Republika e Kosovës
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ZYRA E RREGULLATORIT PËR ENERGJI
REGULATORNI URED ZA ENERGIJU
ENERGY REGULATORY OFFICE

Consultation Paper

Concept Document for the Renewable Energy Support Mechanism

DISCLAIMER

This Consultation Paper has been prepared by ERO to leverage stakeholder comments. The Report does not represent an ERO decision and should not be interpreted as such.

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List of abbreviations

ALPEX	Albanian Power Exchange
BDTA	Bad-Debt Allowance
CfD	Contract for Difference
CfD	Contract for Premium
DSO	Distribution System Operator
EBRD	European Bank for Reconstruction and Development
ERO	Energy Regulatory Office
FIP	Feed-in Premium
FIT	Feed-in Tariff
GO	Guarantee of Origin
GSE	Gestore dei Servizi Energetici
HUDX	Hungarian Derivative Energy Exchange
KOSTT	The Transmission, System and Market Operator of Kosovo
MO	Market Operator
PPA	Power Purchase Agreement
RE	Renewable Energy
REO	Renewable Energy Operator
RES	Renewable Energy Source
RESF	Renewable Energy Support Fund
RSME	Renewables Support Management Facility
SO	System Operator
TSO	Transmission System Operator

Executive Summary

This Concept Document presents the guiding principles for developing the Rule on the Renewable Energy Support Mechanism and has been prepared by the Energy Regulatory Office (ERO), and its advisors financed by the European Bank for Reconstruction and Development (EBRD), as a basis for leveraging stakeholder feedback. The comments received during the public consultation will inform the drafting of the Rule.

The document proposes the core functions of the Renewable Energy Operator (REO) and the manner in which it is financed by the Renewable Energy Support Fund (RES Fund) through the legally mandated Renewable Energy Obligation (RE Obligation). In line with a Government of Kosovo Decision, KOSTT, the Transmission, System, and Market Operator, has been designated to carry out REO's functions under its Market Operator license, managing the RES Fund and serving as a counterparty to renewable energy producers.

The document identifies the responsibilities of the REO as the counterparty to generators admitted to the support scheme and legacy PPAs. The RES Fund operated by the REO must ensure financial stability, project bankability, and transparency, with costs recovered through the RE Obligation. These costs include payments under feed-in tariffs, Contracts for Difference (CfDs), Contracts for Premium (CfPs), prosumer compensation, and balancing and administrative expenses. Revenues from electricity and GO sales, along with grants or donations, are deducted from the fund's cost base in compliance with the Law on Promotion of Use of Renewable Energy Sources.

The Concept Document proposes that support to Renewable Self-Consumers (Prosumers) is channelled through the Renewable Energy Operator. Since 2017, ERO has promoted self-consumption through net-metering and net-billing schemes, ensuring prosumers are compensated for surplus energy. However, market liberalization in 2025 has limited access to the Universal Service Supplier, pushing some prosumers to contract with alternative suppliers who may offer unfavourable terms and may distort the market. To address this, ERO is considering a mechanism where the support to Prosumers is compensated by REO through Prosumers' suppliers, compensating them for their surplus energy via the RES Fund.

REO needs to be able to maintain continuous liquidity and solvency to accommodate seasonal variations between revenues and expenditures which can result from output and electricity market volatility. These seasonal variations may reduce revenues or increase payments unexpectedly, which can risk payment arrears. Liquidity management is critical for maintaining REO's credibility as a credible off-taker and the concept document presents various options of addressing liquidity constraints alongside an analysis of potential liquidity needs.

Finally, the document presents the procedure and timeline according to which ERO calculates the Renewable Energy Obligation, aligning it with the regular tariff review and adjustment process, and the procedure for conducting extraordinary reviews, in the event of unforeseen changes materially impacting the renewable energy support fund. Policy recommendations

are complemented by case studies of countries applying similar support frameworks, ensuring that the proposed concept aligns with examples of international best practice.

1 Introduction

The Energy Regulatory Office (ERO) is currently developing a methodology to operationalize the Renewable Energy Support Fund (RES Fund). Managed by the Renewable Energy Operator (REO), the RES Fund provides a transparent and structured mechanism for delivering financial support to incentivize investments in renewable energy capacity, in line with Kosovo's renewable energy targets. The RES Fund is financed through the Renewable Energy Obligation (RE Obligation), which is levied on end-use customers in accordance with the Law (No. 08/L-258) on the Promotion of the Use of Renewable Energy Sources (RES Law). The RES Fund, REO and RE Obligation shall, for the purpose of this document and unless specified otherwise, be commonly referred to as the Renewable Energy Support Mechanism.

This Concept Document outlines the guiding principles for the development of the Rule on the Renewable Energy Support Mechanism and has been prepared by the ERO and its advisors financed by the European Bank for Reconstruction and Development (EBRD) as a basis for leveraging stakeholder feedback. The comments received during the public consultation will inform the drafting of the Rule, which will be developed following a thorough review of stakeholder comments.

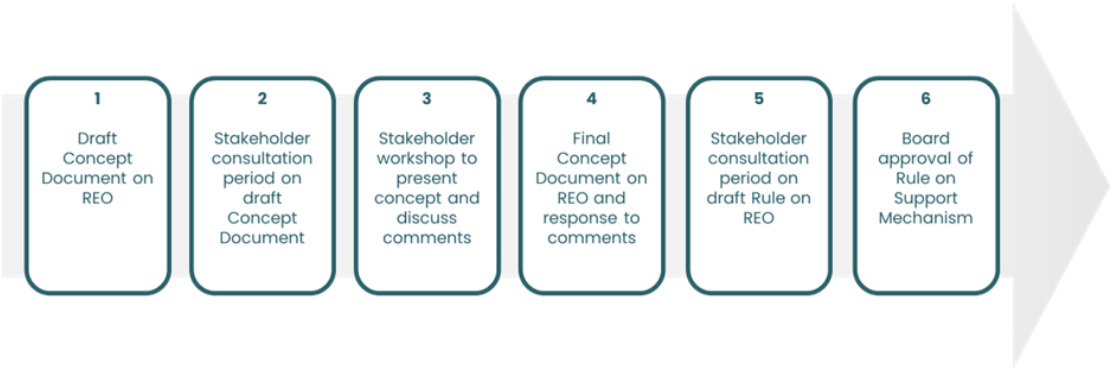
The document is structured as follows:

- Chapter 2 provides an overview of the process of drafting the Rule on Renewable Energy Support Mechanism;
- Chapter 3 provides a background on the current Renewable Energy Fund (RES Fund);
- Chapter 4 provides the legal basis for the REO, RES Fund and RE Obligation;
- Chapter 5 proposes the structure of the RES Fund and the calculation of the RE Obligation; and,
- Chapter 6 presents two of the country case studies reviewed during the preparation of the Concept Document.

2 An overview of the process

ERO places a strong emphasis on public consultation as a fundamental component of regulatory policy development. The drafting of the Rule on the Renewable Energy Support Mechanism will involve two stages of public consultation: (i) an initial consultation focused on the conceptual framework of the support mechanism, including its scope, responsibilities, and funding structure; and (ii) a subsequent consultation on the draft Rule itself, aimed at reviewing the extent to which it aligns with the conclusions of the first phase. This two-step process ensures that stakeholder input is integrated at both the conceptual discussion and drafting stages of the Rule.

Figure 1 An overview of the process of developing the Renewable Energy Support Mechanism



ERO invites energy sector stakeholders and interested parties to contribute to this process by reviewing and commenting on the proposed Concept Document. Parties wishing to submit any comments regarding ERO's proposals are invited to send their written feedback via email to ero.pricing-tariffs@ero-ks.org no later than 5 September 2025. Comments may also be marked for the attention of the Pricing and Tariffs Department and mailed to the following address:

Energy Regulatory Office
Bekim Fehmiu Street, 2nd floor
10000 Pristina, Kosovo

2.1 Relevant documents

This Concept Document should be read in conjunction with the following primary and secondary legislation, which either influence or are influenced by its content.

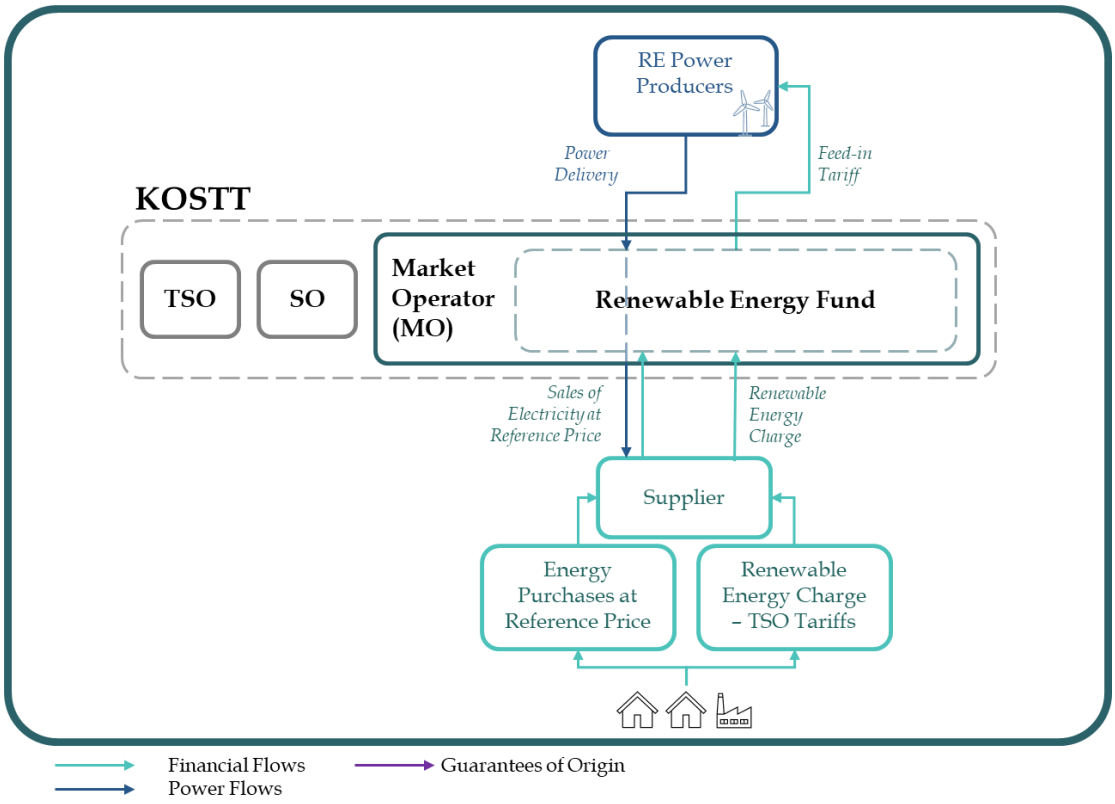
Law on the Promotion of the Use of Renewable Energy Sources	https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=89043
Law No. 05/L-084 on the Energy Regulator	https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=12694
Law No. 05/L-085 on Electricity	https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=12744
Rule on Maximum Allowed Revenues of Transmission System Operator and Market Operator	https://ero-ks.org/2017/Rregullat/TSO-MO%20Pricing%20Rule.pdf
Rule on Prosumers of Renewable Sources	https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/Rule%20on%20Prosumers.pdf
Government Decision No. 08/236 on REO designation	https://gzk.rks-gov.net/ActsByCategoryInst.aspx?Index=3&InstID=3&CatID=30

Market Rules PO-MO, May 2023, version 3.1.	https://kostt.com/Content/ViewFiles/MarketOperatorOfKosovoEnergy/The%20Market%20Rules_3.1.pdf

3 Background on the current Renewable Energy Fund

The Renewable Energy Fund in Kosovo was established in 2017 within the scope of the Market Operator (MO), through the Law on Electricity, the Law on Energy and the Law on the Energy Regulator. The detailed scope, tasks and funding were further clarified through ERO's Rule on the Support Scheme for Generators from Renewable Energy Sources.

