

Greening the economy in the pan- European region: working towards sustainable infrastructure

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Roadmap

Setting the scene

- I. Infrastructure and sustainability: Challenges and opportunities
- II. Practice and experience for sustainable infrastructure in the region
- III. Measuring sustainable infrastructure in the region
- IV. The Future, and our place in it
- V. Conclusions and the way forwards

Discussion

Setting the scene

Driving forces for sustainable infrastructure

*Sustainable infrastructure plays an **important role** in the **current efforts for greening the economy** and the achievement of **global commitments** (SDGs/
Paris Agreement and others)*

Setting the scene

Trends for sustainable infra. in the pan-European reg.

- *Promotion of **circularity** and the **green economy**.*
- *Sustainable infrastructure **investment** aligned with **COVID-19 recovery strategies**.*
- ***Digitalisation** and **data-driven** solutions*

Setting the scene

Pressures of infrastructure development



I.

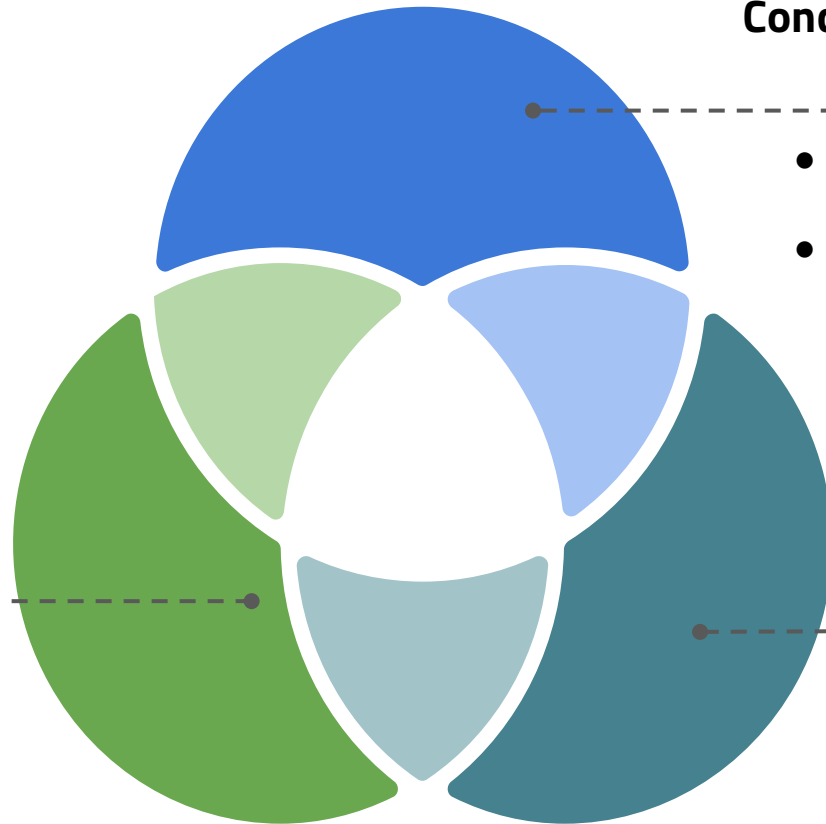
Infrastructure and sustainability: Challenges & opportunities

Key enablers of sustainable infrastructure

- **Regulatory frameworks** and rule of law
- Adequate levels of **technical** and **institutional capacity**
- Clearly defined **sustainability policies**
- **Transparency, effective, safe** and **inclusive public participation**
- Sound **investment climate**

I.

Infrastructure and sustainability: Challenges & opportunities



Conceptual challenges and opportunities

- A common definition of sustainable infrastructure
- Sustainability of the life cycle

Financial challenges and opportunities

- Financing sustainable infrastructure

Incorporation of new solutions, challenges and opportunities

- Making brown infrastructure greener
- Risk and resilience

I. Infrastructure and sustainability

Conceptual challenges and opportunities

- A **common definition** of sustainable infrastructure
 - Significant work has been conducted in the area across the region
 - There is no commonly agreed definition
 - There are not common targets to measure progress
- Sustainability of the **life cycle**
 - Systematic and integrated planning, financing, prioritization, design, construction, maintenance, operation, and evaluation.
 - Capacity building efforts to support development

I.

