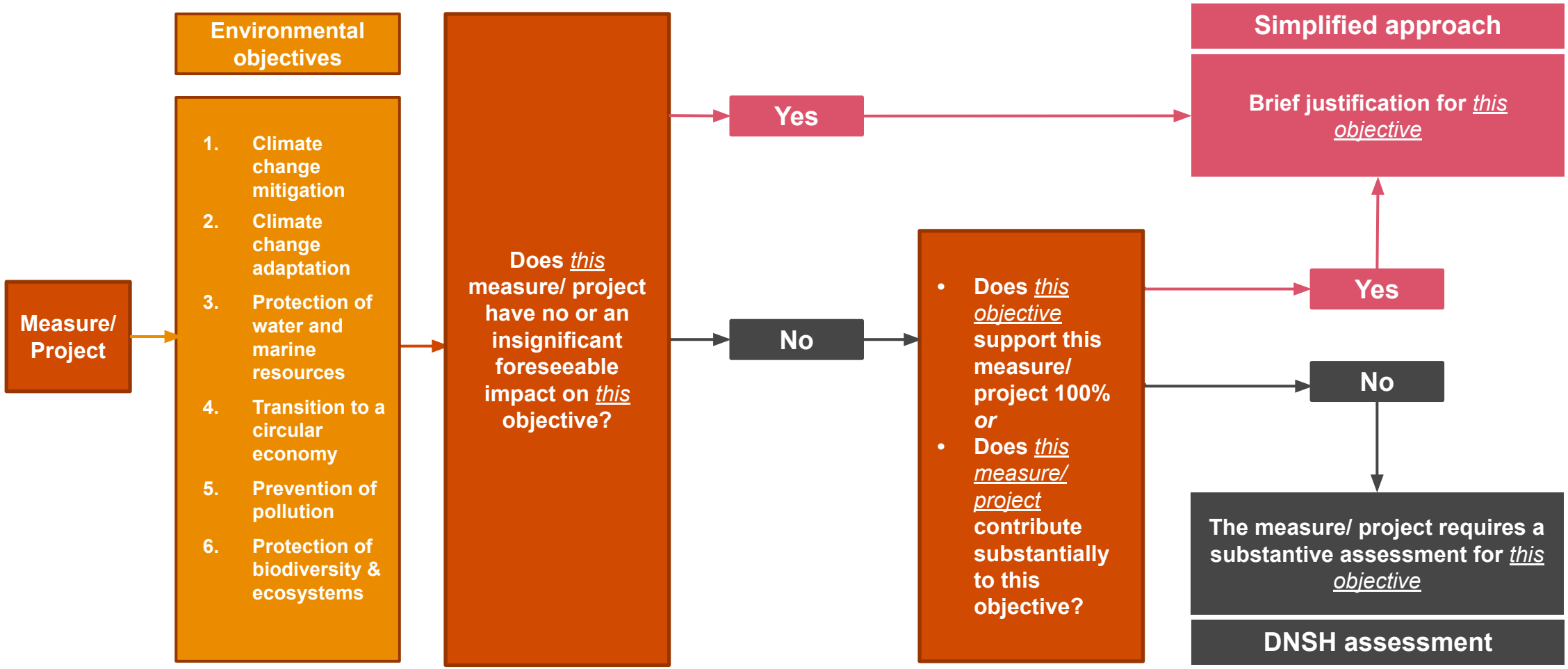
- Put in place relevant measures to ***ensure compliance with specific DNSH points*** identified in regulatory documents and guidance
- Ensure appropriate diligence at general level to identify ***risks*** in order to ***avoid, or mitigate, the "foreseeable (negative) impact"*** measures/ projects could generate on the environmental objectives

- **Ensure compliance:** specific attention points identified by the EC must be the main focus of public authorities as they are the main risks and are likely to be controlled
- **Appropriate diligence:** a balanced, yet rigorous, approach must be found in the interest of all parties
- **Risks:** foresee any unplanned event that could generate significant environmental impact
- **Avoid, or mitigate:** show that public authorities have used the appropriate available tools

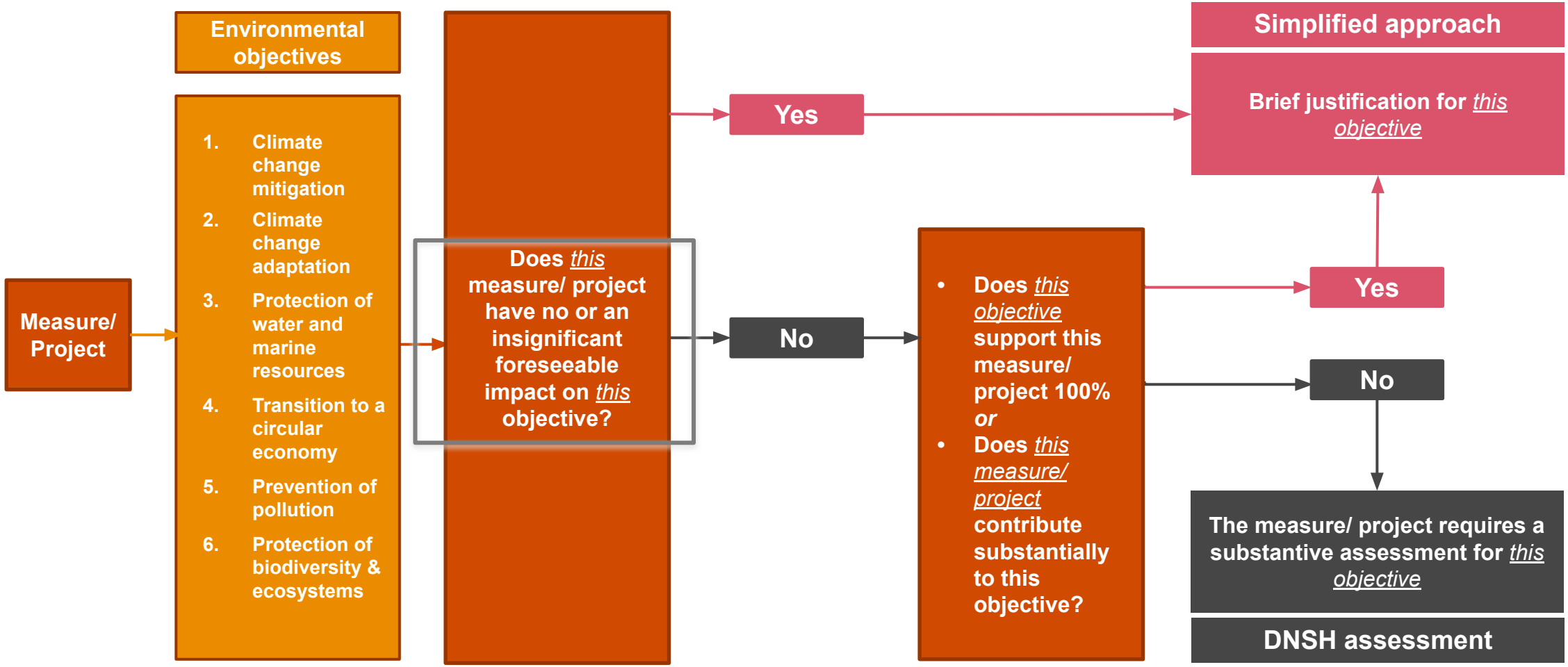
3

Overview of the DNSH review approach

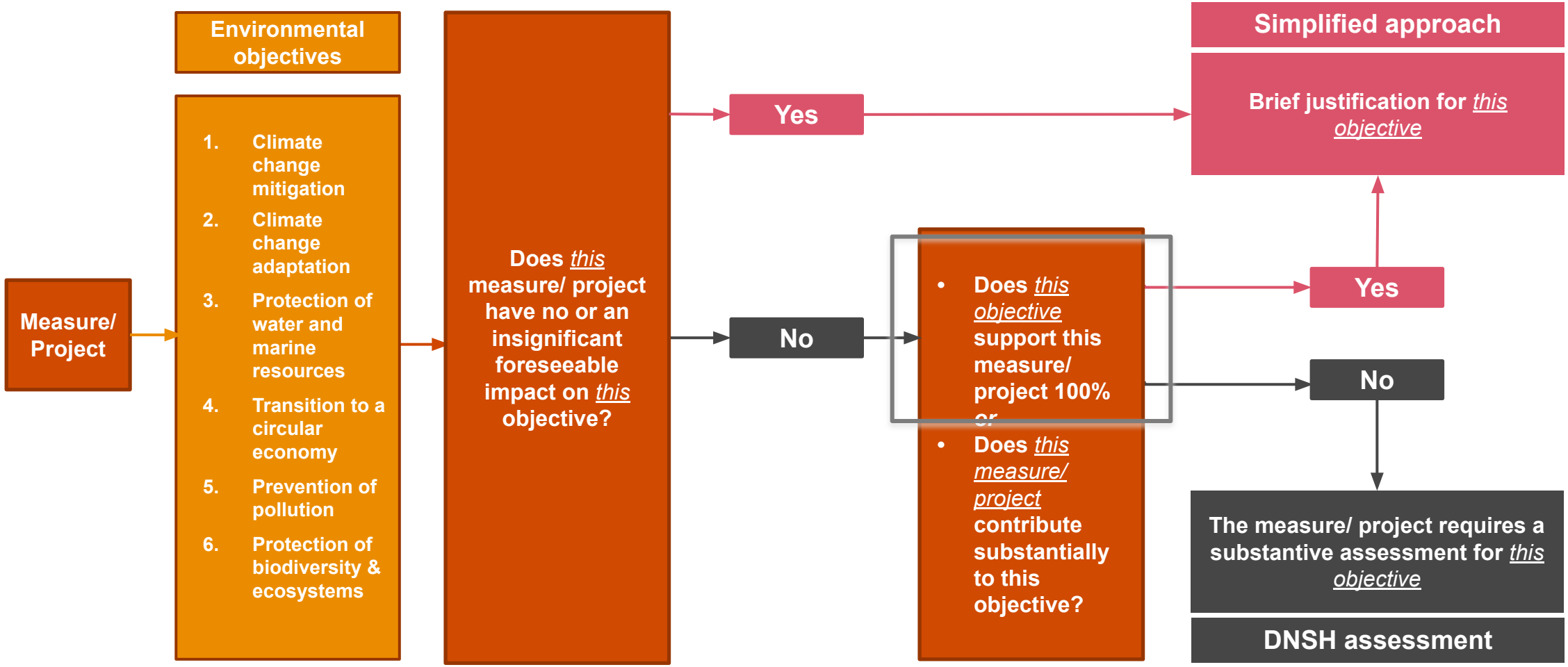
Overview of DNSH assessment approach



Overview of DNSH assessment approach



Overview of DNSH assessment approach



Does this objective support this measure/ project 100%?

According to the methodology in ANNEX VI of the RRF Regulation

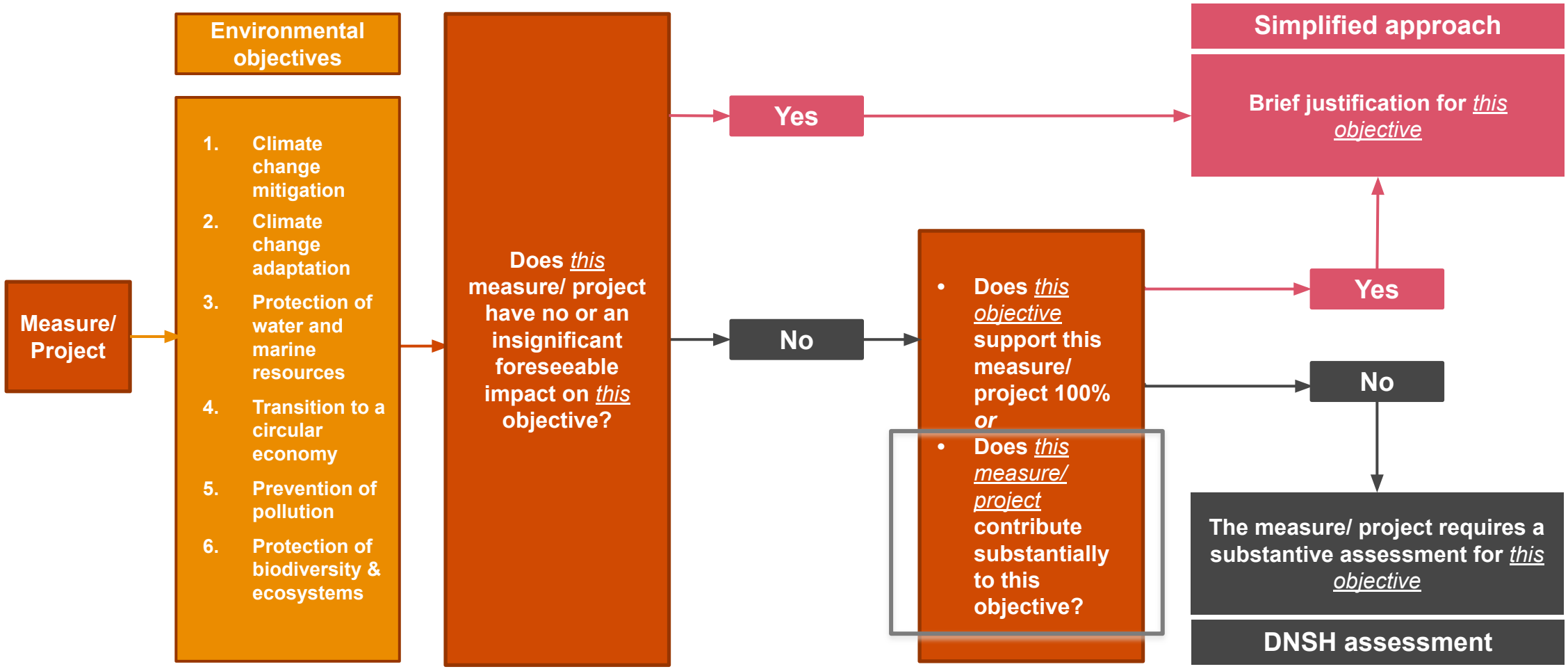
To what extent each measure/ project contributes fully (100%), partly (40%) or has no impact (0%) on the climate and/or environmental objectives?

Methodology for climate tracking

Dimensions and codes for the types of intervention for the Facility

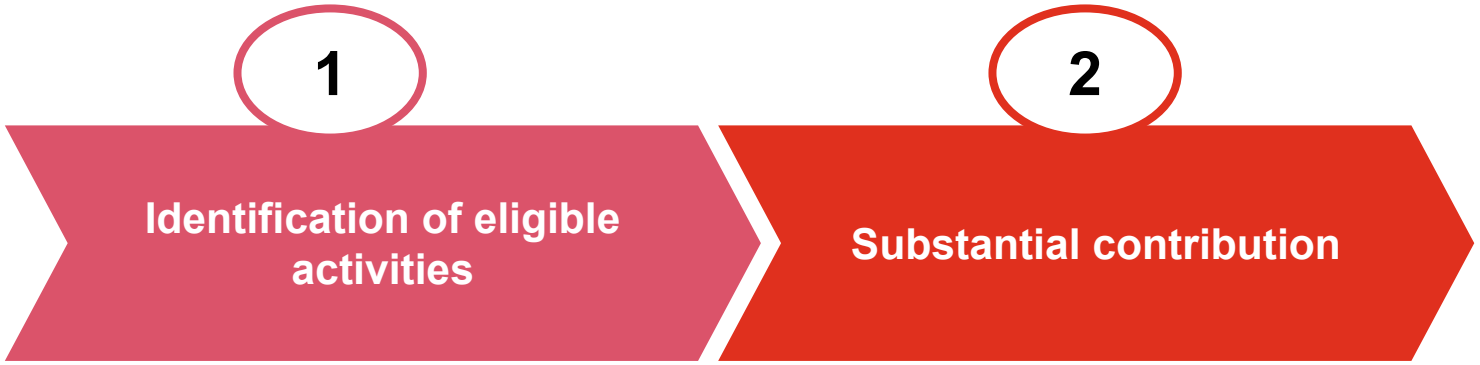
	INTERVENTION FIELD	Coefficient for the calculation of support to climate change objectives	Coefficient for the calculation of support to environmental objectives
001	Investment in fixed assets, including research infrastructure, in micro enterprises directly linked to research and innovation activities	0 %	0 %
002	Investment in fixed assets, including research infrastructure, in small and medium-sized enterprises (including private research centres) directly linked to research and innovation activities	0 %	0 %
002 bis1	Investment in fixed assets in large, including research infrastructure, enterprises ([1]) directly linked to research and innovation activities	0 %	0 %
003	Investment in fixed assets, including research infrastructure, in public research centres and higher education directly linked to research and innovation activities	0 %	0 %
004	Investment in intangible assets in micro enterprises directly linked to research and innovation activities	0 %	0 %

Overview of DNSH assessment approach



Does this measure/ project contribute substantially to this objective?

