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Aligning Albania's Economic Policy with EU Climate and Energy Goals: Evidence from Multi-Stakeholder Roundtables and Documentary Analysis

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Abstract

This paper assesses how far EU climate, energy, and sustainable-finance requirements are being embedded across Albania's energy policy subsystems and its fiscal and monetary frameworks, and how this affects economic development. It examines whether a coordinated, cross-sectoral approach is emerging in policy discourse, design, and implementation, and the degree of consensus among key actors. The study uses a mixed qualitative methodology: two stakeholder roundtables (government, civil society, academia, business) and a triangulated review of legislation, strategies, official reports, EU progress assessments, media, and expert-provided documents. By mapping the interplay between national priorities and EU directives, the paper gives actionable insights and targeted recommendations to align climate commitments with growth objectives. It further highlights how the energy and climate agenda is being mainstreamed into education, by revising curricula and engaging higher education institutions in project and other initiatives in line with the EU Green Deal.

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1. Introduction

Climate change poses significant risks to human well-being and planetary health, and the narrowing window of opportunity means that actions taken within this decade will have consequences both immediate and long-lasting. The energy sector plays a vital role in these global developments, especially targeting mitigation activities. Improved access to appropriate financial resources—especially for vulnerable regions, sectors, and groups—as well as inclusive governance and coordinated policies are crucial to achieve targets and to support sustainable development.

Albania, a country in the Mediterranean region, is not immune to these challenges. Aligning national policies with EU climate and energy frameworks is a strategic priority for Albania. Specifically, to align with the EU's 2030 climate–energy objectives—at least a 55% cut in net greenhouse-gas emissions and a minimum 42.5% share of renewables (45% aspiration)—Albania must prepare policies and capacity that track the acquis and emerging best practice. This calls for cross-sectoral coordination that links mitigation, adaptation, and sustainable growth across the energy system and the financial frameworks. This study will assess the progress towards energy transformation in Albania, and specifically the economic and societal

benefits of the climate and energy plan, focusing on EU agenda alignment and financial background of the transitions. Education sector is also highlighted as both a mean for creating adaptive capacities and being affected by new policies and agendas.

The paper is organized as follows. In the next section, a systematic literature review is offered with emphasis on EU evidence and country specific cases. Next, the context and methodology of the study is presented, highlighting the Albanian energy agenda and its goals. The reminder of the paper will present the results of two roundtables conducted with experts of the field. A special focus will be given to mapping financing instruments that support the energy transition process. Education sector impacts are assessed within this discussion. Examples of the framework and implementation of the climate and energy plan will be given following the desk research conducted for triangulating the results of the roundtables. Finally the study will translate findings into policy recommendations for central/local government and the education institutions. The study also examines whether such an integrated approach is emerging and where institutional consensus and capacity gaps remain.

2. Theoretical Background

Human activity has warmed the planet. The IPCC reports a +1.1 °C rise in 2011–2020 vs. 1850–1900, driven by greenhouse gases emitted from energy use, land use, and consumption patterns across regions, between and within countries, and among individuals (IPCC, 2023). The EU is a key driver of climate and energy policy. Other major economies (USA, China, India, Brazil, Russia) show mixed commitment over time, but their role is also critical being among the main contributors to greenhouse gas emissions and, consequently, to the phenomenon of global warming. European Commission (n.d) explains that NextGenerationEU puts sustainability at the core, and faster shifts in power, heat, and transport support several SDGs by making renewables central to global decarbonization.

Renewables potential have been assessed thoroughly through literature and evidence mostly suggest that energy transformation will be led by technology advances especially in the photovoltaic field (Colasante et al, 2022; Hasan et al, 2023). When linked to economic development and growth, evidence shows generally a positive correlation but the results are also context-dependent (Jia et al, 2023). For Brazil, Pao & Fu (2013) find that a 1% rise in renewable use links to about 0.20% rise GDP (using 1980–2010 data and a VECM within a neoclassical production framework), arguing that Brazil's growth and energy independence make expanding renewables economically and environmentally beneficial. A meta-regression analysis of 40 empirical studies (153 observations) shows that the causal link between renewable energy consumption and economic growth differs in the short and long run, making short-term policies potentially inadequate over time. Results also vary depending on country grouping, model specification, data type, treatment of structural breaks, and estimation techniques (Sebri, 2014).

