



PATHWAYS2RESILIENCE

# Pathways2Resilience Workshop in France: Financing Climate Change Adaptation Action at All Levels of Governance

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**Date:** 28 January 2026

**Location:** Normandy Regional Council Building, Rouen, France

**Organisers:** Pathways2Resilience (P2R) project and the Normandy Region

**Participants:** Regional and local authorities, national government representatives, financial institutions, research organisations, EU representatives, and climate adaptation experts.



## Executive Summary

Climate change impacts are already affecting European territories, creating increasing economic, environmental, and social costs. Regions and local authorities are at the forefront of these challenges and play a crucial role in implementing climate adaptation strategies.

The **Pathways2Resilience (P2R) workshop on Financing Climate Change Adaptation**, held in Rouen on 28 January 2026, brought together representatives from regional and national governments, European initiatives, financial institutions, research organisations, and technical agencies. The workshop alternated between deep-dive presentations, roundtable discussions, and collaborative sessions, enabling participants to share experiences, challenge findings, and collectively identify priority actions. **The objective was to discuss how to accelerate adaptation action, strengthen governance frameworks, and mobilise sustainable financing mechanisms.**

While the presentation of the France's Third National Adaptation Plan (PNACC3) provided a national context in France, highlighting a +4°C scenario by 2100, escalating climate risks, and five priorities for public action, the discussions were enriched by territorial experiences from Normandy, Paris, Marseille, and Pôle Métropolitain Caen, as well as contributions from associations, public banks, and research actors.

The discussions highlighted a strong consensus: **adaptation is unavoidable**, and **delaying action significantly increases costs**. The cost of climate inaction is already visible through rising damages caused by extreme weather events, infrastructure degradation, and economic disruptions. Hence adaptation must be pursued alongside mitigation, ensuring short- and long-term strategies are aligned.

Overall, the workshop reinforced that **adaptation trajectories are highly context specific**. Regions must balance risks, costs, and co-benefits to design effective strategies while leveraging multi-level governance, innovative financing mechanisms, and broad stakeholder engagement. Participants also stressed the importance of robust climate risk diagnostics, technical capacity building for local authorities and the need for simplification and flexibility in rules and regulations to allow context-specific, locally adapted solutions, including addressing constraints such as coastal laws.

**Adaptation should not be viewed as a cost but as a strategic investment**, generating multiple co-benefits such as improved public health, biodiversity protection, territorial attractiveness, and economic resilience.

**There is an urgent need to better integrate adaptation planning and financing**, which are often treated separately in public decision-making. Regions require clearer frameworks, improved coordination across governance levels, and enhanced access to planning and financing tools to translate strategies into implementable projects. Anticipation and phased planning are critical to manage large financial needs, using multi-year investment programs (PPI) to align strategy, budgets, and projects over time.

**Financing adaptation remains challenging**, as it currently represents only a small fraction of green finance due to long-term horizons, uncertain returns, and difficulties in monetizing co-

benefits. **Innovation and experimentation are therefore essential**, as no single institution can fund all adaptation needs. Hybrid economic models, territorial insurance schemes, and co-benefits-based instruments, such as local carbon cooperatives or payments for ecosystem services, were highlighted as ways to improve the “investability” of adaptation projects.

**Regional authorities are key in coordinating adaptation efforts.** Normandy, a participant in the first cohort of the Pathways2Resilience programme, demonstrated how regional authorities can structure adaptation strategies, estimate financing needs, and engage financial actors in identifying innovative funding mechanisms.

**Effective governance and broad stakeholder engagement**, from citizens to economic actors, were also stressed as critical for long-term success, with stable structures such as GIP (*Groupes d'Intérêts Publics*) or PPA (*Projet Partenarial d'Aménagement*), and public banks providing continuity for sustained investment.

Finally, the workshop highlighted the importance of **knowledge sharing and scaling up successful experiences across Europe**, particularly through initiatives such as the *EU Mission on Adaptation*. Tools like the *P2R Climate Toolbox* and the *Adaptation Finance Innovation Lab* help regions align strategies, budgets, and financing. Peer learning and knowledge sharing through *National Adaptation Hubs* were recognized as vital for scaling up successful approaches, connecting EU, national, and local stakeholders, and fostering innovation. By combining national guidance, territorial experience, European tools, and collaborative approaches, adaptation can move from planning to impactful, long-term implementation, strengthening resilience for communities across Europe.

