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COMPREHENSIVE STUDY ON FINANCIAL MECHANISMS FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY IN KOSOVO

2025



DISCLAIMER

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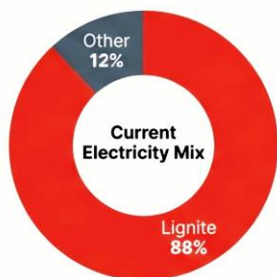
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1. EXECUTIVE SUMMARY

The Republic of Kosovo stands at a defining juncture in its energy history. For decades, the nation's economic engine has been powered almost exclusively by lignite, a legacy that has resulted in an electricity generation mix where 88% to 95% of output is derived from two aging thermal power plants, Kosovo A and Kosovo B. While this infrastructure provided baseload stability in the past, it has now become a source of profound vulnerability. The energy crisis of 2021-2022 exposed the fragility of this monocultural dependence, as unplanned outages forced the government to subsidize electricity imports at a cost of over €300 million, fiscal resources that could otherwise have catalyzed the transition to a sustainable future. Simultaneously, the environmental toll of lignite combustion has placed Kosovo under increasing pressure to align with the European Union's Green Agenda and the decarbonization mandates of the Energy Community Treaty.

In response, the Government of Kosovo has articulated a bold vision through its Energy Strategy 2022–2031. This strategy is not merely an aspirational document but a roadmap for survival and modernization. It targets a fundamental restructuring of the energy mix, aiming for a minimum of 32%, and potentially up to 35%, renewable energy sources (RES) in gross final electricity consumption by 2031. The strategy mandates the deployment of at least 1.6 GW of new renewable capacity, comprising 600 MW of wind, 600 MW of utility-scale solar PV, 100 MW of prosumer capacity, and 20 MW of biomass. Furthermore, it commits to a 16.3% reduction in greenhouse gas (GHG) emissions relative to 2016 levels and the phase-out of at least one lignite generation unit.

88% Lignite Dependency



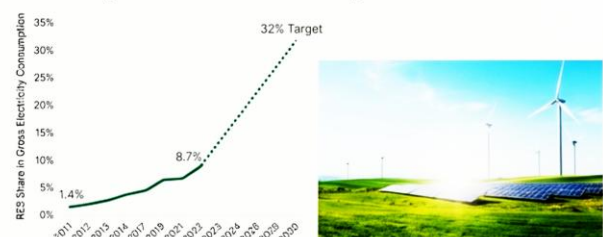
Kosovo's energy sector remains heavily dependent on lignite, creating significant environmental, environmental, health, and security vulnerabilities.



A Strategic Energy Transformation by 2030



Progress Towards 2030 RES Target



However, the realization of these targets faces a formidable obstacle: the "financing gap."

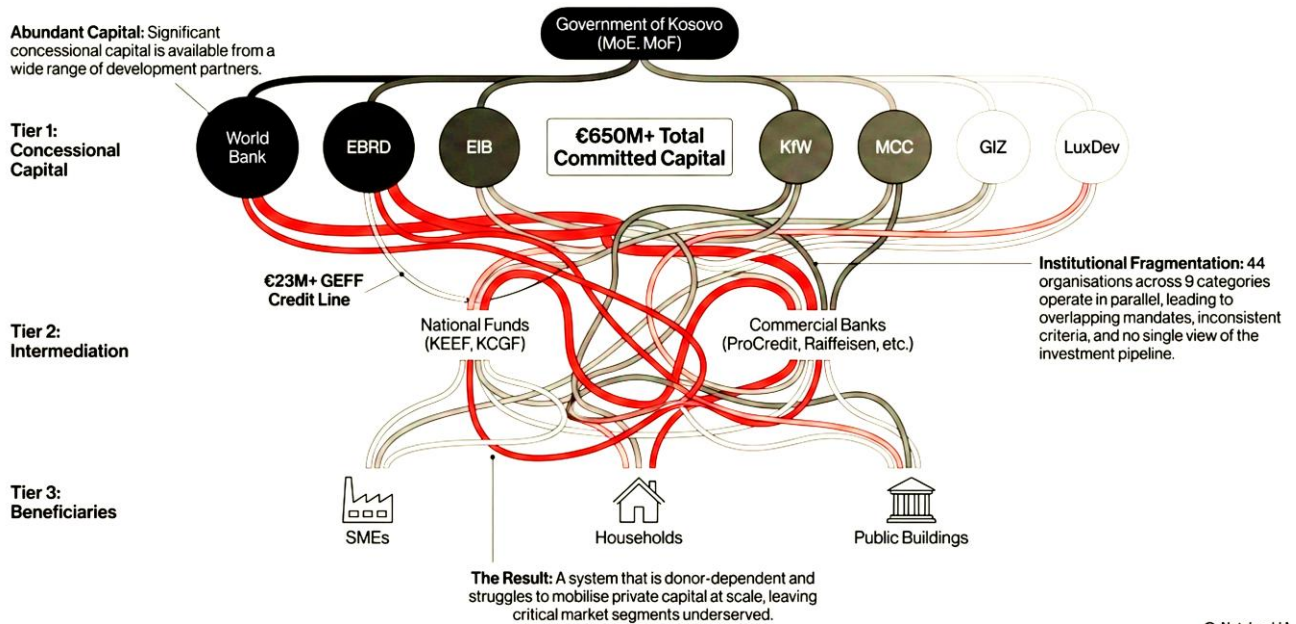
The research conducted in this study shows that there is technical potential and political will, but the financial system that is needed to raise the necessary funds on the scale that is demanded is broken up, afraid of taking risks, and too reliant on funding from donors. The problem isn't a lack of cash, commercial banks in Kosovo have more than €100 million in green loan capital ready to go, but a structural mismatch between the risk-return profiles of projects and the needs of financiers.

This strategic plan synthesizes the findings from three comprehensive studies-mapping and gap analysis (D1), international benchmarking (D2), and financial mechanisms design (D3) to

propose a unified, phased approach to establishing a coordinated clean energy financing architecture. Rather than attempting to implement all instruments simultaneously, the plan recommends a tiered rollout balancing institutional capacity development with immediate impact.

1.1. THE DIAGNOSTIC REALITY: A FRAGMENTED ECOSYSTEM

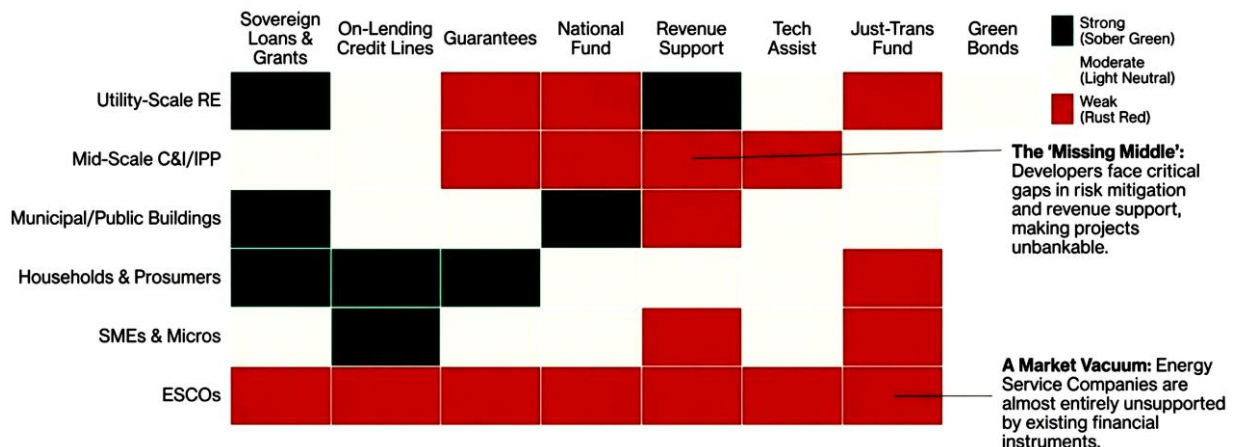
The comprehensive mapping of Kosovo's current financing landscape (D1) identifies a complex ecosystem involving over 44 organizations, including government ministries, regulators, development finance institutions (DFIs), and commercial banks.



Despite the presence of active credit lines and guarantee funds, five critical systemic failures persist:

1. **The "Missing Middle" Crisis:** Utility-scale projects (>50 MW) are served by competitive auctions and sovereign guarantees, while small residential prosumers (<100 kW) benefit from grant subsidies. However, mid-scale commercial projects (5–30 MW), the sweet spot for domestic private developers, are unbankable. Under the current merchant-price regime, these projects face a Debt Service Coverage Ratio (DSCR) of only 0.80, far below the 1.20 threshold required by lenders.

RE/EE Financing Coverage by Segment



Stakeholder feedback, highlights that instruments like KCGF's GROW window face underutilization due to borrowers favoring blended grant-guarantee options and banks' reluctance to combine guarantees with external grants. Mechanism 1 addresses this through proposed blending (see details under Mechanism 1).

2. **The ESCO Vacuum:** Energy Service Companies (ESCOs), which drive efficiency investments globally by financing retrofits through energy savings, are virtually absent in Kosovo. The lack of standardized Energy Performance Contracts (EPCs) and Measurement and Verification (M&V) protocols prevents banks from lending against future savings, leaving a €500 million energy efficiency market untapped.



3. **Household Affordability and Administrative Friction:** While 40% of households suffer from energy poverty, access to finance is hindered by high interest rates (10–18% from Microfinance Institutions) and complex bureaucratic procedures that cause 6-12 week delays in subsidy disbursement.
4. **Municipal Capacity Bottlenecks:** Renewable energy developers face permitting delays of 12 to 24 months due to outdated Municipal Development Plans and poor coordination between local authorities and the grid operator (KOSTT), increasing pre-development costs and discouraging investment.



5. **Institutional Fragmentation:** Key financing entities, the Kosovo Energy Efficiency Fund (KEEF), the Kosovo Credit Guarantee Fund (KCGF), and KIESA, operate in silos. There is no unified governance mechanism to align fiscal incentives, guarantees, and grants, leading to inefficiencies and missed opportunities for blended finance.

1.2. CORE RECOMMENDATIONS

This report synthesizes these findings into a cohesive strategic plan designed to transition Kosovo from a donor-dependent model to a market-based financing architecture. Drawing on international best practices from North Macedonia, Bulgaria, and Serbia (D2), the plan proposes the immediate implementation of five mutually reinforcing financial mechanisms (D3):

1. **SME Green Guarantee Facility (Tier 1):** Expanding the KCGF to provide 50-70% partial risk guarantees for SME renewable energy investments, unlocking the collateral deadlock that currently stifles commercial lending.
2. **Household and Public-Building Blended Finance (Tier 1):** Leveraging KEEF to combine 30-40% grants with concessional loans, bridging the affordability gap for vulnerable households and public institutions.
3. **ESCO Intermediation Pilot (Tier 2):** A market-development facility to standardize contracts and provide performance guarantees, birthing a domestic ESCO industry.
4. **Green Bond Framework (Tier 3):** A long-term regulatory initiative to prepare municipal and corporate issuers for capital market entry by 2028-2030.
5. **Clean Energy Financing Window (Integration Hub):** A unified governance window within the Innovation Fund to coordinate these mechanisms and provide high-risk innovation capital.

Mechanism	Timeline	Target Beneficiaries	Leverage Ratio	Priority
SME Green Guarantee Facility (KCGF Expansion)	Phase 1	800-1,200 SMEs	3.4x	Tier 1
Household & Public Blended Finance (KEEF Scaling)	Phase 1	1,000-1,500 households + 50-100 buildings	2.5x	Tier 1
Clean Energy Financing Window (Innovation Fund Integration)	Phase 1	All mechanisms	1x (coordinating)	Tier 1
ESCO Intermediation Pilot	Phase 2-3	50-100 buildings + 10-15 ESCOs	2.0x	Tier 2
Green Bond Framework (Capital Market Entry)	Phase 3+	Municipalities + utilities	250x (long-term)	Tier 3

The implementation of this roadmap is projected to mobilize €250–300 million in private capital over five years, leveraging public funds at a ratio of 1:3 to 1:5, and reducing GHG emissions by 25,000–30,000 tCO₂e annually.

These mechanisms also build on existing instruments like KCGF's GROW window and LuxDev-supported KEEF initiatives, with targeted differentiations and blending to enhance uptake and coherence.

1.2.1. AGGREGATE IMPACT (2025-2030+)

- **2,000-2,500 direct beneficiaries** (SMEs, households, public facilities)
- **EUR 200-250 million private capital mobilized** against EUR 80-100 million in concessional resources (2.6x leverage)
- **25,000-30,000 tCO₂e annual greenhouse gas reduction**
- **2,000-3,000 jobs created** in construction, energy services, and renewable energy deployment
- **1,000-1,500 energy-poor households** lifted from energy poverty through blended financing

1.2.2. CRITICAL SUCCESS FACTORS

1. **Unified governance** through a Clean Energy Financing Window within the forthcoming Innovation Fund, with clear authority and quarterly decision reviews
2. **Dedicated staffing** (Chief Investment Officer, Fund Manager, M&E specialist) within three months
3. **Secured bank participation** through written commitments from at least three lead institutions (ProCredit, Raiffeisen, BKT) by Month 2
4. **Robust monitoring** through a common Monitoring, Reporting & Learning (MRL) framework aligned with Kosovo's 2030 targets
5. **Adaptive management** through quarterly steering reviews enabling evidence-based course correction

2. STRATEGIC CONTEXT: THE ENERGY TRANSITION IMPERATIVE

2.1. MACRO-FISCAL AND ENERGY SECTOR BASELINE

Kosovo's energy sector is an anomaly in Europe, defined by an overwhelming reliance on lignite. The power generation mix is dominated by Kosovo A (with three of its five units currently in service., operational since the 1960s/70s) and Kosovo B (two units, operational since the 1980s). Together, they account for nearly 90% of domestic electricity generation. While this reliance on indigenous coal reserves has historically shielded Kosovo from certain import dependencies, the advanced age of these plants has resulted in chronic unreliability. In 2022, frequent breakdowns necessitated emergency electricity imports at peak market prices, creating a severe fiscal shock.

Despite these structural rigidities, the broader macroeconomic context offers a stable foundation for reform. Kosovo maintains a low public debt-to-GDP ratio (below 20%), providing fiscal headroom that many regional peers lack. However, the fiscal space is constrained by the persistent burden of energy subsidies, which reached €300 million during the crisis period, funds that merely sustained consumption rather than investing in transition capacity.

The energy intensity of the economy remains high, standing at 358.0 kg of oil equivalent per €1,000 GDP in 2022, compared to an EU average significantly lower. Although this represents an improvement from 525.2 kg in 2011, it indicates massive untapped potential for energy efficiency improvements in the residential and industrial sectors.

2.2. THE POLICY FRAMEWORK: 2031 TARGETS AND EU ALIGNMENT

The Government of Kosovo has aligned its energy policy with the European Union's decarbonization trajectory. The primary vehicle for this alignment is the *Energy Strategy of the Republic of Kosovo 2022–2031*, adopted in March 2023.² This strategy marks a definitive departure from plans for new coal generation (the cancelled "Kosova e Re" project) and embraces a renewables-led future.

Key Strategic Targets for 2031:

- **Renewable Energy Share:** Minimum of 32% in gross final electricity consumption, with ambitious scenarios targeting 35%.

