



UNEP Sustainable Infrastructure



Rowan Palmer – UNEP
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UNEA Resolutions 4/5 and 5/9 on Sustainable and Resilient Infrastructure

- Member States to “develop and strengthen national and regional systems-level strategic approaches to infrastructure planning”
- UNEP to support Member States to develop sustainable infrastructure as a means of implementing the SDGs
- UNEP to collect and share best practice, building on existing initiatives and identifying knowledge gaps, to assist Member States in promoting and strengthening the sustainability of their infrastructure, and to submit that report to the Environment Assembly at its fifth session



Infrastructure Systems

Built Infrastructure



Natural Infrastructure

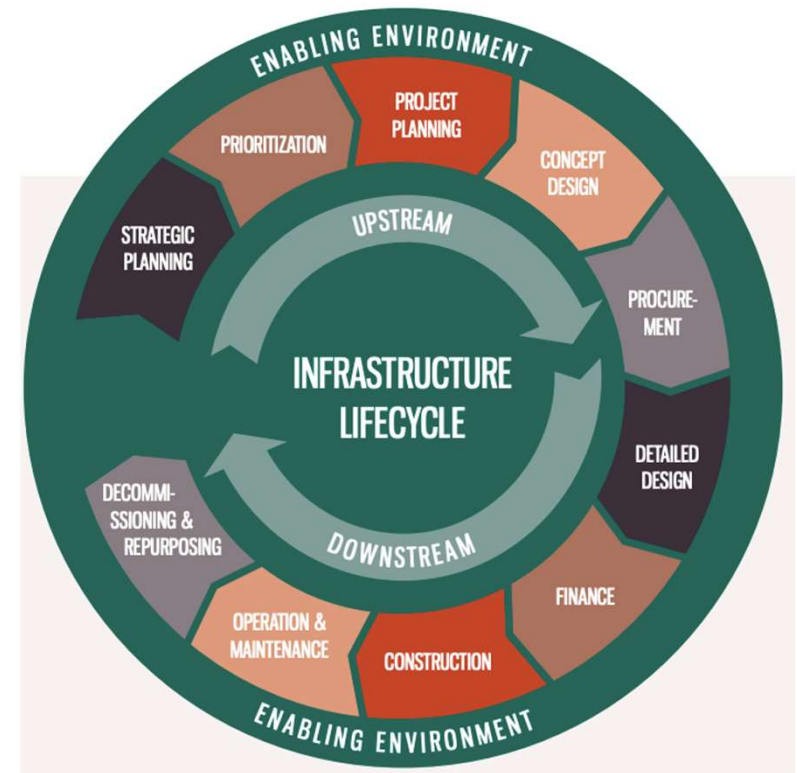


Hybrid Infrastructure



Sustainable Infrastructure

Sustainable infrastructure systems are those that are planned, designed, constructed, operated, and decommissioned in a manner to ensure economic and financial, social, environmental (including climate resilience), and institutional sustainability over the entire infrastructure lifecycle.



*This definition is adapted from the Inter-American Development Bank's definition of sustainable infrastructure in: Inter-American Development Bank (IDB). *What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle*. (Washington, DC, IDB, 2018).