## Key Messages

Several key messages emerged from the discussions:

- **Climate adaptation is unavoidable**, and regions are central actors in implementing resilience strategies.
- **The cost of inaction far exceeds the cost of proactive adaptation investments.**
- Adaptation must be considered as a **strategic investment generating multiple co-benefits**, including health, biodiversity, economic resilience, and territorial attractiveness.
- **There is no single adaptation trajectory**: choices are political, context-specific, and dependent on territorial priorities.
- **Strategy and financing must be planned together from the outset**, as financial constraints shape the level of ambition.
- **Robust climate risk diagnostics and costing methodologies are essential** to guide investment decisions and unlock financing.
- **Multi-stakeholder governance and strong political leadership are critical** for implementing transformative adaptation.
- Financing systems must be **simplified, coordinated, and strengthened**, including through multi-year planning frameworks and innovative mechanisms.
- **Technical support and territorial engineering are essential** to help regions develop bankable adaptation projects.
- **Knowledge sharing and experience pooling across territories** are crucial to scaling up effective adaptation solutions.

# 1. Introduction

Climate change adaptation is increasingly recognised as an urgent policy and investment priority across Europe. While mitigation efforts remain essential, the accelerating impacts of climate change are already affecting territories, infrastructure, and communities, requiring immediate adaptation measures.

The workshop “**Financing Climate Change Adaptation Action at All Levels of Governance**” was organised by the [Pathways2Resilience](#) (P2R) in collaboration with the Normandy Region.

The workshop had three main objectives:

- To **better understand the costs of climate adaptation** and the implications of climate inaction.
- To **identify financial mechanisms and governance models** capable of supporting transformative adaptation.
- To **collect practical insights and recommendations** to inform European initiatives, including the forthcoming **European Climate Resilience Framework**.

The workshop gathered a diverse group of stakeholders involved in climate adaptation and territorial resilience to explore **how to mobilise and coordinate financial resources to support climate adaptation across governance levels**.

Participation was strongly anchored at territorial level, with a significant representation of local and regional authorities (particularly from Normandy), including regional administrations, metropolitan authorities, municipalities, inter-municipal structures and departmental actors. This territorial core was complemented by participants from other French regions (Île-de-France, Nouvelle-Aquitaine, Hauts-de-France, Auvergne-Rhône-Alpes, Provence-Alpes-Côte d’Azur, Grand Est and overseas territories), ensuring broader geographical diversity.

The event also brought together national institutions, research organisations, financial actors, consultancies, NGOs and private sector representatives, including national development banks, investment institutions and industry stakeholders. Participants covered a wide range of professional roles, spanning policy design, project development, finance, research, technical expertise and strategic planning.

The discussions highlighted that **adaptation investments must be considered not only as costs but also as opportunities** to generate economic, social, and environmental co-benefits, including improved health, biodiversity protection, and enhanced regional attractiveness.

## 2. Opening Session

### Welcome Address

**Thibault Beauté**, Regional Councillor for Normandy, opened the workshop by emphasising the urgency of climate adaptation. He highlighted that territories now face severe constraints, including tightening public budgets and growing climate risks. However, he stressed that **the cost of inaction far exceeds the cost of investing in adaptation today**.

Normandy has made adaptation a strategic priority, notably through the creation of the **Normandy Biodiversity Agency**, which aims to promote cross-cutting integration of biodiversity and climate adaptation across public policies.

### European Perspective

An introductory video message from **Philippe Tulkens**, Deputy Director of the Mission on Adaptation at the European Commission, highlighted the growing importance of adaptation within EU policy.

Key priorities of the EU Adaptation Mission include:

- **Supporting regions and cities in developing adaptation strategies**
- **Mobilising private and institutional investment**
- **Ensuring that infrastructure is designed to be climate-resilient from the outset**

The Mission is currently supporting more than **120 regional and local authorities** in implementing adaptation strategies and developing investment portfolios.

Several complementary EU projects were mentioned as part of the broader adaptation finance ecosystem, including:

- [ClimateFIT](#)
- [CLIMINVEST](#)
- [RISE-IN](#)
- [BLOSSOM](#)

Looking ahead, the European Commission is preparing a **European Climate Resilience Framework**, expected in 2026, aimed at improving the alignment of financial tools and policies supporting adaptation. A strong emphasis was placed on “resilience by the design”, as well as the need to **combine public and private funding** and to strengthen coordination between European, national, and local initiatives.