Figure 2 An overview of the current RES Fund mechanism in Kosovo



The Market Operator (MO) was mandated to manage and administer the RES Fund, serving as counterparty to RES developers who obtained support by the ERO. The MO purchased electricity from RE producers within the support scheme through a 10/12-year PPA (depending on the type of technology). The MO also covered 85% of imbalance costs caused by RE producers in the support scheme.

The MO allocated the electricity purchased to all electricity suppliers active in Kosovo, in proportion to their respective demand. The Renewable Energy Fund was financed through two separate income streams:

- Electricity sales to Suppliers at the "Reference Price", and
- Income from the Renewable Energy Tariff

Electricity Suppliers were obliged to buy their respective share of allocated electricity produced by renewable energy producers within the Support Scheme from the Market Operator at the Reference Price. The Reference Price was set yearly by ERO based on the weighted average avoided cost of electricity purchases from renewable energy sources.

The difference between the RES Fund total financing needs and the income from electricity sales at Reference Price was compensated through the Renewable Energy Tariff. The Renewable Energy Tariff was a volumetric tariff (€/MWh) set through yearly reviews by ERO, and was part of the Transmission System Operator tariffs.

Due to changes in legislation and the electricity market in Kosovo, the scope of the Renewable Energy Fund and the Renewable Energy Operator has expanded.

4 The legal basis for the Renewable Energy Support Mechanism

This chapter of the document reviews the legal basis governing the Renewable Energy Support Mechanism and its roles and responsibilities. The chapter has been structured as follows:

- Section 4.1 reviews the legal basis and mandate of the REO;
- Section 4.2 covers the placement of REO as a function of the Market Operator;
- Section 4.3 covers REO's responsibilities;
- Section 4.4 addresses mechanisms for regulatory oversight;
- Section 4.5 reviews obligations for data collection and public registers;
- Section 4.6 addresses unbundling obligations of the REO

4.1 Legal basis

The establishment and operation of the REO, as the designated counterparty to renewable energy producers receiving support, and the management of the RES Fund are based on the RES Law. These roles are further defined and governed by the Market Rules, which are proposed by the Market Operator and approved by the ERO. REO shall operate under the legal and regulatory framework composed of:

- Law No. 08/L-258 on the Promotion of the Use of Renewable Energy Sources (RES Law);
- Law No. 05/L-084 on the Energy Regulator;
- Law No. 05/L-085 on Electricity;
- Government Decision No. 08/236 on REO designation;
- ERO's Decision on responsibilities of the REO (to be adopted);
- ERO Rule on the Renewable Support Scheme Mechanism (to be adopted);
- Market Rules adopted by ERO;

- Support contracts (PPA, CfP, CfD) and Legacy PPAs[1]

4.2 REO as a function of the Market Operator

The Ministry of Economy, in coordination with the ERO, proposed the assignment of REO's responsibilities to an existing entity (Article 23 of the RES Law). The Government subsequently designated KOSTT, the Transmission, System, and Market Operator, to perform the REO's functions under its Market Operator license[2]. KOSTT is a publicly owned company, overseen by the Assembly of Kosovo for corporate governance matters, and by the ERO for regulatory compliance. As of 2017, KOSTT, in its capacity as MO, has administered the RES Fund under the previous support schemes, covering all feed-in tariffs and reference price supported projects.

REO will therefore operate under the Market Operator function of the Transmission, System and Market Operator of Kosovo (KOSTT)

4.3 REO's responsibilities

REO is the entity designated to be the counterparty to RES Producers benefiting from the Support Scheme and is responsible for managing the RES Fund (RES Law, Article 3, sub-paragraph 1.43, Article 23, paragraph 6). According to Article 23, paragraph 7 of the RES Law, ERO shall, by decision, determine the responsibilities of the REO.

REO also acts as the contractual counterparty (off-taker) for electricity generated by Privileged Producers under all forms of support contracts, whether PPAs, Contracts for Premium (CfP), or Contracts for Difference (CfD), and manages the associated financial and market obligations. Privileged Producers are the bidders selected based on a competitive bidding process – auction, administrated by the Ministry of Economy.

Case study Italy: GSE is a state-owned company and administers Italy's renewable energy and energy efficiency support mechanisms. GSE calculates and pays FiPs, legacy FITs and CfD settlements, buys and resells electricity for plants under the FiT scheme, manages schemes for self-consumers, issues and auctions Guarantees of Origin, supplies detailed forecasts to the regulator and the treasury fund CSEA, and carries out plant inspections and penalty enforcement.
The Italian Case Study is explained in detail in Section 6.2 of this report.

Additionally, REO also inherits Power Purchase Agreements (PPAs) concluded prior to the entry into force of the RES Law ("Legacy PPAs"), which remain valid and enforceable until their contractual expiration deadline, unless earlier voluntarily conversion upon producers request into Contract for Differences (RES Law, Article

[1] Legacy PPAs are concluded based on the Rule on Support Scheme for Renewable Energy Sources Generators of 2017

[2] Government Decision No. 08/236 dated 11 December 2024

26, paragraph 4). If converted, producers sell their electricity directly in the national day ahead market and settle the sliding premium with REO.

The core responsibilities to be assigned to the REO are described in the RES Law and shall include:

- Administration of the RES Fund, including the collection and financial management of RE Obligation (Article 23, paragraph 6 and Article 24, paragraph 1);
- Management of support contracts with Privileged Producers (Article 5, paragraph 3, Article 21, paragraph 1 and Article 23, paragraph 4);
- Financial settlement as a contractual party for obligations arising under PPAs (Article 23, paragraph 3 and 4);
- Maintenance and publication of an online public register (Article 23, paragraph 5);
- Coverage of imbalances caused by the Privileged Producers within the permitted error margin, and partial coverage of imbalances caused by Legacy PPAs, as defined in relevant support scheme (Article 14, paragraph 2, sub-paragraph 3);
- Sale of electricity purchased under support contract in the organized electricity market and in the national day-ahead market, as applicable (Article 23, paragraph 3);
- Issuance of monthly invoices to licensed suppliers for the RE Obligation (Article 24, paragraph 3), and collection of funds, accordingly, excluding final consumers which have purchased Guarantees of Origin (Article 24, paragraph 5);
- Timely compensation of RES producers benefiting from support (Article 5, paragraph 3);
- Requesting payment insurance instruments form suppliers (Article 24, paragraph 4);
- Fulfilment of any other responsibilities as determined by the Regulator.

For the effective execution of responsibilities for managing the RES Fund, the ERO is required to adopt a Methodology for the RES Fund (RES Law, Article 24, paragraph 2 and 6).

4.4 Regulatory oversight, and audit rights

The REO should be subject to ongoing regulatory monitoring actions from the ERO. According to the RES Law, Articles 60 and 61 paragraph 2, the ERO should exercise monitoring rights toward REO to ensure implementation and operation of support schemes. In parallel the Law on Energy Regulator in Articles 15 and 26 empowers ERO to perform monitoring activities toward licensed entities.

The ERO shall have full audit rights over the REO's financial, contractual, and operational activities related to the implementation of support schemes. The REO shall maintain all relevant documentation in a verifiable and accessible format and cooperate fully with ERO monitoring requirements (RES Law, Article 21, paragraph 2).

4.5 Data collection and maintenance of the online public register

The REO is required to maintain a publicly accessible online register of all Privileged Producers benefiting from support schemes (RES Law, Article 23, paragraph 5). This online public register must include a dedicated file for each Privileged Producer, containing key information such as the Privileged Producer's name and location, the date of the contract for support, including the form and level of support granted, the cumulative support received since admission to the support scheme, and the end date of the support period. The purpose of this requirement is to promote transparency, facilitate regulatory oversight, and ensure public accountability regarding the allocation and implementation of renewable energy support mechanisms.

REO shall have the right to request any data necessary for implementing the RES Support Mechanism. Market participants shall be obliged to provide such data, in accordance with the requirements set out in the Rule.

The online public register must be updated regularly to reflect any changes in the status of the Privileged Producer, to ensure that the information remains accurate and accessible for stakeholders and the general public. Where the requested data contains commercially sensitive information, REO shall ensure its confidentiality and use it solely for the purposes of implementing the RES Support Mechanism, in line with applicable data protection and market confidentiality provisions.

4.6 Unbundled accounts of the Renewable Energy Operator

REO will maintain unbundled accounts, and operate a separate bank account, from the Market Operator in line with ERO's Regulatory Accounting Guidelines. The unbundled accounts will ensure that the transactions related to the Renewable Energy Support Mechanism are recorded, managed and reported independently, preventing cross-subsidization between the MO and REO functions. Common costs between MO and REO functions shall be allocated according to principles of causality, objectivity, consistency and transparency, in compliance with Article 16 of ERO's Regulatory Accounting Guidelines[3]. REO shall have a separate bank sub-account under KOSTT.

5 The Renewable Energy Support Fund and the Renewable Energy Obligation

The costs of the Renewable Energy Support Scheme and of the REO's will be recovered through the RES Fund consisting of the collected funds under RE Obligations. These are elaborated further in this chapter, which is structured as follows:

- Section 5.1 covers the costs and revenues of the RES Fund;
- Section 5.2 provides the formula for calculating the RES Fund;

[3] https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/C2%20-%2020160822%20-%20Regulatory%20Accounting%20Guidelines%20-%2010Oct2016%20(1).pdf

