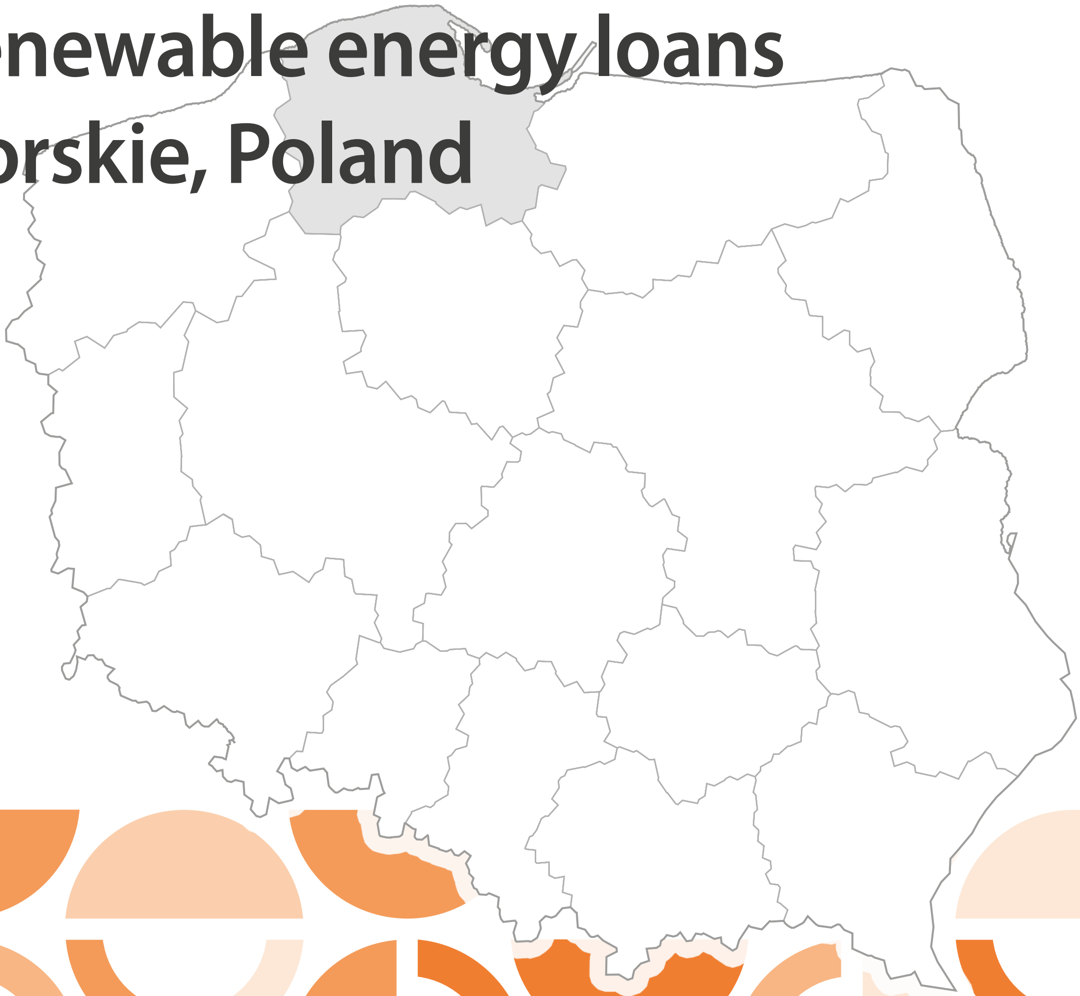
fi-compass ERDF

Case Study
June 2024

ERDF renewable energy loans in Pomorskie, Poland



European Commission

European Investment Bank

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Abbreviations

Abbreviation	Full name
BAPE	Baltic Energy Conservation Agency (Bałtycka Agencja Poszanowania Energii Sp. z o.o.)
BGK	Bank Gospodarstwa Krajowego
CLLD	Community-led local development
CPR	Common Provisions Regulation
EIB	European Investment Bank
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF or ESI Funds	European Structural and Investment Funds
EU	European Union
FoF	Fund of Funds
MA	Managing authority
OP	Operational Programme
PFP	Pomorskie Loan Fund (Pomorski Fundusz Pożyczkowy Sp. z o.o.)
RES	Renewable energy sources
SME(s)	Small and medium-sized enterprise(s)

