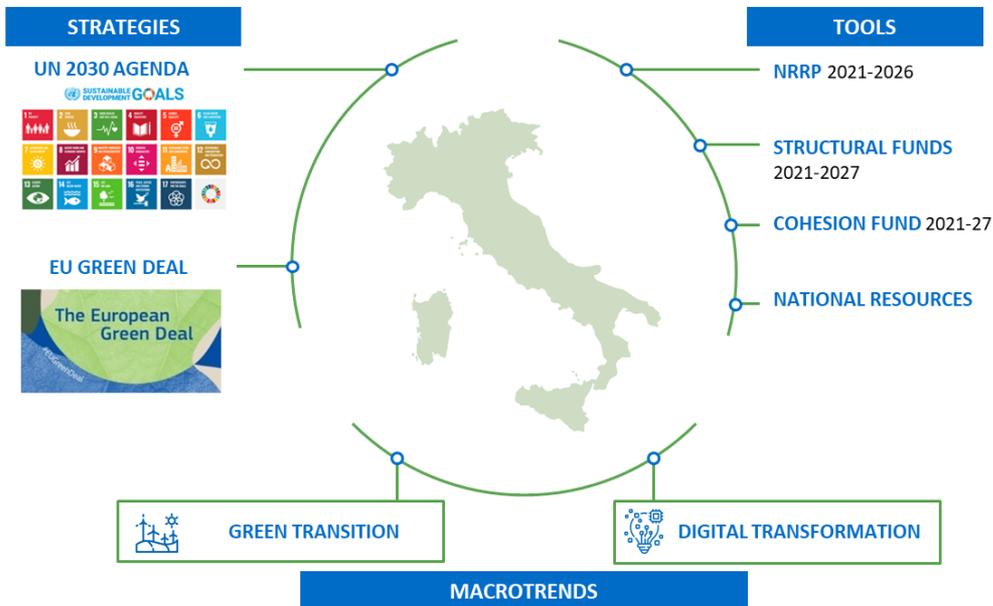# Towards a new framework for sustainable infrastructure assessment

**15th Annual Meeting of the OECD Network of Senior Infrastructure and PPP Officials**
*Infrastructure governance for green and climate-resilient infrastructure*