Infrastructure influences all 17 SDGs – Overall 92% of targets

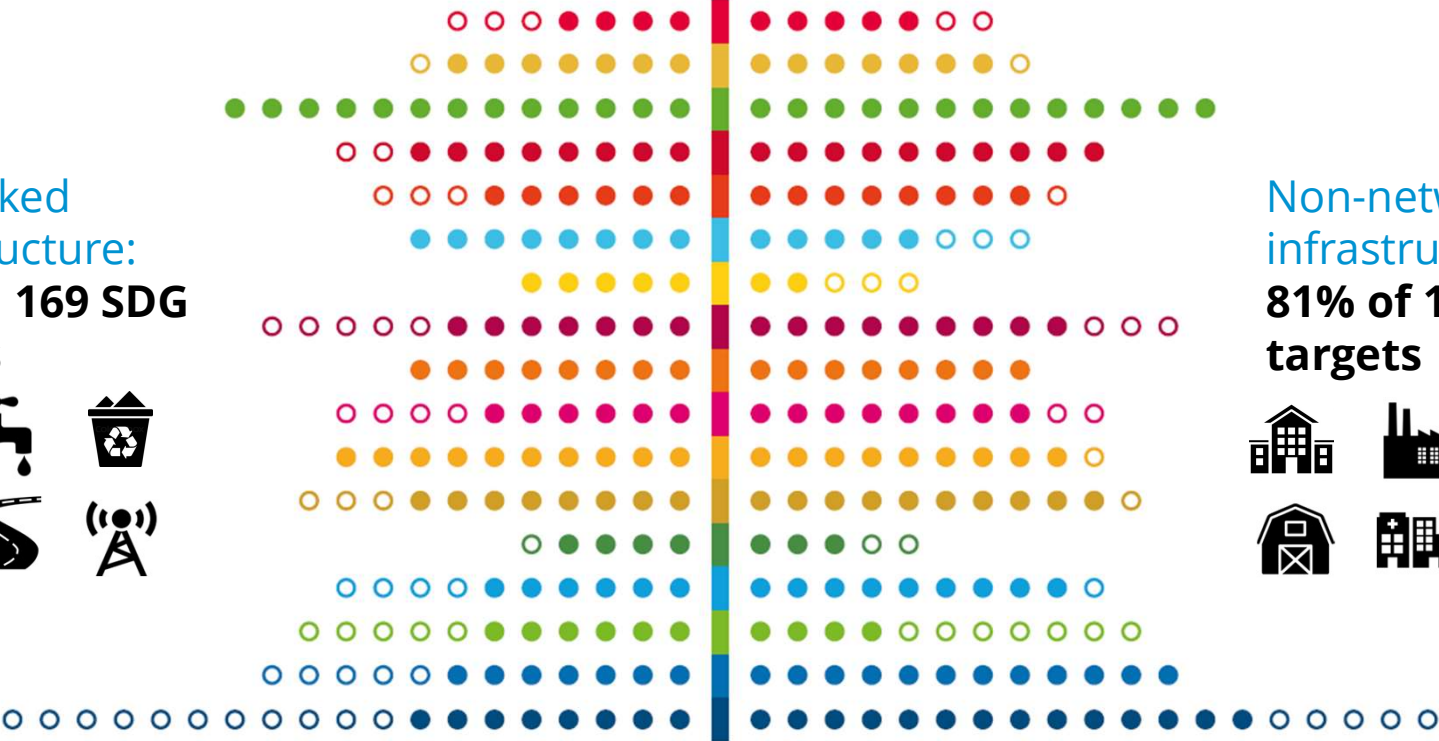
Networked infrastructure influence on targets of the SDGs

Non-networked infrastructure influence on targets of the SDGs

Networked infrastructure:
72% of 169 SDG targets



Non-networked infrastructure:
81% of 169 SDG targets



Sustainable Infrastructure Partnership (SIP)



1. Raise awareness

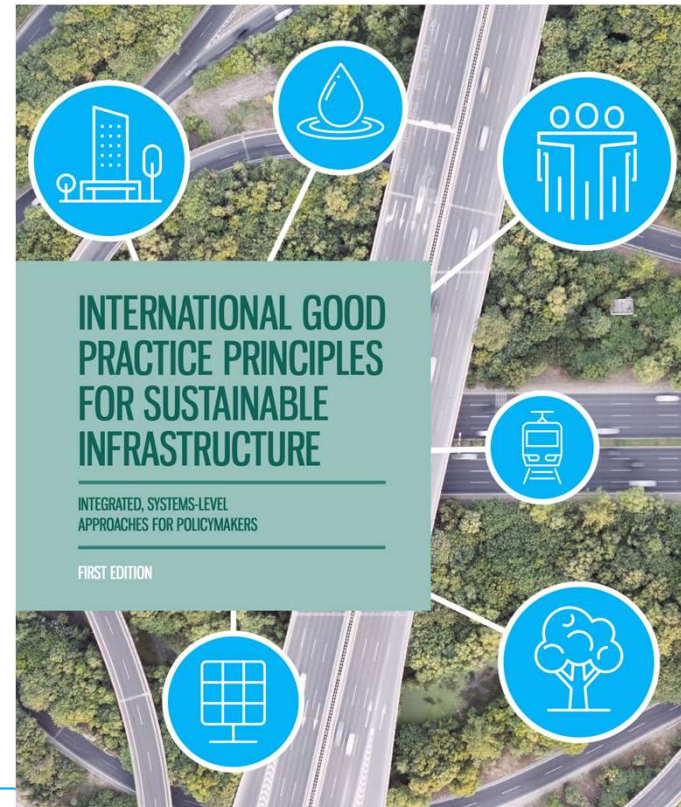
2. Develop streamlined normative and technical guidance