The main constraint in these developments is system integration (Bompard et al., 2022) with technological reforms needed to achieve this (Ejuh et al, 2025; Saleh & Hassan, 2024; Liu et al, 2023). Transition speed and dynamics are also uncertain and context driven: fast and targeted in the EU, uneven globally (WEF, 2025; Fattouh et al, 2019). Today renewables supply roughly ~15% of global energy; many scenarios reach ~⅓ by 2040, with deeper shares if policies accelerate (Ren21, 2025, Saleh & Hassan, 2024).

Literature shows that support from innovative financial frameworks are essential in the transformation pathways, despite cost barriers (Gouchoe et al, 2002; Qadir et al, 2021). Zhang et al (2024) examine how

financial innovation, renewable-energy generation intensity, energy-transition progress, and environmental regulation jointly shape the integration of renewable energy systems, using China as the empirical setting. The paper's contribution is to connect finance, technology, and policy levers in one framework, moving beyond single-factor studies common in the literature. Conceptually, the authors posit that financial innovation (e.g., green credit/fintech) lowers investment frictions and accelerates RES uptake; stronger environmental regulation complements this by tightening incentives, while higher renewable generation intensity reflects technological/scale readiness—together supporting deeper system integration.

Finally, the education impacts are another crucial perspective to take in the policy framework of renewables and climate agenda. Education sector is both affected and at the same time impacts the policies in the field. As energy policies intensify, there is a need to make education institutions more sustainable through green policies that promote sustainability through building and site design and maintenance, reducing this way their own ecological footprint. In summary, education system can affect climate and energy agenda by improving literacy, addressing teaching and learning methodologies that foster a problem solving and critical thinking approach, and by making university services more sustainable and greener (Kopnina, 2012; Anderson, 2012; Hamilton, 2011).

For Albania, these themes are only partly explored. As EU integration process advances, a full program will be needed to turn targets into delivery. This paper uses a qualitative perspective to understand how Albania's energy transition really works in practice and how it supports climate goals, economic growth, and energy security. The next part of the paper will describe the results of two roundtables developed with the purpose of understanding the complex links between policy development and implementation is the particular context that Albania offers.

3. Data and Methods

3.1. Context: Albanian Energy Landscape

Albania is a distinctive case for this study. Under its nearly five decades of communist regime, Albania's economy was dominated by heavy industry. Environmental policy was largely absent, and climate change barely figured in public discourse. After 2000, the environmental agenda began to strengthen. Albania shifted from a fully state-run, centralized economy before 1990—where state enterprises misunderstood market needs and performance deteriorated—to a difficult 1990s transition marked by deep social and economic change (Kume and Llaci, 2000; Pieterse, 1997). The new agenda focused on stabilization, liberalization, privatization, and integration into regional and global markets, which opened the economy to foreign investors and set the basis for an open aspiration in the EU integration. These influences have deeply affected Albanian society, shaping the political environment, and the general development of infrastructural and environmental policies, including those within the energy sector.

Today, Albania depends almost exclusively on hydropower for its electricity generation (98% of its electricity generation comes from hydropower), making it increasingly vulnerable to unfavorable hydrological conditions in the summer, especially in view to predicted effects of climate change in the Western Balkans region (Ministry of Tourism and Environment & UNDP, 2022). Apart from the fact that there is no constant production, electricity from hydropower is not sufficient to meet the needs. Thus, Albania have started to plan adequate measures to increase investments in renewable energy

projects other than hydropower.

Opportunities for the deployment of solar energy are extensive. Albania's solar insolation is very high throughout most of its territory at more than 1,500 kWh/m2 annually, with peaks of 1,753 kWh/m2 annually, particularly in the western part of the country (ESCWA, 2022). Albania also has some of Europe's highest number of sunshine hours per year, presenting significant potential for development of solar PV for power generation and solar thermal for heating purposes.

Due to the fall in technology costs and significant renewable energy potential that the country has, solar PV is seen as one of the most feasible measures to mitigate climate change and reach the Nationally Determined Contributions (NDC) targets, while on the other hand contribute to mitigate the impact on the end-consumer electricity price and increase the green jobs. Total Capacities of Renewable Energy in 2022 is 2516 MW, out of which, 2168 MW belong to Large Hydropower, 325 MW belong to Small Hydropower (less than 10 MW) and 23 MW to solar energy. By the end of 2018, there were 10MW of solar PV installed (Milieukontakt, 2024).

