

Multi-year Expert Meeting
on Transport, Trade Logistics and
Trade Facilitation
9th Session

**Sustainable and resilient transport and
trade facilitation in times of pandemic
and beyond: key challenges and
opportunities**

12–14 July 2022

**Technical guidance on the climate
proofing of infrastructure in the period
2021-2027**

Presentation by

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Technical guidance on the climate proofing of infrastructure in the period 2021-2027

Presented by Claus Kondrup, Senior Expert, DG Climate Action, European Commission

Multi-year expert meeting on transport, trade logistics and trade facilitation

Session on climate change adaptation, resilience-building and DRR for ports

United Nations Conference on Trade and Development (UNCTAD)

Palais des Nations, Geneva, Switzerland, Wednesday 13 July 2022, 3-5 p.m.



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1

Introduction



From the guidance:

- **Climate proofing is a process** that integrates climate change mitigation and adaptation measures into the development of infrastructure projects.
- In general, the project promoter will include in the project organisation the **expertise** needed for climate proofing and coordinate with other work in the project development process, for instance, environmental assessments. Depending on the specific nature of the project, this may include bringing in a climate-proofing manager and a team of experts in climate change mitigation and adaptation.

2

Policy framework



- European Green Deal
- European Climate Law, recital (33), article 5(5)
- EU long-term budget 2021-2027, Council Conclusions 17-21/7/20
- European Parliament resolution of 15/1/20
- Fund-specific legislation (ERDF, Cohesion Fund, InvestEU, ...)
- EU Strategy on adaptation to climate change (adopted 24/2/21)

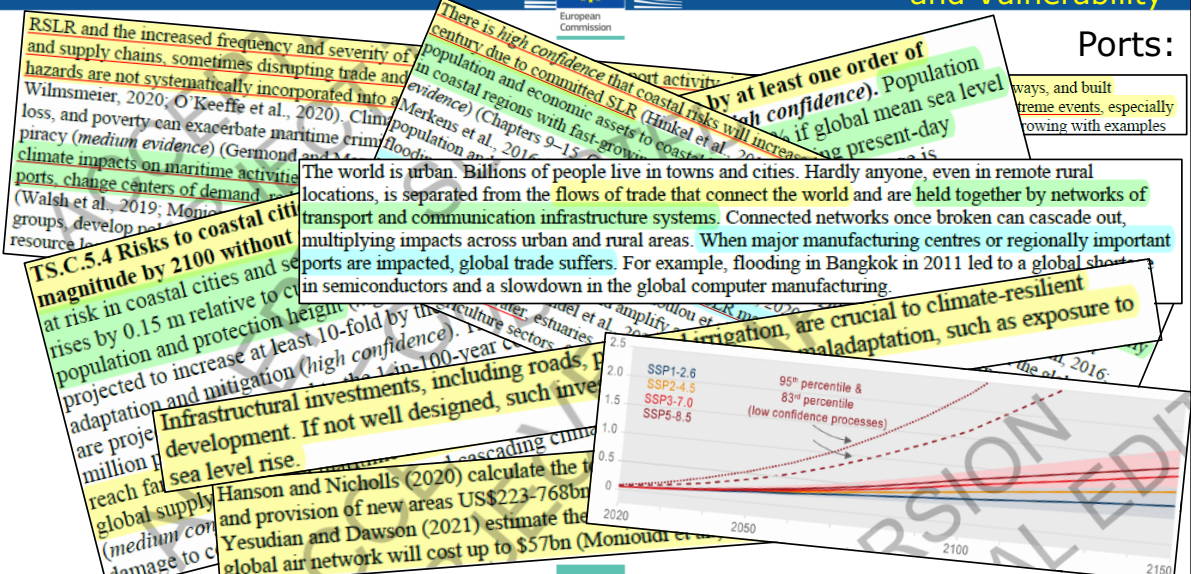
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IPCC AR6 WGII

IPCC report "Climate Change 2022: Impacts, Adaptation and Vulnerability"



Ports:



4

Climate proofing 2014-2020



Climate Change and Major Projects

Outline of the climate change related requirements and guidance for major projects in the 2014-2020 programming period

Ensuring resilience to the adverse impacts of climate change and reducing the emission of greenhouse gases

Addressing climate change in the development of major projects

Adaptation to climate change
Vulnerability/Risk Assessment
and adaptation response

