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GREEN INDUSTRIAL POLICY

Country Report
Albania

Contextualized Analysis
and Policy Recommendations

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GREEN INDUSTRIAL POLICY

Country Report Albania

Contextualized Analysis and Policy Recommendations

Acronyms and Glossary

Acronym	Definition
ACA	Albanian Competition Authority
AEE	Energy Efficiency Agency
AIDA	Albanian Investment Development Agency
AKBN	National Agency of Natural Resources
AKPA	National Agency for Employment and Skills
AKM	National Environment Agency
ALL	Albanian Lek
ALPEX	Albanian Power Exchange
BAT	Best Available Techniques
CBAM	Carbon Border Adjustment Mechanism
CCDR	Country Climate and Development Report
CEEAG	Climate, Environmental Protection and Energy Aid Guidelines
CfD	Contract for Difference
CIF	Climate Investment Funds
CSRD	Corporate Sustainability Reporting Directive
CSDDD	Corporate Sustainability Due Diligence Directive
DPA	General Directorate of Accreditation
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
ERE	Energy Regulatory Authority
ETS	Emissions Trading System
FSHU	Universal Service Supplier
GBER	General Block Exemption Regulation
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEFF	Green Economy Financing Facility
GHG	Greenhouse Gas

Acronym	Definition
GIP	Green Industrial Policy
IFC	International Finance Corporation
IPA	Instrument for Pre-Accession Assistance
KESH	Albanian Power Corporation
KfW	Kreditanstalt für Wiederaufbau
MF	Ministry of Finance
MIE	Ministry of Infrastructure and Energy
MRV	Monitoring, Reporting and Verification
ME	Ministry of Environment
MTCS	Ministry of Tourism, Culture and Sport
MSME	Micro, Small, and Medium-sized Enterprise
NAP	National Adaptation Plan
NECP	National Energy and Climate Plan
NPL	Non-Performing Loan
OST	Transmission System Operator
OSSH	Distribution System Operator
PPA	Power Purchase Agreement
SAC	State Aid Council
SCF	Social Climate Fund
SME	Small and Medium-sized Enterprise
UNDP	United Nations Development Programme
WBIF	Western Balkans Investment Framework

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Executive Summary

Albania's energy transition is entering a structurally decisive phase. The country's electricity sector, already dominated by renewable hydropower, which accounts for between 78% and 90% of domestic electricity production depending on annual hydrological conditions, provides a comparative advantage within the Western Balkans. This foundation is, however, simultaneously a vulnerability: annual hydropower output has fluctuated between approximately 5.2 TWh in drought years (2019–2020) and 8.9 TWh in wet years (2021, 2023), driving recurring import dependence of 30–40% of consumption in low-hydrology years and exposing the economy to regional spot-market price dynamics. In 2025, preliminary data indicate domestic electricity production of approximately 7.5 TWh, with solar PV contributing close to 1 TWh — roughly 13% of total domestic production, marking a system-relevant threshold for a technology that was virtually absent before 2022.

Several structural transitions are underway simultaneously and must be understood in their interaction. Solar PV capacity expanded from negligible levels before 2022 to generating over 500 GWh in 2024 and approximately 1 TWh in 2025, driven primarily by commercial and industrial self-consumption in direct response to market price exposure during the 2022 energy crisis. The rapid deployment demonstrates that cost-reflective price signals can accelerate investment in clean technologies without requiring public subsidy, but also that the system's regulatory, grid, and institutional infrastructure has not kept pace with market-led deployment.

EU accession, with the opening of Cluster 4 (Green Agenda and Sustainable Connectivity) in September 2025, is now the primary external driver of reform, embedding climate and energy obligations into conditionality for access to €922 million tentatively allocated to Albania under the EU Reform and Growth Facility (2024–2027). Albania's Carbon Border Adjustment Mechanism (CBAM) exposure, while modest in macroeconomic terms, equivalent to €72–160 million of covered exports to the EU, or 0.3–0.6% of 2024 GDP, is highly concentrated in cement and steel industrial enterprises, creating sector-specific competitiveness and employment risks that require targeted policy responses.

The energy transition also creates significant opportunities for labour market restructuring. The rapid expansion of solar, wind, and hydropower modernisation projects is generating demand for specialised competencies in PV installation and maintenance, wind turbine engineering, grid integration, energy storage, and digital energy management. However, VET enrolment data show declining student numbers in electrotechnics, thermohydraulics, mechanics, and construction, precisely the profiles most needed for deployment and maintenance of new energy infrastructure, highlighting a supply-side skills gap that will constrain deployment velocity unless addressed through targeted education and training reform.

Total investment needs for Albania's energy transition are substantial. The World Bank's 2024 Country Climate and Development Report (CCDR) estimate undiscounted adaptation investment needs of US$6.0 billion over the next decade (approximately €5.2 billion), while the UNDP's Second National Adaptation Plan (2026–2036) costs 66 priority measures at US$9.8 billion (approximately €8.5 billion). Incremental

decarbonisation investment through 2050 is estimated at a further US$5–7 billion (approximately €4.3–6.0 billion). The combined transition envelope of approximately US$11–17 billion (approximately €9.5–14.6 billion) through 2050 — equivalent to US$0.4–0.7 billion (approximately €0.3–0.6 billion) per year, or 1.5–2.6% of 2024 GDP — is far beyond what current public and donor flows can cover. The CCDR expects approximately 85% of decarbonisation investment to come from private sources, placing regulatory credibility, market design, and the green-finance architecture at the centre of transition strategy.

Three systemic weaknesses cut across all chapters of this report. First, institutional fragmentation: climate- and energy-related competencies are dispersed across at least nine ministries and agencies: MIE, MTCS, MF, ME, NEA, ERE, OST, Customs, Taxes, DPA, without a designated coordination authority for cross-cutting challenges such as CBAM readiness. Second, regulatory implementation gaps: legal frameworks are broadly aligned with Energy Community obligations on paper, but permitting delays, weak State Aid enforcement, and the absence of operational MRV and accreditation infrastructure limit practical effectiveness. Third, a financing architecture mismatch: the identified investment envelope far exceeds current public and donor flows, while private capital mobilisation is constrained by regulatory uncertainty and the absence of domestic green-finance instruments including a green bond market, a domestic taxonomy aligned with the EU Taxonomy, and a national transition-guarantee facility.

Green Industrial Policy in Albania must therefore serve a dual function. First, it must address near-term obligations arising from the CBAM, Energy Community, and EU accession. Second, it must support a longer-term economic transformation toward higher-value, lower-carbon activities, including renewable energy services, grid digitalisation, energy-efficient construction, and industrial decarbonisation. In doing so, it should also strengthen competitiveness, facilitate access to EU markets, promote industrial upgrading, attract investment, support skills development, and ensure adequate social protection. The thematic chapters that follow provide the analytical evidence base for this dual agenda, while the concluding chapter presents a consolidated set of short-, medium-, and long-term policy recommendations.

1

Energy Transition Context and Strategic Relevance

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Photo: pexels.com Enes Beydilli

1. Energy Transition Context and Strategic Relevance

1.1 Energy System Overview

Albania's energy system has a distinctive profile relative to other Western Balkan countries. Its electricity sector is already largely renewable, with domestic power generation dominated by hydropower, while the broader energy system remains strongly dependent on fossil fuels, particularly oil products in transport and heating, limiting overall decarbonisation progress. In shorthand, Albania has a comparatively low-carbon electricity mix but has not yet achieved a low-carbon energy system.

Electricity generation over 2018–2025 illustrates both Albania's structural strength and its core vulnerability. Domestic electricity production has fluctuated significantly year on year, primarily as a function of hydrological conditions. In dry years, most notably 2019 and 2020, production fell to approximately 5.2–5.3 TWh, while in favourable years such as 2021 and 2023 it reached close to 9 TWh. Preliminary data for 2025 indicate production of approximately 7.5 TWh. Hydropower remains the backbone of the electricity system[1], contributing between 78% and over 90% of domestic generation depending on the year, and the electricity supply accordingly remains highly exposed to rainfall patterns and climate variability.

The most important structural change in the generation mix since 2022 has been the rapid emergence of solar photovoltaic generation from under 100 GWh in 2023 to more than 500 GWh in 2024 and close to 1 TWh in 2025. This makes solar PV by far the fastest-growing generation technology in Albania. Its share of domestic electricity production reached approximately 13% in 2025, representing an important transition from marginal deployment to system-relevant contribution. This growth is significant not only in volumetric terms but because it demonstrates that market-based incentives can drive accelerated clean investment when consumers are directly exposed to price signals.

The causal mechanism is important for policy design. When medium- and high-voltage consumers moved into the liberalised electricity market, they became directly exposed to price volatility, particularly during the 2022 energy crisis, when regional spot prices spiked sharply. For many commercial and industrial consumers, investing in on-site solar PV offered a means to reduce exposure to unpredictable market prices and improve control over operating costs. This explains why the strongest growth in solar deployment has occurred in the commercial and industrial self-consumption segment and in utility-scale projects rather than in the residential sector, which remains on regulated tariffs. Regulated tariffs, frozen at 9.5 ALL/kWh from 2015 to February 2025, suppressed the investment signal for this consumer segment.

Beyond electricity, the broader energy balance presents a different picture[2]. Oil products continue to dominate final energy consumption, particularly in transport, where electrification penetration remains limited. Albania's pattern of fossil fuel dependence is therefore concentrated in liquid fuels for mobility rather than in coal or gas for power generation, a structural characteristic that distinguishes it from regional neighbours but also limits the reach of renewable electricity deployment as a decarbonisation strategy. Coal plays a minimal role in Albania's energy profile; natural gas is not a component of final energy consumption. The principal decarbonisation challenge is thus not electricity generation but the gradual substitution of fossil fuel use across the transport and heating sectors.

1 Annex 1 – Electrical Energy Balance

2 Anex 1 – Electrical Energy Balance

The OECD's 2025 Energy Prices and Subsidies in the WB6 provides the most authoritative assessment of Albania's fossil fuel support: across 2018–2023, total energy-sector financial support amounted to approximately €1 billion, comprising €577 million in fiscal support (subsidies, tax expenditures, transfers) and €456 million in credit support through public loans or publicly guaranteed loans. Most of this support was directed toward fossil fuels and toward maintaining below-cost electricity tariffs rather than transition investment. The OECD specifically documents €170.2 million in fossil-fuel support over the period, including VAT exemptions for hydrocarbon exploration, excise reimbursements, and agricultural and fishing-fuel subsidies. Current price regulation is estimated to transfer approximately half its value to the better-off 40% of households, an equity distortion that simultaneously undermines the clean-investment price signal.

Albania's electricity pricing framework thus retains a dual structure that shapes the pace and distribution of clean-energy investment: liberalised market pricing, which exposes larger consumers to cost-reflective signals and has driven commercial and industrial solar deployment; and regulated tariffs for households and low-voltage customers, which protect against energy poverty but weaken incentives for energy efficiency and distributed renewables in this segment[3]. The policy challenge is not the binary choice between maintaining or removing regulated tariffs, but redesigning support instruments to be targeted and means-tested rather than broad-based, so that affordability protection is preserved where genuinely needed while price signals are allowed to encourage investment in efficiency and clean technologies.

1.2 Renewable Energy Sources: Potential, Targets, and Deployment

Albania is well-positioned to expand renewable energy substantially beyond its traditional reliance on hydropower. International assessments confirm favourable natural conditions for solar and wind development, particularly[4]. Solar irradiation levels exceed 1,500 kWh/m^2 annually across most of the country and reach approximately 1,750 kWh/m^2 in southern regions, placing Albania among the more attractive locations in Europe for solar energy generation. IRENA (2021) estimates the technical potential for solar PV at approximately 2,400 MW, corresponding to around 3.7 TWh of annual production, a figure that, in wet hydrological years, would be equivalent to roughly 40% of total domestic electricity production.

Wind energy represents a major long-term opportunity, though deployment remains at an early stage. IRENA (2021) estimates cost-competitive wind potential of up to 7,400 MW, far exceeding any currently deployed or awarded capacity. Optimistic projections from the same source suggest that wind capacity could reach approximately 600 MW by 2030, generating around 1.8 TWh annually. The recent first large-scale wind auction in which more than 220 MW was awarded in 2023, signals a structural shift toward more organised development, though actual commissioning remains years away.

Albania's renewable energy transition is anchored in a set of international, regional, and national commitments that define the policy framework. As a Contracting Party to the Energy Community and a signatory to the Paris Agreement, Albania has committed to aligning its policies with EU climate and energy objectives. The binding Energy Community Ministerial Council Decision (2022) requires Albania to achieve a 52% share of renewable energy in gross final energy

3 Energy Regulatory Entity. (2025). Electricity and natural gas tariffs and prices for the year 2026. https://www.ere.gov.al/media/files/2025/12/24/Tarifat_dhe_%C3%87mimet_e_energjis%C3%AB_Elektrike_dhe_Gazit_natyror_p%C3%ABr_VITIN_2026.pdf

4 International Renewable Energy Agen cy. (2021). Renewables readiness assessment: Albania. IRENA. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/IRENA_RRA_Albania_2021.pdf

consumption by 2030. At the global level, Albania's Nationally Determined Contribution (NDC) commits to a reduction of GHG emissions of approximately 20.9% by 2030 against a business-as-usual scenario, and to a 53.2% reduction, equivalent to 12.00 $MtCO_2eq$, under the Energy Community 2030 target. These commitments are operationalised through the National Energy and Climate Plan[5](NECP, DCM No. 872 of 29 December 2021), which sets a renewable energy target of 54.4% by 2030, subsequently raised to 59.4% in the October 2024 revised draft NECP. The revised NECP also sets sectoral RES targets: 178.1% for electricity (production exceeding demand), 34.6% for transport, and 16.6% for heating and cooling; and targets a final energy consumption reduction of 9.4% and GHG emission savings of 18.7% relative to the with Existing Measures scenario.