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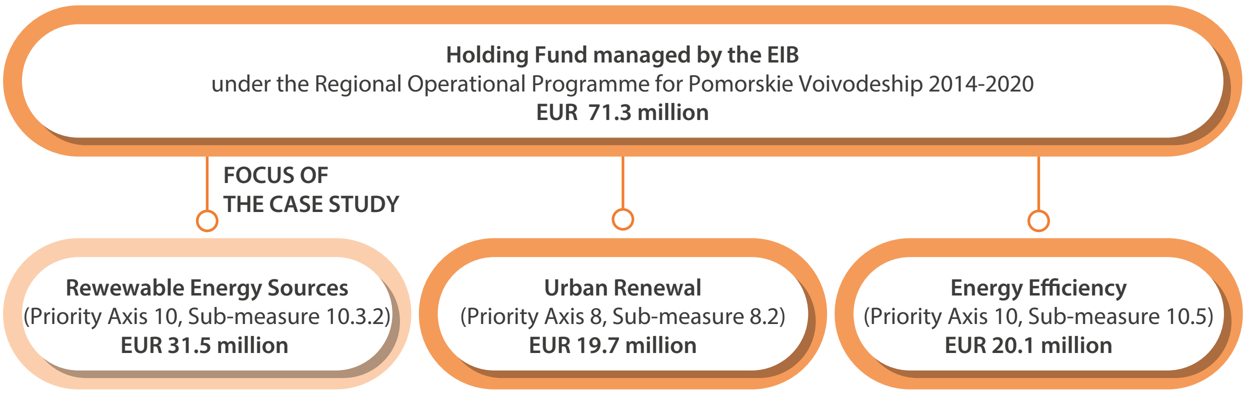
01 Executive summary

This case study presents a loan instrument under the European Regional Development Fund (ERDF) set up in 2019 to support investments in renewable energy sources (RES) in the Pomorskie region of Poland. It was supported by the Regional Operational Programme (OP) 2014-2020 with a contribution of EUR 31.5 million, with additional support from the body implementing the Specific Fund[1] of EUR 1 million.

Within the Regional Operational Programme for Pomorskie Voivodeship 2014-2020 the Holding Fund managed by the European Investment Bank deployed financial instruments through three policy windows: 1) Renewable energy; 2) Urban renewal; and 3) Energy efficiency in housing. This case study focuses on the Renewable Energy Sources Loan Fund ('RES Loan Fund'), which is one of the three Specific Funds implemented under the Operational Programme.[2] The RES Loan Fund operated under Sub-measure 10.3.2 Renewable Energy Sources of Priority Axis 10.

Figure 1: Focus of the case study: RES Loan Fund



Source: EIB

The RES Loan Fund was the first fund dedicated specifically to the RES policy window in the Pomorskie region. The purpose of the RES loan instrument was to finance projects involving renewable energy installations (such as photovoltaics, biomass, heat pumps, biogas and modernisation of hydropower stations) to boost renewable energy capacity and ultimately to foster the use of renewable energy in the region.

To implement the instrument, the Board of the Pomorskie Voivodeship entrusted the EIB as the body implementing the Holding Fund[3]. The Pomorskie Loan Fund (Pomorski Fundusz Pożyczkowy, PFP) was selected as the body implementing the RES Loan Specific Fund.