**Paris - October 10, 2022**

# Priorities and policy objectives

## STRATEGIES

**UN 2030 AGENDA**

**EU GREEN DEAL**

## TOOLS

**NRRP** 2021-2026

**STRUCTURAL FUNDS** 2021-2027

**COHESION FUND** 2021-27

**NATIONAL RESOURCES**

## MACROTRENDS

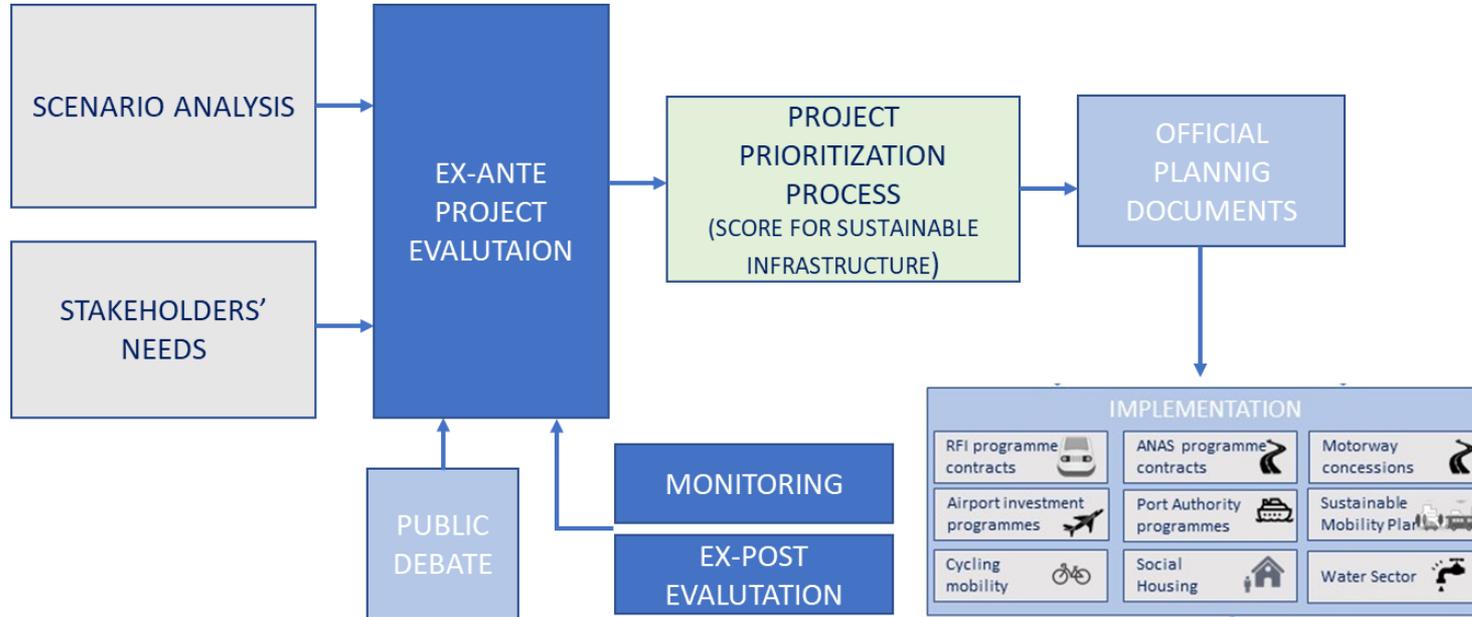**GREEN TRANSITION**

**DIGITAL TRANSFORMATION**

### Mims' priorities and objectives

**One of the priorities of the Ministry for Sustainable Infrastructures and Mobility** has been to carry out the digital and green transition through the **introduction of sustainability in project planning**, the design of **policies to decarbonize transport**, the improvement of **security for all infrastructures against climate change** and the **planning of resilient infrastructure** to accelerate the transition towards a zero-carbon economy.

Our ecological transition is based on a people centred approach through **integrated and systemic interventions aimed at improving the quality of life of citizens** and the competitiveness of companies, **reducing inequalities between various territories, as** new investments in infrastructure and mobility must also ensure the **economic, social and environmental sustainability**.

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# A new framework for sustainable infrastructure assessment

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# A new framework for sustainable infrastructure assessment: principles

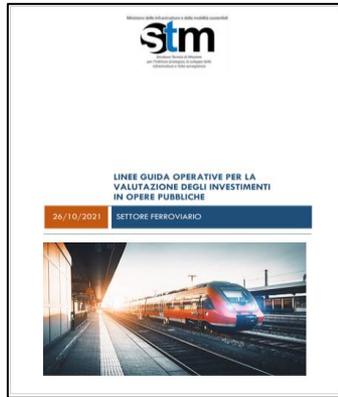| | |
|---|---|
| **CONSISTENCY** | **Policy coherence** with clear synergies with respect to action to be taken |
| **EFFICIENCY AND EFFECTIVENESS** | **Feasible process with respect to timeline and targets** |
| **FLEXIBILITY** | Defining criteria and scenarios must take into account the uncertainty related to **technological change** |
| **PROPORTIONALITY** | **Growing level of detail and robustness for the analyses**, in accordance with the value of the work and/or its impact |
| **ACCOUNTABILITY** | An accountable **decision-making process** in order to ensure a structured **stakeholder engagement** |

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# The need of an integrated set of information

MIMS has published a set of **technical and sector-based Guidelines** with the aim to ensure **a set of integrated** information for project evaluation and assessment