- **Capacity Deployment:** Installation of 600 MW wind, 600 MW solar PV, 100 MW prosumer solar, and 20 MW biomass.
- **Storage:** Deployment of at least 170 MW (340 MWh) of battery energy storage systems (BESS) to manage intermittency.
- **Decarbonization:** Reduction of GHG emissions by 16.3% compared to 2016 levels.⁶
- **Coal Phase-Out:** Decommissioning of at least one unit of Kosovo A and the refurbishment of Kosovo B to meet environmental standards.

This strategy is further supported by the *Law on the Promotion of the Use of Renewable Energy Sources (Law No. 08/L-258)*, enacted in 2024, which introduces competitive bidding (auctions) as the primary support mechanism, replacing the feed-in tariffs.⁹ Additionally, the *National Energy and Climate Plan (NECP) 2025–2030*, currently in draft phase, will provide the integrated framework for climate and energy governance.

2.3. KOSOVO'S ENERGY TRANSITION IMPERATIVE

Kosovo's energy transition is not optional: it is a legal, fiscal, and humanitarian imperative:

Climate & Environmental Commitment: Kosovo is signatory to the Energy Community Treaty and is aligned with EU 2030 climate targets, requiring a 32% renewable energy share and 16.3% greenhouse gas reductions by 2030. The current trajectory, with renewable energy representing just 5.8% of gross electricity consumption in 2022 (improving to 8.7% by 2024), puts the country significantly behind its targets.

Energy Dependency & Security: Kosovo imports approximately 26% of its net energy requirement, creating vulnerability to regional supply shocks and price volatility. Domestic renewable deployment reduces this vulnerability while supporting long-term economic competitiveness.

Public Health & Social Equity: Coal-dependent electricity generation contributes significantly to air pollution, with measurable health impacts on Kosovo's vulnerable populations. Energy efficiency improvements reduce household energy costs, addressing the reality that 40% of Kosovo's population experiences energy poverty, with particularly acute impacts in rural areas and among elderly households.

Economic Opportunity: Renewable energy and energy efficiency investments create employment, attract foreign direct investment, and position Kosovo as a competitive knowledge economy. Current estimates suggest that green energy investment could create 2,000-3,000 direct jobs and an additional multiplier effect of 1.5-2x indirect employment.

2.4. THE COST OF INACTION

The urgency of this transition is underscored by the fragility of the current system.

The "status quo" scenario is fiscally and socially unsustainable. Reliance on aging coal plants guarantees future supply shocks, necessitating expensive emergency imports that drain the national budget.

Furthermore, the forthcoming Carbon Border Adjustment Mechanism (CBAM) by the EU poses a

direct threat to Kosovo's economic competitiveness. As an exporter to the EU, Kosovo's carbon-intensive products will face tariffs if the energy mix is not decarbonized, effectively locking the country out of its primary export market. Thus, the transition is an economic survival imperative.

2.5. CURRENT STATE ASSESSMENT: CRITICAL GAPS

The comprehensive mapping and gap analysis (D1) identified Kosovo's renewable energy and energy efficiency financing ecosystem as characterized by **abundance of isolated initiatives but scarcity of coordination**.

The ecosystem is comprised of a "complex, multi-layered stakeholder ecosystem involving 44+ organizations," which can be categorized into three tiers:

1. Policy and Regulatory Tier:

- **Ministry of Economy (MoE):** The central architect of energy policy. Its *RES Project Implementation Unit (RES PIU)* is tasked with executing renewable energy auctions. While technically competent, the PIU operates with only 50% of its budgeted staff, creating a bottleneck in auction design and execution.
- **Energy Regulatory Office (ERO):** The independent regulator responsible for licensing and tariffs. ERO has successfully implemented prosumer regulations but struggles with data transparency regarding reference prices, creating uncertainty for developers.
- **Ministry of Finance (MoF):** The fiscal authority. Despite maintaining macro-fiscal stability, the MoF lacks a dedicated "Green Fiscal Policy" unit, meaning tax incentives for renewables are ad-hoc rather than strategic.

2. Financial Intermediation Tier:

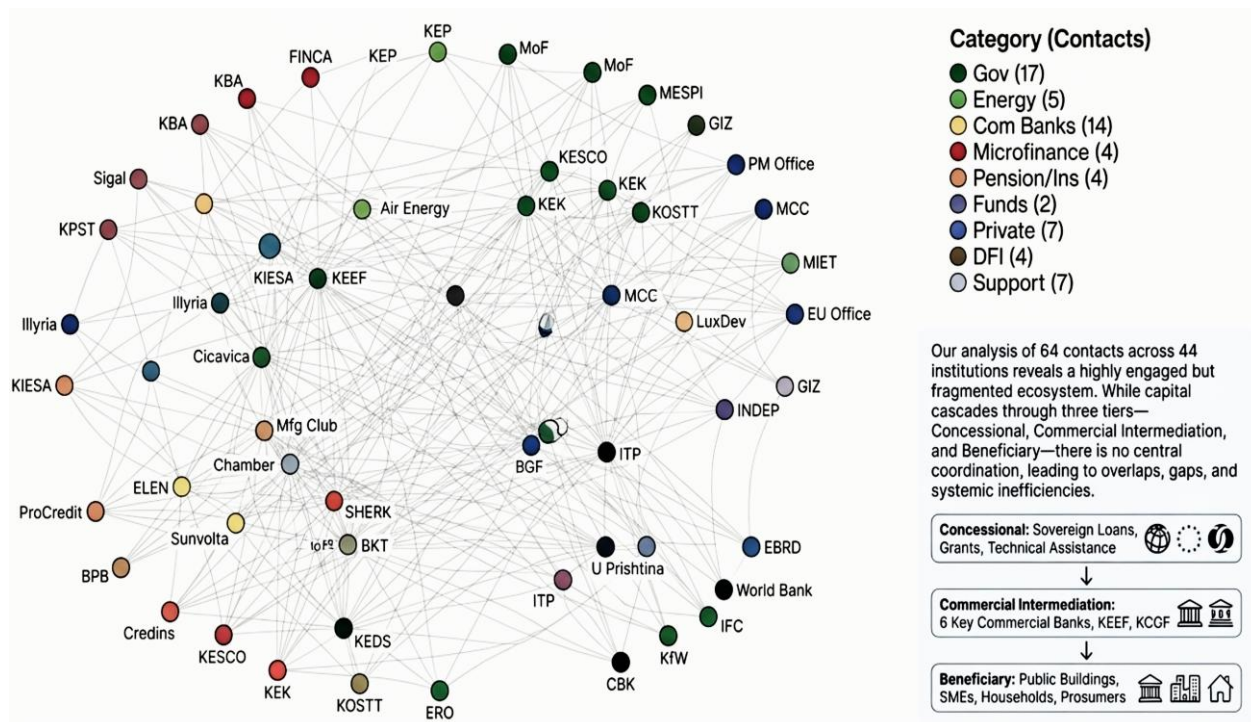
- **Kosovo Energy Efficiency Fund (KEEF):** Established in 2019, KEEF is the flagship institution for energy efficiency. With a portfolio of €44 million and a pipeline of €133.5 million, it has successfully renovated public buildings using a revolving fund model. However, its mandate is largely confined to the public and residential sectors, limiting its ability to directly support commercial and SME investments.
- **Kosovo Credit Guarantee Fund (KCGF):** A vital risk-sharing entity. Its "Grow Window" offers guarantees of up to 70% for green SME loans. It has successfully onboarded commercial banks but is constrained by the need for larger guarantee capital to cover deep retrofits.
- **Commercial Banks:** The sector is dominated by foreign-owned banks (ProCredit, Raiffeisen, NLB, BKT) which are liquid and technically capable. ProCredit alone reports a group-wide green loan portfolio of over €1.2 billion. However, local lending conditions remain conservative, with interest rates of 6.3% and collateral requirements of 120–150%.

3. Development Finance Tier:

International donors provide the bulk of capital. Major instruments include:

- **World Bank (IDA):** The €32.5M KEERE Project for public building efficiency.
- **EBRD:** Over €50M committed via the Kosovo EE in Public Buildings program and GEFF credit lines for residential green lending.
- **KfW & EIB:** Financing the flagship Solar4Kosovo project (100 MW solar on coal ash dumps), aiming to demonstrate the viability of large-scale solar.

- Millennium Challenge Corporation (MCC): A \$236M compact focused on battery storage and workforce development, critical for grid stability



The landscape also includes:

- **EUR 650+ million** in committed financing across donor-funded projects, bilateral credit lines, and commercial green lending products
- **58 named stakeholder contacts** engaged in strategic coordination

Despite this institutional density, the analysis identified six critical barriers preventing effective deployment:

1. **Institutional Fragmentation** – No consolidated governance mechanism; mechanisms operate in parallel rather than as an integrated system
2. **Regulatory Uncertainty** – Transition from Feed-in Tariffs to merchant exposure without adequate risk mitigation; 244 MW utility-scale projects under construction but only 1 MW commissioned as of 2024
3. **Project Preparation Bottleneck** – Municipal permitting delays; insufficient capacity for project preparation in municipalities. **The Barrier:** Developers report permitting delays of **12 to 24 months**. The root cause is the dependency on Municipal Development Plans (MDPs), which are updated only every 3-5 years. If a solar project is not in the MDP, the Distribution System Operator (DSO) cannot process the connection request. This administrative gridlock freezes capital and increases development costs.
4. **ESCO Market Underdevelopment** – Only 2-3 operational Energy Service Companies versus estimated 200+ potential firms; absent market development framework. Energy Service Companies (ESCOs) are the standard global vehicle for energy efficiency, yet Kosovo has only a few firms.

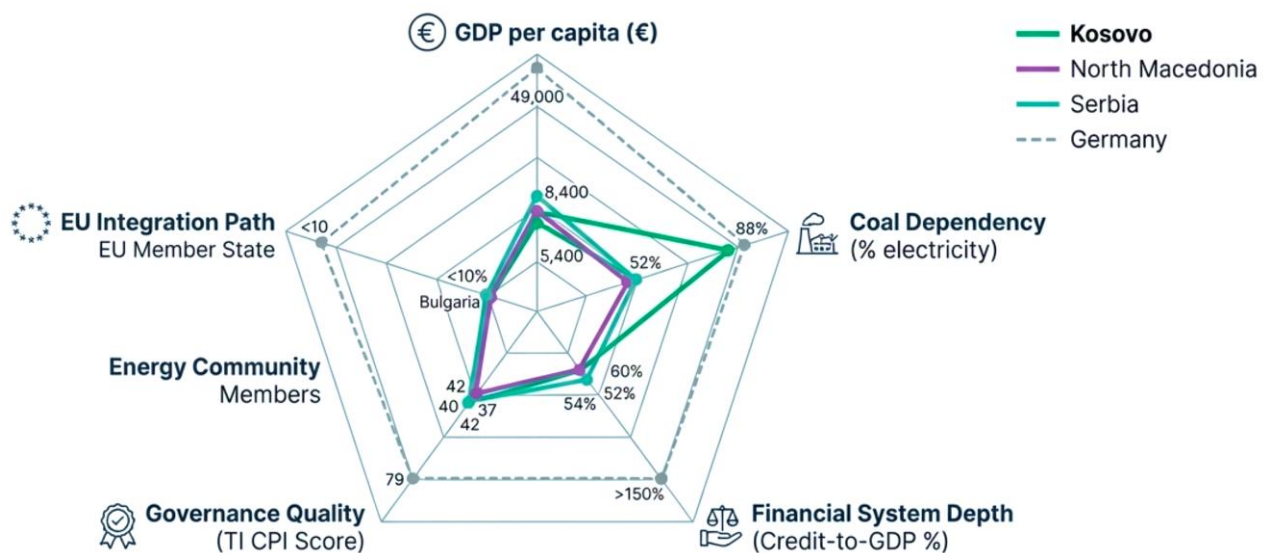
The Barrier: There is no legal framework for Energy Performance Contracting (EPC). Banks do not recognize "future energy savings" as collateral. Consequently, the €500 million market for

private sector retrofits is stagnant. Potential ESCOs exist but lack the capital and legal certainty to operate

5. **Household Access Barriers** – Administrative burden (primary barrier, not regulatory) for accessing subsidized efficiency programs; complex application processes. Households want to invest in efficiency, but the system makes it hard. **The Barrier:** Microfinance Institutions (MFIs) charge 10-18% interest. While grants (e.g., GEF 20%) exist, the administrative process involves complex invoicing and verification that takes 6-12 weeks. For a low-income family, this delay and complexity are prohibitive. The "hassle factor" is a significant non-financial barrier
6. **The "Missing Middle" Crisis** – Mid-scale renewable developers (5-30 MW) lack bankable project structures due to merchant risk exposure and absence of revenue stabilization instruments. A critical policy gap exists for renewable energy projects between 5 MW and 30 MW. Kosovo has moved from a Feed-in Tariff (FiT) to a market-based support scheme (Auctions/CfDs). Large projects (>100 MW) are served by government auctions. Small prosumers (<100 kW) have a net-billing scheme. However, mid-sized projects, typically developed by local SMEs, fall into a regulatory void. They are forced to sell electricity on the merchant market (spot price) without a Power Purchase Agreement (PPA) floor price. **The Barrier:** Financial modeling in D1 shows that a 10 MW solar project under pure merchant risk achieves a Debt Service Coverage Ratio (DSCR) of 0.80, meaning it cannot service its debt. Banks will not finance it. **The Solution:** If a floor price of €35/MWh were introduced, the DSCR would rise to 1.71, making the project bankable. The lack of this mechanism has stalled the domestic developer pipeline

3. INTERNATIONAL BENCHMARKING: LESSONS FOR KOSOVO (SYNTHESIS OF D2)

To solve these problems, Kosovo need not reinvent the wheel. The D2 report benchmarks Kosovo against peer countries, North Macedonia, Serbia, and Bulgaria, that share similar economic and energy profiles.



3.1. NORTH MACEDONIA: THE BLENDED FINANCE MODEL

Similar to Kosovo, North Macedonia faced high SME interest in renewables but high banking risk aversion.

The Solution: The Green Financing Facility (GFF). This mechanism blended EBRD credit lines with government grants and technical assistance.

- **Key Feature:** It used a "performance-based payment" (grant) of 10-30% that was released *only* after the project was verified.
- **Result:** It successfully mobilized over €15 million, proving that blending grants with loans leverages private capital at a ratio of 1:4.
- **Lesson for Kosovo:** Grants should not be standalone handouts. They should be "equity kickers" blended with commercial loans to buy down interest rates and incentivize bank participation.¹

3.2. SERBIA: CREDIT ENHANCEMENT VIA GEFF

The Green Economy Financing Facility (GEFF) focused heavily on credit enhancement (guarantees) and technical assistance for banks.

- **Key Feature:** It provided standardized "Technology Selectors" (lists of pre-approved equipment) which removed the technical appraisal burden from bank loan officers.
- **Result:** Mobilized over €135 million region-wide.

- **Lesson for Kosovo:** Simplification is key. Banks need "off-the-shelf" green products. Standardization of eligible technologies reduces transaction costs and accelerates lending.¹

3.3. BULGARIA: THE REVOLVING FUND MODEL

Context: An EU member but with a legacy of Soviet-era building stock.

The Solution: The Municipal Energy Efficiency Fund (MEEF).

- **Key Feature:** Institutional independence. MEEF was set up as a non-bank financial institution, separate from the state budget. This allowed it to enforce strict repayment discipline.
- **Result:** Achieved a repayment rate of >95% and became self-sustaining, recycling capital into new projects rather than constantly asking donors for refills.
- **Lesson for Kosovo:** KEEF must be protected from political interference and operate on strict commercial principles to achieve long-term sustainability.¹

3.4. CAPITAL MARKET ENTRY (GREEN BONDS)

Context: Denmark and the EU utilize green bonds for large-scale infrastructure.

