

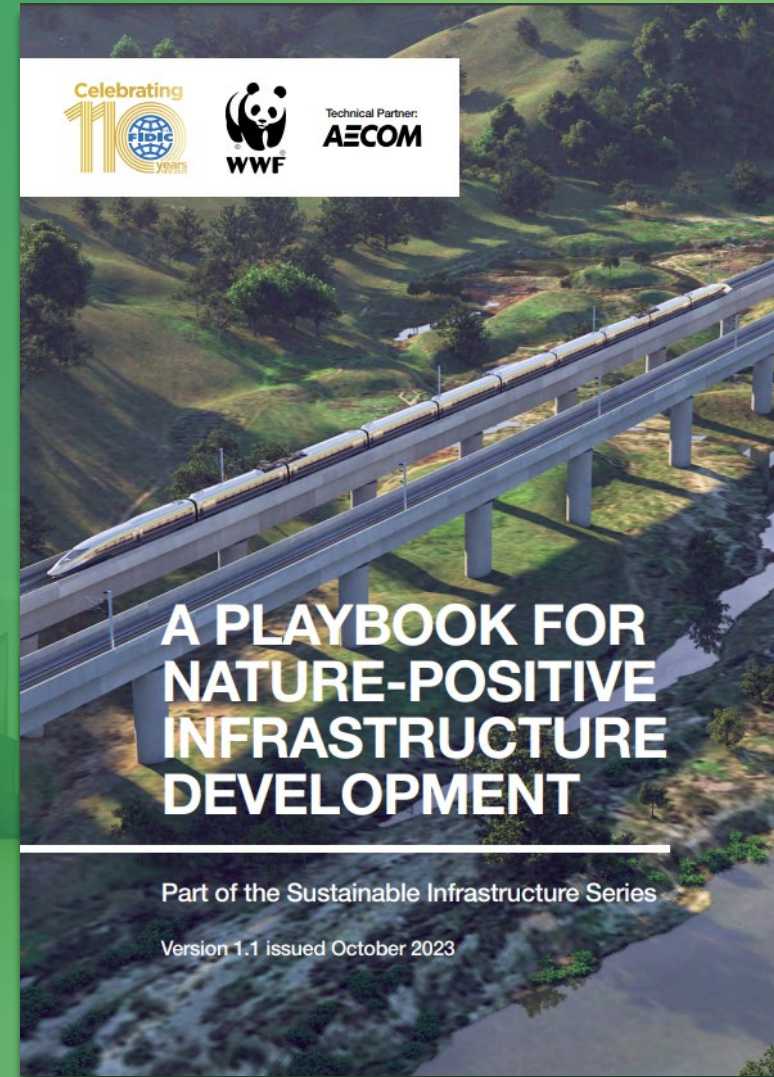
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# Introducing Playbook for Nature-Positive Infrastructure Development