**Guidelines for ex-ante evaluation**

| Railways | Roads | Water sector |
|---|---|---|

**Guidelines for the Technical and Economic Feasibility Project of Public Works**
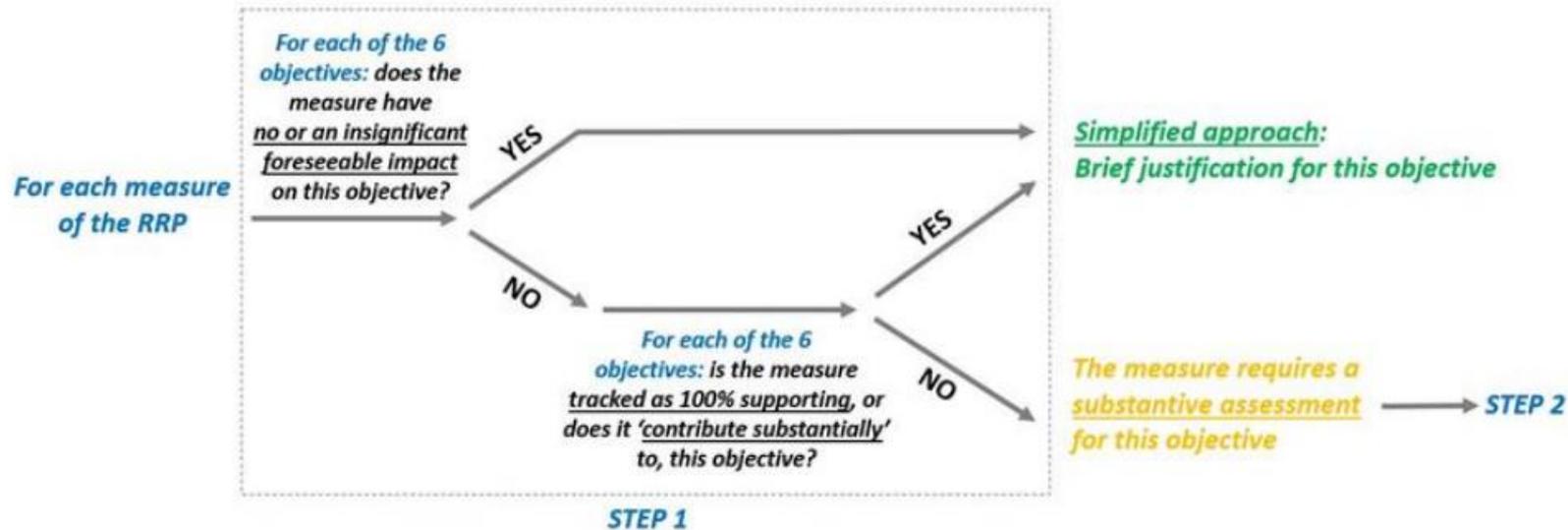
*"Which/What"*

*"How"*

# The Guidelines structure and the "Sustainability Report"

A "**Sustainability Report**" must be presented by project promoter according to following dimensions:

| Dimensions | Main elements of evaluation |
|---|---|
| **Economic** | • **Contribution to the Sustainable Development Goals (SDGs)**<br>• Estimate of **medium-long term impacts** in terms of economic and social development of the territory |
| **Environmental** | • **"Substantial contribution" and DNSH**<br>• **Carbon Footprint of the work and Energy Balance**<br>• **Life Cycle Assessment and Resilience Analysis** |
| **Social** | • **Employment impacts**<br>• **Measures to protect decent work** along the whole procurement chain |
| **Institutional and Governance** | • **Policy coherence**<br>• **Models and tools for stakeholder engagement** |