Mitigation of climate change
EIB carbon footprint
EIB cost of carbon

- Legal basis (e.g. project information / application form)
- Integration in CBA and project cycle management
- Memorandum of Understanding DG REGIO – DG CLIMA
- JASPERS advisory service, verification, training etc.

https://ec.europa.eu/clima/sites/clima/files/docs/major_projects_en.pdf

5

From 2014-2020 to 2021-2027



- More EU funds: InvestEU, Connecting Europe Facility (CEF), European Regional Development Funds (ERDF), Cohesion Fund (CF), and Just Transition Fund (JTF), ...
- Updated carbon footprint methodology and shadow cost of carbon
- Climate vulnerability and risk assessment as basis for adaptation
- Consistency with the Paris Agreement and climate objectives
- Documentation and verification
- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (SEA)
- Recommendations to support climate proofing in Member States

6



Commission Notice – Technical guidance on the climate proofing of infrastructure in the period 2021-2027
C/2021/5430

OJ C 373, 16.9.2021, p. 1–92 (BG, ES, CS, DA, DE, ET, EL, EN, FR, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV)

Languages, formats and link to OJ

	BG	ES	CS	DA	DE	ET	EL	EN	FR	GA	HR	IT	LV	LT	HU	MT	NL	PL	PT	RO	SK	SL	FI	SV
HTML																								
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Climate Neutrality

*Screening
Phase 1 (mitigation)*

*Detailed analysis
Phase 2 (mitigation)*

The climate proofing process is divided into two pillars (mitigation, adaptation) and two phases (screening, detailed analysis)

Climate Resilience

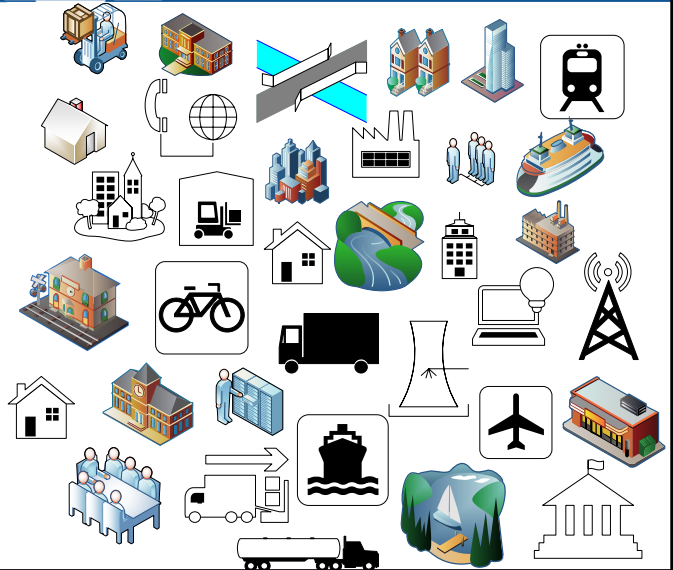
*Screening
Phase 1 (adaptation)*

*Detailed analysis
Phase 2 (adaptation)*

Climate proofing 2021-2027



Infrastructure is a broad concept encompassing buildings, network infrastructure, and a range of built systems and assets. For instance, the InvestEU Regulation includes a comprehensive list of eligible investments under the sustainable infrastructure policy window.