## Pathways2Resilience Perspective

**Fernando J. Díaz López**, Executive Director of the Climate & Earth Center at HEC Paris and former coordinator of Pathways2Resilience, presented the objectives of the P2R project.

The project aims to support **at least 100 European regions** in developing both **adaptation strategies and financing strategies**. A central focus of the initiative is **transformative adaptation**, which involves structural changes in governance, finance, and territorial planning.

He also introduced the **Adaptation Finance Lab (AFIL)**, a pilot initiative designed to support regions in designing innovative financial instruments for climate adaptation.

The [P2R Climate Toolbox](#), which includes a [finance catalogue](#) of **78 financial instruments**, was highlighted as a key resource for regional authorities seeking to implement adaptation investments.

Several key messages emerged from the opening remarks:

- Adaptation must be addressed through **integrated public policies**, rather than sector-specific approaches.
- Climate adaptation generates **significant co-benefits**, including improvements in health, ecosystems, and regional development.
- Regions must **rethink governance models and financial strategies** to respond effectively to climate challenges.

## Regional Experience: The Normandy Case

Normandy, part of the **first cohort of the P2R programme**, shared its experience implementing these methodologies.

Initially, the region faced several barriers:

- limited technical expertise on adaptation financing,
- fragmented governance structures,
- lack of clear methodologies to estimate investment needs.

To address these challenges, the region developed the **NORMAdapt initiative**, designed as a toolkit to support regional adaptation planning.

A dedicated **adaptation financing working group** was established, bringing together:

- regional authorities,
- national government representatives,
- financial institutions,
- technical agencies.

The group focused on:

- mapping existing funding sources,

- estimating adaptation financing needs,
- identifying barriers to transformative adaptation,
- exploring innovative financing mechanisms.

The **P2R Climate Toolbox** was also used to identify relevant financial instruments, providing access to a catalogue of **78 adaptation financing tools**.

### 3. Session 1 - National Framework for Adaptation in France

**Lucie Sénéchal**, Director of the Adaptation Office at the French Directorate General for Energy and Climate (DGEC), presented France's **third National Climate Adaptation Plan (PNACC3)**.

The plan is based on a reference climate scenario known as **TRACC**, which anticipates a +3°C global warming, which translates into a **+4°C warming in mainland France by 2100**.

Under this scenario, France expects:

- More frequent and longer heatwaves
- Increased coastal erosion
- Expansion of wildfire risks
- Increased soil shrinkage and swelling
- Greater cyclone risks in overseas territories

The plan includes **more than 200 measures** organised across five strategic pillars:

1. Protecting populations
2. Ensuring resilient infrastructure and territories
3. Strengthening economic resilience and food sovereignty
4. Protecting cultural and natural heritage
5. Mobilising society for adaptation

Several initiatives target local authorities specifically, including:

- The **"4°C trajectory toolkit"**, enabling regions to adapt existing climate risks assessments under the new warming scenario.
- A forthcoming **guide on maladaptation**, helping avoid ineffective or counterproductive measures.
- Expansion of the **Green Fund** to finance adaptation measures such as urban cooling, schoolyard restoration, coastal retreat, and cyclone-resistant construction standards.
- Creation of the **national adaptation mission**, a **support hub** connecting public agencies including ADEME, CEREMA, and Météo-France, with the aim of **mainstreaming the 'adaptation reflex'** by integrating climate resilience considerations from the earliest stages of project design.

## 4. Session 2 – Understanding the Costs of Adaptation

A roundtable explored how regions and cities can estimate the cost of adaptation and integrate these costs into investment planning.

Speakers included:

- **Juliette Nouel**, Journalist, creator of climate adaptation workshops
- **Vivian Depoues**, Researcher at Institute for Climate Economics (I4CE)
- **Léo Lenoir**, City of Marseille
- **Léa Morfoisse**, City of Paris
- **Vincent Viguié**, Researcher at École des Ponts ParisTech / CIRED

### Why invest in adaptation?

- Climate hazards are already generating significant economic losses, with impacts estimated at up to 0.3% of French GDP for recent heatwaves and around €10 billion for extreme events.
- These estimates remain partial and likely underestimated, as they only capture a fraction of impacts (e.g., biodiversity loss is difficult to quantify).
- Projections consistently show rising costs over time, often reaching several points of GDP under conservative assumptions.
- Local evidence confirms this trend: in southern France, climate-related damages could increase sharply (e.g., +65% insurance claims linked to soil shrink–swell, and billions in potential flood damages).