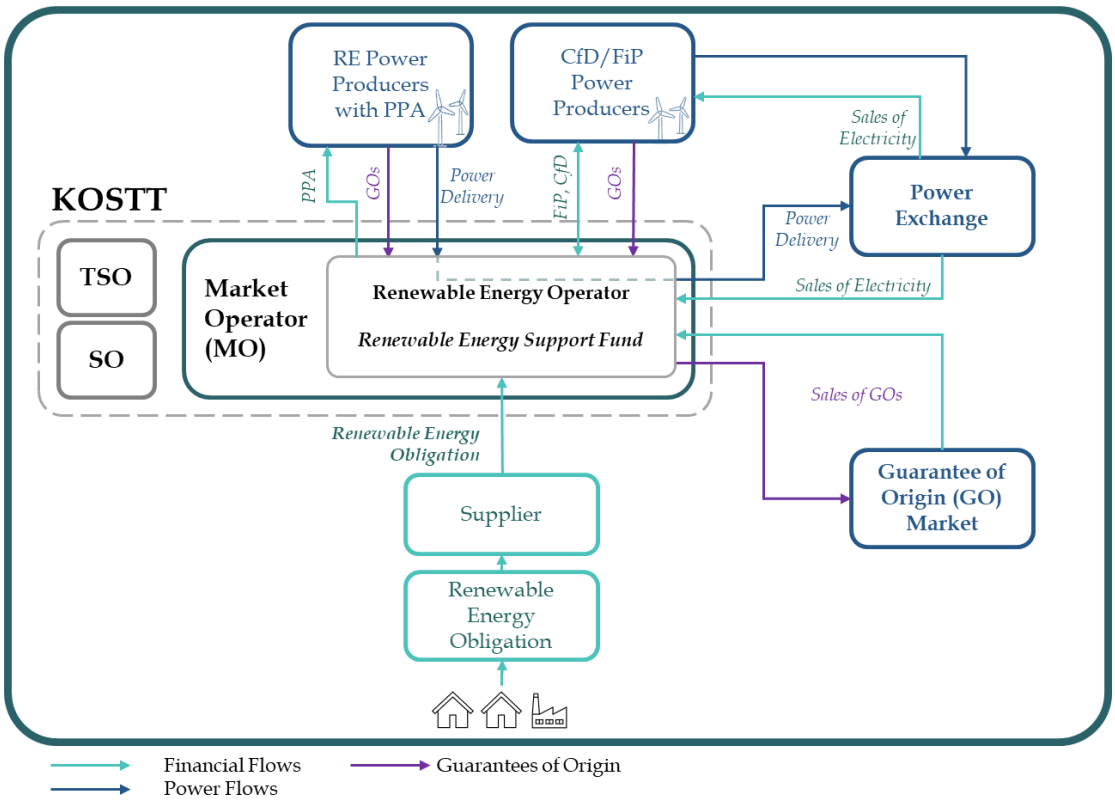
- Section 5.3 presents the calculation of the RE Obligation;
- Section 5.4 covers the REO tariff setting procedures and reviews.

5.1 The Renewable Energy Support Fund

The Renewable Energy Support Fund (RESF) of the REO shall be calculated in a manner which ensures the financial sustainability of the fund, the bankability of the renewable energy projects supported through the RES Fund, liquidity of the RES Fund and should be calculated in a manner that facilitates the transparency of the support scheme. These are elaborated further in this sub-section of the report.

The Renewable Energy Support Fund is managed by the Renewable Energy Operator and handles all financial transactions of the REO, as presented in Figure 3Figure 3.

Figure 3 An overview of the proposed Renewable Energy Support Mechanism



5.1.1 Expenses of the Renewable Energy Support Fund

The RES Fund must recover the costs assumed by the REO as the counterparty to legacy PPAs, FIT support schemes or generators admitted under CfD support schemes, the costs of administering the RES Fund and ensuring its liquidity. These are summarized below:

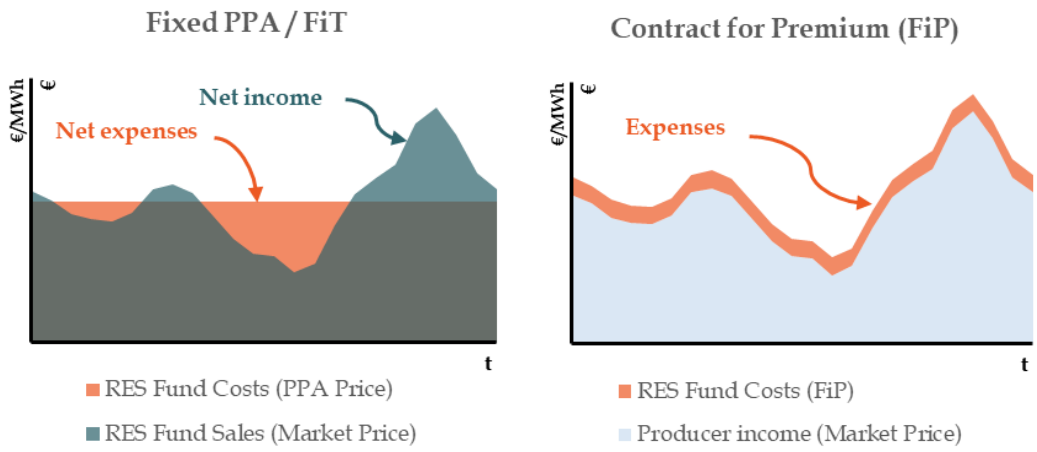
5.1.1.1 Costs incurred as a counterparty to support schemes

This subsection of the document covers the costs of the RES Fund which it incurs by being a counterparty to support schemes. These costs include:

- Costs required to cover the electricity purchased from Privileged Producers under Feed-in Tariff arrangements, including Legacy PPAs. These are fixed-price contracts that obligate the REO to purchase all the electricity produced by a qualifying generator at the fixed price.
- Costs required to cover the support provided under Contracts for Difference (CfD) mechanisms. There are different modalities to the CfD, however under the symmetric CfD, producers are guaranteed a fixed strike price for the electricity they sell on the market. If the market price is lower than the strike price, the REO pays the difference; conversely, if it's higher, the producer refunds the excess. This makes this cost component variable and, in some periods, negative, as the REO can be a net receiver of funds. In turn, this effects the renewable energy obligation (discussed separately in Section 0).
- The costs related to premiums paid to producers under the Contract for Premium (CfP) scheme. Unlike CfDs, the producer keeps the market revenue and receives a top-up payment (a premium) from the REO, as envisaged by the RES Law.
- The costs related to funding any other Renewable Energy support scheme approved and developed by the responsible Ministry, foreseen to be funded through the REO.

The REO relationships with counterparties for each support scheme is presented in Table 1Table 1, whereas the expenses and income for producers and the REO are shown in Figure 4Figure 4.

Figure 4 Support mechanisms in RES Law and Legacy PPAs



5.1.1.2 Curtailment costs

Privileged Producers admitted to the support scheme are entitled to dispatching priority. Nevertheless, such producers may - as a last resort measure - be curtailed by the transmission system operator due to oversupply or due to network constraints. While these costs are charged to the transmission system operator, the merit order for curtailment of capacities may lead to differences between the curtailed price of generators admitted to the support scheme and the actual weighted average or cleared price of curtailment for any given hour. In any instance, the fund shall ensure that it recovers any differences between the cost of curtailing renewable energy sources and the cost of procuring curtailment as a last resort balancing mechanism of the TSO.

5.1.1.3 Balancing costs

The Kosovo RES Law stipulates that Privileged Producers may be partially exempt from balancing responsibilities. In such cases, the associated balancing costs are treated as an allowable cost under the RES Fund.

5.1.1.4 Renewable Self Consumers

Since 2017, ERO has implemented support schemes such as net-metering and net-billing to promote self-consumption, ensuring that prosumers are compensated for surplus electricity fed into the grid. However, with the opening of the electricity market in June 2025, some prosumers are no longer supplied by the Universal Service Supplier and must contract with alternative suppliers. While the primary legislation provides binding requirements for suppliers to sign bilateral contracts with prosumers, doing so may distort competition or may incentivize such suppliers to provide unfavourable conditions to prosumers.

***Case study Italy**: Scambio sul Posto* (SSP) is Italy's net-metering regime for small renewables ≤ 500 kW. GSE serves as an offtaker and sells their exported power on the market and once a year pays them a fee covering the value of that power plus part of grid charges.
The payment minus the market revenue is a net cost that GSE recovers from the ASOS tariff (Renewable Energy Charge).

To address these challenges, and in the interest of maintaining the neutrality of the support scheme without distorting the market, ERO is reviewing the possibility of placing the support to renewable self-consumers through the REO. Under this proposed mechanism:

- suppliers act as the counterparty to renewable self-consumers admitted to a support scheme for the energy fed into the grid.
- Suppliers allocate surplus energy from prosumers to the Renewable Energy Operator, who sells the energy on ALPEX;
- Renewable Energy Operator pays suppliers the retail price for the surplus energy, in line with the Rule on Prosumer support;

- Suppliers pay the prosumer 0.80-0.85 x the retail price, using the difference to compensate for their own administrative costs and cost of imbalances, in line with the Rule on Prosumers.

The Rule on the Renewable Energy Support Mechanism will reflect any changes to the Rule on Prosumer Support.

The proposed framework is summarized in the following diagram:

Figure 5 Integrating Prosumers in the RES Framework

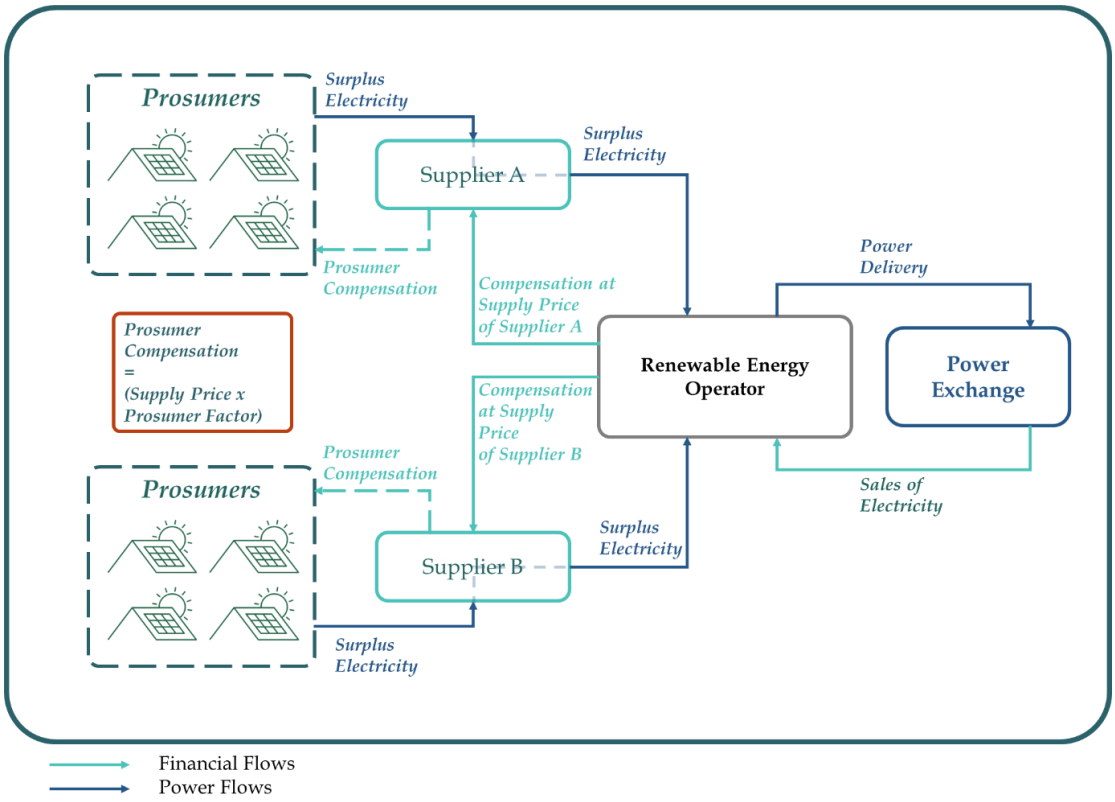


Table 1 Proposed REO relationships with counterparties

	Sell power to	Cash-flow	Curtailment	Balancing
PPA legacy contracts	REO	REO pays total output x contract price	Costs recoverable	Partially covered, in line with RES Law
CfD contracts	ALPEX	REO and CfD exchange payments	Costs recoverable	Partially covered, in line with RES Law
CfP contracts (Feed-in Premium)	ALPEX	REO pays fixed premium	Costs recoverable	Partially covered, in line with RES Law

Prosumers (net-billing)	Suppliers	REO pays for volume injected x 0.85 or 0.90	Not specified	Fully covered by Suppliers
Prosumers (net-metering)	Suppliers	REO pays volume x supply price	Not specified	Fully covered by Suppliers

5.1.1.5 Administrative and operational expenses

Operational and administrative costs of REO include the necessary expenditures to ensure the effective management and implementation of its mandatory obligations. These costs typically include staffing, office operations, market modelling and analysis, IT systems for monitoring and billing, legal and regulatory compliance activities, public communication, and reporting obligations. The REO must also maintain accurate records of contracts, energy flows, and financial settlements with supported producers and electricity suppliers.