Applicability: D2 analysis concludes this is premature for Kosovo. Kosovo, having obtained a BB- credit rating in 2024, now meets the threshold for development finance institution (EBRD, EIB, IFC) involvement in capital markets. To access mainstream institutional investors (pension funds, insurance, major asset managers), further rating improvement to BBB- or higher would be beneficial but is not a blocker for securitization or initial green-bond pilots targeting DFI co-placement. With a nascent capital market regulator, immediate issuance would fail.

Lesson for Kosovo: Build the regulatory foundation first (taxonomy, reporting standards) before attempting issuance. This is a long-term (Tier 3) goal

 Blended Finance for Households & SMEs • Source Cases: North Macedonia (GFF), Serbia (GEFF) • Core Lesson: Combining concessional IFI credit lines with grants (20-40%) and risk-sharing is highly effective at overcoming high upfront costs and perceived technology risk. • Potential for Kosovo: A similar facility could mobilise ~€150-200m in private investment for every ~€50m of concessional capital.	 Revolving Funds for the Public Sector • Source Case: Bulgaria (MEEF) • Core Lesson: An initially grant-funded vehicle can become a self-sustaining revolving fund with strong governance and >95% repayment discipline, repeatedly recycling capital for municipal EE projects. • Potential for Kosovo: With legal strengthening, KEEF can play a similar role.
 ESCO Models for Performance-Based Delivery • Source Case: Green for Growth Fund (GGF) • Core Lesson: ESCO-centric finance delivers high leverage but is only viable in markets with a critical mass of capable ESCOs, standardised contracts, and a supportive legal framework. • Potential for Kosovo: A promising medium-term option, but foundational market development is required first.	 Capital Markets for Long-Term Funding • Source Case: EU Green Bond Standard • Core Lesson: Green bonds offer a long-term funding source, but preconditions (sovereign rating, securities regulation, institutional investor base) are not yet met. • Potential for Kosovo: A post-2030 instrument. Foundational steps (taxonomy, data governance) must begin now.

4. STRATEGIC VISION AND OBJECTIVES

4.1. VISION STATEMENT

Kosovo will establish a coordinated, scalable, and effective clean energy financing architecture by 2030 that mobilizes EUR 250+ million in private investment, reaches 2,500+ beneficiaries (SMEs, households, public facilities), and reduces greenhouse gas emissions by 25,000-30,000 tCO₂e annually, while advancing energy affordability and job creation.

This vision is anchored in three pillars:

1. **Institutional Coordination:** A unified governance structure replacing fragmentation with strategic coherence
2. **Financial Diversification:** Multiple instruments (guarantees, blended finance, ESCOs, capital markets) deployed according to market conditions and risk profiles
3. **Impact at Scale:** Transformation from isolated projects to systemic change, with measurable outcomes and institutional sustainability

4.2. STRATEGIC OBJECTIVES

4.2.1. OBJECTIVE 1: ESTABLISH UNIFIED GOVERNANCE & COORDINATION ARCHITECTURE

Kosovo's financing ecosystem will transition from 42 uncoordinated organizations to a single coordinating hub, the Clean Energy Financing Window within the forthcoming Innovation Fund, with clear decision authority, transparent governance, and quarterly adaptive management reviews.

Success Metrics:

- Joint Steering Committee established and operationalized by Month 3
- Common Monitoring, Reporting & Learning platform operational by Month 6
- Portfolio-level data integration across KEEF, KCGF, Innovation Fund achieved by Month 9

4.2.2. OBJECTIVE 2: UNLOCK PRIVATE CAPITAL THROUGH RISK MITIGATION

Kosovo will deploy targeted guarantees, blended finance structures, and equity instruments to mobilize EUR 200-250 million in private capital, leveraging EUR 80-100 million in concessional resources at an average 2.6x leverage ratio, aligned with international best practice for comparable emerging markets.

Success Metrics:

- Phase 1: EUR 40-50M private capital mobilized (1.7x leverage)
- Phase 2: EUR 100-130M cumulative private capital (2.3x leverage)
- Phase 3: EUR 200-250M cumulative private capital (2.6x leverage)

4.2.3. OBJECTIVE 3: ADDRESS CRITICAL MARKET BARRIERS THROUGH TARGETED INTERVENTIONS

Each proposed mechanism directly addresses one or more identified barriers:

- **Institutional Fragmentation** → Clean Energy Financing Window (Mechanism 5)
- **Regulatory Uncertainty & "Missing Middle"** → NECP finalization, secondary legislation, SME guarantees (Mechanism 1)
- **Municipal Bottlenecks** → KEEF scaling with municipal project prep TA (Mechanism 2)
- **ESCO Underdevelopment** → ESCO intermediation pilot with legislation, standards, capacity building (Mechanism 3)
- **Household Access Barriers** → Simplified application processes, frontloaded grants, community engagement in blended finance (Mechanism 2)

Success Metrics:

- Regulatory roadmap finalized and 90% on-time delivery achieved by Phase 1-2
- Municipal project pipelines increased from current levels to 30-50 active projects by Phase 1-2
- Household subsidy application completion rates improved from <40% to >80%
- ESCO market expanded from 2-3 to 10-15 operational firms by end of Phase 2

4.2.4. OBJECTIVE 4: DEMONSTRATE IMPACT AT SCALE AND BUILD SUSTAINABILITY

Kosovo's mechanisms will reach 2,000-2,500 direct beneficiaries by 2030, achieving measurable outcomes (energy savings, GHG reduction, job creation) that validate the institutional model and create political support for sustained financing beyond the 2030 horizon.

Success Metrics:

- Phase 1: 510-715 beneficiaries, 5,000-7,000 tCO₂e reduction, 500-700 jobs
- Phase 2: 1,035-1,560 cumulative beneficiaries, 12,000-15,000 tCO₂e reduction, 1,200-1,500 jobs
- Phase 3: 1,860-2,815 cumulative beneficiaries, 25,000-30,000 tCO₂e reduction, 2,000-3,000 jobs

4.2.5. OBJECTIVE 5: ALIGN WITH KOSOVO'S NATIONAL CLIMATE & ENERGY COMMITMENTS

All mechanisms will be explicitly designed to contribute to Kosovo's 2030 targets (32% renewable energy, 16.3% GHG reduction, 20% energy efficiency gains) and the longer-term vision of coal phase-out by 2050, ensuring that financing mechanisms are tools of national strategy rather than parallel initiatives.

Success Metrics:

- Annual NECP progress reports explicitly quantify contribution of mechanisms to 2030 targets
- Mechanisms are recognized in Kosovo's updated Integrated National Energy and Climate Plan (2025-2030)

- Portfolio data is integrated into Kosovo's climate reporting to UNFCCC

5. THE FIVE PROPOSED MECHANISMS

Based on the diagnostic gaps (D1) and international lessons (D2), this report proposes five specific financial mechanisms. These are not theoretical concepts but detailed product designs ready for implementation.

5.1. MECHANISM 1: SME GREEN GUARANTEE FACILITY (KCGF EXPANSION)

5.1.1. STRATEGIC ROLE AND MARKET CONTEXT

The SME Green Guarantee Facility represents a deliberate market-shaping intervention designed to unlock commercial bank financing for energy-intensive small and medium enterprises (SMEs) in Kosovo.

This mechanism addresses a fundamental capital market failure: the existence of substantial unmet financing demand despite abundant commercial bank liquidity, driven by a misalignment between borrower collateral capacity and bank credit-risk assessment frameworks.

The Market Condition: Kosovo's commercial banking sector holds approximately EUR 100 million in available liquidity designated for green lending, yet deployment rates remain significantly below potential. This liquidity gap reflects neither capital scarcity nor weak demand; rather, it reflects a structural friction in how banks assess and price credit risk for energy-efficiency and small-scale renewable investments by asset-like SMEs. The 2024-2025 electricity price shock, creating a substantial increase in operating costs for energy-intensive enterprises, has generated genuine, validated demand for efficiency investments. However, this demand remains unmet due to three interconnected borrower-lender friction points that the Mechanism directly addresses.

The Diagnostic Foundation: Stakeholder interviews conducted during the D1 diagnostic phase with six major commercial banks (ProCredit, Raiffeisen, BKT, BPB, NLB, TEB) confirmed both the intensity of SME demand for green financing and the specific structural barriers preventing bank participation. Banks articulated a clear willingness to expand green lending portfolios at commercial rates (6-8%) provided that risk-allocation mechanisms address three core concerns: (1) collateral adequacy for energy technology investments, (2) creditworthiness assessment for borrowers with proven operational performance but limited financial transparency, and (3) medium-term tenor alignment (7-10 years) matching energy equipment investment payback periods rather than standard commercial loan tenors (3-5 years).

5.1.2. DIFFERENTIATION FROM THE EXISTING GROW WINDOW: ADDRESSING THE INCENTIVE GAP

KCGF's existing GROW (Green Recovery and Opportunity Window) window represents an important institutional foundation with demonstrable operational capacity: 8 years of operational experience, 95% repayment rate, and established relationships with commercial banks. However, utilization data reveals a critical gap between the program's potential and its actual deployment. This underutilization does not reflect insufficient demand for green financing; rather, it reflects a borrower-incentive misalignment in how the guarantee is structured and positioned within the broader financing market.

The GROW Window's Design Constraint: The "Collateral Paradox"

GROW provides partial guarantees of up to 70% on loans up to EUR 3 million (with maximum guarantee exposure of EUR 1 million). While this structure is mechanically sound from a risk-allocation perspective, it addresses only one element of the SME financing constraint: the bank's perception of credit risk. It does not address a more fundamental problem: **the collateral paradox**.

Many Kosovo SMEs are operationally solvent and generate sufficient cash flow to service debt, yet they remain asset-light, with limited tangible collateral to offer traditional lending institutions. For these enterprises, a guarantee that reduces risk exposure to 30% of loan principal still leaves the borrower facing collateral gap concerns and bank reluctance to accept alternative risk-mitigation approaches.

Bank interviews during D1 consultations revealed that GROW guarantees, while accepted, do not fully displace traditional collateral requirements. Banks continue to demand hard collateral (equipment liens, real estate mortgages) alongside the guarantee, limiting the extent to which GROW truly unlocks financing for collateral-constrained SMEs.

The guarantee is therefore deployed as a **supplementary risk-sharing tool** rather than as a **primary risk-displacement mechanism**, limiting its utility for the SMEs most constrained by collateral availability.

The Borrower Incentive Gap: Standalone Guarantees vs. Grant Blending

Diagnostic consultations also revealed that stakeholders, both SME associations and commercial banks, perceive grants and subsidies as more attractive instruments than standalone guarantees. This preference reflects a rational economic calculation: a 20% grant covering upfront equipment costs reduces effective borrowing requirements and generates more favorable debt-service-coverage ratios (DSCR) than a guarantee that addresses only lender risk. Borrowers, particularly mid-sized enterprises with limited cash reserves, often prefer mechanisms offering immediate cost reduction to those offering only risk-sharing.

Additionally, commercial banks rarely integrate GROW guarantees with external grant facilities due to administrative complexity.

Banks report that coordinating GROW guarantee documentation with external grant application procedures creates duplicative reporting, eligibility verification, and loan approval workflows.

This operational friction, while seemingly administrative, results in higher effective transaction costs for both borrowers and lenders, further reducing uptake relative to potential.

Market Timing: The 2024-2025 Electricity Shock as a Strategic Window

A critical contextual factor distinguishes the current moment from the prior period when GROW was underutilized: the **electricity price shock of 2024-2025**. Kosovo's electricity tariffs increased substantially following market liberalization, creating an acute, quantified cost burden for energy-intensive SMEs. This exogenous shock has transformed energy efficiency from a capital-intensive luxury to an operational necessity for competitive survival in energy-intensive sectors (textiles, food processing, hospitality, light manufacturing).

This timing creates a transitory but significant market advantage: SMEs now face a **"survival incentive"** for efficiency investment that did not exist when energy costs were stable and low. This demand surge creates a narrow but crucial window for market-building intervention. If the Mechanism launches during this period of demonstrated demand, it can establish operational track records, build bank confidence in green-energy lending, and create institutional momentum that persists even as tariff volatility stabilizes.

The GROW window, established during a period of low energy costs and limited demand, never captured this pricing advantage. Mechanism 1 is explicitly designed to activate market conditions that did not previously exist.

5.1.3. THE FOUR-ELEMENT VALUE PROPOSITION: DIFFERENTIATION STRATEGY

To address these interconnected constraints, the collateral paradox, the borrower-incentive misalignment, administrative friction, and the time-limited market opportunity, Mechanism 1 differentiates through a coordinated four-element value proposition:

1. Element 1: Capital Strength and Collateral Displacement

The Mechanism mobilizes **EUR 17.5 million in dedicated capitalization** (from LuxDev and EU sources) specifically for the SME Green Guarantee Facility. This capitalization level, substantially larger than GROW's operational reserve and earmarked exclusively for this window, signals long-term institutional commitment and provides KCGF with sufficient financial strength to enforce stricter guarantee conditions on bank participation.

Operationally, this capital strength enables a critical shift: **from guarantee as supplementary risk-sharing to guarantee as primary collateral displacement**. KCGF can negotiate covenants with participating banks explicitly requiring reduced collateral requirements as a condition of guarantee participation. A bank accepting a 50-70% guarantee with disciplined underwriting standards (demonstrated through KCGF's 95% historical repayment rate) can rationalize reducing hard collateral demands from the SME borrower.

This approach directly addresses the collateral paradox: the guarantee becomes a **functional substitute for collateral** rather than a mere risk-mitigation layer, opening financing to asset-light SMEs that GROW was unable to serve despite their operational viability.

2. Element 2: Integrated Blended-Incentive Structure (Optional Grant Component)

To address the borrower-incentive gap, the finding that standalone guarantees remain less attractive than mixed grant-guarantee structures, Mechanism 1 introduces a **strategic blending option at the facility level**. Rather than operating KCGF guarantees and KEEF grants as separate, non-coordinated programs, the Innovation Fund (hosting entity for the Clean Energy Financing Window) coordinates voluntary, performance-linked grant components with the guarantee facility.

The blending structure works as follows:

- **Base structure:** KCGF guarantee of 50-70% on 7-10 year loan at 6-8% interest rate
- **Optional enhancement:** An additional performance-based grant element (10-20% of project cost) triggered by **verified energy savings** upon project completion

This design serves multiple functions:

1. **Borrower incentive:** The possibility of post-completion grants (based on verified savings) enhances the attractiveness of the guarantee facility to borrowers, bringing it closer to the all-in cost-reduction of pure grant programs while preserving capital efficiency.
2. **Moral hazard management:** By linking grants to verified outcomes (actual energy savings, not project completion), the structure maintains banking discipline. Unlike upfront grants, performance-based grants only flow after independent verification that promised energy reductions have been achieved.
3. **Capital efficiency:** The performance-linked structure ensures that grant capital (limited resource) is deployed only where genuine outcomes are achieved, not on projects selected

primarily for grant eligibility. This targets limited grant resources to highest-impact opportunities.

4. **Coordination simplicity:** By centralizing the blending decision within the Innovation Fund's Clean Energy Window governance, the mechanism eliminates the administrative complexity that prevented banks from coordinating GROW with external grants. A single application, undergoing single approval process, can unlock both guarantee and conditional grant support.