This contextual facts are the basis for conducting the exploratory research presented next, which digs into the issues of policy development, financial instruments support and awareness raising including education impact. The study uses a mixed methods synthesis combining: (i) qualitative document review (laws, strategies, EU progress assessments, institutional reports); (ii) two multi stakeholder roundtables, with selected representatives, including policy makers, regulators, utilities, private sector, academia, development partners. Results of both methods are presented next.

3.2. Desk research background

In order to provide a framework to cross-check primary data results, a desk review was developed. Through document screened, a short case study was selected and presented in the next part, illustrating the benefits of integrating renewables at project level. As per the systematic desk research, the main documents consulted included:

- Albania's National Communication to the UNFCCC (in total 4 communications)
- National Energy and Climate Plan of the Republic of Albania (NECP 2030)
- Albania EC Progress Report 2024
- "Market Transformation for Solar Energy PV Acceleration in Albania" Project report
- Financial Management Sectoral Strategy 2023-2030 and Action Plan 2023-2026

Some key takeaways show that:

First, energy and transport dominate Albania's GHG profile, and the NECP (2030) sets an overall 54.4% RES share with sectoral goals for electricity (178.1%—reflecting net exports), transport (34.6%), and heating/cooling (16.6%).

Second, Albania's power system is highly hydro-dependent and climate-sensitive; diversification with solar PV is both feasible and urgent. Policy and market signals now support rapid PV uptake: utility-scale auctions award 15-year CfDs with competitive prices, while the prosumer segment is moving from net metering (≤500 kW) to net billing and energy communities from 1 January 2024.

Third, the Renewables Law has shifted away from administratively set feed-in tariffs toward competitive

support (CfD/CfP), with interim fixed-price auctions and a planned full CfD regime once the day-ahead market is liquid. Recent tenders confirm execution capacity and price discovery.

Finally, the review also shows early but concrete steps regarding climate risk as an activity gradually mainstreaming into supervisory practice, with draft guidance for scenario analysis and stress tests under development; in parallel, green budgeting and climate-related fiscal risk statements are being piloted within public finance processes, and the education system is adding climate, energy and innovative finance modules and training to build the necessary capacities.

Education sector is at the spotlight in several national and international projects targeting PV implementation. As both impacted and impacting climate and energy agenda, the education sector was a target of a UNDP project focused on PV implementation and benefits. During the 2022-2023, UNDP implemented the project "Market Transformation for Solar Energy PV Acceleration in Albania" with funding from the Government of Japan, designed to support achievement of the Nationally Determined Contributions (NDC) target to increase the share of non-hydro renewable energy in Albania in gross final energy consumption by 2030. The project implemented 10 pilot projects in four municipalities - a detailed feasibility study and site-specific technical specifications were developed, and solar PV systems, consisting of 951 solar PV panels with total installed capacity of 542 kWp, were installed in 10 pilot sites (on the roofs of schools, kindergartens and city halls' buildings). Through the project, 20,000 ton of CO2 emissions will be avoided over the 25 years lifetime of the solar PVs, and 2,124 children, public officials and citizens are now benefitting from access to green energy.

Figure 1: PV panels installed

One of the schools benefiting from the Project was the "Demir Gashi" school in Diber Municipality, providing service for 530 children and 20 teachers every day including partly Saturday with some outside children activities. Total average yearly electricity consumption for the monitored years (2021 & 2022) was 123,088 kWh/year. The school benefitted a 66-kW solar photovoltaic system matching about 67.16% of the school energy demand. Electricity generation by the PV Auto producer system is calculated to generate around 94,000 kWh/year, allowing for 20,172-euro energy cost savings annually. In terms of environmental analysis, the installation of solar PV Auto producer allows the reduction of greenhouse

gases of 49 tons/year of CO2 eq. These results clearly demonstrate the education system's dual role—both a frontline adopter of, and a sector affected by, energy policies and programs. This two-way role—consumer, educator, and community hub creates measurable savings, builds a skilled pipeline for green jobs, and accelerates household adoption of efficiency and renewables, directly supporting Albania's revised NDC target and offering a scalable model beyond its borders.

3.3. Round tables design

The next part of the paper will show the results of the primary data collection developed though round tables discussion.