5.1.1.6 Financing costs

The financing costs of the REO represent the expenses incurred to ensure continuous liquidity and solvency of the RES Fund, especially in the face of seasonal fluctuations in expenditures and revenues.

Liquidity concerns can occur due to a number of reasons:

- Seasonality effect implies the expenses of REO are highest when its revenue generated is lowest:
    - The RE Obligation, the charge levied on suppliers to finance the RES Fund, is fixed for the entire Relevant Year. It is a volumetric charge (€c/kWh) which generates revenues for the Renewable Energy Operator based on consumer sales. Since electricity consumption is lower during the summer months, the income of the renewable energy operator will likely be lower in summer months and higher in winter months.
    - In the event that the sales portfolio of the renewable energy operator is solar-abundant, the expenses of the REO will be higher during the summer months when the solar output which needs to be compensated by REO is highest;
    - Since most of the solar production is in the summer months, which is usually associated with low market prices, this will impact REO's revenues from selling the contracted electricity on the market. At the same time, this will imply REO has higher payments because of the higher CfD spread.
- Forecasting errors and uncertainty for market prices of electricity and sales volumes:

- The intermittent production nature of renewables means forecasts are prone to a higher error margin. Although such errors do not carry bias, this can lead to liquidity concerns in the event forecasted RES output is underestimated but sufficient enough to trigger an extraordinary review;
- Power market prices are becoming increasingly volatile, driven by the intermittent nature of renewable generation and the role of natural gas as the marginal pricing fuel, whose price is closely tied to geopolitical developments. Errors in underestimating the power market price can lead to higher CfD payments, which can expose the liquidity of the fund.
- Electricity consumption by end-users may shift from forecasted values. Low demand reduces billed Renewable Energy Obligation payments, which in turn reduces revenues of the RES Fund. Overestimating end-user consumption can lead to a gap between revenues collected and expenses.

Liquidity constraints can lead to payment arrears which can diminish the credibility of the renewable energy operator as a bankable off-taker for renewable energy investments. It is therefore critically important for the renewable energy operator to be able to accrue sufficient liquidity to accommodate payments stemming from its counterparty obligations.

The liquidity concerns of the renewable energy operator can be addressed in a number of ways, each having advantages and setbacks with regard to ease of implementation, effectiveness in addressing liquidity concerns and impact on the renewable energy obligation.

These are discussed below:

Interest on working capital

As a first best option, liquidity constraints can be addressed by allowing the renewable energy operator to recover the cost of interest and fees incurred for the provision short-term credit lines, accessible by the renewable energy operator and able to cover cash-flow differences throughout the year. This can adequately address liquidity constraints while providing an efficient solution which mitigates tariff impacts. The challenge is that the Renewable Energy Operator is a new entity to Kosovo financial institutions and their interest to finance short term loans is likely going to be low until the Renewable Energy Operator establishes itself as a credible financial counterpart.

Case study Italy: GSE and CSEA's ASOS ledger maintain liquidity by (i) obliging DSOs to pay ASOS proceeds each month and require CSEA to transfer to GSE an advance of 80% of the forecasted needs of the preceding month, with end of month reconciliation; (ii) carrying any year end surplus or deficit forward as the first line in the next tariff calculation; and (iii) allowing CSEA to recover interest and commissions costs of credit lines activated to guarantee liquidity. The Italian Case Study is explained in detail in Section 6.2 of this report.

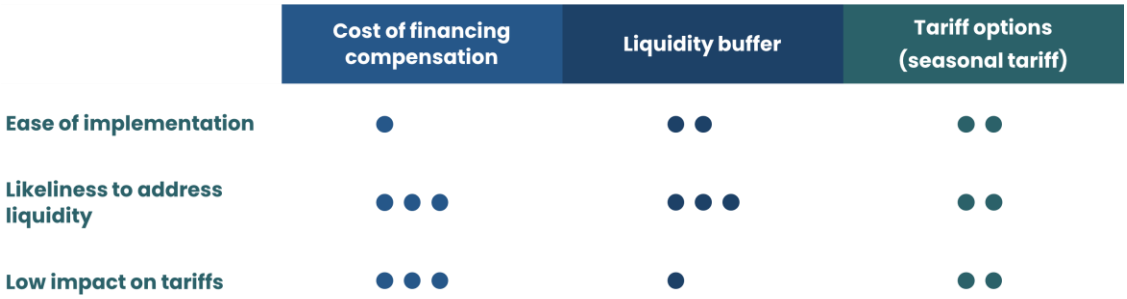
Liquidity buffer

Alternatively, the renewable energy operator can be allowed to recover a revolving liquidity buffer, in essence a cash allowance in the allowed revenues equivalent to – for instance – 9/12 of the annual value of the sales, and which is consistently maintained through the adjustment of the renewable energy obligation. While this will also address liquidity concerns, it is likely to lead to a significant increase in the renewable energy obligation, which may be addressed by flooring negative prices to zero until the required liquidity is achieved (see Section 5.3).

Seasonal tariffs

A third option is to allow the renewable energy obligation to vary by season, increasing its value during the summer months and lowering it during the winter months in order to address the sales and expense mismatch. However, while this may partially address the seasonality constraint, it does not fully address liquidity concerns.

Figure 6 6 Liquidity measures compared against ease of implementation, effectiveness and impact on tariffs



ERO does not consider seasonal tariffs as an effective solution to the Renewable Energy Operator's liquidity challenges. While varying the renewable energy obligation by season may help reduce the mismatch between revenues and payment obligations, it would not generate the level of liquidity needed to ensure smooth operation throughout the year. The decision between the interest on working capital and liquidity buffer will be taken after feedback from the public consultation process. ERO will engage local financing institutions on their willingness and capacity of provide short-term credit lines or other liquidity instruments to the Renewable Energy Operator.

5.1.1.7 Liquidity buffer analysis

This section of the Report presents an analysis of potential liquidity requirements of REO for a base scenario, a high market price and low renewable energy production scenario4 a low market price and high renewable energy production scenario5. The analysis estimates, month by month, the revenues and expenses of the Renewable Energy Fund over each tariff year

[4] + 20 €/MWh on market prices, - 10% renewable energy output

[5] - 20 €/MWh on market prices, + 10% renewable energy output

(April–March), from 2023 to 2028, considering past data and forecasted inputs. The objective is to identify the timing and magnitude of any within-year liquidity shortfalls so that an appropriate working-capital buffer can be planned. Because market prices, technology capture rates, generation, and billed consumption vary seasonally, a tariff that is fixed on an annual basis can produce temporary monthly deficits or surpluses.

ERO is aware of the potential shortfalls of this estimation, primarily due to a short period of market data from ALPEX. Thus, this estimation shall not serve any tariff setting purposes, or any future projections on tariffs. The estimation aims to perform a simple calculation on the potential liquidity needs of the fund during the following years.

The analysis is built on observed data and projections. Monthly market prices are constructed from hourly observations (January 2023 to July 2025) using a seasonal-plus-trend model6. The baseline is anchored to forward HUDX prices. The baseline was then anchored to forwards with minimal distortion: Aug–Dec 2025 fixed to monthly forwards, 2026 scaled by a single factor within each quarter so the three-month average matches the quoted forward, 2027–2028 scaled so each year's average matches the annual forward while preserving month-of-year seasonality. Technology-specific capture rates (wind, solar, hydro) are derived from hourly realizations over the same historical period, then projected with a seasonal-plus-trend model similar to the monthly market prices. Final consumption (billed MWh) was forecast using additive Holt-Winters, with a 12-month seasonal cycle.

Legacy FiT cost streams are extended by holding the observed cost profile and applying 2% annual inflation from a 2024 base. Generation volumes from legacy FiT follow the same principle. For new CfD assets, a 100 MW solar plant foreseen to be commissioned in January 2026 with a strike price of 48.88 €/MWh, and 100 MW wind from January 2027 with a strike price of 80.2 €/MWh, were analyzed with strike prices indexed at 2% per year and monthly production profiles consistent with PVGIS (solar) and the existing fleet (wind).

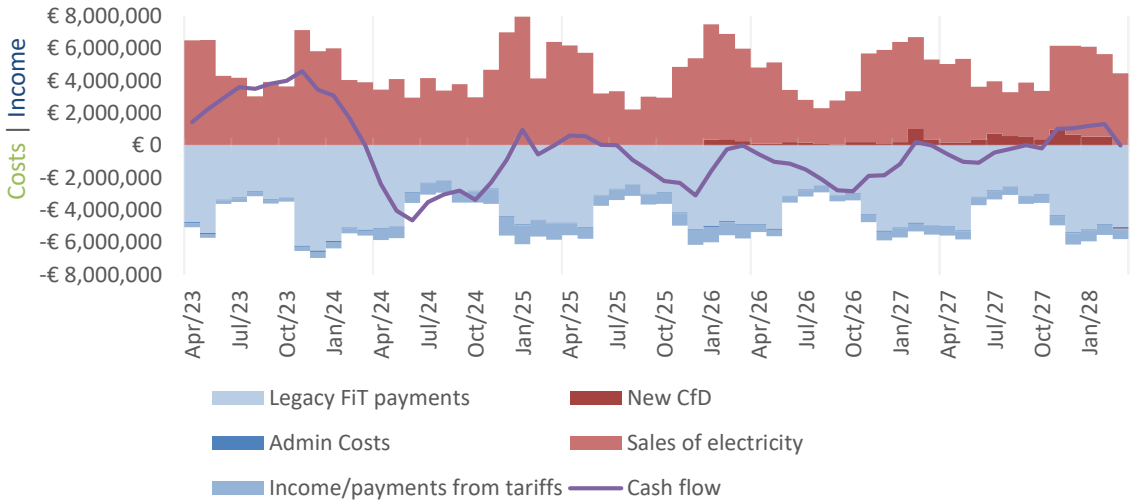
For each month, we calculate the FiT costs and any CfD top-ups (or paybacks), administrative costs at 1% of costs, and market revenues using forecast prices and capture rates. The RES Charge (€/MWh) is then set each April so that total monthly cash over April–March sums to zero when applied to forecast billed consumption. The within-year cumulative sum traces the temporary liquidity high and low points. By design, the cumulative line returns to zero each end of tariff period (March).