Established in 2004 by the Marshal's Office of the Pomorskie Voivodeship, PFP has grown into a prominent entity within the region, recognised for its strategic role in local economic development. Operating under a stable ownership system predominantly held by local government units, PFP focuses on supporting the growth of SMEs

1 This was referred to as body implementing the financial instrument or financial intermediary in the CPR terminology for the 2014-2020 programming period.
2 In addition to the financial instruments managed by the EIB through the Holding Fund, the Regional Operational Programme for Pomorskie Voivodeship also contributed to financial instrument implementation under Investment Priority 1b ('promoting business investment in R&I, etc.') and Investment Priority 3c ('supporting the creation and the extension of advanced capacities for product and service development') as well as for Priority Axis 13, Sub-measure 13.1.2, dedicated to the REACT-EU initiative. This was achieved through Bank Gospodarstwa Krajowego and Pomorski Fundusz Rozwoju Sp. z o.o., which served as implementing bodies for the respective Holding Funds.
3 This was referred to as Fund of Funds (FoF) in the CPR terminology for the 2014-2020 programming period.

and fostering regional development initiatives, including those in the social economy. Over the years, PFP has granted 7 906 loans totalling EUR 165 million, leveraging funds from local, national and EU sources to become one of the largest financial intermediaries in Pomorskie, effectively managing public funds across 34 projects.

The financial instrument subordinated[4] the ERDF and state budget financing to the co-financing of the body implementing the Specific Fund, allowing lower pricing to the final recipients.

The RES Loan Fund prioritised projects that fit in with municipal low-carbon or energy supply policies or innovative projects with the aim to develop equipment and systems with the highest environmental impact. Supported projects were required to comply with municipality-level air quality programmes.

The financial instrument has been fully absorbed through 137 loan agreements. The supported projects included a varied mix of investments, ranging in size from EUR 6 thousand to EUR 5 million and catered for various types of final recipients, including microenterprises, SMEs, large enterprises, public entities, associations, among others.

Funding sources
ERDF Regional Operational Programme for Pomorskie Voivodeship 2014-2020

Type of financial product
Loan

Financial size[5]
EUR 31.5 million from the Regional Operational Programme, including EUR 28.8 million from ERDF and EUR 2.7 million from national co-financing + EUR 1 million from the body implementing the Specific Fund.

Thematic focus
Renewable energy projects

Partners involved
Managing authority
The Board of the Pomorskie Voivodeship
Body implementing the Holding Fund
European Investment Bank (EIB)
Body implementing the Specific Fund
Pomorskie Loan Fund (PFP)

4 Subordination means that the ERDF and state budget financing are placed in a lower priority compared to the co-financing from the body implementing the Specific Fund. In practical terms, this implies that in case of losses, the ERDF and state budget financing would absorb any financial setbacks before the co-financing is affected.

5 The exchange rate used in this document is EUR 1 = PLN 4.3015, as set by the European Central Bank on 6 June 2024.

Key takeaways

As well as addressing the financing gap for renewable energy in Pomorskie, the RES Loan Fund exhibited several characteristics that contributed to its success:

- **Extensive distribution network:** the body implementing the Specific Fund, PFP, is a well-known local stakeholder and one of the largest financial intermediaries in the region. It has had a long history of implementing EU projects and maintains a broad active network across the region, including branches outside the Tri-City (Gdańsk, Gdynia, Sopot) in locations such as Słupsk, Tczew, and Kartuzy. This wide network and strong local presence have facilitated efficient marketing and distribution of the loan, making it readily accessible to a diverse range of investors;
- **Tailor-made product:** the design of the RES loan was closely aligned with the specific needs of targeted final recipients. As an example, it served as a direct response to the sharp increase in energy prices, offering a practical solution for local borrowers, by ensuring access to inexpensive and practically inexhaustible energy via the investments;
- **Flexible and attractive product parameters:** the RES loan was characterised by its simplicity and flexibility, including variable loan values and grace periods adjusted to the individual projects, along with relatively straightforward criteria for securing preferential (fixed) interest rates. These features have met the diverse requirements of the target group effectively;
- **Effective cooperation with local energy agency:** BAPE (Baltic Energy Conservation Agency) provided valuable technical expertise free of charge (such as assessment of economic viability of new RES technologies), ensuring that only feasible and impactful initiatives received funding. BAPE's strong market knowledge and regional presence complemented PFP's understanding of the local market, streamlining the implementation process.