Infrastructure and sustainability

Incorporation of new solutions, challenges and opportunities

- Making **brown infrastructure greener**
 - Deploy nature based solutions, as a adaptation strategy to climate change and more efficient service provision.
 - More resilient services.
- Risk and resilience
 - Identify potential risk and avoid cascade failure effects
 - Resilience goes beyond climate change, but also includes social resilience (stakeholder engagement process is key)

I.

Infrastructure and sustainability Financial challenges and opportunities

- **Financing** sustainable infrastructure
 - Budgetary planning/ identification of incentives and management by both governments, the private sector and investors.
 - Risk should carefully evaluated and allocated

II.

Practice and experience for sustainable infrastructure in the region

Global policy actions for infrastructure that deliver the SDGs

- Global Agendas a targeting specific elements that are characteristic of sustainable infrastructure
- Lack of consensus in the different initiatives implemented
 - **UNECE.** Led several efforts to support progress
 - **UNEP.** International Good Practice Principles for Sustainable Infrastructure /UNEA resolution 4/5 on sustainable infrastructure
 - **Multilateral Development Banks**
 - **OECD**
 - **The Global Infrastructure Hub**

II.

Practice and experience for sustainable infrastructure in the region

National experiences for sustainable infrastructure and stimulus for COVID-19 recovery

- Introduction of programmes, plans or strategies to promote the green economy (eg. Renewable energy)
- COVID-19 related recovery stimulus packages through fiscal policies to support companies
- Increase social benefits some sectors more impacted

III. Measuring sustainable infrastructure in the region

() In alignments with the Assessment Paper*

"Greening the economy in the pan-European region: working towards sustainable infrastructure"

These frameworks analyzed are:

1. Indicator Pan-European Strategic Framework
2. MDB Common Set of Aligned Sustainable Infrastructure Indicators (SII)
3. UNEP International Good Practice Principles for Sustainable Infrastructure
4. The G20 principles for Quality Infrastructure Investment
5. Fast-Infra
6. EU Taxonomy for Sustainable Activities

III.

Measuring sustainable infrastructure in the region

- These frameworks represent initiatives developed by the **public, and private sector** as well as **international groups** and **Multilateral Development Banks**.
- The **respective criteria** from the different frameworks have been organized around **four main categories**:
 1. Environmental sustainability & resilience
 2. Social sustainability,
 3. Institutional sustainability
 4. Economic and financial sustainability.