This blending approach is **deliberately differentiated from pure grant-only instruments** (Mechanism 2, which serves households and public buildings) and from pure guarantee-only programs. It represents a middle-ground incentive structure specifically calibrated to the commercially viable SME sector.

3. Element 3: Tailored Technical Specifications and Extended Tenor Advocacy

Mechanism 1 differentiates through **precise technical alignment with SME investment characteristics**:

Green Technology List with Standardized Costs: The facility will develop and maintain a curated list of eligible renewable energy and energy-efficiency technologies, with standardized cost benchmarks for each technology type. This specificity serves multiple functions:

- Reduces time and cost for SME project preparation (borrowers need not commission detailed feasibility studies; standardized specifications allow simplified applications)
- Enables bank credit officers to assess project bankability quickly without specialized energy-sector expertise
- Permits standardized insurance and maintenance requirements, reducing ongoing bank monitoring costs
- Allows KCGF to establish standardized underwriting assumptions and performance expectations for each technology category

Tenor Extension Advocacy: Commercial banks traditionally offer 3-5 year loan tenors, aligned with general SME working capital and equipment cycles. However, energy-efficiency and renewable-energy equipment typically has 15-20 year useful lives, with investment payback periods of 7-10 years. A 3-5 year loan forces SMEs to service debt from cashflow savings that may not yet be fully realized, creating artificially high DSCR requirements.

Mechanism 1 commits to **advocacy and incentive alignment** to extend standard loan tenors to 7-10 years for green-energy investments. This tenor extension can be achieved through:

- **KCGF covenant negotiation:** Specific lending covenants requiring tenor matches for green-energy loans
- **Risk pricing adjustment:** If banks require higher risk compensation for longer tenors, the guarantee fee can be structured to create neutral incentives for tenor extension (fee adjustments that make 7-10 year loans economically equivalent to 5-year loans from the bank's perspective)
- **Joint marketing:** Positioning longer tenors as a **competitive advantage** for participating banks (attracting borrowers seeking affordable debt service)

This technical differentiation directly addresses the bank-identified constraint: debt-service-coverage challenges that currently discourage green financing despite positive project economics.

4. Element 4: Integrated Technical Assistance and Proactive Market-Making

The original GROW window operates as a **passive risk-transfer mechanism**: applicants submit loan requests; if eligible and acceptable to the bank, guarantees are issued. However, stakeholder interviews revealed that low uptake also reflects **supply-side constraints**: SMEs lack project preparation capacity, lack technical expertise in energy-efficiency business cases, and lack awareness of available financing options.

Mechanism 1 addresses these supply-side barriers through **dedicated technical assistance** (EUR 500-750K budget over initial 3 years) deployed across three vectors:

TA Vector 1: SME Project Preparation Support

Dedicated project-preparation specialists will work with SME associations and individual enterprises to:

- Translate operational energy costs into bankable project business cases
- Conduct rapid (simplified) energy audits establishing baseline consumption and savings potential
- Prepare standardized loan applications and technical documentation
- Coordinate with banks on tender procedures and equipment procurement
- Support beneficiary financial management and loan administration

This TA function is **critical for removing transaction costs** that currently deter borrowers from pursuing available financing. Given that many Kosovo SMEs have limited financial management capacity and lack experience with commercial banking relationships, professional project-preparation support directly addresses a major uptake bottleneck.

TA Vector 2: Commercial Bank Capacity Building

Participating banks will receive dedicated support for:

- **Green credit assessment training**: Equipping loan officers with technical knowledge of energy-efficiency investments, renewable-energy project risks, and performance-verification methodologies
- **Portfolio risk modeling**: Joint development of green-energy specific credit assessment frameworks adapted to Kosovo market conditions
- **Best-practice exchange**: Facilitated peer learning among participating banks, sharing underwriting experiences and successful deal structures
- **Technology partnerships**: Relationship-building between banks and reputable equipment suppliers and installation contractors, creating preferred-vendor relationships that reduce credit risk

This bank-side TA ensures that expanded credit availability is matched by bank capacity to appropriately assess and price risk for unfamiliar technology investments.

TA Vector 3: Proactive Market-Making Through Vendor Partnerships

Beyond traditional TA, Mechanism 1 commits to **vendor engagement and market-making**:

- Relationship development with equipment suppliers, installers, and maintenance providers to create standardized commercial relationships
- Marketing campaigns targeting energy-intensive SME sectors (textiles, food processing, hospitality) with tailored messaging about cost-savings and financing options

- Sector-specific outreach events and awareness campaigns through industry associations
- Incentive structures encouraging first-mover participation (e.g., recognition programs, preferential guarantee terms for early adopters)

This proactive market-making approach transforms the facility from a passive credit window to an **active demand-creation mechanism**, deliberately leveraging the 2024-2025 market window to build sustainable green-energy financing momentum.

5.1.4. UPTAKE STRATEGY: FROM 20% CURRENT UTILIZATION TO 40-50% PARTICIPATION

The combined four-element approach is designed to increase SME participation rates substantially. **GROW's current utilization** among energy-intensive SMEs is estimated at approximately 10-20% of the addressable market (400-700 SMEs out of 3,500 energy-intensive firms). Mechanism 1 targets **40-50% participation among the 3,500 addressable population** (800-1,200 SMEs financed) within 3 years.

This 2-2.5x increase in participation is achievable through:

1. **Collateral displacement:** Expanding eligible borrower pool from those with traditional collateral to include asset-light but operationally viable firms (estimated 40% of currently excluded SMEs)
2. **Blended incentives:** Positioning combined guarantee-grant structure as more attractive alternative to non-green financing (estimated 20-30% improvement in borrower receptivity)
3. **Technical assistance:** Reducing transaction costs and information barriers, enabling smaller enterprises and less financially sophisticated firms to access financing (estimated 15-25% expansion in eligible participant pool)
4. **Market timing:** Capturing demand surge created by 2024-2025 electricity shock before market equilibrates (estimated 30-40% additional demand relative to business-as-usual trajectory)
5. **Bank expansion:** Extending participation from 3-4 currently engaged banks to all 6-8 commercial banks with green-lending mandates, expanding geographic coverage and product availability (estimated 10-20% demand multiplication)

Cumulatively, these five vectors create plausible pathway to **2.5-3x improvement in participation** over 3-year implementation period, moving from current GROW underutilization to substantial market penetration.

5.1.5. CAPITAL EFFICIENCY: WHY GUARANTEES, NOT GRANTS, FOR SMES

A strategic design choice requires explicit justification: **why does Mechanism 1 emphasize guarantees for viable SMEs rather than direct grants (as deployed for households in Mechanism 2)?**

The answer reflects capital efficiency and leverage optimization:

- **Guarantee leverage ratio:** EUR 1 in KCGF guarantee capital mobilizes EUR 3-4 in commercial bank lending (3:1 to 4:1 leverage)
- **Grant leverage ratio:** EUR 1 in grant capital typically mobilizes EUR 1-1.5 in additional financing or provides direct project cost reduction (1:1 to 1.5:1 leverage)

For commercially viable SMEs generating sufficient cash flow to service market-rate debt, **guarantees deploy capital far more efficiently** than grants. EUR 17.5 million in guarantee capitalization can mobilize EUR 60 million in SME lending. An equivalent EUR 17.5 million grant allocation would serve only 800-1,000 households at 20-25% grant rates, but only 1.75x mobilization ratio.

The institutional bifurcation, KCGF guarantees for commercially viable SMEs; KEEF blended finance for energy-poor households, ensures that limited concessional resources are deployed where they generate maximum leverage (guarantees for viable borrowers) and maximum social impact (grants for energy-poor households unable to service commercial debt).

5.1.6. RISK MANAGEMENT AND SUSTAINABILITY PATHWAY

Credit Risk Management: KCGF's 95% repayment rate and 8+ years of operational experience provide the institutional foundation for robust risk management. The EUR 17.5M capitalization is sufficient to withstand default rates of 4-5% (consistent with regional SME guarantee benchmarks) while maintaining operational viability.

Sustainability Transition: The mechanism is designed with explicit fee-based sustainability. Guarantee fees (1.5-2.0% annually) are retained in KCGF reserve fund, enabling the facility to become operationally self-sustaining by Year 4-5. Initial concessional capital (EUR 17.5M from LuxDev/EU) is redeployed as operational capital generating fee revenue, permitting the facility to continue operations beyond donor funding horizons.

Market Sustainability: Mechanism 1's success is explicitly tied to building sustainable commercial bank green-lending capacity. By Year 3-4, market maturation should enable participating banks to independently assess and price green-energy credit risk, reducing reliance on KCGF guarantee support. The facility's role evolves from **guarantee provider** to **market-infrastructure anchor**, supporting market growth that eventually becomes self-sustaining through commercial competition.

5.1.7. ALIGNMENT WITH STRATEGIC OBJECTIVES AND EXPECTED IMPACT

This mechanism directly supports Kosovo's strategic objectives:

- **Capital mobilization:** EUR 60M in private capital mobilized (3.4x leverage on EUR 17.5M concessional resources)
- **Beneficiary reach:** 800-1,200 SMEs financed; 2,000-3,000 direct jobs created in equipment supply, installation, and energy auditing
- **Environmental impact:** 12,000-15,000 tCO₂e annual GHG reduction at 3-year scale
- **Economic competitiveness:** Energy cost savings of 15-25% for participating SMEs, improving industrial competitiveness in energy-intensive sectors
- **Institutional development:** Establishment of sustainable green-credit infrastructure within Kosovo's commercial banking sector

The mechanism represents the immediate, highest-feasibility entry point for Kosovo's clean-energy financing architecture, creating operational momentum, building institutional capacity, and demonstrating market viability for subsequent instruments (Mechanisms 2-5).

Strategic Rationale

Addresses the "Missing Middle" and SME collateral deadlocks by de-risking commercial bank lending. A 50-70% partial risk guarantee makes renewable energy and efficiency projects bankable for the engine of our economy.

Operational Design

Target
800-1,200 SMEs

Guarantee Coverage
50-70% of loan principal

Loan Terms
6-8% annual rate,
7-10 year tenor

Concessional Capital
€17.5M

Private Capital Mobilized
€60M

Leverage Ratio
3.4x

Implementation Host: Kosovo Credit Guarantee Fund (KCGF) Expansion.

Feasibility Assessment: 92% (High) - Leverages KCGF's existing operational capacity, high market demand validated by banks, and becomes self-sustaining by Year 4.

Energy costs at high consumption customers have risen sharply in Kosovo during 2024-2025 reform period, creating genuine SME demand for efficiency investments. However, SMEs face three barriers: (1) high upfront capital requirements, (2) perceived technology risk from lenders, and (3) short-tenor financing (3-5 years) mismatched to 10-year investment payback periods. A guarantee covering 50-70% of loan principal de-risks lender exposure, unlocking commercial bank participation at competitive rates (6-8%).

5.2. MECHANISM 2: HOUSEHOLD AND PUBLIC-BUILDING BLENDED FINANCE (KEEF SCALING)

KEEF's experience demonstrates that blended finance (combining grants, concessional loans, and commercial co-financing) effectively addresses two constraints simultaneously: (1) high upfront costs (EUR 10-40K per household retrofit), creating affordability barriers for the 40% of Kosovo households in energy poverty, and (2) limited national budgetary resources (KEEF capitalization EUR 17M against EUR 100M+ potential demand). Scaling KEEF through additional grant mobilization and bank partnerships unlocks EUR 30M+ in household and municipal co-financing.

Strategic Rationale

Directly addresses household affordability friction and municipal capacity gaps. Blending 30-40% grants with concessional loans makes deep retrofits financially viable for vulnerable families and public institutions, turning energy savings into a repayment source.

Implementation Host: Kosovo Energy Efficiency Fund (KEEF) Scaling.

Operational Design

Target
1,000-1,500 households +
50-100 public buildings

Structure
30-40% grant +
60-70% concessional loan
(5-6% rate)

Concessional Capital
€12M

Private Co-Financing Mobilized
€30M

Leverage Ratio
2.5x

Feasibility Assessment: 88% (High) - Builds on KEEF's proven model and existing €86M public-building pipeline; demand is confirmed by long waiting lists.

Target Market & Demand: Current KEEF pipeline includes 10,000+ households with energy poverty; existing waiting lists indicate demand exceeds current budgetary allocation. Municipal demand for building retrofits is similarly robust, with 30+ municipalities expressing interest in EE programs. Realistic Phase 1-3 targets: 1,000-1,500 households and 50-100 buildings.

Implementation Requirements:

1. **Grant Resource Mobilization:** Confirm additional EUR 12M donor funding (World Bank additional financing, EU blending facility, bilateral donors)
2. **Commercial Bank Partnerships:** Secure commitments from 4-5 banks to provide subordinated/concessional lending (5-6% rates) to pre-screened household/municipal borrowers
3. **Streamlined Application Process:** Replace current complex subsidy processes (>15 steps) with simplified 5-step process (application, energy audit, loan approval, installation, inspection)
4. **Household Financial Literacy:** TA programs supporting household understanding of loan agreements, energy savings calculations, and tariff structures
5. **Municipal Project Preparation:** EUR 100-150K dedicated TA per municipality for project identification, feasibility studies, and tender preparation
6. **Energy Audit & Verification:** Standardized technical audit protocols and savings verification procedures (M&V) to ensure loan repayment credibility

Positioning Relative to Existing LuxDev Blended-Finance Mechanism

This mechanism aligns with and builds upon the blended-finance approach for the residential sector already developed by LuxDev (as detailed in the shared presentation). LuxDev's model effectively combines grants with concessional loans to address energy poverty, demonstrating strong potential for household uptake.

To ensure coherence and avoid overlap, the proposed scaling of KEEF focuses on:

- **Complementary Expansion:** Extending the blend to public buildings (e.g., schools, hospitals) and municipal infrastructure, while adopting LuxDev's residential framework as a base for households.
- **Process Enhancements:** Further streamlining applications (from LuxDev's model to a 5-step process) and integrating frontloaded grants to reduce the 6-12 week delays noted in feedback.
- **Integration Pathways:** Coordinating with LuxDev-supported KEEF windows to pool resources, e.g., using LuxDev's pipeline for initial pilots and sharing M&V protocols for unified impact tracking.

This positions the proposal as an evolution, leveraging LuxDev's foundational work to reach 1,000-1,500 households without duplication, while enhancing overall ecosystem coherence.

Feasibility Assessment: 88% overall – HIGH institutional readiness (KEEF 6+ years operational with 86M EUR public-building pipeline), HIGH demand (waiting lists established), HIGH financial viability (energy savings repay loans, creating self-sustaining structure), LOW timeline risk (immediate implementation possible).