02

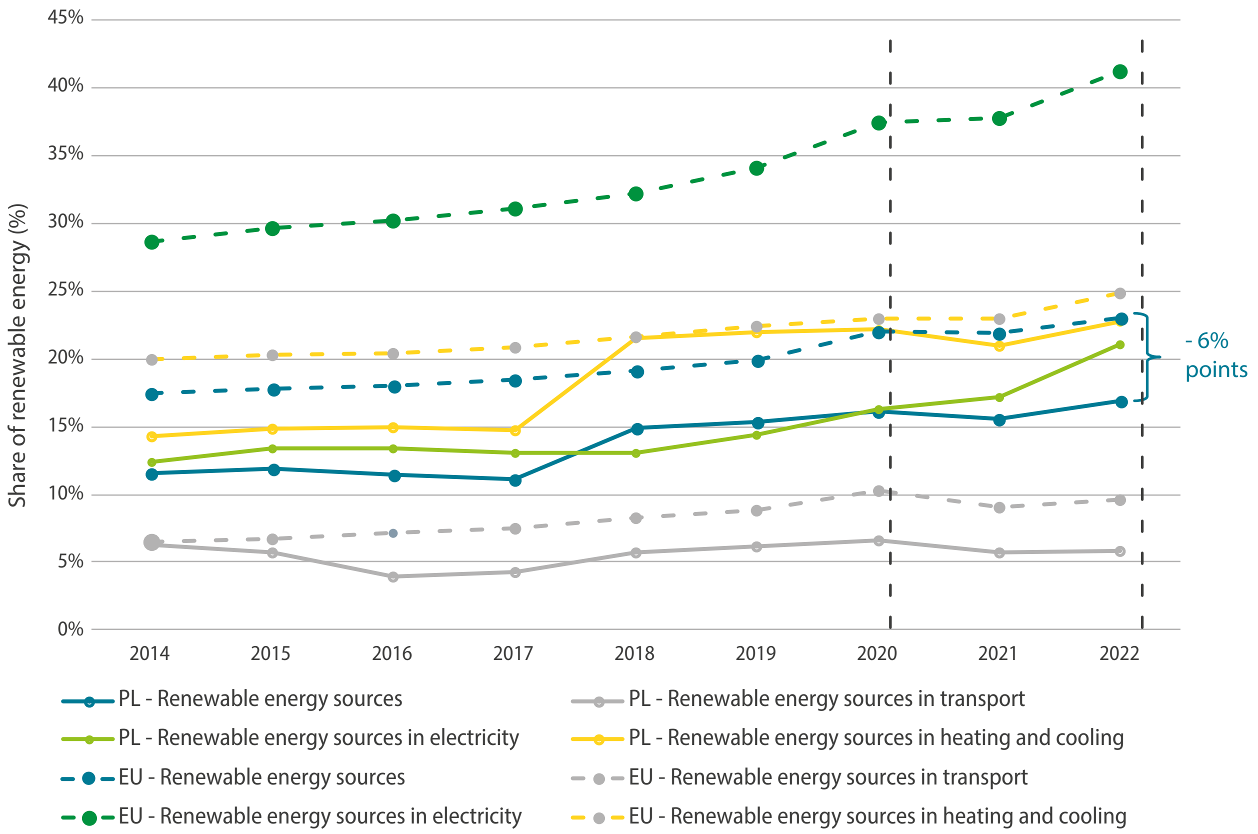
Design of the financial instrument

2.1 Context

The underlying need

In Poland, the share of renewable energy sources has steadily increased across various sectors over the past two decades. The overall contribution of RES to the energy mix has incrementally risen from 7% in 2004 to 12% in 2014, and subsequently to 17% by 2022, as illustrated in the chart below. However, it is still lower than the EU average of 17% in 2014 and 23% in 2022 and falls short of the 32% target set for 2030 under the resource efficient Europe flagship initiative.