Pursuant to the EU Taxonomy Regulation



List defined in delegated acts
mainly according to European NACE nomenclature

Criteria for achieving at least 1 of the environmental objectives

Currently only really possible for the first two out of the six environmental objectives (climate change mitigation and climate change adaptation) + only if measure/project is related to one of the eligible activities

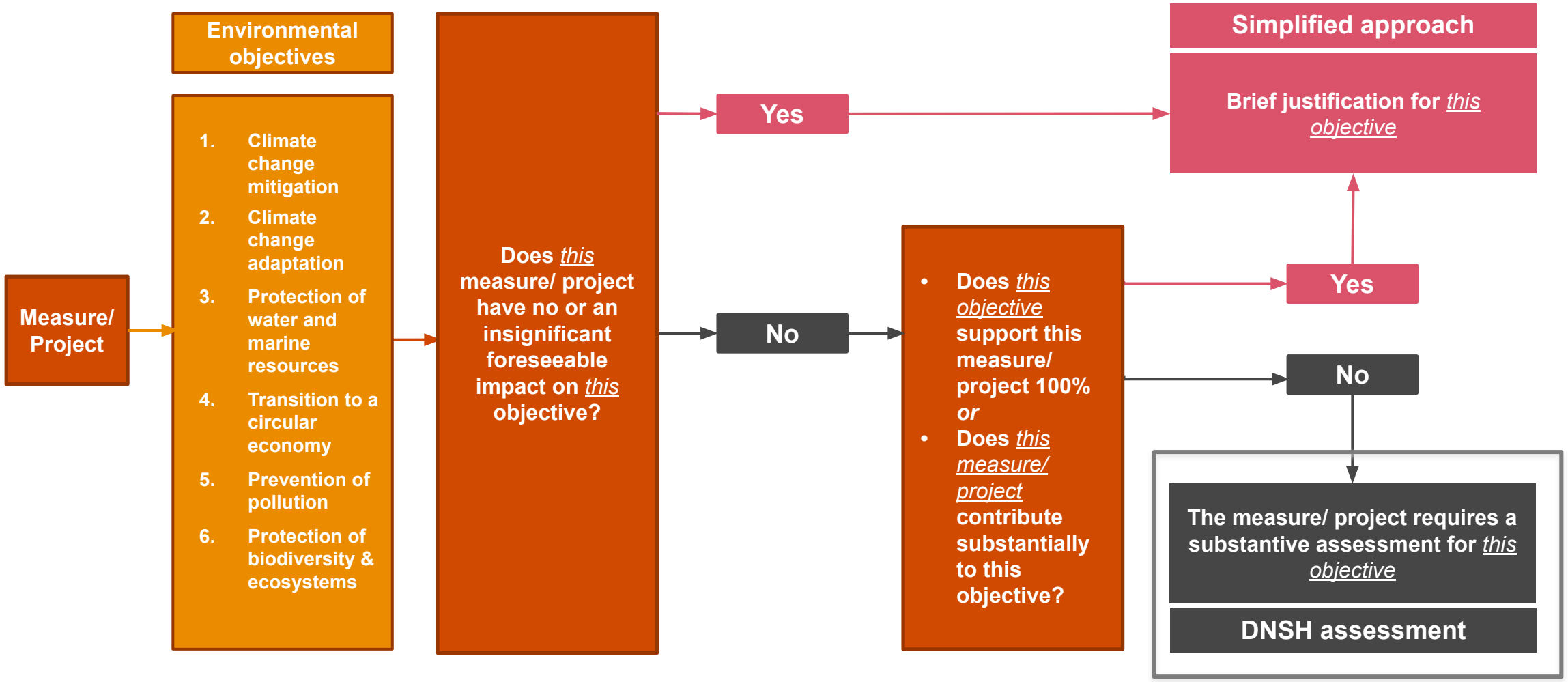
Does this measure/ project contribute substantially to this objective?

Example: *Renovation of existing buildings*

Substantial contribution to climate change mitigation		**DNSH to other five environmental objectives**	
1 Climate change mitigation	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%.	2 Climate change adaptation	The activity complies with the criteria set out in Appendix A to Annex I of the Climate Delegated Act.
		3 Protection of water and marine resources	Where installed as part of the renovation works, except for renovation works in residential building units, the specified water use for the following water appliances is attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to this Annex: • wash hand basin taps and kitchen taps have a maximum water flow of 6 litres/min; • showers have a maximum water flow of 8 litres/min; • 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; • urinals use a maximum of 2 litres/bowl/hour. Flushing urinals have a maximum full flush volume of 1 litre.
		4 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 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 limit waste generation in processes related 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. 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.
		5 Prevention of pollution	Building components and materials used in the construction complies with the criteria set out in Appendix C to Annex I of the Climate Delegated Act. Building components and materials used in the building renovation that may come into contact with occupiers emit less than 0,06 mg of formaldehyde per m^3 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 m^3 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. Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.
		6 Protection of biodiversity & ecosystems	N/A.

Source: ***EU Taxonomy Compass***

Overview of DNSH assessment approach



Overview of DNSH assessment approach

1 Climate change mitigation

- For a measure in an area not covered by ETS benchmarks, the ***measure is compatible with achieving the GHG emissions reduction target by 2030 and with the objective of reaching climate neutrality by 2050***.
- For a measure promoting electrification, the measure is complemented with evidence that the energy mix is on a path to decarbonise in line with the GHG emissions reduction targets by 2030 and 2050, and is accompanied by increased renewables generation capacity.
- For projects above the threshold of EUR 10 million, regardless of whether they require an EIA or not, the assessment must proceed with the ***screening and proofing process, in line with the guidelines for climate neutrality*** (as per the Technical guidance on sustainability proofing for the InvestEU Fund (2021/C 280/01)).

2 Climate change adaptation

- A ***proportionate climate risk assessment*** has been carried out.
- If an investment is above the value of €10 million, ***a climate vulnerability and risk assessment has been carried out or is planned*** leading to identification, appraisal and implementation of relevant adaptation measures.

Overview of DNSH assessment approach

3 Protection of water and marine resources

- Environmental degradation risks related to preserving water quality and avoiding water stress have been identified and addressed in accordance with the requirements under the ***Water Framework Directive and a River Basin Management Plan***.
- In the case of a measure in relation to the coastal and marine environment, the measure does not permanently preclude or compromise the achievement of good environmental status as defined under the ***Marine Strategy Framework Directive*** at the level of the marine region or subregion concerned or in the marine waters of other Member States.
- The measure does not significantly impact (i) affected water bodies (nor prevent the specific water body to which it relates nor other water bodies in the same river basin to achieve ***good status or good potential***, in accordance with the requirements of the Water Framework Directive) or (ii) protected habitats and species directly dependent on water.

4 Transition to a circular economy

- The measure is ***in line with the relevant national or regional waste management plan and waste prevention programme***, in accordance with Article 28 of Directive 2008/98/EC as amended by Directive 2018/851/EU, and, where available, the relevant national, regional or local circular economy strategy.
- The measure is in line with the ***principles of sustainable products*** and ***the waste hierarchy***, with a priority on waste prevention.
- The measure ensures resource efficiency for major resources used. Inefficiencies in the use of resources are addressed, including ensuring that products, buildings and assets are efficiently used and durable.
- The measure ensures the effective and efficient separate collection of waste at source and that source-segregated fractions are sent for preparation for reuse or recycling.

Overview of DNSH assessment approach

5

Prevention of pollution

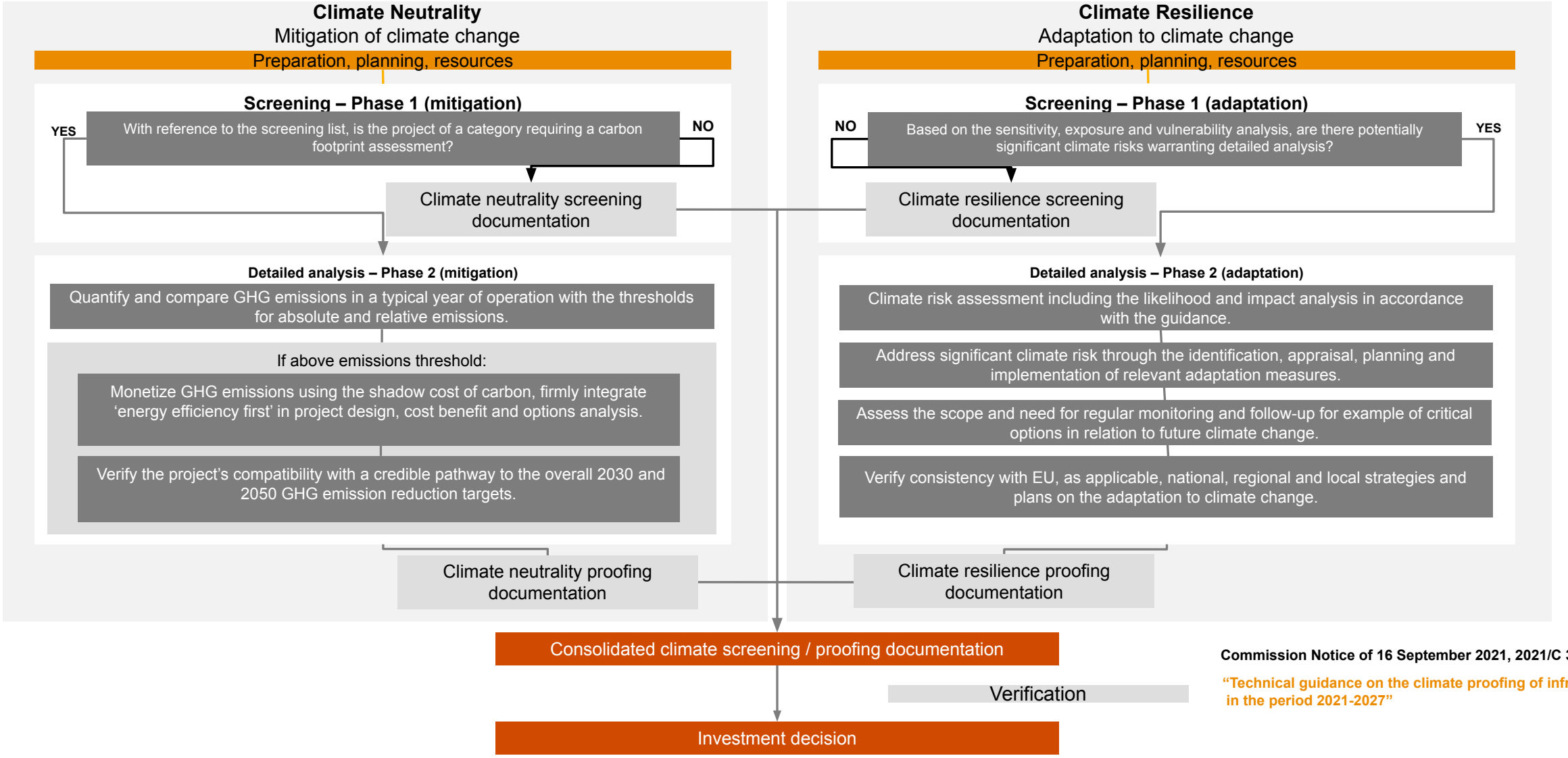
- The measure is in line with existing global, national, regional or local plans for pollution reduction.
- The measure ***complies with the relevant Best Available Techniques (BAT) conclusions*** or with the ***Best Available Techniques Reference Documents (BREFs)*** in the sector.
- Alternative solutions to the use of hazardous substances will be implemented.
- The measure is in line with the sustainable use of pesticides.
- The measure is in line with best practices to combat antimicrobial resistance.

6

Protection of biodiversity & ecosystems

- The measure respects the ***mitigation hierarchy*** and other relevant requirements under the ***Habitats and Birds Directives***.
- An ***environmental impact assessment (EIA)*** has been carried out and the ***conclusions have been implemented***.

Climate screening and proofing process



Commission Notice of 16 September 2021, 2021/C 373/01

"Technical guidance on the climate proofing of infrastructure in the period 2021-2027"

Projects that need/ do not need screening for climate change mitigation

In general, a ***carbon footprint assessment*** will be required for these project categories:

— Municipal solid waste landfills
— Municipal waste incineration plants
— Large wastewater treatment plants
— ***Manufacturing industry***
— Chemicals and refining
— Mining and basic metals
— Pulp and paper
— Rolling stock, ship, transport fleet purchases
— ***Road and rail infrastructure, urban transport***
— Ports and logistic platforms
— Power transmission lines
— ***Renewable sources of energy***
— Fuel production, processing, storage and transport
— Cement and lime production
— Glass production
— Heat and power generating plants
— District heating networks
— Natural gas liquefaction and regasification facilities
— Gas transmission infrastructure
— **Any other infrastructure project category or scale of project for which the absolute and/or relative emissions could exceed 20,000 tonnes CO_2e/year**