Expected Outcomes (Phase 1-3):

- 1,000-1,500 households retrofitted; 50-100 public buildings improved
- EUR 30M private co-financing mobilized

- 8,000-10,000 tCO₂e annual GHG reduction (cumulative)
- 20-40% average household energy cost savings
- 1,500-2,000 jobs in construction, energy auditing, HVAC services
- 1,000-1,500 energy-poor households lifted from energy poverty

Risks & Mitigation:

- **Risk:** Municipal capacity insufficient for project preparation; permitting delays persist (12-24 months)
 - **Mitigation:** Standardized project templates, dedicated municipal liaison officers in KEEF, peer-learning networks, expedited permitting protocols
- **Risk:** Household affordability not sufficient for loan repayment despite grant (45%+ of poor households cannot service even concessional debt)
 - **Mitigation:** Income-tested grant allocation (higher grants for poorest); savings-based repayment (household obligation capped at percentage of energy savings, not fixed loan amount); targeted TA for alternative livelihood strategies
- **Risk:** Default on household loans higher than expected, creating reputational/institutional risk
 - **Mitigation:** Conservative underwriting (income verification, savings calculations at 50% of engineering estimates), arrears management protocols, targeted counseling for vulnerable borrowers

Recommended Action: TIER 1 – SCALE IMMEDIATELY, YEAR 1

5.3. MECHANISM 3: ESCO INTERMEDIATION PILOT (EMERGING MARKET DEVELOPMENT)

Energy Service Company (ESCO) models have delivered exceptional results in mature markets, enabling performance-based energy efficiency retrofits in commercial buildings without upfront capital barriers to clients. However, Kosovo's ESCO market is nascent (2-3 operational firms) with no standardized performance contracts, no independent measurement & verification protocols, and no enabling legislation. This mechanism combines **results-based design grants, performance-contract guarantees, and technical assistance** to catalyze ESCO market emergence without assuming immediate commercial viability.

Strategic Rationale

Addresses the 'ESCO Vacuum' by birthing a domestic market from the ground up. This is not a financing instrument alone, but a market development facility to standardize contracts, provide performance guarantees, and build a pipeline of bankable projects.

Implementation Host: A new facility, coordinated through the Clean Energy Window.



Feasibility Assessment: 72% (Medium) - Requires significant legislative and regulatory groundwork; market is nascent. This is a strategic investment in future capacity.

Operational Design:

Parameter	Value
ESCO Eligibility	Emerging companies with: (a) basic operating experience, (b) commitment to ISO 50001 certification, (c) willingness to standardize contracts
Design Grants	EUR 50-100K per ESCO for business model development, client acquisition, M&V protocol design
Technical Assistance	Revolving fund for ESCO certification, performance contract templates, credit rating support
Performance Contract Guarantee	40-50% coverage on ESCO revenues from guaranteed energy savings (first-loss guarantee)
Revenue Sharing	50% savings to client, 30% to ESCO, 20% retained for market development/contingency
Concessional Capital	EUR 10M (design grants + guarantees + TA)
Target Market	200-300 emerging ESCOs; 1,000-1,500 commercial-client buildings (offices, hotels, factories)
Implementation Period	Phase 2, Months 6-24 (preparation); Phase 3, Months 24-60 (pilot + scale)

Market Development Prerequisites: The ESCO pilot explicitly acknowledges that Kosovo's market is not yet ready for rapid scale-up. Instead, it sequences interventions:

Months 6-12 (Preparation):

1. Enact ESCO legislation defining ESCOs, their regulatory requirements, and liability frameworks
2. Develop standardized Energy Performance Contract (EPC) templates aligned with ISO 50001
3. Establish independent M&V protocols (e.g., eSave-type solutions) for savings verification

4. Create ESCO registry and certification standards (technical, financial, reputational)

Months 12-24 (Pilot Launch):

1. Issue design grant RFP; select 10-15 ESCO pilot firms
2. Support pilot ESCOs through business plan refinement, M&V system adoption, bank relationship building
3. Identify 50-100 commercial buildings for ESCO pilot projects (targeting hotel, hospitality, food-service sectors with high energy intensity)
4. Document savings verification and performance contract execution

Months 24-60 (Market Development):

1. Transition successful pilots to commercial viability; phase out design grant support
2. Scale guarantee facility based on pilot track record
3. Expand ESCO reach to public-sector buildings and municipal infrastructure
4. Build toward 50-100 operational ESCOs and 1,000+ buildings financed by 2030

Feasibility Assessment: 72% overall – MEDIUM institutional readiness (requires legislative change and regulatory framework development), MEDIUM market readiness (nascent ESCO ecosystem), MEDIUM financial sustainability (design grants create temporary support; market viability must be earned), MEDIUM timeline (18-24 month development phase before commercial viability).

Expected Outcomes (Phase 2-3, 5-year pilot horizon):

- 50-100 commercial buildings retrofitted via ESCOs
- 10-15 ESCO firms operationalized
- 3,000-5,000 tCO₂e annual reduction
- Foundation established for commercial ESCO market post-2030
- 500-800 jobs in ESCO firms, engineering, and building systems

Risks & Mitigation:

- **Risk:** ESCO market development slower than projected; only 2-3 new firms operationalized by Year 3
 - **Mitigation:** Extend design grant period; increase grant magnitude for first-movers; focus pilots on public-sector (lower-risk, standardized buildings) before commercial expansion
- **Risk:** Bank reluctance to finance ESCO revenues without proven track record
 - **Mitigation:** Guarantee structure (40-50% first-loss) reduces bank risk; initial pilots with development banks (EBRD, KfW) before commercial-bank expansion
- **Risk:** ESCO legislative framework delayed (18+ months typical in Western Balkans)
 - **Mitigation:** Begin TA-supported contractual templates immediately (non-legislative approach); use EBRD/GIZ support for accelerated drafting

Recommended Action: TIER 2 – PREPARE (Months 6-18), LAUNCH PILOT (Months 18-24)

5.4. MECHANISM 4: GREEN BOND FRAMEWORK (CAPITAL MARKET ENTRY)

Green bonds represent a transformational capital mobilization tool, enabling issuers (sovereigns, municipalities, utilities) to access global institutional investor capital at favorable rates. International benchmarking (D2) shows that mature green bond markets in comparable EU countries generate 200-300x leverage (i.e., EUR 1M regulatory development investment catalyzes EUR 200-300M institutional capital). However, green bonds require substantial regulatory and institutional preconditions not yet present in Kosovo.

5.4.1. CAPITAL-MARKET READINESS AND PHASING

Implementation Approach – Long-Term Preparatory Framework (Not Immediate Deployment):

Green bonds represent the long-term aspiration of Kosovo's capital-market development pathway, but they are not the immediate entry point. International best practice, demonstrated across Bulgaria's Municipal Energy Efficiency Fund (MEEF), Serbia's Dunav Insurance securitization platform, and the EU Innovation Fund's staged capital-market transition, reveals that emerging markets typically follow a sequenced pathway: (1) guarantee and grant-based instruments anchoring initial deployment → (2) portfolio aggregation and securitization mobilizing institutional investors → (3) capital-market instruments including green bonds enabling access to global capital at scale.

Therefore, Kosovo should not attempt green bond issuance during 2025-2030. Instead, it should use this period to build necessary foundations:

Phase 1 (2025-2026): Foundational Work

1. **Develop Kosovo Green Taxonomy:** Align with EU Taxonomy for Sustainable Activities; classify eligible RE/EE/water/solid-waste projects
2. **Strengthen Sovereign Credit Profile:** Maintain current fiscal discipline (public debt <20% GDP); obtain first sovereign rating from international agency (S&P, Moody's, Fitch)
3. **Regulatory Harmonization:** Ensure CBK and CMA (Capital Markets Authority) frameworks align with EU Regulation 2020/852 (Sustainable Finance Taxonomy)
4. **Data Infrastructure:** Integrate KEEF, KCGF, municipal EE data into consolidated green project database with standardized impact metrics

Phase 2 (2026-2028): Capacity Building & Pilot Preparation

1. **Municipal Credit Assessment:** Work with 5-10 pilot municipalities to assess creditworthiness, project pipelines, and bond issuance readiness
2. **Investor Outreach:** Conduct roadshows with international institutional investors (asset managers, pension funds, development finance institutions) to gauge appetite for Kosovo municipal bonds
3. **Bond Documentation:** Prepare template prospectuses, offering documents, and covenant frameworks aligned with ICMA Green Bond Principles
4. **Technical Assistance:** Hire international bond counsel; establish municipal finance teams with bond-issuance expertise

Phase 3 (2028-2030+): Initial Bond Issuances

1. **Pilot Municipal Bond:** First issuance (EUR 5-10M) by 2030, demonstrating feasibility and establishing Kosovo in international capital markets

2. **Scaling:** Post-2030, municipal and utility bond issuances of EUR 20-50M annually supporting municipal infrastructure (EE buildings, district heating, water efficiency, solid waste)

Feasibility Assessment: 45% overall – LOW institutional readiness (sovereign rating absent, regulatory framework immature, municipal borrowing tradition limited), HIGH financial viability (once frameworks in place), MEDIUM timeline (36+ months realistic for framework development and first issuance).

Expected Outcomes (10-year horizon, 2030-2040):

- EUR 100-150M cumulative green bonds issued
- 20-30 municipal/utility infrastructure projects financed
- 50,000+ tCO₂e annual cumulative reduction
- Long-term capital market access established for Kosovo's energy transition and municipal infrastructure

Critical Success Factors:

1. **Regulatory Framework & CMA Alignment** – Kosovo's Capital Markets Authority must align securities regulation with EU Regulation 2020/852 (Taxonomy) and ICMA Green Bond Principles. The BB- sovereign rating (obtained 2024) enables DFI involvement; further rating improvement supports institutional investor expansion..
2. **Regulatory Certainty:** EU Taxonomy alignment must be formalized in Kosovo law and CBK/CMA procedures
3. **Project Pipeline:** Municipalities must demonstrate 3-5 year pipeline of bankable projects (EUR 5-50M each) with clear revenue streams and repayment capacity
4. **Investor Base Development:** Initial issuances will likely require co-placement by development finance institutions; commercial investor appetite will grow with track record

Recommended Action: TIER 3 – PLAN (Years 2-3), EXECUTE (Years 3-5+): Green bonds should be viewed as a post-2030 instrument. Phase 1-2 should focus on foundational work (taxonomy, regulatory alignment, data systems); pilot issuances can commence in 2028-2030 if preconditions are met.

Building on the phased approach for green bond market development outlined above, the following sub-sections provide additional clarification on complementary capital-market instruments and risk-mitigation approaches that may support green bond issuance as market conditions evolve, without introducing new financing mechanisms or commitments.

5.4.2. SUPPORTING CAPITAL-MARKET INSTRUMENTS AND RISK-MITIGATION APPROACHES

Kosovo has recently obtained an international sovereign credit rating of **BB- with a stable outlook**, which is generally sufficient to enable participation by development finance institutions (DFIs) in capital-market operations, but remains below the investment-grade threshold typically required by most mainstream institutional investors such as large pension funds and insurance companies. At the same time, Kosovo maintains a relatively low public-debt-to-GDP ratio by regional and European emerging-market standards, which supports fiscal credibility and underpins potential investor confidence in the sovereign's macro-fiscal fundamentals. In this context, credit-enhancement and broader risk-mitigation mechanisms can play a critical role in gradually broadening the potential investor base, improving pricing conditions, and supporting initial green or thematic bond initiatives without placing undue pressure on public finances. As

market conditions mature, such bond issuance could be complemented by a range of capital-market instruments and risk-mitigation approaches, the choice of which would depend on regulatory readiness, fiscal-risk considerations, and investor demand, with DFIs typically acting as early cornerstone investors before wider institutional participation becomes feasible..

Credit-enhanced bond structures may be considered, in principle, to support early or pilot issuances by eligible public or quasi-public entities, while avoiding reliance on blanket sovereign guarantees. In such cases, partial risk-mitigation, through guarantees or other credit-enhancement tools, could be used to improve pricing, extend maturities, and broaden the investor base, while maintaining prudent public-sector risk exposure and consistency with Kosovo's debt-management and fiscal-risk frameworks. Where appropriate, sustainability-linked bond features could also be explored, whereby financial characteristics (for example, coupon step-ups or step-downs) are linked to predefined performance indicators, such as renewable-energy capacity connected, energy-efficiency improvements achieved, or SME coverage targets, rather than strict earmarking of proceeds. This can reduce complexity in early market-entry stages and help align financial incentives with national energy and climate objectives, , .

In a more advanced market context, securitization could be considered as a second-stage scaling option, once standardized and sufficiently seasoned portfolios of renewable-energy or energy-efficiency loans have been established through commercial banks and existing guarantee or blended-finance facilities. Over time, portions of such portfolios could be refinanced via capital-market instruments, allowing banks to recycle capital and mobilize longer-term private investment, while maintaining a clear separation between portfolio-level risk and the sovereign balance sheet. This sequencing should be understood as indicative and reflecting market-development logic, rather than as a prescribed implementation plan or a commitment to specific transaction volumes or structures.

In addition, international experience suggests that limited collateral-based credit-enhancement may, in some cases, support early access to capital markets in countries with shallow bond markets and limited investor familiarity. Such approaches rely on partial collateralization, rather than full guarantees, to improve the credit profile and marketability of debt instruments. Any exploration of collateral-based approaches in Kosovo should remain cautious and fully aligned with debt-management and fiscal-risk frameworks, and should be seen as complementary to, rather than a substitute for, earlier-stage financing instruments and donor-supported risk-sharing facilities

5.5. MECHANISM 5: CLEAN ENERGY FINANCING WINDOW (INNOVATION FUND INTEGRATION)

International Practice and Terminology, Positioning the Clean Energy Financing Window as Kosovo-Tailored Institutional Innovation

5.5.1. STRATEGIC CONTEXT: WHY A KOSOVO-SPECIFIC INSTITUTIONAL DESIGN

Kosovo's proposed Clean Energy Financing Window represents a deliberate institutional innovation shaped by the country's unique financing ecosystem and policy context.

The design responds to three fundamental realities that distinguish Kosovo from comparator economies: (1) a need to coordinate severely fragmented institutional arrangements across multiple national entities operating in parallel silos; (2) an imperative to integrate diverse funding sources, concessional financing, donor resources, commercial capital, and innovation capital,

under unified governance; and (3) a requirement to move rapidly from concept to implementation without extended regulatory preconditions that have delayed other emerging-market transitions.

This section addresses a valid and important question raised during consultative workshops: whether comparable mechanisms exist internationally, whether they employ similar naming conventions, and how Kosovo's design compares to established international practice.

5.5.2. INTERNATIONAL NOMENCLATURE AND FUNCTIONAL ARCHITECTURE: DISAMBIGUATING TERMS

The Key Finding: Naming Convention vs. Functional Architecture

Based on systematic review of available public sources, including development finance institution frameworks, bilateral donor programs, and emerging-market case studies, the "Integration Hub" designation, is a Kosovo-specific institutional terminology reflecting the country's coordination imperative, but across international practice, the functional architecture , a unified governance entry point for clean energy financing , is well-established and widely replicated, though jurisdictions employ different terminology reflecting their institutional histories and policy contexts.