Figure 2: Share of renewable energy sources in Poland and in the EU



Source: Eurostat[6]

6 https://ec.europa.eu/eurostat/databrowser/view/sdg_07_40__custom_11049610/default/table?lang=en.

The share of renewable energy in electricity generation in Poland has experienced a significant rise, increasing from 2% in 2004 to 12% in 2014, and further to 21% by 2022. This trend underscores a consistent shift towards cleaner energy sources within the power sector, aligning with European sustainability objectives. Similarly, the heating and cooling sector has witnessed a notable increase in renewable energy usage, growing from 10% in 2004 to 14% in 2014, and reaching 23% in 2022. Conversely, in the transport sector, after some initial fluctuations, the share of renewables has stabilised, remaining around 6% from 2014 through 2022.

The Pomorskie Region has experienced a consistent increase in the percentage of energy derived from renewable sources. The share of energy production from renewables has consistently exceeded the national average. In 2010, the region's renewable energy share produced in the voivodeship had already reached 30%. By 2019, this figure had risen to 52%, with renewable electricity production accounting for 27.4% of total energy consumption. Wind power dominates renewable electricity generation, contributing around 75% of "green" electricity. Biomass follows with approximately 17%, while other significant sources like hydropower, biogas, and photovoltaics collectively account for about 2.5%, partly due to a notable increase in micro-installations (figures as at 2020). However, the overall energy production across all sources falls short of meeting the region's energy demand, covering less than 53% of the region's energy needs.

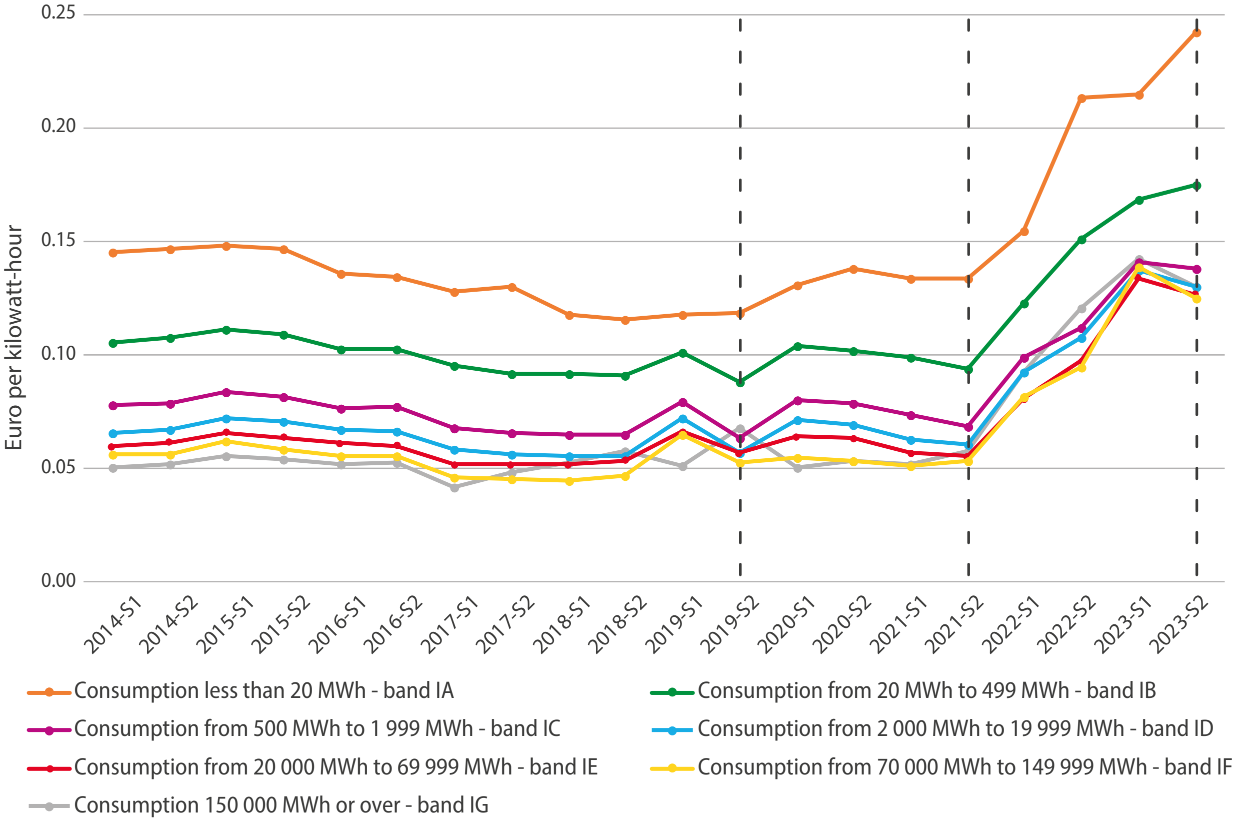
The region's infrastructure, including the outer port of Gdańsk and service ports, supports the development of offshore wind farms. There is also a growing interest in energy self-sufficiency among consumers, evident in the rising adoption of RES micro-installations. Moreover, the region possesses ample space for RES installations, including urban areas, unused or minimally utilised agricultural land as well as significant areas of wasteland suitable for renewable energy projects.