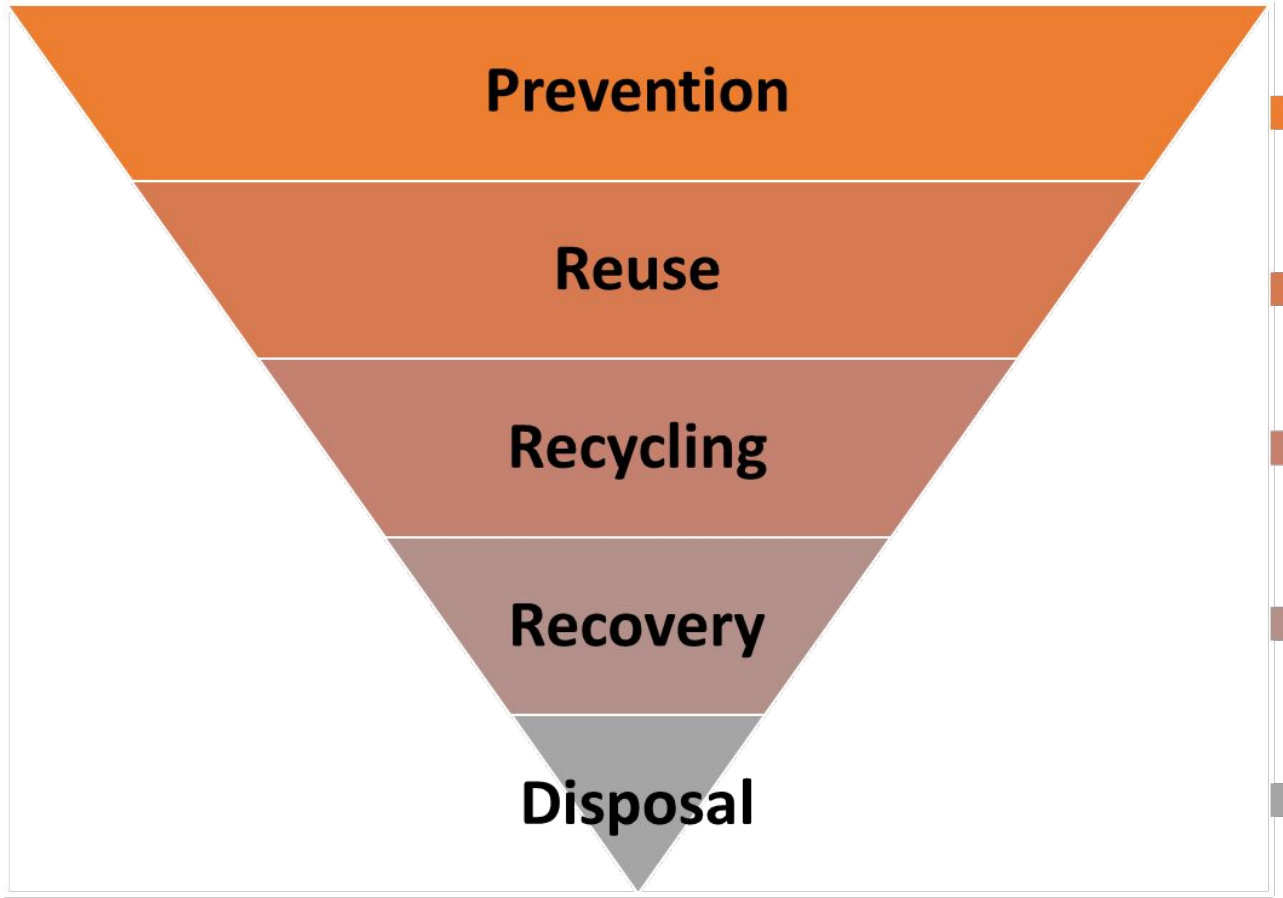
In general, ***depending on the scale of the project***, a carbon footprint assessment *WILL NOT* be required in these project categories:

— Telecommunications services
— Drinking water supply networks
— Rainwater and wastewater collection networks
— Small-scale industrial waste water treatment and municipal wastewater treatment
— Property developments
— Mechanical/biological waste treatment plants
— R&D activities
— Pharmaceuticals and biotechnology

Commission Notice of 16 September 2021, 2021/C 373/01

"Technical guidance on the climate proofing of infrastructure in the period 2021-2027"

Waste hierarchy



- Using less material in design and manufacturing
- Preventing resources from the entering the waste stream

- Cleaning, repairing or refurbishing

- Turning waste materials into new products . Includes composting, providing it meets quality standards

- Anaerobic digestion
- Incineration/gasification/pyrolysis processes that produce fuels, heat and/or power

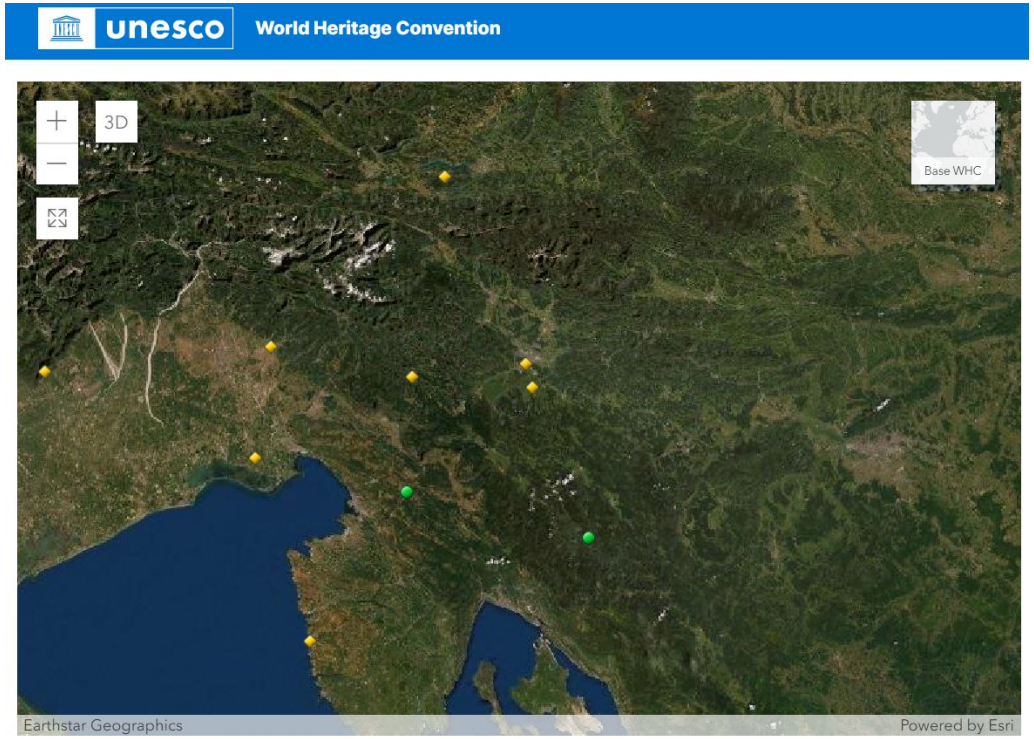
- Landfill
- Incineration without energy recovery

Waste Framework Directive 2008/98/EC

Biodiversity sensitive areas

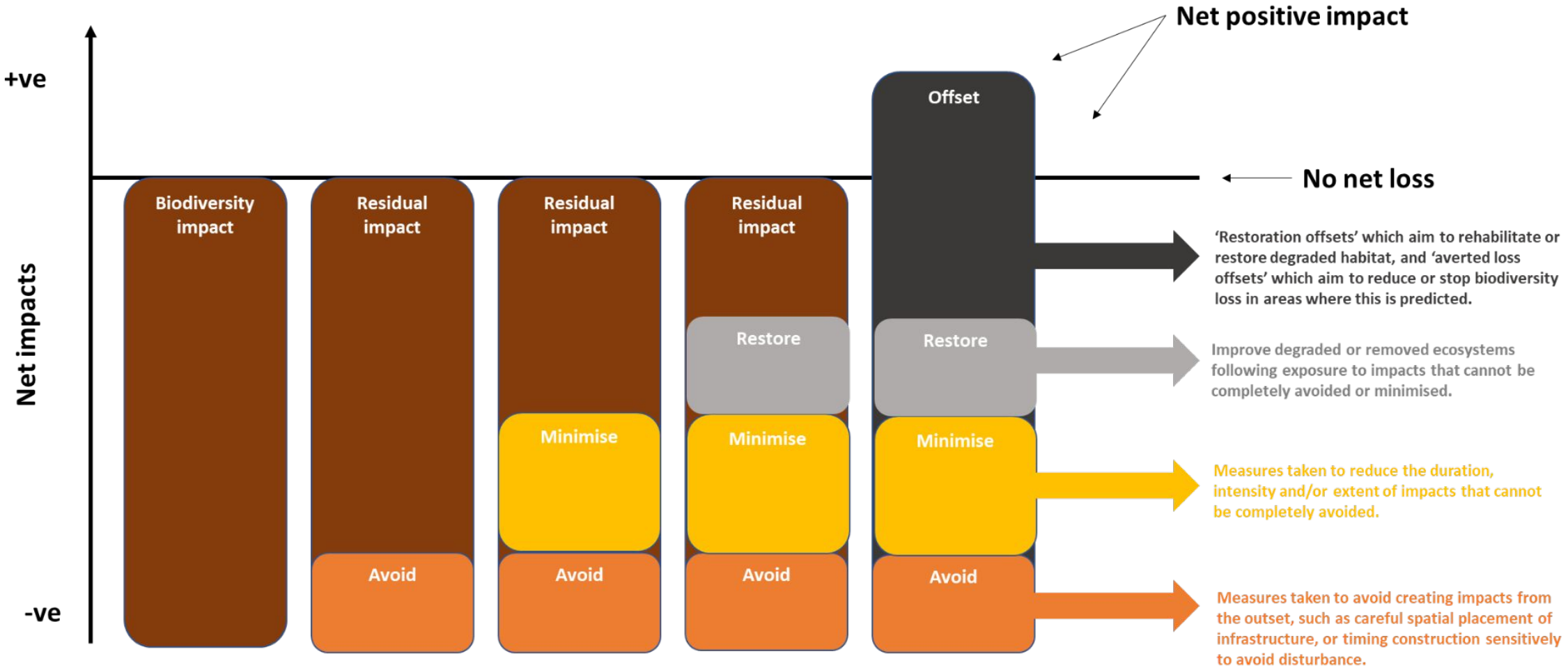
- Slovenia tops the list in Europe in terms of the area covered by Natura 2000 sites and the number of protected species.
- There are 355 Nature 2000 sites in Slovenia, of which 324 are designated under the Habitats Directive and 31 under the Birds Directive.
- The areas cover 37.46% of Slovenia's surface area and are home to 114 endangered plant and animal species and 60 habitat types under the Habitats Directive and 122 protected species under the Birds Directive.

https://www.naravovarstveni-atlas.si/web/DefaultNvaPublic.aspx



https://whc.unesco.org/en/list/

Biodiversity mitigation hierarchy



Limiting as far as possible the negative impacts on biodiversity from development projects

Environmental Impact Assessment

Requirement for an EIA, according to national legislation:

- Types of environmental intervention for which an environmental impact assessment is mandatory (Article 2(1) of the EIA Regulation). ***Examples:***
  - Industrial installations for the manufacture of paper pulp from wood or similar fibrous materials (Activities covered by the reference document (BREF) for the pulp and paper industry).
  - Production of cement, fibre cement or cement clinker with a production capacity of 1,000 tonnes per day.
  - Wind farms with a total electrical output of at least 30 MW.
  - Long-distance railway lines of international or national importance (Main lines under the rules governing rail transport).

- Types of environmental interventions for which an environmental impact assessment is mandatory if it is established in a preliminary procedure that they are likely to have significant effects on the environment (Article 3(1) of the EIA Regulation). ***Examples:***
  - Other industrial installations for the production of paper, paperboard and paperboard with a production capacity of at least 10 tonnes per day.
  - Other manufacture of cement or cement products.
  - Other wind farms with a total electrical output of at least 15 MW, where the site of the development is in an area protected under nature conservation legislation or with a distance of 1 km or less from buildings with secure premises
  - Other railway lines of 10 km or more in length.

Environmental Impact Assessment under the Environmental Protection Act (Zakon o varstvu okolja – ZVO) (Official Gazette of the Republic of Slovenia, Nos. 32/93 and 1/96)

Life cycle assessment

- ***Evidence from existing life cycle assessment (LCA)*** could be used to substantiate the DNSH assessment

- The ***carbon footprint does not purport to be a comprehensive LCA of a project***. For instance, downstream emissions that will occur due to the use of the products and services resulting from the projects are generally not considered.

- LCA is an ***internationally standardised methodology*** - ISO 14040:2006 Environmental management — Life cycle assessment — Principles and framework + ISO 14044: Requirements and Guidelines.

- EU Level(s) Framework - Ensures future proofing of buildings as it tracks performance throughout the full life cycle.

4

Key observations from review of project examples – Part 1

4.1

Ministry of Education example

Project overview

Description

- Renovation and extension of the Institute for the Deaf and Hard of Hearing Ljubljana, with environmental aspects being taken into account.
- The construction of a building with a total area of 1,100 m^2 is planned.
  - LOT 1: Kitchen renovation - extension of dining room B4 and kitchen technology - EUR 1,245,000 excl. VAT;
  - LOT 2: Addition B5 - 2nd phase - 610,000 EUR excl. VAT;
  - LOT 3: Interior fittings B4 and B5 - 110,000 EUR excl. VAT; and
  - LOT 4: Exterior arrangement - parking - EUR 100,000 without VAT.

General considerations

- Has accessibility been fully considered in the renovation?
- EN 17210:2021 contributes to an accessible and usable built environment and can serve as a useful reference for addressing accessibility for persons with disabilities.
- Has an EIA been carried out? Or has a screening for an EIA been carried out?

DNSH assessment (1)
What needs to be demonstrated further

1. To meet a 100% coefficient, you need to demonstrate: Investment 026bis - Energy efficiency renovation or energy efficiency measures regarding public infrastructure, demonstration projects and supporting measures compliance with energy efficiency criteria

2. The objective of the measure is:

(a) To achieve, on average, ***at least a medium-depth level renovation*** *as defined in Commission Recommendation on Building Renovation (EU) 2019/786* ***(basis of primary energy savings is between 30 % and 60%)***

or

(b) To achieve, on average, at least a 30 % reduction of direct and indirect GHG emissions compared to the ex-ante emissions.

3. To meet substantial contribution to climate change mitigation (according to the EU Taxonomy Regulation):

(a) The energy performance is certified using an as built Energy Performance Certificate (EPC). - has this requirement been clarified in the tender? ***An EPC shall be issued for all buildings with a total usable floor area of over 250 m^2 that are owned or used by the public sector,*** *and a valid energy certificate is placed in a visible place.*

(b) Renovation of existing buildings: ***The building renovation complies with the applicable requirements for major renovations or leads to a reduction of primary energy demand (PED) of at least 30 %.***

DNSH assessment (2)
What needs to be demonstrated further

*1. A **proportionate climate risk assessment** needs to be carried out, identifying the physical climate risks that are material to the project, based on the risks listed in Appendix A to Annex 1 of Taxonomy Regulation Climate Delegated Act. It shall be ensured that risks are addressed across the building lifecycle.*

***Note:** A full climate risk and vulnerability assessment does not need to be followed as the project does not meet or exceed the EUR 10 million threshold as laid down in the guidance from the Commission on sustainability proofing under the InvestEU Regulation.*

*2. **Projects that require an environmental impact assessment (EIA) under the EIA Directive, proofing for the environmental, social and climate dimensions will be required regardless of the total project cost, for the impacts identified in the EIA report**. Such an approach is consistent with the requirements of the Invest EU Regulation.*

DNSH assessment (3)
What needs to be demonstrated further

1. Mention of the requirements of the Water Framework Directive shall be included.

*2. Mention of the requirements of the latest **River Basin Management Plans in Slovenia** shall be included.*

Note on RBMPs in Slovenia:

- *RBMP for the Danube RBD (Načrt upravljanja voda na vodnem območju Donave za obdobje 2016–2021)*
- *RBMP for the Adriatic RBD (Načrt upravljanja voda na vodnem območju Jadranskega morja za obdobje 2016–2021)*
- *3rd RBMPs (2022-2027) - The public consultation process is ongoing.*

Source: https://ec.europa.eu/environment/water/participation/map_mc/countries/slovenia_en.htm

DNSH assessment (4)
What needs to be demonstrated further

*1. **Design for disassembly and adaptability shall be embedded and ensured via ISO 20887** (Sustainability in buildings and civil engineering works — Design for disassembly and adaptability — Principles, requirements and guidance) or other standards for assessing the disassembly or adaptability of the building and associated infrastructure.*

*2. To ensure that **waste prevention is achieved as much as technically and financially feasible**, prioritise reuse of building materials, via undertaking a demolition audit, where demolition works are to be undertaken.*

*3. To ensure that waste is managed in accordance with the waste hierarchy, mandate the production and implementation of a **construction waste management plan**, outlining how waste during construction/renovation will be segregated and stored on-site, and how it will be sorted and treated both on-site and off-site, in line with the EU Construction and Demolition Waste Protocol.*

DNSH assessment (5)
What needs to be demonstrated further

*1. **Building components and materials used in the building renovation that may come into contact with occupiers emit less 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 (Indoor air — Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air — Active sampling method) or other equivalent standardised test conditions and determination methods.*

*2. Measures to be taken to **reduce noise, dust (PM10, PM2.5) and pollutant emissions during construction and demolition works**.*

