Guidance document on suitable Incentive Mechanisms

Describes a range of Incentive Mechanisms and a set of policy recommendations

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List of Acronyms

ASP	Adaptation Solution Provider
CAPEX	Capital Expenditure
EPC	Engineering, Procurement, and Construction
ESG	Environmental, Social, and Governance
EU	European Union
FIE	Financing and Investment Entities
GHG	Greenhouse Gas
IFI	International Financial Institution
IM	Incentive Mechanism
MSP	Mitigation Solution Provider
NPV	Net Present Value
O&M	Operations and Maintenance
OPEX	Operating Expenditure
PA	Public Authority
PCG	Partial Credit Guarantee
PES	Payments for Ecosystem Services
PPP	Public–Private Partnership
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
R&D	Research and Development
ROI	Return on Investment
ROIC	Return on Invested Capital
SDG	Sustainable Development Goals
SPV	Special Purpose Vehicle
VAT	Value-Added Tax
WACC	Weighted Average Cost of Capital

EXECUTIVE SUMMARY

As part of the CLIMATEFIT investment approach, this guidance explores how incentive mechanism can be used to mobilize private capital for adaptation financing. Financial constraints remain a major obstacle to climate adaptation across all impact sectors and geographic regions. Public budgets are under increasing pressure from competing priorities as the need for adaptation grows. The European Climate Adaptation Strategy as a more ambitious EU strategy on climate change adaptation highlights the importance of mobilizing the private investment for adaptation project "it is vital for the private and public sectors to work together more closely, in particular on financing adaptation.[1]"

To mobilize private capital, adaptation projects need to meet bankability criteria and Incentive mechanisms (IMs) as a way to facilitate meeting these criteria. Under CLIMATEFIT's definition, Incentive Mechanisms (IMs) are policy instruments designed to encourage investment in climate adaptation projects. These mechanisms can significantly enhance the attractiveness of projects by offering financial benefits or risk mitigation.

Drawing on a systematic review and validated through engagement with financial and investment entities (FIEs) in CLIMATEFIT pilot territories, this report provides insights to help public authorities better understand the bankability criteria of adaptation projects and the policy incentives mechanisms that attract private capital to invest in climate adaptation projects.

Key Insights:

- **Taxonomy of Incentives:** The guidance classifies incentive mechanism (IMs) into seven kinds of policy tool, namely, Command & Control Policies, Corrective Subsidies, Risk Mitigation, Tradable Permits & Market-based Mechanisms, Policies Aimed at Connected Markets, Soft Policies, Direct Provision (the Tier-1 category) and 30 mechanism types (the Tier-2 category) and specific measures (Tier 3 category).
- **Impact of incentives:** Among the seven types of policy tools, corrective subsidies (grants, tax incentives, concessional loans) are the dominant mechanism in practice, accounting for nearly half of the documented cases. The incentive mechanisms that improve project financial viability or reduce risk are most effective at mobilising private investment and act at the immediate project level. In contrast, soft policies, including capacity building and regulatory frameworks, create essential enabling conditions and act at the market level.
- **The Six-Domain Bankability criteria for adaptation project**: The report identified that bankability of adaptation projects is not merely about returns and debt coverage but involves six integrated domains.
- **Key insight from FIEs engagement on bankability**: Financial institutions confirm that while ESG alignment is a prerequisite, it cannot compensate for weak financial fundamentals. Investors prioritise cash flow stability and clear risk allocation, requiring robust financial data (e.g. ROI and cash-flow projections), as information limited to upfront costs and project duration is insufficient to assess bankability.

[1] Finance for Impact

1 Introduction

The incentive mechanism guidance is embedded in the CLIMATEFIT investment approach. The overall investment approach for CLIMATEFIT covers three stages – Investment Strategies, Investment Plans, and Investment Cases.

An overview of Investment Planning and Investment Concept stages, and how they are being applied in the project, is shown in Figure 1. The incentive mechanisms (IM) guidance is a component of the third part, Investment Cases (IC), that aims to help you select the appropriate incentive mechanism to make your adaptation project bankable. Incentive Mechanisms (IMs), namely the direct ones, are also an essential component of Step 5 of the Investment Planning (IP) process (Building a pipeline of bankable projects and enabling conditions) and are perceived as one of such conditions. The broader indirect mechanisms can be employed in compiling affective investment strategies (IS) by Public Authorities (PAs). A practical workstream of this project also entails piloting the overall methodology in 5 leader territories (Investment Cases) in the course of which the choice application of the IMs will be considered if necessary.

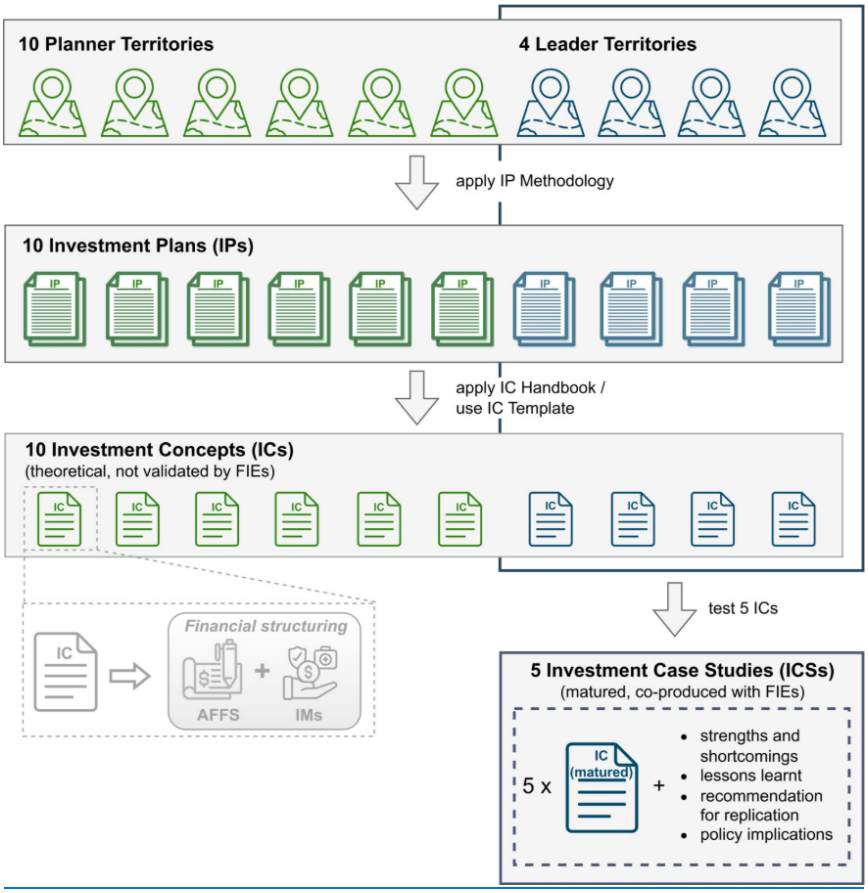


Figure 1 Overview of the application of Investment Planning and Investment Concept stages.
Source: CLIMATEFIT

This guidance is designed to support Public Authorities (PAs) in selecting suitable incentives for adaptation projects to increase the likelihood of mobilising private finance. To select the suitable incentives, we will need to understand: **First,** what policy tools can be used as incentives? **Second,** understanding why your adaptation projects are currently difficult to finance (i.e., identifying the barriers to bankability). **Third,** establishing a clear

linkage between bankability criteria and incentive mechanisms to select the suitable incentive fixes the financing barriers.

This guidance is designed to support you in going through the process of selecting suitable incentive mechanisms. Therefore, it provides:

- A taxonomy of incentive mechanisms to help PAs understand the landscape of available options.
- An explanation of key bankability criteria, along with a mapping of incentives to these criteria (Table 2 and Annex 1).
- Step-by-step guidance enabling you to identify the barriers to making your project bankable and select the suitable incentives for it.
- A case-based database illustrating how these incentives have been applied in practice, offering real-world reference points for PAs (Annex 1).

1.1 Research Methodology

To produce the guidance, the research team 1) conducted a systematic literature review of over 2,000 peer-reviewed papers on incentive mechanisms for mainly climate adaptation projects, 2) analyzed the documented incentive mechanisms to understand how they have been applied in real–life cases 3) conducted a narrative literature review on available policy options and bankability criteria for climate adaptation projects 4) analyzed the linkage between identified incentives and bankability criteria 5) validated the result from survey and focus group discussions with FIEs across CLIMATEFIT planner territories.
The methodology followed PRISMA guidelines[2] and combined quantitative analysis with qualitative validation to ensure both theoretical rigor and practical relevance. This deliverable aims to provide helpful guidance to Public Authorities (PAs) in selecting suitable Incentive Mechanisms (IMs) for adaptation projects; to keep the document practical and concise, it presents the output without demonstrating the detailed research process.

2 Understanding Incentive Mechanism and Bankability

2.1 Definition of Incentive Mechanism

Many adaptation investments - flood defenses, early-warning systems, climate-resilient infrastructure - create positive externalities: benefits that spill over to the broader society but are not captured by private investors, for instance, green roofs not only lower cooling costs for building owners but also reduce urban heat island effect (Li et al., 2014), early warning systems not only reduce asset losses for companies who install them to protect private assets, but also save lives and improve community preparedness (Rogers and Tsirkunov, 2011). Left to the market alone, these investments are underprovided.

These investments are underprovided due to the lack of economic rationale from private companies, because most benefits are societal and not financial. This is a common problem with all markets with positive externalities (healthcare, education, etc.). These goods have vast positive external effects, but if private firms were to provide them solely, the market price for the consumers, which includes the reflection of private and societal benefits, would be too high. Therefore, the best way to internalize such market failures is to provide them with direct government subsidies. Such policies are too costly to implement and very often are also underfunded by the governments as well. However, not all such policies may be costly, and in this work, we provide less funding-intensive options as IMs for adaptation; They may not make the adaptation projects fully funded by

[2] Preferred Reporting Items for Systematic Reviews and Meta-Analyses (Page et al., 2021)

private capital, but they may attract private institutions and even households to participate in adaptation finance.