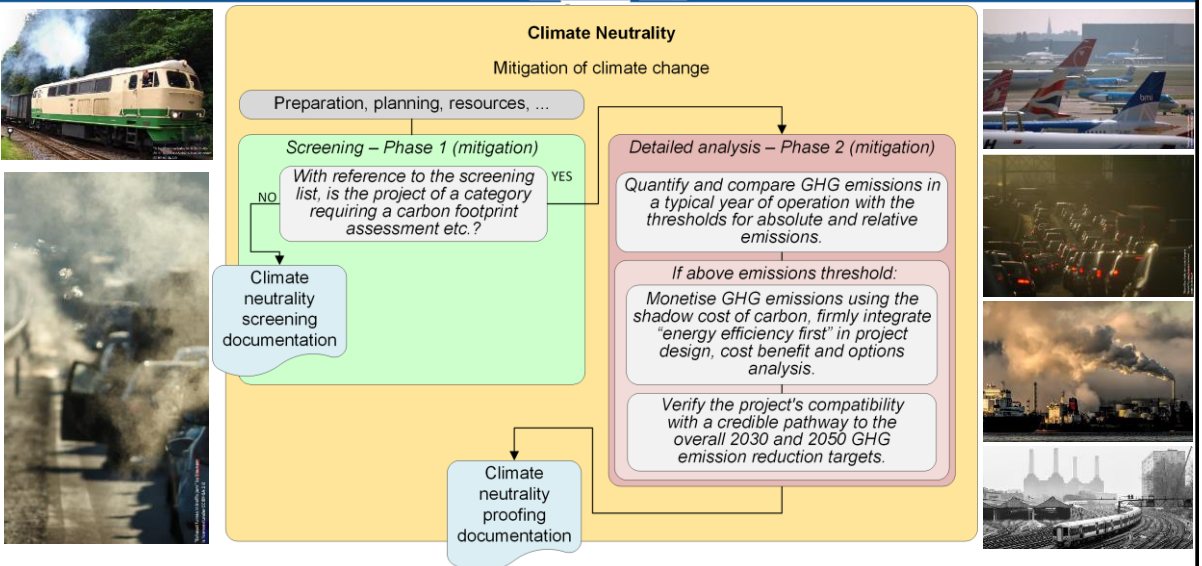


9

Climate proofing infrastructure (mitigation, climate neutrality) 2021-2027



2021-2027

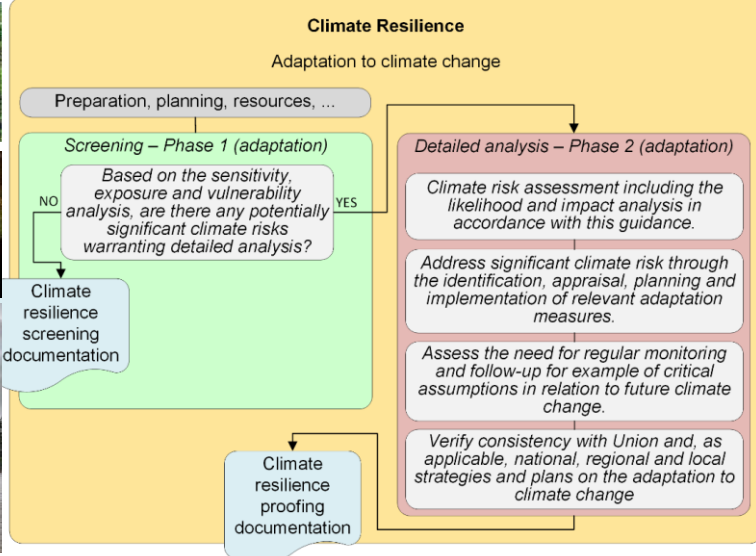
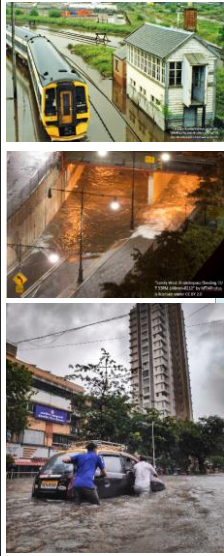


10

Climate proofing infrastructure (adaptation, climate resilience)



2021-2027



11

Climate proofing & environmental assessments



2021-2027

European Commission

Common phases in the project development cycle:

STRATEGY / PLAN FEASIBILITY DESIGN PROCURE / BUILD OPERATE / MAINTAIN DECOMMISSION

Common project development activities:

- STRATEGY / PLAN: Programming, Sector strategies, Policies, Spatial planning, Pre-feasibility, Business model, SEA
- FEASIBILITY: Conceptual design, Feasibility studies*, Site selection, Technology selection, Risk assessment, Legal analysis, EIA Screening & Scoping
- DESIGN: Main / final design, EIA permitting, development consent, Documentation of climate proofing
- PROCURE / BUILD: Contracting, Construction
- OPERATE / MAINTAIN: Operation and maintenance strategy, Asset management, Operation and maintenance, Monitoring and control
- DECOMMISSION: Decommissioning, End of asset life

Where feasibility studies* may include various types of analysis e.g. demand, financial, economic, options and cost benefit analysis.