Measuring sustainable infrastructure in the region



Core elements Frameworks	Environmental sustainability and resilience	Social sustainability	Institutional sustainability	Economic and financial sustainability
Pan-European Strategic Framework	<ul style="list-style-type: none"> Natural capital Ecosystem services sustainable production patterns (circular economy) 	<ul style="list-style-type: none"> Healthy living & well-being Sustainable consumption Public participation & education 	<ul style="list-style-type: none"> Externalities & natural capital Green & fair trade 	<ul style="list-style-type: none"> Externalities & natural capital Green and decent jobs, & human capital
MDB Common Set of Aligned Sustainable Infrastructure Indicators (SII)	<ul style="list-style-type: none"> GHG reduction Climate risk, resilience Biodiversity Pollution control & monitoring Efficient use of materials Energy & water efficiency 	<ul style="list-style-type: none"> Access and affordability Stakeholder engagement Human & labor rights Disability & special needs Gender integration Health & safety 	<ul style="list-style-type: none"> Anti corruption protocols & procedures Corporate sustainability disclosure 	<ul style="list-style-type: none"> Positive economic & social return (ERR) Job creation
UNEP International Good Practice Principles for Sustainable Infra.	<ul style="list-style-type: none"> Resilience Environmental impacts and nature Resource efficiency Circular economy 	<ul style="list-style-type: none"> Equity inclusiveness & empowerment 	<ul style="list-style-type: none"> Life Cycle assessment Strategic planning Transparent, inclusive & evidence-based decision-making 	<ul style="list-style-type: none"> Fiscal sustainability & innovative finance Enhancing economic benefits
The G20 principles for Quality Infrastructure Investment	<ul style="list-style-type: none"> GHG reduction Climate risk, resilience Biodiversity Natural capital Pollution control & monitoring Resource efficiency Circular economy 	<ul style="list-style-type: none"> Community Development Stakeholder engagement Displacement female jobs Data gathering 	<ul style="list-style-type: none"> Participatory project identification, Procurement standards Conflict of interest and ethics Sustainability Certification 	<ul style="list-style-type: none"> ROR/ contingencies Cost overruns Domestic goods & services Training and education Permanent & construction jobs
Fast-Infra	<ul style="list-style-type: none"> GHG reduction Climate change mitigation, resilience Biodiversity Natural environment Pollution prevention and control Waste reduction Circular economy 	<ul style="list-style-type: none"> Stakeholder Engagement Human & Labour Rights Land Acquisition & Resettlement Mitigation Gender & Inclusivity Health & Safety 	<ul style="list-style-type: none"> Sustainability & Compliance Policies Anti-corruption Policies & Procedures Transparency & Accountability 	<ul style="list-style-type: none"> Embedding Government Policies for Project Fiscal Transparency & Procedures
EU Taxonomy for Sustainable Activities	<ul style="list-style-type: none"> Climate change mitigation Climate change adaptation Biodiversity and ecosystems. Pollution and control Circular economy Water and marine resources 	---	---	---

CATEGORIES

INDICATORS

Environmental sustainability and resilience	<ol style="list-style-type: none"> 1. Climate change adaptation and mitigation <ul style="list-style-type: none"> ■ GHG emission reduction  ■ Disaster risk reduction strategies  2. Environmental conservation and biodiversity protection <ul style="list-style-type: none"> ■ Biodiversity protection (<i>Aichi Biodiversity</i>)  ■ Ecosystem services protection (<i>land degradation</i>)  3. Circular Economy (<i>construction and demolition waste</i>) 
Social sustainability	<ol style="list-style-type: none"> 4. Gender equality and empowerment (<i>Employment gap</i>)  5. Life-cycle cost accounting (<i>Cost-Benefit Analysis</i>)  6. Access to basic services (<i>water, sanitation, electricity, mobile network</i>) 
Institutional sustainability	<ol style="list-style-type: none"> 7. Transparency and anticorruption 
Econ/ financial sustainability	<ol style="list-style-type: none"> 8. Sustainable investment 

IV.

The Future, and our place in it

- **Collective response.** Significant progress has been made (Stimulus packages)
- **Discuss a roadmap** of next steps during the follow-up discussion of the Fifth United Nations Assembly (UNEA-5.2, in February 2022).
- **Collaborate with key stakeholders** on stimulus approaches and capacity building efforts
- **Develop a compendium of use cases,** commitments and good practices across the region

V. | Conclusions and the way forward

1. A **holistic approach** to sustainability (*social, environmental, economic, institutional*)
 - Climate change **adaptation & mitigation and its synergies**
 - **Social inclusion and stakeholder engagement**
2. A **full lifecycle approach** to infrastructure development.
3. Development of a **common definition for sustainable infrastructure**.
4. The way forward- **Responses should be collaborative and collective**
 - Support incorporation through good practices sharing
5. **Sustainable infrastructure** should be at the core of **green economy**
 - Central role for COVID-19 stimulus recovery plans

Discussion

1. How does the pan-European region defines sustainable infrastructure?
2. What is the progress achieved so far to address that definition, and how to leverage that progress?
3. What are the policy changes required to ensure that sustainability is incorporated in every step of the process?
4. What are the main impediments to ensure a full lifecycle approach?
5. Needs for data gathering on the impact and current externalities of infrastructure development



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FOR EUROPE

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