The multi-disciplinary round-table discussions were organized as a series of focus group sessions, each moderated by two facilitators — a professor and an expert from the field — to ensure balanced and informed dialogue. Participants were selected using a purposive sampling strategy to ensure a broad and balanced representation of perspectives across all areas related to climate, energy and the financial system. A list of national and regional stakeholders and experts with the right technical skills and decision-making positions was established based on the goals of the research. Other participants included academics, researchers, civil society organisations and students who offered theoretical perspectives and empirical insights.

The first Roundtable entitled "Integrating EU Policies and Strategies in Energy and Climate Agenda of Albania", was developed on 29 June 2024, and addressed the interconnection of climate change mitigation policy with the energy sector under the EU agenda. The second-round table "Climate impact on Financial Markets in EU and Albania", as developed on 26 June 2025 and engaged professionals from treasury, banking, fiscal entities, and financial regulation sectors, aiming at the discussion on the risk and opportunities that an economy faces under the threat of climate change. Table 1 summarizes the profiles and characteristics of participants of both roundtables. The completed transcripts were organised thematically using the framework technique so that systematic qualitative analysis could be done.

Table 1. Characteristics of participants in the first and second round table

Category	**First Round Table**			**Second Round Table**		
	Female	**Male**	**Total**	**Female**	**Male**	**Total**
Institution Representatives	2	3	5	8	1	9
Policy Experts	1	1	2	2	0	2
Professors	6	0	6	6	0	6
Students & Others	12	1	13	10	4	14
TOTAL	21	5	26	26	6	31

Annex 1 shows the list of questions prepared. Deviations and additional themes were explored following the discussions. While addressing thoroughly policies and national frameworks, both roundtables touched upon the aspects of mainstreaming climate and energy agenda into education frameworks, both at pre-university and university levels. The diverse background of participants allowed to explore knowledge gaps in the market and to give concrete recommendations on how these knowledge gabs can be addressed in the future by reforming curricula and teaching methodologies.

3.4 Analysis and results

The roundtable debates are summarized in Table 2 and 3. Discussion were organized into different themes for easing the analysis and for producing recommendations. Main themes of the discussion included: the current regulatory framework, EU harmonization processes and future policy directions, operational and investment perspectives on the climate and energy transitions, and risk exposure, market readiness and new financing mechanisms, as well as awareness issues, including education role in the transition.

While addressing policy issues, alignment with EU climate and energy agenda, technological development, and financial markets response, the debates converged on the centrality of education and awareness raising. Ideas and discussion on how to insert climate and energy literacy across curricula, upskill teachers, and turn campuses into "living labs" that link learning to real projects and community outreach, supporting behavior change (solar adoption, e-mobility, efficiency), were some of the highlights of the discussions.

The participants generally agreed in the recommendations provided:

- Policy and practice should move in synergy: reorganize sectoral development plans, strengthen national energy-climate governance, and align legal frameworks with EU rules.
- Stabilize renewable integration by clarifying land-use regulations, incentivizing rooftop and utility-scale solar PV, and accelerating investment in storage and grid flexibility.
- Mobilize private capital through blended finance and risk-sharing instruments to scale green infrastructure.
- Improve planning and accountability by modernizing digital data systems, training municipal staff, and applying clear KPIs for financial reporting and NDC tracking.
- Advance integrated infrastructure plans, pursue regional energy-market projects, and run open, evidence-based assessments of nuclear and energy-community options.
- Make education a core enabler: embed energy and climate literacy across pre-university and university curricula, deliver teacher upskilling and executive short courses, and pair national awareness campaigns with community programs that drive household solar uptake, efficiency habits, and sustainable transport choices.