3. Strengthen the technical and institutional capacity of Member States

Good Practice Principles

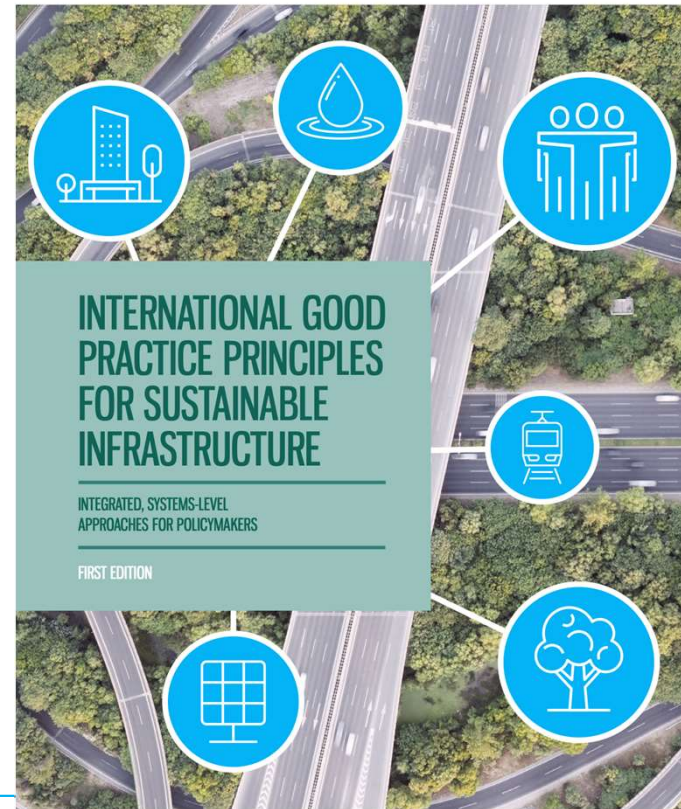
- 10 principles for policymakers
- Needs-based, systems-level, integrated approaches
- Emphasis on the enabling environment and “upstream” interventions

<https://wedocs.unep.org/bitstream/handle/20.500.11822/34853/GPSI.pdf>



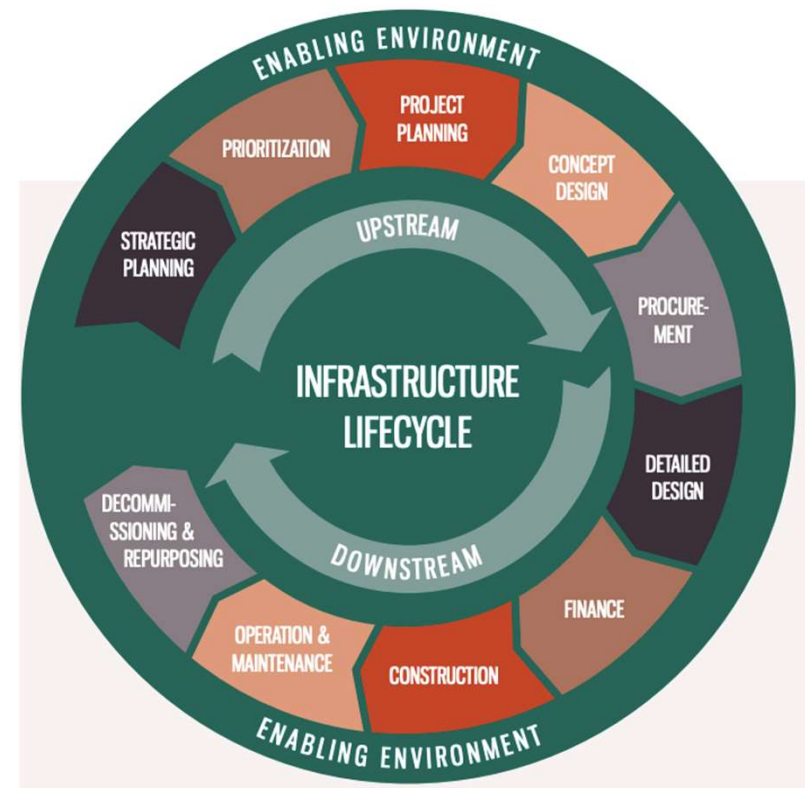
Good Practice Principles

1. Strategic Planning
2. Responsive, resilient, and flexible service provision
3. Comprehensive lifecycle assessment of sustainability
4. Avoiding environmental impacts and investing in natural infrastructure
5. Resource efficiency and circularity
6. Equity, inclusiveness, and empowerment
7. Enhancing economic benefits
8. Fiscal sustainability and innovative financing
9. Transparent, inclusive and participatory decision-making
10. Evidence-based decision-making