Progress toward these targets has been broadly positive but unevenly distributed across sectors. The electricity sector benefits from a high existing renewable share due to hydropower, and solar PV has added rapidly to this baseline in recent years. However, this progress is concentrated in power generation. Transport and industry continue to rely heavily on fossil fuels, and the absence of an approved updated NECP, which remains pending as of mid-2026, creates a strategic gap in the framework for delivering the more ambitious 2030 targets.

The pipeline of awarded renewable energy projects reflects momentum, but also a significant implementation gap between award and commissioning. Albania has increasingly relied on competitive auctions as the central mechanism for allocating new renewable capacity, transitioning from ad hoc feed-in tariff arrangements toward a more structured Contract-for-Difference framework under Law No. 24/2023. The 2024 hybrid solar auction allocated approximately 300 MW of capacity at competitive prices, attracting strong investor interest and demonstrating growing confidence in the sector[6]. The 2023 wind auction resulted in over 220 MW of capacity awarded, the first concrete step toward large-scale wind deployment[7]. The overall utility-scale project pipeline includes several significant investments: a 234 MW onshore wind project led by Biopower Green Energy and Marseglia Group; a 222.5 MW wind project awarded to Guris, Total Eren, and Verbund; the Voltalia 240 MW solar PV portfolio (IFC co-financed at US$34 million- approximately €29 million); the Karavasta 140 MW solar PV project (awarded 2020); and Statkraft's Moglica pumped-storage project. The Skavica hydropower project, planned at approximately 200 MW, is in advanced preparation and would represent the largest single energy investment if it proceeds.

Despite this momentum, a critical limitation is the gap between capacity award and actual commissioning. Many projects allocated in 2023–2024 have not entered construction and are unlikely to be operational before 2027, with the majority of the wind portfolio expected toward the end of the decade. This lag reflects a combination of project development capacity constraints, financing arrangement delays, and administrative process bottlenecks. It also reduces the near-term contribution of new renewables to energy security and diversification, maintaining the system's structural dependence on hydrological variability during a critical transition window.

Continued reliance on fossil fuels and slow diversification of the electricity mix impose tangible economic costs. In dry years, Albania currently imports 30–40% of electricity consumption at spot prices, with import costs rising as neighbouring coal-based generators face increasing carbon pricing under the EU ETS. Continued dependence on oil in transport creates persistent exposure to international oil price volatility and contributes to Albania's structural trade deficit in energy. In 2024, Albania ran a total goods trade deficit of US$5.6 billion (approximately €4.8 billion), up 30.5% from 2023, driven in part by energy imports. Each year of delayed transition sustains these vulnerability channels and forgoes the competitiveness gains that renewable energy at scale and improved energy efficiency would deliver.

5 Ministry of Infrastructure and Energy of the Republic of Albania. (2024). The National Energy and Climate Plan of the Republic of Albania (Version of 31 October 2024). https://www.infrastruktura.gov.al/wp-content/uploads/2024/12/The-National-Energy-and-Climate-Plan-NECP.pdf.pdf

6 Ministry of Infrastructure and Energy of the Republic of Albania. (2024, January 15). Hybrid 300 MW photovoltaic auction launched. https://www.infrastruktura.gov.al/hapet-ankandi-fotovoltaik-hibrid-300-mw/

7 Ministry of Infrastructure and Energy of the Republic of Albania. (2023, July 25). The first wind farm auction: Announcement of the winning bidders. https://www.infrastruktura.gov.al/ankandi-i-pare-i-parqeve-eolike-shpallja-e-fituesve/

1.3 Regulatory Framework for Renewable Energy Deployment

Albania has made important progress in establishing the formal legal and regulatory basis for renewable energy development. The adoption of Law No. 24/2023 introduced a competitive CfD auction framework, replacing the previous feed-in tariff system and aligning Albania more closely with EU and Energy Community best practices. The development of a self-consumption regulatory framework has created a structured pathway for prosumers. In formal terms, the framework is broadly aligned with the country's Energy Community obligations. The central challenge is no longer the absence of rules but the consistency, predictability, and efficiency with which those rules are applied in practice.

The most significant barrier to renewable energy investment is the lack of predictability in the permitting and approval process, particularly for projects that seek to operate in the free market without government support. Investors must interact with multiple institutions, such as the ministry responsible for energy, ERE, OST, OSSH, territorial planning authorities (AZHT), environmental institutions, and, in some cases, additional public bodies, each with a legitimate role but without strong coordination or unified timelines. This fragmentation increases the time and cost of project development and creates uncertainty over when, or whether, a project can move from approval to construction. In practice, companies frequently report that permitting represents one of the main bankability risks for green investments, not a routine administrative step.

The fee structure associated with development permits has attracted particular criticism. Under the framework in place before the 2025 amendments, the application review fee imposed by AZHT for preliminary development permits reportedly reached approximately €5,000 per MW. A level difficult to justify in relation to the actual administrative burden involved, and representing a disproportionate barrier for larger projects. The 2025 amendments[8] replaced this linear per-MW structure with fixed fees differentiated by project size bands: ALL 1 million (~€9,000) for projects up to 2 MW; ALL 5 million for projects of 2–10 MW; ALL 10 million for 10–50 MW; ALL 20 million for 50–100 MW; and ALL 30 million (~€275,000) for projects above 100 MW. While this revision partially reduces the proportional burden on larger projects, concerns persist over the overall level of administrative costs applied to energy infrastructure investment, particularly for utility-scale projects where high upfront permitting fees compound grid connection costs, land acquisition expenses, and other development expenditures.

8 Council of Ministers of the Republic of Albania. (2025, July 31). Decision No. 447 of 31 July 2025. Official Publication Centre (QBZ). http://qbz.gov.al/eli/vendim/2025/07/31/447

The contrast with small-scale self-consumption projects is instructive. For prosumers and smaller installations, OSSH effectively acts as the main contact point for connection and approval, and procedures are correspondingly more streamlined. This streamlined design has contributed directly to the rapid growth of small-scale solar deployment in recent years. Where the procedure is simple, handled through a single point of contact, and applied consistently, deployment accelerates. Where projects require interaction with multiple institutions operating on different timelines and without coordinated sequencing, implementation slows.

Regulatory gaps also affect specific investment configurations. Industrial consumers seeking to develop PV systems for self-consumption without grid connection face an unclear regulatory environment in which neither explicit authorisation nor explicit prohibition exists. In such cases, both investors and authorities may hesitate, blocking commercially viable projects through inaction rather than deliberate policy choice. Similarly, uncertainty over the methodology for determining the purchase price of surplus electricity injected into the grid by prosumers limits optimal system sizing and reduces investment attractiveness in the distributed generation segment.

A universal, energy-sector-wide one-stop-shop mechanism for renewable energy permitting does not yet exist in Albania. For small-scale self-consumption, OSSH performs a de facto single-contact function effectively. For larger renewable energy investments, developers must navigate separate procedures across different institutions without a single coordination point. The strategic investment framework administered by AIDA[9] can provide procedural coordination for projects meeting strategic investor thresholds, but this pathway is selective and not universally accessible. As a result, larger renewable investments face substantially greater administrative burden and uncertainty than smaller ones.

9 Rrotani, V., Bualoti, R., Çelo, M., Gjukaj, A., & Voshtina, E. (2025). Albanian transmission system in the context of the RES development in SEE. In Proceedings of the 11th INTERNATIONAL BLACK SEA COASTLINE COUNTRIES SCIENTIFIC RESEARCH CONFERENCE. Retrieved from https://www.researchgate.net/profile/Viktor-Rrotani-2/publication/390313437_ALBANIAN_TRANSMISSION_SYSTEM_IN_THE_CONTEXT_OF_THE_RES_DEVELOPMENT_IN_SEE/links/67e93bc376d4923a1ae33acf/ALBANIAN-TRANSMISSION-SYSTEM-IN-THE-CONTEXT-OF-THE-RES-DEVELOPMENT-IN-SEE.pdf?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19

1.4 Grid Capacity and Modernisation

Grid infrastructure is increasingly the binding physical constraint on Albania's renewable energy transition. The transmission system was historically designed around a hydropower-based generation structure, with major generating capacity concentrated in the northern highlands and demand centres located primarily in the central and southern parts of the country. As renewable generation diversifies, with solar deployment concentrated in the sunnier southern and central regions, and wind potential concentrated in different geographic zones, actual power flows increasingly deviate from the system's historical design parameters[10], creating voltage, loading, and congestion challenges.

These constraints are already visible in areas with high generation and relatively low local demand. A detailed study of the Burrel sub-region found that 55 hydropower plants with approximately 275 MW of installed capacity produced more than 827 GWh in 2023, while local consumption remained substantially lower. The resulting surplus generation induced reverse power flows, voltage violations, and elevated loading on 110 kV lines. A new 220 kV transmission line, completed in 2025, improved voltage profiles, reduced losses, and decreased line loading in the area, demonstrating that higher-voltage reinforcement can release significant network capacity and resolve local congestion[11]. However, analogous constraints persist elsewhere: the 35 kV Cërrik–Gramsh line remains capacity-limited and requires upgrading to 110 kV to support continued growth in that corridor.

Planned solar PV additions will create additional pressure in the coming years, particularly in the Fier and Hoxhara area, where at least 450 MW of new PV generation is expected. Studies indicate that Hoxhara will need to be developed as a major 220/110 kV substation node to accommodate this generation. Even with planned reinforcements, power flow simulations show that the 220 kV Hoxhara–Fier line could approach approximately 83% of its thermal limit, posing a potential N-1 security concern that requires proactive resolution rather than reactive management. Network analysis for 2028 conditions projects Albania's net transfer capacity at approximately 1,850 MW but estimates that around 100 MW of PV generation may still need to be curtailed due to cross-border congestion, confirming that grid adequacy is simultaneously a domestic infrastructure challenge and a regional market integration challenge[12].

The necessary investments go well beyond building individual new lines. Albania requires a comprehensive modernisation programme encompassing reinforcement of 400 kV, 220 kV, and 110 kV infrastructure; expansion of substations in high-generation zones; stronger interconnections with neighbouring systems; digital grid operation tools; real-time generation and consumption monitoring; improved forecasting for hydro, solar, and wind output; and congestion management instruments. As variable renewable generation grows, and the system moves toward a more diversified hydro-solar-wind structure, storage solutions and demand-response capabilities will also become increasingly important for system balancing.

These grid constraints have direct implications for industrial transition. Large consumers considering electrification

10 Rrotani, V., Bualoti, R., Çelo, M., Gjukaj, A., & Voshtina, E. (2025). Albanian transmission system in the context of the RES development in SEE. In Proceedings of the 11th INTERNATIONAL BLACK SEA COASTLINE COUNTRIES SCIENTIFIC RESEARCH CONFERENCE. Retrieved from https://www.researchgate.net/profile/Viktor-Rrotani-2/publication/390313437_ALBANIAN_TRANSMISSION_SYSTEM_IN_THE_CONTEXT_OF_THE_RES_DEVELOPMENT_IN_SEE/links/67e93bc376d4923a1ae33acf/ALBANIAN-TRANSMISSION-SYSTEM-IN-THE-CONTEXT-OF-THE-RES-DEVELOPMENT-IN-SEE.pdf?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19

11 Hida, A., & Bualoti, R. (2025). The impact of installing a new power transmission line in the distribution areas with high variable renewable energy. In Proceedings of the 5th International World Energy Conference (IWEC 2025) (p. 1284). International World Energy Conference. Retrieved from https://www.researchgate.net/profile/Andi-Hida/publication/399950920_THE_IMPACT_OF_INSTALLING_A_NEW_POWER_TRANSMISSION_LINE_IN_THE_DISTRIBUTION_AREAS_WITH_HIGH_VARIABLE_RENEWABLE_ENERGY/links/6970a268e806a472e6a4e594/THE-IMPACT-OF-INSTALLING-A-NEW-POWER-TRANSMISSION-LINE-IN-THE-DISTRIBUTION-AREAS-WITH-HIGH-VARIABLE-RENEWABLE-ENERGY.pdf

12 Voshtina, E., Hida, A., Çelo, M., & Buhaljoti, R. (n.d.). Assessment of the current operational security in the view of absorption of high PV generation in the Albanian transmission network. In Proceedings of the 12th Conference, Ohrid, North Macedonia, September 17–19. Retrieved from https://www.researchgate.net/profile/Rajmonda-Bualoti/publication/376650457_ASSESSMENT_OF_THE_CURRENT_OPERATIONAL_SECURITY_IN_THE_VIEW_OF_ABSORPTION_OF_HIGH_PV_GENERATION_IN_THE_ALBANIAN_TRANSMISSION_NETWORK/links/6582a9eb2468df72d3be8a3e/ASSESSMENT-OF-THE-CURRENT-OPERATIONAL-SECURITY-IN-THE-VIEW-OF-ABSORPTION-OF-HIGH-PV-GENERATION-IN-THE-ALBANIAN-TRANSMISSION-NETWORK.pdf?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19

of process heat, self-generation, or renewable electricity procurement under power purchase agreements depend on reliable grid access and predictable connection capacity. If grid reinforcement lags renewable investment, industrial users may face delays in grid connection, higher connection costs, curtailment risk, or limited access to clean electricity. The grid, therefore, represents a strategic infrastructure bottleneck whose resolution is a precondition for both renewable deployment and industrial decarbonisation objectives.

1.5 Energy Transition and EU Integration

Albania's energy transition is increasingly shaped by the European Union accession process. The opening of Cluster 4 (Green Agenda and Sustainable Connectivity) in September 2025 places energy, climate, and environmental reforms at the centre of negotiations, and the requirements linked to the Energy Community, the NECP, the Reform Agenda, CBAM readiness, and EU State aid rules are shifting the focus from policy adoption to implementation, enforcement, and measurable outcomes.