### What should be considered when assessing adaptation costs?

- There is no single adaptation pathway: territories must make strategic choices depending on political choices, technical options, and risk tolerance (e.g., preserving vs. transforming existing infrastructure).
- Different strategies imply different cost distributions, risks, and winners/losers across stakeholders.
- Co-benefits (health, biodiversity, attractiveness) are critical and can significantly increase the value of investments. Studies show that \$1 invested in adaptation can generate \$10 in co-benefits.
- Some “no-regret” measures (e.g., in buildings) have low additional costs and should be systematically integrated.

### How are cities approaching this challenge?

- **Paris**: Paris is currently updating its 2012 and 2021 risks assessments based on the TRACC scenario. Key risks, which have intensified and accelerated, include flooding, urban heat, biodiversity loss, water resource constraints. Efforts focus on mapping existing measures and planned actions across departments before engaging external

actors. The city is developing a climate adaptation pathway and working with the European Investment Bank to estimate the financial costs of priority projects.

- **Marseille:** Marseille is building a city-scale diagnosis from scratch, conducting mapping and bibliographic research, identifying heat-vulnerable schools, and sharing diagnostics widely across city services and stakeholders.

### When and how should financing be addressed?

- Climate planning and financial discussions are still too often disconnected. Discussions on financing often happen after action plans are drafted, but integrating funding considerations early (e.g., in budgets or multi-year investment plans) supports cross-departmental coordination.
- Chambéry is an example of integrating adaptation into budgetary processes and multi-year investment plans (PPI) to ensure coherence and prioritization.
- Some cities are beginning to quantify investment needs upstream, with Marseille conducting a study with the European Investment Bank to estimate adaptation costs and support future investment decisions, and Paris working on costing priority actions, and documenting its work for sharing with other cities.

### How to work effectively with partners?

- Both cities emphasised the importance of engaging stakeholders early, including infrastructure operators (ENEDIS), healthcare institutions (ARS), utilities, and private sector actors. Marseille engaged its partners early in the diagnostic phase, fostering dialogue across sectors that rarely interact. Paris is taking a phased approach: first consolidating its internal diagnostics and then holding interviews and workshops to challenge the findings and co-define priorities.
- Coordination, information sharing, and technical engineering are essential and represent significant but necessary costs. Example: During drought planning, actors initially assumed they would have priority in crisis, highlighting the need for dialogue.

### How to prioritize and act in a political context?

- Adaptation strategies must go beyond electoral cycles to address long-term challenges. Where the topic is sufficiently mature, adaptation can become a genuine campaign issue, and the beginning of a mandate is a critical window for action.
- Paris leveraged end-of-mandate timing to provide guidance for the incoming executive. The ongoing work is conceived as an exercise in building ownership and support for the incoming municipal team.
- In Marseille, an adaptation plan with 20 actions was adopted in June 2025. While still imperfect and incomplete, it covers the city's competencies and marks the launch of a collaborative process with local stakeholders. The city aims to finalize a shared diagnostic overview by March–April 2026, to inform the new municipal executive and move into the action planning phase.

## 5. Session 3 – Coordinating Governance for Adaptation Financing

This session explored how different governance levels can cooperate to finance transformative adaptation.

Speakers included representatives from:

- **Quentin Ghesquière** – Facilitator, Association Adapt
- **Céline Gilquin** – Banque des Territoires
- **Sandrine Mésirard** – Région Normandie
- **Emmanuel Renard** – Pôle Métropolitain Caen Normandie / Caen la Mer
- **Laetitia Verhaeghe** – French Development Agency (AFD)

### Why does governance need to evolve for adaptation financing?

- All territories will be affected by climate change, and climate change is redefining territorial habitability, requiring both de-development and re-development of areas. Yet current financial and governance systems were designed for a stable climate and are no longer fit for purpose.
- Existing tools and funding mechanisms are fragmented and insufficient to address the scale of transformation required (e.g., managed retreat, territorial reconfiguration). Existing instruments often have complex eligibility criteria and lack integrated financial frameworks, making it difficult to develop coherent projects.
- Capacity Gaps: A critical barrier is the insufficient technical capacity and human resources within local authorities to move from planning to implementation.