In the base case, the calculated annual RES Charge for each April–March period is negative. A negative charge indicates that expected market revenues (including CfD paybacks when market revenues exceed strikes) exceed total support scheme payments over the full year, in this case consumers would receive net credit. However, the monthly path matters for

[6] The monthly market price was constructed via decomposition and forward anchoring on HUDX futures. Using January 2023 – July 2025 data from ALPEX, 12-month seasonal indices were estimated and shrunk to avoid noise due to short term data availability of ALPEX. The de-seasonalized level was fitted with a linear trend, and seasonality was re-applied to form the baseline.

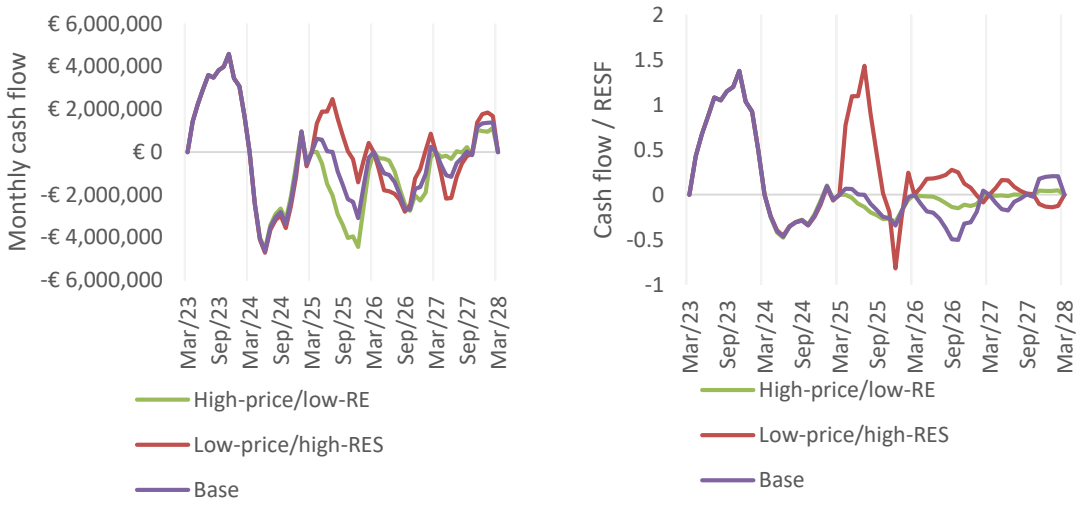
liquidity. The Fund's cumulative cash position demonstrates seasonal swings even when the annual net is zero, with temporary liquidity needs typically coinciding with low hydro output, softer summer solar capture, and when prices are below indexed strikes. These needs define the working-capital requirement: the deepest negative cumulative point within an April–March year is the liquidity buffer the Fund must be able to access to meet obligations without mid-year tariff changes.

Figure 7 Liquidity buffer analysis - cash flow of base case scenario



Directional sensitivity tests behave as expected and are informative for planning. In a low market price/high renewable energy production environment, monthly deficits deepen, and the annual charge moves toward zero or slightly positive in some years. In a high market price /low renewable energy production environment, monthly surpluses widen and the annual charge becomes increasingly negative. These movements are consistent with the way revenues and obligations are constructed.

Figure 8 Monthly cash flow of RES Fund (left), ratio between cash flow and annual RES Fund



The analysis demonstrates a clear requirement for a seasonal liquidity buffer. The buffer should be sized to the maximum cumulative deficit per April–March year, about €4–5m (approximately 50% of the annual RESF in the base case and high market price / low renewable energy production scenario, or 82% of the annual RESF in the low market price / high renewable energy production scenario. Liquidity shortfalls are most likely to occur from May to October. The primary drivers can be a negative annual tariff paid out each month, low seasonal volumes/capture rates reducing market revenue, and months where prices fall below CfD strike prices. Practically, use a committed revolving line, and keeping a floor of 0 €/MWh for the RES Charge during the initial years of operation to retain early-year surpluses to pre-fund the summer dip, are both options. The credit line and annual revolving fund should be regularly updated and adjusted based on forecasts.

5.1.2 Revenues of the Renewable Energy Support Fund

The renewable energy fund will recover revenues from sales of energy in the organized market, positive differences in CfD contracts, sales of guarantees of origin or incomes from grants or contributions as envisaged in the RES Law.

These are further elaborated below.

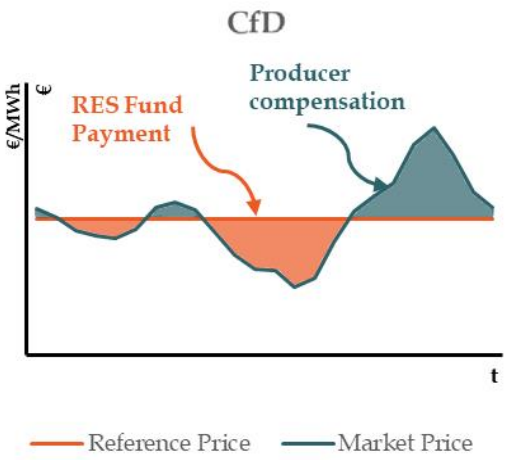
5.1.2.1 Sales of energy in organized markets

REO is the counterparty and physical off-taker to privileged producers under FiT support and to legacy PPA contracts. As the physical off-taker of their energy, the REO on-allocates their physical output to the market. To ensure transparency in the sales price, this energy shall be sold exclusively on the organized market, now referred to the Albanian Power Exchange (ALPEX). The proceeds from the sale of energy to the organized market are used to offset differences in payments to Renewable Energy producers admitted to the support scheme.

5.1.2.2 Differences in CfD payments

As elaborated previously, the fund recovers the costs required to cover the support provided under Contracts for Difference (CfD) mechanisms. In this mechanism, producers are entitled to recover the difference between their strike price and the reference price. However, if market prices are high, it may occur that the market price is higher than the strike price. In symmetric CfD support schemes, producers under such circumstances are required to compensate the renewable energy operator for such differences, effectively making the renewable energy operator a net-receiver of such funds. Should such instances occur, these will account as revenues for the renewable energy operator.

Figure 9 CfD payments between RES Fund and Producers



According to the RES Law, the Reference Price is the hourly price settled in the day-ahead market operated by ALPEX. If the settled price of the previous day cannot be established, the Reference Price shall be determined by the Regulator, through secondary legislation based on a methodology for setting the Reference Price. In case the Reference Price is negative, it shall be considered zero for the purpose of financial settlement under a Contract for Difference.

5.1.2.3 Contributions to the fund

The renewable energy fund, as defined in the RES law, envisages the totality of the funds, including those received from the central budget, any donations or other contributions which need to be accounted as revenues in the annual calculation of the renewable energy fund.

5.1.2.4 Guarantees of Origin

Renewable energy producers that receive financial support are not entitled to the Guarantees of Origin (GOs) for the electricity covered by that support. Instead, the right to the GO is transferred to the REO, which may sell the GOs and direct the proceeds to the RES Fund. This arrangement prevents double compensation for the same electricity, once through support payments and again through GO revenues.

5.1.2.5 Annual adjustments

The RES Fund must be annually adjusted to recover the differences between forecast and actual volumes of electricity produced by the Renewable Energy Support Scheme, forecast and actual financing costs or differences between assumed and actual market prices. Such differences are adjusted with interest, in line with ERO's precedents on short-term interest rates, based on publicly available benchmarks.

5.2 Renewable Energy Support Fund (RES Fund) formula

Based on Article 23, paragraph 4 of the RES Law, and the roles and responsibility of the REO, the following formula is used to derive the forecasted RES Fund to be recovered by the Renewable Energy Obligation:

$$RESF = \frac{(C_{PPA} + C_{CfD} + C_{FiP} + C_{Pro} + Bal + Adm + Fin - S_{Elec} - S_{GO} - G + Adj)}{(1 - BDTA)} \quad (5.1)$$

Where the allowed costs components of the RES Fund (RESF) to be recovered by the Renewable Energy Obligation include:

C_{PPA} - The total cost of electricity purchased from Privileged Producers who are supported on the basis of a Feed-in Tariff based on a Power Purchase Agreement, including purchases from Legacy PPAs.

These costs shall include any costs for compensation associated with curtailment which are subject to compensation by the REO.

C_{CfD} - The payable differences between the Strike Price and the Reference Price for Privileged Producers granted support based on a Contract for Difference (CfD). These costs may be negative.

These costs shall include any costs for compensation associated with curtailment which are subject to compensation by the REO.

Privileged Producers supported under the CfD scheme must sell their electricity in the organized Power Market. The payable difference will be calculated based on the hourly difference between organized market prices and the Strike Price.

C_{FiP} - Payments of the premium for Privileged Producers granted support based on a Contract for Premium. These costs shall include any costs for compensation associated with curtailment which are subject to compensation by the REO.

C_{Pro} - Compensation towards Prosumers based on the electricity purchased by the REO, according to the Prosumer Support Scheme.

Bal - Balancing costs for Privileged Producers that are partially exempted from balancing responsibility, according to Article 14 of the RES Law;

Adm - Administrative, monitoring and reporting costs;

Fin - The financial costs associated to ensuring liquidity of the fund, including but not limited to the cost of financing, market access, working capital, cost of provisioning reserves to ensure financial liquidity and solvency of the Renewable Energy Support Fund on a rolling basis, while also considering seasonality of funds.

The following income components are deducted from the total requirements of the fund:

S_{Elec} - Proceeds from sales of electricity purchased from Privileged Producers who have been supported based on a Feed-in Tariff, PPA or electricity purchased through the Prosumers Support Scheme, in the Organized Market;

S_{GO} - Proceeds from sales of Guarantees of Origin;

The REO shall sell the Guarantees of Origin through organized GO markets, or in absence of such markets, through a competitive bidding process to be proposed by the REO and approved by ERO.

G - Income from grants, donations, and contributions;

BDTA - The bad-debt uplift to allow for fallbacks in collection rates;

Adjustments of the fund are calculated during every tariff review with the following formula:

$$ADJ = \left(AAC_{RESF,t-1} - AAR_{RESF,t-1}\right) * (1 + I_t) \quad (5.2)$$

$AAC_{RESF,\ t-1}$ - Actual Allowed Costs of the RES fund during the previous regulatory period.

$AAR_{RESF,\ t-1}$ - Actual Allowed Revenue (including revenues from the Renewable Energy Obligation) of the RES fund during the previous regulatory period

I_t - the interest rate for the Relevant Year t calculated based on EURIBOR plus S%, where S is a value to be determined by the Regulator at each Relevant Year and which reflects the premium payable by the licensee for short-term loans

5.3 Calculation of the Renewable Energy Obligation

The RES Fund shall be funded through the RE Obligation which collected from all suppliers supplying final consumers, on a monthly basis, calculated per kWh consumed. Based on Article 24, paragraph 5 of the RES Law, a final consumer may be exempted from paying the RE Obligation if both of the following conditions are met:

(i) it has purchased GOs covering its entire consumption, and
(ii) its consumption is supplied through a purchase contract with a RES Producer who is not receiving support.

This exempted demand will therefore be deducted from the total volume of electricity consumption which will serve as the basis for calculating the renewable energy obligation.