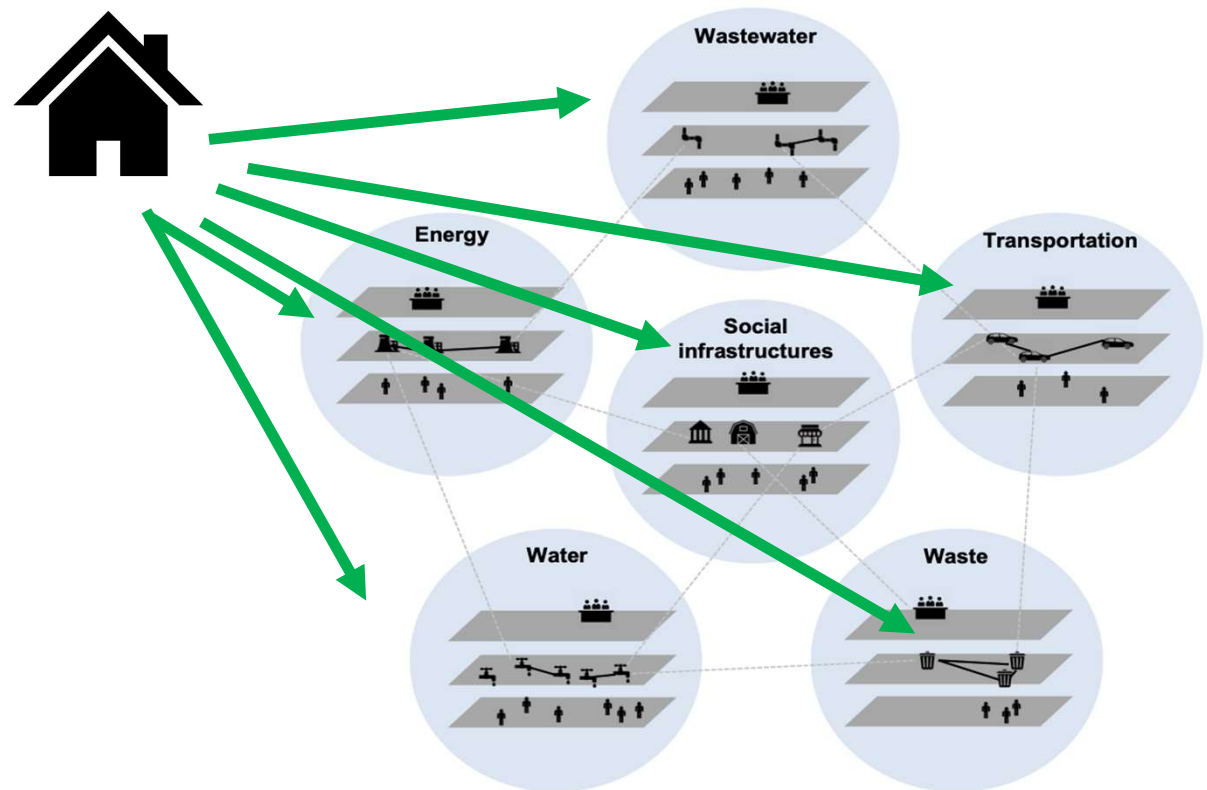
Good Practice Principles

- **Needs-based** = people centered, data and demand driven
- Focused on **systems-level** interventions, emphasis on the early planning phases and enabling environment (institutions, processes, policies)



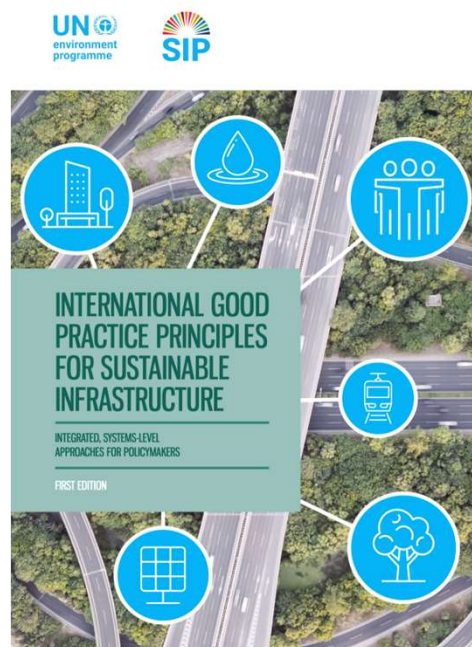
Good Practice Principles

- **Integrated approaches:**
 - Integration of all aspects of sustainability
 - Integration of different infrastructure systems across time and space
 - Nature as infrastructure
 - Understanding impacts and benefits at the aggregate level
 - Integrated governance, policies, and processes