### What role do financial institutions and public actors play?

- Banks were identified as strategic intermediaries providing advisory services, long-term loans (50 to 80 years), and land acquisition mechanisms.
- Banque des Territoires: Deployed a 2023 strategy offering a "continuum of offers" (Consulting, Financing, Securing, Operating), including engineering subsidies to link diagnostics to budget programming.
- French Development Agency (AFD): Supports adaptation, particularly in overseas territories (DROM-COM) highly exposed to climate risks, sharing global expertise through tools like Adapt'action or international knowledge exchange, particularly by learning from highly exposed regions such as small island states facing potential disappearance.

### Leading regional & territorial examples

- Normandy Region: Since 2010, the Region has developed a comprehensive, long-term coastal adaptation policy "*Notre littoral pour demain*", combining observation (coastal

monitoring network), scientific expertise (regional IPCC created in 2021), and support for local strategies at relevant geographic scales (e.g., hydro-sedimentary cells). The approach emphasizes multi-level governance, capacity-building, and stakeholder engagement, with financial and technical support to territories. The entire coastline is now covered by adaptation strategies, with ongoing efforts focused on implementation and operational support.

- Caen (Orne Estuary): Initially planned over a decade as a large eco-development project, the Orne estuary initiative was halted in July 2023 after updated climate projections highlighted significant flooding and submersion risks. A new strategy is now being developed, focusing on the long-term spatial transformation of the entire lower Orne valley, which is expected to become a maritime park by 2100 (around 13 electoral cycles). Governance is coordinated through France's first estuary-scale Partnership Development Project (PPA), supported by €500,000 from the Banque des Territoires for diagnostics.

### At what scale should adaptation governance be organized?

- There is no single “correct” scale: governance must align with climate risks, territorial realities, and financing logic.
- The regional level often provides structure through diagnostics and coordination, while implementation occurs via inter-municipal (EPCI) or ad hoc structures, such as a Public Interest Group (GIP) for the relocation of Saint-Pierre et Miquelon or a PPA (Projet Partenarial d'Aménagement) in the Orne Estuary.

### How to structure effective governance?

- Key steps for building governance: develop robust, multi-temporal diagnostics (mapping risks and vulnerabilities); work across hazard scales, institutional competencies, and lived territories; integrate social acceptability and local perspectives; and make explicit political choices (adapt, transform, or renounce).
- The example of the Orne estuary project (Normandy) uses a PPA as a collaborative, long-term planning and development framework across stakeholders and administrative boundaries. While involving over 60 actors is complex, it ensures collective alignment. Governance must evolve from institutional coordination to broader inclusion of associations, economic actors, and citizens.
- Building future governance requires strong involvement of citizens and civil society. In Normandy, a regional IPCC has enabled participatory approaches such as citizen conventions, serious games, and landscape-based methods.
- Societal acceptance and political courage are essential, as adaptation involves difficult choices, including modifying or abandoning infrastructure no longer viable under future climate conditions.

### How can adaptation governance link with the future European Climate Resilience Framework?

- The roundtable highlighted the need to move beyond funding silos and build coherent, cross-sectoral governance for adaptation. Key points included:
- **Collaboration and scaling:** Encourage stakeholders to work together, scale pilot projects (especially nature-based solutions), and share experiences between states.

- **Transversal integration and participation:** Embed adaptation across all policies, involve citizens and local actors in decision-making, and ensure territorial equity (e.g., coastal vs. inland regions).
- **Integrated financing frameworks:** Overcome fragmented funding streams and complex aid rules by adopting project-based, ensemble approaches rather than sectoral silos.
- **Operational focus and innovation:** Support coordination, replication of exemplary projects, and engagement of economic actors beyond insurers.

## 6. Session 4 – Barriers to Financing Adaptation

*A collective workshop bringing together local authorities, government services, and experts to identify obstacles and solutions. Feedback presented by Stéphanie Piacentino, Red Cross Climate Centre.*

### > Economic Barriers

Adaptation projects often struggle to demonstrate their economic value due to difficulties in assessing costs and benefits, limited recognition of co-benefits and avoided losses, and challenges in evidencing short-term returns alongside long-term resilience gains.