5.6. INTERNATIONAL PRECEDENTS FOR INTEGRATED CLEAN ENERGY FINANCING STRUCTURES

5.6.1. INNOVATION FUNDS AND CLIMATE FINANCE PLATFORMS: THE EU AND MULTILATERAL MODEL

The European Union's Innovation Fund represents perhaps the most prominent international precedent for a unified governance structure deploying capital into clean energy and climate technologies. Established under EU Regulation 2021/1060, the Innovation Fund:

- Acts as a centralized mechanism for channeling EU budget resources into innovative low-carbon technologies (renewables, energy storage, hydrogen, carbon capture)
- Operates through a single governance structure with transparent fund management and investment criteria
- Coordinates capital across multiple risk profiles, from mature renewable energy projects to early-stage technology development
- Uses the terminology "fund" rather than "window" or "hub," but performs a functionally equivalent coordinating role

Similarly, major multilateral development banks , the World Bank, EBRD, EIB, and regional development banks , structure climate and clean energy financing through centralized platforms or windows, though terminology varies:

- **World Bank:** "Climate Action" and sectoral "investment programs" serving as umbrella governance structures for multiple instruments
- **EBRD:** "Green Economy Transition" (GET) approach, which coordinates guarantees, loans, equity, and technical assistance under unified strategy and governance
- **EIB:** "Climate Action" lending programs with integrated risk-sharing mechanisms combining concessional resources and commercial finance

- **Asian Development Bank:** "Energy Financing Programs" that coordinate across multiple instrument types under unified portfolio management

In each case, the functional architecture includes:

1. A single governance entity with clear decision authority
2. Coordination across multiple financing instruments (grants, concessional loans, guarantees, equity)
3. Unified monitoring, reporting, and learning systems
4. Explicit deployment of concessional resources to catalyze private capital mobilization
5. Risk-allocation mechanisms designed to unlock commercial market participation

The naming, whether "fund," "program," "platform," "window," or "strategy", varies according to institutional context and legislative frameworks, but **the functional coherence is consistent across these precedents.**

5.6.2. COMPARATOR EMERGING MARKETS: WINDOW/PLATFORM STRUCTURES IN THE WESTERN BALKANS AND CENTRAL ASIA

Within Kosovo's immediate geographic and development context, regional precedents provide particularly relevant examples:

Serbia: The Green for Growth Fund (GGF) Model

Serbia's GGF operates as a dedicated financing window within the broader donor-supported landscape, with institutional features closely paralleling the proposed Kosovo structure:

- Single governance platform coordinating multiple instruments: concessional credit lines, guarantees, and technical assistance
- Unified portfolio tracking and impact measurement across different financing products
- Explicit coordination with national banks (Erste, ProCredit, Raiffeisen) to unlock commercial lending
- Technical assistance pool supporting both lenders and borrowers to reduce transaction costs
- Outcome-focused monitoring (energy savings, CO₂ reduction) rather than activity-based reporting

The GGF uses the terminology "fund" rather than "window," but the operational architecture directly mirrors the integration approach proposed for Kosovo.

North Macedonia: The Energy Efficiency Financing Facility (EEFF)

North Macedonia's EEFF, supported by the World Bank, represents another highly comparable regional precedent:

- Centralized facility coordinating grants, concessional loans, and guarantees
- Unified eligibility criteria and application procedures across instrument types
- Integrated technical assistance for municipalities, utilities, and private borrowers
- Common monitoring framework tracking leverage ratios, CO₂ reduction, and beneficiary progression

- Single governance body (steering committee) approving major policy decisions and adjusting subsidy levels based on performance

Bulgaria: The Energy Efficiency and Renewable Energy Fund (ECERF)

Bulgaria's ECERF, established with EU support, demonstrates how integrated clean energy financing windows can transition toward financial sustainability:

- Unified governance hub coordinating guarantee facilities, blended finance, and equity investments
- Systematic use of fee-based instruments (guarantee fees, upfront loan fees) to create self-sustaining operations by Year 3-4
- Portfolio aggregation enabling scale economies in technical assistance and operational costs
- Clear transition pathway from donor-dependent subsidies to market-driven fee structures

Critically, these regional comparators all employ the functional architecture of coordinated windows/platforms but use terminology reflecting their specific institutional contexts. The choice between "fund," "facility," "program," and "window" reflects legislative frameworks, governance preferences, and historical precedent within each country rather than fundamental architectural differences.

5.6.3. INNOVATION FUND HOSTING: INTERNATIONAL PRACTICE AND PRECEDENT

Kosovo's proposed hosting of the Clean Energy Financing Window within the forthcoming national Innovation Fund itself represents an institutional design choice with international precedent, though implementation approaches vary:

UNDP Global Innovation Fund Integration

The UNDP's climate innovation support programs, deployed across emerging markets, increasingly operate through national innovation funds as coordinating hubs, with climate and clean energy financing windows embedded as specialized components. This approach leverages:

- Existing innovation fund governance and administration
- Common IT and reporting infrastructure
- Alignment of climate finance with broader innovation investment objectives

EU-Level Precedent: Innovation Fund and Climate-Energy Programs

At the EU level, the Regulation 2021/1060 (EU budget framework) explicitly allows member states to embed climate-energy "windows" within broader innovation or development fund structures, provided governance, transparency, and impact measurement standards are met. This structure supports:

- Efficient use of administrative capacity
- Integrated portfolio management reducing operational duplication
- Cross-learning between clean energy and broader innovation investments

5.6.4. FUNCTIONAL ALIGNMENT WITH INTERNATIONAL BEST PRACTICE

Across all international precedents reviewed, the EU Innovation Fund, MDB climate programs, and regional comparators in the Western Balkans and Central Asia, the Kosovo proposal demonstrates strong functional alignment with established best practice in the following dimensions:

Dimension	International Practice	Kosovo's Proposed Clean Energy Financing Window	Alignment Assessment
Governance Structure	Single decision-making body with clear authority; quarterly or annual reviews	Steering Committee (MoE, MoF, CBK, LuxDev, banks, KEEF, KCGF); quarterly decisions	Strong alignment; governance structure consistent with EU and MDB precedent
Coordination Mechanism	Unified portfolio tracking across multiple instruments; common eligibility criteria	Single IT system; unified MRL framework; common eligibility standards	Strong alignment; exceeds regional comparators in specified integration detail
Instrument Diversity	Multiple instruments deployed according to market maturity (grants, guarantees, concessional loans, equity)	Five mechanisms phased by feasibility; instrument mix matched to market conditions	Strong alignment; instrument selection methodology explicitly evidence-based
Private Capital Mobilization	Leverage ratios of 1:2 to 1:5 (concessional:private capital) as standard success metric	Target leverage 1:3 to 1:4 across portfolio; phased ambition matching institutional capacity	Strong alignment; leverage expectations realistic relative to emerging-market precedent
Technical Assistance	Shared TA pool reducing per-transaction costs; integrated capacity building for lenders and borrowers	Pool of 5-8 specialists supporting across all mechanisms; bank training, municipal support	Strong alignment; TA integration consistent with GGF, EEFF, ECERF models
Impact Measurement	Outcome-focused MRL frameworks tracking beneficiary progression, energy savings, GHG reduction, employment	Unified MRL framework with annual beneficiary tracking, verified savings, job creation monitoring	Strong alignment; outcome focus consistent with international best practice
Sustainability Transition	Explicit transition from grant subsidies to fee-based/market-driven models by Years 3-5	KCGF guarantee fees self-sustaining by Year 4; KEEF revolving model by Year 5	Strong alignment; sustainability pathway detailed and realistic
Donor Coordination	Structured coordination platforms minimizing duplication and aligning co-financing	Monthly donor forum; transparent pipeline sharing; joint risk assessment	Strong alignment; exceeds minimum standard in specified integration mechanisms

5.6.5. THE KOSOVO-SPECIFIC ELEMENTS: WHY INSTITUTIONAL TAILORING IS JUSTIFIED

While the functional architecture aligns with international precedent, several Kosovo-specific contextual factors justify tailored institutional design rather than direct replication of comparator models:

1. Severity and Breadth of Fragmentation

Kosovo's coordination challenge is more acute than in regional comparators. The country operates 44+ separate organizations across 9 institutional categories (government, regulators,

national funds, commercial banks, international financial institutions, municipalities, ESCOs, universities, civil society) with minimal cross-institutional communication. This systemic fragmentation, documented in the D1 diagnostic, exceeds typical Western Balkans patterns and necessitates a more explicitly integrative governance structure than standard international "windows."

The **"Integration Hub" designation reflects this reality**: the window must not simply coordinate financial instruments but actively harmonize institutional behavior, align eligibility criteria, and systematize learning across a highly dispersed ecosystem.

2. Institutional Capacity Constraints in Innovation Fund Development

Kosovo's forthcoming Innovation Fund is itself under development, requiring the Clean Energy Window to serve as an initial institutional anchor and proof-of-concept for coherent fund governance. Regional comparators (Serbia, Bulgaria, North Macedonia) often embedded clean energy windows within pre-existing, operationally mature institutional structures. Kosovo must build the host institution and the specialized window in parallel.

This context justifies:

- More detailed governance specifications (e.g., explicit role definitions for each committee member)
- Longer ramp-up timelines for IT system integration
- Heavier reliance on donor technical partnership (LuxDev) during the institutional building phase
- Explicit "learning infrastructure" mechanisms (annual reviews, documented lessons) to institutionalize practices as the fund matures

3. Multiple Concessional Funding Sources Requiring Active Coordination

Kosovo's financing ecosystem includes multiple concessional-resource channels: bilateral donors (Luxembourg, Germany, Austria), multilateral development banks (World Bank, EBRD, EIB), EU blending facilities, and government budget allocations. These sources operate under different terms, policy requirements, and reporting standards.

Unlike more centralized comparators, Kosovo requires explicit coordination mechanisms to:

- Align fiscal incentives (VAT, customs duty, tax depreciation) across financing windows
- Harmonize reporting standards and impact metrics across donor programs
- Prevent double-subsidy of identical beneficiaries across parallel programs
- Create transparent pipeline management minimizing donor uncertainty

The "window" structure serves as the unified reporting point for this complexity, reducing transaction costs for donors and improving capital allocation efficiency.

4. Energy Affordability as an Explicit Constraint

Kosovo's acute energy poverty (40% of households) and recent price increases (2024-2025) create a policy constraint absent in comparator markets. The financing window must simultaneously:

- Scale affordable access for vulnerable populations (grants of 40-50% for poorest households)
- Protect fiscal sustainability (limiting subsidy intensity)

- Maintain private bank participation (ensuring commercial lending availability)

This "affordability-sustainability-commercialization" tension is more acute in Kosovo than in comparators and justifies the explicit differentiation of grant structures, integration of household subsidy reform, and careful subsidy calibration specified in the proposal.

5. ESCO Market Development as an Embedded Function

The proposed window explicitly embeds ESCO market development (Mechanism 3) as an integrated component, rather than as a parallel initiative. Regional comparators typically treat ESCO pilots as standalone programs outside the core financing window structure. Kosovo's approach, embedding ESCO development within the coordinated window while maintaining distinct governance for the pilot phase, reflects the country-specific finding that ESCO market creation is essential to achieving efficiency deployment targets and cannot succeed in isolation.

5.6.6. CLARIFYING THE DISTINCTION: "WINDOW" VS. "INTEGRATION HUB" TERMINOLOGY

The dual designation "Clean Energy Financing Window (Integration Hub)" merits explicit clarification:

"Clean Energy Financing Window" adheres to international nomenclature conventions and signals alignment with established global practice. This terminology indicates:

- A centralized mechanism for channeling concessional and catalytic capital into clean energy
- Coordination across multiple financing instruments
- Unified governance and operational management
- Clear positioning within Kosovo's emerging innovation financing architecture

"Integration Hub" is a Kosovo-specific descriptor emphasizing the window's particular institutional role in resolving the country's fragmentation challenge. This terminology indicates:

- An explicit mandate to harmonize policies, eligibility criteria, and reporting across national institutions
- A governance structure that actively manages inter-institutional relationships
- Systematic reduction of beneficiary-journey friction across multiple financing channels
- Embedded learning and adaptive management to improve ecosystem efficiency

In formal policy documentation and international engagement, "Clean Energy Financing Window" should be the primary designation, with "Integration Hub" serving as a descriptive subtitle clarifying Kosovo's specific implementation context.

5.6.7. INTERNATIONAL BEST PRACTICE ALIGNMENT: THE CORE ANALOGY

The most accurate international analogy for Kosovo's proposal is the **coordinated blended-finance platforms** that multilateral development banks have deployed in countries with similar fragmentation challenges (e.g., the EBRD's Green Economy Transition approach in Central Asia, the World Bank's Climate Action platforms in Sub-Saharan Africa).

In each case:

- **Functional commonality:** A single governance mechanism coordinating multiple financing instruments and risk-sharing structures, guided by unified strategy and impact measurement

- **Institutional tailoring:** Specific governance bodies, instrument sequencing, and operational procedures adapted to local context
- **Naming variation:** Terminology reflecting institutional history and policy framing (platform, window, program, fund, facility)
- **Sustainability pathway:** Explicit transition mechanisms moving from grant/subsidy dependence toward fee-based and market-driven models

Kosovo's Clean Energy Financing Window follows this established international template while incorporating the specific institutional innovations required by Kosovo's fragmentation challenge and policy constraints.

5.6.8. SYNTHESIS: INSTITUTIONAL INNOVATION WITHIN INTERNATIONAL CONSENSUS

The Clean Energy Financing Window (Integration Hub) is best characterized as:

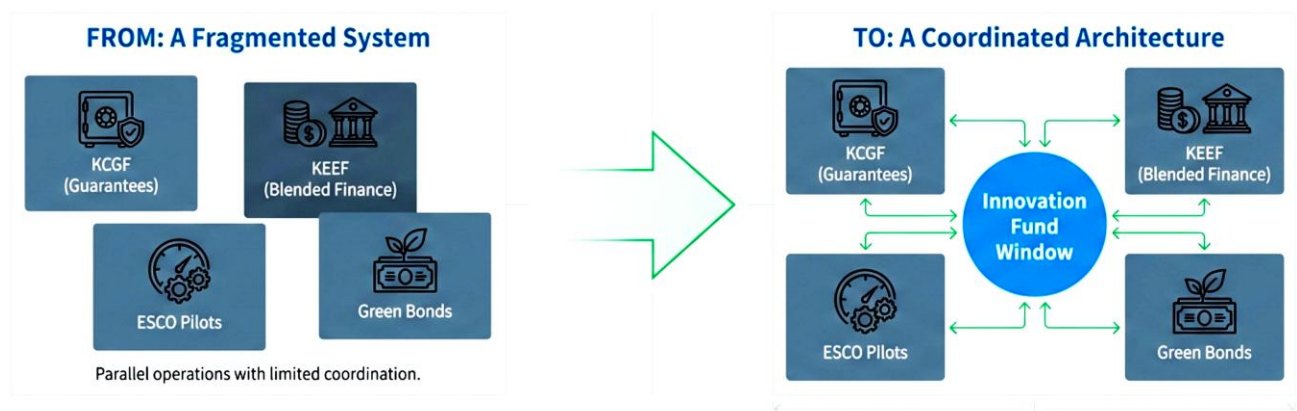
Not: An internationally standardized, off-the-shelf institutional model that Kosovo is adopting wholesale

Rather: A Kosovo-tailored institutional innovation that applies established international principles of blended-finance coordination and unified governance to Kosovo's specific financing ecosystem, instrument gaps, and coordination challenges.

The strategic value of this positioning is:

- **Credibility:** Grounds the proposal in international best practice while avoiding misleading claims of international standardization
- **Clarity:** Explicitly acknowledges what is Kosovo-specific and what is internationally proven
- **Flexibility:** Permits adaptive management and institutional evolution without suggesting deviation from "standard" models
- **Stakeholder confidence:** Reassures both domestic and international constituencies that the design is grounded in rigorous international evidence, not ad-hoc institutional creation

This framing allows Kosovo to move forward with confidence in the institutional design while maintaining intellectual honesty about the balance between international precedent and Kosovo-specific innovation.



Core Functions of the Window



Strategic Oversight: Set unified policy and risk appetite across all mechanisms.



Efficient Funding: Blend public and private capital for maximum leverage.



Unified MRL: Enable portfolio-level learning via a single Monitoring, Reporting, and Learning system.



Innovation Capital: Catalyze new climate tech and fintech solutions.