Progress across the three accession chapters most relevant to the energy transition (energy, environment and climate, and competition) remains uneven[13], creating an imbalance that carries growing risks. In the energy sector, Albania has made solid and measurable progress, representing one of the more advanced areas in the accession process. Reforms in electricity market liberalisation have moved forward, as has integration with regional and EU markets. Concrete milestones include the launch of the ALPEX day-ahead electricity market in April 2023, the completion of day-ahead market coupling with Kosovo in January 2024, and the subsequent launch of CRIDA intraday auctions in late 2024. At the same time, key structural elements remain incomplete: the updated NECP has not been adopted; the Energy Efficiency Obligation Scheme has not been fully operationalised; biofuels targets in transport have not been met; and progress on the Electricity Integration Package transposition faces an infringement procedure already opened by the Energy Community Secretariat after a missed end-2023 deadline.

13 European Commission. (2025). Progress report for Albania. https://enlargement.ec.europa.eu/document/download/fe9138b7-90fe-4277-a12c-3a03f6d1957f_en?filename=albania-report-2025.pdf

In contrast, the environment and climate chapter exhibits limited progress. Despite its central importance within the EU Green Agenda, legislative frameworks across waste management, air quality, water protection, and climate policy remain pending, and implementation and enforcement capacity is weak. Administrative strengthening has not yet translated into consistent or effective implementation. This gap is particularly significant given the increasing role of environmental and climate alignment as a condition for both accession progress and access to EU pre-accession financing.

The competition policy chapter similarly shows structural weaknesses. While some alignment with EU rules has occurred, particularly in merger control, enforcement remains weak, institutional capacity is constrained, and the independence and effectiveness of State aid control mechanisms continue to be flagged as areas of concern by the Energy Community Secretariat in consecutive annual implementation reports. This matters directly for the energy transition: transparent and non-distortive market conditions are prerequisites for attracting private renewable energy investment and ensuring a level playing field.

The Reform Agenda[14] introduces a more immediate layer of EU-driven obligations, linking financial support from the €922 million Reform and Growth Facility allocation directly to the implementation of specific green-transition measures. These include the adoption of the NECP, progress in decarbonisation policies, development of renewable energy frameworks, and reforms related to energy efficiency and market functioning. The green transition is therefore not only a long-term structural objective but a near-term condition for accessing the external financing on which Albania's investment programme depends. Delays in implementing these reforms have direct fiscal implications.

14 Council of Ministers of the Republic of Albania. (2024, October 10). Decision No. 621 on the approval of the policy document "National Reform Agenda 2024–2027" within the framework of the European Union instrument "Reform and Growth Facility for the Western Balkans". Official Publication Centre (QBZ). http://qbz.gov.al/eli/vendim/2024/10/10/621

2

CBAM Exposure, Carbon Pricing, and Trade Policy

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Photo: pexels.com Enes Beydilli

2.CBAM Exposure, Carbon Pricing, and Trade Policy

2.1 Trade Context and Macroeconomic Exposure

Albania's total goods exports in 2024 amounted to approximately US$4 billion (approximately €3.4 billion), representing an 8.5% decline from US$4.37 billion (approximately €3.8 billion) in 2023[15]. The EU absorbed approximately 67% of these exports — €2,481 million in value according to Eurostat Comext data, a 10.9% decline from 2023[16]. Italy alone accounted for 43.7% of all Albanian exports in 2024, making that single bilateral trade relationship the dominant channel for CBAM exposure. Albania ran a goods trade deficit of US$5.6 billion (approximately €4.8 billion) in 2024, up 30.5% from 2023, in part reflecting higher energy import costs. In the first five months of 2025, the EU share of exports was 67.2% and the EU share of imports 52.5%[17].

CBAM Annex I covers cement (HS 25), fertilisers (HS 28/31), iron and steel (HS 72/73), aluminium (HS 76), hydrogen (HS 2804.10), and electricity (HS 2716). The verified Albanian export values for these categories in 2024 are presented in the table below.

Table 1: Albanian export values for CBAM categories in 2024

HS Chapter / Product	2024 Export Value (US$)	% of Total Exports	YoY Change
HS 27 — Mineral fuels (incl. oil and electricity)	US$484 million (approx. €421 million)	12.1%	n/a
HS 72 — Iron and steel	US$309.7 million (approx. €269 million)	7.7%	-31.4%
HS 26 — Ores, slag, ash	US$152.3 million (approx. €132 million)	3.8%	+10.5%
HS 76 — Aluminium	US$131.1 million (approx. €114 million)	3.3%	n/a
HS 73 — Articles of iron or steel	US$130.7 million (approx. €113 million)	3.3%	+14.9%
HS 25 — Salt, sulphur, stone, cement	Trade surplus US$49.1 million (approx. €43 million)	n/a	+24.2%

Source: INSTAT, 2025 trade data.

At the 4-digit HS level, the most significant export product categories in 2024 were: iron or non-alloy steel bars and rods (2.5% of total exports); electrical energy (2.3%); hydraulic cements (2.0%); chromium ores and concentrates (1.9%); iron ferroalloys (1.8%); and miscellaneous iron and steel structures (1.7%).

Focusing on CBAM-relevant exports to the EU specifically, the DG Trade factsheet of 8 May 2025 records the following EU imports from Albania (Albanian exports to the EU) for 2024.

15 World's Top Exports — Albania's Top 10 Exports. https://www.worldstopexports.com/albanias-top-10-exports/
16 European Commission. DG Trade Factsheet — Albania (8 May 2025). https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_albania_en.pdf
17I nstitute of Statistics (INSTAT). Foreign trade in goods: May 2025. https://www.instat.gov.al/media/arsdypwl/tj-maj-2025-ang.pdf

Table 2: EU imports from Albania (2024)

Sector	EU Imports from Albania (2024)	Trend
Iron and steel	€72 million (vs €98m 2021, €89m 2022, €96m 2023)	Declining
Non-ferrous metals (incl. aluminium)	€56 million, +11.6% YoY	Growing
Petroleum and petroleum products	€398 million, +92.4% YoY	Rebound
Chemicals (HS Section VI)	€594 million, +11.5% YoY	Growing
Ores and other minerals	€20 million, -10.7% YoY	Declining

Source: DG Trade factsheet, 8 May 2025. Cement exports to the EU at CN-8 are not separately published by Eurostat. Climate Analytics estimates Albanian cement exports to Italy at approximately US$13 million in 2023; no equivalent 2024 figure is publicly available.

Adding the verified EU-side numbers gives roughly €130–160 million of CBAM-relevant goods exports to the EU in 2024 (iron and steel €72m + non-ferrous metals incl. aluminum €56m + a cement contribution likely in the low double-digit millions). Not all 'non-ferrous metals' are CBAM-covered aluminum products, so this is an upper bound. A lower bound, limited to iron and steel, is €72 million. The realistic CBAM-direct exposure is therefore in the €72–160 million range, dominated by iron and steel with smaller cement and aluminum contributions.

- As a share of total Albanian exports to the EU (€2,481m): 2.9–6.4%.
- As a share of total Albanian goods exports (US$4 billion ≈ €3.7bn): 1.9–4.3%.
- As a share of GDP: 0.3–0.6% (2024 nominal GDP is estimated at US$25–27 billion or approximately €21.5–23.2 billion)[18].

2.2 Energy-Intensive and hard-to-decarbonise sectors

Albania's industrial energy profile is unusual in the regional context. The electricity sector is based almost entirely on hydropower, which shields the country from the kind of structural CBAM exposure faced by coal-dependent neighbours. Industry accounts for approximately 23% of GDP and 21.2% of the active population. Manufacturing value added is estimated at 5.9–7% of GDP; the energy sector contributes 4.2% of GDP[19].

2.2.1 Cement, the largest hard-to-abate sector

Cement production is responsible for almost 90% of emissions from Albania's Industrial Processes and Product Use sector. Three producers operate in the Albanian market: Antea Cement (Titan Group), the Fushë-Krujë Cement Factory (Seament), and Colacem Albania. Antea has a production capacity of 1.4 million tonnes of cement and 3,300 tonnes of clinker per day, with cumulative investment above €200 million. Antea operates according to EU Best Available Techniques standards and reduced specific heat consumption to 768 kcal/kg clinker in 2024, down from 794 kcal/kg in 2023. Clinker substitution is already in use: the CEM II/A-LL 42.5 R product uses 6–20% limestone substitution and CEM II/B-LL 42.5 R uses 21–35%. Colacem co-processed 4,321 tonnes of Solid Recovered Fuel in 2024 to partially displace

18 International Monetary Fund. (2024). World economic outlook database: https://statisticstimes.com/economy/country/albania-gdp.php
19 Lloyds Bank. Albania: Trade profile. https://www.lloydsbanktrade.com/en/market-potential/albania/trade-profile

fossil fuel inputs. Titan Group has SBTi-validated decarbonisation targets[20]. Nevertheless, cement decarbonisation faces irreducible process emissions from limestone calcination that renewable electricity alone cannot eliminate, requiring clinker substitution, alternative raw materials, or carbon capture as long-term pathways.

2.2.2 Iron and steel, structurally advantaged but exposed

Iron and steel production is dominated by one operator: Kurum International in Elbasan, which covers approximately 85% of the domestic iron market and employs more than 700 workers. Kurum operates an Electric Arc Furnace (EAF) using scrap as feedstock, a technology with intrinsically much lower carbon intensity than blast-furnace routes (approximately 0.2–0.5 tCO_2 per tonne of crude steel, compared with approximately 2.33 tCO_2/t for integrated blast-furnace mills). Combined with Albania's near-zero-carbon electricity, this places Albanian steel production in a structurally advantaged position relative to European comparators. In December 2025, Kurum and Danieli signed a contract for a new €150 million green-steel plant in the Metallurgical Industrial Zone of Elbasan, using Danieli's MIDA Steel Concept, with annual capacity of nearly one million tonnes[21]. Start-up is scheduled for Q4 2027, with a 75-tonne EAF and a continuous scrap-charging system. This investment, if delivered on schedule, would substantially reduce Kurum's CBAM-relevant emission intensity. The decline in Kurum's EU-bound iron and steel exports, from €141 million in 2022 to €72 million in 2024, driven by an August 2024 production stoppage, demonstrates the sector's vulnerability to operational disruption and market uncertainty[22].

2.2.3 Ferrochrome, oil, and gas

AlbChrome employs more than 800 workers across operations in Bulqizë, Elbasan, Tirana, Burrel, and Klos. The Elbasan ferrochrome plant, operating since 1989, has a capacity of approximately 33,000 tonnes per year and is owned by Balfin Group. Ferrochrome production uses electric submerged-arc furnaces but requires carbothermic reduction of chromium ore, inevitably emitting CO_2 from coke and reductants. Although AlbChrome benefits from hydropower-based electricity, its CN-7202 ferro-chromium product is CBAM-covered, and no recent public decarbonisation roadmap has been published. Albpetrol manages more than 1,200 oil wells across seven oilfields with an annual crude production of approximately 110,000 tonnes; two ageing refineries (Ballsh and Fier) operate well below capacity, with Ballsh suspended since 2015. Decarbonisation of these operations is limited and largely passive, with no published roadmap.

2.3 Electricity under CBAM, a contingent advantage

Electricity is currently a CBAM 'winner' for Albania. The Energy Community Secretariat's 2025 CBAM Readiness Tracker confirms that Albania faces a zero CBAM cost on electricity exports to the EU, compared with €33–73 per MWh for the rest of the Western Balkans. In Q1 2026, Albania exported approximately 1.2 TWh net to the EU, with hydropower production up approximately 70% year-on-year following favourable hydrological conditions. This favourable position rests on Albania's near-zero default emission factor for electricity generation, a consequence of the dominance of hydropower, and not on a formal legal exemption from CBAM.

A formal CBAM exemption for electricity requires satisfaction of several conditions: day-ahead market coupling with the EU internal electricity market; transposition of the relevant electricity market acquis; alignment with EU 2030 renewable energy targets; a 2050 climate-neutrality commitment; and effective import controls. Albania has made meaningful

20 Titan Albania. https://titanalbania.com/

21 Albanian Daily News (Dec 2025). Kurum International Invests EUR 150M in Green Steel Production. https://albaniandailynews.com/news/kurum-international-invests-eur-150m-in-green-steel-production

22 Danieli (2026). Introducing Europe's first greenfield MIDA plant. https://www.danieli.com/en/news-media/news/introducing-europe-s-first-greenfield-mida-plant_37_1024.htm

progress toward this pathway. ALPEX launched in April 2023, market coupling with Kosovo was completed in January 2024, and the December 2025 European Commission simplification proposal explicitly acknowledges that current rules do not adequately credit zero-carbon producers like Albania. Full coupling with the EU internal market is, however, unlikely before 2028, and Albania has not yet adopted a long-term low-emission strategy committing to 2050 climate neutrality.

The zero default emission factor is fragile. If the planned 170 MW Roskovec gas-fired plant, approved in December 2024, proceeds, the Albanian grid's emission factor will increase, reducing or eliminating the CBAM advantage on electricity exports. The public debate comparing coal-based and renewable electricity costs should be extended to include a carbon-adjusted comparison: at current EU ETS prices, coal-based electricity faces an additional €60–90 per MWh in carbon cost. The net cost of coal-based power, properly accounting for carbon pricing, is materially higher than headline comparisons suggest, further strengthening the commercial case for maintaining Albania's renewable-dominated electricity system.

2.4 Carbon pricing, current framework and CBAM deductibility

Albania has a carbon tax established under Law No. 9975 of 28 July 2008 on National Taxes, as amended, covering gasoline, diesel, coal, kerosene, solar fuel, heavy fuel oil, and petroleum coke. Current rates are 3 ALL/kg for coal and 3 ALL/litre for liquid fuels. Despite its broad scope — covering more than 72% of national GHG emissions, the effective carbon price is far below the World Bank recommended minimum of 15.3 ALL/kg for coal. The fuel carbon tax generated approximately 2.9 billion ALL (equivalent to approximately €31 million) in revenue in 2024[23]/[24] . The 2024 fiscal package established a trajectory rising to 15.3 ALL/kg for coal by 2030, but parliamentary postponement means the first increment to 4.5 ALL/kg takes effect only in July 2026[24]/[25].