The formula for calculating the Renewable Energy Obligation can be presented as follows:

$$RE\ Obligation = \frac{RESF}{E_{Cons}} \quad [€cent/kWh] \quad (5.3)$$

where:

RESF	-	RES Fund of the REO, as defined with equation 5.1
E_{Cons}	-	Total forecasted electricity consumption from final consumers (excluding exempted customers)

The RE Obligation shall be collected by electricity suppliers and shall be transferred to the RE Fund as per the invoicing orders in line with the Market Rules. REO shall require all suppliers to provide appropriate payment insurance instruments that will be activated in the event the supplier fails to fulfil its payment obligations towards the REO.

The RE Obligation shall be separately identified on invoices/bills of final consumers.

Case study Austria: RSME is mainly funded through two levies: a flat-rate charge and a percentage levy, both paid by end-customers connected to the Austrian grid. The flat-rate charge is set every three years and is fixed charge per metering point, providing a stable and predictable revenue stream. The percentage levy is set annually and is adjustable within the year. It adds a uniform surcharge to network tariffs. The Austrian Case Study is explained in detail in Section 6.1 of this report.

5.3.1 Negative Renewable Energy Obligation

Based on equation 5.1 for the REOs Renewable Energy Support Fund (*RESF)*, ERO notes that income from sales of electricity and GOs may exceed the total costs of the Fund, thus resulting in a negative RESF and, therefore, a negative RE Obligation.

Some European countries such as Austria and Italy implement a floor of 0 €/MWh on such charges. Any proceeds exceeding the amount of the total forecasted allowed costs of the RES Fund are then carried forward to the following regulatory period through the adjustment mechanism. This approach has several advantages such as increases funding certainty of the RES Fund, increased bill stability (albeit higher bills), administrative simplicity and reduced risk to suppliers.

Case study Ireland: Ireland's PSO levy is recalculated each year by the Regulator (CRU): if wholesale prices exceed the support strike prices, generators pay the excess into the PSO account, turning the net requirement negative. The CRU can therefore set the levy below zero, as was set in 2022/2023 where customers received €89.1 from the PSO Levy. The Irish CRU set the levy at €0 in 2023/24, opting to carry the surplus forward to smooth out next year's tariffs.

ERO proposes that the Renewable Energy Obligation shall be allowed to be negative as customer should benefit in times when revenues from high market prices exceed the costs of the support. Negative charges have been implemented in Luxembourg and Ireland. In this

case consumers benefited and were aware of the benefits of renewable energy support schemes which offset high market electricity prices. However, the renewable energy obligation should be floored to zero until the RES Fund is able to achieve the required liquidity buffer (Section 5.1.1.6).

In case of a Negative RE Obligation, the REO shall compensate suppliers through invoicing orders in line with the Market Rules.

5.4 Renewable Energy Obligation tariff setting procedures and reviews

The Renewable Energy Support Fund (RESF) of the REO, including the RE Obligation, shall be set at least once a year. The tariffs can be set through the regular process, or through an extraordinary tariff review. In order to ensure alignment with the tariff-setting process for regulated TSO/MO, DSO and USS tariffs, the procedure and timeline for setting the RESF, and the associated RE Obligation, should be aligned to the procedures laid out in the TSO/MO Rule[7].

- The REO will be set annually and aligned with the Relevant Year of the TSO/MO (1 April – 30 March);
- REO shall submit its proposal for the RES fund no later than fifty (50) Business Days prior to the commencement of the next Relevant Year;
- ERO will inform REO whether it approves the TSO's calculation of the RES fund at least forty (40) Business Days before the start of the forthcoming Relevant Year;
- If the Regulator does not approve the proposed REO, it shall provide reasons and evidence why, in accordance with the Rule. The REO shall not be adjusted until the Regulator approves a proposal or provides its own calculation of RESF and REO.
- Any positive or negative impacts on the fund resulting from delays in approval of the REO will be recovered with interest during each Relevant Year.

The Automatic Process for reviewing and approving the RES fund and REO charge shall allow sufficient time for stakeholder engagement while acknowledging the mechanical and automatic nature of the annual adjustments.

5.4.1 Regular tariff review process

Before the start of each regulatory year, REO submits a proposal for the RES Fund and associated RE Obligation to the ERO at least 50 business days in advance. The submission must include all supporting data and calculations. ERO then reviews the proposal for accuracy, relevance, and reasonableness, and may request further clarification or additional

[7] ERO Rule on Maximum Allowed Revenues of Transmission System Operator and Market Operator. Available at: https://ero-ks.org/2017/Rregullat/TSO-MO%20Pricing%20Rule.pdf

information from the REO. To ensure transparency, all non-confidential documents and submissions are published on ERO's website.

ERO prepares a Provisional Evaluation of the REO's proposal at least 20 business days before the start of the regulatory year. This evaluation may modify the REO's submission where justified, with all changes clearly explained. After notifying the REO, ERO conducts a public consultation before issuing a Final Decision on the RES Fund and associated RE Obligation. These approved revenues apply from the start of the regulatory period. Any errors, misreporting, or unresolved disputes are adjusted in subsequent years.

5.4.2 Extraordinary tariff reviews

An Extraordinary Review may be initiated when significant, unforeseen event, such as tax changes, force majeure, or other uncontrollable incidents, substantially impact the REO's revenues or costs. For an adjustment to occur, the financial impact resulting from such incidents must exceed a materiality threshold of 20% of annual revenues. The review focuses solely on the direct financial effects of the event, excluding unrelated factors. The extraordinary review may be triggered by the ERO or the REO.

Once triggered, the REO must submit a Report of Financial Impact within 20 business days, detailing the event, its effects on costs and revenues, and whether it exceeds the materiality threshold. The ERO then has 20 business days to approve or reject the proposed adjustment based on the validity of the calculations and available evidence. If approved, the revised RES Fund and associated RE Obligation take effect immediately. If rejected, the ERO must explain its decision. Any disagreements may be formally appealed in accordance with applicable law.

6 Case studies

This section of the Report provides an overview of two example case studies reviewed by ERO in developing the Renewable Energy Support Mechanism. The chapter is structured as follows:

- Section 6.1 Reviews the case study of Austria under the renewable support management entity (RSME)
- Section 6.2 reviews the Italian GSE and the associated CSEA clearing house.

6.1 Austria – Renewables Support Management Entity (RSME)

Austria finances their Renewable Energy Support Scheme through the Renewables Support Management Entity (RSME). The RSME legal basis is defined in the Federal Act on the

Expansion of Energy from Renewable Sources (Renewable Energy Expansion Act) of 2021 (*Erneuerbaren-Ausbau-Gesetzes* – EAG)[8].

The RSME operator is appointed and supervised by the Federal Minister for Climate Action, Environment, Energy and Mobility (BMK). Representatives of the BMK are invited to meetings of the RSME supervisory board, and the RSME submits annual accounts and reports to the BMK. The RSME is subject to inspection from the Austrian Court of Audit.

The current RSME operator is OeMAG, a private joint-stock company owned by grid operators, banks and industrial companies. The largest shareholder is Austrian Power Grid AG with 24.4% of shares.

Section 67 of the EAG defines five core functions on the RSME:

1. awarding, handling and overseeing financial support under the EAG;
2. publishing the annual support available through auctions or investment grants, both in terms of volume (capacity) and funds for each technology and type of support;
3. keeping the EAG support database up to date and ensuring that plant operators supply data within the statutory 14-day deadline;
4. taking all measures in its power to secure necessary funds and liquidity, including taking on debt (only with the express agreement of the BMK).
5. Provide to the BMK and to the Regulatory Authority (E-Control) any, and all data and information necessary.

The RSME also serves as the administrator for legacy support schemes under the Ökostromgesetz (Green Electricity Act of 2012), which includes Feed-in Tariffs awarded from 2012 to 2021.

The data collected from the RSME includes, a) plant designation and operator, b) plant type, maximum capacity, and storage capacity (if applicable), c) type and amount of support received under the EAG, d) in the case of renewable electricity plants that receive a feed-in premium: the quantity of electricity fed into the public electricity grid in kWh, e) type and amount of other support granted (if any), f) operational date of the plant, g) decommissioning date of the plant and, h) in the case of plants that run on raw materials: the type of fuel used.

6.1.1 Structure of the ring-fenced accounts operating under the RSME

The RSME operates 3 separate ring-fenced accounts:

Account 1. EAG Renewable Electricity Ledger – Renewable Power projects under Renewable Energy Expansion Act (EAG) of 2021

[8] Federal Act on the Expansion of Energy from Renewable Sources (Renewable Energy Expansion Act), 2021. Available at: https://pvaustria.at/wp-content/uploads/Austrian_Renewable_Energy_Expansion_Act_1645214803.pdf

Account 2. ÖSG Green Power Settlement Agent – Legacy Support Schemes awarded through the Ökostromgesetz defined in the Green Electricity Act of 2012 (ÖSG)[9], which includes Feed-in Tariffs awarded from 2012 to 2021.

Account 3. RGPA Renewable Gas Promotion Agency.

From this point forward only Accounts 1 and 2 (Renewable Power) of the RSME, will be analyzed. Functioning of account 3 (Renewable Gases) is similar to Account 1.

6.1.1.1 Account 1 – "EAG Renewable Electricity Ledger" (EAG, Section 69)

The Renewable Electricity Fund was created as part of the new Renewables Support Management Entity (RSME). From Account 1 the RSME disburses every post-2021 support payment: monthly market-premium instalments, investment-grant tranches and its own administrative and financing costs.

The cost components which the RSME is allowed to recover for renewable power projects under the EAG (Account 1) are described in Section 69 paragraph 1 and 2, of the EAG and include:

1. Feed-in premiums and investment grants,
2. Provincial technology support (an annual €8 million disbursed to federal provinces to support renewable electricity generation),
3. Administrative and financial expenses associated with the feed-in premiums support,
4. Costs of evaluation of the renewables support schemes (each 3 years, detailed under section 91 of the EAG).

This account of the RSME is purely financial and does not include any power purchase agreements or transfers of Guarantees of Origin. The renewable energy producers sell all power and Guarantees of Origin in the market, and only the financial compensations for feed-in premiums, CfDs and grants are compensated by RSME.

To ensure liquidity of the fund financial expenses such as credit lines, commitment/arrangement fees on credit lines, guarantee commissions (only with ministerial consent), and interest gained or negative interest on cash surpluses, among others.

6.1.1.2 Account 2 – "ÖSG Green Power Settlement Agent" (ÖSG, Section 50)

The Green Power Settlement Agent is a separate account within the RSME which covers the legacy feed-in-tariff program.