Operational Design:

Parameter	Value
Host Institution	Forthcoming national Innovation Fund (Ministry of Industry/Entrepreneurship) with sponsors technical partnership
Governance Structure	Joint Steering Committee: Ministry of Economy (Chair), Ministry of Finance, LuxDev, 2 commercial bank representatives, KEEF director, KCGF director
Decision Authority	Fund Manager (independent, hired on 3-year contract) with Steering Committee quarterly policy oversight
Funding Sources	EUR 40-50M over 5 years: EUR 25-30M for Mechanisms 1-4; EUR 15-20M for innovation capital
Innovation Capital Focus	Design grants, equity, TA for climate tech startups and fintech firms addressing clean energy barriers
Common Services	Unified IT systems, portfolio tracking, MRL platform, beneficiary database, technical assistance coordination
Operating Cost	EUR 1.5-2M annually (staff, IT, TA); 3-4% of total capital deployed

Key Coordination Functions:

1. **Portfolio Coherence:** Prevent double-subsidy and beneficiary overlap (e.g., an SME using guaranteed credit to purchase equipment from an ESCO); track aggregate impact across mechanisms
2. **Resource Efficiency:** Shared IT systems, common TA platform, consolidated procurement reduce per-transaction costs by 15-20%
3. **Learning Platform:** Single MRL framework enables cross-mechanism analysis (e.g., which beneficiary types progress from household grants to SME guarantees to ESCO contracts?); evidence informs policy iteration
4. **Political Support:** Single funding window simplifies government budget negotiations and donor coordination; demonstrates integrated strategy rather than ad-hoc projects
5. **Investor Confidence:** Unified governance signals institutional commitment and reduces execution risk, facilitating debt and equity financing

Innovation Capital Window:

In parallel to scaling existing mechanisms, Kosovo's green energy transition requires **technological innovation and business-model experimentation**. The Window will invest in:

- **Climate Tech Startups:** Non-dilutive grants (EUR 50-100K) for early-stage cleantech companies developing solutions for Kosovo's barriers (e.g., affordable solar inverters, battery storage, smart grid technologies, energy-data platforms)
- **Fintech Solutions:** TA and seed capital for digital platforms addressing household/SME access barriers (e.g., mobile applications for subsidy applications, blockchain-based peer-to-peer energy trading, microfinance platforms)

- **Demonstration Projects:** Competitive grants supporting piloting of innovative financing models (e.g., community-scale solar cooperatives, on-bill financing for microfinance institutions, energy barter systems for rural households)

Feasibility Assessment: 78% overall – MEDIUM institutional readiness (Innovation Fund establishment underway; coordination mechanisms straightforward but require governance discipline), MEDIUM financial viability (EUR 40-50M realistically mobilizable with committed donors), HIGH market fit (mechanism unifies existing demand from Mechanisms 1-4), MEDIUM timeline (12-month governance establishment realistic; phased activation of mechanisms 1-5 over 18-24 months).

Expected Outcomes (5-year horizon):

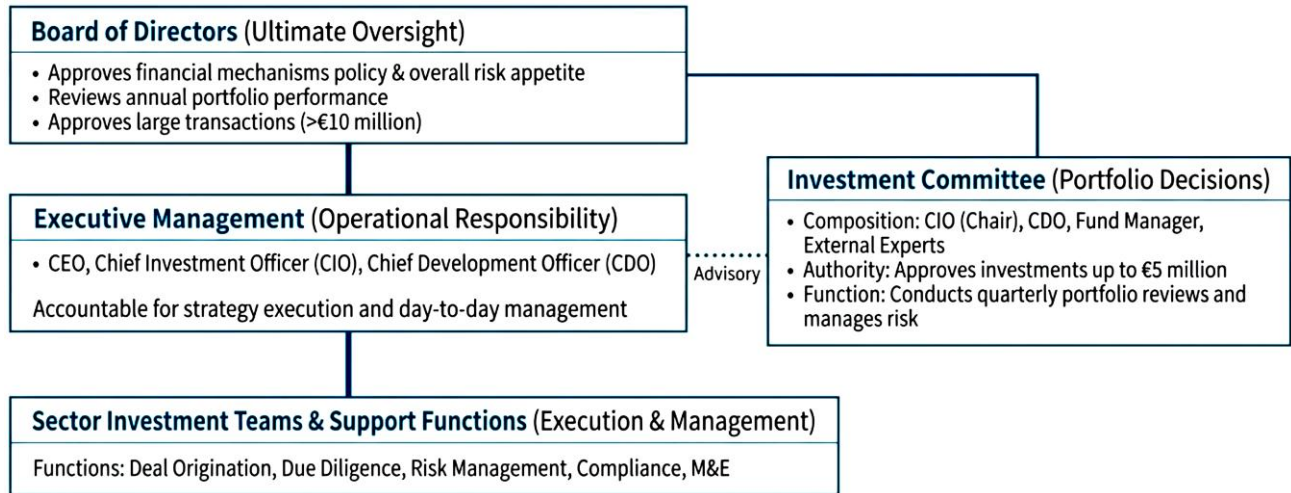
- EUR 150-200M private capital mobilized across all mechanisms (vs. EUR 80-100M concessional)
- 2,000-2,500 direct beneficiaries
- 25,000-30,000 tCO₂e annual GHG reduction
- Unified national platform for clean-energy financing established
- Foundation for post-2030 capital market integration and climate tech ecosystem

Critical Implementation Requirements:

1. **Governance Operationalization:** Steering Committee established by Month 1; Fund Manager hired by Month 2
2. **Institutional Integration:** MOUs executed with KEEF, KCGF, KIESA for coordination and data-sharing by Month 3
3. **IT Systems:** Portfolio management system operational by Month 6; MRL framework finalized by Month 9
4. **Bank Engagement:** Lead banks (ProCredit, Raiffeisen, BKT) signed into operational committee by Month 2; lending protocols finalized by Month 4
5. **Donor Coordination:** Quarterly meetings with World Bank, EBRD, KfW, EU, MCC, bilateral donors to align pipeline and avoid duplication by Month 1

Recommended Action: TIER 1 – SETUP GOVERNANCE (Year 1), PHASED ROLLOUT (Mechanisms 1-2 immediately; 3-4 sequentially)

6. GOVERNANCE, RISK MANAGEMENT, AND SUSTAINABILITY



6.1. A COORDINATED NATIONAL FINANCING ARCHITECTURE

As elaborated in chapter 5, the goal is to create a complementary ecosystem where each institution has a clear, specialized role, orchestrated by a central coordinating entity. This structure ensures that public funds are used catalytically to address specific market gaps, creating a complete value chain from policy design to project implementation and risk mitigation.



6.1.1. THE CENTRAL ROLE OF THE INNOVATION FUND'S CLEAN ENERGY WINDOW

The Innovation Fund will host a dedicated "Clean Energy Financing Window," which will serve as Kosovo's central blended-finance platform. This window will manage a combination of public and donor contributions to orchestrate the activities of other national instruments. Its core functions are to standardize eligibility criteria and documentation, house results-based incentive

schemes, and deploy flexible financial products that can combine grants, guarantees, and concessional loans to meet the needs of underserved market segments. By acting as the central coordinator, it will ensure that all components of the financing architecture work in concert.

6.1.2. PROPOSED DIVISION OF INSTITUTIONAL EFFORT

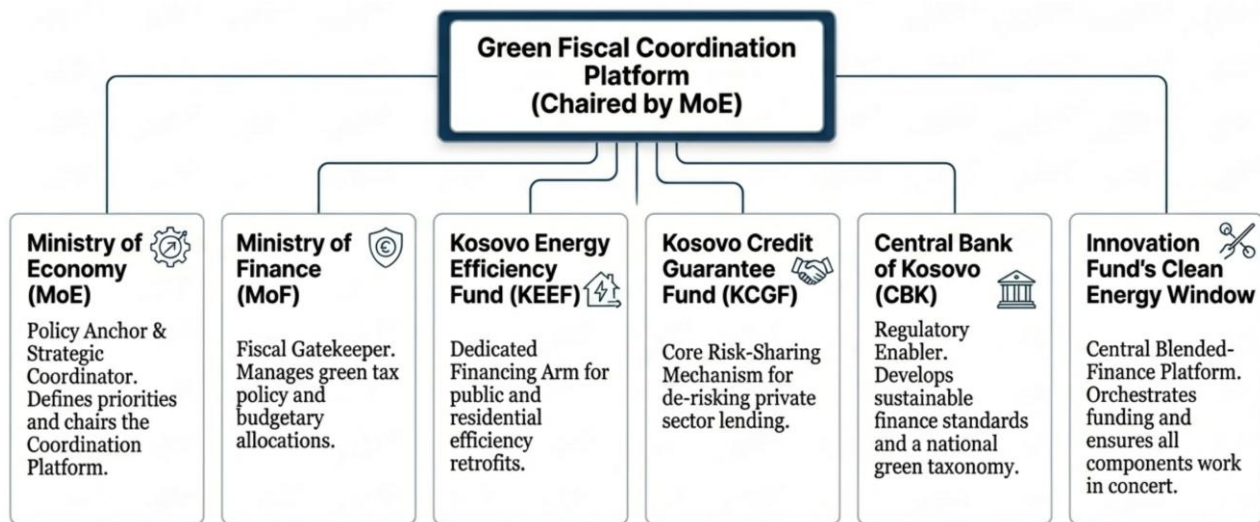
To dismantle the barriers of fragmentation and market gaps, each key institution will assume a clearly delineated and specialized role within this coordinated architecture, leveraging its unique strengths to contribute to the overall system.

- Ministry of Economy (MoE): Serves as the policy anchor and strategic coordinator. The MoE will define national priorities, translate policy targets into program criteria, and chair the Green Finance Coordination Platform to ensure alignment across all stakeholders.
- Ministry of Finance (MoF): Acts as the fiscal gatekeeper and enabler of green incentives. The MoF is responsible for green tax policy, budgetary allocations for clean energy programs, and the design of sovereign risk-mitigation tools.
- Kosovo Energy Efficiency Fund (KEEF): Continues its focused mandate as the dedicated financing arm for public-sector and residential energy efficiency. It will leverage its proven revolving fund model to implement large-scale retrofits in municipal buildings, schools, hospitals, and social housing.
- Kosovo Credit Guarantee Fund (KCGF): Functions as the core private-sector risk-sharing mechanism. It will expand its Green Window with higher guarantee coverage for renewable energy and energy efficiency loans, enabling commercial banks to extend more favorable lending terms to SMEs and households.
- Kosovo Investment and Enterprise Support Agency (KIESA): Acts as the primary channel for SME investment grants. These grants will be explicitly linked to KCGF-backed loans to reduce upfront investment costs and enhance the bankability of projects for private enterprises.
- Central Bank of Kosovo (CBK): Fulfills a crucial enabling role as the financial sector regulator. The CBK is responsible for developing sustainable finance standards, introducing a national green taxonomy, and integrating climate risk into its supervisory framework to create a stable and supportive environment for green lending.

This strategic division of labor creates a complete and coherent value chain for clean energy finance. The following roadmap outlines the prioritized actions needed to bring this architecture to life.

6.2. THE GREEN FISCAL COORDINATION PLATFORM

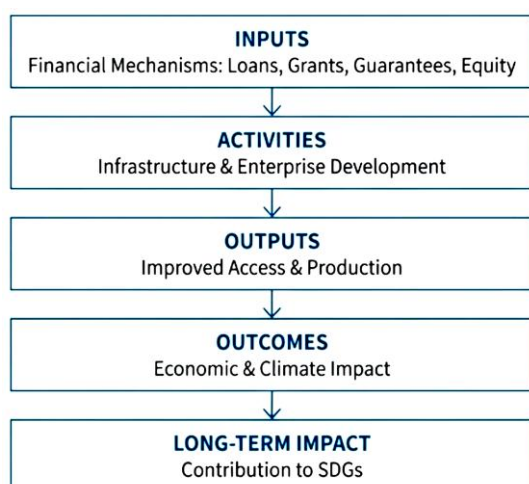
To address the "Institutional Fragmentation" identified in D1, a **Green Fiscal Coordination Platform** must be established immediately.



- **Chair:** Ministry of Economy.
- **Members:** Ministry of Finance, CBK, KEEF, KCGF, and Donor Representatives.
- **Mandate:** To harmonize eligibility criteria (what counts as "green"), align fiscal incentives (VAT/Tax) with financial products, and monitor the aggregate leverage ratio of the ecosystem. It prevents "double-dipping" of subsidies and ensures strategic coherence.

6.3. MONITORING, REPORTING, AND LEARNING (MRL) SYSTEM

Current monitoring is activity-based (e.g., "number of loans"). The new architecture requires outcome-based MRL. The success would be measured not only by financial returns, but by our tangible contribution to Kosovo's sustainable development. We will track progress through a clear Theory of Change and a set of ambitious Key Performance Indicators (KPIs).



KPI	5-Year Target
Private Capital Mobilized	€150-200 M
GHG Abatement	25,000-30,000 tCO ₂ e / year
Direct Beneficiaries	2,000-2,500 (SMEs, households, innovators)
Sustainable Jobs Created	3,000-5,000
Women Beneficiaries	40%+ of total beneficiaries

Example Metrics: Cost per ton of CO₂ avoided; Leverage ratio (Private/Public capital); Energy savings (MWh/year) verified by smart meters.

Implementation: A unified IT dashboard hosted by the Innovation Fund, aggregating data from KCGF and KEEF. This allows real-time adjustment of grant intensity based on market uptake.