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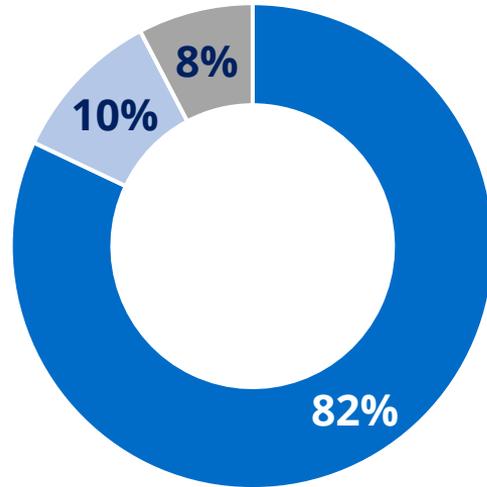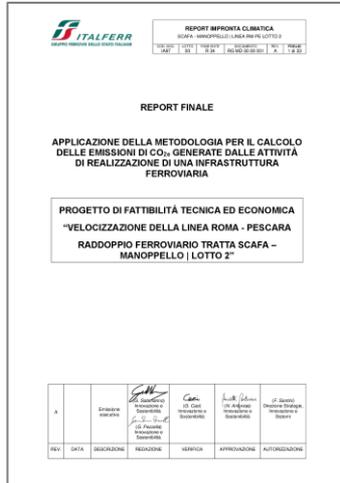**10 years to transform Italy**

# DNSH assessment within the «Sustainability Report»



Decision tree

# Sustainability report: infrastructure carbon footprint

**An application to a NRRP railway project:**



## GHC emissions sources

- Construction materials

- Construction material transportation

- Construction site

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# Sustainability report: mitigation options

**An application to a NRRP railway project:**

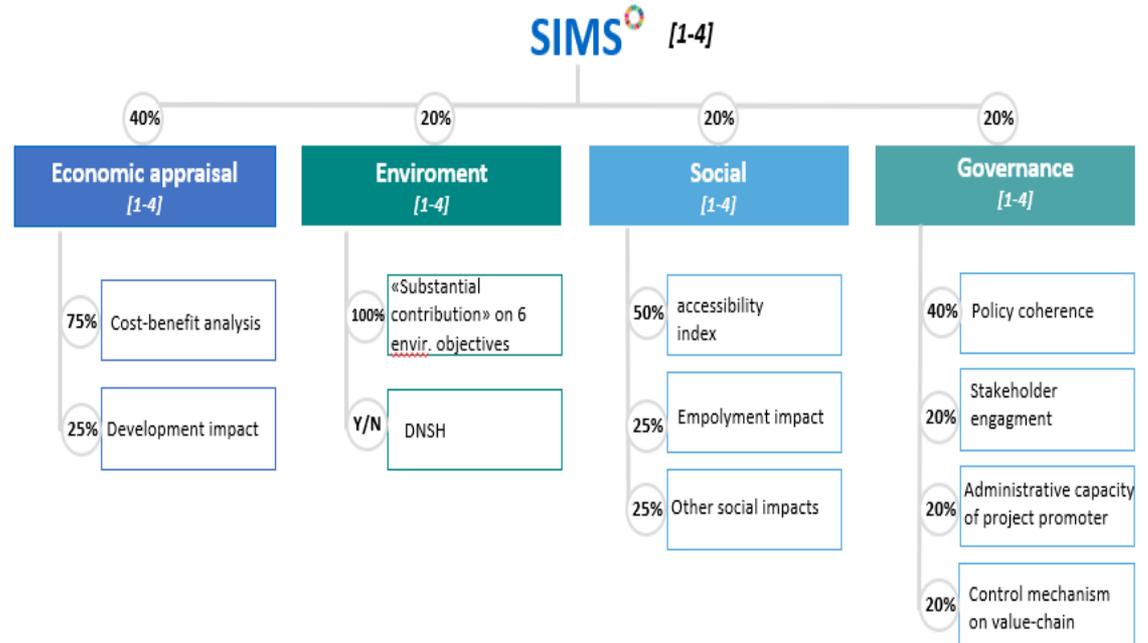| Worst case | Mitigation option |
|---|---|
| ■ No reuse of excavated materials<br>■ All construction materials are taken «outside»<br><br>**35.557 $tCO_{2e}$** | ■ Reuse of excavated materials (80%)<br>■ Landfilling and other utilization(20%)<br><br>**23.865 $tCO_{2e}$** |

**Saving: -33%**
**11.692 tCO2e**

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# A scoring model for project prioritization

**The Sustainable Infrastructure and Mobility Scoring Model (SIMS)**



Every dimensions and sub-domains are evaluated using a **linear scale**:

# Thank for your attention

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