Taking into account the national and local conditions, several factors underlined the necessity of the RES Loan Fund:

- **Increasing energy prices:** from 2019 onwards, energy prices in Poland have begun to rise, nearly doubling between 2021 and 2023, primarily due to the Russian-Ukrainian war. This significant increase has impacted both economic and energy strategies in the region. Trends in electricity prices for non-household consumers in Poland are illustrated in Figure 3 below[7];
- **Coal dependence:** the still significant reliance on coal for thermal energy results in high emissions, challenges in meeting air quality standards, and substantial carbon dioxide emissions;
- **Air pollution:** the extensive use of coal for domestic heating is a primary contributor to air pollution, leading to non-compliance with WHO air quality standards in many Polish cities. Regular exposure to polluted air significantly contributes to premature deaths in Poland;
- **Cultural shifts:** there is considerable potential to change public attitudes towards energy consumption and encourage a culture where individuals both consume and produce renewable energy within the region;
- **Renewable energy potential:** there is considerable potential for the development of renewable energy, especially in wind and solar power, alongside substantial biomass resources and biogas production capabilities. This potential is amplified by the rapid advancements in renewable energy technologies and the decreasing costs of equipment and machinery for generating energy from renewable sources, driven by mass production and the commercialisation of investments;
- **High energy intensity:** the region's economic development is hindered by its high energy intensity, particularly in public and residential buildings where significant potential for heat savings exists;
- **Electricity deficit:** Poland faced a significant generation capacity deficit in the programming period, resulting in the need to import electricity.

7 Note that regarding the household sector, which is not within the scope of the RES Loan Fund and this case study, the government introduced a number of protective measures, including special subsidies and freezing energy prices, to mitigate the impact of increasing energy prices.

Figure 3: Electricity prices for non-household consumers in Poland (bi-annual data)



Source: Eurostat[8]

The RES loan was designed to address the identified needs and challenges by providing low-cost external financing to a wide range of borrowers, particularly to enhance the use of energy from renewable sources in distributed generation. This was aimed to not only secure local energy supplies but also economically invigorate rural areas that are well-suited for RES development. The decreasing cost of technology, alongside international commitments and rising energy prices projected a growing interest in RES installations among production companies and energy producers.

Strategic objectives and priorities

The overarching aim of the RES Loan Fund under the Regional Operational Programme funds for 2014-2020 (RPO WP 2014-2020) is **to enhance energy security, improve energy efficiency, and reduce the environmental impacts associated with energy production**. The financial instrument designed to support these objectives offered a RES loan specifically aimed at funding projects that generate energy from renewable sources, prioritising ecological impact and cost-effectiveness.