> **Incentive Mechanisms (IMs)** are policy instruments designed to encourage investment in climate adaptation projects. These mechanisms can significantly enhance the attractiveness of projects by offering financial benefits or risk mitigation. Integrating these incentives into policy frameworks ensures sustained support and stimulates market activity, driving more capital into climate adaptation projects (CLIMATEFIT).

2.2 Bankability of Adaptation Project

Bankability refers to the characteristics that make a project attractive and viable for financing by investment entities. A bankable project demonstrates sufficient financial returns, manageable risks, clear revenue streams, and credible implementation capacity. For adaptation projects, bankability often requires addressing challenges such as long payback periods, diffuse benefits, and uncertain revenue streams.

> **Bankability** is the combination of profitability and an acceptable overall risk profile (McHugh, 2023). A project is bankable when its risk-return profile meets investors' criteria, and it can secure financing for implementation.

The operationalization of bankability requires specific criteria that can guide investment decisions across diverse project types and contexts. Drawing on Lessambo (2022) and Zhu & Chua (2018), the literature reveals that bankability criteria naturally organize into six integrated domains: Financial & Economic Viability, Political & Regulatory Environment, Technical & Project-Specifics, Risk Management & Mitigation, Stakeholder Credibility & Governance, and Environmental, Social & Sustainability.

This six-domain framework provides a comprehensive structure for understanding how various aspects of project assessment contribute to the overall determination of bankability. As shown in Table 1, each domain contains multiple criteria, each with specific metrics and indicators that collectively determine whether a project can secure financing. Annex 4 provides a more detailed operationalization of each Domain.

Table 1 Consolidated Bankability Framework

Domain	Key Criteria
1. Financial & Economic Viability	ROI, cash flow stability, financial ratios, capital structure, cost-benefit analysis
2. Political & Regulatory Environment	Political stability, legal framework, regulatory certainty, government support
3. Technical & Project Specifics	Technical feasibility, technology maturity, infrastructure availability, project planning
4. Risk Management & Mitigation	Risk allocation, risk management strategies, insurance & guarantees, financial safeguards
5. Stakeholder Credibility & Governance	Sponsor credibility, public sector reliability, contractor competence, governance structure
6. Environmental, Social & Sustainability	Environmental standards, climate impact, social inclusion, SDG alignment, co-benefits

2.3 FIEs' Perspective on Bankability of Adaptation Projects

Based on surveys and interviews with FIEs, the feedback validates the relevance of the consolidated framework. FIEs identify that financial viability (including the financial risk

mitigation) and environmental performance are the most important criteria to consider when reviewing an adaptation project. Please see the summarized feedback towards each bankability domain below:

- **Financial & Economic Viability:** Feedback indicates that, for adaptation projects, the primary concerns are the stability of cash flows and the clear identification of a repayment source (e.g., projected savings).
- **Political & Regulatory Environment:** No feedback emerged on this domain.
- **Risk Management & Mitigation:** There is strong demand for clear **risk-allocation strategies**, especially when multiple stakeholders are involved.
- **Technical & Project-Specifics and Stakeholder Credibility & Governance:** FIEs emphasized that successful implementation is critical to bankability, so they engage only with reliable partners. For public adaptation projects, the administrative capacity and legal reliability of the municipality or public authority are paramount to mitigate execution risks.
- **Environmental, Social & Sustainability:** Compliance with the EU Taxonomy is a prerequisite for accessing specific financing tools. However, feedback suggests that high ESG scores alone cannot compensate for a weak financial model.

3 Taxonomy and Database of Incentive Mechanisms

3.1 Introducing the Taxonomy and the Database

Based on the extant literature, a comprehensive database of incentive mechanisms was constructed. The database serves as the empirical foundation for the classification framework and practical guidance provided in this document.

The database contains over 200 examples of government-led incentive mechanisms from various contexts and application areas. Each mechanism in the database was systematically coded using a three-tier classification system:

- Tier 1: Seven main policy categories (Corrective Subsidies, Risk Mitigation Tools, Soft Policy, Command-and-Control, Direct Provision, Tradable Permits, Connected Markets);
- Tier 2: 30 Possible Incentive mechanisms types under the Tier-1 policies.
- Tier 3: Detailed measures of incentive mechanisms demonstrating how it works

Beyond the hierarchical classification, each database entry was coded to identify target stakeholders, financial vs. non-financial measures, bankability domains addressed (mapped to the six-domain framework), sector in which it was applied, if the case is empirical, and multiple sectors for application if theoretical, direct vs. indirect incentive mechanism designation, and climate objective (adaptation, mitigation, or mixed, added for potential scalability).

The following sections introduce the three tiers in detail. Both taxonomy and database include both empirical inputs and theoretically predicted possibilities, which may not have found implementation yet, but need to be considered as having a strong potential.

The complete database is provided as a separate Excel file in Annex 1. It is architected to support querying and cross-referencing through a multi-dimensional filtering system. Users can navigate the data by filtering for hierarchical classification, alignment with specific bankability domains, or relevance to various adaptation sectors. A step-by-step user guide is provided in Section 5.

3.2 Tier 1- Policies with Incentive Potential

The first tier focuses on Policy Instruments with incentivising potential. As demonstrated in Table 2, we have identified seven categories that possess the capacity to incentivise private adaptation financing as well as implementation of the adaptation projects.

Category	Explanation
1. Command & Control Policies	Regulatory mandates requiring or prohibiting specific actions
2. Corrective Subsidies	Financial incentives addressing positive externalities
3. Risk Mitigation	Tools transferring, sharing, or reducing investment risks
4. Tradable Permits & Market- based Mechanisms	Market mechanisms allocating rights through price signals
5. Policies Aimed at Connected Markets	Policies affecting linked markets to shift behavior
6. Soft Policies	Non-binding interventions changing behavior through information
7. Direct Provision	Government directly supplies goods or services

Table 2 Overview of Policy Instrument Categories (Tier 1)

Note: We further refer to each category as Tier-1 policy, and the full classification of Tier-1 policies branching into Tier-2 (IMs) and Tier-3 (measures) can be viewed in Annex 1.

Based on the literature review, the empirical distribution indicates that corrective subsidies dominate the policy landscape, accounting for nearly 40 percent of all identified incentive mechanisms. This, as expected, demonstrates the prevalence of subsidy-based approaches to promoting adaptation activities with positive externalities. Soft policies, such as information disclosure, capacity building, and voluntary standards, represent the second-largest category at around 20 percent, highlighting the role of non-mandatory incentive mechanisms in shaping private sector behavior.

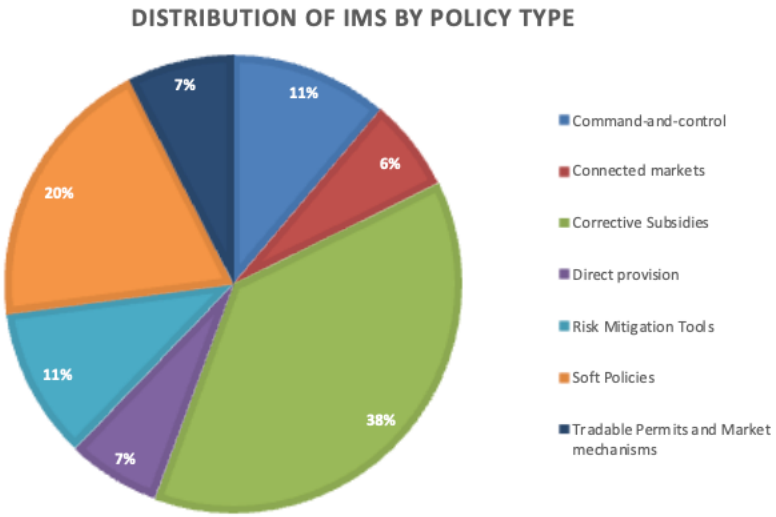


Figure 2 Distribution of by Tier 1 Policies

Command and control policies and risk mitigation tools each constitute roughly over 10 percent of the observed policies, reflecting their continued relevance in establishing minimum standards and addressing investment risk, respectively. This category is closely

followed by direct government provision, a distinct category that can fully or partially internalize externalities, substituting for private markets; and tradable permits and market-based mechanisms, which are more promising tools enabling projects to generate additional cash-flow from normal operations; while policies targeting connected markets, including substitutes or complements to adaptation activities, form the smallest share at roughly 6 percent (**Error! Reference source not found.**). Table 2 provides explanations of which policies are included in each tier-1 type.

3.3 Tier 2- Incentive Mechanism Types

Drawing from a literature review, we identified 30 distinct types of Incentive Mechanisms (IMs) categorized into seven primary policy groups. A comprehensive overview of these incentives, including their classifications and functional explanations, is detailed in Table 3.