The existing carbon tax is not deductible under CBAM Article 9, for two reasons: it is levied on fuel inputs per physical unit rather than on embedded CO_2 per tonne of CBAM-covered output; and fuel exports are explicitly exempt from the tax. As a result, Albanian cement and steel exporters will pay the full CBAM levy on EU-bound shipments from January 2026 with no domestic deduction, effectively transferring carbon-related revenue to the EU budget rather than retaining it in Albania. The Energy Community Secretariat has estimated that across the Western Balkans, the transfer of carbon revenue to the EU budget could approach €1.2 billion per year if domestic carbon prices remain unaligned with CBAM. While Albania's share of this figure is smaller given its limited industrial base, the forfeiture of domestic revenue from a CBAM-eligible carbon pricing instrument represents a clear policy inefficiency.

2.5 CBAM administrative capacity and MRV infrastructure

MRV and accreditation infrastructure for CBAM compliance are not yet operational. The General Directorate of Accreditation (DPA, operating under ISO/IEC 17011 and employing 11–50 staff) has not accredited any verifier for

23 Tax Foundation (2025). Carbon taxes in Europe — Albania. https://taxfoundation.org/data/all/eu/carbon-taxes-in-europe/

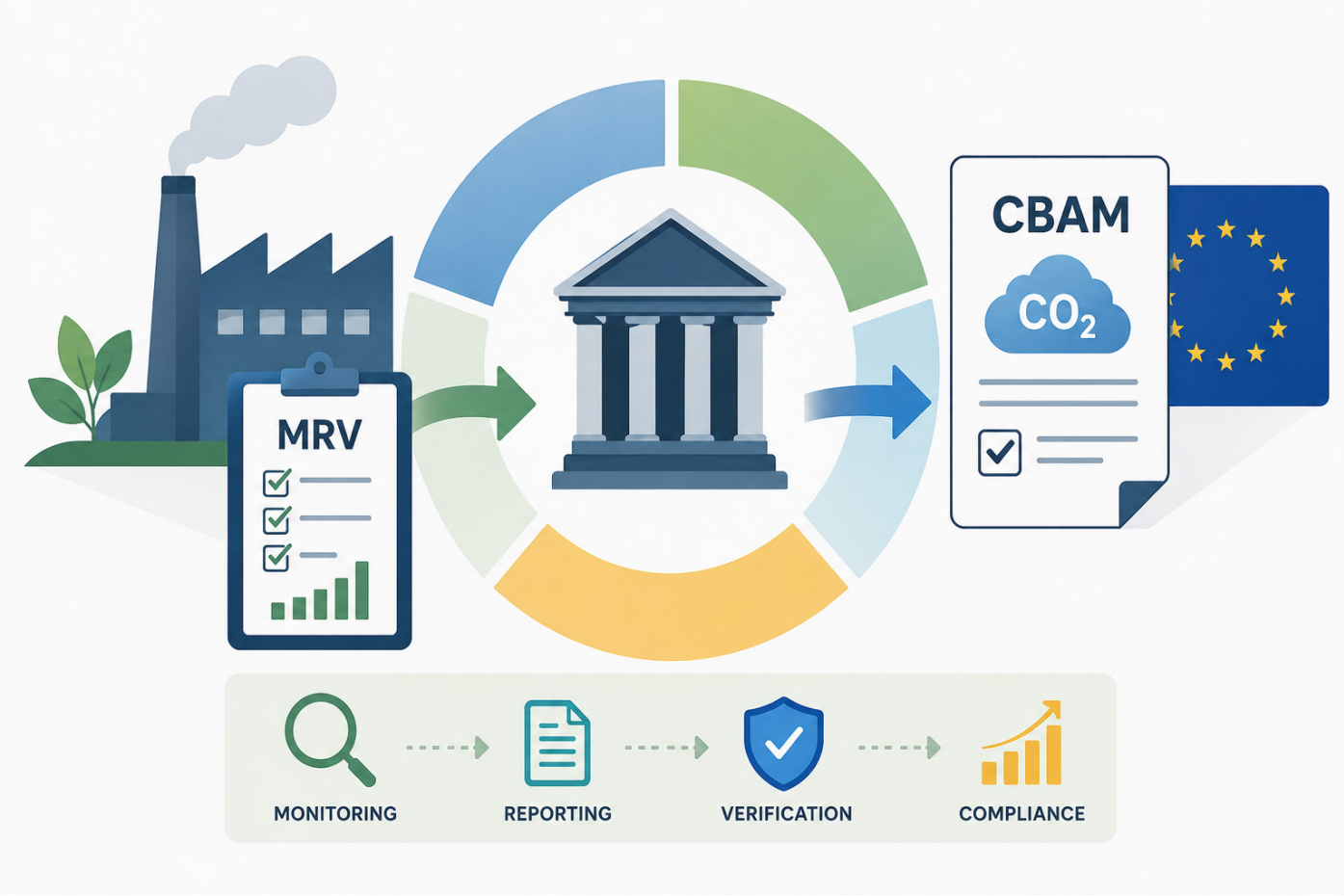
24 Tatime.gov.al — National Taxes (Law 9975/2008). https://www.tatime.gov.al/c/6/72/taksat-kombetare

25 Politiko (Dec 2023). Fiscal package, increases in carbon taxes from 2024-2030 for environmental protection, increased costs for heavy industry. https://politiko.al/english/e-tjera/paketa-fiskale-nis-rritja-e-taksave-te-karbonit-nga-2024-2030-per-mbrojt-i494709

26 Albanian Energy Association. Albania's 2026 Electricity Law: Powering a Competitive, Secure, and Green Energy Future. https://aea-al.org/energy-sector-reform/

ISO 14065 or EU ETS-equivalent GHG verification. NEA holds competence for environmental permitting with a GHG component, but no installation-level GHG emissions registry comparable to the EU Union Registry exists. Albanian exporters must therefore rely on EU-accredited foreign verifiers[27]/[28], increasing compliance costs and impeding domestic institutional learning. The November 2025 EU4Green workshop signalled the beginning of preparatory work on installation-level MRVA infrastructure, but implementation remains at a nascent stage.

Institutional fragmentation is a central obstacle. CBAM-relevant decisions and data are dispersed across at least nine agencies: MIE, ME, MF, NEA, ERE, OST, Customs, Taxes, and DPA, with AKBN, IGEWE, AIDA, and INSTAT also holding relevant competencies without a designated coordination authority. No public list of firms above the 50-tonne CBAM threshold has been published by AIDA, Customs, or INSTAT. Firm-level emissions intensities are not disclosed for any of the four CBAM-exposed producers. Cement-sector energy-use data are not separately specified in national statistics. The Energy Community Secretariat's 2024 Implementation Report specifically flags inadequate EIA capacity, State Aid Council independence concerns, and persistent dependence on donor funding for climate work at the Albanian institutional level[29].



27 EU4Green (Nov 2025), Accreditation of Emissions Trading System Verification.

28 General Directorate of Accreditation (DPA). https://dpa.gov.al/

29 Energy Community Secretariat. (2024, November 1). Albania: Annual implementation report 2024. https://www.energy-community.org/dam/jcr:-d96a206d-606b-4fde-abf8-3f81da29b2b1/IR2024_Albania.pdf

2.6 Indirect CBAM Exposure of MSMEs via EU ETS 2

The EU's 50-tonne de minimis CBAM threshold currently shields most Albanian MSMEs from direct compliance obligations. However, the March 2026 EU Council Parliament decision confirming EU ETS 2 implementation from 2028, covering buildings, road transport, and small industrial installations, creates three indirect transmission channels through which Albanian MSMEs will be materially affected.

First, fuel-cost pass-through: cross-border road haulage between Albania and Italy or Greece will face higher fuel input costs from 2028 as EU ETS 2 covers road transport fuels at the upstream supplier level.

Albanian transport firms with EU-registered fleets, or Albanian exporters using EU-registered hauliers, will face increased logistics costs. Second, buyer-side procurement pressure: EU customers covered by CSRD, CBAM, and CSDDD will increasingly require verified emissions data from Albanian suppliers. In 2024, textiles and clothing represented 28.7% of Albanian exports to the EU, machinery 8.9%, and food, beverages and tobacco 12.6% — sectors collectively representing the bulk of MSME export activity. Third, CBAM downstream expansion: the December 2025 Commission proposal extends CBAM scope to approximately 180 additional steel and aluminium-intensive products from 2028, including window frames, basic auto parts, kitchenware, structural elements, fasteners, and cables, typical outputs of Albanian MSME manufacturers. Default-value mark-ups of +10% in 2026, +20% in 2027, and +30% from 2028 will further disadvantage Albanian SMEs lacking verified emissions accounting systems. The Temporary Decarbonisation Fund of €630 million planned for 2028–2029, financed from 25% of CBAM revenues, is reserved for EU producers only, leaving Albanian SMEs without access to this compensatory mechanism[30].

SMEs constitute 99.8% of Albanian enterprises, employ 80.3% of the workforce (against 66.4% in the EU average), and produce 68.3% of value added. Total active enterprise count at end-2024 was 237,881, with the vast majority being micro-enterprises. Sectoral concentration of SME turnover falls in trade (52.6%), manufacturing (11.4%), and construction (11.2%). The combined effect of ETS 2 pass-through, buyer-side procurement pressure, and CBAM scope expansion will materially affect Albanian MSMEs from 2028 even without triggering direct CBAM compliance obligations.

30 S&P Global Platts (Dec 2025). Brussels to expand CBAM to downstream steel, aluminum; overhaul power import rules. https://www.spglobal.com/energy/en/news-research/latest-news/energy-transition/121625-brussels-to-expand-cbam-to-downstream-steel-aluminum-overhaul-power-import-rules

3

Just Transition, Employment, and Skills

GREEN INDUSTRIAL POLICY

3.1 Regional context and affected communities

In Albania, the regions and communities most affected by the energy transition are not coal-power regions in the classic Western Balkan sense, but rather territories shaped by legacy extractive activity, hydropower dependence, new renewable-energy investments, and energy poverty[31]. UNECE's just transition assessment for Albania explicitly frames the country's challenge around post-coal mining areas and their socio-economic adjustment, rather than the closure of a large active coal-power system. Instead, the relevant territorial dimension centres on communities shaped by legacy extractive activity, particularly chromium mining (Bulqizë, Fushë-Arrëz) regions facing operational change in hydropower, and areas receiving new renewable energy and grid investments (Vlorë, Fier, northern Albania)[32].

The Elbasan industrial cluster is the highest-concentration area of transition risk: Kurum International (700+ steel workers) and AlbChrome (800+ chromium workers) are both CBAM-exposed, and the future of both enterprises depends on successful decarbonisation investments. Fushë-Krujë, where Fushë-Krujë Cement Factory (Cement) operates alongside Antea Cement's Elbasan presence, represents a second significant cluster. The combination of sectoral exposure, geographic concentration, and limited local economic diversification makes these communities particularly vulnerable to transition risks.

3.2 Energy sector employment trends

INSTAT employment and enterprise data across 2018–2024 reveal a structural shift within Albania's energy economy. Total private-sector employment increased from 515,706 in 2018 to 551,189 in 2024, with a temporary contraction to 503,986 in 2020 attributable to the COVID-19 pandemic. Within the energy sector, defined by NACE B (Mining and Quarrying, codes 05–09) and NACE D/E (Electricity, Gas, Water Supply and Waste Management, codes 35–39), employment patterns diverge: mining and quarrying employment declined from 11,540 (2.2% of total employment) in 2018 to 9,614 (1.7%) in 2024, while employment in electricity, gas, water supply, and waste management remained broadly stable, increasing from 21,814 (4.2%) in 2018 to 23,939 (4.3%) in 2024.

Table 3: Employment levels into the energy sector (private sector)

	NACE 2	2018	2019	2020	2021	2022	2023	2024
Total employment (private)	-	515,706	530,853	503,986	519,240	547,942	559,922	551,189
Mining & Quarrying	05-09	11,540	11,318	10,173	9,355	9,202	9,247	9,614
Mining & Quarrying (% of total)	-	2.2%	2.1%	2.0%	1.8%	1.7%	1.7%	1.7%
Electricity, Gas, Water, Waste	35-39	21,814	22,953	23,868	22,822	23,431	24,082	23,939
Electricity etc. (% of total)	-	4.2%	4.3%	4.7%	4.4%	4.3%	4.3%	4.3%

Source: INSTAT (upon author's request, 2026).

31 The Vienna Institute for International Economic Studies (2024). The Energy Transition in the Western Balkans: The Status Quo, Major Challenges and How to Overcome them, available at: https://wiiw.ac.at/the-energy-transition-in-the-western-balkans-the-status-quo-major-challenges-and-how-to-overcome-them-dlp-6896.pdf

32 Ministry of Infrastructure and Energy of Albania. Naional Energy and Climate Plan of the Republic of Albania (2024) available at: https://www.infra-struktura.gov.al/wp-content/uploads/2024/12/The-National-Energy-and-Climate-Plan-NECP.pdf.pdf

Value-added data reinforce the narrative of structural change. Total value added across all market producers increased from ALL 565,478 million (approx. €6.2 billion) in 2018 to ALL 1,008,026 million (approx. €11.1 billion) in 2024. Mining and Quarrying value added declined in share terms from 6.1% of total value added in 2018 to 2.9% in 2024. In contrast, Electricity, Gas, Water Supply, and Waste Management more than doubled in nominal terms from ALL 49,567 million (approximately €545 million) to ALL 101,391 million (€1.12 billion), increasing its share from 8.8% to 10.1%. This pattern confirms that utilities and energy-related services are gaining economic weight relative to extractive industries, a structural trajectory consistent with the energy transition, but the employment gains in utilities have not been sufficient to absorb the workers displaced from mining and quarrying.

