

# **Do no significant harm: how to move from the principle to the practice and get funded**

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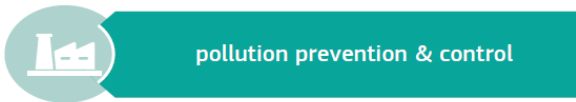
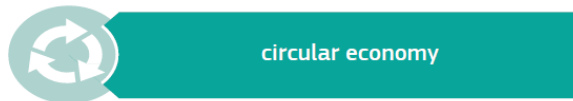
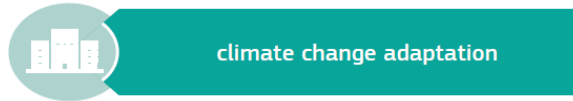
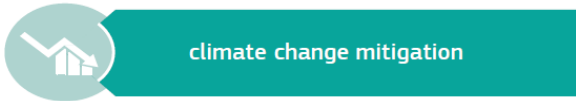


# THE DNSH PRINCIPLE/1

## Do No Significant Harm (DNSH)

The Regulation establishing the Recovery and Resilience Facility (RRF) provides that **no measure** (i.e. no reform and no investment) included in a Member State's Recovery and Resilience Plan (RRP) should **lead to significant harm to any of the six environmental objectives** within the meaning of Article 17 of the Taxonomy Regulation (EU) 2020/852.

The 6 environmental objectives:





## THE DNSH PRINCIPLE/2

An activity is considered to do significant harm to:

1. climate change mitigation if it leads to **significant greenhouse gas (GHG) emissions**;
2. climate change adaptation if it 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**;
3. the sustainable use and protection of water and marine resources if it 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;
4. to the circular economy, including waste prevention and recycling, if it leads to **significant inefficiencies in the use of materials or in the direct or indirect use of natural resources, or if it significantly increases the generation, incineration or disposal of waste**, or if the long-term disposal of waste may cause significant and long-term environmental harm;
5. pollution prevention and control if it leads to a **significant increase in emissions of pollutants into air, water or land**;
6. the protection and restoration of biodiversity and ecosystems if it is significantly **detrimental to the good condition and resilience of ecosystems, or detrimental to the conservation status of habitats and species**, including those of Union interest.



Brussels, 12.2.2021  
C(2021) 1054 final

Commission Notice

Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation

EUROPEAN COMMISSION  
C(2021) 1054

Technical guidance  
on the application  
of “do no significant harm”  
under the  
Recovery and Resilience  
Facility Regulation

EN

EN



The Commission adopted  
Technical Guidance on DNSH  
on 12 February 2021



## DNSH IS PART OF THE ASSESSMENT

The Commission assess Member States' RRP based on assessment criteria annexed to the RRF Regulation

For each criterion, the Commission must rate the RRP from A to C

- For the **assessment of DNSH**, the Commission has only two rating options: **A or C (there is no B!)**
- **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 Commission can only endorse an RRP if no assessment criteria is rated with a 'C'

REGULATION (EU) 2021/241  
OF THE EUROPEAN  
PARLIAMENT AND OF THE  
COUNCIL

of 12 February 2021

establishing the Recovery and  
Resilience Facility



Annex V



# DNSH CHECKLIST/1

## ANNEX I: DNSH checklist

1. **Part 1 – Member States should filter the six environmental objectives to identify those that require a substantive assessment.** For each measure, please indicate which of the below environmental objectives, as defined in Article 17 (*‘Significant harm to environmental objectives’*) of the Taxonomy Regulation, require a substantive DNSH assessment of the measure:

<i>Please indicate which of the environmental objectives below require a substantive DNSH assessment of the measure</i>	Yes	No	<i>Justification if ‘No’ has been selected</i>
Climate change mitigation			
Climate change adaptation			
The sustainable use and protection of water and marine resources			
The circular economy, including waste prevention and recycling			
Pollution prevention and control to air, water or land			
The protection and restoration of biodiversity and ecosystems			



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# DNSH CHECKLIST/2

2. **Part 2 – Member States should provide a substantive DNSH assessment for those environmental objectives that require it. For each measure, please answer the questions below, for those environmental objectives identified under Part 1 as requiring a substantive assessment:**