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# Agenda

1. Rational for, and aim of the Playbook
2. Overview of the Playbook and deep dive
3. Key messages of the Playbook

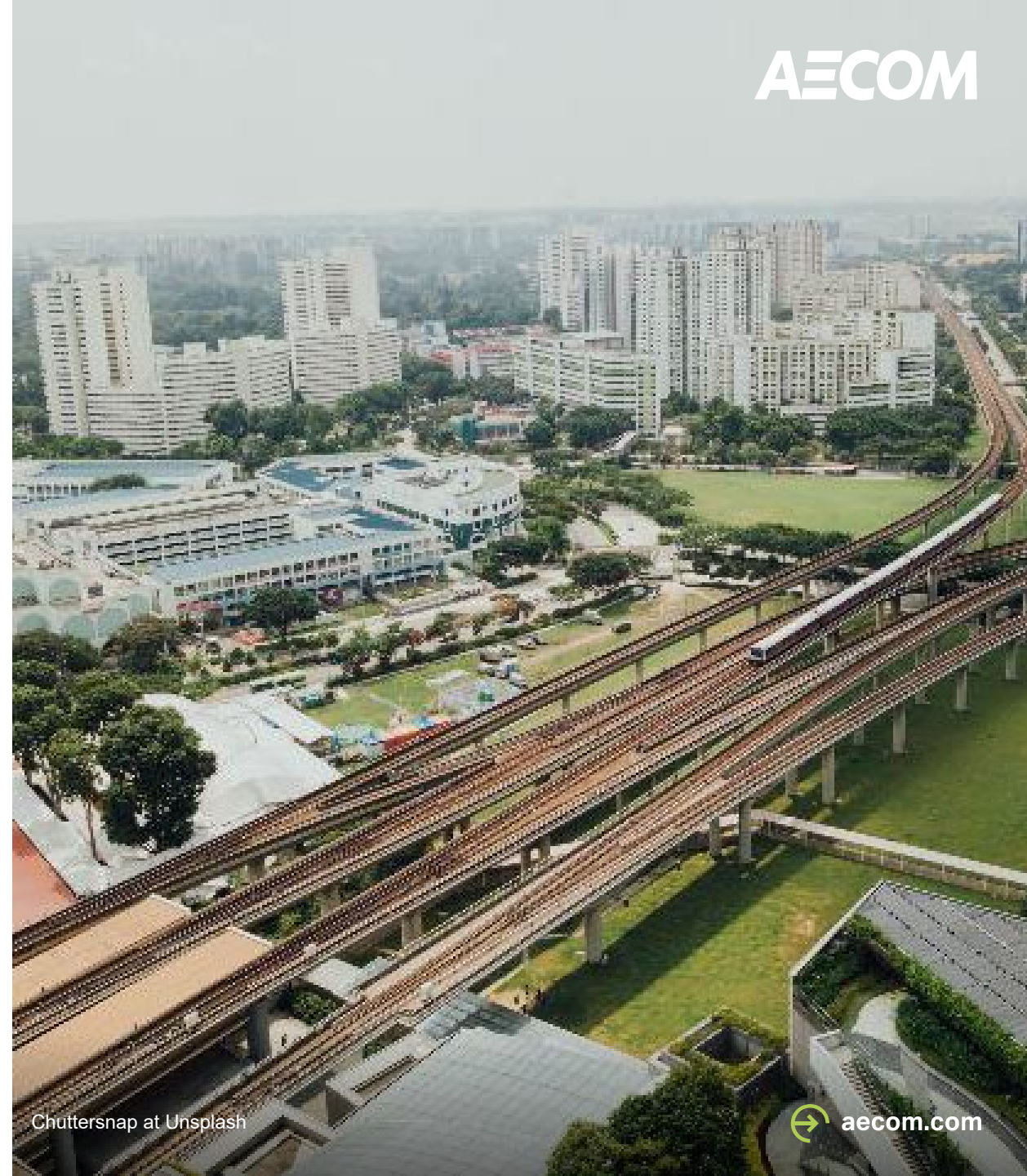
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# Rational for, and aim of the Playbook