DNSH assessment (6)
What needs to be demonstrated further

*1. Explicitly stating compliance with the **Habitat and Birds Directives**.*

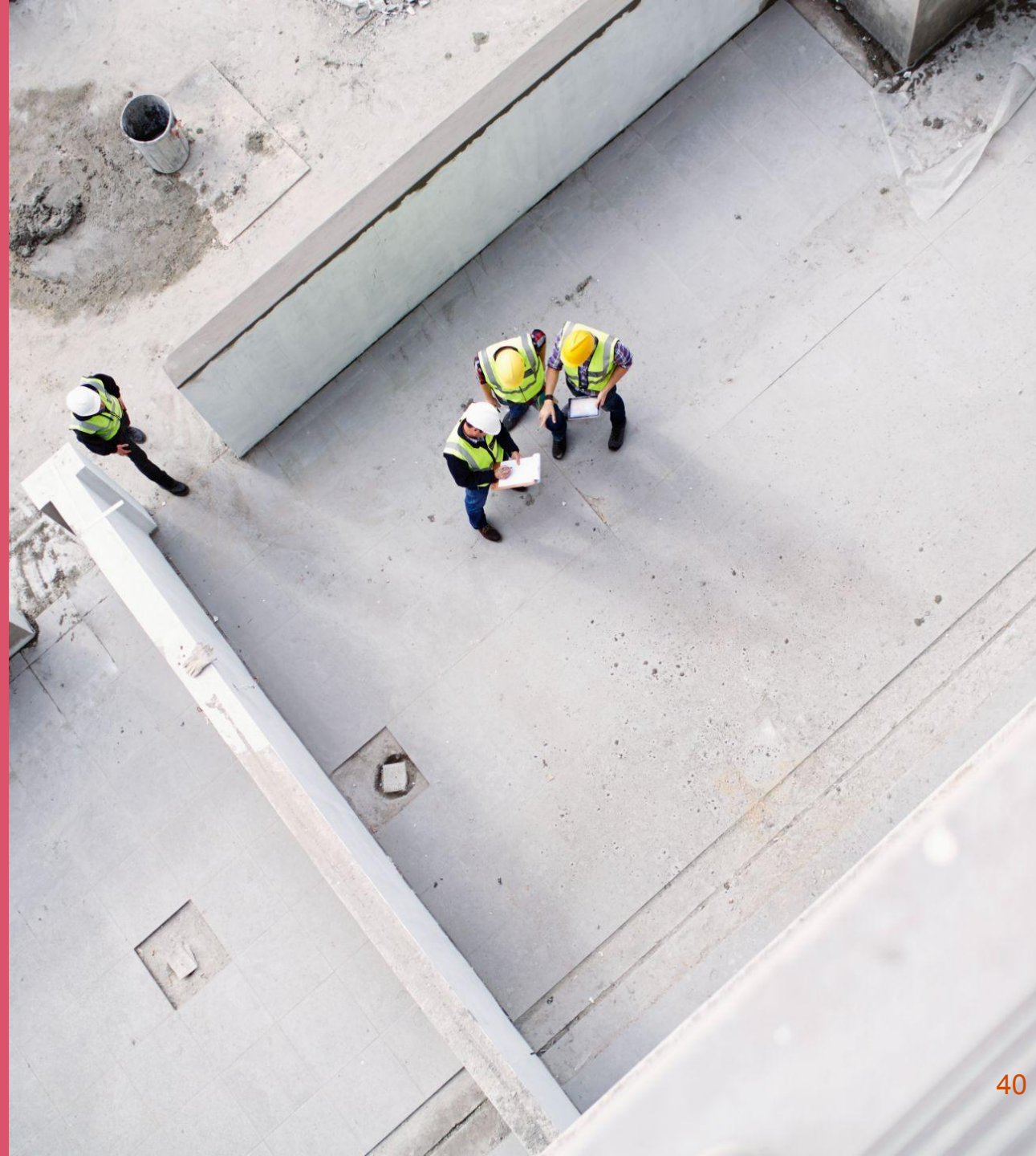
*2. Has an **Environmental Impact Assessment (EIA) or screening** been completed in accordance with Directive 2011/92/EU?*

*3. Has the **EU Biodiversity Strategy 2030** been considered throughout the project lifecycle? In the post-COVID-19 context, the strategy aims to build our societies' resilience to future threats such as*

- *the impacts of climate change*
- *forest fires*
- *food insecurity*
- *disease outbreaks - including by protecting wildlife and fighting illegal wildlife trade*

4.2

Ministry of Infrastructure example



Project overview

Description

- Upgrade of the Ljubljana–Brezovica section (7km)
- Estimated value: 67.61 million euros
- EU funds - Recovery and Resilience Plan: 37.87 million euros
  - Upgrade of the Ljubljana Tivoli stop
  - Upgrade of level crossings for the highest track speed
  - Replacement of the steel bridge over the Little Graben
  - Construction of anti-noise fences in the length of 8,196 m
  - Upgrade of existing tracks
  - Upgrade or reconstruction of the rolling stock
  - Upgrade of signaling devices

General considerations

- Has a requirement been provided for the contractor to hold a certificate of a recognised environmental management system, such as EMAS (or alternatively ISO 14001 or equivalent)?
- Has a full EIA/SEA been considered and/or carried out already? E.g. in line with the Environmental Report on a Strategic Environmental Assessment for the Transport Development Strategy in the Republic of Slovenia?

DNSH assessment (1)
What needs to be demonstrated further

1. *The project is eligible for intervention field 064/065 a in the Annex to the RRF Regulation with a climate change coefficient of 100%. Rail can play an important role in reducing the transportation sector emissions due to the efficiency of passenger and freight rail transport. It is noted that the* ***project relates to the upgrade of a double-track electrified line. To enable the shift to an effective climate neutral economy, measures leading to greater electrification of key sectors such as transport, are encouraged****.*

2. ***Is the use of renewable energy mandated at any part of the contract? Including during the construction phase?***

3. *According to RRF DNSH technical guidance, "promotion of electrification investments should be deemed as complying with DNSH in the area of climate change mitigation under the RRF,* ***provided that Member States justify that greater electrification is accompanied by increased renewables generation capacity at the national level****."*

DNSH assessment (2)
What needs to be demonstrated further

1. Slovenia is increasingly exposed to the impacts of climate change, with Slovenia's geomorphological diversity rendering it increasingly vulnerable to avalanches, floods and heatwaves. ***Changes to climate scenarios and predictions, as well as guidance has changed since 2019 when the risk assessment was carried out****.*

2. The investment is above the value of EUR 10 million, therefore a climate vulnerability and risk assessment shall be carried out leading to identification, appraisal and implementation of relevant adaptation measures, ***in line with the Technical guidance on sustainability proofing for InvestEU****.*

3. The physical climate risks that are material to the project can be identified from those listed in Appendix A to Annex 1 of Taxonomy Regulation Climate Delegated Act, by performing a climate risk and vulnerability assessment of the works, ensuring that risks are ***addressed across the infrastructure lifecycle****.*

4. As described in the 'Guidance on the climate proofing of infrastructure in the period 2021-2027', for climate change adaptation, the use of internationally recognised approaches (e.g. IPCC 6th Assessment Report)) to carry out climate risk assessments of projects remains possible.

5. Have the effects on a system level been considered? Such as the impacts on the rest of the railway network and other transport networks, especially during the construction phase - which may result in higher congestion/less resilience?

DNSH assessment (3)
What needs to be demonstrated further

*1. Have the requirements of the **River Basin Management Plans (RBMPs) been considered?***

Note on RBMPs in Slovenia:

- *RBMP for the Danube RBD (Načrt upravljanja voda na vodnem območju Donave za obdobje 2016–2021)*
- *RBMP for the Adriatic RBD (Načrt upravljanja voda na vodnem območju Jadranskega morja za obdobje 2016–2021)*
- *3rd RBMPs (2022-2027) - The public consultation process is ongoing.*

Source: https://ec.europa.eu/environment/water/participation/map_mc/countries/slovenia_en.htm

DNSH assessment (4)
What needs to be demonstrated further

1. Design for disassembly and adaptability shall be embedded and ensured via ISO 20887 (Sustainability in buildings and civil engineering works) or other standards for assessing the disassembly or adaptability of the infrastructure.

2. To ensure that waste prevention is achieved as much as technically and financially feasible, during construction works, ***prioritise reuse of existing materials****, via undertaking a demolition audit, and by prioritising cut-and-fill balance of excavated materials, primarily on-site and then, off-site.*

3. In the RfP it is stated that "Preliminary works on the construction site, removal of growth, felling and removal of bushes and trees, removal of branches of previously felled trees, removal of stumps, stones, masonry remains and various debris on the entire section and all buildings, with removal to a permanent landfill" - ***has it not been ensured that the waste hierarchy is applied?***

DNSH assessment (5)
What needs to be demonstrated further

*4. **At least 70 % (by weight) of the non-hazardous construction and demolition waste** (excluding naturally occurring material referred to in in category 17 05 04 in the European List of Waste established by Decision 2000/532/EC) generated during construction, demolition and excavation works 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.*

*5. Other sustainable waste management principles in line with the Waste Framework Directive should be followed, namely: the **proximity principle and polluter pays principle**. **Has the availability of sufficient reuse and recycling facilities been assessed in the proximity of the project?***

*6. Has the implementation of the **Construction Waste Management Plan been mandated and ensured via the contract?***

DNSH assessment (6)
What needs to be demonstrated further

1. Has the air quality assessment ***considered the release of PM2.5?***

*2. In the Construction Waste Management Plan, it is stated that "****Asbestos can be found on the building of the guard house*** *(the amount of waste will be checked), if the amount of asbestos waste exceeds the limit for small-scale works, it is necessary to prepare documentation in accordance with the Regulation on the conditions under which the reconstruction or removal of buildings and during maintenance work on buildings, installations or devices, materials containing asbestos that were not prescribed by the design task are removed." -* ***what was the outcome of this? Asbestos reference is not clear in the RfP specification.***

DNSH assessment (7)
What needs to be demonstrated further

1. In what sense shall the Environmental Protection Act be followed by the contractor? ***Does this include an EIA?***

2. The technological study shall describe environmental protection in line with the Habitats and Birds Directive and assess to what extent ***measures with respect to the mitigation hierarchy have been included****.*

3. It is noted that The EU Biodiversity Strategy 2020 is mentioned in the DNSH justifications, but since this has been updated by the 2030 Strategy.

4. Has ***prevention of habitat fragmentation been considered****? Including provision of wildlife corridors.*

5. Has consideration been given to any ***Ljubljana Marsh disturbance*** *which may result in this habitat turning from a net carbon sink to a net carbon source?*

5

Coffee break

6

Key observations from review of project examples – Part 2

6.1

Ministry of Economic Development and Technology example

Project overview

Description

- Public tender to promote greater wood processing for a faster transition to a climate neutral society.
- Included in the RRP in the component C1.K5 Green transition - Circular economy - efficient use of resources, and in the investment Greater processing of wood for a faster transition to a climate-neutral society.
- Only SMEs which, in accordance with Annex I to the Standard Classification of Activities (Official Gazette of the RS, no. 69/07 and 17/08), have registered the following main activity or other activities in addition to the main activity can apply for the tender, specified in the act of establishment of the entity:
  - Division C16 Working and processing of wood, manufacture of products of wood, cork, straw and wicker, except furniture or
  - Division C31 Manufacture of furniture (except class C 31.03 – manufacture of mattresses).

General considerations

- "In line with Slovenia's National energy and climate plan (NECP), wood should be properly integrated into the system and into the indicators of sustainable construction and green public procurement."
- The end date of project monitoring is 3 years after the end of the project - what is this decision based on?

DNSH assessment (1)
What needs to be demonstrated further

1. For projects above the threshold of EUR 10 million, regardless of whether they require an EIA or not, the assessment must proceed with the screening and proofing process, in line with the ***guidelines for climate neutrality (as per the Technical guidance on sustainability proofing for the InvestEU Fund (2021/C 280/01))****.*

2. ***Assessment for projects below the EUR 10 million threshold shall also be considered****, particularly when:*

- *There are doubts that the proposed investment could lead to emission increases/reductions above the thresholds described in the technical guidance (Section 2.2.5.1); and*
- *When the proposed project is part of a wider investment programme for which an overall assessment in term of GHG emissions has been performed.*

3. In line with the Technical guidance on sustainability proofing for the InvestEU Fund (2021/C 280/01), for climate change mitigation, the ***main reference for assessing GHG emissions is the EIB Carbon Footprint Methodology****, as recommended in the 'Guidance on the climate proofing of infrastructure in the period 2021- 2027'. (see https://www.eib.org/attachments/publications/eib_project_carbon_footprint_methodologies_2022_en.pdf) Alternatively,* ***internationally agreed and published carbon footprint methodologies may be used****.*

DNSH assessment (2)
What needs to be demonstrated further

*4. **An LCA at least with regards to the "climate change" indicator** (total, fossil, biogenic and land use) should be mandated, because of the following objectives:*

a) The applicant explains and describes the impact of the notified project on the environment in terms of greenhouse gas (GHG) emissions.

*b) The applicant demonstrates a **lower level of wood processing as a "contribution of a faster transition to a climate neutral society"**.*

*c) The above would require **coverage of all GHGs identified by the Kyoto protocol** (carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and the so-called Fluorinated gases (F-gases) (hydrofluorocarbons and perfluorocarbons) and sulphur hexafluoride (SF_6)) **across the whole lifecycle of the in-scope project** (raw material extraction, manufacturing, distribution, use, end-of-life).*

d) It shall be ensured that the sourced wood, has indeed a negative carbon footprint, given the importance of this objective in this investment.

DNSH assessment (3)
What needs to be demonstrated further

5. Following an LCA approach shall be in line with the relevant standard (ISO 14040:2006 - Life cycle assessment — Principles and framework, ISO 14044:2006 - Life cycle assessment — Requirements and guidelines) and this case, given the importance placed on the carbon footprint of the product, following ISO 14067:2018 (Carbon footprint of products — Requirements and guidelines for quantification) shall be encouraged.

*6. Adopt some of the **EU Ecolabel for wood-, cork- and bamboo based floor coverings requirements** (Commission Decision 2017/176/EU) - such as **setting a maximum threshold for electricity and fuel consumption during the product manufacturing**. This requires to take into account all energy inputs throughout the production process (including coating and packaging activities) so as to comply with the "E Score" limit of annual energy consumption.*

DNSH assessment (4)
What needs to be demonstrated further

*1. Ensuring that a proportionate risk assessment has been carried out, which means that the **climate risk and vulnerability assessment is proportionate to the scale of the project and its expected lifespan**, such that:*

*a) For projects with an expected lifespan of **less than 10 years and a value of less than €10 million**, the assessment is performed, at least by using climate projections at the smallest appropriate scale and at least by undertaking the climate resilience screening step to identify potential climate-related risks to the proposed project (and related assets). **Where relevant, they should also plan appropriate adaptation measures to be included in the project**.*

*b) If an investment is above the value of €10 million, a climate vulnerability and risk assessment shall be carried out or shall be planned to be carried out leading to identification, appraisal and implementation of relevant adaptation measures. The climate vulnerability and risk assessment shall follow the methodology provided in **Technical guidance on sustainability proofing for the InvestEU Fund (providing relevant extracts from this guidance in the RfP would be beneficial** (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0713(02)).*

*2. Follow the overall **climate proofing process for climate resilience** in Figure 2 of the Technical guidance on sustainability proofing for the InvestEU Fund.*

DNSH assessment (5)
What needs to be demonstrated further

*3. It shall be clearly stated and understood that the **vulnerability of a project is determined by a combination of two aspects**:*

- *How sensitive the project's components are to climate hazards in general (**sensitivity**); and*
- *The probability of these hazards occurring at the project location now and in the future (**exposure**).*

These two aspects can be assessed in detail separately.