Climate resilience – adaptation to climate change – enhancing the resilience to adverse climate change impacts

- Strategic climate vulnerability screening to identify potential risks from climate change impacts
- Nominate a climate-proofing manager and plan the climate-proofing process
- Screening exposure, sensitivity, vulnerability, Climate vulnerability and risk assessment
- Options analysis, climate risk and adaptation
- Measures ensuring resilience to current and future climate
- Technical aspects e.g. location and design
- Risk assessment and sensitivity analysis
- Environment and climate change aspects
- Coordination with EIA process
- Implementation of adaptation measures in construction and operation
- Monitoring of critical climate hazards
- Regular review of the climate hazards, which may change over time, updating of the risk assessment, review of the structural and non-structural adaptation measures, and reporting to the project owner and others as required
- Decommissioning plan and its implementation to give due regard to the future climate change impacts and risks

Climate neutrality – mitigation of climate change – reducing the emission of greenhouse gas

- Consistent with climate neutrality by 2050
- Link to climate policy and GHG emission targets
- Planning including operation and maintenance to consider further GHG reductions
- Nominate a climate-proofing manager and plan the climate-proofing process
- Quantification of GHG emissions using carbon footprint methodology
- Monetisation of GHG emissions using shadow cost of carbon
- Contribution to EU and national climate targets
- Consideration of less carbon intensive options
- Economic analysis
- Coordination with EIA process
- Implementation of mitigation measures in construction and operation
- Monitor and implement plans to further reduce GHG emissions
- Verification of actual GHG emissions
- Decommissioning plan and its implementation to give due regard to climate change as well as net zero GHG emissions and climate neutrality by 2050

Common phases in the project development cycle:

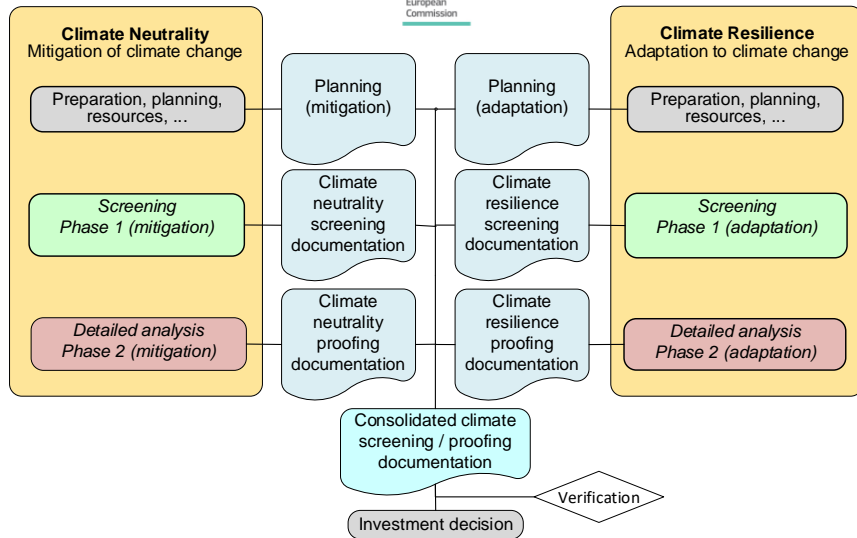
STRATEGY / PLAN FEASIBILITY DESIGN PROCURE / BUILD OPERATE / MAINTAIN DECOMMISSION

Environmental assessments and climate proofing (not limited to SEA and EIA, e.g. Natura 2000)

- Integrate and address climate change mitigation and adaptation effectively in SEA and other environmental assessments, ref. e.g. Directive 2001/42/EC (SEA Directive)
- Distinguish between projects following Directive 2014/52/EU (2014 EIA Directive) and Directive 2011/92/EU (2011 EIA Directive), and plan accordingly
- Ensure close coordination with the climate proofing process for mitigation and adaptation
- Take into account how the environment will change in the future among other due to climate change (evolving baseline)
- EIA screening, scoping (as appropriate)
- EIA and other relevant environmental assessments e.g. Natura 2000
- Final Development Consent decision
- Assess the projects climate vulnerability
- No-regret, low-regret, win-win options
- During the construction and operation phases of the project, monitor the significant adverse effects on the environment identified as well as measures taken to mitigate them

Climate proofing and EIA (Annex D), and SEA (Annex E)

12



13



Thank you for your attention



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14