Table 3 Overview of Incentive Mechanisms (Tier-2) in Adaptation Context

Policy instruments (Tier-1)	Incentives Mechanism Types (Tier-2)	Explanation (in adaptation context)
1. Command & Control	Performance Standards	Mandatory requirements for adaptation outcomes (e.g., buildings must withstand specified flood depths or seismic activity)
	Technology Mandates	Requirements to adopt specific adaptation technologies (e.g., mandatory use of heat-reflective materials)
	Zoning & Land Use	Restrictions on construction in climate- vulnerable areas
	Usage Quotas	Limits put on extraction of resources (water etc.), fishing, hunting quotas to preserve biodiversity
	Bans & Prohibitions	Prohibition of maladaptive practices
2. Corrective Subsidies	Grants	Direct funding for adaptation investments
	Tax Incentives	Tax reductions for adaptation activities (property tax relief for green roof installation etc.)
	Concessional Loans	Below-market lending to adaptation solution providers (ASPs) in general or to finance specific adaptation projects
	In-Kind provisions	Direct provision of assets (land etc), human resources to ASPs
3. Risk Mitigation	Credit Guarantees	Government backing for loans to adaptation projects
	First-Loss Guarantees	Government absorbs initial losses in adaptation projects implementation
	Public Insurance Schemes	Government-backed insurance against climate risk
	Risk-Sharing Mechanisms	Any structures where risks (mainly financial risks in adaptation investment) are shared between public and private stakeholders
4. Tradable Permits & Markets	Trading schemes	Markets for trading positive or negative outcomes, in the context of adaptation this can be tradable heat island reduction credits etc.
	Tradable Resource (or Development) Rights	Arrangements like tradable groundwater extraction allocations, tradable development rights in hazard-prone areas

Policy instruments (Tier-1)	Incentives Mechanism Types (Tier-2)	Explanation (in adaptation context)
	Payment for Ecosystem Services	Direct payments for positive outcomes, such as compensation for planting mangroves, or installation of green roofs etc.
5. Connected Markets	Pigouvian Taxes (in linked markets)	Taxes put on markets with negative externalities, that indirectly will incentivise alternative markets with positive externality: taxing groundwater extraction to incentivise stormwater recycling for agriculture.
	Disincentives & Penalties	Financial penalties for maladaptive behavior.
	Revenue Recycling	Channeling collected revenues back into adaptation (e.g., water extraction fees funding watershed restoration)
	Direct Provision	These will mainly apply to compliment markets, i.e. building retrofits and green-roofs are compliment markets, government will procure retrofits which will enable green-roofs to be installed privately.
6. Soft Policies	Education	Awareness campaigns about climate risks and adaptation options
	Technical Assistance	Expert support for implementing adaptation measures including guidelines, taxonomies.
	Disclosure Tools	Requirements to reveal climate risk information as well as assessment methodologies e.g. taxonomies
	R&D Grants	Funding for adaptation research and innovation
	Stakeholder Engagement	Multi-stakeholder forums, platforms, co-creative processes for adaptation planning
7. Direct Provision	Public Infrastructure	Government-built adaptation infrastructure
	Direct Service Provision/Procurement	Government delivery or procurement of adaptation services
	Public Asset Creation	Creation of publicly owned resilient assets, such as retrofits of public buildings
	PPPs	Partnership arrangements for adaptation delivery, such as joint ventures for water treatment.
	Ownership Transfer	Public takeover of critical adaptation assets from ASPs to ensure provision, or the opposite transfer of ownership to the private sector to achieve optimal outcomes.

Source: Authors' deliberations based on the literature review

Most of these mechanisms are aimed directly at the intended market (or good), however, some of them (e.g., soft policies) act towards the whole market, thus impacting the bankability and willingness to implement adaptation initiatives indirectly. This is addressed in the database (Annex A). Additionally, incentives operating through connected markets are essentially the same mechanisms as acting directly, but they will be aimed at either markets with complements (for instance, green infrastructure will incentivise various services connected with its maintenance, which in themselves are adaptation solutions, but they serve a broader adaptation good) or substitutes (mainly the alternatives which have negative externalities or do not serve adaptation purposes, e.g. non-climate resilient housing), and through this impact will have an indirect positive influence on the development and funding of adaptation solutions.

3.4 Tier 3 - Specific Measures and Examples of Application

This section dissects the operational logic of specific incentives through real-world applications, focusing on grants, regulatory frameworks, and concessional loans. We examine how Toronto's Eco-Roof Incentive Program leverages direct funding (Figure 3), how landscape replacement mandates catalyse Nature-based Solutions (NbS) (Figure 4), and the role of concessional financing in driving building renovations in La Louvière (Figure 5).

Grant for NbS project: Within the sector of **Water Supply, Sewage, Waste and Remediation**, the **EcoRoof Incentive Program** in Toronto, Canada, serves as a prominent example of a **Corrective Subsidy** in the form of a grant. The program provides CAD 75 per m²—up to a maximum of CAD 100,000—for green roof projects, specifically aimed at promoting urban heat reduction and sustainable water management. As a **financial incentive** targeting adaptation solution providers, it addresses **Domain 1: Financial and Economic Viability**.

Figure 3 Example of EcoRoof Incentive Program in Toronto, Canada

Regulation for stimulating the NbS project: The **Landscape Replacement Areas (LRA)** mechanism acts as a regulatory "command-and-control" tool to influence the market directly by mandating specific green space ratios during the zone planning stage. By integrating **Green and Hazard Zoning** into the law, it creates a compulsory market for nature-based solutions and ecosystem restoration. For the project implementor, this is a critical driver because it moves climate adaptation from an optional "add-on" to a legal requirement, strengthening **Domain 2: the Political and Regulatory Environment.**

Figure 4 Example of Landscape Replacement Area mechanism

Concessional loan for building renovation project: The **BE REEL! scheme** in La Louvière, Belgium is launched to tackle the high costs of building renovations by using a direct financial incentive. It works by blending third-party investments with interest-free regional loans, effectively allowing end users to upgrade their properties at zero upfront cost. By creating these **Targeted loan programs**, the scheme solves the primary headache in **Domain 1: Financial and Economic Viability.**

Figure 5 Example of BE REEL! Scheme in La Louviere, Belgium

These examples demonstrate that a wide range of diversified incentives are available to enhance the project bankability. However, the success depends on targeting the specific barriers of adaptation projects, reinforcing the importance of diagnosing the barriers of bankability.

4 Incentive Mechanisms to Bankability Gaps Matching Result

4.1 Distribution of Policy Types by Bankability Domains

The effectiveness of an incentive mechanism depends on targeting it to the specific bankability constraint a project faces. The following table is a result of database analysis and is derived from cross-tabulating Incentive Mechanisms (Tier-2) and Bankability

Domains. We also suggest an explanation as to how the bankability gap was addressed by the IMs, and their mechanisms of action.

The guidance on which mechanisms can be used to address which domains is based on empirical data; the order of IMs mentioned in the "Recommendation" column follows the frequency of these IMs applied towards these domains as per the Database. A more detailed description of each domain and key criteria can be found in Annex 4.

Table 4 The Matching Result of Incentive Mechanisms and Bankability Domain

Bankability Gap	Recommended IMs	How It Works
Domain 1: Insufficient Financial Returns	Grants, tax incentives, concessional loans, in-kind provisions, tradable permits/PES	These mechanisms improve economic aspects of the projects by reducing upfront capital requirements and the cost of debt, or creating additional revenue streams. Grants and tax incentives reduce the equity burden, improving Internal Rate of Return (IRR). Concessional loans offer below-market interest rates, reducing debt service costs and improving Return on Investment (ROI). In-kind provisions (e.g., land and infrastructure access) reduce the development costs of the projects (CAPEX or OPEX). Tradable permits and Payment for Ecosystem Services (PES) schemes create new revenue streams by monetizing environmental outcomes.
Domain 2: Regulatory Uncertainty	Performance standards, zoning regulations (as enabling conditions), policy commitments, disclosure tools, technology mandates	Regulatory instruments address investor concerns about policy risk and market uncertainty. Performance standards set compliance benchmarks, reducing uncertainty of project requirements. Zoning and land-use regulations provide clarity for project siting and long-term operations. Disclosure tools (e.g., climate risk reporting requirements) standardize information flows, enabling better risk assessment. Technology mandates help build market demand for specific adaptation solutions. Policy commitments signal long-term government direction, enabling longer investment horizons.
Domain 3: Technical/ Capacity Gaps	Technical assistance, R&D grants, feasibility study support, capacity building	These mechanisms reduce technological barriers and build implementation capacity. Technical assistance programs provide expertise for project design, engineering, and management, reducing preparation costs and improving project quality. R&D grants de-risk early-stage technology development, proving commercial viability before private investment. Education and capacity building programs develop local expertise, ensuring projects have skilled human resources. Feasibility studies reduce investment costs at the early stages. Technology mandates drive capacity development by creating demand that justifies investments into training initiatives.

Bankability Gap	Recommended IMs	How It Works
Domain 4: Excessive Risk Profile	Credit guarantees, first-loss capital, public insurance, risk-sharing arrangements	Risk mitigation instruments transfer or share project risks that private investors cannot adequately price or absorb. Credit guarantees improve project credit ratings, enabling access to debt markets and reducing borrowing costs. First-loss capital absorbs initial losses, improving the projects' risk profiles and thus catalyzing private finance. Public insurance products cover risks that commercial insurers normally don't address (e.g., climate-related hazards, political risk). Risk-sharing arrangements distribute risk exposure across public and private actors, derisking investments. Concessional financing can also provide hedging against various risky scenarios.
Domain 5: Stakeholder/ Governance Issues	Stakeholder engagement tools, disclosure requirements, governance frameworks, education, PPPs	Governance-focused mechanisms build trust, clarify roles, and establish accountability structures. Stakeholder engagement tools ensure affected communities are consulted, reducing opposition risk and social license concerns. Disclosure requirements create transparency around project impacts and benefits, building credibility. Education and awareness-building programs build public understanding and support for climate investments. Public-Private Partnerships (PPPs) formalize roles and responsibilities between government and private actors. Governance frameworks establish clear decision-making processes and performance monitoring, reducing uncertainty in project implementation.
Domain 6: ESG/ Sustainability Concerns	Disincentives, disclosure tools, environmental standards, taxonomy alignment, public infrastructure	These mechanisms help ensuring that projects meet sustainability criteria and demonstrate impact. Pigouvian instruments (taxes, penalties) internalize environmental externalities (negative), making sustainable alternatives more attractive. Disclosure tools allow ESG-oriented investors to verify project impact at the same time, ensuring that investors receive the intended private benefits. Environmental standards establish minimum sustainability thresholds, providing assurance to impact investors. Public infrastructure for environmental monitoring generates the data needed to verify impact.