DNSH assessment (6)
What needs to be demonstrated further

*1. **Environmental degradation risks related to preserving water quality and avoiding water stress** should be identified and addressed in accordance with the requirements under the **Water Framework Directive and a River Basin Management Plan**.*

2. Where an EIA 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.

DNSH assessment (7)
What needs to be demonstrated further

*1. **Clarification as to what is meant by "principles of sustainable construction"** which would need to be followed:*
*a) **EU Construction and Demolition Waste Protocol** (https://single-market-economy.ec.europa.eu/news/eu-construction-and-demolition-waste-protocol-2018-09-18_en)*
*b) **EU Circular economy principles for buildings design** (https://ec.europa.eu/docsroom/documents/39984)*
c) Following "EN 15978:2011 - Sustainability of construction works" shall be encouraged
2. While it is stated that "both the environmental impact of the activity itself and the environmental impact of the products and services provided by this activity are taken into account throughout their entire life cycle, with particular consideration being given to the production, use and end of life of these products and services", further guidance shall be given to justifying life cycle considerations, as follows:
a) Encouragement to submit full life cycle assessments, where these were undertaken for specific products or processes (as stated in RRF DNSH guidance "evidence from existing life cycle analyses could be used to substantiate the DNSH assessment")
*b) **Following the LEVEL(s) framework for sustainable buildings shall be encouraged in cases of construction/renovation of buidlings for the purposes of enhancing the capacity of wood processing** - this includes six macro-objectives, which can be tracked through sixteen indicators (see https://environment.ec.europa.eu/topics/circular-economy/levels/lets-meet-levels/how-does-levels-work_en)*
*c) **Providing guidance on a compliant LCA**: ISO 14040:2006 Environmental management — Life cycle assessment — Principles and framework + ISO 14044: Requirements and Guidelines*

DNSH assessment (8)
What needs to be demonstrated further

3. Adopt some of the EU Ecolabel for wood-, cork- and bamboo based floor coverings requirements (Commission Decision 2017/176/EU) - such as:

- *The requirement that the **products be designed in a way that simplifies their dismantling, and that makes sure they can be repaired, and properly disposed at end of life**.*
- *Clear instructions regarding the **disassembly and replacement of damaged components/materials must be provided to consumers***
- ***Information on the best cleaning and maintenance methods**.*

DNSH assessment (9)
What needs to be demonstrated further

1. While it is mentioned that for tangible fixed assets the principles of material and energy efficiency shall be followed in line with best available technology - further clarification shall be provided on this, including ***reference to the EU' s Best Available Techniques Reference Documents (BREFs), where applicable (e.g. Wood-based Panels Production)*** *(https://eippcb.jrc.ec.europa.eu/reference/) + (http://okolje.arso.gov.si/ippc/tabela/16/page/1).*

2. It shall be ensured that any environmental permits required to be obtained ***in line with the Industrial Emissions Directive (IED)****, are applied for and obtained accordingly* ***(e.g. if acquiring any production buildings whose operations are subject to the IED)****.*

3. It is stated that the beneficiary will have to realise the results of the project in accordance with the principle of sustainable development and while promoting the objective of the European Union to preserve, protect and improve the quality of the environment, taking into account the polluter pays principle in accordance with Article 8 of Regulation 1303/2013/EU. However, for further clarification, it is worth referencing the document that provides a clearer definition of this: ***polluter pays principle as set out in Article 191(2) Treaty on the Functioning of the European Union (TFEU)****.*

DNSH assessment (10)
What needs to be demonstrated further

4. Adopt some of the EU Ecolabel for wood-, cork- and bamboo based floor coverings requirements (Commission Decision 2017/176/EU) - ***emissions from formaldehyde floor coverings must be lower than 50 % of the used threshold value****. This* ***tolerance level is compatible within the E1 classification for formaldehyde-containing wood-based panels used across EU Member States****.*

DNSH assessment (11)
What needs to be demonstrated further

1. Given the importance of biodiversity, it is crucial to provide further clarifications on the requirements to be met:

*a) **Carrying out an environmental impact assessment (EIA) where this is legally required or deemed to be required via a comprehensive screening process.** For instance, in line with Slovenian legislation, Industrial Installations for the production of wood-based panels with a production capacity of at least 600m^3 panels per day, would legally require an EIA if it established in a preliminary procedure that they are likely to have significant effects on the environment (Article(3)1 of this Regulation) (http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6527).*

*b) Understanding the **presence and/or proximity of conservation areas and/or other areas of natural importance** (e.g. Natura2000 sites, Protected habitats under the EU Habitats Directive, UNESCO World Heritage Sites, national parks, regional parks, natural monuments, Special Protected Areas under the Birds Directive) and understanding the types of activities carried out in such biodiversity-sensitive areas.*

*c) Adopt some of the EU Ecolabel for wood-, cork- and bamboo-based floor coverings requirements (Commission Decision 2017/176/EU) - **materials do not originate from GMOs and are covered by a chain of custody certificate issued by an independent certification scheme such as the Forest Stewardship Council (FSC), the Program for the Endorsement of Forest Certification (PEFC) or equivalent**. All virgin wood, cork and bamboo must also be covered by valid sustainable forest management certificates issued by an independent third party certification scheme such as **FSC, PEFC** or equivalent.*

DNSH assessment (12)
What needs to be demonstrated further

*3. It shall be acknowledged and taken into consideration that **management can also harm the ecosystem; for example, machinery used in a timber harvest can compact the soil, stress the root system, reduce tree growth, lengthen the time needed for a stand to mature to harvestability**. Machinery can also damage the understory, disturbing wildlife habitat and prevent regeneration. **Stressing the requirement of LCA**.*

6.2

Ministry of Agriculture example

Project overview

Description

- The investment of the Centre for Seeding, Forestry and Forest Protection will be carried out in accordance with the principles of passive construction (nearly sustainable energy buildings), taking into account the:
  - Green Public Procurement Regulation
  - Use of high proportion of low carbon footprint building materials and sustainable materials
  - Use of renewable energy sources and on-site energy generation
  - Recyclability of materials at the end of their life.
- The estimated value of the investment grant for the period 2021 to 2024 is EUR 5.1 million (excluding VAT) and consists of obtaining the building and use permit, the organisation of the building and the purchase of related equipment.
- The Centre would need around 3m² total and functionally built and connected areas, of which:
  - For the Seed Production Department and the Seed Bank, cca 410 m²(the existing areas in the old laboratory building are 70 m²)
  - For the tree nursery department cca 280 m² (currently no laboratory area)
  - For the forest protection department, approximately 1.200m² (existing areas in the main building are 300 m²) an additional approximately 33% of the total surface area is required for communications, service and total areas.

General considerations

- The investment will take into account the LCCA (Life Cycle Cost Assessment) analysis by assessing the eligibility of the investment throughout the life of the building in terms of operating and maintenance costs - but how about life cycle assessment in terms of environmental impacts?
- The criteria of sustainable construction in line with the DGNB - German Sustainable Building Council will be followed - any specific rating (i.e. Platinum, Gold, Silver or Bronze)?

DNSH assessment (1)
What needs to be demonstrated further

*1. It is mentioned that the indicator of sustainable construction of the investment will be the **energy performance of the building, which will be checked in the course of individual investment processes**. No further detail is provided on what these checks will consist of.*

*2. Sustainable materials (wood, stone, glass) with a low carbon footprint and the possibility of recycling will be used for construction, as mentioned in the DNSH justification. However, **specific targets and material specifications** have not been provided. This is important to ensure that such sustainable procurement will take place in practice.*

*3. DNSH assessment seems to be mixing up the various environmental objectives, with **air, water and soil pollution, being mentioned under climate change mitigation**. Each of the six environmental objectives shall be addressed in a separate and consistent manner.*

DNSH assessment (2)
What needs to be demonstrated further

1. The estimated value of the investment grant for the period 2021 to 2024 is €5.1 million (excluding VAT), therefore a full climate vulnerability and risk assessment is not mandated, as the threshold is €10 million, in line with the Technical guidance on sustainability proofing for the InvestEU Fund. However, ***a proportionate climate risk assessment*** *shall be undertaken, given that it is an infrastructure development project.*

2. It is mentioned that the investment foresees elements of a green roof to create more favourable microclimatic conditions. This shall be supported from a climate adaptation perspective, however, more information is required as to the foreseen design of the green roof, species to be used and clarity on whether ***local biodiversity will be supported/enhanced via this measure (bringing in green co-benefits)****. Also, unclear whether the* ***microclimate mitigation effect*** *has been quantified.*

DNSH assessment (3)
What needs to be demonstrated further

1. The construction is not located in the area of water sources, where interventions in the space would not be allowed. However, have considerations been made on the ***level of water consumption*** *of the new building? The EU Taxonomy Regulation (Climate Delegated Act, Annex I) may provide some good guidance on this:*

- *Wash hand basin taps and kitchen taps have a maximum water flow of 6 litres/min;*
- *Showers have a maximum water flow of 8 litres/min;*
- *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; and*
- *Urinals use a maximum of 2 litres/bowl/hour. Flushing urinals have a maximum full flush volume of 1 litre.*

2. It is mentioned that rainwater roof wastewater will be collected, treated and used as gray water, which is collected in reservoirs and used for irrigation purposes. Has the ***process, quality control and specific final end uses of this solution been determined****?*

DNSH assessment (4)
What needs to be demonstrated further

1. Sustainable materials (wood, stone, glass) with a low carbon footprint and the possibility of recycling will be used for construction, as mentioned in the DNSH justification. The possibility of recycling does not denote that this will actually take place. It shall be ensured that the ***appropriate infrastructure and plans are put in place to ensure appropriate levels of recycling*** *and overall landfill diversion.*

2. Considerations may be given to procurement of construction materials with a specific ***recycled content****, and specified accordingly.*

3. It is stated that for waste generation and reduction, cradle-to-cradle principles and circular economy principles will be followed, where a large part of waste will be recycled and reused. However, no specific standards or targets are being mentioned and committed to, such as:

- *Ensuring construction works are carried out in line with the waste hierarchy and the* ***EU Construction and Demolition Waste Protocol***
- *Preparation of construction waste management plans, ensuring that they address* ***segregation of waste on site, as well as on-site and off-site transfer and treatment of waste****, in order to achieve the landfill diversion target set (i.e. 70% of non-hazardous waste diverted from landfill)*

DNSH assessment (4)
What needs to be demonstrated further

4. During the construction of the supporting infrastructure, the principle of sustainable use of space will be taken into account (construction on a degraded, already built-up area), as mentioned in the DNSH justification. Given the construction on a brownfield site, ***retention of existing building elements and materials*** *may be considered as a priority in the design process (including undertaking a* ***demolition audit*** *to salvage materials, in case demolitions works are planned).*

DNSH assessment (5)
What needs to be demonstrated further

1. The design of the installation will take into account all protective aspects in order to avoid excessive levels of permissible emissions into the environment. Specific information on how this will be achieved, and which ***pollutants will be targeted and to what emissions levels****, shall be specified.*

2. A number of pollution prevention measures are mentioned in the DNSH justification (e.g. measures to prevent the spillage of hazardous substances, measures to protect the soil - humus, management of hazardous waste, prevention of excessive emissions to air, soil, water, reduction of noise levels, etc.). However, further information and more detailed specification is required to ensure that such measures can be met. A good guide for this is the EU Taxonomy Regulation (Climate Delegated Act Appendix I):

- *Building components and materials used in 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 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.*
- *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****.*

DNSH assessment (6)
What needs to be demonstrated further

*1. It is useful to provide a DNSH justification with reference to the **biodiversity mitigation hierarchy**.*

*2. Any contribution to **enhancement of green and blue infrastructure**, as well as support of wildlife corridors shall be mentioned, with reference to the inclusion of a green roof and greywater recycling, and overall design of the new building.*

*3. While a full environmental impact assessment (EIA) may not be required, it is important to understand whether an **EIA screening process** is required, and decide accordingly on how to proceed, to make sure that any justifications provided on the lack or minimum local impact, are backed up sufficiently.*

7

Implementation and monitoring of DNSH: a project example

7.1

Overview of call for projects example

Proper specification may result in…

1. *Easier understanding of application requirements by applicants.*
2. *Higher quality applications, with more evidence and overall factual nature.*
3. *Easier and more efficient assessment of most appropriate project contenders.*
4. *Facilitation of more comprehensive monitoring of project implementation.*

Using the Ministry of Economic Development and Technology example

Description

- Public tender to promote greater wood processing for a faster transition to a climate neutral society.
- Included in the RRP in the component C1.K5 Green transition - Circular economy - efficient use of resources, and in the investment Greater processing of wood for a faster transition to a climate-neutral society.
- Only SMEs which, in accordance with Annex I to the Standard Classification of Activities (Official Gazette of the RS, no. 69/07 and 17/08), have registered the following main activity or other activities in addition to the main activity can apply for the tender, specified in the act of establishment of the entity:
  - Division C16 Working and processing of wood, manufacture of products of wood, cork, straw and wicker, except furniture or
  - Division C31 Manufacture of furniture (except class C 31.03 – manufacture of mattresses).

General considerations

- "In line with Slovenia's National energy and climate plan (NECP), wood should be properly integrated into the system and into the indicators of sustainable construction and green public procurement."
- The end date of project monitoring is three years after the end of the project - what is this decision based on?

7.2

Review of DNSH components in an example application

Description of planned investment by specific contender

Scope:

Expansion of production capacities of wooden structural elements in buildings.

Goals:

1. Lower electricity consumption by 97,345.50kWh.
2. Monitor energy consumption on new operating machines on a monthly basis and have control over consumption and operation.
3. The new lifting equipment will save an average of 33% of electricity depending on the use and operating time of the lift.
4. A new automatic planer with feeder will replace two existing manual planers with more than 64,800 kWh of annual electricity consumption, where there will also be savings between 13% and 30%.
5. Train employees involved in production for the economical management of new machines and equipment.
6. Shorten transport routes between production and storage areas and consequently consume less transport energy (reduction of transport routes by 25% and consequently fuel consumption by 10.50% compared to the existing situation, with the baseline year being 2021).

Example of DNSH justification provided by a project contender

The biggest difference between the old CNC machine and the new K2-Industry 650 is that the newer machine has a lower consumption of compressed air, built-in economical motors and thus consumes less electricity for operation. These improvements mean that the machine has a 23.8% lower energy consumption than the existing one.

CNC stroj K2-Industry 650 (Hundegger)

Največja razlika med starim CNC strojem in novim K2-Industry 650 je, da ima novejši stroj manjšo porabo komprimiranega zraka, vgrajene varčne motorje in tako porabi manj električne energije za delovanje. Te izboljšave pomenijo, da ima stroj za 23,8% manjšo porabo energije od obstoječega.

Prikaz energetskih prihrankov:

	K2i	K2
Moč motorjev	44,2kW	45kW
Čas izmene	8h	8h
Faktor časa	0,78	0,78
Št. Obratovalnih dni	250	250
Poraba energije na izmeno	214kWh	281kWh
Poraba energije na dve izmeni	428kWh	562kWh
Poraba energije na leto	106985kWh	140400kWh
Razlika	23,8%	

What are the key observations for improvement?

Overall style of response

- Too long;
- Written in essay style with inconsistent sections;
- Offers a lot of references not relevant to the project; and
- Exhibits a lot of repetition.

Example

"With the development of industrialisation, man's behaviour has greatly increased the concentration of greenhouse gases and thereby contributed to climate change. ***Our activity affects the atmosphere, oceans, glaciers, land, vegetation and the entire planet.*** *We can already see the activities and actions of people in climate change, which significantly changes the lives and work of people in the world. In recent years, the climate has changed significantly as a result of human activity."*

Reference to future commitments

- Future commitments made without provision of baseline conditions and linkages to existing analyses made (e.g. link to LCA results).