For Legacy Renewable Power projects supported through the Feed-in Tariff scheme, the RSME maintains duties as a physical offtaker, through the Green Power Settlement Agent. The RSME

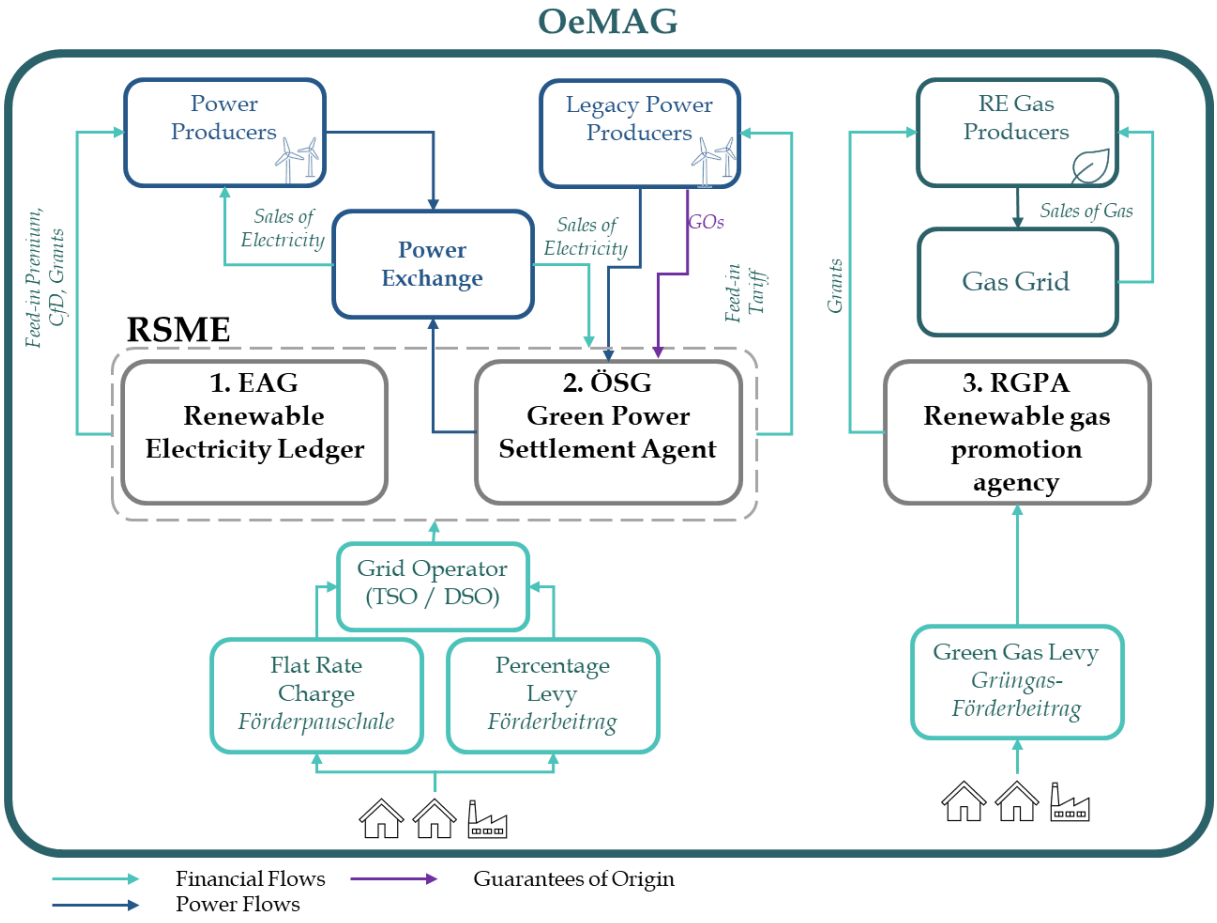
[9] Ökostromgesetz (Green Electricity Act) 2012 as amended on 08/01/2013. Available at: https://www.e-control.at/documents/1785851/1811363/OESG-2012-Fassung-vom-08-01-2013_en.pdf/e3f5aab1-d4e6-44c2-a57b-8033da5db678?t=1413908457345

purchases all electricity from Feed-in Tariff projects and sells the electricity and guarantees of origin in the market, as well as is a balance responsible party.

The cost components which the RSME is allowed to recover for legacy renewable power projects are described in Section 42 of the Green Electricity Act, and include:

1. Net Feed-in Tariff deficit – any deficit that may result from the difference between the cost of purchasing green electricity and the revenue from selling green electricity and guarantees of origin, while discounting any expenses covered by the federal provinces
2. Administrative and financing costs
3. Balancing-energy (imbalance charges)
4. Any mark-ups on Feed-in Tariffs as described in Section 21 and 22 of ÖSG
5. Expenses of grants for technology support (not applicable past 2021).

Figure 10 Schematic representation of Austrian RSME



6.1.2 RSME funding and tariffs

The RSME receives two customer levies created by the 2021 EAG, a) the flat-rate charge (Erneuerbaren-Förderpauschale) and b) the percentage levy (Erneuerbaren-Förderbeitrag), as well as penalties, interest and other minor-income items, explained in Section 6.1.2.

Section 71 of the EAG lays out all revenue streams of RSME for both the EAG Renewable Electricity Ledger and the Green Power Settlement Agent. Both new and legacy support projects are funded through the following main sources of revenue:

1. The flat rate charge – "Erneuerbaren-Förderpauschale", and
2. The percentage levy – "Erneuerbaren-Förderbeitrag,
3. Other minor income streams:
    - Penalties - Liquidated damages payable by auction winners who withdraw their project or miss the implementation deadline.
    - Administrative fines - Fines imposed by administrative authorities for breaches of the support rules.
    - Forfeited grid-connection deposits - Deposit paid by project developers when they request capacity, forfeited if they never build.
    - Interest on invested funds – Overnight and term-deposit interest on cash parked in the electricity fund
    - Donations, court settlements, EU receipts, etc.

6.1.2.1 Flat rate charge - "Förderpauschale" – (EAG, Section 73)

The flat rate charge (Förderpauschale) is an annual renewable electricity charge in Euro per metering point. The flat rate charge is paid by all end-customers that are connected to the grid in Austria. Exempt parties include parties which use electricity from the grid exclusively to operate powerplants, customers that provide balancing services (under section 23b to 23d of the Electricity Act 2010), pumped-storage power plants, and other possible exemptions or reductions subject to the BMK.

The flat rate charge is collected by system operators (DSO for low voltage, TSO for high voltage) through their bills to final customers. The flat rate is displayed as a separate item on bills. The system operators pass on the collected amounts to RSME every three months. The RSME may collect the projected amount in advance for every quarter, with quarterly reconciliations ex-post.

The flat rate charge is set by the Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK), together with the Federal Minister for Digital and Economic Affairs, once every three (3) years for each grid level. The flat rate charge may be set at zero (0) but may never be negative**.** The most recent flat rate charge was set in December 2024 for the year 2025 – 2027[10]. The EAG legislation aims to recover 38% of the funds needs through the flat rate charge.

[10] Verordnung - Erneuerbaren-Förderpauschale-Verordnung 2025. Available at: https://www.ris.bka.gv.at/eli/bgbl/II/2024/416

The method of calculation, allocation and assumptions for determining the flat rate charge are not publicly available, however the main and simplified formulas can be derived as follows:

1. The target amount the flat rate charge must raise:

$$RSME_{flat} = 0.38 \cdot (RSME_{need} - RSME_{other})[€] \quad (6.1)$$

2. The scaling factor α which converts the weights into euros:

$$\alpha = \left(\frac{R_{fix}}{\sum_{i=1}^{n} \omega_i \cdot m_i}\right)[€] \quad (6.2)$$

3. The flat charge for each grid level:

$$F_i = \alpha \times \omega_i \; [€/meter/year] \quad (6.3)$$

where:

$RSME_{need}$	-	Forecasted funding needs for the RSME
$RSME_{other}$	-	Forecasted income from other sources (Section 6.1.2, point 3)
m_i	-	Forecasted number of metering points for grid level i
ω_i	-	per-meter weight that sets each grid level's relative share of the flat renewable-energy charge

The flat rate charge secures a predictable income stream for the RSME, and ensures that the part of the cost for Renewable Electricity is shared among different customers groups, including low consumption customers, as well as high demand customers, through a predictable and stable tariff.

6.1.2.2 Renewable Electricity Contribution (Percentage Levy) - "Förderbeitrag" (Section 75, EAG)

The percentage levy is a renewable electricity surcharge expressed as a percentage (%) mark-up of the nationwide average network tariffs for each grid level. It is paid by all end-customers connected to the Austrian electricity grid, with the same exemptions that apply to the flat rate (pumped-storage, network-reserve units, and any further exemptions granted by the BMK).

Distribution system operators (DSOs) and, for high-voltage connections, the transmission system operator (TSO) add the levy to the network-use invoice as two line items, shown as separate entries on customer bills:

- Capacity component (€/kW)
- Energy component (€/kWh)

Operators transfer the proceeds to the RSME each month.

The BMK, together with the Federal Minister for Labor and Economy, sets one single percentage every year. The most recent tariff was set in December 2024 for the 2025 tariff

year at 10.32%. This percentage is applied to the average Austrian network-use and network-loss charges for each grid level published in the System-tariff Ordinance (SNE-V) [11].

As the flat charge is set for three years, and aims to provide 38% of the RSME's funding need, the percentage levy is designed to raise the remaining percentage (aiming for 62% of the funding need). The BMK may adjust the percentage during the year by amending the ordinance, to accommodate for extraordinary shifts in funding needs. The percentage levy may be set to zero, but may never be negative, or issue credits to consumers. The 2024 tariff ordinances demonstrated this principle in practice when the percentage levy was fixed at 0%[12].

The calculation method and assumptions for determining the percentage levy are not publicly available, however the main and simplified formulas can be derived as follows:

1. Remaining amount the percentage levy must raise:

$$RSME_{var} = RSME_{need} - RSME_{flat} - RSME_{other}[€] \tag{6.4}$$

2. The percentage levy applied across all grid levels:

$$P = \frac{RSME_{var}}{\sum_{i=1}^{n}(T_{cap,i} \cdot CAP_i + T_{ene,i} \cdot ENE_i)}[\%] \tag{6.5}$$

3. The surcharge for each grid level:

$$C_i = p \cdot T_{cap,i}[€/kW/year]$$
$$E_i = p \cdot T_{ene,i}[€/kWh] \tag{6.6}$$

where:

$T_{cap,i}$, $T_{ene,i}$	-	national-average capacity and energy network-tariff components for grid level i
CAP_i , ENE_i	-	forecast contracted capacity (kW) and energy (kWh) for grid level i
C_i, E_i	-	capacity and energy surcharges shown on customer invoices

The percentage levy complements the flat charge by flexibly covering the remaining funding needs. It adds a uniform percentage to the national-average network tariffs for each grid level, so every customer's contribution rises or falls in direct proportion to their contracted capacity and energy use. This keeps the RSME cash flow aligned with actual costs while distributing the

[11] Verordnung - Erneuerbaren-Förderbeitragsverordnung 2025. Available at: https://www.oem-ag.at/fileadmin/user_upload/Dokumente/gesetze/Erneuerbaren-Foerderbeitragsverordnung_2025.pdf

[12] Verordnung - Erneuerbaren-Förderbeitragsverordnung 2023. Available at: https://www.oem-ag.at/fileadmin/user_upload/Dokumente/gesetze/2022_12_27_-_Erneuerbaren-Foerderbeitragsverordnung_2023_-_BGBl_I_Nr_498.pdf

bulk of renewable electricity expenses equitably, through a transparent, annually adjustable surcharge.

Both EAG tariffs, and the percentage levy (*Erneuerbaren-Förderbeitrag*), may be reduced to zero (0), but may never be negative**.** The flat charge is defined in Section 73 of the EAG as an amount "in Euro per metering point," and the levy in Section 75 of the EAG as a "contribution". Neither word form permits a credit.