Table 4: Value added (mln ALL)in Albanian economy from Mining/quarrying and Electricity, gas, water and waste management

	NACE 2	2018	2019	2020	2021	2022	2023	2024
All market producers (ALL mln)	-	565,478 (€5.7 billion)	582,083 (€5.8 billion)	548,580 (€5.5 billion)	664,217 (€6.6 billion)	849,581 (€8.5 billion)	956,753 (€9.6 billion)	1,008,026 (€10.1 billion)
Mining & Quarrying (ALL mln)	05-09	34,414 (€378 million)	36,570 (€402 million)	20,763 (€228 million	32,995 (€363 million)	45,091 (€496 million)	30,680 (€337 million)	29,425 (€323 million)
Mining & Quarrying (% total)	-	6.1%	6.3%	3.8%	5.0%	5.3%	3.2%	2.9%
Electricity, Gas, Water, Waste (ALL mln)	35-39	49,567 (€545 million)	44,271 (€487 million)	43,483 (€478 million)	47,839 (€526 million)	57,858 (€636 million)	101,048 (€1.1 billion)	101,391 (€1.12 billion)
Electricity etc. (% total)	-	8.8%	7.6%	7.9%	7.2%	6.8%	10.6%	10.1%

Source: INSTAT (upon author's request, 2026).

3.3 Skills gaps and VET supply, side analysis

The VET enrolment data throughout the period 2020–2026 show that the share of energy-related fields increased steadily from 53% in 2020–2021 to 58% in 2025–2026, indicating a growing focus on technical and industrial skills connected to the energy transition.

The strongest contributions come from profiles such as Electrical Engineering, Thermohydraulics, Information and Communication Technology, Mechanical Engineering, Transport Vehicle Services, and Oil and Gas-related studies. Together, these profiles form the core of the technical workforce needed for electricity systems, renewable energy deployment, industrial maintenance, energy efficiency, smart grids, and infrastructure development.

A particularly important trend is the strong growth in ICT-related enrolments, increasing from 1,675 students in 2020–2021 to 2,459 in 2025–2026. This suggests increasing demand for digital and technological competencies, which are becoming essential for modern and smart energy systems.

At the same time, more traditional fossil fuel-oriented profiles, such as Geology and Mining and Oil, Gas, and Water Exploration, show a gradual decline, potentially reflecting changing labour market expectations and the broader shift toward greener and more sustainable economic activities.

Table 5: Number of pupils enrolled in public VETs

VET Profile	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Agribusiness					23	30
Agriculture	654	555	480	473	367	325
Maritime Studies	91	85	70	55	61	48
Economics-Business	1459	1329	1154	1193	1321	1428
Electrical Engineering	1726	1635	1466	1392	1433	1588
Geodesy	65	71	48	49	50	42
Geology and Mining	52	56	52	41	36	22
Hospitality (EHL)					25	101
Hospitality and Tourism	3242	3207	2951	2806	2939	3058
Software Engineering / Computer Engineering	287	319	319	297	297	280
Oil, Gas, and Water Exploration, Drilling, and Exploitation	53	48	34	47	41	29
Culinary Arts (EHL)					25	26
Mechanical Engineering	1056	1047	967	874	851	781
Construction	211	208	167	147	139	96
Wood Processing	158	136	101	100	96	103
Forestry	68	69	59	64	55	70
Transport Vehicle Services	3040	2907	2675	2509	2643	2867
Social and Healthcare Services	664	651	535	546	579	622
Information and Communication Technology (ICT)	1675	1746	1850	2095	2290	2459
Food Technology	768	712	530	393	360	328
Textile and Garment Production	313	282	215	221	232	195
Thermohydraulics	1169	1116	1023	1008	1004	1150
Veterinary Medicine	250	218	225	247	255	257
Elderly Care Services (pilot – GIZ)			109	70		
Chemical Technology	14	13	12			
Food and Beverage (EHL)					15	

VET Profile	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Total	**17015**	**16410**	**15042**	**14627**	**15137**	**15905**
Energy related fields	9058	8874	8386	8263	8595	9176
Energy related fields in %	53%	54%	56%	56%	57%	58%

Source: AKPA (upon author's request). Selected energy-relevant profiles shown; full table available in the original dataset.

At the tertiary level, trends are more mixed. Engineering, Manufacturing, and Construction remain the strongest pillar, with enrolment growing from 20,537 students (17% of total) in 2020–21 to 23,009 (19%) in 2024–25. ICT enrolment grew from 8,341 (7%) to 9,991 (8%) over the same period. These trends support the longer-term pipeline of engineering and digital competencies relevant to the energy transition. However, Natural Sciences, Mathematics, and Statistics declined from 4,924 students (4%) in 2020–21 to 3,540 (3%) in 2024–25, weakening the foundational scientific knowledge base needed for research, innovation, and advanced technology development in energy systems.

Table 6: Tertiary level of enrolment

Field of Study	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Engineering, manufacturing, and construction	20,537	22,555	22.834	23.270	23,009
— as % of total	17%	18%	19%	19%	19%
Information and communication technologies	8,341	7,458	9,297	9,449	9,991
— as % of total	7%	7%	8%	8%	8%
Natural sciences, mathematics, and statistics	4,924	4,553	4,056	3,349	3,540
— as % of total	4%	4%	3%	3%	3%
Total (all fields)	123,797	123,880	121,352	120,063	122,613

Source: INSTAT (upon author's request, 2026).

The National Employment and Skills Strategy 2023–2030[33] provides the main policy framework for workforce adaptation, emphasising lifelong learning, labour market alignment, and the development of green and digital skills. The ETF reports[34] that dual VET expanded to 204 students and 107 companies across tourism, ICT, energy, and transport, and that apprenticeships now constitute up to 70% of curricula in several continuing VET programmes, a relevant development for work-based learning in technical energy trades. GIZ implements projects on renewable energy and energy efficiency training, while UNDP, IRENA, and the EBRD contribute capacity-building initiatives. Despite this multi-stakeholder system, specialised renewable energy training remains insufficient and systematically undersupplied relative to expanding deployment needs.

33 National Employment and Skills Strategy 2023–2030. https://qeverisjavendore.gov.al/wp-content/uploads/2026/02/pv-per-miratimin-e-strategjise-punesimit-dhe-aftesive-2023-2030.pdf

34 European Training Foundation, available at: https://www.etf.europa.eu/en/where-we-work/countries/albania

A major weakness, however, is that specialised renewable-energy training is still insufficient. The ETF's Albania energy-skills work explicitly notes that there is no formal training for photovoltaic installers despite Albania's rapid solar expansion, and that companies have sometimes had to recruit from outside Albania because local candidates lacked the necessary skills. The same source points to growing needs for solar and wind skills, smart-grid operation, project and energy managers, and more specialised engineering profiles. The Energy Academy in Albania, established at the end of 2024 by the Ministry of Infrastructure and Energy of Albania, aims to prepare and develop the next generation of professionals for the national energy sector[35]. The initiative is designed to strengthen technical and professional capacities in areas related to electricity systems, energy infrastructure, digitalization, and the broader energy transition. It also seeks to create stronger links between vocational education, practical training, and labour market needs in the energy sector. Currently, the Energy Academy is part of the organizational structure of the OSHEE GROUP and operates under the direct supervision of the CEO.

So far, the Academy has received support from the European Bank for Reconstruction and Development for the development of training modules aimed at upskilling current employees in the energy sector[36]. To date, 170 employees have been certified, out of a target of 250 participants[37]. Consultations among key public and private stakeholders in the energy sector are currently underway to determine the most appropriate legal structure for the Academy, intending to ensure that it can effectively serve a broad range of stakeholders across the sector.

As for the largest electricity or energy companies, Schneider Electric in Albania as a private-sector example that uses internal training, e-learning, coaching, mentoring, and onsite or virtual visits to smart factories to address skills gaps[38].

For KESH, there is evidence of strategic partnerships linked to future capability-building. A recent KESH announcement on cooperation with AFD and EDF refers to improving operational efficiency, renewable integration, climate resilience, and long-term sustainability[39]. That shows movement toward institutional strengthening, but it still does not provide transparent data on how many employees have been trained so far, nor on the exact training modules delivered.

3.4 Energy poverty framework and social protection

Albania has developed a legal and institutional framework for energy poverty that represents a meaningful first layer of social protection, even if coverage and ambition remain limited. The Law on the Energy Performance of Building[40] contains a legal definition of 'energy-poor households[41] and requires the government to maintain a registry of households in need and protect vulnerable customers through legal safeguards. The Ministry of Health and Social Protection administers a registry with approximately 213,000 eligible households and at least 11,200 active beneficiaries. Key support measures include monthly compensation for electricity price increases for eligible households consuming up to 300 kWh per month, with an annual budget of approximately €14.22 million; disconnection protection for vulnerable customers; and a solar thermal collector subsidy covering up to 70% of installation costs, initially for 2,000 households and subsequently reopened for a further 2,000 families.

35 available at https://albaniandailynews.com/news/deputy-pm-launches-energy-academy

36 OSHEE SUSTAINABILITY PROJECT (2025), available at https://www.ebrd.com/content/dam/ebrd_dxp/documents/project/55236/oshee-sustainability-project-board-report.pdf

37Interview with Mr. Ardvin Kraja, the Head of the Academy of Energy.

38 European Training Foundation. FUTURE SKILL NEEDS IN THE ALBANIAN ENERGY SECTOR (2022).

39 Albanian-French Energy Partnership : KESH and AFD sign a MoU on Drin cascade management and advance energy storage planning. Available at: https://www.afd.fr/en/actualites/communique-de-presse/albanian-french-energy-partnership-kesh-and-afd-sign-mou-drin-cascade-management-and-advance-energy-storage-planning

40 Law No. 37/2025 "Energy Performance of Buildings", available at https://qbz.gov.al/eli/ligj/2025/06/16/37

41 Energy Community (2025). Annual Implementation Report.

Despite these positive developments, significant gaps remain. The Energy Community notes that Albania lacks a national quantitative target for reducing the number of energy-poor households. External analyses indicate that a significant proportion of Albanian households' face difficulty maintaining adequate warmth, and the transition from regulated to more cost-reflective tariffs, initiated with the February 2025 adjustment from the long-frozen 9.5 ALL/kWh rate may increase this proportion without commensurate expansion of targeted support. The policy framework is stronger on protecting vulnerable consumers from immediate affordability impacts than on a comprehensive socio-economic strategy for transition-affected communities, particularly in mining and industrial municipalities.

3.5 Public consultation and community engagement

Formal consultation mechanisms exist in Albanian law and have been applied in select strategic processes, the NECP preparation included a stakeholder consultation phase, and 2025 draft amendments to the Power Sector Law were subject to public consultation. However, civil society monitoring and independent assessments indicate that consultation quality is inconsistent in practice. Several energy-sector reforms have attracted criticism for insufficient transparency, limited public accessibility to key documents, and failure to engage communities in proximity to RES project sites prior to permitting decisions[42]/[43]. The Elbasan Sustainable Energy and Climate Action Plan process provides a positive local-level example of participatory municipal planning, but this remains an exception rather than a systematic feature of energy-transition governance.

Affected workers and communities are currently protected primarily through general social protection, labour-market measures, and vulnerable-consumer energy support, rather than through a dedicated just-transition framework targeting specific energy-transition regions. Albania does not yet have a mature, territorially focused just-transition mechanism of the kind deployed in EU coal regions. Local-level engagement in energy-transition governance is predominantly project-specific rather than institutionally embedded in planning processes.

42 Reform agenda snapshot: Insights from the European Commission's first assessment. Institute for Democracy and Mediation (IDM, 2025). https://reform-monitor.org/wp-content/uploads/2025/10/IDM-Brief-Reform-Agenda-Snapshot.pdf

43 Gas Plant Profile: Roskovec, Albania 2025. Available at: https://beyondfossilfuels.org/2025/11/26/gas-plant-profile-roskovec-albania/

4

Financing the Energy Transition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4.1 Investment needs and the financing gap

Albania's energy transition requires a substantial and sustained investment programme across two distinct but interrelated cost categories: adaptation (protecting people and infrastructure from climate impacts) and mitigation/decarbonisation (transforming the energy and industrial system to reach climate neutrality by 2050).

On adaptation, the World Bank's 2024 Albania Country Climate and Development Report (CCDR) calculates undiscounted adaptation investment needs of US$6.0 billion (approximately €5.2 billion) for Albania over the next decade (in 2020 US dollars). Without this investment, the CCDR projects climate-related economic damages reaching 7% of Albanian GDP by 2050, rising to 15.7% under macroeconomic modelling, approximately three times the loss projected for other Western Balkans countries[44]/[45]. The benefit-to-cost ratio of adaptation investment is estimated at approximately 1.6 for the Western Balkans region, yielding approximately US$4 in returns for every US$1 invested. A more recent and granular estimate comes from the UNDP and the Government of Albania's Second National Adaptation Plan (2026–2036), published in January 2026, which lists 66 priority adaptation measures across agriculture and forestry, energy, transport, urban development, and tourism at US$9.8 billion (approximately €8.4 billion) over the decade. The difference between the CCDR and NAP figures reflects a longer time horizon, more granular bottom-up costing, and a wider scope in the latter[46].

On mitigation and decarbonisation, the CCDR estimates additional regional investment of approximately US$32 billion (approximately €27.5 billion) to reach net-zero by 2050. Albania's incremental decarbonisation investment under this scenario is estimated at US$5–7 billion (approximately €4.3–6.0 billion) through 2050, based on the country's share of regional totals and its relatively lower existing carbon intensity. Annualised, the combined transition investment requirement is approximately US$0.4–0.7 billion (approximately €0.34–0.60 billion) per year, equivalent to 1.5–2.6% of 2024 GDP. The CCDR expects approximately 85% of this investment to come from private sources, with the remaining 15% from public budgets, IFIs, EU instruments, and bilateral donors[47].