The Way Forward

1. Promoting uptake and adoption
2. Country support
3. Financing



“There is an urgent need to include sustainable and climate resilient infrastructure as an integral part of green growth to deliver energy, water, and transportation solutions that will facilitate opportunity, connection, and sustainable growth. The International Good Practice Principles for Sustainable Infrastructure provides a very useful guiding framework for governments to lay the groundwork for a future where sustainable infrastructure is the only kind of infrastructure we know.”

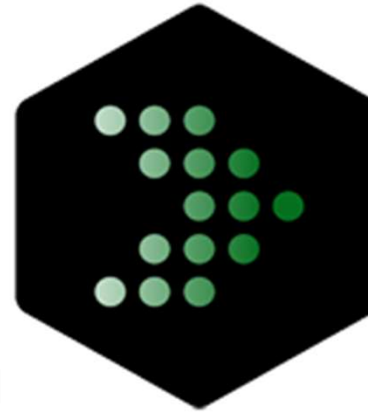
Ban Ki Moon, President and Chair of GGGI

“Infrastructure is key to achieving the SDGs and helping countries deliver on the Paris Agreement on climate change. In the face of an environmental emergency, and as countries work to recover from the COVID-19 pandemic, this report provides timely guidance on delivering infrastructure that underpins sustainable development. UNOPS is proud to have supported UNEP in developing this report, which equips decision-makers with the integrated, system-level approaches required to develop sustainable, resilient and inclusive infrastructure.”

Grete Faremo, Executive Director of UNOPS

Sustainable Infrastructure Tool Navigator

- Database of tools
- User friendly navigation interface
- Matching stakeholders with the tools they need

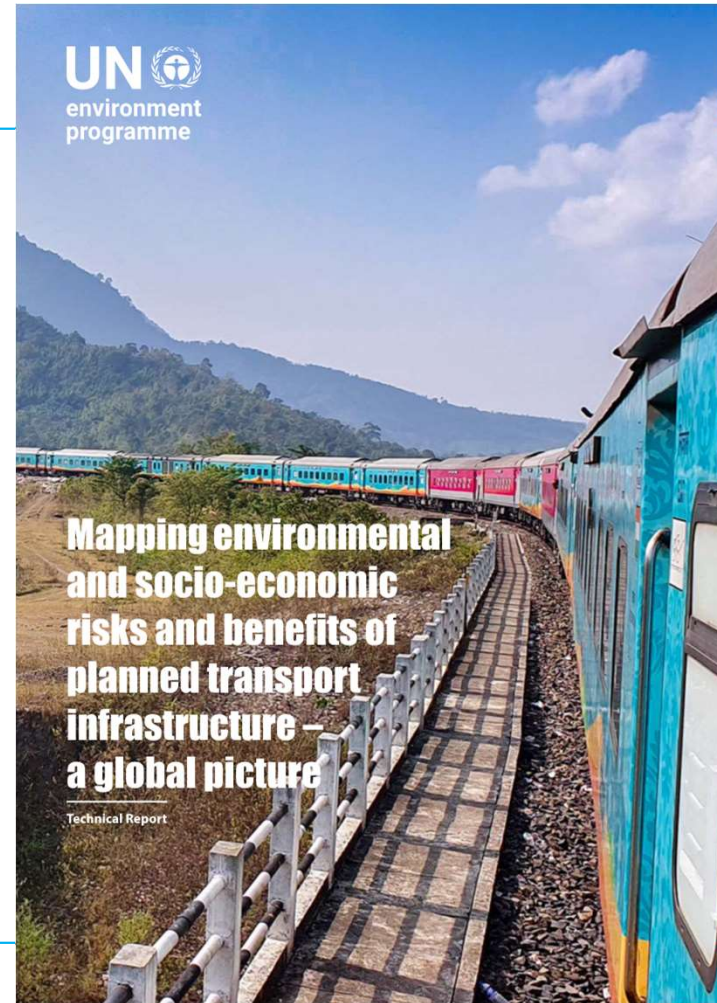


SUSTAINABLE
INFRASTRUCTURE TOOL
NAVIGATOR

Global Impact assessment

- Impacts from planned major linear transport
- Rio conventions w/ focus on nature
- Risk/benefit hotspot mapping
- Piloting country application in Mongolia