Example

1 Climate change mitigation | 2 Climate change adaptation | 3 Protection of water and marine resources | 4 Transition to a circular economy | 5 Prevention of pollution | 6 Protection of biodiversity & ecosystems

"Based on the analysis, the situation and key points of greenhouse gas emissions in the entire value chain will be determined, we will prepare a strategy and determine measures ***to achieve carbon neutrality of the company or reducing the carbon footprint****.*
We expect the first results to be visible at the end of next year*."*

But they also mention: "Reduction of greenhouse gases in the atmosphere due to the energy efficiency of the new investment by at least 34,070 kg CO_2*/ year."*

Reference to future commitments (2)

- Some future commitments are made that can be measurable and able to be monitored.

Example

1	2	3	4	5	6
Climate change mitigation	Climate change adaptation	Protection of water and marine resources	**Transition to a circular economy**	Prevention of pollution	Protection of biodiversity & ecosystems

*"We will **carry out employee training on the appropriate handling, collection and disposal of waste in production**."*

*"We will **reduce the amount of plastic packaging**, and then we will properly prepare the plastic for recycling by properly separating and baling it, thus directly contributing to the reduction of plastic as waste."*

Evidence required on claims made

- "Analysed the lifecycle" is mentioned - evidence of the LCA provided.
- Mentioned as part of climate change mitigation.

Example

1	2	3	4	5	6
Climate change mitigation	Climate change adaptation	Protection of water and marine resources	Transition to a circular economy	Prevention of pollution	Protection of biodiversity & ecosystems

“We also did an LCA in the company. In the attached LCA, for {product name} and the passive house {product name}, the environmental impacts of {company’s name} analysed buildings are shown”.

“We gained a detailed insight into the environmental impacts of the production, construction, use, maintenance and decommissioning of the houses, thus proving ***the small negative impact*** *of {company’s name} buildings on the environment and people's health.”*

Evidence required on claims made (2)

- More information and documentation on specific statements is required.

Example

1	2	3	4	5	6
Climate change mitigation	Climate change adaptation	Protection of water and marine resources	**Transition to a circular economy**	Prevention of pollution	Protection of biodiversity & ecosystems

"Not only do we want to use the greenest materials possible, we also want to reduce our waste as much as possible, we reuse waste wood as a raw material, and at the same time we also act as a responsible producer, because we also think about what happens to the {company's name} house after its lifetime. ***There will surely come a time in the future*** *when we will use the {company's name} house or a part of it for something new, with a suitable conversion for a new story, for a new building."*

Misunderstanding of DNSH criteria definitions and scope

- The climate adaptation justification provided is focusing on climate mitigation elements.

Example

1	2	3	4	5	6
Climate change mitigation	Climate change adaptation	Protection of water and marine resources	Transition to a circular economy	Prevention of pollution	Protection of biodiversity & ecosystems

*“We will establish a system for monitoring the **energy consumption of the new investment** and record, collect and process the data on a monthly basis.”*

Ensuring that all requirements are met

- Where specific requirements have been articulated in the call for projects, these are more clearly addressed by the contender.

Example

1	2	3	4	5	6
Climate change mitigation	Climate change adaptation	Protection of water and marine resources	Transition to a circular economy	Prevention of pollution	Protection of biodiversity & ecosystems

*“We **attach the Programme for the Endorsement of Forest Certification (PEFC) and Forest Stewardship Council (FSC) certificates** of our wood and OSB board suppliers: {suppliers mentioned.}”*

7.3

Phrasing DNSH criteria

DNSH criteria...

...shall mirror and be related to other "environmental substantial contribution criteria"

Criterion		No. points	Max. no. points
2	**CONTRIBUTION TO A FASTER TRANSITION TO A CLIMATE NEUTRAL SOCIETY**		**34**
2.1	**Level of wood processing**		10
	- 90-100	10	
	- 80-89,99	8	
	- 70-79,99	6	
	- 60-69,99	3	
	- 50-59,99	2	
	- 20-29,99	1	
	- 0-19,99	0	
2.2	**The project addresses products that address the identified gaps in the market**		5
	- longitudinally glued KVH wood, BSH glued wood, composite materials, Rohling for doors, widthwise-longitudinally jointed finger joint wood (uprights) and boards (cross-glued, OSB, construction, chipboard, boards with width and length joint...))	5	
	- the project does not interfere with the area of products related to the identified gaps	0	
2.3	**Digitisation of business**		5
	- within the framework of the project, the establishment of a comprehensive business digitization model will be implemented (internal processes, virtualization, production, business flows to suppliers, customers, etc.)	5	
	- within the framework of the project, the establishment of a digitalization model of internal business (internal processes, virtualisation, production) will be implemented	4	
	- within the framework of the project, an investment will be made in machines and devices that enable the digitization of business operations	2	
	- none of the above	0	
2.4	**Use of natural renewable building materials in the investment**		4
	- during construction, 40% and more natural renewable materials were used in the entire volume of installed materials	4	
	- during construction, between 30% and up to 40% of natural renewable materials are used in the total volume of installed materials	3	
	- during construction, between 20% and up to 30% of natural renewable materials are used in the total volume of installed materials	2	
	- during construction, between 10% and up to 20% of natural renewable materials are used in the total volume of installed materials	1	
	- during construction, less than 10% of natural renewable materials were used in the total volume of installed materials	0	

DNSH criteria...

...shall mirror and be related to other "environmental substantial contribution criteria"

Connecting and acquiring knowledge in the forest-timber chain or in connection with knowledge institutions relevant to the project	4 Transition to a circular economy
Use of ***natural renewable building*** materials in the investment	1 Climate change mitigation; 4 Transition to a circular economy; 6 Protection of biodiversity & ecosystems
Use of local resources (concluded contracts/letters of intent for long-term supply of raw materials)	1 Climate change mitigation; 2 Climate change adaptation; 4 Transition to a circular economy
The use of wood species in the production process	1 Climate change mitigation; 4 Transition to a circular economy
Share of wood in the product (wood-forming)	1 Climate change mitigation; 4 Transition to a circular economy
Additional contribution to circularity- r***euse of already used raw materials is foreseen in production***	1 Climate change mitigation; 4 Transition to a circular economy

...how about?

3 Protection of water and marine resources

5 Prevention of pollution

Phrasing the DNSH requirements to meet life cycle considerations…

The RfP states that eligible costs are as follows:

	Type of cost	Examples
1	Construction costs	Preparatory earthworks, construction works, mechanical and electrical installations, external arrangements

Examples of DNSH actions at this stage to address environmental impacts:

- Ensuring earthworks and other construction works are carried out in line with the waste hierarchy and the EU Construction and Demolition Waste Protocol.
- Preparation of construction waste management plans, ensuring that they address segregation of waste on site, as well as on-site and off-site transfer and treatment of waste, setting a minimum landfill diversion target (e.g. 70% of non-hazardous waste diverted from landfill).
- Minimum level of % by weight recycled content mandated in construction materials procured.

Phrasing the DNSH requirements to meet life cycle considerations…

The RfP states that eligible costs are as follows:

	Type of cost	Examples
2	Costs of purchasing tangible fixed assets	Purchase of new equipment, new machines, production buildings

Examples of DNSH actions at this stage to address environmental impacts:

- Equipment and production buildings chosen based on principles of material and energy efficiency, ensuring certain minimum rating evidenced via energy performance certificates (EPCs).
- Using of best available techniques (e.g. following the relevant EU BREFs) when it comes to technology.
- Production buildings developed in line with sustainable buildings principles (e.g. in line with LEVEL(s) framework, in alignment with the EU Taxonomy Regulation etc).
- Procuring materials that meet relevant life cycle based ecolabels.

Phrasing the DNSH requirements to meet life cycle considerations…

The RfP states that eligible costs are as follows:

	Type of cost	Examples
3	Costs of purchasing intangible fixed assets	Purchase of technology by purchasing patent rights, licenses, trademarks, know-how or unpatented technical know-how

Examples of DNSH actions at this stage to address environmental impacts:

- Technical know-how incorporates sustainable design and associated innovation, which would ensure resource efficiency and reduced wastage relative to conventional alternatives.

8

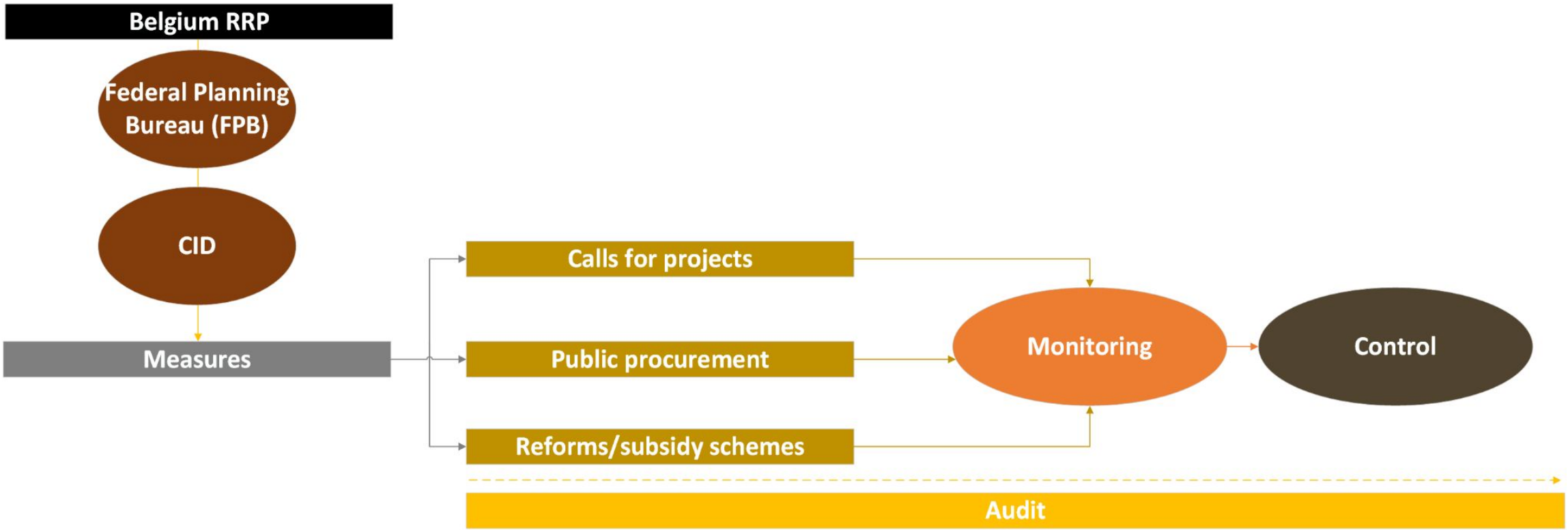
Observations from other member states

8.1

Belgium - Implementation approach

Distinction according to modes of implementation

- ***3 modes of implementation*** in RRP, that can be combined
- DNSH approach must be lightly customised depending the operational responsibility of the activity
- The final accountability always stays with the Member State



Distinction according to modes of implementation

1) Measures to be implemented entirely or partly through a ***call for projects***

All projects must be compliant with DNSH. In this case, Public Authorities can select and set specific conditions, but project leaders are external and have the operational responsibility. ***The stake is to ensure appropriate monitoring.***

2) Measures to be implemented entirely or partly through ***public procurement*** by public authorities

In this case, the stake is to incorporate the DNSH principle within the tender specifications to ensure that the project will respect DNSH. ***The stake is to list all relevant elements and to ensure efficient control***.

3) Measures to be implemented by public authorities through ***legislative/ regulatory processes***

- Some of these measures have already been pre-assessed by the Federal Planning Bureau (FPB); regarding DNSH, ***the stake lies mainly in monitoring and control***.
- Some of these measures have not been pre-assessed by the FPB; to be done by the relevant public authority based on chosen orientations of measures and impact assessment.

DNSH challenges

At general level:

- The six environmental objectives are wide and not completely defined.
- DNSH guidelines are very general and do not always provide enough guidance for ‘real-life’ cases.
- There is currently no jurisprudence.
- The status of “non-compliance” and its impact is not clear (project/activity level?).

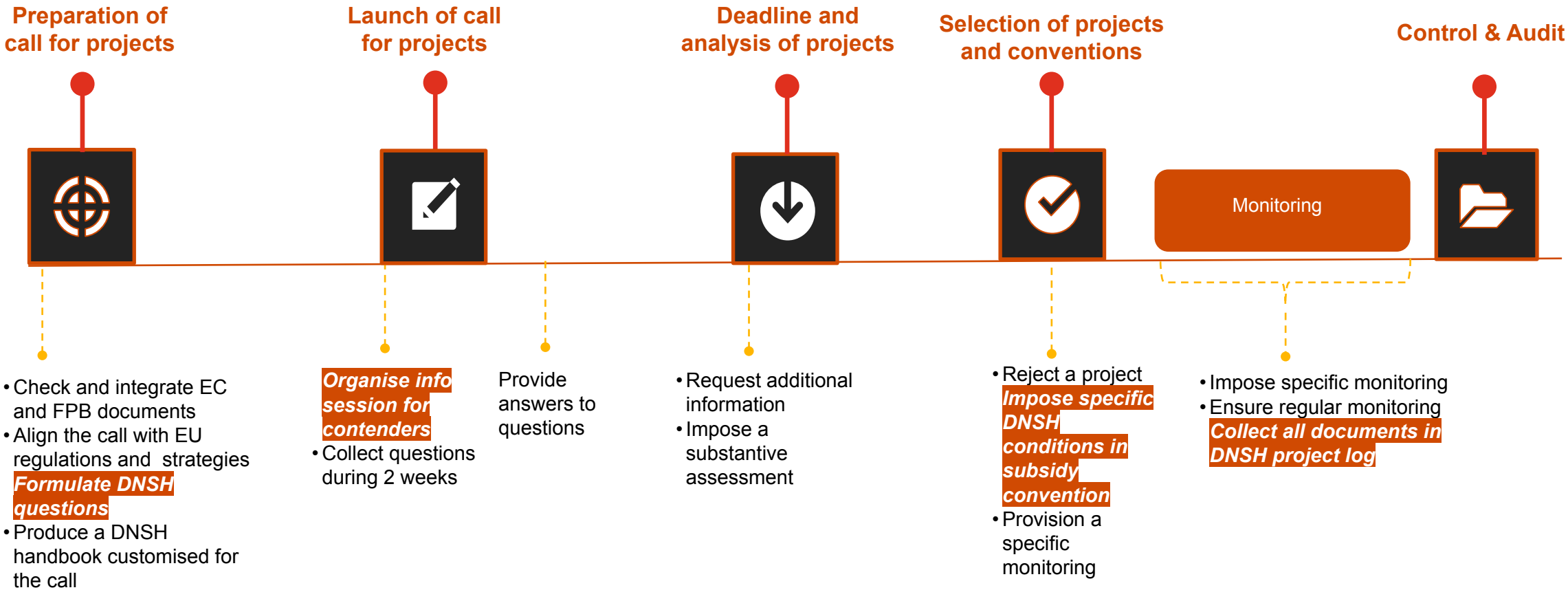
DNSH challenges

At the level of Belgium's RRP:

- **Various approaches** depending on the type of measure: call, public procurement, reform/subsidy schemes.
- **Various topics**: construction & renovation, R&D, circular economy, energy, etc.
- **Various targets**: public authorities (specialised agents and supporting agents), external project leaders/subcontractors (companies, NGOs,…), control and audit authorities.
- **Various timelines**: select, implement, monitor, report, control and audit.
- **Six institutional entities** with autonomy in implementing their part of Belgium's RRP.

