

Third national adaptation plan to climate change (PNACC 3) – France

Baptiste EISELE
Directorate General for Infrastructure, Transport and Mobility
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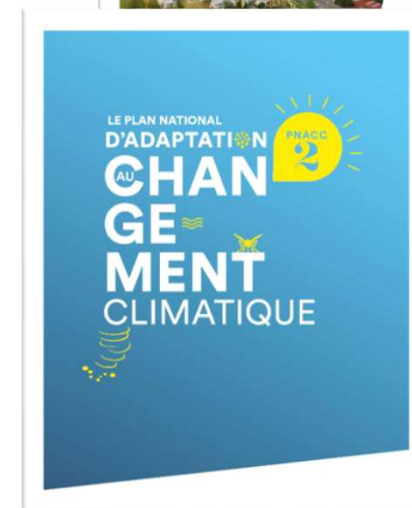
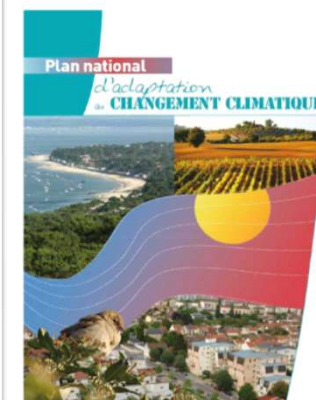
Previous PNACC achievements

❖ PNACC-1 (2011) - Knowledge

- Access to knowledge (e.g. the DRIAS portal),
- Planning tools (e.g. master plans, urban planning documents, risk prevention plans),
- Sector-specific adaptation strategies (e.g. energy, transport, forests)

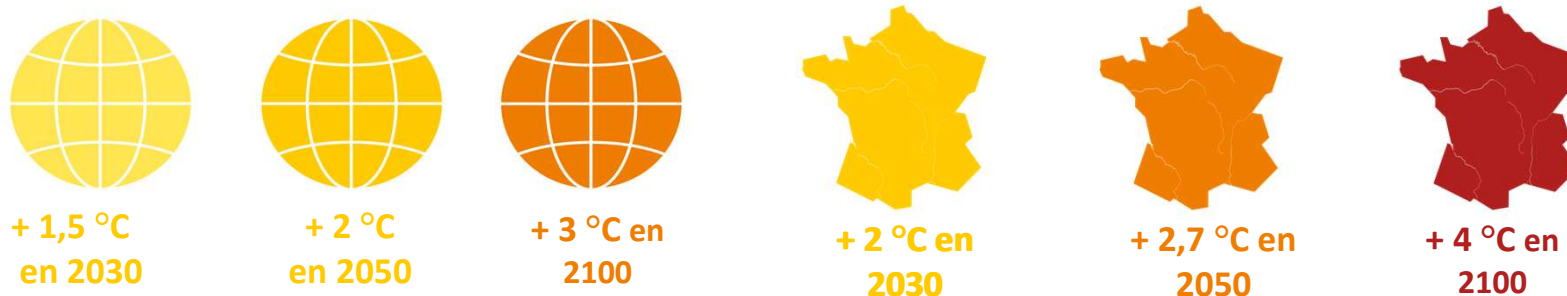
❖ PNACC-2 (2018) – Governance

- Training for stakeholders + access to data
- The need for economic activities to anticipate the consequences of climate change more effectively
- Increased support for forestry and agriculture, but still insufficient



The third national adaptation plan (PNACC 3)

- For the first time, France has a national trajectory of global warming for adapting to climate change (TRACC)



- ❖ Synthetic document including 14 key measures (including resilience of transport and mobility)
- ❖ 51 measures, divided into 5 areas: protection of the population, resilience of territories, infrastructures and essential services, resilience of the economy, protection of the natural and cultural heritage, mobilization of the nation's driving forces.
- ❖ Publication : 10 march 2025