6.4. RISK MANAGEMENT FRAMEWORK



The plan identifies eight **principal implementation risks** and proposes mitigation strategies:

6.4.1. RISK 1: LOW PRIVATE UPTAKE AND UNDERUTILIZATION OF FACILITIES (MEDIUM LIKELIHOOD, HIGH IMPACT)

Mitigation:

- Proof-of-concept pilots with 50-100 beneficiaries in Phase 1 before scale-up
- Demand surveys and market testing (Month 1-3)
- Active vendor engagement ("market maker" TA helping suppliers connect with mechanism beneficiaries)
- Targeted communication campaigns and peer-learning networks

Monitoring: Monthly beneficiary enrollment tracking; quarterly review of pipeline growth rates

6.4.2. RISK 2: AFFORDABILITY / MORAL HAZARD IN HIGH ENERGY-POVERTY CONTEXT (MEDIUM LIKELIHOOD, HIGH IMPACT)

Mitigation:

- Differentiated grant structures (higher grants for poorest; clear repayment obligations)
- Careful calibration of subsidy levels via periodic affordability analysis
- Robust credit assessment (income verification, savings projections at 50% of engineering estimates)
- Capping household obligation to <15% of household income
- Household financial literacy TA (EUR 500-1,000 per applicant)

Monitoring: Default rates tracked by income quintile; household payment stress indicators; periodic affordability surveys

6.4.3. RISK 3: GRID BOTTLENECKS AND INTEGRATION RISKS FOR NEW RE (HIGH LIKELIHOOD, HIGH IMPACT)

Mitigation:

- Prioritize EE and distributed, grid-friendly investments in Phase 1
- Align facility pipelines with KOSTT/KESCO grid development plans (quarterly coordination meetings)
- Cap distributed generation incentives to grid-manageable levels (per-node limits defined by ERO)
- Coordinate with EU TSO-DSO coordination initiatives

Monitoring: Actual grid connection timelines vs. contracted timelines; renewable curtailment incidents; grid stability metrics

6.4.4. RISK 4: POLITICAL AND INSTITUTIONAL INSTABILITY (MEDIUM LIKELIHOOD, HIGH IMPACT)

Mitigation:

- Institutional buffering via semi-independent KEEF/KCGF governance
- Multi-donor boards insulating mechanisms from day-to-day politics
- Clear rules and decision frameworks that survive political cycles

- Dedicated staffing with professional development programs and retention incentives

Monitoring: Staff retention rates; governance continuity through government transitions; portfolio consistency through policy changes

6.4.5. RISK 5: REGULATORY DELAYS IN SECONDARY LEGISLATION (HIGH LIKELIHOOD, MEDIUM IMPACT)

Mitigation:

- Establish regulatory roadmap and timeline in Month 1
- Assign inter-ministerial working group with clear accountability
- Use donor TA to accelerate drafting (GIZ, KfW, EBRD support)
- Build contingency mechanisms enabling phased implementation pending legislation

Monitoring: Regulatory milestone completion vs. published calendar; tracking regulatory bottlenecks

6.4.6. RISK 6: ESCO MARKET DEVELOPMENT SLOWER THAN EXPECTED (MEDIUM LIKELIHOOD, MEDIUM IMPACT)

Mitigation:

- Flexible timeline for Mechanism 3; allow Phase 2-3 phasing
- Provide higher grant support (EUR 100K+) to first-mover ESCOs
- Partner with international ESCO networks for knowledge transfer
- Focus on public-sector pilots before commercial expansion
- **Monitoring:** Number of operational ESCOs; EPC contract volumes; ESCO financial viability indicators

6.4.7. RISK 7: BANK PARTICIPATION LOWER THAN ANTICIPATED (MEDIUM LIKELIHOOD, HIGH IMPACT)

Mitigation:

- Secure written commitments from lead banks by Month 2 (binding lending targets)
- Provide co-guarantee structures reducing bank risk-bearing to 30-50%
- Offer capacity-building (joint credit committees, co-underwriting)
- Start with smaller pilot volumes before Phase 2 scale-up

Monitoring: Bank lending volumes vs. commitments; green asset ratios by bank; loan performance by bank partner

6.4.8. RISK 8: MUNICIPALITY CAPACITY INSUFFICIENT FOR PROJECT PREPARATION (HIGH LIKELIHOOD, MEDIUM IMPACT)

Mitigation:

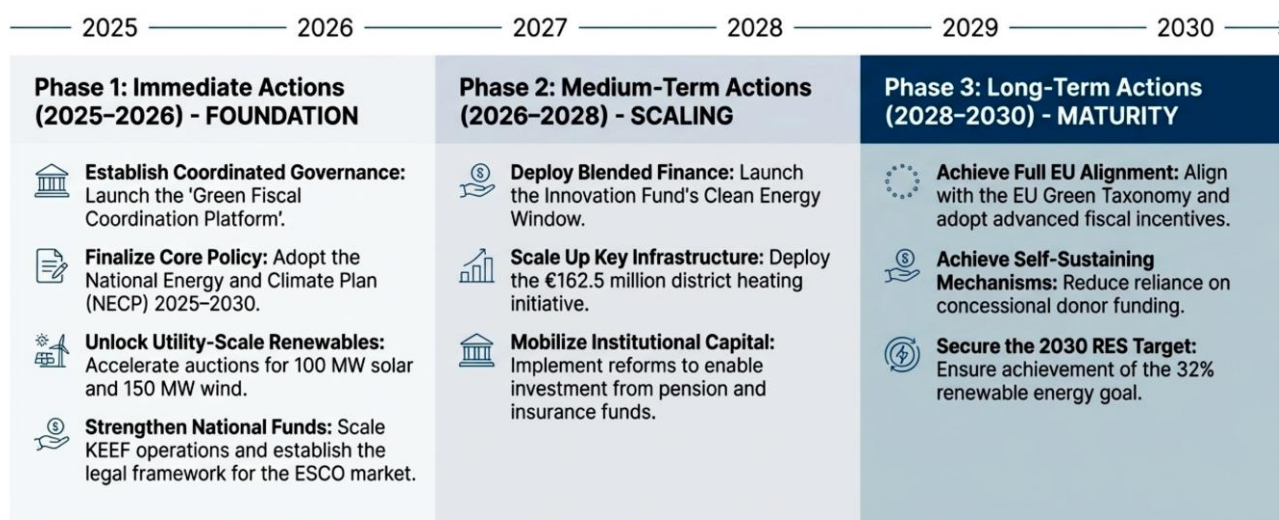
- Standardized project preparation templates and training
- Allocate dedicated TA budget (5-10% of Mechanism 2 capital)
- Establish peer-learning networks and best-practice sharing

- Consider hiring municipal liaison officers within KEEF

Monitoring: Municipal project pipeline development; project preparation timeline improvements; municipal staff satisfaction and capacity self-assessments

7. PRIORITIZED ACTION ROADMAP: 2025-2030

This roadmap presents a phased, actionable plan designed to build the new financing architecture and drive progress toward Kosovo's 2030 targets. The actions are prioritized to tackle the most critical barriers first, creating momentum and building a solid foundation for long-term success.



7.1. IMMEDIATE ACTIONS (2025–2026)

- 1. Establish Coordinated Governance:** Formally launch the "**Green Fiscal Coordination Platform**," convening monthly meetings between the Ministry of Finance, Ministry of Economy, Central Bank, KEEF, KCGF, and other key stakeholders to align policy, share data, and oversee implementation.
- 2. Finalize Core Policy:** Finalize and adopt the **National Energy and Climate Plan (NECP) 2025–2030** and its supporting secondary legislation to provide a stable and predictable regulatory environment for investors.
- 3. Unlock Utility-Scale Renewables:** Accelerate the competitive auctions for **100 MW of solar and 150 MW of wind projects**, a key commitment under the IMF's Resilience and Sustainability Facility, to mobilize significant private capital.
- 4. Strengthen Core National Funds:** Scale the operational capacity of the Kosovo Energy Efficiency Fund (KEEF) and formally establish the **legal and regulatory framework for the ESCO market**, including standardized contracts and M&V protocols.

IMPLEMENTATION TIMELINE & IMMEDIATE ACTIONS (FIRST 6 MONTHS)

Month 0-1: Foundation & Governance Setup

- Cabinet/Government endorsement of strategic plan (government decision)
- Establish Steering Committee and approve charter (Ministry of Economy + sponsors)
- Announce Fund Manager international recruitment (open posting)
- Initiate secondary legislation roadmap development (Ministry of Economy + TA partners)

Month 1-2: Staffing & Bank Engagement

- Hire Fund Manager (international recruitment complete)

- Negotiate MOUs with lead banks (ProCredit, Raiffeisen, BKT) for SME guarantee and household lending commitments
- Initiate CIO and Operations Manager recruitment (local hiring)
- Confirm EUR 12-17.5M donor financing for Phase 1 mechanisms (donor coordination meetings)

Month 2-3: Mechanism Design & Regulatory Prep

- Finalize SME Green Guarantee Facility design (terms, eligible equipment, pricing)
- Finalize KEEF household blended finance streamlined application process
- Launch ESCO legislation drafting (GIZ/EBRD TA)
- Publish NECP draft for public consultation (target final publication Month 6)

Month 3-4: IT & Operational Systems

- Hire M&E Specialist and ESCO/Climate Tech Specialist
- Initiate common MRL platform design (portfolio management system)
- Establish inter-ministerial working group for municipal coordination
- First Steering Committee meeting (Month 3-end; review staffing, financing, mechanism readiness)

Month 4-6: Launch Phase 1 Mechanisms

- SME Green Guarantee Facility: First technology list published; pilot bank training; first beneficiary applications accepted (Target: 20-30 firms in pipeline by Month 6)
- KEEF Scaling: Simplified household application process live; first community awareness campaign; municipal project prep TA launches (Target: 50-100 household applications in pipeline)
- MRL platform operational (basic version) for portfolio tracking
- NECP published (final); secondary legislation roadmap finalized and published
- Second Steering Committee meeting (Month 6; review Phase 1 launch, celebrate first beneficiaries, identify early issues)



Months 0-2: Foundation & Engagement

- ☐ **Action:** Secure Government endorsement of this strategic plan.
- ☐ **Action:** Establish the Steering Committee and approve its charter.
- ☐ **Action:** Hire the Fund Manager for the Clean Energy Window.
- ☐ **Action:** Negotiate and sign MOUs with lead commercial banks (ProCredit, Raiffeisen, BKT) to secure lending commitments.



Months 2-4: Design & Systems Setup

- ☐ **Action:** Finalize the operational design for the SME Guarantee and Household Blended Finance mechanisms.
- ☐ **Action:** Initiate drafting of ESCO legislation with TA support.
- ☐ **Action:** Begin design of the common Monitoring, Reporting & Learning (MRL) platform.
- ☐ **Action:** First Steering Committee meeting convenes to review progress.



Months 4-6: Launch Phase 1 Mechanisms

- ☐ **Action:** SME Green Guarantee Facility goes live; first beneficiary applications accepted.
- ☐ **Action:** KEEF's scaled-up blended finance program launches with a simplified application process.
- ☐ **Action:** MRL platform (basic version) becomes operational for portfolio tracking.
- ☐ **Action:** Final NECP is published, providing regulatory certainty.

7.2. MEDIUM-TERM ACTIONS (2026–2028)

1. **Deploy Blended Finance Mechanisms:** Launch and operationalize the **blended finance facility through the Innovation Fund's Clean Energy Window** to provide tailored financial products for households and SMEs, bridging the affordability gap.
2. **Scale Up Key Infrastructure:** Deploy the **€162.5 million initiative to scale district heating projects** across multiple municipalities, significantly improving energy efficiency and reducing reliance on fossil fuels for heating.
3. **Mobilize Institutional Capital:** Implement the necessary regulatory reforms to enable the mobilization of capital from **pension and insurance funds** for investment in green assets and infrastructure projects.
4. **Build the ESCO Market:** Actively build the capacity of the ESCO market and develop a robust project pipeline, leveraging the newly established legal framework to unlock private investment in energy efficiency.

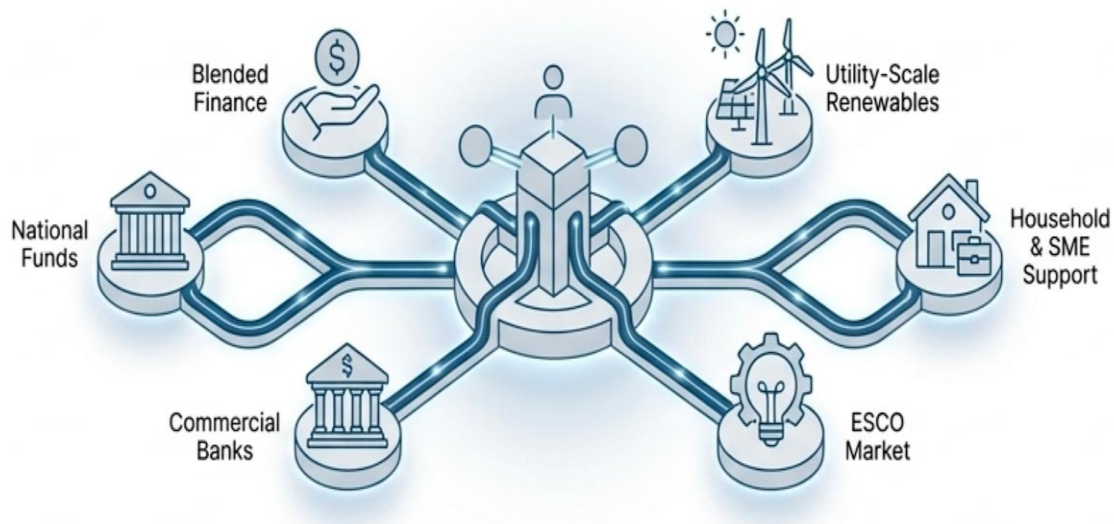
7.3. LONG-TERM ACTIONS (2028–2030)

1. **Achieve Full EU Alignment:** Fully align with the **EU Green Taxonomy** and adopt advanced fiscal incentives, such as **accelerated depreciation for green assets**, to bring Kosovo's policy framework in line with European best practices.
2. **Scale Private Capital Mobilization:** Achieve scaled-up private capital mobilization through mature and self-sustaining financing mechanisms that operate with reduced reliance on concessional donor funding.
3. **Secure the 2030 RES Target:** Ensure the secure achievement of the **32% renewable energy target** through the cumulative impact of investments deployed via the fully operational and coordinated financing ecosystem.

The successful implementation of this roadmap is essential for transforming Kosovo's energy future.

8. CONCLUSION: A CALL TO COORDINATED ACTION

Kosovo's renewable energy and energy efficiency transition is economically, environmentally, and socially imperative. The current financing ecosystem, characterized by institutional fragmentation, regulatory uncertainty, and undersized concessional resources, cannot deliver the scale and speed required to meet 2030 targets. However, Kosovo possesses **substantial institutional foundations** (KEEF, KCGF, donor partnerships, commercial banking capacity) that can be integrated and amplified into a **coherent, scalable financing architecture**.



The analysis is complete, the strategic objectives are defined, and the necessary actions have been identified. The transition from plan to reality will require **discipline, focus, and unwavering commitment from all stakeholders**.

The achievement of Kosovo's 2030 energy and climate goals is entirely contingent upon the disciplined and timely implementation of this strategic plan. The challenges of institutional fragmentation, market failures, and implementation bottlenecks can only be overcome through a united effort. Sustained multi-stakeholder coordination, strong political will, and a relentless focus on execution are the critical factors that will ultimately determine the success of Kosovo's clean energy transition.

This strategic plan proposes **five integrated mechanisms**, sequenced across three phases, designed to:

1. **Establish unified governance** (Clean Energy Financing Window) replacing fragmentation with strategic coherence
2. **Unlock private capital mobilization** (EUR 200-250M) through targeted guarantees, blended finance, and risk mitigation
3. **Address critical market barriers** (regulatory uncertainty, ESCO underdevelopment, household access barriers, municipal capacity gaps)
4. **Demonstrate impact at scale** (2,000-2,500 beneficiaries, 25,000-30,000 tCO₂e GHG reduction, 2,000-3,000 jobs)
5. **Align with Kosovo's national climate commitments** (32% renewable energy, 16.3% GHG reduction by 2030)

The plan is actionable and realistic: Built on Kosovo's existing assets rather than aspirational best practices; grounded in evidence from international benchmarking and stakeholder validation; financed through committed donor resources and government co-investment; and sequenced according to institutional capacity rather than idealized implementation timelines. It also integrates with ongoing efforts, such as LuxDev's residential blended-finance and KEEF's private-sector window, ensuring added value through complementarity and blending

 €200-250 Million Private capital mobilized against €80-100 million in concessional resources.	 2.6x Average capital leverage ratio, aligned with international best practice.	 2,000-2,500 Direct beneficiaries, including SMEs, households, and public facilities.
 25,000-30,000 tCO₂e Annual greenhouse gas reduction.	 2,000-3,000 New jobs created in construction, energy services, and renewable energy deployment.	 1,000-1,500 Energy-poor households lifted from energy poverty.

Immediate action is essential: Government endorsement and mechanism launch during H2 2025 is critical to demonstrate political commitment, secure bank participation, and deliver early beneficiaries that build momentum and institutional confidence. Delay risks losing private sector interest, donor coordination, and political momentum.

With determined implementation of this strategic plan, supported by unified government commitment, sustained donor partnership, and engaged commercial banking participation, **Kosovo can establish a world-class clean energy financing architecture that becomes a regional model for emerging-market energy transition** while delivering tangible impact on household energy poverty, climate mitigation, and economic opportunity.