Current business models remain heavily dependent on short-term and often insufficient public subsidies, reflecting the absence of stable and sustainable economic models for adaptation investments and limiting their attractiveness for private actors.

Suggested solutions included:

- Better communication and monetisation of co-benefits including ecosystem services.
- Development of alternative economic models that involve private and commercial actors.
- Development of innovative taxation or insurance mechanisms.
- Stronger coordination between regional planning and financing frameworks.

### > Financial Barriers

Key financial barriers identified included:

- Limited budgets at local and regional levels, competing with other priorities.
- Fragmented and complex financing landscape with multiple schemes, high transaction costs, and lack of visibility on available financial instruments.
- Insufficient funding for project preparation and engineering.
- Challenges in mobilising private finance due to perceived risks and uncertain returns.
- Misalignment of regulatory and policy frameworks with adaptation financing needs.

Proposed solutions included:

- Enhanced coordination mechanisms, pooled financing approaches and dedicated financial intermediaries.

- Innovative financing instruments such as green bonds, crowdfunding mechanisms, public-private partnerships, dedicated adaptation funds.
- Budgetary and fiscal reforms supporting long-term investment planning, including **adaptation-sensitive budgeting practices, targeted fiscal incentives and increased financial flexibility at the territorial level.**
- Improved alignment of EU funding instruments for facilitating blended finance approaches and supporting coherent territorial investment pathways.

### > Political and Institutional Barriers

Institutional challenges include:

- Fragmented governance and siloed administrative structures.
- Competing policy priorities, often with a reactive rather than anticipatory approaches.
- Lack of political ownership, and/or misalignment between political cycles and long-term adaptation needs.
- Institutional capacity constraints, including limited human resources dedicated to adaptation
- Regulatory and administrative complexity causing implementation delays.

Participants emphasised the need for **cross-cutting governance structures** and stronger integration of adaptation across all public policies.

### > Knowledge and Awareness Barriers

Participants identified several knowledge-related barriers affecting territorial adaptation:

- Insufficient awareness of climate vulnerabilities and adaptation needs and Lack of “territorialised” data.
- Complexity of climate information, making it difficult to translate scientific knowledge into operational tools.
- Communication gaps limiting usability of adaptation knowledge for authorities, businesses, and citizens.

Suggested solutions included:

- Peer learning between regions.
- Capacity-building and training for elected officials, public authorities and citizen.
- Improved climate communication tools and narratives.
- Improving the **territorialisation and accessibility of climate data** to support evidence-based decision-making and integration of adaptation into planning processes.

### > Sociocultural Barriers

Participants highlighted behavioural challenges, including:

- Limited risk perception, uncertainty, and climate scepticism.
- Prevailing narratives focus on losses rather than opportunities, limiting engagement.
- Adaptation often perceived as a cost rather than a resilience driver.

- Resistance to transformative measures, especially those affecting place attachment (e.g., relocation, land-use changes).
- Fear of change and low societal willingness to support long-term measures.

Solutions focused on building trust, improving communication, and demonstrating tangible benefits of adaptation measures.



## 7. Breakout Sessions – Innovative Financing Mechanisms

Participants explored three financing approaches in parallel sessions.

### A. Financing Adaptation Through Debt

This session, led by Grégoire Chauvière Le Drian (European Investment Bank, France), Léo Renaudin (Nouvelle-Aquitaine), and Hervé Amblard (City of Paris), explored the use of green and sustainability bonds by public authorities, drawing on experiences from regional and city levels. While investor demand for green finance is increasing, adaptation projects still represent a limited share of bond-funded investments. In practice, adaptation accounts for only a small proportion of sustainable debt, estimated at around 5% in major cities (such as Paris) and even lower in some regional contexts.

Several structural challenges explain this imbalance between mitigation and adaptation:

- Lower direct financial returns associated with adaptation projects compared to mitigation investments.
- Difficulties in measuring and demonstrating impacts, particularly where adaptation is embedded within broader infrastructure projects.
- Limited recognition of adaptation within financial standards and taxonomies.