Perimeter of PNACC-3

Main impacts covered

Heat

Drought

Floods

Coastline – maritime submersion

Wildfires

Main issues covered

Health

Education

Cities

Infrastructure

Ecosystems

Coast-line

Mountain territories

Forests

Agriculture

Targeted actors

Citizens

Companies

Research actors

Local authorities

National authorities

Type of actions involved

Knowledge

Providing help and support

Awareness-raising and training

Regulation

Focus on transport in PNACC 3



Resilience of transport and mobility

- One of the 14 flagship measures of the PNACC focuses on the resilience of transport and mobility.
 - ❖ **Define adaptation plans for transport infrastructures and services:** in particular for major public operators and infrastructure managers, the national road network and territories (regions and metropolitan areas) : DGITM offers technical support to the actors in framing their resilience strategies
 - ❖ **Adapt transport infrastructure and services at a local scale**
 - ❖ **Adapt rolling stock to extreme heat,** with recommendations for mobility authorities and operators : national working group, upcoming guide
 - ❖ **Define an agenda for updating transport-related technical standards**
 - ❖ **Building a task force on transport and mobility adaptation**

Define adaptation plans of transport infrastructure and services

- Carry out vulnerability studies on all major transport networks, using the reference global warming trajectory for adaptation to climate change (TRACC).



- Define adaptation plans based on those vulnerability assessments
- **Objective** : propose solutions to improve the resilience of transport infrastructures and services, and include a reflection on the evolution of the transport offer (people and goods) in the context of climate change.