8 https://ec.europa.eu/eurostat/databrowser/view/nrg_pc_205__custom_11048548/default/table?lang=en.

The objectives for the RES Loan Fund are detailed in the Operational Programme, with specific objectives outlined for enhancing both the social and economic infrastructure:

- Supporting the generation and distribution of energy from renewable sources. The relevant specific objective was to increase the use of energy from renewable sources, especially produced in distributed generation (*Priority Axis 10, Investment Priority 4a*);
- Supporting the physical, economic and social regeneration of poor communities in urban and rural areas. The relevant specific objective was to increase social and economic activity of residents of degraded urban areas (*Priority Axis 8, Investment Priority 9b*);
- Supporting energy efficiency, smart energy management and the use of renewable energy sources in public infrastructure, including public buildings, and the housing sector. The relevant specific objective was to improved energy efficiency of public and residential buildings (*Priority Axis 10, Investment Priority 4c*).

The RES Loan Fund, as outlined in the Investment Strategy, **primarily supports Investment Priority 4a**, focusing on the generation and distribution of energy from renewable sources with an emphasis on distributed generation. The Investment Strategy details how the RES loan contributes to the overall objectives of the Programme, using specific output and result indicators to measure its impact and effectiveness within the allocated budget.

The objectives defined for the RES Specific Fund are closely aligned with the "Resource-efficient Europe" flagship initiative under the Europe 2020 strategy. This alignment underscores the region's commitment to decoupling economic growth from resource and energy use, reducing CO_2 emissions, increasing competitiveness, and increasing energy security.

Complementarity of the RES Loan Fund with other instruments

The RES Specific Fund has operated alongside a variety of national and commercial funding options:

- **National grant programmes** such as 'Clean Air' and 'Thermal Modernisation Relief for Taxpayers' mainly targeted individual consumers and did not compete with the RES Loan Fund;
- **Leasing of RES installations** for Small and Medium-sized Enterprises (SMEs) offered by commercial banks served as a competitive alternative to the RES loan;
- **Green loans for SMEs** provided by the national promotional bank BGK (Bank Gospodarstwa Krajowego) explicitly excluded co-financing with the RES loan to prevent double financing;
- **Green loans for SMEs** from commercial banks acted as complementary products, enhancing the financial setup of investments supported by the RES loan.

2.2 Previous experience with financial instruments in Poland

In the programming period 2007-2013, the Regional Operational Programme for Pomorskie deployed financial instruments under the **JESSICA Initiative**, focusing primarily on urban development projects, including projects with elements related to energy efficiency. Managed by the EIB, the initiative distributed funds through two main intermediaries: BGK and Bank Ochrony Środowiska S.A. (BOŚ, Bank for Environmental Protection). The initiative financed 44 urban projects that significantly enhanced urban and metropolitan areas particularly in the Tri-City area.

The **JEREMIE Initiative** in the Pomorskie region, which was also managed by BGK, had a total budget of EUR 67 million. Compared to other regions implementing the JEREMIE Initiative in Poland, the size of the initiative was considered quite high, considering what might be expected given the region's relative economic potential. For the implementation of the financial instruments, BGK selected 15 financial intermediaries, including the Pomorskie Loan Fund to implement these instruments.

Urban Development Fund in Pomorskie

The Board of the Pomorskie Voivodeship as managing authority entrusted the EIB as Holding Fund manager for the JESSICA initiative, which was the first generation of financial instruments for many regions in Poland. The BGK-managed Urban Development Fund (UDF), with a budget of around EUR 60 million, was an ERDF co-funded financial instrument implemented through the Holding Fund using resources of the Pomorskie Regional OP 2007-2013. It supported sustainable growth and renewal in urban and metropolitan areas alongside the grant system. The UDF focused on financially viable urban projects that are socially important and part of an integrated urban development plan, including business environment institutions, urban regeneration, public transport, and renewable energy.