Questions	No	Substantive justification
<i>Climate change mitigation:</i> Is the measure expected to lead to significant GHG emissions?		
<i>Climate change adaptation:</i> Is the measure expected to lead to an increased adverse impact of the current climate and the expected future climate, on the measure itself or on people, nature or assets?		
<i>The sustainable use and protection of water and marine resources:</i> Is the measure expected to be detrimental:  (i) to the good status or the good ecological potential of bodies of water, including surface water and groundwater; or  (ii) to the good environmental status of marine waters?		
<i>The transition to a circular economy, including waste prevention and recycling:</i> Is the measure expected to:  (i) lead to a significant increase in the generation, incineration or disposal of waste, with the exception of the incineration of non-recyclable hazardous waste; or  (ii) lead to significant inefficiencies in the direct or indirect use of any natural		

resource <sup>1</sup> at any stage of its life cycle which are not minimised by adequate measures <sup>2</sup> ; or  (iii) cause significant and long-term harm to the environment in respect to the circular economy <sup>3</sup> ?		
<i>Pollution prevention and control:</i> Is the measure expected to lead to a significant increase in the emissions of pollutants <sup>4</sup> into air, water or land?		
<i>The protection and restoration of biodiversity and ecosystems:</i> Is the measure expected to be:  (i) significantly detrimental to the good condition <sup>5</sup> and resilience of ecosystems; or  (ii) detrimental to the conservation status of habitats and species, including those of Union interest?		



**HOW DOES THE DNSH PRINCIPLE APPLY TO  
THE CONSTRUCTION AND RENOVATION OF  
BUILDINGS - RESIDENTIAL AND NON-  
RESIDENTIAL - FINANCED BY THE PNRR?**



# IT - PNRR - MISSION 2 GREEN REVOLUTION AND ECOLOGICAL TRANSITION/1

COMPONENTS AND RESOURCES (€BILLIONS)



59,47

Bn

Total

M2C1 – CIRCULAR ECONOMY AND SUSTAINABLE AGRICULTURE 5,27

M2C2 – RENEWABLE ENERGY, HYDROGEN, GRID AND SUSTAINABLE MOBILITY 23,78

M2C3 – ENERGY EFFICIENCY AND BUILDING RETROFIT 15,36

M2C4 – CONSERVATION OF LAND AND WATER RESOURCES 15,06





# IT - PNRR - MISSION 2 GREEN REVOLUTION AND ECOLOGICAL TRANSITION/2

## FRAMEWORK OF MEASURES AND RESOURCES (€BILLIONS)

15,36

Bn

Total

Areas of intervention/Measures	Total
<b>1. Energy efficiency of public buildings</b>	<b>1.21</b>
Investment 1.1 Plan for <u>school buildings</u> replacement and energy retrofit	0.80
Investment 1.2 Efficiency of <u>judicial buildings</u>	0.41
Reform 1.1 Simplification and acceleration of the procedure for the realization of energy efficiency retrofit	
<b>2. Energy and Seismic retrofit of public and private dwellings</b>	<b>13.95</b>
Investment 2.1 Ecobonus and Sismabonus up to 110% for energy efficiency and building safety	13.95
<b>3. District heating systems</b>	<b>0.20</b>
Investment 3.1 Development of district heating systems	0.20



## IT - PNRR - MISSION 2 GREEN REVOLUTION AND ECOLOGICAL TRANSITION/3

### EXPECTED RESULTS

195 school buildings (410.000 sqm) → Regime 1 (substantial contribution)  
8.400 tCO<sub>2</sub>/ year reduction

48 judiciary buildings (290.000 sqm) → Regime 2 (exclusive to DNSH)  
2.500 tCO<sub>2</sub>/ year reduction

100.000 private and public dwellings (36 million sqm retrofit) → Regime 1 (substantial contribution)  
667.000 tCO<sub>2</sub>/ year reduction

→ TOT. 677.900 tCO<sub>2</sub>/ year reduction



# THE DNSH PRINCIPLE IN THE CONSTRUCTION AND RENOVATION OF BUILDINGS/1

6 OBJECTIVES	ISSUES identified in the construction sector
Mitigation of climate change	<ul style="list-style-type: none"><li>• <b>Excessive energy consumption</b> and emissions of carbon derivatives</li></ul>
Adaptation to climate change	<ul style="list-style-type: none"><li>• Reduced resistance to <b>extreme weather events</b></li><li>• Lack of resilience to <b>future temperature increases</b> in terms of <b>indoor comfort</b> conditions</li></ul>
Sustainable use or protection of water and marine resources	<ul style="list-style-type: none"><li>• Excessive water consumption due to <b>inefficient water systems</b></li><li>• <b>Interference</b> of the structure with the <b>surface water pattern</b></li><li>• <b>Impact of the construction site on the local water environment</b> (pollution)</li></ul>
Circular economy	<ul style="list-style-type: none"><li>• Transport to landfill and/or incineration of <b>construction and demolition waste</b> that could otherwise be efficiently recycled/reused</li><li>• <b>Excessive waste production</b> and inefficient waste management</li></ul>
Prevention and reduction of pollution	<ul style="list-style-type: none"><li>• Presence of <b>harmful substances</b> in building materials</li><li>• Presence of <b>contaminants in building components</b> and any hazardous construction and demolition wastes from building renovations</li><li>• Presence of <b>contaminants in the site soil</b></li></ul>
Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"><li>• Inappropriate <b>building location</b></li><li>• <b>Negative impacts on ecosystems</b> if construction occurs in a conservation area or an area of high biodiversity value (in the case of new construction)</li><li>• <b>Risks to forests</b> from not using wood from sustainably managed and certified forests</li></ul>