Table 2. Key themes for the first-round table

Theme	Key Issues Discussed	Selected quotes
Governance & Regulation	To slow emissions growth and achieve net-zero emissions by 2050, a long-term national and international framework is required; it is crucial that Albania's policies be in line with EU regulations and Energy Community goals	*"…without a clear sectoral plan, every investment remains risky. We have ambitious targets, but we lack the roadmap to achieve them."* – Participant, Private Sector *"A strong legal framework is a prerequisite for becoming part of the regional energy market. Without it, we cannot gain the trust of investors and partners."* – Participant, Ministry of Infrastructure and Energy *"We have good laws, but often we do not have the people and systems to implement them properly."* – Participant, Development Partner *"We need a reporting system that shows us where we are every year – if we cannot measure progress, we cannot improve it."* – Participant, Academia
Energy Transition Pathways	Insufficient use of renewable energy potential; disagreements surrounding the distribution of land for wind and solar versus agricultural purposes; difficulties with small hydropower plants; and wind energy variability.	*"Renewable sources are available everywhere, but we still haven't used them to their full potential — this is the moment to accelerate."* – Participant, Renewable Energy Expert *"A common regional electricity market would create a win-win for all Western Balkan countries — it is not just an opportunity, but a necessity."* – Participant, Energy Policy Specialist
Financial Sector & Market Mechanisms	Significant investments are required (solar PV capacity, transportation shift, building renovation); improved integration is predicted to save money; and smart systems and market integration call for preparation.	*"If we want to reach 54% renewables by 2030, we need to think beyond donor grants — we need blended finance and risk-sharing mechanisms."* – Participant, Financial Sector Representative *"This is not only about decarbonization — it's about creating new jobs and new economic opportunities for Albania."* – Participant, Development Partner *"Investors need certainty. Clear rules, fair tariffs, and a stable market environment are what will unlock private capital."* – Participant, Private Sector
Data & Institutional Capacity	There is a need to improve statistics and reporting systems, address shortcomings in data collection and reporting, increase human resources, and enhance municipalities' understanding of the importance of accurate data.	*"It is very difficult to plan without accurate data — sometimes even basic figures on energy use are missing."* – Participant, Academic *"Municipalities often don't see why data matters — but without local data, we cannot design realistic policies."* – Participant, Development Partner
Infrastructure & Strategic Planning	Goals for the transport sector's transition (30% to rail by 2030, 50% by 2050); the necessity of regional energy planning that is coordinated; and interest in energy communities and possible nuclear options.	*"Transport is our biggest emitter — shifting passengers and goods to rail is one of the fastest ways to cut emissions."* – Participant, Transport Expert *"We need to think beyond borders — an integrated regional energy market is key for security and affordability."* – Participant, Energy Community Representative
Public Engagement, Awareness &Education	Pair public awareness campaigns with system-wide curriculum updates that embed energy efficiency and climate change across pre university system, higher education, and adult learning; set clear learning outcomes, update materials and assessments, upskill teachers (incl. micro-credentials), use schools as "living labs," and add interdisciplinary university modules with community capstones.	*"We must educate the next generation — energy literacy should start in schools and continue through university programs."* – Participant, University Lecturer *"We need a mindset shift — energy efficiency must become a habit, not an exception."* – Participant, Student

Table 3. Key themes for the second- round table

Theme	Main Insights / Outcomes	
Strategy & Governance	Climate risks formally recognized as financial risks; NGFS/EU-aligned strategy adopted; sector questionnaire launched; scenario analysis and stress test guidance drafted; national taxonomy development to start in 2025.	*"…we cannot wait until EU accession — we must have our own taxonomy ready, piloted in key sectors, to guide the market now."* – Participant, Bank of Albania "*Phase II of our climate risk strategy will quantify physical risks and integrate them into fiscal planning — this is a turning point."* – Participant, Bank of Albania
Regulation, Disclosure & Data	EU Sustainable Finance Directive transposition ongoing; lack of national taxonomy and standardized reporting; fragmented datasets. Proposal for a "green dashboard."	"*Without a taxonomy, banks and investors are working blind — we need a shared language to define what is truly green.*" – Participant, Financial Supervisor
Risk Landscape	Exposure to floods, wildfires, earthquakes; transition risks from CBAM and carbon pricing; large insurance protection gap.	"*Every year we face floods and wildfires — yet the financial impact is mostly handled ad hoc. We need to plan for these shocks, not just react.*" – Participant, Ministry of Finance "*If CBAM hits our exporters tomorrow, many SMEs would be unprepared — that is a systemic risk."* – Participant, Private Sector
Financial Sector Practice	Some banks integrate climate criteria in lending; green products exist but remain small share of portfolios; need clearer definitions and registries of "green" products.	"*Today, 20% of our portfolio meets EBRD green criteria, but there is still untapped demand — we need stronger incentives for both banks and borrowers.*" – Participant, Commercial Bank "*Clients ask what counts as a green loan — we need a national registry to give them confidence."* – Participant, Banker
Public Finance & DRF	Climate budgeting strategy 2023–2030 adopted; fiscal risk statements include disasters; National Disaster Loss Database operational. Draft earthquake insurance law explored but not yet adopted.	"*We have begun including disasters in the fiscal risk statement, but we still lack pre-arranged instruments like risk pools or cat bonds.*" – Participant, Ministry of Finance
International Alignment	Engagement with NGFS, OECD, IFIs on carbon-tax design, stress testing, disclosures; strong convergence trajectory.	"*This is the moment to leverage international programs — before EU accession we have more flexibility to attract funding.*" – Participant, Ministry of Economy, Culture and Innovation
Market Development & Awareness	Green budgeting and subsidies are growing, but SME awareness and capacity remain low. Add an education track: integrate green finance/ESG into TVET and university curricula, offer micro-credentials and executive short courses with banks/regulators, upskill teachers, and use capstones/living-lab projects to drive real uptake.	"*Businesses still see sustainability as a cost, not an opportunity — we must change this narrative.*" – Participant, Business Association