Current identifiable public and donor flows cover an estimated 20–40% of this annualised requirement, and even this estimate overstates the net transition contribution, because a substantial share of existing flows has been directed toward fossil-fuel subsidies and tariff stabilisation rather than toward renewable deployment, energy efficiency, or industrial decarbonisation. Albania's National Energy and Climate Plan does not publish a consolidated total investment figure for delivering its 2030 targets[48]. A gap flagged by the Energy Community Secretariat in its review of the October 2024 revised draft NECP, creating a strategic planning vacuum that weakens the credibility of the investment programme with IFI partners and private investors.

44 World Bank Group. (2024, November). Albania country climate and development report. https://www.worldbank.org/en/country/albania/publication/albania-country-climate-and-development-report

45 World Bank Group. (2024, July). Western Balkans 6: Albania country compendium—Country climate and development report. https://documents1.worldbank.org/curated/en/099103024082037555/pdf/P17920514f0e1e0af1b3b019312cb6f0512.pdf

46 United Nations Development Programme. (2026, January 12). Albania's National Adaptation Plan (2026–2036). https://www.undp.org/albania/publications/albanias-national-adaptation-plan-2026-2036

47 World Bank Group. (2024, November 25). Investing in Albania's resilience: A path to protect lives and secure growth. https://www.worldbank.org/en/news/press-release/2024/11/25/investing-in-albania-s-resilience-a-path-to-protect-lives-and-secure-growth

48 Ministry of Infrastructure and Energy of the Republic of Albania. (2024, October). The National Energy and Climate Plan of the Republic of Albania. https://www.infrastruktura.gov.al/wp-content/uploads/2024/12/The-National-Energy-and-Climate-Plan-NECP.pdf.pdf

4.2 International Financial Institutions and donor financing

International financial institutions constitute the dominant non-private source of transition finance and have been the principal vehicle through which Albania has begun diversifying its hydropower-dominated electricity system. The most active institutions are the EBRD, EIB, World Bank Group (IBRD and IFC), KfW, WBIF, and the Green Climate Fund.

The EBRD has the largest single IFI presence in Albania, with cumulative investments of almost €2 billion across more than 130 projects over 30 years, half of which were realised between 2017 and 2022. Its energy portfolio spans renewable generation, transmission, and distribution network reinforcement, and policy dialogue with ERE and OST. The EBRD also operates the Green Cities programme covering Tirana and other municipalities and provides green credit lines to Albanian commercial banks for SMEs and households[49].

The World Bank Group combines analytical work, including the 2024 CCDR, which sets the strategic framework for transition financing, with policy-based lending through Development Policy Operations and IFC private-sector investments. The IFC portfolio includes a US$34 million (approximately €29 million) investment in the Voltalia 240 MW solar PV portfolio, a US$41 million (approximately €35 million) investment in the Balfin Group, and 13 regional advisory projects covering digital finance, agriculture finance, climate finance, and renewable energy[50].

The EU and WBIF are the largest sources of grant-equivalent financing. WBIF has channelled €476.8 million in grants to Albania since 2008 (€410.2 million in investment grants plus €66.6 million in technical assistance), supporting estimated investments of €4.7 billion across rail, road, renewable energy, energy efficiency, electricity transmission, and other infrastructure. Albania benefited from eight EIP flagship investments in 2020–2024 totalling €941.7 million with WBIF grants of €333.4 million. Under the EU Reform and Growth Facility (2024–2027), €922 million is tentatively allocated to Albania, with energy and green-transition reforms among the explicit payment conditions. IPA III provides additional grant funding for technical assistance, climate policy alignment, and capacity-building at MIE, ME, AKM, ERE, and DPA[51].

KfW is the most active bilateral donor on energy efficiency and renewable energy, financing the 400 kV interconnection between Albania and North Macedonia, credit lines for energy-efficient buildings, and TAP-related upgrades. AFD (France) and GIZ/EUKI (Germany) support technical assistance on the NECP revision, energy efficiency in municipalities through the Smart Energy Municipalities programme, and just-transition planning. The Green Climate Fund, working through UNDP, has financed the National Adaptation Plan process, including the second NAP costed at US$9.8 billion (approximately €8.4 billion). The Climate Investment Funds Industry Decarbonization Program is a potential future source for cement, steel, and ferrochrome decarbonisation but has not yet been programmed for Albania[52].

49 European Bank for Reconstruction and Development. (2023, June). The EBRD in Albania: Results snapshot. https://www.ebrd.com/content/dam/ebrd_dxp/assets/pdfs/country-strategies/albania/Albania_Snapshot_For_Publication_14062023.pdf

50 World Bank, Albania country page. https://www.worldbank.org/ext/en/country/albania

51 WBIF, Albania country page. https://www.wbif.eu/beneficiaries/albania

52 Energy Community Secretariat. (2022, February). Policy Guidelines by the Energy Community Secretariat 01/2022 on the applicability of the 53 Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG) in the Energy Community. www.energy-community.org/dam/jcr:530a395d-3c5e-4975-bba4-51f1358dcffe/PG_01-2022_CEEAG_022022.pdf

4.3 Green Finance and the financial sector

Albania's commercial banking sector shows conditions broadly conducive to green lending. Bank of Albania data through mid-2025 indicate private-sector credit growth of 15.7% year-on-year at end-2024 and 14% in Q3 2025. Enterprise loans grew by an average of 15.5% annually in the first half of 2025. The NPL ratio fell to 4.3% in October 2025, the lowest level since 2008. The Bank of Albania reduced its policy rate from 3.25% at the start of 2024 to 2.5% in July 2025, with the Bank Lending Rate declining to 8.32% in September 2025. Long-term credit represents approximately 66% of total private-sector credit, with long-term loans contributing approximately 11.5 percentage points to overall credit growth in H1 2025[53]. The corporate segment dominates business credit, with corporate loans representing 53.9% of business loans at June 2025; small and medium-sized enterprises together represent approximately 46.1% of total business loan stock.

The flagship green-finance instrument is the EBRD Green Economy Financing Facility (GEFF) Western Balkans, launched in 2017 with a regional envelope of €85 million. GEFF channels EBRD credit lines through Albanian partner banks, including ProCredit Bank, Raiffeisen Bank, and Tirana Bank, and microfinance institutions, including Fondi BESA, with initial Albanian credit lines of €9 million, subsequently expanded. EU grants covering up to 20% of the investment (cashback incentives) are embedded in the facility, with over €1.8 million in EU incentives allocated to the Albanian programme. GEFF has supported more than 9,000 Albanian households in investing in energy efficiency, and over 18,000 households across the Western Balkans[54]/[55]/[56]. Austria's Federal Ministry of Finance funds a technical-assistance component covering energy audits for apartment buildings. Non-bank microfinance institutions collectively hold a loan portfolio of ALL 57.6 billion (~€560 million), equivalent to approximately 7% of the total Albanian loan portfolio as of end-March 2024[57].

53 Bank of Albania (Jul 2025). Trends in Lending — July 2025. https://www.bankofalbania.org/rc/doc/Tendencat_ne_kreditim_2025_july_eng_WEB_31556.pdf

54 GEFF Albania. https://ebrdgeff.com/albania/

55 EBRD (2022). EBRD and ProCredit promote energy efficiency in Albania. https://www.ebrd.com/home/news-and-events/news/2022/ebrd-and-procredit-promote-energy-efficiency-in-albania.html

56 The Western Balkans residential Green Economy Financing Facility: Results so far and recommendations for further action (Briefing). CEE Bankwatch Network, 2024. https://bankwatch.org/wp-content/uploads/2024/01/2024_01_Western-Balkans-residential-Green-Economy-Financing-Facility.pdf

57 Albanian Daily News (May 2024),. Microfinance Lending Continues to Expand. https://albaniandailynews.com/news/microfinance-lending-continues-to-expand

The GEFF instrument is well-designed for residential energy efficiency and small renewables, but has structural limitations for the industrial decarbonisation challenge. It is concentrated in the residential and small-business segments, maximum loan sizes are modest, and no equivalent dedicated facility exists for cement, steel, or ferrochrome decarbonisation at the scale required. More broadly, Albania lacks a sovereign green bond (no government green bond issuance as of 2026), a corporate green bond market, a domestic green taxonomy aligned with the EU Taxonomy, a sustainability-linked loan or bond market, and a national green or transition guarantee facility. The Bank of Albania's Medium-term Development Strategy 2024–2026 mentions financial market development but does not include a dedicated green-finance regulatory roadmap.

4.4 Public spending on energy programmes

Albania does not publish a consolidated line-by-line breakdown of annual public spending on energy programmes, a transparency gap that hampers strategic planning. Available estimates draw on the state budget, OECD energy subsidies inventory, and donor disbursement reports. The 2024 Albanian state budget totalled 735.9 billion ALL (approximately €7 billion), with infrastructure, covering MIE's portfolio of roads, water, reconstruction, and energy, projected at 52.87 billion ALL in capital and current expenditure. The budget document does not isolate an energy-only share[58].

The OECD's 2025 Energy Prices and Subsidies in the Western Balkans provides the most comprehensive consolidated estimate: across 2018–2023, total Albanian energy-sector financial support was approximately €1 billion, comprising €577 million in fiscal support and €456 million in credit support, or roughly €170 million per year. Most of this flowed to fossil fuels and below-cost electricity tariffs; fossil-fuel-specific support amounted to €170.2 million over the period, while electricity-sector firms received approximately €49.1 million per year on average in fiscal transfers and credit support. The fuel carbon tax collected approximately 2.9 billion ALL (~€31 million) in 2024. The primary energy-related fiscal revenue is, though, insufficient relative to the scale of the transition financing need.

Donor and IFI flows are the dominant funding source for green programmes, estimated at €50–100 million per year, supplemented by a comparable or smaller level of domestic public green-energy spending. Pulling these figures together, total identifiable green-energy and energy-efficiency spending is in the range of €100–200 million per year. Against an annualised transition investment requirement of US$0.4–0.7 billion (approximately €0.4–0.6 billion), current flows cover approximately 20–40% of need and this comparison itself overstates the net transition contribution given the continued weight of fossil-fuel support in the total.

4.5 State Aid Framework and regulatory constraints

Albania is bound by the EU State aid acquis — including the CEEAG (2022) and the General Block Exemption Regulation, through the Energy Community Treaty since 2006, irrespective of its candidate country status. The Energy Community Secretariat formally endorsed the CEEAG in Policy Guidelines 01/2022, making it the reference framework for State aid assessment in Contracting Parties. The binding constraint on Albania's transition is not that these rules are overly restrictive, but that they are inadequately enforced, simultaneously inhibiting legitimate green-transition support and permitting continued fossil-fuel preferentialism through unnotified schemes[59]. The State Aid Council (SAC, Këshilli i Ndihmës Shtetërore) is the formal enforcement authority. The Energy Community Secretariat's Implementation Reports

58 Council of Ministers (Dec 2023). State Budget 2024. https://www.kryeministria.al/en/buxheti/

59 European Commission. (2022, January 27). Questions and answers on the Guidelines on State aid for climate, environmental protection and energy 2022. https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_566

for both 2024 and 2025 reiterate concerns about the SAC's limited independence and under-resourcing: 'Full compliance with the Treaty's obligations in the area of State aid would require an independent State aid authority with sufficient human and technical resources.' The SAC has reviewed individual energy-sector cases — including state support for the Karavasta solar PPA (Remas) and a 2024 offshore solar PPA at HEC Vau i Dejës, but the institutional architecture remains structurally weak[60]/[61].

This creates five specific pathways through which inadequate State aid governance affects the energy transition: it slows the design of legitimate green-support schemes, as any new instrument risks Energy Community infringement proceedings without independent SAC clearance capacity; it perpetuates unnotified fossil-fuel preferentialism (€170.2 million over 2018–2023 per the OECD estimate); it introduces residual legal risk into renewable energy auction contracts (CfD instruments are State aid by EU classification), pricing itself into developer bids; it constrains access to EU pre-accession financing where State aid compliance is a horizontal disbursement condition; and it weakens the credibility of any future CBAM-compatible domestic carbon price with EU counterparts.

The CEEAG framework affords significant flexibility for legitimate green support. Aid can cover up to 100% of the funding gap when allocated through competitive bidding. Contracts for Difference are explicitly recognised as a permissible instrument for renewable energy support. The framework covers thirteen permissible aid categories directly relevant to Albania, including renewable energy and GHG reduction (catch-all), building energy performance, clean mobility, security of supply, grid infrastructure, storage, district heating, and industrial decarbonisation. Aid for natural gas under the CEEAG faces strict lock-in conditions, of direct relevance to the Roskovec gas project, which risks Energy Community infringement and accession complications if structured as a state aid scheme.

Competition policy constraints compound these challenges. KESH remains dominant in electricity generation, with 95–98% of public generation under its control. OST is the sole transmission system operator. Households and small businesses at 0.4 kV remain on regulated tariffs under FSHU. The Supplier of Last Resort regime for 6 kV consumers was extended to 31 December 2025. OSSH continues to procure most distribution network losses through non-market public service contracts. The ACA had a 2022 operating budget of approximately ALL 74.6 million (~€680,000) and 46 staff, resources insufficient for effective competition enforcement across an economy undergoing rapid energy-sector liberalisation[62]/[63].

4.6 Costs of investment delay

The costs of delaying the transition investment programme are compounding and concrete. Four categories of cost are identifiable with quantitative evidence.

Climate damages are the most substantial: the CCDR projects a 7% GDP loss by 2050 under conservative estimates and 15.7% under macroeconomic modelling in the absence of proactive adaptation investment. The CCDR's benefit-to-cost ratio of approximately 1.6 for adaptation, and the scale of adaptation needed at US$9.8 billion (approximately €8.4 billion) per the NAP, imply that frontloaded investment is the fiscally rational choice even before considering the benefits of avoided damages to infrastructure, agriculture, and health.