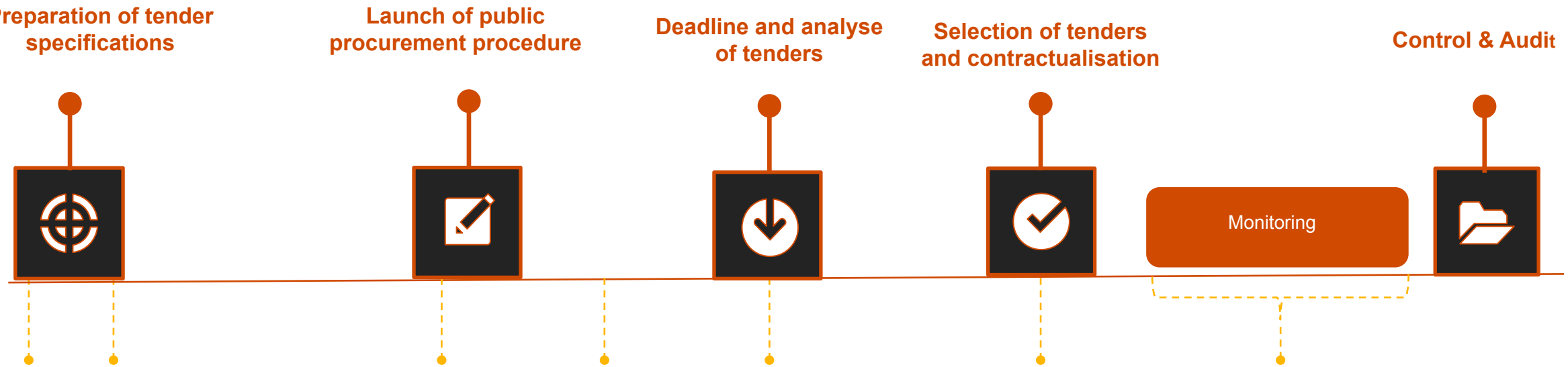
PwC Belgium approach for call for projects

- DNSH in call for projects must be considered during the entire lifespan of the projects
- The most practical way is to incorporate appropriate DNSH considerations in each step thanks to various ‘tools’ at disposal



PwC Belgium approach for public procurements

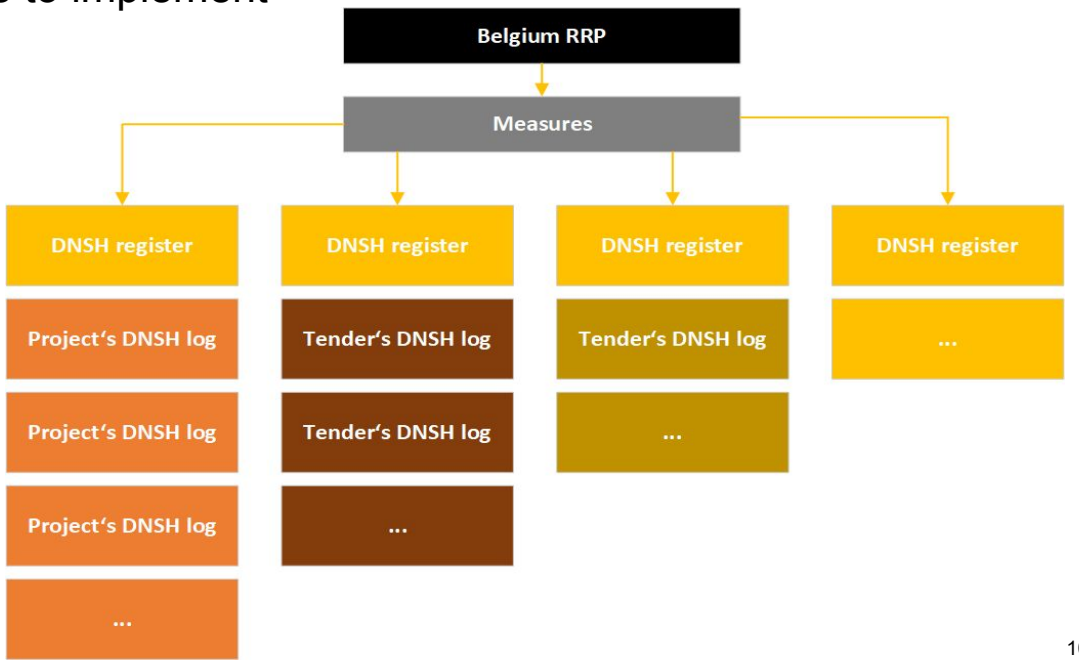
- DNSH in public procurement is a contractual issue that must be set through technical specifications in tender documents



PwC Belgium proposal on monitoring

- All measures and the projects coming under them will need monitoring during the RRP's lifespan
- ***Standard mode and frequency*** can be set for projects, but ***customised monitoring*** is recommended for activities with specific DNSH conditions
- To prove the respect of DNSH principle in due time, it is crucial that all processes and information are documented and available
- The ***DNSH register*** collects and provides a record of all information related to the measure: it is a compilation of ***DNSH logs*** created at sub-levels
- The ***use of a register is inspired from common project/program methodologies recommended by the EC (PM²)*** or widely used (Prince2) and must considered as a good practice to implement

- The approach is:
  - To set a DNSH register for each measure
  - To set a DNSH log for each independent sub-part of a measure (each project, tender…)
  - DNSH log and register are ***maintained under the responsibility of measures' owners*** (accountable institutional entity, or delegated authority, of the measure)



8.2

Belgium - DNSH feedback from RRP

Belgium's DNSH context and general aspects

Belgium is a federal State; all six institutional entities have the autonomy to implement the measures for which they are responsible (and accountable)

→ Need for dialogue and collaboration across institutional entities and relevant departments to develop a homogeneous approach

Belgium's RRP has 17 components and 109 measures that cover many topics; building renovation R&D, energy production, education & training, mobility infrastructures, among others

→ A specific DNSH approach based on topics was considered not relevant

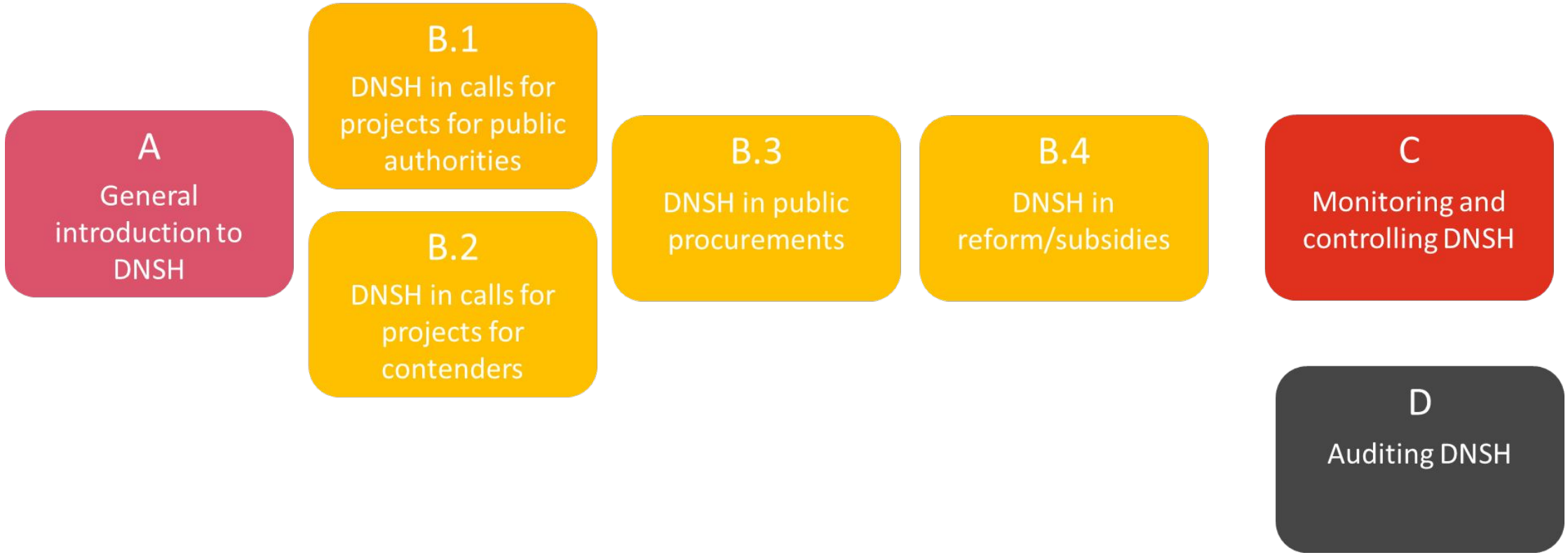
The approach developed by Belgium is to ensure the respect of the DNSH principle is based on two key elements:

- A differentiation based on elements specified in the CID and DNSH-related documents ('Compliance') and all other elements related to the six environmental objectives ('Risk management')
- A differentiation based on the mode of implementation of the measures (call for projects, public procurement, reform and subsidy schemes for citizens), as the role of public authorities differs

→ These elements ease the understanding of stakeholders (internal and external to public authorities), and allow to set clear procedures for each mode of implementation

Capacity building

Activities are developed and organised through ‘learning blocks’, which allows the customisations of the training sessions to the audience by using only the needed blocks.



This approach is being developed from the start ***together with Control and Audit Authorities*** in order to facilitate the collaboration and ensure common understanding.

DNSH in calls for projects

1. While drafting the call for project, public authorities ***list the specific DNSH in CID and relevant Regulations to ensure compliance***, and review them together with the RRP supporting department. In several cases, Belgian authorities have used an external contractor to support the entire process of the call, including DNSH.

2. ***DNSH is set up as an eligibility condition of applications***: allows to exclude irrelevant projects and avoids having to conduct a complete analysis for projects that clearly do not respect the DNSH principle.

3. After the launch of the call and before its deadline, ***public authorities in charge of the call organise an information session for contenders during which an hour is dedicated to DNSH***; the objective is to provide them with a grasp of the DNSH's objectives, and provide enough information and tools for them to perform quality DNSH self-assessments in their application.

4. As all DNSH justifications must be demonstrable, ***the aspect of evidence is to be integrated from the start and must be stressed to all stakeholders*** (public authorities and contenders) as self-declaration are usually not sufficient.

DNSH in calls for projects (2)

5 It has been noticed that ***contenders usually do not take into account the entire lifespan of the project nor the primary indirect impact***; this must be stressed as well during the informative session and in all call's documents.

6 It has been proven useful to ***allow enough time during the project evaluation stage to collect complementary information from project contenders***, as various questions arise from their self-assessments.

7 ***Monitoring of projects might need to be customised depending on the DNSH conditions identified by the project's evaluation and listed in the grant agreement***.

DNSH in public procurements

Challenges

- Translating the DNSH principle into technical specifications
- Ranking the proposals in the absence of metrics

DNSH criteria can also be used as award criteria in addition to the technical specifications, but they tend to be challenging to score if they are not translated into clear metrics.

Belgian authorities contemplate the possibility to organise working sessions with relevant economic sectors before drafting technical specifications in order to identify state-of-the-art practices and set benchmarks.

Monitoring might need to be customised depending on the DNSH conditions set in tender specifications.

Solutions?

- EU Taxonomy Regulation and other EU environmental legislation do not always provide clear specifications for each case; therefore ***public authorities have to set metrics based on other sources***.
- A procedure with output specifications and no metrics is also a possibility in order to let the bidders propose solutions *BUT* in order to evaluate and score the tenders, ***clear award criteria must be set in the tender specifications***; otherwise, the entire procedure is under risk of legal complaints.
- ***When CID or Regulations set specific DNSH conditions,*** the bidder must meet the conditions ***set by clear and auditable commitments***; additional information might be requested during the evaluation stage.

DNSH in reforms/ subsidy schemes for citizens

- *Reforms of Belgium's RRP cover several topics while subsidy schemes focus on building renovation for energy saving.*

Most of the reforms (but not all) have been assessed by the ex-ante evaluation, and approved by the EC; where relevant, additional DNSH conditions have been notified in the CID.

→ The DNSH challenge regarding reforms is to ***evaluate the need for deeper impact assessment*** when considering the technical aspects of implementation that were not known during the ex-ante assessment.

Regarding subsidy schemes, the objective of public authorities is to build theses schemes as 'self-reliable systems' by incorporating various *ad-hoc* conditions linked to DNSH (e.g. exclusion list of specific equipments and materials, use of pre-approved contractors, use of invoices as proof etc)

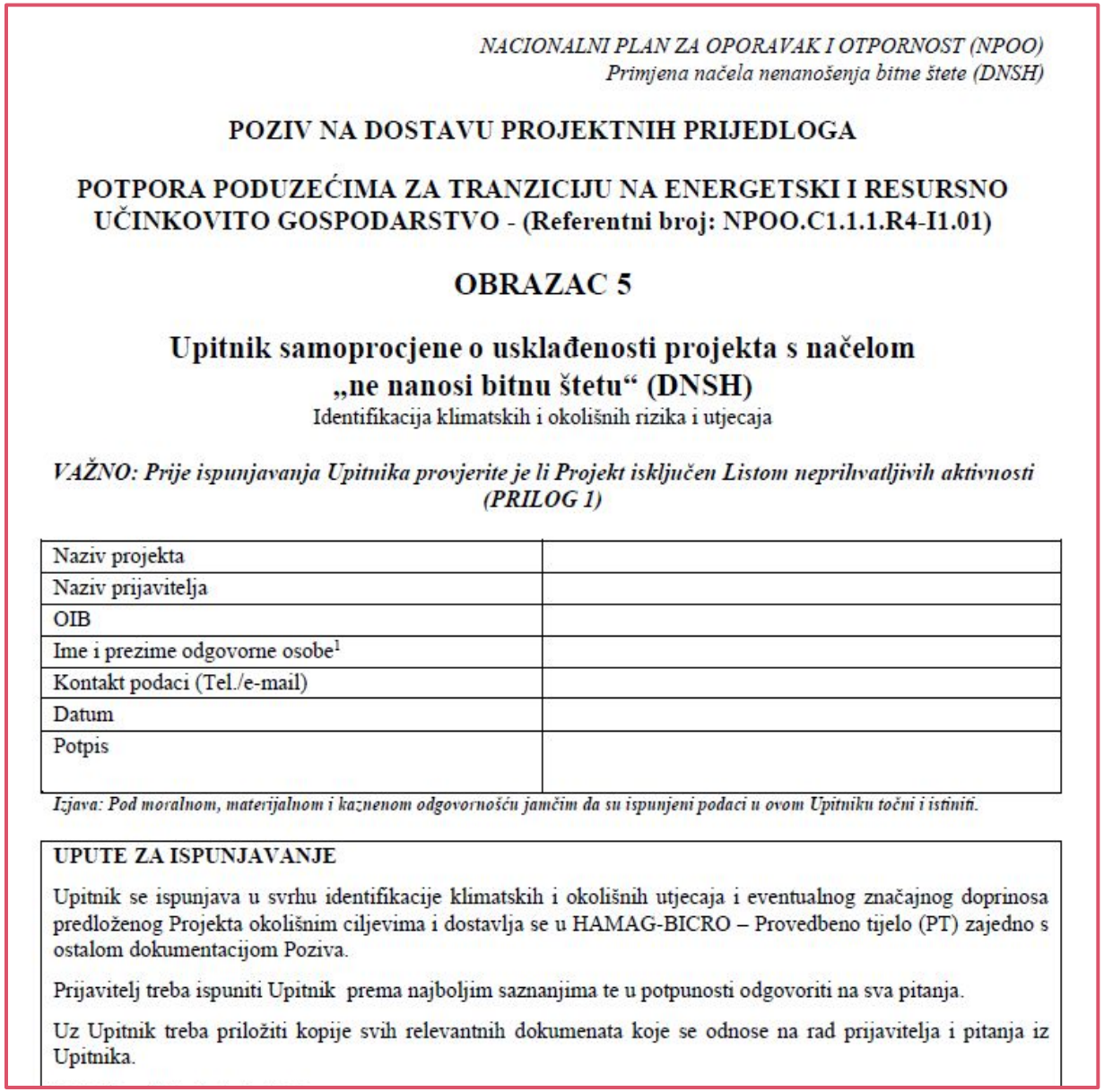
→ The DNSH challenge regarding subsidy schemes is to ***provide enough assurance that DNSH is respected for hundreds/thousands of small, particular cases***.