Most studies launched in 2024 and first adaptation plans by the end of 2025

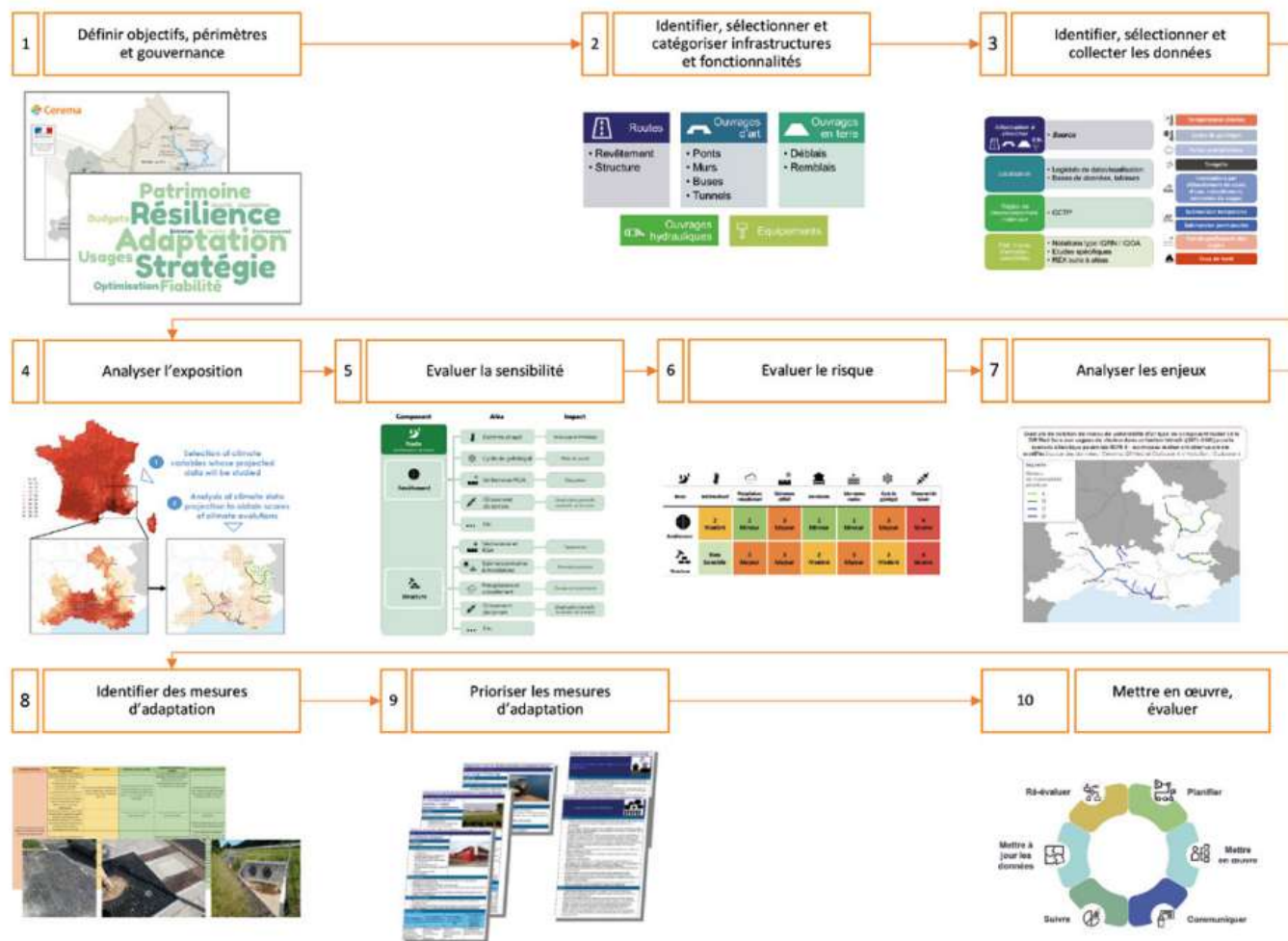
Diapositive 7

EB35

parler de la synthèse grand public ?

EISELE Baptiste; 01/06/2026

Reference methodology



The reference methodology for vulnerability assessments of transport networks is the **ASAIT method of Cerema**

Physical and functional risks approach

Other adaptation work carried out : vulnerability of working and operating conditions, vulnerability of rolling stock, vulnerability of investments/cost of climate impacts

(Source : Cerema, réalisé à partir de plusieurs sources dont Carbone 4, RTL, Setec)

Work in progress at a local scale

- Adapt transport infrastructure and services at a local scale:
 - ❖ Regions : objective **to launch multimodal vulnerability assessments** in the regions (PACA, IDF and Normandie)
 - ✓ National implication (by DGITM) in the studies to frame specifications and bring technical expertise
 - ❖ Express Regional Metropolitan Services (SERM) : suburban public transport services (by rail or road)
 - ✓ A vulnerability assessment (mainly functional vulnerability) is mandatory for each SERM. To this end, Cerema is currently adapting its methodological guide to apply it to a territory in a multimodal and service-focused context



Publication SERM : september 2026

Adapting rolling stock to extreme heat

- **Objective : develop a decision-support guide to help mobility organising authorities adapt rolling stock to extreme heat**
 - ❖ Include recommendations on adaptation to extreme heat in mobility authorities specifications for rolling stock and in passenger waiting areas (stations, bus/tram stops)
 - ❖ Raise user awareness of good practices during periods of extreme heat
- **Working group made up of volunteer stakeholders:**
 - ❖ Around a dozen mobility organising authorities, the Groupement des Autorités Responsables des Transports (GART), the Union des Transports Publics (UTP), and the Fédération Nationale des Transports de Voyageurs (FNTV)
- **Pending publication**



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EB33

voir avec ACB la date de publication

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Updating technical standards and reference frameworks

- Develop a timetable for updating technical standards and reference frameworks relating to transport
 - ❖ Identify, for each transport mode, the standards/reference documents to be updated in light of climate change (an initial review was carried out under PNACC 1)
 - ❖ Prioritise the standards/reference documents to be updated
 - ❖ AFNOR and CGDD have compiled a list of French and European standards that need to be adapted to climate change. Standards committees must now use this list to prioritize their revisions



Timeline : first updated publications for the road and port sectors in 2025 to 2028. Identification of priority inland waterway and rail reference frameworks in progress

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EB34

parler référentiels identifiés AFNOR ?

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Building a task force on transport and mobility adaptation

- **Objective** : sharing experience, pooling knowledge and harmonising practices, identifying synergies and common issues
 - ❖ Need for climate data and indicators aligned with TRACC (in connection with Météo-France)
 - ❖ Cost-benefit assessment methods for adaptation actions
 - ❖ Vulnerability assessment method and share of strategy adaptation plan
- **Who** : infrastructure managers already engaged in a climate change adaptation approach
- **Format** : launch following publication of the PNACC (Q1 2025). 4th session beginning of June

Resilience of supply chains

- Build a method to analyze the resilience of supply chains to climate change
 - ❖ Feedback initiated on recent extreme events in some regions
 - ❖ Characterize the challenges of supply chain resilience for industries and regions : a method has been built with companies and 1 pilot sector.



Pending publication