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60 Energy Community Secretariat. (2024, November). Albania: Annual implementation report 2024. https://www.energy-community.org/dam/jcr:-d96a206d-606b-4fde-abf8-3f81da29b2b1/IR2024_Albania.pdf

61 Energy Community Secretariat. (2025, November). Albania: Annual implementation report 2025. https://www.energy-community.org/dam/jcr:3e3eef90-0f2e-4140-844b-31202aceb22f/Albania_IR25CP.pdf

62 Law No. 9121/2003 On the Protection of Competition (WIPO Lex). https://www.wipo.int/wipolex/en/legislation/details/10580

63Global Competition Review. (2023). Albanian Competition Authority profile. https://globalcompetitionreview.com/insight/enforcer-hub/2023/organization-profile/albanian-competition-authority

Forfeited domestic carbon revenue represents the second category. In the absence of a CBAM-eligible domestic carbon price, the differential between Albania's current 3 ALL/kg coal tax and the World Bank-recommended 15.3 ALL/kg and the embedded carbon cost implicit in CBAM is paid by Albanian exporters into the EU budget rather than retained domestically. The Energy Community Secretariat estimates that carbon revenue transfers from Western Balkans countries to the EU budget could approach €1.2 billion per year at the regional level if domestic carbon prices remain unaligned.

Stranded assets and lock-in risk constitute the third cost category. The planned 170 MW Roskovec gas-fired power plant, approved in December 2024, risks becoming stranded as the EU ETS carbon price rises and as the electricity CBAM exemption pathway becomes available only to fully decarbonised exporters. Proceeding with Roskovec would also raise Albania's grid emission factor, eroding the zero-CBAM-cost advantage on electricity exports. Each year the project advances without a credible renewable alternative increases the eventual write-down cost and the lock-in of carbon-intensive infrastructure.

Lost EU accession credit and concessional finance is the fourth category. The €922 million Reform and Growth Facility allocation is explicitly conditioned on green-transition reform delivery. Delay in transposing the Electricity Integration Package, adopting a long-term 2050 climate strategy, and accrediting GHG verifiers has already contributed to slower disbursement under available EU financing instruments. The infringement procedure opened by the Energy Community Secretariat over missed EIP transposition deadlines (end-2023) creates an additional reputational and legal risk affecting investor confidence.

5

Data Centres and Digital Infrastructure


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Data Centres and Digital Infrastructure

The potential for data centre development in Albania merits consideration as part of a forward-looking Green Industrial Policy, both because of the comparative advantages the country's energy profile creates and because of the economic diversification benefits that digital infrastructure investment could deliver. This chapter provides a preliminary assessment based on available evidence; the findings warrant deeper investigation through primary research with digital infrastructure operators and development finance institutions.

Albania's renewable electricity profile creates a structural advantage for energy-intensive data centre operations relative to most European comparators. Data centres consuming electricity at Albania's current grid emission factor would incur near-zero CBAM costs on electricity inputs, a significant benefit as EU digital infrastructure operators face increasing pressure to decarbonise their energy consumption and demonstrate scope 2 emissions reductions. This advantage is directly analogous to Iceland's and Norway's positioning as data centre destinations based on hydropower availability, though Albania's advantage is smaller in scale and more variable.

Economic benefits from data centre development would include direct foreign direct investment and construction employment, high-quality permanent technical jobs in server operation, network management, cybersecurity, and facility management, ICT skills demand that could pull through improvements in tertiary education and VET supply, GDP diversification away from extractive and low-margin manufacturing sectors, and — for hyperscale operators seeking to locate EU-adjacent infrastructure — potential anchor demand that could accelerate the commercial case for large-scale renewable and storage investments, improving the viability of projects in the generation pipeline.

Albania's growing ICT sector, with tertiary ICT enrolment increasing from 8,341 to 9,991 students between 2020–21 and 2024–25, and ongoing improvements in digital infrastructure and regional connectivity provide a human capital and connectivity foundation for this value proposition. The country's geographical position at the interface of EU and Western Balkans digital infrastructure corridors, combined with improving fibre connectivity and energy grid integration, enhances its attractiveness to operators seeking EU-adjacent but lower-cost locations.

Prerequisite conditions that would need strengthening include: grid reliability and quality-of-supply guarantees for mission-critical loads (data centres require very high availability levels that current distribution network performance may not consistently meet); competitive and cost-reflective electricity pricing accessible to large industrial consumers under transparent and stable long-term PPAs; clear and predictable permitting pathways for large-footprint industrial facilities; and alignment of data protection and cybersecurity frameworks with EU standards, relevant for operators processing EU-origin data. The regulatory and institutional gaps identified in earlier chapters, particularly around permitting predictability and electricity pricing, therefore directly affect Albania's competitiveness as a data centre destination.

The decarbonisation dimension of data centre development also requires attention. Attracting data centre investment should be conditioned on mandatory renewable electricity procurement requirements, through Power Purchase Agreements or equivalent green certificate mechanisms to ensure that new large industrial electricity loads are matched by additional renewable capacity rather than absorbed by existing generation, and to maintain the grid's near-zero emission factor. This design principle would transform data centre investment from a potential strain on the renewable energy balance into a catalyst for additional renewable deployment.

6. Policy Recommendations

The following recommendations are organised as short-term priorities (2026–2027) addressing immediate compliance obligations deliverable within existing institutional and legislative frameworks; medium-term actions (2028–2030) addressing structural investment, skills, and institutional gaps; and long-term structural reforms (post-2030) aligning Albania with EU Green Deal commitments and building durable competitive advantages. Each recommendation is grounded in the analytical findings of the preceding chapters.

6.1 Short-Term Priorities (2026–2027)

6.1.1 Energy transition and governance

▪ Adopt and publish the updated NECP before the end of 2026, incorporating a consolidated investment figure for delivering 2030 targets, addressing the gap flagged by the Energy Community Secretariat, and submit the long-overdue long-term 2050 climate-neutrality strategy.

▪ Establish a statutory one-stop-shop mechanism for utility-scale renewable energy projects: a centralised permitting registry with binding timelines, transparent first-come-first-served project sequencing, and a single institutional accountability point building on the AIDA strategic-investment framework but with universal scope and no minimum investment threshold.

▪ Publish a prosumer surplus electricity purchase price methodology and clarify the regulatory treatment of grid-independent industrial self-consumption systems to eliminate the current investment uncertainty in these market segments.

▪ Confirm and implement the July 2026 coal-tax increment to 4.5 ALL/kg as the first step in the statutory trajectory toward 15.3 ALL/kg by 2030; ensure the trajectory is protected from further parliamentary postponement through inclusion in a multi-year fiscal framework.

6.1.2 CBAM readiness

▪ Albania should develop a structured support programme for exposed industries, including emissions monitoring, energy audits, electrification roadmaps, renewable electricity procurement options and guidance on EU carbon reporting requirements. This should be treated not only as a climate measure, but as a competitiveness measure for exporters.

▪ Establish a CBAM Coordination Unit by Council of Ministers Decision (hosted in MFE or the Prime Minister's Office) with permanent representation from MIE, ME, MFE, NEA, ERE, Customs, Taxes, DPA, and INSTAT. This is the single highest-leverage administrative reform Albania can undertake before mid-2026; it requires no new legislation and would resolve the institutional fragmentation currently preventing coherent CBAM engagement with Brussels.

▪ Mandate NEA to design and operationalise a firm-level GHG emissions registry by 2027; task DPA to accredit two or three domestic or EA-MLA-affiliated ISO 14065 GHG verifiers by end-2026; develop and roll out installation-level monitoring plans starting with the four CBAM-exposed firms.

▪Negotiate a technical implementation Memorandum of Understanding with DG TAXUD and DG CLIMA on CBAM application, reporting standards, and the electricity exemption pathway, and push for a formal Commission position recognising Albania's near-zero emission factor pending full market coupling.

6.1.3 State aid and regulatory governance

▪ Systematically notify all existing and future energy-sector support measures through the SAC under CEEAG categories, replacing the current pattern of unnotified fossil-fuel support with a compliant framework. This is a zero-fiscal-cost reform that directly improves the enabling environment for transition financing.

▪ Commence the structural strengthening of the SAC: increase staffing and budget, establish a statutory publication requirement for all energy-sector decisions, and clarify the institutional interface with ACA to avoid enforcement gaps at the competition–sector regulation boundary.

6.2 Medium-Term Actions (2028–2030)

6.2.1 Renewable energy and grid investment

▪ Restructure the carbon tax into a CBAM-deductible Article 9-compliant instrument, either through a small sectoral ETS covering cement, steel, and ferrochrome, or through a redesigned output-based emissions tax levied per tonne of embedded CO2 aligned with EU ETS methodology. Retain the phased trajectory to 15.3 ALL/kg (coal equivalent) by 2030.

▪ Develop and implement a comprehensive Grid modernisation that must shift from planning to execution through a sequenced investment programme covering 400 kV, 220 kV, and 110 kV reinforcements, substations in high renewable zones, distribution refurbishment, smart metering, real-time monitoring, better forecasting, and congestion management. Generation planning and grid planning should be synchronised so that awarded renewable capacity can connect without delays, high costs, or curtailment.

▪ Financing frameworks should also be strengthened. Competitive auctions should remain the main mechanism for utility-scale renewable deployment. For SMEs, practical tools such as targeted grant loan combinations, on-bill financing, and standardised ESCO models can help expand distributed generation and energy efficiency.

▪ Skills and delivery capacity should be treated as a core system constraint. Albania needs targeted programmes for grid engineers, PV and wind technicians, storage and system integration specialists, energy auditors, and building retrofit professionals. These should be linked with certification schemes, vocational education, and partnerships with industry. Public institutions also need stronger project preparation capacity, so that projects in the National Single Project Pipeline can move from early stage or partial maturity to implementation.

6.2.2 Industrial decarbonisation

▪Mobilise targeted blended finance through WBIF, EBRD, EIB, and the Climate Investment Funds Industry Decarbonization Program for the three most capital-intensive industrial decarbonisation investments: Antea

Cement and Colacem clinker substitution; Kurum International's MIDA Steel green-steel transition (€150 million, commissioning Q4 2027); and AlbChrome smelter electrification.

▪ Introduce green public procurement standards for low-carbon cement and steel in Albanian public infrastructure contracts — leveraging the government's construction pipeline (post-earthquake reconstruction, road and energy infrastructure) as a domestic demand signal for decarbonised industrial products.

▪ Develop a bilateral CBAM action plan for Italy, given that the single Italian trade relationship accounts for 43.7% of total Albanian exports and constitutes the dominant CBAM exposure channel; include a joint MRV technical assistance component.

6.2.3 Just transition and skills

▪ Develop and publish a territorial Just Transition Roadmap for the Elbasan industrial cluster (Kurum International, AlbChrome) and the Fushë-Krujë and Elbasan cement operations, with dedicated retraining programmes, worker social-protection measures, economic diversification investments, and community engagement mechanisms.

▪ Introduce formal PV installer and wind technician certification within the national VET framework in coordination with ETF, GIZ, IRENA, and industry associations to address the documented gap between accelerating solar deployment and the absence of a formal training and certification pathway for installation and maintenance workers. Expand dual education and apprenticeship schemes in renewable energy fields such as photovoltaic installation, wind turbine maintenance, energy efficiency, and smart-grid management.

▪ Strengthen cooperation between renewable energy companies, VET schools, universities, and municipalities to align curricula with labour market needs.

▪ Transform the Energy Academy into a national multi-stakeholder training center serving public institutions, private companies, VET providers, and universities.

▪ Support retraining programs for workers from declining extractive industries toward renewable energy, construction, maintenance, and environmental services.

▪ Strengthen investment in research and innovation on renewable energy, energy storage, and climate technologies through cooperation between universities and industry.

▪ Expand the energy poverty support framework to include a national quantitative target for the reduction of energy-poor households, broaden eligible measures beyond electricity bill compensation to include heat pumps and building envelope retrofits, and upgrade the registry to real-time consumption data to improve targeting efficiency.

▪ Make pre-permitting community consultation for RES projects above 10 MW mandatory and standardised, with published timelines, document accessibility requirements, and a structured feedback mechanism linking community input to permitting decisions.

6.2.4 Finance and green financial architecture

▪Publish a consolidated NECP investment requirement figure and a rolling green public investment plan aligned with EU pre-accession fiscal frameworks, to close the strategic data gap and improve programme credibility with IFI partners.

▪Develop a National Green Finance Architecture: adopt a domestic green taxonomy aligned with the EU Taxonomy; prepare a pipeline of green bond issuances beginning with a sovereign climate bond; and establish a national transition-guarantee facility as a first-loss instrument to de-risk private lending for industrial decarbonisation and building energy efficiency.

▪Scale up MSME-focused green-finance instruments beyond the current GEFF retail level, targeting energy efficiency in manufacturing and SME clean-technology adoption: deploy an EBRD Green Economy Window facility dedicated to Albanian MSMEs, with a minimum envelope of €100 million, combined with AIDA technical assistance for emissions accounting and investment preparation.

▪Introduce Albanian-language CBAM/ETS 2 guidance materials and a dedicated helpdesk at AIDA for SME exporters; integrate emissions-accounting system upgrades into existing SIPPO and AIDA export-promotion vehicles ahead of the 2028 ETS 2 implementation date.

6.3 Long-Term Structural Reforms (Post-2030)

6.3.1 EU integration and market coupling

▪Pursue full ALPEX–EU internal electricity market coupling, securing a formal legal electricity CBAM exemption pathway as opposed to the current contingent advantage based on the near-zero default emission factor. Full coupling is the highest-leverage single step for locking in Albania's competitive advantage on electricity exports.

▪Complete transposition of the Electricity Integration Package in full, resolving the current Energy Community infringement procedure and unlocking the associated pre-accession financing conditionalities under IPA III and the Reform and Growth Facility.