<https://www.giiviewer.org/>



Regional CB courses/ECHO Hubs

Regional Capacity Building Courses

- Virtual and in-person

Sustainable Infrastructure Community of Learners

- Peer-to-peer communities of practice
- ECHO model
 - Case-based learning
 - Virtual delivery only



National Rapid Assessments

- Chile
- Thailand
- Rwanda
- Costa Rica
- South Africa

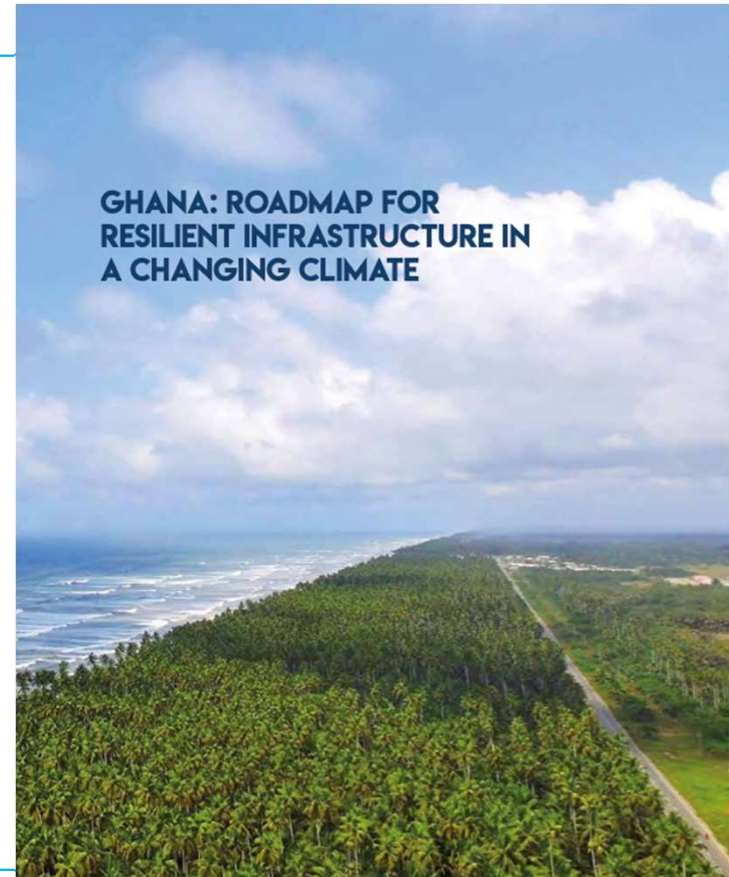


Enabling environment

Assessment of infra plans/policies –
identification of entry points for further work
on sustainability

Country-level TA

- Rapid assessments - SI implications of GE plans/policies
- Integrated impact assessments (GEF project)
- Resilience assessment (Ghana)
- Nbl framework/tool
- Sustainable Public Budgeting for infrastructure



GEF - Greening Transportation Infrastructure Development (GRID)

Global Environmental Challenges



Ecosystems: Loss and degradation of forests, wetlands, deltas, rivers, etc.



Biodiversity: Loss of habitats and ecological connectivity and wildlife mortality from transportation



Climate: GHG emissions linked to land degradation, deforestation and unsustainable building practices

Global Commitments under MEAs



Achieving 5/21 action targets set under the [Post-2020 Global Biodiversity Framework of the Convention of Biological Diversity](#)



Contributing to agreed actions toward achieving land degradation neutrality under the [UN Convention to Combat Desertification](#)



Meeting the [UN Framework Convention on Climate Change](#) ambitions for climate mitigation and adaptation expressed through NDCs to the Paris Agreement.

GRID Goal

- 1 Improved Policy and Finance
- 2 Avoided negative impacts from transportation

GRID Support

- ✓ Enhance **capacity** of government staff to implement integrated planning
- ✓ Strengthen integrated, multisectoral, and participatory upstream **risk assessment, planning, and design**
- ✓ Improve the **policy environment**
- ✓ Increase country readiness for **blended finance and de-risking mechanisms**

Thank you!

rowan.palmer@un.org



Case-based Learning

Case Study Database

- case studies from around the world
- Illustrating the Principles
- Case study database

Sustainable Infrastructure Community of Learners

- Peer-to-peer
- Case-based learning
- Webinar series