Participants highlighted that adaptation lacks clear visibility in financial markets and often competes with mitigation for the same funding streams, despite differing risk and return profiles. In addition, the traceability of adaptation investments remains complex, as costs are frequently integrated into larger projects rather than identified as standalone expenditures.

While financial instruments such as green and sustainability bonds are available, their use presents operational constraints:

- Large issuance volumes are typically required to attract institutional investors, limiting access for smaller municipalities or projects.
- The development of issuance frameworks and reporting requirements is resource-intensive and administratively demanding.
- Existing taxonomies and standards remain predominantly focused on mitigation, offering limited guidance for adaptation-related investments.

Despite these barriers, certain advantages were noted. Green bond issuance can provide a marginal financial benefit through slightly lower interest rates, which can generate savings over the long term. It can also strengthen the financial reputation of local authorities and improve access to financing. In parallel, public financial institutions offer targeted support, including dedicated funding envelopes and long-term financing solutions for adaptation.

To better mobilise green finance for adaptation, participants identified several needs:

- Stronger financial engineering capacity within public authorities to structure bankable projects.
- The development of financial products specifically tailored to adaptation, with adapted reporting requirements.
- Mechanisms to aggregate smaller projects in order to reach the scale required by financial markets.
- Improved standardisation, with clearer categories and indicators for adaptation in financial frameworks.

## B. Leveraging Co-Benefits

This session, led by Maxime Ammendolea (Agence du Climat, Strasbourg), Cécile Bordier (City of Paris), Dominique Blanchard (Bocage d'Avenir), and Tanguy Henocque (Le Havre Seine Métropole), explored how financial instruments such as carbon cooperatives and payments for ecosystem services can help mobilise co-benefits to support climate adaptation.

Discussions highlighted the emergence of local carbon cooperatives linking businesses, public authorities and project developers such as farmers or associations, supported by frameworks such as the French Low Carbon Label, which certifies emission reductions and is increasingly applied to adaptation-related activities.

Local authorities play a key role as trusted intermediaries, facilitating connections between local funders and project developers while ensuring that projects serve the general interest. Several examples illustrated how these initiatives generate multiple benefits beyond carbon, making them relevant tools for territorial resilience. These include:

- Environmental and social co-benefits: biodiversity restoration, improved water management, and the creation of social links, notably through hedgerow restoration or tree planting projects.
- Support for agriculture: additional income streams for farmers and support for the transition towards more sustainable practices.
- Urban-rural cooperation: partnerships between cities and surrounding rural areas, for instance, to protect water resources or support local food systems.

Participants also noted that, while these mechanisms are often framed within a carbon compensation logic, a co-benefits approach enables a broader valorisation of territories and can justify higher local costs compared to international carbon markets. Small-scale, locally anchored projects, sometimes supported through citizen contributions or tax-incentivised donations, were highlighted as impactful entry points.

However, several challenges were identified:

- The complexity of carbon market mechanisms and limited understanding among stakeholders.
- Higher costs of local projects compared to international carbon markets.
- Uncertainty around long-term project durability and maintenance.

Carbon-based instruments were seen as an important lever to support investment and risk-taking, particularly for long-term maintenance costs, but not sufficient on their own to ensure the long-term viability of projects. Participants therefore emphasised the need for complementary funding mechanisms, stronger local coordination structures, and improved methods and capacity to identify and value co-benefits at territorial level.

## C. Climate-Aligned Investment Planning

The third breakout session, led by Vivian Depoues (I4CE) and Marion Fetet (I4CE) examined [I4CE's Climate-Aligned Multi-Year Investment Plan \(PPI\) Methodology](#), an innovative tool for local authorities to ensure financial strategies support climate objectives. It helps reconcile climate and financial strategies and supports voluntary municipalities in securing sufficient funding while maintaining fiscal sustainability.

Key challenges addressed by the methodology include:

- Limited dialogue between climate and finance departments.
- Short-term planning horizons (typically 10 years) that overlook climate risks, e.g., summer comfort in Normandy schools or climate-resilient building renovations.
- The need for clear investment prioritization.