### GUIDING PRINCIPLES

- a) designed to minimize **energy use and carbon emissions**, throughout the life cycle
- b) adaptation** of buildings to climate change
- c) rational use of **water resources**
- d) proper selection of **materials**
- e) proper management of **site waste**

The solutions implemented, the materials and the components used must guarantee compliance with current Italian **CAM (Minimum Environmental Criteria)**.



# THE DNSH PRINCIPLE IN THE CONSTRUCTION AND RENOVATION OF BUILDINGS/3

## DNSH CONSTRAINTS

6 OBJECTIVES	DNSH CONSTRAINTS - NEW BUILDING CONSTRUCTION	DNSH CONSTRAINTS – RENOVATIONS
Mitigation of climate change	<ul style="list-style-type: none"><li>• Overall non-renewable primary energy demand <b>20% lower than that of NZEB requirements</b> → class en. A4 (<b>Regime 1</b>)</li><li>• <b>NZEB, Class A4 (Regime 2)</b> - mandatory for new buildings from 1/1/2021 (private buildings) and 1/1/2019 (public buildings)</li></ul>	<ul style="list-style-type: none"><li>• <b>Major renovation of first and second level</b> → <b>savings in net primary energy demand of at least 30%</b> compared to the performance of the building before renovation</li></ul>
Adaptation to climate change	<ul style="list-style-type: none"><li>• <b>Climate risk assessment over the building lifecycle</b> (10- to 30-year climate projections)</li><li>• Verify <b>vulnerability of the building</b> with respect to the identified risks</li><li>• <b>Adaptation solutions</b> that can reduce risk (integrated in design and implementation. They should not adversely affect adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of the cultural heritage, of property and other economic activities. Adaptive solutions should be consistent with local, sectoral, regional or national adaptation strategies and plans) (<i>e.g. stormwater runoff, temperature mitigation, etc.</i>)</li></ul>	
Sustainable use or protection of water and marine resources	<ul style="list-style-type: none"><li>• <b>Building CAM application</b> (<i>e.g. dual flush cisterns for 6Lmax WCs, water-saving taps, separation of wastewater from stormwater, purification/removal of wastewater from driveways and car parks, pedestrian/cycle paths/roofs/etc. into stormwater cisterns, waterless urinals, water consumption measurement</i>)</li><li>• <b>International standards</b> on sanitary faucets (EN 200, 816,817,1111,1112,1113,1287,15091) for water saving (already mandatory in Italy)</li></ul>	



# THE DNSH PRINCIPLE IN THE CONSTRUCTION AND RENOVATION OF BUILDINGS/4 DNSH CONSTRAINTS

6 OBJECTIVES	DNSH CONSTRAINTS - NEW BUILDING CONSTRUCTION	DNSH CONSTRAINTS – RENOVATIONS
Circular economy	<ul style="list-style-type: none"><li>• <b>Building CAM application → 50% disassembly</b> (in weight of building and prefabricated components)</li><li>• At least <b>80% (new construction) and 70% (renovation)</b> of non-hazardous C&amp;D waste sent for <b>recovery</b></li><li>• <b>Waste management plan</b></li></ul>	
Pollution preventive and reduction	<p>Building CAM application including:</p> <ul style="list-style-type: none"><li>• Components, products and <b>materials containing pollutants</b> from the Authorization List in the REACH Regulation (Candidate List) may not be used.</li><li>• <b>Radon risk assessment</b> for used materials and soil characterisation</li><li>• <b>Construction site plan</b></li><li>• Soil and groundwater characterisation (as per Legislative Decree 152)</li></ul>	
Protection and restoration of biodiversity and ecosystems	<p><b>New construction</b> works must not concern:</p> <ul style="list-style-type: none"><li>• <b>Cultivated and arable land</b> with moderate to high soil fertility and underground biodiversity (LUCAS survey)</li><li>• <b>Virgin land with high biodiversity</b> and land that is the habitat of species (flora and fauna) on the European Red List or the IUCN Red List;</li><li>• <b>Forests</b></li><li>• <b>Virgin wood</b> for structures, cladding, finishes must be <b>at least 80% FSC certified</b> or use <b>recycled wood or wood prepared for reuse</b></li></ul>	



**Sede Legale ed operativa**

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**Thank you for your attention!**