▪Albania should move from a narrow renewables expansion approach toward a coherent Green Industrial Policy. The central objective should be economy-wide electrification, using Albania’s largely renewable electricity base to decarbonise transport, heating, and cooling, and industry. This includes e-mobility, heat pumps, solar thermal, efficient industrial processes, and systematic use of waste heat where feasible.

▪Renewable energy deployment should also be linked to industrial and value chain development. Albania should promote local service ecosystems for installation, operation, and maintenance, engineering, digital energy services, and clean technology supply chains. Public procurement and industrial support schemes should favour low-carbon processes and products, while remaining compatible with EU competition rules. This would strengthen CBAM resilience and help Albanian firms integrate more deeply into EU value chains.

▪Long-term infrastructure choices should be screened against EU decarbonisation pathways. Albania should avoid

investments that risk creating carbon lock-in and should prioritise storage, interconnection, grid digitalisation, system flexibility, and electrification. The strategic shift should be from adding renewable capacity to delivering system-wide outcomes: reliable supply, lower system costs, stronger industrial competitiveness, and full integration with EU energy and climate frameworks.

6.3.2 Green finance and industrial strategy

▪Adopt and enforce a domestic green taxonomy aligned with the EU Taxonomy as the regulatory basis for green public procurement standards, sustainable finance labelling, and corporate climate disclosure, creating the institutional infrastructure for a functioning Albanian green capital market.

▪Develop a national industrial decarbonisation strategy to 2050, covering sector-specific carbon budgets, technology roadmaps, and investment plans for cement, steel, ferrochrome, and transport fuels, providing the long-term certainty that industrial investors require to commit to capital-intensive decarbonisation transitions.

▪Integrate green industrial policy objectives into EU value chain development strategy: position Albanian firms and regions as suppliers in renewable energy equipment assembly, green hydrogen logistics, sustainable construction materials, and circular economy services, leveraging EU accession as a market access enabler.

▪Build SAC institutional capacity to the standard required for EU accession Chapter 8 (Competition Policy) closure, enabling full access to EU State aid instruments (including any future Just Transition Fund equivalent) and providing the regulatory certainty needed to attract large-scale private industrial decarbonisation investment.

6.3.3 Digital and data infrastructure

▪Commission a targeted feasibility study on Albania's competitiveness as a data centre location, covering electricity pricing, grid reliability, land availability, digital connectivity, and regulatory alignment with EU data governance standards, providing the evidence base for a sector-specific GIP instrument.

▪Develop a data centre investment promotion package through AIDA, conditional on renewable electricity procurement requirements (PPAs or equivalent), linking digital infrastructure investment explicitly to the additionality of renewable capacity and preservation of the near-zero grid emission factor.

GREEN INDUSTRIAL POLICY

Annex I

Electrical Energy Balance (MWh)

Year	2018	2019	2020	2021	2022	2023	2024	2025
Total Domestic Electricity Production	8552154.00	5207929.00	5313032.00	8962703.00	7002647.00	8795634.00	7836625.00	7467589.00
From PV Plants	0.00	22196.00	32266.00	40756.00	51260.00	89724.00	506548.00	984068.00
Gross Import	1771740.00	3176515.00	3238631.00	2252548.00	3043533.00	1921743.00	2668771.00	3375269.00
Gross Export	2685045.00	77048.00	963027.00	2800443.00	2122527.00	2841555.00	2334878.00	2497802.00
Domestic Electrical Energy Consumption	7638848.00	7613964.00	7588636.00	8414808.00	7923653.00	7875822.00	8170517.00	8345057.00
Grid Losses	1783118.00	1653465.00	1630632.00	1784871.00	1657835.00	1654540.00	1614264.00	1592955.00

Source INSTAT

Year	2018	2019	2020	2021	2022	2023	2024	2025
Total Installed Generation Capacity	2204.00	2275.00	2506.00	2605.00	2614.00	2676.00	3213.00	3475.00
PV Installed Generation Capacity	0.00	15.00	21.00	23.00	23.00	48.00	449.00	631.07

Source ERE

Year	2018	2019	2020	2021	2022	2023	2024	2025
Prosumers No total	0.00	0.00	59.00	174.00	799.00	1528.00	2415.00	3137
Prosumers per year	0.00	0.00	59.00	115.00	625.00	729.00	887.00	722.00
Increase	0.00	0.00	-	94.92%	443.48%	16.64%	21.67%	-18.60%
Total Generation Capacity from Prosumers	0.00	0.00	-	21.00	103.00	163.00	217.00	284.00
Installed capacity per year	-	-	-	21.00	82.00	61.00	54.00	67.00

Source ERE+OSSH

General balance of energy

Description	2017	2018	2019	2020	2021	2022	2023	2024*
Gross inland consumption	2,366	2,332	2,340	2,055	2,227	2,177	2,173	2,245
Primary production	1,661	1,997	1,727	1,480	1,773	1,615	1,773	1,725
Import	1,569	1,377	1,636	1,498	1,452	1,532	1,436	1,445
Stock change	177	113	100	70	47	70	51	57
Export	650	899	892	822	922	863	954	834
Bunkers	36	31	31	31	29	38	32	36
Consumption of the energy sector	156	135	112	89	93	78	83	88
Distribution losses	107	100	91	71	96	74	77	103
Available for final consumption	2,147	2,137	2,116	1,877	2,007	2,010	1,974	2,044
Final non-energy consumption	77	55	49	31	42	37	63	107
Final energy consumption	2,070	2,082	2,067	1,845	1,964	1,972	1,908	1,937

**Note: The data are preliminary*
Source: National Agency of Natural Resources

List of Priority investments according to Ministerial Council Decision No. 91, dated 12.2.2025, "On the approval of the priority policy document 2026–2028"

No	Description	Proposing/Responsible Institution	Sector	Subsector	Indicative Value	Maturity Status	institutional priority level	SDG	COFOG
1	*Construction of the 50 MWp photovoltaic plant in Belsh	MIE/KESH	Energy	Renewable Energy	€ 40,000,000	Mature	A	7.2	04.3
2	Electromechanical rehabilitation of the Vau i Dejës Hydropower Plant	MIE/KESH	Energy	Energy Generation	€ 110,500,000	Mature	B	7.1	04.3
3	Installation of smart meters and balancing at transformation points, as well as the CRM/billing system	MIE/OSHEE	Energy	Energy Efficiency	€ 330,000,000	Mature	A	7.3	04.3
4	Digitalization of Albania's transmission system	MIE/OST	Energy	Energy Efficiency	€ 51,500,000	Mature	A	7.1	04.3
5	Energy Efficiency Program in the Transmission Sector – construction of the 220 kV double-circuit transmission line Tirana–Rrashbull and the 110 kV Tirana Ring	MIE/OST	Energy	Energy Efficiency	€ 49,173,745	Mature	A	7.1	04.3
6	**Adriatic-Ionian Gas Pipeline – Montenegro and Albania sections	MIE	Energy	Gas	€ 172,500,000	Partially mature	B	17.9	04.3
7	**Fier–Vlora Gas Pipeline connecting the TAP pipeline with the Vlora Thermal Power Plant	MIE/ALBGAZ	Energy	Gas	€ 50,500,000	Partially mature	A	7.1	04.3
8	**Construction of a Pump Storage facility, Koman–Fierzë	MIE/KESH	Energy	Energy Efficiency	€ 202,670,000	Partially mature	A	7.3	04.3
9	Skavica Hydropower Plant	MIE/KESH	Energy	Energy Generation	€ 800,050,000	Partially mature	B	7.1	04.3
10	Reconstruction of the 220 kV Vau i Dejës (Albania) – Podgorica (Montenegro) line and expansion of the Vau i Dejës substation to 400/220 kV	MIE/OST	Energy	Energy Transmission	€ 70,000,000	Partially mature	B	7.3	04.3
11	**Construction of a new 400 kV OHL between the Republic of Albania and the Republic of Greece and closure of the internal 400 kV ring	MIE/OST	Energy	Energy Transmission	€ 53,600,000	Partially mature	A	17.9	04.3
12	Vlora Thermal Power Plant (TEC Vlora)	MIE/ALBGAZ	Energy	Energy Generation	€ 250,000,000	Early-stage	A	7.1	04.3
13	Construction of the natural gas transmission network in the city of Korça	MIE/ALBGAZ	Energy	Energy Transmission	€ 17,000,000	Early-stage	A	7.2	04.3
14	New subsea HVDC interconnection line Vlora (Albania) – Brindisi (Italy)	MIE/OST	Energy	Energy Transmission	€ 310,000,000	Early-stage	A	19.9	04.3

15	Digitalization of the Drin Cascade together with the downstream flow	MIE	Energy	Energy Efficiency	€ 80,000,000	Early-stage	A	7.1	04.3
16	Construction of an electricity storage power plant	MIE	Energy	Energy Efficiency	€ 120,000,000	Early-stage	B	7.3	04.3
17	Reconstruction and development of the Albanian oil pipeline network (under the administration of Albpetrol sh.a.)	MIE	Energy	Oil	€ 155,000,000	Early-stage	C	7.3	04.3
18	Digital improvement of integrated energy systems within the Western Balkans as a key driver for a new era	MIE	Energy	Energy Transmission	€ 50,000,000	Early-stage	C	17.6	04.3
19	LNG Terminal in Vlora	MIE/ALBGAZ	Energy	Gas	€ 120,000,000	Early-stage	B	8.4	04.3
20	**Albania–Kosovo Gas Pipeline (ALKOGAP)	MIE/ALBGAZ	Energy	Gas	€ 195,500,000	Early-stage	C	7.3	04.3
21	Belsh 250 MWp Photovoltaic Park	MIE/KESH	Energy	Renewable Energy	€ 150,000,000	Early-stage	B	7.3	04.3
22	**Assessment of wind energy potential in Albania for the construction of wind farms and construction of an offshore wind power plant	MIE/KESH	Energy	Renewable Energy	€ 100,000,000	Early-stage	B	7.2	04.3
23	Expansion and relocation of the existing Tirana 1 substation to the 400 kV voltage level	MIE/OST	Energy	Energy	€ 17,000,000	Early-stage	B	7.1	04.3
24	Digitalization of Albania's energy distribution system	MIE/OSHEE	Energy	Energy Efficiency	€ 118,300,000	Early-stage	A	7.3	04.3
25	**Expansion of the 400 kV Fierza Substation and new 400 kV Albania–Kosovo interconnection	MIE/OST	Energy	Energy Transmission	€ 55,000,000	Early-stage	A	7.1	04.3

Annex II— CBAM-covered CN codes

Regulation (EU) 2023/956 sets out the goods that fall within CBAM scope by reference to Combined Nomenclature codes in Annex I. The list below summarises the main families currently covered, plus the proposed downstream additions from January 2028. For compliance purposes, the full Annex I to Regulation 2023/956 is authoritative.

Cement

- CN 2507 00 80 — Other kaolinic clays.
- CN 2523 — Cements (clinker, Portland, and other hydraulic cements). Includes 2523 10, 2523 21, 2523 29, 2523 30, 2523 90.

Electricity

- CN 2716 00 00 — Electrical energy.

Fertilisers

- CN 2808 00 00 — Nitric acid; sulphonitric acids. CN 2814 — Ammonia. CN 2834 21 00 — Potassium nitrates. CN 3102 — Mineral or chemical fertilisers, nitrogenous. CN 3105 — Fertilisers containing two or three of N, P, K.

Iron and steel

- CN 7201 — Pig iron and spiegeleisen. CN 7202 — Ferro-alloys (incl. ferro-chromium under 7202 41 to 7202 49 — relevant to AlbChrome). CN 7203 — Direct-reduction iron. CN 7205–7229 — Various semi-finished and finished products. CN 7301–7311, 7318, 7326 — Articles of iron or steel.

Aluminium

- CN 7601 — Unwrought aluminium. CN 7603–7616 — Aluminium powders, bars, rods, profiles, wire, plates, sheets, foil, tubes, structures, and other articles.

Hydrogen

- CN 2804 10 000 — Hydrogen.

Proposed downstream additions from 1 January 2028

The Commission's December 2025 proposal would add approximately 180 downstream products with high steel and aluminium content, including: car parts (engines, chassis, transmission components, but not finished passenger cars), refrigerators and washing machines, power transformers, cables and stranded wire, farming machinery, fasteners, fittings and structural metal articles, furniture components, and industrial radiators. The 94% of additions that are intermediate industrial goods have an average 79% steel and aluminium share by mass. [19,20,21,23]

Markup on default values

- +10% in 2026, +20% in 2027, +30% from 2028 onwards (lower mark-up for fertilisers).

De minimis

- A 50-tonne annual threshold per importer applies and is preserved in the 2028 expansion proposal.

Annex III: Interview Checklist – Mr. Ardvin Kraja, Head of the Energy Academy (OSHEE)

- Why was the Energy Academy established and what are its main objectives?
- What are the most significant skills gaps currently facing Albania's energy sector?
- How is the energy transition changing workforce and training needs?
- What training programmes have been developed so far and what results have been achieved?
- How do you assess the impact of the Academy on the professional development of energy sector employees?
- How does the Academy cooperate with universities, VET institutions, and private energy companies?
- What role can the Academy play in supporting green skills and renewable energy development?
- What are the main challenges facing the Academy today?
- What are your priorities and vision for the Academy over the next five years?

Milieukontakt Albania

Milieukontakt Albania, established in 2016, is a non-governmental organization dedicated to improving the quality of life through the promotion of public participation in the development of environmentally sustainable societies.

The organization connects individuals, civil society organizations, institutions, and networks that share common environmental and social challenges, fostering cooperation and knowledge exchange to strengthen community engagement. Milieukontakt Albania supports citizens and stakeholders in actively participating in decision-making processes by providing training, capacity-building, legal guidance, and technical assistance. Through its work, the organization promotes participatory governance and collaborative partnerships as key drivers of sustainable development and resilient communities.

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GREEN INDUSTRIAL POLICY

Country Report

Albania

Contextualized Analysis
and Policy Recommendations

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