The methodology guides users to review planned investments for adaptation co-benefits, adjust designs, and consider additional investments for specific adaptation needs. It is supported by publicly available resources:

- **Decision-Maker Summary:** Presents the benefits of the methodology, its objectives, and the steps to implement it within a municipality.
- **Methodological Guide:** Details the process for creating a climate-aligned Multi-Year Investment Plan (PPI) and highlights key success factors.
- **Mitigation Workbook:** Provides guidance on estimating climate mitigation costs and prioritizing investments.
- **Adaptation Workbook:** Offers tools and methods to define adaptation objectives and integrate climate resilience.
- **“Budget Ambition Climat” Game:** An interactive tool to raise awareness and encourage dialogue between budgeting and climate planning.



## 8. Key Takeaways for Regions

> The closing segment of the workshop began with a presentation of the National Adaptation Hubs, highlighted as a key perspective for regions seeking to strengthen climate adaptation.

These National Adaptation Hubs serve as national poles for climate adaptation in each of the 27 EU Member States, connecting EU, national, and local actors while accelerating knowledge sharing between stakeholders, both within countries and across borders. Rather than creating duplicate structures, the Hubs build on existing initiatives in each country to scale up impact and ensure continuity.

In France, for example, the French National Adaptation Hub is led by CEREMA and running from November 2025 for two years. It supports existing multi-stakeholder initiatives such as the [Centre de ressources pour l'Adaptation au Changement Climatique](#) and the French [Mission Adaptation](#), promotes peer learning, knowledge exchange, and twinning between local authorities. It also focuses on, helping local authorities and public actors secure more EU funding, and showcasing the action of the European Union in adaptation.

Regions and local authorities can already manifest their interest in twinning (jumelage) with other territories or referencing their initiatives, helping them connect with EU-wide knowledge networks, attract funding, and amplify the impact of local adaptation projects.

> Key takeaways for regions of the workshop were captured in the conclusion section delivered by Hubert Dejean de la Batie, Vice-President of the Normandy Region, highlighting that:

- **Regional authorities are pivotal** for coordinating adaptation efforts, with the EU providing important but currently limited resources.
- **Adaptation must be pursued alongside mitigation**, ensuring both short- and long-term climate strategies are aligned.
- **Solidarity is essential** and support should prioritize territories facing the greatest climate risks, including at the inter-municipal (EPCI) level.
- **Anticipation and phased planning** are critical to manage large financial needs, using multi-year investment programs (PPI).
- **Innovation and experimentation in financing** are needed, as no single institution can fund all adaptation needs.
- **Simplification and flexibility** in rules and regulations are required to allow context-specific, locally adapted solutions, including addressing constraints like coastal laws.
- **Collective intelligence and stakeholder engagement**, from citizens to economic actors, are key to building effective, long-term governance.

## 9. Recommendations for the European Commission

Throughout the workshop, participants recognized the major role of the EU in supporting climate adaptation, particularly in enabling small-scale initiatives to scale up and in valorising local expertise. Adaptation is inherently transversal, requiring coordination across sectors, funding streams, and governance levels.

Several key recommendations for the European Commission emerged to strengthen regional adaptation capacity and foster innovation:

- **Provide practical guidance to integrate avoided losses and co-benefits** into investment and decision-making frameworks.
- **Support regional adaptation planning and investment strategies**, ensuring territories have the technical, financial, and governance capacity to develop actionable plans.
- **Fund engineering capacity and financial structuring** to help regional actors develop bankable project portfolios.
- **Enhancing financial access for adaptation projects** by enabling project aggregation to attract diverse investors, clarifying funding pathways from diagnostics to investment, and facilitating blended finance approaches that combine European and national funding streams.
- **Improve the coherence and accessibility of EU instruments** to reduce administrative complexity and transaction costs for local authorities and promote cross-cutting funding frameworks
- **Act as a strategic intermediary between European funding instruments and territorial ecosystems** to disseminate good practices across the continent, by facilitating knowledge exchange and peer learning between regions focusing specifically on practical delivery and financing models.
- **Foster collective action and democratic participation**, ensuring that multi-stakeholder collaboration, including citizens, local authorities, and civil society, is central to planning and implementation.
- **Promote territorial solidarity**, providing stronger support to regions most exposed to climate risks (e.g., coastal and peripheral areas), and enabling harmonized solutions across Member States.

The EU was encouraged to build on existing initiatives such as the Adaptation Mission and to scale up successful local projects across Europe.



## 10. Resources

Presentation available [here](#).

Session videos available [here](#).