Source: The authors

4. Discussion, Conclusion and Policy Recommendations

Albania's trajectory is directionally consistent with EU integration: targets are set, renewable deployment is accelerating, and supervisory conversations have begun to include climate risk. Albania can accelerate EU-consistent decarbonization and resilience by institutionalizing cross-sector governance, operationalizing a taxonomy-and-data backbone, scaling supervisory guidance and DRF, and enabling markets for green investment. These steps will help translate targets into bankable pipelines and measurable outcomes.

Findings reflect stakeholder discussions and qualitative documents rather than comprehensive econometric modeling; data constraints (particularly emissions and geospatial exposures) limit precision. Future work should include quantitative scenario analysis and cost-benefit modeling of DRF instruments.

The discussions and recommendations from the roundtable highlighted a clear picture of the systemic challenges, but also the significant potential that Albania has to advance toward a successful climate and energy transition. While long-term objectives—such as achieving climate neutrality by 2050—require continuous and multi-level efforts, the current challenges are closely linked to gaps in coordination, institutional capacities, data collection and usage, as well as public and economic stakeholder awareness.

In summary, Albania can accelerate climate-finance integration by tightening governance and data while making education the engine of adoption. Empowered inter-institutional committees, an academia-supported technical framework, and an EU-aligned taxonomy would promote private investment, with targeted incentives for PV, efficiency, and technological reforms.

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Annex 1

Key questions Discussed on the first-round table

PART 1: Governance and Energy Transition

Topic I: What policy or regulatory reforms are most urgent to ensure Albania meets its 2030 and 2050 climate and energy targets?

Topic II: What are the biggest opportunities and main risks for accelerating Albania's energy transition?

PART 2: Finance, Data, and Infrastructure

Topic III: How can Albania mobilize more public and private investment to support renewable energy and energy efficiency projects?

Topic IV: Which infrastructure investments (grid upgrades, transport, storage) should be prioritized for maximum impact?

PART 3: Public Engagement

Topic VI: How can citizens and local communities be engaged to actively support and participate in the energy transition?

Key questions Discussed on the second-round table

PART 1: Strategy & Governance

Topic I: How can Albania strengthen coordination among regulators and ministries to implement the NGFS/EU-aligned climate strategy and upcoming national taxonomy?

Topic II: What mechanisms are needed to ensure that climate risk supervision and scenario analysis become a regular part of financial oversight?

PART 2: Regulation, Data & Risk

Topic III: What are the most urgent steps to operationalize a national green taxonomy and harmonized reporting templates?

Topic IV: How can data gaps be addressed, and what should a national "green dashboard" include to support supervision and market transparency?

Topic V: How can physical and transition risk stress testing be scaled across banks, insurers, and fiscal authorities, and how should results inform decision-making?

PART 3: Finance, Market Development & Awareness

Topic VI: What policies or incentives could expand green lending, standardize product definitions, and attract private capital (e.g., bonds, blended finance)?

Topic VII: Which disaster risk financing instruments (sovereign risk pools, cat bonds, contingency funds) are most relevant for Albania's fiscal context?

Topic VIII: What programs are needed to raise SME and consumer awareness, prepare for CBAM, and increase adoption of rooftop PV, energy efficiency, and e-mobility solutions?