Implication: Direct financial incentives remain the primary tool for mobilizing adaptation investment. Market mechanisms are underused, likely due to implementation complexity and regulatory requirements.

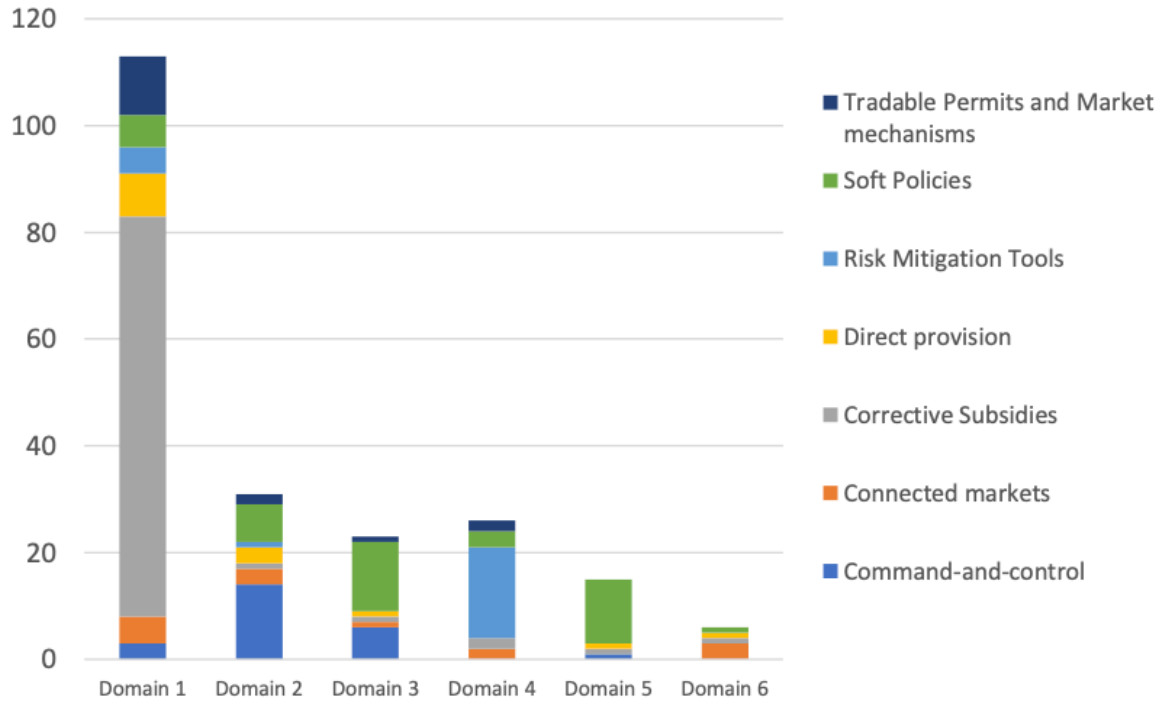


Figure 6 Distribution of Tier 1 Policies by Bankability Domains

The distribution of incentive mechanisms across bankability domains reveals a clear structure in how policy instruments support adaptation and related investments (Figure 6):

- Domain 1 (Financial and Economic Viability) is the most heavily addressed, reflecting the funding gap and the central importance of improving project economic indicators, cost coverage, and revenue stability. A wide range of policy tools contribute here, indicating that financial feasibility remains the primary binding constraint for many projects. This domain prevailed by the use of Corrective Subsidies.
- Domain 2 (Political and Regulatory Environment) is the second most prominent domain, underscoring the role of regulatory certainty, permitting frameworks, and policy commitment in enabling investment.
- Domain 3 (Technical and Project Specifics) highlights the need for technical readiness, feasibility, and implementation capacity beyond purely financial considerations.
- Domain 4 (Risk Management and Mitigation) is addressed more selectively; it is characterized by an expectedly strong focus on incentives explicitly designed to reduce uncertainty and risk.
- Domain 5 (Stakeholder Credibility and Governance) is mainly supported through soft policies and, within this category, coordination mechanisms, reflecting the importance of trust, coordination, and governance quality.
- Domain 6 (Environmental, Social, and Sustainability) is the least covered by policy mechanisms, suggesting that ESG considerations are more often treated as co-benefits rather than primary drivers of bankability.

5 How to Use the Database to Select Suitable Incentives

5.1 Step-by-Step Guide: How to Use the Incentive Mechanism Database

This database is designed to help PAs, regulators, and development partners identify suitable incentive mechanisms (IMs) to improve the bankability of adaptation and mitigation projects. The process below assumes the database is used in a filtered Excel or a similar spreadsheet environment. Link to access Database: [LINK]

The following step-by-step guide provides a practical approach to navigating the Database, allowing users to filter and select suitable policy instruments linked to their projects' bankability constraints. However, not all steps require equal attention: Steps 1–3, 9, and 10 are mandatory for policy selection; Steps 4–5 are optional filters and Steps 6–8 are recommended quality checks that can be skipped.

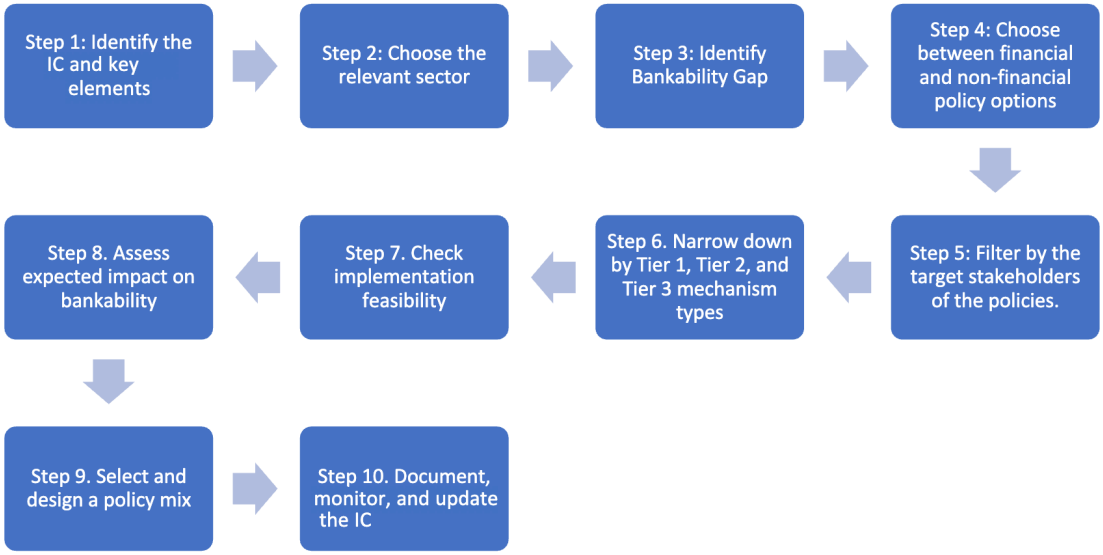


Figure 7 Step-by-Step Guide to Policy Selection

Step 1. Define IC and identify key elements

Based on the information gathered in your investment concept (IC), identify the project information: sector, location, implementing actor, scale, type of investment, and the fundamental financial indicators: ROI, CAPEX, OPEX, Payback Period, as well as the expected environmental and societal impact.

Step 2. Select the relevant sector and focus

1. Classify the project according to the EU-based industry and/or sub-sector categories used in the database (As per Annex 3).
2. In the spreadsheet, use the filter function on the sector and adaptation/mitigation focus to display only IM entries that match the project's sectoral profile, or select scalable IMs.
3. If the policy is cross-sectoral (for example, sustainable finance regulations), select the sector that best captures the dominant channel. If not applicable, use the "Professional, Scientific and Technical Activities" or "Financial and Insurance Activities" categories as appropriate.
4. This creates a list of policies that you can consider applying. If the policies satisfy your needs, you may proceed to this step.

The database also contains examples of IMs from the litigation sector. If at this step no applicable IM is identified, the user may go back and revise the sector by changing it to a "Select all" filter and reviewing if the mitigation sector offers potentially scalable solutions.

Step 3. Diagnose the relevant bankability domain(s)

1. Using the project assessment checklist (Annex 2), identify which of the six bankability domains is primarily constraining investment (or consult with FIE):
   - Domain 1: Financial and Economic Viability
   - Domain 2: Political and Regulatory Environment
   - Domain 3: Technical and Project Specifics
   - Domain 4: Risk Management and Mitigation
   - Domain 5: Stakeholder Credibility and Governance
   - Domain 6: Environmental, Social, and Sustainability (ESG)
2. In many cases, more than one domain is affected. Note both the primary domain and any secondary domains, since IMs often influence several domains simultaneously.

This will give you an intermediate list of suggested policy options. If these policies satisfy your needs, you may stop at this step.

Step 4: Choose between financial and non-financial policy options:

1. In the case of limited resources, it is feasible to assess the possibility of applying costless options first.
2. Filter by "financial/non-financial" policies
3. This will generate a list of potential options. If the options are not viable or do not address the identified bankability gap, revert to financial policies.

Step 5: Optionally, filter by the target stakeholders of the incentivising policies.

Depending on the project specifics and policy gap, you may filter the list by the target stakeholders on the policy. This will narrow down the list of suggested policies.