Yearly reconciliation

The RSME shall deposit all funds into an interest-bearing instrument. At the end of every calendar year the RSME, must draw up a complete statement of the renewable-electricity fund that is kept under. As per Section 69, paragraph 2 of the EAG, within five months after year-end, the closing balance sheet for the Renewable Electricity ledger, as well as for the ÖSG Green Power Settlement Agent shall be submitted to the Ministry (BMK). During that five-month period the RSME first nets all late inflows, principally the December instalments of the flat charge and percentage levy, against the out-payments already recorded. It simultaneously settles any inter-account advance created in the fourth quarter: if the FIT ledger pre-financed the EAG fund in December, that amount is repaid (as per Section 69, paragraph 2).

Under Section 69, paragraph 3 of the EAG the residual funds are carried forward as the first line in the cost-recovery calculations for the coming tariff year. A positive balance (surplus) is booked as a liability of the fund and is deducted from next year's funding need, automatically lowering the flat charge and/or the percentage levy. Whereas, a negative balance (deficit) is booked as an asset and is added to the next funding requirement, raising the levies accordingly.

In this way the statutory mechanism ensures that every expense over or under collected in one year is neutralized through the tariff-setting exercise for the next year, keeping the renewable-electricity fund cash-neutral over time while maintaining full transparency between the new EAG scheme and the still-running FIT program.

6.1.3 Vulnerable consumer protection under the EAG and RSME

Austria's 2021 Renewable-Expansion Act (EAG) adds a social safety layer to its two nationwide renewable-electricity charges, through two mechanisms, a) a full exemption for low-income households (Section 72), and b) a cost cap for households (Section 72a)

Low-income households that qualify for the broadcasting-fee (*Rundfunkgebührengesetz*) waiver, are exempt from the renewable electricity flat rate, the renewable electricity percentage levy, and the renewable gas contribution. The exemption is automatic once the customer's status is registered at the Gebühren Info Service (GIS).

Households which do not qualify for the exemptions, but whose income does not exceed a certain threshold (determined in line with section 48 paragraph 1 of the Telecommunication Fees Code) are exempt from the renewable electricity flat rate and the percentage levy

contribution in excess of 75 Euro/year overall. The cost of the foregone amounts is reported by operators in the annual settlement statement to the RSME and reimbursed from the proceeds of the following tariff year, thereby spreading the social measure to the wider customer base.

6.2 Italy – Renewable Energy support management entities (GSE/CSEA)

Italy finances its Renewable Energy Support Scheme through two key entities:

- Gestore dei Servizi Energetici S.p.A (GSE) - Manager of Energy Services, and
- Cassa per i Servizi Energetici e Ambientali (CSEA) – The Energy Sector Clearinghouse.

The legal framework governing these entities is defined primarily by Legislative Decree 387/2003[13], and Legislative Decree 28/2011[14]. Both entities are regulated by ARERA (the Italian Regulatory Authority for Energy, Networks and Environment).

GSE is a state-owned company, wholly owned by the Ministry of Economy and Finance (MEF). GSE has three subsidiaries which perform different key roles in the Italian energy sector:

- Acquirente Unico – AU S.p.A. serves as a supplier of last resort and for customers of the protected market, manager of the Customer Help Desk, operator of the Integrated Information System for Gas and Electricity, and as the Italian Central Storage Entity (security stocks of Oil)
- Gestore dei Mercati Energetici – GME S.p.A. is responsible for the economic management of the wholesale power market (IPEX), as well as the gas and environmental markets.
- Ricerca sul Sistema Energetico – RSE S.p.A serves as a research and analysis center for the energy sector, with a focus on strategic national projects, as well as in evaluation and certification of energy saving projects.

GSE is also responsible for technical and economic administration of various support schemes for renewable energy, electric mobility, energy efficiency, and district heating among others. GSE responsibilities include verifying plant compliance, imposing penalties, issuing Guarantees of Origin (GOs), managing the national registry of renewable plants.

CSEA is a government-owned economic body operating in the electric, gas and water sector in Italy. Its main mission is the collection of certain tariff components and system charges from operators, financial management (ensuring liquidity) of the funds collected through dedicated ring-fenced management accounts, and subsequently disbursement to companies according

[13] Legislative Decree 387/2003. Available at: https://www.mercatoelettrico.org/portals/0/Documents/en-US/20081008DLGS387_29Dec2003%20_en.pdf

[14] Legislative Decree 28/2011, Number 28. Available at: https://www.gazzettaufficiale.it/eli/id/2011/03/28/011G0067/sg

to rules issued by ARERA. The accounts include funds for renewable energy, energy efficiency, quality of service, nuclear decommissioning, social bonuses, etc.

CSEA currently administers 62 separate funds:

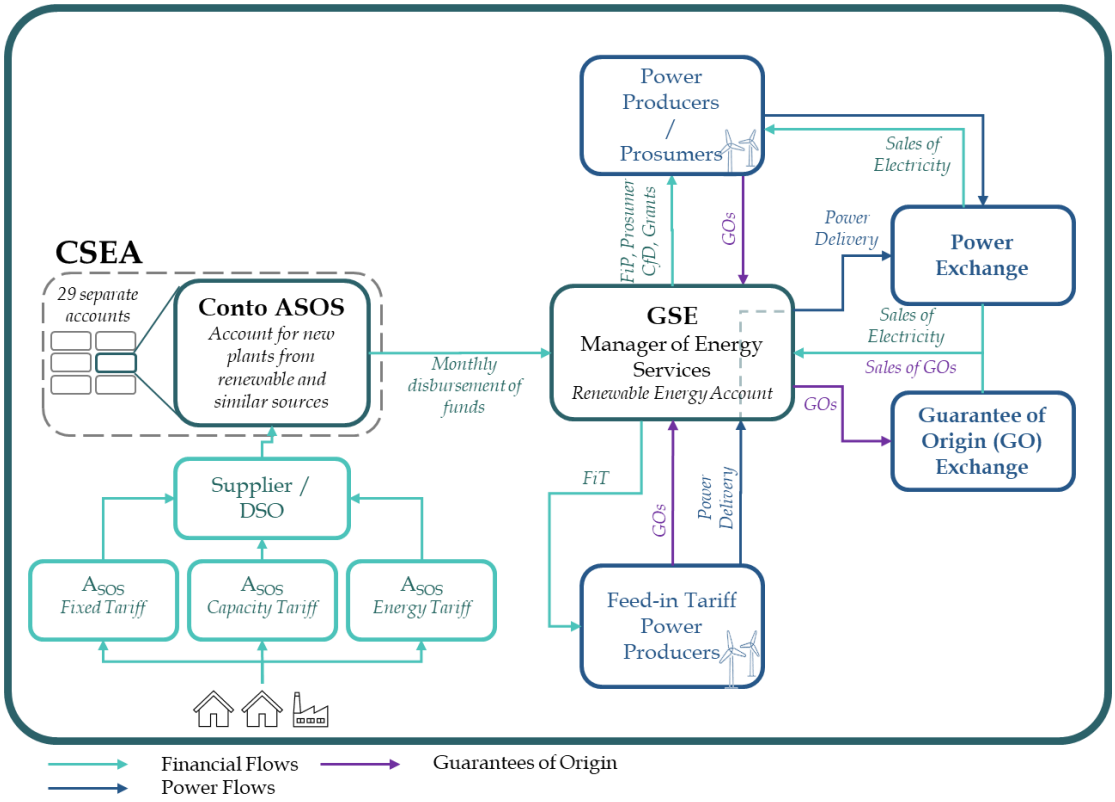
- 29 for the management of the electricity sector
- 25 for the management of the gas sector
- 6 for the management of the water sector
- 2 for the management of the waste sector

CSEA also carries out administrative, technical, accounting and management inspection of subjects.

6.2.1 Interactions between RES Entities in Italy (CSEA/GSE)

GSE carries out the purchase and sale of energy produced from renewable sources (Feed-in Tariff), develops technical analyses for plant qualification, applies various incentives, and carries out verifications on data certified by producers. The total amount of support, net of revenues received (from sales of electricity, GO's and issuing penalties), as well as the costs incurred for the management of the mechanisms, constitute GSE's funding needs for renewable energy support entities. These funding needs are mostly covered by the revenue generated from the ASOS tariff component.

Figure 11 Schematic of interaction between renewable energy support entities in Italy



Electricity suppliers/distribution companies collect the ASOS tariff component from their consumers, and in turn transfer the funds collected from the ASOS tariff to CSEA dedicated Account for new plants from renewable and similar sources, *"Conto per nuovi impianti da fonti rinnovabili e assimilate"* (ContoASOS). According to the provisions of Annex A of the ARERA Deliberation 618/2023/R/com (TIPPI)[15], specifically Article 5.1, distribution companies pay proceeds to the ASOS components of the fund each month, within 15 days of previous billing period. If the proceeds are negative, CSEA will liquidate the amount in favor of the distribution company within 60 days from the end of the month.

Electricity distribution companies inform CSEA every 6 months on the forecasted electricity funds collected by their consumers.

The transfer of funds from ContoASOS to GSE is described in Article 12 of TIPPI. CSEA makes the necessary financial resources available to GSE from ContoASOS according to a monthly advance and adjustment mechanism. The amount of financial resources that CSEA must provide monthly to GSE, as an advance payment, is set at 80% of the average monthly requirement. The advance payment of financial resources must be made by the CSEA by the 17th calendar day of each month, while the settlement of the balance items is carried out by

[15] Testo Integrato delle disposizioni per le Prestazioni Patrimoniali Imposte e i Regimi Tariffari speciali – Settore elettrico (TIPPI). Available at: https://www.arera.it/en/atti-e-provvedimenti/dettaglio/23/618-23

the second-to-last working day of each month, based on the monthly reporting that GSE sends to the CSEA and ARERA. Unspent funds remain within ContoASOS, serving as a liquidity buffer.

GSE also receives funds from the sale of electricity for Feed-in Tariff support schemes, the sale of Guarantees of Origin, penalties issued, and interest accrued on funds. These cash flows and any positive balance remain within GSE and are net-settled in the annual ASOS calculation. GSE transfers funds to renewable energy producers on a monthly basis.

6.2.2 Renewable Energy costs, funding and tariffs

Article 12.1 of TIPPI Annex A, details the cost components to be recovered by the ASOS tariff. These cost components include:

- Renewable-electricity incentives
    - Feed-in premiums
    - Contracts for Difference
    - Investment Grants
    - Feed-in tariff support of legacy projects (net of income from electricity sales)
    - Imbalance charges
    - Prosumer support schemes
- Administrative and monitoring costs
- Interest and bank fee costs, cost on liquidity measures

The following negative components are deducted from the total requirements of the fund:

a) GO auctions proceeds
b) Penalties issued and paid to GSE by supported producers
c) Penalties issued to GSE
d) Claw-backs
e) Support from state budget

The ASOS tariff is calculated annually by ARERA using detailed forecasts provided jointly by GSE and CSEA. The calculation considers gross forecasted incentive payments, offsetting revenues, and any carried-over buffer balance from the previous year. These tariffs undergo quarterly reassessment by ARERA.

The ASOS tariff is paid by all consumers connected to the grid. In general customer and low-income household protection is not part of the ASOS tariff consideration, and it is subject to other policies. In the past ARERA has reduced the ASOS tariff to zero (0) for LV-non-domestic users in the May–July billing cycles. The costs were born from the CSEA liquidity fund and were later repaid through increased tariffs. Enterprises with high electricity consumption pay only part of the ASOS tariff. The cost of this exemption is paid from other electricity customers.