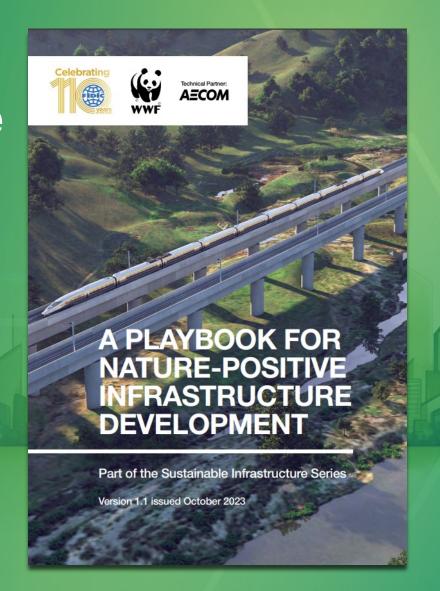


Introducing Playbook for Nature-Positive Infrastructure Development



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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





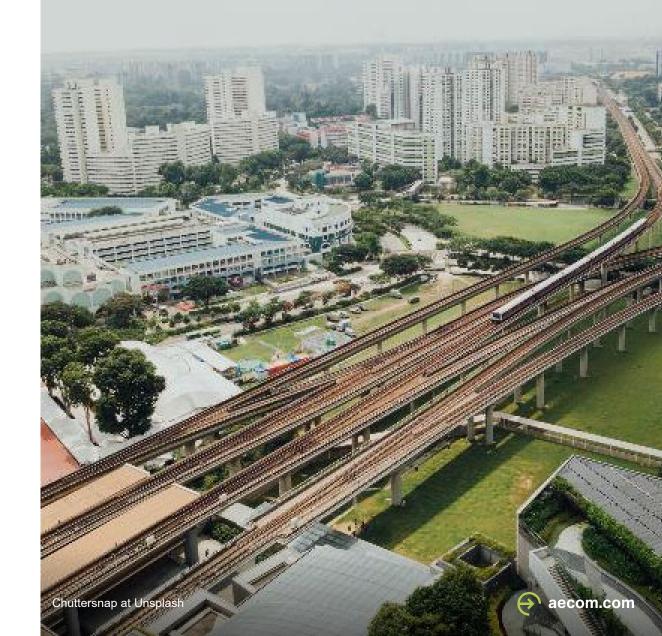
Rational for, and aim of the Playbook



Rational 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





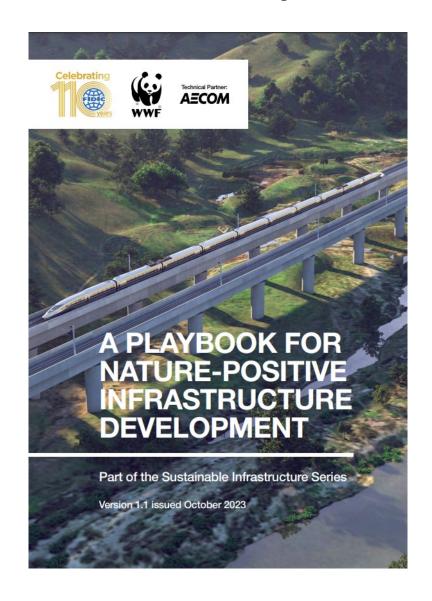


Overview of the Playbook and deep dive



Overview of the Playbook











Sectors

Benefits



Solutions



Additional resources

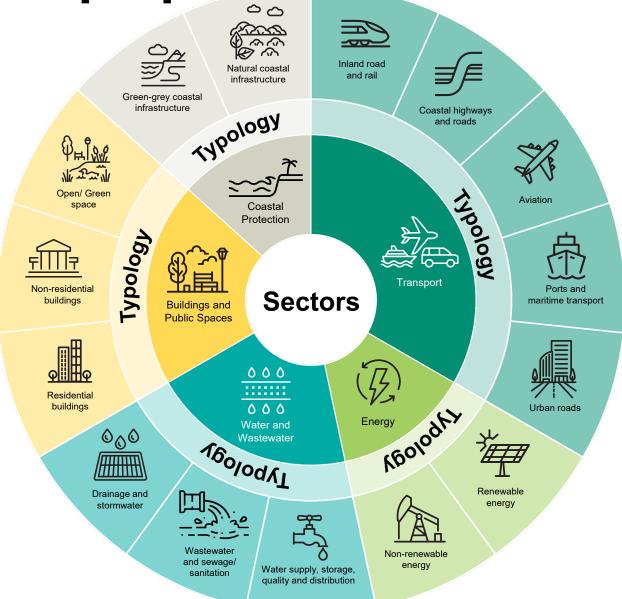


Case studies



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Overview of the Playbook [cont.]

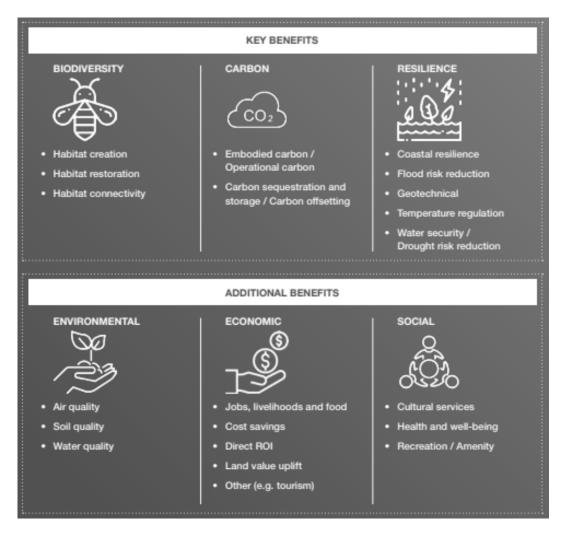




Overview of the Playbook [cont.]



- 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.]

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- '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, vertipooles, 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





Key messages of the Playbook





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

7

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.