Step 6. Narrow down by Tier 1, Tier 2, and Tier 3

1. With the filtered list, review the **Tier 1** types (Command-and-control, Corrective Subsidies, Risk Mitigation Tools, Soft Policy, Tradable Permits and Market mechanisms, Direct provision, Connected markets).
2. Choose one or two Tier 1 types that align with:
   - The institutional authority of the public actor (for example, fiscal instruments vs regulatory powers).
   - The nature of the bankability constraint (for example, revenue risk suggests guarantees or insurance; high upfront capex suggests grants or concessional loans).
3. Apply a filter on Tier 1, then refine further using:
   - Tier 2 (for example, Grant, Tax incentive, Concessional Loans, Technical assistance, Zoning and Land Use, Disclosure Tools, Public Insurance, Stakeholder Engagement).
   - Tier 3, where detail is available (for example, Competitive grants, VAT reductions, Targeted loan programs, Performance standards, Output-based grants).

At this stage, you will have a manageable short list of IM entries with similar functional characteristics.

Step 7. Check implementation feasibility

1. Use your expert judgement to determine whether the selected mechanism covers all relevant aspects or whether a bundle of IMs is required.
2. Consider institutional feasibility:
   - Does the responsible agency have the legal mandate to implement this incentive
   - Are sufficient resources available (including time resources)
   - Is the necessary technical capacity present

Mechanisms that are attractive but cannot be implemented by the public authority in question should be removed from the list.

Step 8. Assess expected impact on bankability

For each candidate IM, review the Bankability Domain column and the narrative description:

1. Confirm that the main domain affected matches the diagnosed constraint from Step 2.
2. Note any additional domains that are likely to benefit. This is useful for designing coherent policy packages rather than isolated measures.
3. Use summary statistics or pivot tables (e.g., a contingency table of Tier 2 types and domains) to see which IMs have historically addressed similar constraints most frequently.

At this point, you can assign a simple qualitative rating for each IM for feasibility (1-5) and impact (1-5), and choose IMs with an acceptable impact feasibility ratio.

Step 9. Select and design a policy mix

1. Choose one or more IMs that jointly:
   - Address the primary bankability constraint
   - Fit the sector, stakeholder configuration, and adaptation/mitigation profile
   - Are institutionally feasible within the current context
2. Where possible, prioritise direct instruments (grants, tax incentives, concessional loans, guarantees) for immediate bankability impact, and complement them with indirect or soft measures (standards, disclosure tools, public campaigns) that strengthen the enabling environment over time.
3. Explicitly document how each selected IM is expected to change cash flows, risk allocation, or information asymmetries in line with the bankability domains.

Step 10. Document, monitor, and update the IC

1. Record the selected IMs and their parameters (benefit level, eligibility criteria, budget, duration) in a short policy design note linked to the database entry.
2. Identify indicators to monitor the effects on project bankability (e.g., financial ratios, loan approval rates, cost of capital, default risk).
3. Periodically revisit the database and update classifications or add new examples where implementation generates new evidence.
4. Update your investment concept with the identified incentive mechanism (IMs)

Note: At any stage of analysis, it is recommended to consider options within other filtering criteria, to review if measures used in other sectors, markets, focus etc. may potentially be applicable.

5.2 Recommendations for Suitable Incentive(s) Selection

Use this simplified quick policy choice chart (Figure 8) to identify the most appropriate mechanism category.

Here are some additional recommendations to consider while choosing incentive mechanisms:

1. Start with diagnosis: Always identify specific bankability constraints before selecting mechanisms
2. Use portfolio approaches: Most projects face multiple barriers requiring complementary mechanisms
3. Prioritize direct IMs for financing gaps: Grants, guarantees, and concessional finance have the strongest impact on bankability
4. Don't overlook indirect enablers: Technical assistance and regulatory certainty remove barriers that block projects from reaching the financing stage
5. Engage FIEs early: Validate investment logic and market appetite before finalizing mechanism design
6. Map institutional responsibilities: Confirm which agencies have the mandate and capacity to implement selected IMs
7. Consider low-cost options: Regulatory measures and soft policies may be easier to implement than fiscal incentives
8. Monitor and iterate: Build feedback loops to assess mechanism effectiveness and adjust design
9. When using the Database, always consider exploring solutions from tangential sectors to review other options.

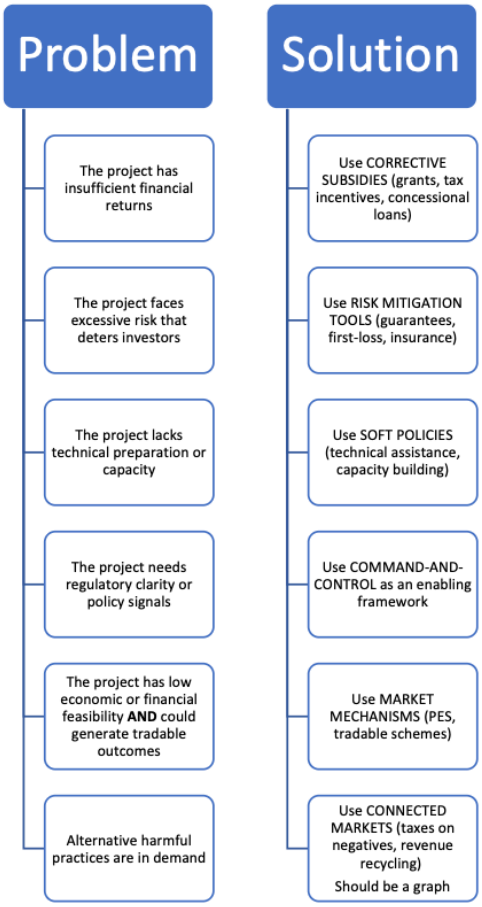


Figure 8 Quick Policy Choice Logic

The IM Database and accompanying guidance provide a systematic, evidence-based approach to select incentive mechanisms addressing specific bankability constraints. By following the suggested step-by-step process, policymakers can move towards creating an effective policy mix, not only targeting a particular project but also the whole market, which may be beneficial to achieve superior outcomes. The database is neither prescriptive nor finite and serves as an auxiliary tool supporting decision-making.

6 Case Study- Sponge City in Alba Iulia

The Alba Iulia Sponge City initiative represents a pioneering deployment of blue-green infrastructure and nature-based solutions (NBS) aimed at bolstering urban climate resilience in Romania. Designed to mitigate flood risks and combat urban heat islands, the project integrates technical interventions—such as permeable pavements, green corridors, retention basins, and urban mini-forests—with smart digital monitoring systems to optimize stormwater absorption, storage, and reuse.

Expected Impact & Alignment: The project is projected to deliver significant environmental benefits, including a **35% reduction** in surface stormwater runoff, a **40% increase** in infiltration rates, a **10% increase** in the Biodiversity Index, and a **2°C mitigation** of local temperatures during heatwaves. Furthermore, the initiative is fully aligned with the **EU Green Deal** and the **EU Taxonomy** for sustainable activities, offering substantial potential for green job creation.

Pilot Phase, Financing Ecosystem & Beneficiaries The initial pilot phase, valued at approximately **€1 million** (with an OpEx of €5,000–€7,000 per year), serves as a proof-of-concept to validate technical feasibility and financial viability. The initiative will be implemented through three complementary financing programs—combining green loans, grants (15–25%), and municipal support—targeting three distinct beneficiary groups with specific risk profiles identified during financial consultations:

- **Urban Green Home (Residential):** Targeting homeowners and housing associations to support implementation of green roofs, solar panels, and permeable pavements, water collection system
- **Green Enterprises for Transformation (SMEs):** Targeting local firms to increase the investment on circular economy, green infrastructure, water reuse and digital efficiency.
- **Resilient Community Program (Public):** Targeting the municipality to build up parks, schools, plazas and urban areas designed for infiltration and cooling.

Figure 9 Case study: Sponge City of Alba Julia, Romania

The Romanian FIEs engaged demonstrate a willingness to invest in projects like the Alba Iulia Sponge City project, but emphasize that economic viability needs to accompany environmental goals. Below is the synthesis of their perspectives on bankability, identified risk, and recommended incentive mechanisms.

Economic viability is deemed a prerequisite in the bankability domain**.** All three banks agree that while the project's environmental impact (e.g., flood reduction, heat mitigation) is commendable and aligns with their green transition targets, it is insufficient on its own to secure financing. One FIE explicitly stated that "the green part of the transaction is not enough," requiring the project to be economically justified with solid financial ratios and criteria to access the adaptation projects, and traditional projects remain the same. Another reinforced this, noting that financing decisions are based "mainly on economic and financial viability," with environmental impact serving as a secondary validation. Another highlighted that for local companies, investments ensure repayment capacity.

FIEs raised concerns about the creditworthiness of stakeholders. The proposal involves three different types of beneficiaries (private individuals, SMEs, and municipalities). Each has specific and separate creditworthiness. The ownership and risk profile of the project remains ambiguous for financial institutions.

Table 5 Risk profiles of beneficiaries suggested by engaged FIEs

Beneficiaries	Perceived risk profiles by FIEs
Municipality	Low Risk. Banks view the municipality as a safe borrower with high creditworthiness
Local companies (SMEs)	Medium/High Risk. Creditworthiness of SMEs remain ambiguous. FIEs are keen to finance assets that generate the cash flows and guarantee from governments are deemed as necessary
Housing associations and Homeowners	Financing the housing associations is deemed difficult due to lack of collateral. Financing the individual is more feasible, but KYC (know your client) should be used to assess them.