## Rationale for and aim of the Playbook

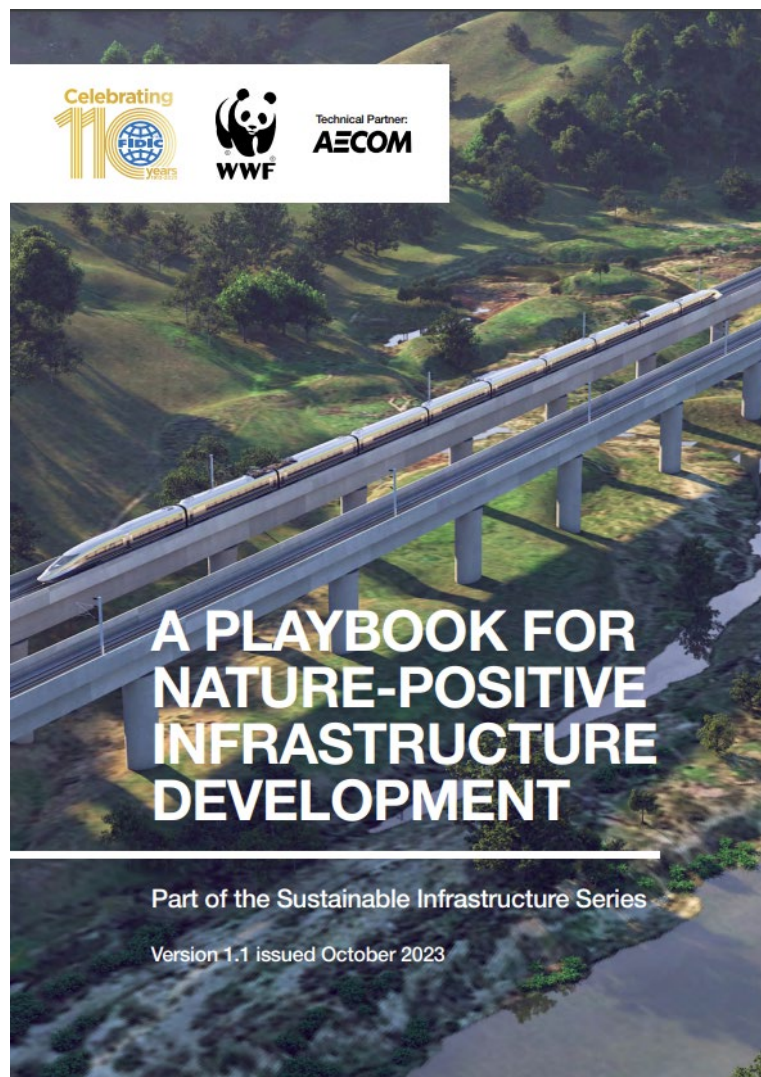
- Infrastructure development is both beneficial and a threat to nature
- WWF and FIDIC partnered to develop strategic and practical materials that help the sector move forward towards 'nature-positive' infrastructure development
- To help drive uptake of 'nature-positive' solutions they've commissioned AECOM to develop the Playbook
- The first iteration has been developed - but this should be seen as a live document
- The Playbook is currently undergoing an update, with additional case studies added and a new chapter on sustainable procurement



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# Overview of the Playbook and deep dive