8.3

Croatia - DNSH feedback from specific call for proposals

DNSH example from Call for proposals from the Croatia's RRP

- **Call for proposals:** Support for entreprises for the transition to an energy- and resource-efficient economy
- The Call has a detailed separate ***DNSH Questionnaire*** form which supplements EC's checklists with concrete criteria, permits, characteristics and requirements ***determining the specific project as DNSH compliant or not***.
- Based on the data submitted in the Questionnaire, the Intermediary Body will assess whether the proposed Project is acceptable for financing and whether its effects, in terms of impact on the proposed Project's climate and environmental changes, have the characteristics of an environmentally sustainable project.
- The ***questionnaire was prepared in accordance with the climate and environmental standards contained in the Technical Guidelines on the verification of sustainability within the InvestEU fund*** and according to the Appendix of the Implementation Decision of the Council on the approval of the evaluation of the plan for the recovery and resilience of Croatia (2021/C 280/01).



NACIONALNI PLAN ZA OPORAVAK I OTPORNOST (NPOO)
Primjena načela nenanošenja bitne štete (DNSH)

POZIV NA DOSTAVU PROJEKTNIH PRIJEDLOGA

POTPORA PODUZEĆIMA ZA TRANZICIJU NA ENERGETSKI I RESURSNO UČINKOVITO GOSPODARSTVO - (Referentni broj: NPOO.C1.1.1.R4-I1.01)

OBRAZAC 5

Upitnik samoprocjene o usklađenosti projekta s načelom „ne nanosi bitnu štetu" (DNSH)
Identifikacija klimatskih i okolišnih rizika i utjecaja

VAŽNO: Prije ispunjavanja Upitnika provjerite je li Projekt isključen Listom neprihvatljivih aktivnosti (PRILOG 1)

Naziv projekta	
Naziv prijavitelja	
OIB	
Ime i prezime odgovorne osobe[1]	
Kontakt podaci (Tel./e-mail)	
Datum	
Potpis	

Izjava: Pod moralnom, materijalnom i kaznenom odgovornošću jamčim da su ispunjeni podaci u ovom Upitniku točni i istiniti.

UPUTE ZA ISPUNJAVANJE

Upitnik se ispunjava u svrhu identifikacije klimatskih i okolišnih utjecaja i eventualnog značajnog doprinosa predloženog Projekta okolišnim ciljevima i dostavlja se u HAMAG-BICRO – Provedbeno tijelo (PT) zajedno s ostalom dokumentacijom Poziva.

Prijavitelj treba ispuniti Upitnik prema najboljim saznanjima te u potpunosti odgovoriti na sva pitanja.

Uz Upitnik treba priložiti kopije svih relevantnih dokumenata koje se odnose na rad prijavitelja i pitanja iz Upitnika.

DNSH example from Call for proposals from the Croatia's RRP

1 INTRODUCTORY PART - GENERAL INFORMATION


Registered headquarters of the applicant (street and number, postal code, city)


National Classification of Activities (NKD) code and main activity of the applicant


Number of employees


Name of the project


Total value of the project in EUR


National Classification of Activities (NKD) code and main activity of the project


Project location (street and number, cadastral plot number, postal code and place)


Planned investment dynamic (beginning and end date)

2 EXISTING BUSINESS AND STANDARDS ACHIEVED

Specify the type and location of buildings and/or land where the applicant's activities take place (address and/or number of cadastral plot and cadastral municipality or other applicable):

Do you use environmentally significant amounts of raw materials, energy and/or natural resources (such as water, mineral materials, etc.) in your existing business processes?
If the answer is Yes, specify in detail (types and quantities):

- ❑ Yes
- ❑ No
- ❑ Not applicable

Mark if you have implemented any of the management systems (quality or business processes or services) in your business activities:

- ❑ Quality management system (ISO 9000 or other)
- ❑ Environmental protection system (ISO 14000, EMAS or others)
- ❑ Other management systems (including certificates and internal company policies related to the relationship with the community, employees, management, etc.).

Does the applicant have employees who are responsible for the quality management system, environmental protection and occupational safety?
If yes, please provide name and contact:

- ❑ Yes
- ❑ No
- ❑ Not applicable

Did the applicant carry out any activities that contributed to the improvement of the environment and the quality of life of the local community? If the answer is Yes, please explain:

- ❑ Yes
- ❑ No

DNSH example from Call for proposals from the Croatia's RRP

2 EXISTING BUSINESS PRACTICES AND STANDARDS ACHIEVED

Mark if the applicant and/or the responsible person and/or the majority owners were previously in one of the following situations: ❑ Punished for non-compliance with environmental regulations ❑ Work permit (if any) withdrawn due to non-compliance with environmental protection regulations ❑ Other If you answered yes, please explain the circumstances and, if necessary, attach copies of the documents:	
Did the applicant's existing activity require an environmental impact assessment and/or a main assessment of acceptability for the ecological network? If the answer is Yes, attach the corresponding document:	❑ Yes ❑ No
Are special permits and approvals/consent required for the applicant's existing activity? If the answer is Yes, check or write the appropriate ones below: ❑ Water permit ❑ Permit for the emission of greenhouse gases ❑ Permits related to the activity of collection, storage, recovery and/or disposal of waste, etc. ❑ Work permit issued according to a special regulation ❑ Environmental permit ❑ Assessment of the impact of the intervention on the environment, Assessment of the need to assess the environmental impact of interventions (PUO, OPUO) ❑ Concession Certificate ❑ Other documents related to the environment, climate, etc.	❑ Yes ❑ No
Does the applicant have an obligation to report on any of the environmental components and, if so, for which component and with what dynamics. If the answer is Yes, submit the last validated report:	❑ Yes ❑ No

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.1 GENERAL INFORMATION

Is it necessary to provide for the needs of the Project or are the so-called "related objects" that are not subject to financing, but are necessary for the realization of the Project. Mark or write the appropriate: ❑ Construction or reconstruction of roads and/or transport routes ❑ Construction or reconstruction of infrastructure facilities (e.g. transmission line, substations, gas pipeline, steam pipeline, water supply, drainage, etc.) ❑ Waste water treatment device ❑ Other If necessary, further clarify and indicate who is responsible for the construction of such facilities:	
Have there been any industrial incidents at the location of the future Project in the past 10 years (e.g. fires, explosions, spills/leaks of fuel and/or dangerous raw materials/products, unplanned emissions, deaths of employees due to accidents at work, etc.)? If the answer is Yes, please explain:	❑ Yes ❑ No
Was the previous owner's waste disposed of on the land of the future Project and/or is the location burdened with pollution from previous activities? If the answer is Yes, please explain:	❑ Yes ❑ No
Is the location of the Project within or in the vicinity or in the area of influence of one of the valuable and/or vulnerable or sensitive areas. If Yes, mark: ❑ Protected nature area in one of the national categories (Strict Reserve, National Park, Nature Park, Special Reserve, Regional Park, Monument of Nature, Significant Landscape, Forest Park, Monument of Park Architecture) ❑ Areas of the NATURA 2000 ecological network significant for the conservation of birds and/or target species and habitat types ❑ Areas with some other international protection status (UNESCO WHS, M&B, Geo park, RAMASAR, etc.) ❑ Site of archaeological or protected cultural property ❑ The locality is a particularly valuable element of cultural and historical identity ❑ Areas of importance for the indigenous population and vulnerable groups ❑ Other If necessary, clarify:	❑ Yes ❑ No

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.1 GENERAL INFORMATION

Is the Project planned to be realized in accordance with some of the standards of sustainable, green and similar practices - for example:
compliance with the principles and standards of green construction (LEED, BREEAM, etc.)
ecological production requirements; EU Eco Label, Friend of the Environment, etc.
If you already have a certificate of conformity, attach a copy in digital form.
If necessary, clarify:

❑ Yes
❑ No
❑ Not applicable

If the construction and/or extension of new space or existing space (plant, warehouse and other spaces) is planned for the implementation of the Project, i.e. any activity that includes the mandatory issuance of a building permit, has the building permit been obtained in accordance with the Law on Construction ("National newspaper" number 153/13, 20/17, 39/19, 125/19). ***(proof of compliance with the nZEB standard for almost zero energy buildings)***. If necessary, clarify:

❑ Yes
❑ No
❑ Not applicable

Is the Project based on general binding rules, i.e. "Best Available Techniques-BAT" related to investment in technology/facility? If necessary, clarify:

❑ Yes
❑ No
❑ Not applicable

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.2 IMPACT OF THE PROJECT ON CLIMATE AND ENVIRONMENT

Will the Project include activities that will affect air quality? (e.g. due to dust emissions, energy consumption, emissions from production processes or significant changes in transport modes or infrastructure?)If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the Project affect the change in the quality of surface, underground or seawater, affect water consumption, quality and quantity of wastewater? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the Project affect the change in land and soil quality - soil erosion, soil organic matter, soil salinity, soil pollution, etc.? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the project include activities that will produce waste, and if so, what types of waste will be disposed of and how? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the Project include activities that could cause noise and vibration levels above values that could disturb people or negatively affect health? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the Project have an impact on locally important habitats or the natural ecosystem? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Is the location already exposed to pollution or environmental damage? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No
Will the Project include activities that could lead to unpleasant odor emissions? If the answer is Yes, please clarify and provide sources of verification:	❑ Yes ❑ No

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.2 SIGNIFICANT CONTRIBUTION OF THE PROJECT

Climate change mitigation:

❑ Yes
❑ No

Does your Project contribute to the stabilization of greenhouse gas concentrations in the atmosphere, by avoiding or reducing greenhouse gas emissions or by increasing the removal of greenhouse gases?

For example in one of the following ways:

- production, transmission, storage, distribution or use of renewable energy;
- by improving energy efficiency;
- by increasing clean or climate-neutral mobility;
- by switching to the use of renewable materials from sustainable sources;
- by increasing the use of environmentally safe carbon capture and use technologies and carbon capture and storage, which achieve a net reduction in greenhouse gas emissions;
- strengthening terrestrial carbon sinks, including avoiding deforestation and forest degradation, forest restoration, sustainable management and restoration of arable lands, grasslands and wetlands, reforestation and regenerative agriculture;
- by establishing the energy infrastructure necessary to enable the decarbonization of energy systems;
- by producing clean and efficient fuels from renewable or carbon-neutral sources; or
- by establishing an activity (the so-called enabling activity) that directly enables any of the aforementioned activities,
- supports the transition to a climate-neutral economy, including the gradual abolition of greenhouse gas emissions, if there is no technologically and economically feasible low-carbon alternative for the Project/activity;
- something else.

If the answer is Yes, please explain and provide sources of verification:

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.2 SIGNIFICANT CONTRIBUTION OF THE PROJECT

Climate change adaptation:

❑ Yes
❑ No

Does your project include adaptation solutions that significantly reduce the risk of the adverse impact of the current climate and expected future climate on the project/activity, or significantly reduce that adverse impact, without increasing the risk of adverse impact on people, nature or property;
If the answer is Yes, please explain and provide sources of verification:

Sustainable use and protection of water and marine resources:

❑ Yes
❑ No

Does your project significantly contribute to the achievement of good status of water bodies, including bodies of surface and groundwater, or to the prevention of deterioration of water bodies that are already in good status, or does it significantly contribute to the achievement of good environmental status of marine waters or to the prevention of deterioration of the environment of marine waters if they are already in good condition?
For example in the following ways:

- protecting the environment from the harmful effects of municipal and industrial wastewater discharges, including contaminants of emerging concern such as pharmaceuticals and microplastics, for example by ensuring adequate collection, treatment and discharge of municipal and industrial wastewaters;
- by protecting human health from the harmful effect of any pollution of water intended for human consumption by ensuring that this water does not contain microorganisms, parasites and substances that represent a potential danger to human health and increasing people's access to clean drinking water;
- improving water management and efficiency, including protecting and improving the state of water ecosystems, promoting sustainable water use, long-term protection of available water resources, including the application of measures such as water reuse, ensuring a gradual reduction of emissions of pollutants into surface and underground waters, contributing to the mitigation of consequences flood and drought, or any other activity that protects or improves the qualitative and quantitative state of water bodies;
- by ensuring the sustainable use of marine ecosystem services or by contributing to the good environmental condition of marine waters, among other things by protecting, preserving or restoring the marine environment and preventing or reducing input into the marine environment; or
- by establishing an activity/activity (the so-called enabling activity) that directly enables any activity/activity mentioned above.

If the answer is Yes, please explain and provide sources of verification:

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.2 SIGNIFICANT CONTRIBUTION OF THE PROJECT

Transition to a circular economy:

Does your project significantly contribute to the transition to a circular economy, including waste prevention, reuse and recycling?

❑ Yes
❑ No

For example if:

- in production you use natural resources more efficiently, including bio-raw materials from sustainable sources and other raw materials, among others: i). by reducing the use of primary raw materials or increasing the use of by-products/secondary raw materials; or ii.) measures for efficient use of resources and energy;
- increase durability, possibility of repair, upgrade or reusability of products, especially in design and production activities;
- increases the possibility of recycling products, including the possibility of recycling individual materials contained in these products, among others by replacing or reducing the use of products and materials that cannot be recycled, especially in design and production activities;
- significantly reduce the proportion of hazardous substances and replace substances of particular concern in materials and products during their life cycle, in accordance with the objectives set out in EU law, inter alia by replacing these substances with safer alternatives and ensuring traceability;
- prolongs the use of the product, including through reuse, design for longevity, repurposing, disassembly, remanufacturing, upgrading and repair, and product sharing;
- increases the use of secondary;
- prevents or reduces the generation of waste; and
- increases preparation for reuse and recycling of waste.

If the answer is Yes, please explain and provide sources of verification:

DNSH example from Call for proposals from the Croatia's RRP

3 INFORMATION ABOUT THE PROJECT

3.2 SIGNIFICANT CONTRIBUTION OF THE PROJECT

Pollution prevention and control:

❑ Yes
❑ No

Does your project significantly contribute to the prevention and control of environmental pollution?
For example in the following ways:

- by preventing or, if this is not feasible, reducing the emissions of pollutants into the air, water or land, which are not greenhouse gas emissions;
- by improving the level of air, water or soil quality in the areas where the economic activity is carried out while simultaneously minimizing any harmful effects and risks to human health and the environment;
- by reducing or minimizing any harmful effect of the production and use and disposal of chemicals on human health and the environment;
- by establishing an activity/activity (the so-called enabling activity) that directly enables any activity/activity mentioned above.

If the answer is Yes, please explain and provide sources of verification:

Protection and restoration of biodiversity and ecosystems:

❑ Yes
❑ No

Does your project significantly contribute to the protection, preservation and restoration of biodiversity or to the achievement of good ecosystem condition or to the protection of ecosystems that are already in good condition?
For example in the following ways:

- preserving nature and biodiversity, including achieving a favorable state of preservation of natural and semi-natural habitats and species or preventing their deterioration if their state of preservation is already considered favorable, and protecting and restoring terrestrial, marine and other water ecosystems in order to improve their condition;
- sustainable land use and management, including adequate protection of soil biodiversity, neutrality of land degradation and remediation of polluted sites;
- sustainable forest management, including practices and use of forests and forest lands, which contributes to improving biodiversity or stopping or preventing ecosystem degradation, deforestation and habitat loss; or
- by establishing an activity/activity (the so-called enabling activity) that directly enables any activity/activity mentioned above.

If the answer is Yes, please explain and provide sources of verification:

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Q&A session

Thank you

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