Grants, tax incentives, technical assistance, and guarantees are suggested by FIEs to be launched to support the project. Grants and tax incentives are considered the most useful tools to improve financial performance. The specific comments towards each incentive are below:

- Grants & tax incentives are considered the most effective means of making a project bankable, thereby reducing the loan amount needed and making it bankable for entities that are "on the edge" of creditworthiness.
- Technical assistance:
  - To FIEs: The PA is suggested to provide technical assistance to calculate "avoided loss" of the adaptation project. FIEs lack the internal models to quantify it.
  - To homeowners and SMEs: FIEs warned that homeowners and SMEs often lack the expertise to monitor and report the environmental KPIs required by green loans. Technical assistance should focus on helping these beneficiaries generate impact data.
- Guarantees are essential for local companies/SMEs. FIEs suggested that state guarantees or guarantees from international bodies are necessary to unlock financing for companies with weaker repayment capacity.

In alignment with the feedback from Romanian FIEs, the author identified the following incentive mechanisms from the database, with a specific focus on the NbS project that has been launched in other territories. The examples are listed below for PA's reference.

Table 6 Incentives examples for NbS projects

Incentive Types	Examples
Grants	London's Green and Resilient Spaces Fund and Melbourne's Urban Forest Fund provide direct capital for large-scale green and blue infrastructure.
	In Dilbeek (Flanders), subsidies of up to €25/m^2 are specifically designed to ensures that private developers do not incur a financial loss when opting for a green roof over a conventional one.
Technical assistance	London's "Grey to Green" guide empowers residents and communities to handle "depaving" projects, reducing the reliance on expensive external contractors.
	Netherlands utilize practice notes and life-cycle Cost-Benefit Analysis (CBA) tools.

7 Conclusion, Limitation, and Future Research

As part of the investment case, this guidance seeks to translate an investment concept into bankable investment opportunities by addressing the positive externality that often limits private-sector interest.

This work identifies seven policy categories and 30 types of incentive mechanisms, structured into a 3-tier taxonomy system. Alongside, 6 bankability domains are identified to evaluate the project's bankability. For the practical purpose, the CLIMATEFIT Incentive Mechanism Database (Annex1) and Bankability Checklist (Annex2) have been developed as practical diagnostic toolkits to support PA selecting suitable incentives.

Despite the practical tools provided, PAs might face several challenges in practice, particularly regarding the technical capacity of matching the incentives with bankability, considering that different FIEs might have different detailed requirements for the bankability. To overcome challenges, PAs are encouraged to engage with FIEs after the investment concept is formed. The targeted FIEs can provide a specific focus on the bankability criteria and also provide a vital reality check on market alignment, ensuring that selected incentives actually shift the risk-return profile enough to trigger investment.

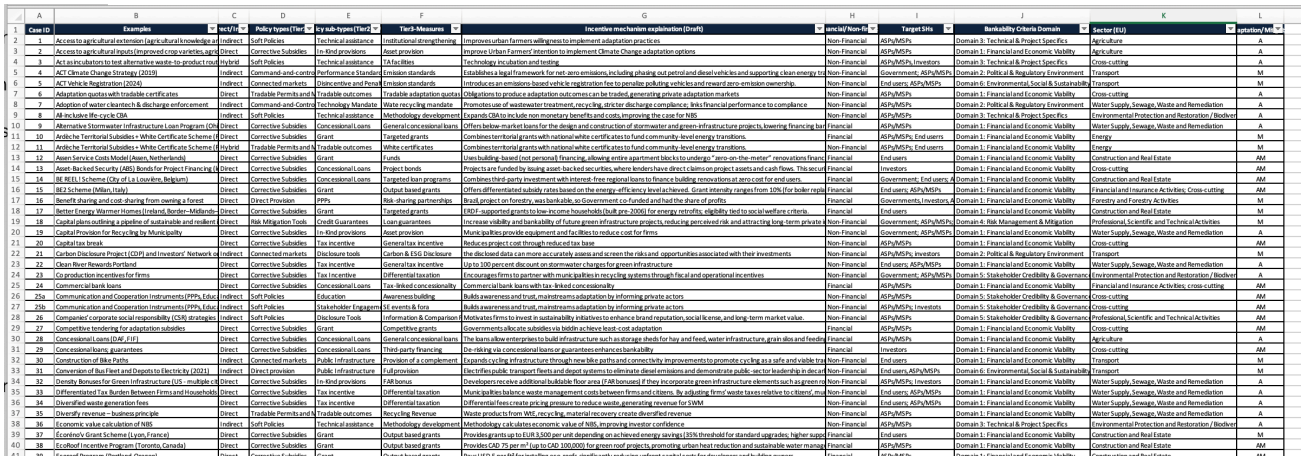
Additionally, the limitations of the guidance are identified. First, since climate adaptation finance is an evolving field, this guidance and its accompanying database should be regularly updated to reflect emerging evidence and best practices as the experience expands. A tangential limitation of this research methodology is that the review included only peer-reviewed articles, omitting the incentive mechanisms documented in grey literature (e.g., news and reports), which may be an opportunity for future research. Also, the taxonomy on which this document is based is just a starting point and prompts future research to supplement it with newer developments in adaptation governance and funding.

Lastly, considering that Task T3.3 is designed to capture FIEs' perspectives on suitable incentive mechanisms, the current guidance does not fully reflect PAs' perspectives, such as how the guidance can better support their decision-making or how incentives can be designed and launched under resource constraints, and the resources needed to implement the selected incentive mechanisms, as well as their feasibility.

Through the CLIMATEFIT project, we hope to continue to gather feedback from project partners and stakeholders to further refine the guidance and database, ensuring they remain practical, context-sensitive, and useful tools for public authorities.

ANNEXES

Annex 1 Database of Incentive Mechanisms [LNK]