# Overview of the Playbook



Introduction



Sectors



Benefits



Solutions

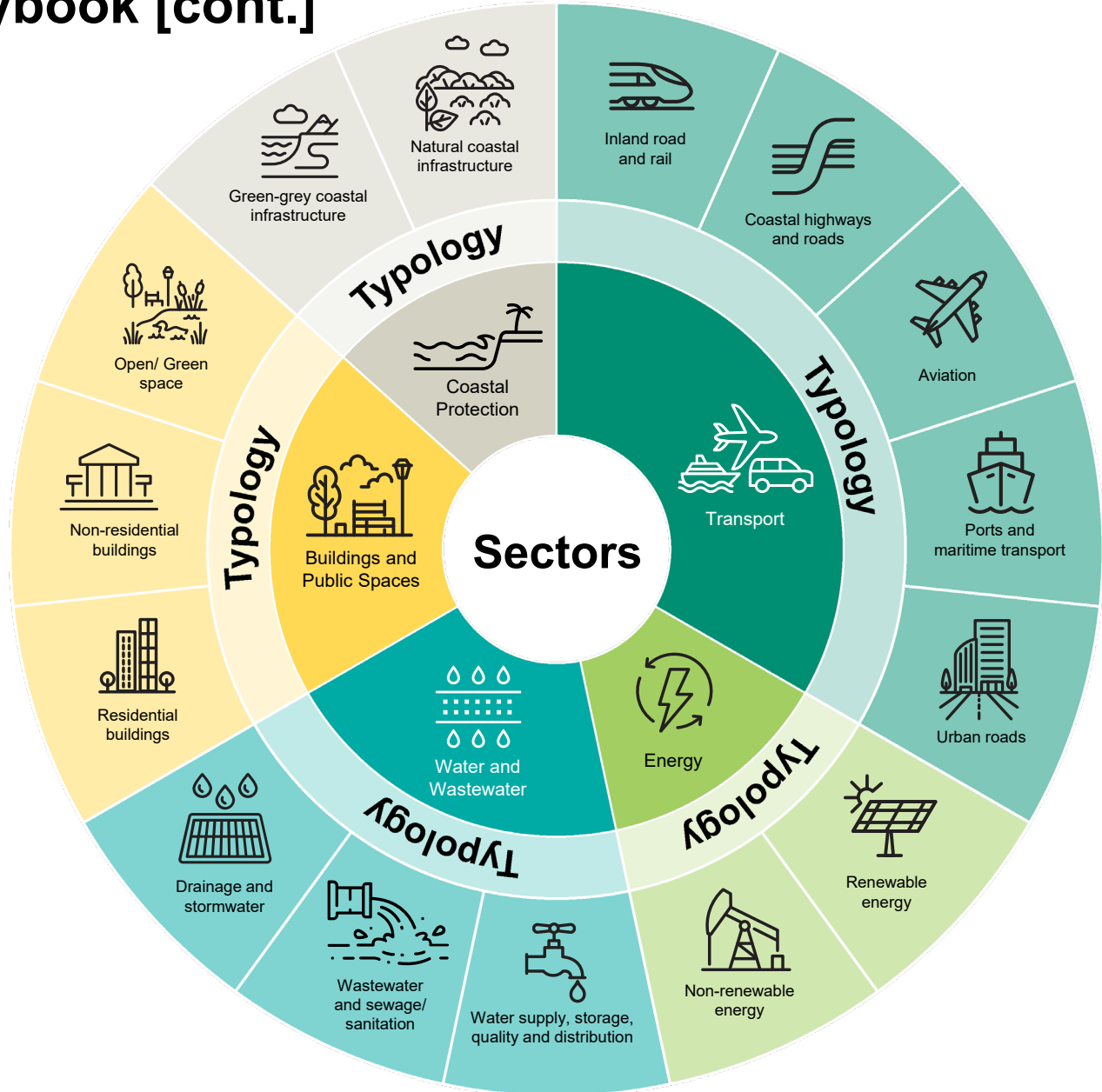


Additional resources



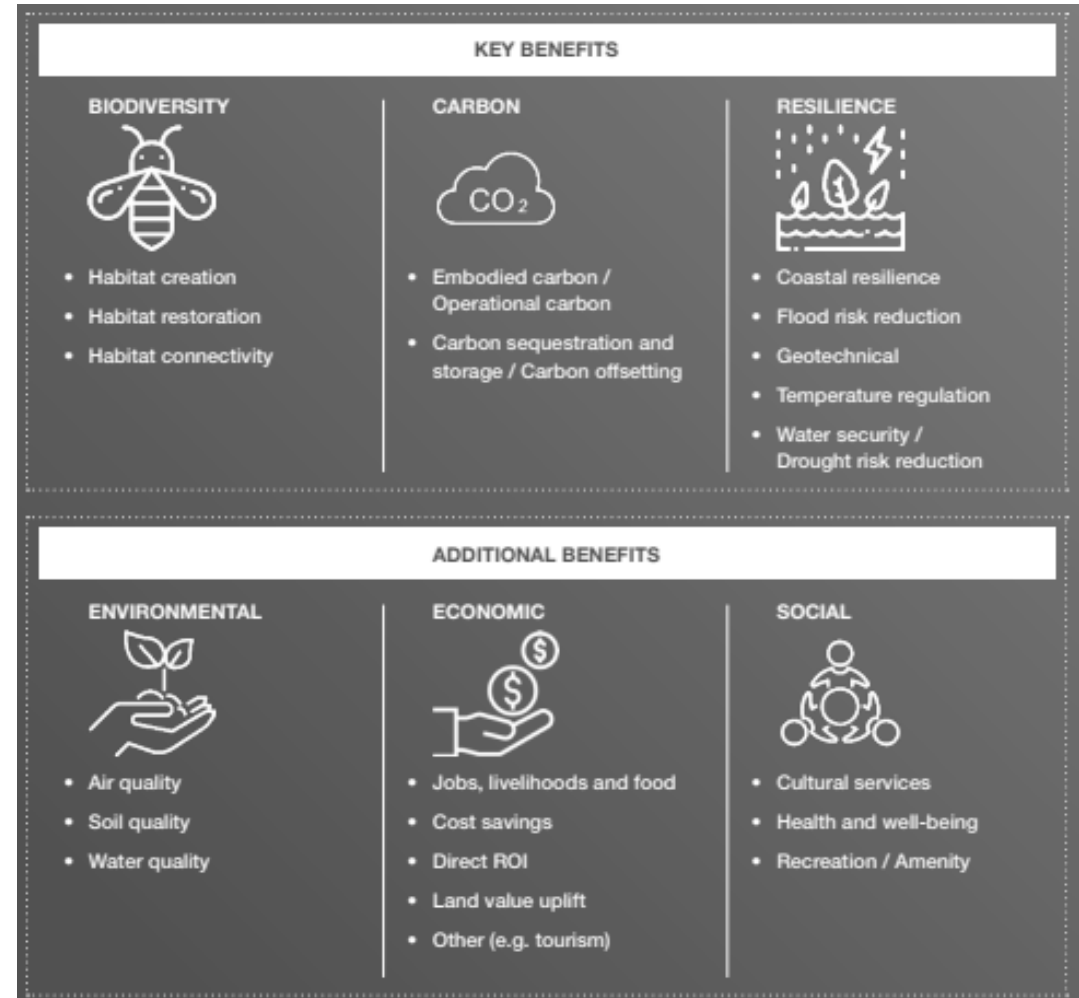
Case studies

# Overview of the Playbook [cont.]



# Overview of the Playbook [cont.]

- Three key benefits identified:
  - **Biodiversity** (through habitat creation, restoration, or enhanced connectivity);
  - **Carbon** (through reducing embodied and operational carbon, increased carbon sequestration and carbon offsetting); and
  - **Resilience** (through reducing flood risk, geotechnical, coastal, temperature regulation, and drought risk reduction).
  
- Additional benefits identified:
  - **Environmental**
  - **Economic**
  - **Social**





# Overview of the Playbook [cont.]

- 'Solutions' section summaries a range of examples (and their success factors) under two headings:
  - Coastal and riverine
  - Inland and urban
  
- Note – this is not a clear cut distinction, it was a means of categorisation for the Playbook (there are overlaps)



## Coastal and riverine

- Mangrove forests
- Coral reef restoration
- Dunes and sandy beaches
- Salt marsh restoration
- Sea grass restoration
- Oyster reef restoration
- Coastal restoration, realignment and living shorelines
- Ecoengineering, vertipool, habitat tiles
- River restoration and catchment management
- Riparian buffers
- Soil infiltration systems
- Sludge treatment reed beds



## Inland and urban

- Peatland restoration
- Wetlands (natural and constructed)
- Sustainable Urban Drainage Systems (SuDS) and bioretention areas
- Resilient urban design and restoration of waterbodies (lakes, ponds)
- Green roofs
- Green and 'living' walls
- Solar gardens
- Afforestation and reforestation, open green space
- Rewilding, grasslands, meadows
- Bioengineering for landslide and erosion protection
- Green bridges, wildlife bridges, ecological corridors, culverts
- Urban and peri-urban agriculture, urban gardens
- Bio-building materials and 'soft' measures

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# Key messages of the Playbook



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## Key messages of the Playbook

# 1

While nature-positive infrastructure development may be high on the agenda, to date, there have not been many examples of such projects implemented globally.

# 2

While there seems to be considerable interest in the potential of nature-based solutions to replace or complement certain functions of 'traditional' grey infrastructure, there is an implementation bias towards several well-established approaches (e.g., reforestation, restoration of wetlands, sustainable urban drainage systems, etc).

# 3

There is a limited understanding of the full range of benefits of nature-based solutions; many of the (co-) benefits of these solutions are not well understood, measured or quantified, which is likely to be preventing their further uptake.

# 4

There is a need to continue to build the evidence base for nature-positive infrastructure and share examples implemented worldwide.