	A	B	C	D	E	F	G	H	I	J	K	L
1	Case ID	Examples	ect/Ir	Policy types (Tier	icy sub-types (Tier2	Tier3-Measures	Incentive mechanism explination (Draft)	ancial/ Non-Fi	Target SHs	Bankability Criteria Domain	Sector (EU)	aptation/Mi
2	1	Access to agricultural extension (agricultural knowledge ar	Indirect	Soft Policies	Technical assistance	Institutional strengthening	Improves urban farmers willingness to implement adaptation practices	Non-Financial	ASPs/MSPs	Domain 3: Technical & Project Specifics	Agriculture	A
3	2	Access to agricultural inputs (improved crop varieties, agric	Direct	Corrective Subsidies	In-Kind provisions	Asset provision	Improve Urban Farmers' intention to implement Climate Change adaptation options	Non-Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Agriculture	A
4	3	Act as incubators to test alternative waste-to-product rout	Hybrid	Soft Policies	Technical assistance	TA facilities	Technology incubation and testing	Non-Financial	ASPs/MSPs, Investors	Domain 3: Technical & Project Specifics	Cross-cutting	A
5	4	ACT Climate Change Strategy (2019)	Indirect	Command-and-control	Performance Standard	Emission standards	Establishes a legal framework for net-zero emissions, including phasing out petrol and diesel vehicles and supporting clean energy tra	Non-Financial	Government, ASPs/MSPs	Domain 2: Political & Regulatory Environment	Transport	M
6	5	ACT Vehicle Registration (2024)	Indirect	Connected markets	Disincentive and Penal	Emission standards	Introduces an emissions-based vehicle registration fee to penalize polluting vehicles and reward zero-emission ownership.	Non-Financial	End users; ASPs/MSPs	Domain 6: Environmental, Social & Sustainability	Transport	M
7	6	Adaptation quotas with tradable certificates	Direct	Tradable Permits and N	Tradable outcomes	Tradable adaptation quotas	Obligations to produce adaptation outcomes can be traded, generating private adaptation markets	Non-Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Cross-cutting	A
8	7	Adoption of water cleantech & discharge enforcement	Indirect	Command-and-Contro	Technology Mandate	Waste recycling mandate	Promotes use of wastewater treatment, recycling, stricter discharge compliance, links financial performance to compliance	Non-Financial	ASPs/MSPs	Domain 2: Political & Regulatory Environment	Water Supply, Sewage, Waste and Remediation	A
9	8	All-inclusive life-cycle CBA	Indirect	Soft Policies	Technical assistance	Methodology development	Expands CBA to include non monetary benefits and costs, improving the case for NBS	Non-Financial	ASPs/MSPs	Domain 3: Technical & Project Specifics	Environmental Protection and Restoration / Biodiver	A
10	9	Alternative Stormwater Infrastructure Loan Program (Ohi	Direct	Corrective Subsidies	Concessional Loans	General concessional loans	Offers below-market loans for the design and construction of stormwater and green-infrastructure projects, lowering financing bar	Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
11	10	Ardèche Territorial Subsidies + White Certificate Scheme (E	Direct	Corrective Subsidies	Grant	Targeted grants	Combines territorial grants with national white certificates to fund community-level energy transitions.	Financial	ASPs/MSPs; End users	Domain 1: Financial and Economic Viability	Energy	M
12	11	Ardèche Territorial Subsidies + White Certificate Scheme (H	Hybrid	Tradable Permits and N	Tradable outcomes	White certificates	Combines territorial grants with national white certificates to fund community-level energy transitions.	Non-Financial	ASPs/MSPs; End users	Domain 1: Financial and Economic Viability	Energy	M
13	12	Aasen Service Costs Model (Aasen, Netherlands)	Direct	Corrective Subsidies	Grant	Funds	Uses building-based (not personal) financing, allowing entire apartment blocks to undergo "zero-on-the-meter" renovations financ	Financial	End users	Domain 1: Financial and Economic Viability	Construction and Real Estate	AM
14	13	Asset-Backed Security (ABS) Bonds for Project Financing (E	Direct	Corrective Subsidies	Concessional Loans	Project bonds	Projects are funded by issuing asset-backed securities, where lenders have direct claims on project assets and cash flows. This secur	Financial	Investors	Domain 1: Financial and Economic Viability	Cross-cutting	AM
15	14	BE RELI 1 Scheme (City of Louvière, Belgium)	Direct	Corrective Subsidies	Concessional Loans	Targeted loan programs	Combines third-party investment with interest-free regional loans to finance building renovations at zero cost for end users.	Financial	Government, End users; A	Domain 1: Financial and Economic Viability	Construction and Real Estate	AM
16	15	BE2 Scheme (Milan, Italy)	Direct	Corrective Subsidies	Grant	Output based grants	Offers differentiated subsidy rates based on the energy-efficiency level achieved. Grant intensity ranges from 10% (for boiler repla	Financial	End users, ASPs/MSPs	Domain 1: Financial and Economic Viability	Financial and Insurance Activities, Cross-cutting	AM
17	16	Benefit sharing and cost-sharing from owning a forest	Direct	Direct Provision	PPPs	Risk-sharing partnerships	Brazil, project on forestry, was bankable, so Government co-funded and had the share of profits	Financial	Governments, Investors, A	Domain 1: Financial and Economic Viability	Forestry and Forestry Activities	M
18	17	Better Energy Warmer Homes (Ireland, Border–Midlands–	Direct	Corrective Subsidies	Grant	Targeted grants	ERDF-supported grants to low-income households (built pre-2006) for energy retrofits; eligibility tied to social welfare criteria.	Financial	End users	Domain 1: Financial and Economic Viability	Construction and Real Estate	M
19	18	Capital plans outlining a pipeline of sustainable and resilient	Direct	Risk Mitigation Tools	Credit Guarantees	Loan guarantees	Increase visibility and bankability of future green infrastructure projects, reducing perceived risk and attracting long-term private c	Non-Financial	Government, ASPs/MSPs;	Domain 4: Risk Management & Mitigation	Professional, Scientific and Technical Activities	M
20	19	Capital Provision for Recycling by Municipality	Direct	Corrective Subsidies	In-Kind provisions	Asset provision	Municipalities provide equipment and facilities to reduce cost for firms	Non-Financial	Government, ASPs/MSPs;	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
21	20	Capital tax break	Direct	Corrective Subsidies	Tax incentive	General tax incentive	Reduces project cost through reduced tax base	Non-Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Cross-cutting	AM
22	21	Carbon Disclosure Project (CDP) and Investors' Network on	Indirect	Connected markets	Disclosure tools	Carbon & ESG Disclosure	the disclosed data can more accurately assess and screen the risks and opportunities associated with their investments	Non-Financial	ASPs/MSPs; investors	Domain 2: Political & Regulatory Environment	Transport	M
23	22	Clean River Rewards Portland	Direct	Corrective Subsidies	Tax incentive	General tax incentive	Up to 100 percent discount on stormwater charges for green infrastructure	Non-Financial	End users; ASPs/MSPs	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
24	23	Co production incentives for firms	Direct	Corrective Subsidies	Tax incentive	Differential taxation	Encourages firms to partner with municipalities in recycling systems through fiscal and operational incentives	Non-Financial	Government, ASPs/MSPs	Domain 5: Stakeholder Credibility & Governance	Environmental Protection and Restoration / Biodiver	A
25	24	Commercial bank loans	Direct	Corrective Subsidies	Concessional Loans	Tax-linked concessionality	Commercial bank loans with tax-linked concessionality	Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Financial and Insurance Activities; cross-cutting	AM
26	25a	Communication and Cooperation Instruments (PPPs, Educ	Indirect	Soft Policies	Education	Awareness building	Builds awareness and trust, mainstreams adaptation by informing private actors	Non-Financial	ASPs/MSPs	Domain 5: Stakeholder Credibility & Governance	Cross-cutting	AM
27	25b	Communication and Cooperation Instruments (PPPs, Educ	Indirect	Soft Policies	Stakeholder Engagem	SE events & fora	Builds awareness and trust, mainstreams adaptation by informing private actors	Non-Financial	ASPs/MSPs; Investors	Domain 5: Stakeholder Credibility & Governance	Cross-cutting	AM
28	26	Companies' corporate social responsibility (CSR) strategies	Indirect	Soft Policies	Disclosure Tools	Information & Comparison	Motivates firms to invest in sustainability initiatives to enhance brand reputation, social license, and long-term market value.	Non-Financial	ASPs/MSPs	Domain 5: Stakeholder Credibility & Governance	Professional, Scientific and Technical Activities	AM
29	27	Competitive tendering for adaptation subsidies	Direct	Corrective Subsidies	Grant	Competitive grants	Governments allocate subsidies via bidding achieve least-cost adaptation	Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Cross-cutting	AM
30	28	Concessional Loans (DAF, FIF)	Direct	Corrective Subsidies	Concessional Loans	General concessional loans	The loans allow enterprises to build infrastructure such as storage sheds for hay and feed, water infrastructure, grain silos and feedin	Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Agriculture	A
31	29	Concessional loans; guarantees	Direct	Corrective Subsidies	Concessional Loans	Third-party financing	De-risking via concessional loans or guarantees enhances bankability	Financial	Investors	Domain 1: Financial and Economic Viability	Cross-cutting	AM
32	30	Construction of Bike Paths	Indirect	Connected markets	Public Infrastructure	Provision of a complement	Expands cycling infrastructure through new bike paths and connectivity improvements to promote cycling as a safe and viable tra	Non-Financial	End users	Domain 1: Financial and Economic Viability	Transport	M
33	31	Conversion of Bus Fleet and Depots to Electricity (2021)	Indirect	Direct provision	Public Infrastructure	Full provision	Electrifies public transport fleets and depot systems to eliminate diesel emissions and demonstrate public-sector leadership in dec	Non-Financial	End users, ASPs/MSPs	Domain 6: Environmental, Social & Sustainability	Transport	M
34	32	Density Bonuses for Green Infrastructure (US - multiple cit	Direct	Corrective Subsidies	In-Kind provisions	FAR bonus	Developers receive additional buildable floor area (FAR bonuses) if they incorporate green infrastructure elements such as green ro	Non-Financial	ASPs/MSPs; Investors	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
35	33	Differentiated Tax Burden Between Firms and Households	Direct	Corrective Subsidies	Tax incentive	Differential taxation	Municipalities balance waste management costs between firms and citizens. By adjusting firms' waste taxes relative to citizens', mu	Non-Financial	End users; ASPs/MSPs	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
36	34	Diversified waste generation fees	Direct	Corrective Subsidies	Tax incentive	Differential taxation	Differential fees create pricing pressure to reduce waste, generating revenue for SWM	Non-Financial	End users; ASPs/MSPs	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
37	35	Diversify revenue – business principle	Direct	Tradable Permits and N	Tradable outcomes	Recycling Revenue	Waste products from WtE, recycling, material recovery create diversified revenue	Non-Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Water Supply, Sewage, Waste and Remediation	A
38	36	Economic value calculation of NBS	Indirect	Soft Policies	Technical assistance	Methodology development	Methodology calculates economic value of NBS, improving investor confidence	Non-Financial	ASPs/MSPs	Domain 3: Technical & Project Specifics	Environmental Protection and Restoration / Biodiver	A
39	37	ÉcoRénoV Grant Scheme (Lyon, France)	Direct	Corrective Subsidies	Grant	Output based grants	Provides grants up to EUR 3,500 per unit depending on achieved energy savings (35% threshold for standard upgrades; higher suppo	Financial	End users	Domain 1: Financial and Economic Viability	Construction and Real Estate	M
40	38	EcoRoof Incentive Program (Toronto, Canada)	Direct	Corrective Subsidies	Grant	Output based grants	Provides CAD 75 per m² (up to CAD 100,000) for green roof projects, promoting urban heat reduction and sustainable water manag	Financial	ASPs/MSPs	Domain 1: Financial and Economic Viability	Construction and Real Estate	AM

Annex 2: Bankability Evaluation Checklist

Use this checklist to systematically assess project bankability across all six domains. Each domain of bankability is evaluated through four main criteria, which are recommended but can be replaced or augmented depending on the project specifics.

Rate each aspect of your project: Yes (no constraint) | Partial (moderate constraint) | No (major constraint). Assign 2 points to each "Yes", 1 point to each "Partial", and 0 points to each "No". The maximum sum of points each domain can be assigned is 8; the minimum is 0. Generally, treat the domain as under-addressed by the project if the total number of points is less than 4; however, the most under-addressed domain is identified via comparison.

Domain 1: Financial and Economic Viability

#	Question	Yes	Partial	No
1.1	Does the project generate sufficient revenue to cover operating expenses?	☐	☐	☐
1.2	Is the expected return on investment acceptable to potential investors?	☐	☐	☐
1.3	Is the payback period within acceptable timeframes for target investors?	☐	☐	☐
1.4	Are financing costs (interest rates, inputs) accessible and competitive?	☐	☐	☐
Total points		Σ		

Domain 2: Regulatory Environment

#	Question	Yes	Partial	No
2.1	Is the project in line with national/local priorities and political mandates?	☐	☐	☐
2.2	Is the regulatory framework stable and predictable for the project duration?	☐	☐	☐
2.3	Do existing authorities support or mandate this type of investment?	☐	☐	☐
2.4	Are property rights and operating rights well defined and reliable?	☐	☐	☐
Total points		Σ		

Domain 3: Technical Feasibility

#	Question	Yes	Partial	No
3.1	Is the technology proven and commercially available at the required scale?	☐	☐	☐
3.2	Is qualified technical expertise available locally for implementation and maintenance?	☐	☐	☐
3.3	Is the necessary infrastructure (grid, transport, supply chains) in place?	☐	☐	☐
3.4	Are performance standards and quality benchmarks clearly defined?	☐	☐	☐
Total points		Σ		

Domain 4: Risk Management

#	Question	Yes	Partial	No
4.1	Are climate and natural hazard risks quantified and manageable?	☐	☐	☐
4.2	Are insurance or guaranteed products available to cover key risks?	☐	☐	☐
4.3	Can currency and inflation risks be adequately hedged?	☐	☐	☐
4.4	Are counterparty and off taker risks acceptable?	☐	☐	☐
Total points		Σ		

Domain 5: Stakeholder & Governance

#	Question	Yes	Partial	No
5.1	Is there clear community acceptance and stakeholder support?	☐	☐	☐
5.2	Are governance structures transparent with clear accountability?	☐	☐	☐
5.3	Are all stakeholders clearly mapped and commitment secured?	☐	☐	☐
5.4	Is there a government or institutional endorsement of the project?	☐	☐	☐
Total points		Σ		

Domain 6: ESG & Sustainability

#	Question	Yes	Partial	No
6.1	Does the project deliver measurable environmental benefits?	☐	☐	☐
6.2	Are social impacts positive and equitable across affected groups?	☐	☐	☐
6.3	Is there a credible monitoring and verification framework?	☐	☐	☐
6.4	Does the project align with recognized sustainability standards or taxonomies?	☐	☐	☐
Total points		Σ		

Annex 3: Database Sectoral Classification (EU Taxonomy)[3]:

Mitigation Sectors and Sub-Sectors	Adaptation Sectors and Sub-Sectors
1. Forestry and Forestry Activities	
Afforestation	Climate-resilient forest management
Reforestation	Fire prevention, watershed protection
Forest management	Erosion control and landscape restoration
2. Environmental Protection and Restoration/ Biodiversity	
Conservation	Ecosystem restoration
Restoration of ecosystems	Floodplain restoration
Nature-based solutions	NBS for climate resilience
3. Manufacturing	
Manufacture of low-carbon technologies (solar, wind, geothermal, hydrogen)	Manufacture of equipment needed for adaptation (e.g., flood barriers)
Manufacture of energy-efficient equipment	Production processes redesigned for resilience
Manufacture of building materials with reduced carbon content	
4. Energy	
Electricity generation (solar, wind, hydro, geothermal, ocean, bioenergy, CHP)	Adaptation of energy systems to climate risks
Transmission and distribution	Flood-proofing substations
District heating/cooling	Storm- and heat-resilient generation and grids
Energy storage	
Hydrogen production (low-carbon)	
5. Water Supply, Sewage, Waste and Remediation	
Water capture, treatment and supply	Water supply resilience
Wastewater treatment	Drought-proofing
Separate wastewater systems	Stormwater management
Anaerobic digestion of biomass	Climate-resilient wastewater treatment
Waste management, sorting, recycling	Waste management resilience
Remediation	
6. Transport	
Passenger rail	Climate-proofing of transport infrastructure
Freight rail	Adaptation of rail, road, ports, airports
Urban transport (public)	Floodproof design, landslide prevention
Zero- and low-emission vehicles	
Infrastructure for low-carbon transport (EV charging, bike, rail, etc.)	
Water transport	

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2139

Mitigation Sectors and Sub-Sectors	Adaptation Sectors and Sub-Sectors
Aviation (limited sustainable aviation fuel criteria)	
7. Construction and Real Estate	
Construction of new buildings	Renovation for thermal comfort
Renovation of existing buildings	Flood-resistant building upgrades
Installation of renewables in buildings	Climate-proof building design
Individual building-level energy services	Rainwater management
8. Information and Communication Technologies (ICT)	
Data processing and hosting	Climate-resilient data centres
Data centres	Resilient telecom infrastructure
Telecommunications networks	
9. Professional, Scientific and Technical Activities	
Engineering for low-carbon technologies	Adaptation risk assessments
Climate-related R&D	Climate vulnerability assessments
	Engineering for physical resilience
10. Financial and Insurance Activities	
Specific financial products enabling mitigation	Insurance products for adaptation
Insurance enabling low-carbon activities	Adaptation-related finance and risk-transfer mechanisms

Annex 4: The Six Bankability Domains and Key Metrics

Criteria	Key Metrics/Indicators[4]
Domain 1: Financial & Economic Viability	
Assessment of financial returns, cash flow stability and revenue certainty, key financial ratios and solvency, capital structure and leverage, cost-effectiveness, currency and revenue alignment, and macroeconomic conditions	Positive NPV (if applicable, may include social dimension); reasonable ROI; ROIC; returns above bank interest rates; risk-return profile meeting investor criteria; stable, predictable cash flows; sufficient cash flows to cover debt service; revenue certainty and demand projections; tariff history and growth prospects; debt service cover ratio; loan life coverage ratio (LLCR); debt-to-equity ratio; solvency ratio; financial autonomy ratio; WACC analysis; asset turnover ratios; minimum equity commitment; equity contribution; financial flexibility; leverage funding ability; clear economic returns; cost-effectiveness; break-even potential; cost savings opportunities; currency hedging strategies; revenue–debt currency alignment; exchange rate risk management; financial market conditions; tax regime considerations; competition conditions; investor interest; market stability.
Domain 2: Political & Regulatory Environment	
Evaluation of political stability and breach-of-contract risk, legal system quality and contract enforceability, regulatory framework clarity and stability, and government support alignment	Political environment assessment; political violence risk; breach of contract risk; public opinion support; legal system quality; contract enforceability; intervention rights; regulatory framework stability; clear regulatory requirements; regulatory compliance; alignment with national and local strategies; letters of support; national priority status; government guarantees
Domain 3: Technical & Project Specifics	
Assessment of technical feasibility and alternatives, proven and certified technology with transfer potential, infrastructure and resource availability, project maturity and planning clarity, demand verification and supply security, and construction safeguard	Feasibility studies completion; pre-feasibility or feasibility stage; alternatives assessed; technology capacity verification; proven, certified technology; technology transfer potential; innovation integration; tested technology track record; infrastructure availability; available human resources; clear objectives, location, and scope; lifecycle cost analysis; financial model development; sufficient demand verification; supply risk management; multiple suppliers; hedge contracts for inputs; fixed-price turnkey contracts; independent technical due diligence; pre-completion guarantees; delay-in-startup insurance; project structuring support (grants, guarantees, technical assistance availability); reporting requirements clarity; conditions precedent to disbursement; disbursement pathway assessment.
Domain 4: Risk Management & Mitigation	

[4] The assessment includes but not limited to the key metrics mentioned in this column

Criteria	Key Metrics/Indicators[4]
Framework for fair risk allocation and return optimization, risk identification and mitigation strategies, comprehensive insurance and guarantees, financial safeguards and debt repayment capacity, third-party liability assessment, and force majeure/termination provisions	Fair risk allocation between participants; risk–return profile optimization; risks within private sector mandate; demonstrated risk management; risk identification and mitigation; project risk consideration; acceptable risk profile; comprehensive insurance arrangements; liability insurance; environmental and legal liability coverage; warranties and guarantees; multilateral guarantees; conservative lending policies; maintaining annual surpluses; collateral availability; high probability of success; debt repayment capacity; environmental liabilities; legal liabilities; third-party risk assessment; force majeure provisions; termination provisions; covenant structures and requirements; financial covenant levels (DSCR, leverage); information and reporting covenants; covenant carve-outs and waivers; covenant negotiation ranges (base case/stress case).
Domain 5: Stakeholder Credibility & Governance	
Evaluation of sponsor, shareholder, and public sector credibility and track records, contractor and operator competence, SPV governance structure and ownership clarity, stakeholder engagement and community involvement, and contractual relationships	Shareholders' credibility; track record with IFIs; financial strength; creditworthiness; public sector track record; government entity creditworthiness; public sector commitment; EPC contractor credibility; O&M operator competence; developer track record; financial strength of contractors; SPV reliability; ownership model clarity; roles and responsibilities; strong project team; stakeholder consultation; community engagement; Indigenous peoples' involvement; country ownership; concession agreements; offtake and supply contracts; support, guarantee, and intent letters
Domain 6: Environmental, Social & Sustainability	
Assessment of environmental standards compliance and conservation outcomes, climate impact quantification and resilience contribution, social inclusion and quality of life improvements, SDG and Paris Agreement alignment, biodiversity and ecosystem gains, co-benefits generation (employment, economic growth), replication and scalability potential, and stranded asset risk	Environmental goals achievement; environmental standards compliance; conservation and resource use; environmental conservation co-benefits; quantified GHG reductions; adaptation and mitigation potential; contribution to longer-term resilience; climate change mainstreaming; resilience improvements; social goals achievement; social inclusion metrics; gender equality considerations; coverage and accessibility; quality of life improvements; sustainable development potential; long-term sustainability; ESG ratings; alignment with the Paris Agreement and SDG framework; measurable biodiversity gains; ecosystem integrity; nature-based solutions integration; employment generation; economic growth spillovers; social well-being improvements; economic spillover effects; productivity increases; innovation potential; replicability assessment; scalability evaluation; paradigm shift opportunity; impact beyond the project area; EU sustainable finance taxonomy alignment; long-term asset viability; climate transition risk assessment

The CLIMATEFIT project aims to support EU territories in their just and transformational journey toward climate resilience by bridging the finance gap, providing critical insight and building the capacities of (i) Public Authorities (PAs) to identify, orchestrate and attract various public and private financing sources and (ii) Financing & Investment Entities (FIEs) to identify and access resilient investment opportunities. CLIMATFIT opens a significant opportunity to foster innovative resilience investments in vulnerable EU territories and to boost competitiveness and EU leadership in a growing market. The project will build on a deep understanding of existing initiatives to sustain systemic and catalytic resilience investments by engaging its Technical Partners, PAs and FIEs in the co-creation of twenty innovative investment strategies, ten concrete and scalable investment plans and four bankable transformational investment cases, increasing the bankability of resilient project pipelines across a diversity of scales, financing gaps, contexts, barriers to financing, climate risks and vulnerabilities, biogeographical regions, adaptive capacities and maturity regarding climate change represented from its twenty case studies grouped in three clusters: Northwestern, Eastern and Southern.

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