For further reading, see: https://www.fi-compass.eu/library/case-studies/urban-development-fund-pomorskie.

The experiences and outcomes from the JESSICA and JEREMIE Initiatives provided valuable lessons for the regional policymakers. For instance, it was noted that local financial intermediaries, especially cooperative banks and loan funds, play a significant role in promoting investment activity through attractive loan offers in smaller communities. However, challenges such as limited bank interest in regional projects, unclear guidelines for financial instruments, and the need for more flexible loan terms were also identified. Strategies for enhancing advisory services, expanding financial networks, and adjusting financing terms to suit different business needs were suggested to address these issues and improve the effectiveness of financial support mechanisms in future programming periods.

During the 2007-2013 period, investments in RES were sporadically funded through loans and blended instruments primarily from funds dedicated to environmental protection and water management, revealing a gap in dedicated financial instruments, which subsequently influenced the strategic direction of financial support in the later periods.

2.3 Ex-ante assessment

In the period leading up to 2014-2020, the selection of the appropriate financial instruments for the Pomorskie Voivodeship was considered against the backdrop of past experiences and current regional needs.

Partnership Agreement: strategic shift to repayable financial instruments

The Partnership Agreement for 2014-2020 recommended that interventions aimed at producers of energy from renewable sources should predominantly use repayable instruments rather than grants. This was a strategic decision aimed at ensuring effectiveness in the utilisation of funds, taking into account the regional conditions and the specific development potential of various RES technologies identified in the Pomorskie Voivodeship Development Strategy. Among these, solar energy (including both photovoltaic cells and solar collectors) biogas, biomass, geothermal energy, wind, and hydropower were prioritised, with special emphasis on photovoltaic systems and heating systems utilising heat pumps or solar collectors.

Ex-ante assessment: optimal balance between grants and repayable support

The ex-ante assessment, building on the insights gained from the JESSICA and JEREMIE initiatives, recommended a mix of **grants and repayable support** to mitigate the high risks of subsidy dependency or low profitability in certain renewable energy projects, particularly in electricity. The financial split was thus set at EUR 215 million for grants and EUR 40 million for repayable instruments.

Continued use of an external entity for managing the financial instruments

The ex-ante assessment recommended the continuation of **using an external entity for managing these financial instruments**, owing to the complex nature of the financial products anticipated under the Operational Programme. The governance structure was seen as a successful model from the previous funding period, which could provide the necessary legal and financial expertise required for the more complex instruments envisioned.

Financial gap

Within the Pomorskie region and within the thematic scope of the Regional Operational Programme, the ex-ante assessment identified an **overall financial gap between EUR 181 million and EUR 221 million**. The ex-ante assessment does not specify the financial gap with respect to investment priorities relevant for RES. In fact, the criteria for using financial instruments in the energy and environmental sectors differ slightly from those for supporting investments in businesses. The primary requirement for intervention is not necessarily to fill a financial gap, but rather to provide incentives for projects aligned with the specific policy goals outlined in the OP.

Recommended products in the area of energy and environment protection

For installations generating renewable energy, the ex-ante assessment recommended the implementation of preferential loans, while grants were recommended for investments lacking positive net present value. Energy retrofitting of buildings for residential use was deemed suitable for preferential loans, whereas grants were recommended for public buildings, considering the debt of local government entities. Other energy efficiency projects, such as lighting replacement and heating network development, followed a similar pattern of preferential loans for certain areas like residential construction and grants for broader initiatives. For environmental protection projects such as waste management, no suitable opportunities for financial instruments were identified, indicating a preference for non-refundable financing or combined instruments. Additionally, financial instruments for purchasing vehicles used in public transportation systems were not recommended due to logistical complexities. Instead, non-refundable financing or combined instruments, such as interest-rate subsidies on commercial credits, were suggested as alternatives.

COVID-19 update: enhancing liquidity support for SMEs

Although the COVID-19 pandemic prompted an updated ex-ante assessment of the financial needs of local enterprises in 2020, the focus of the update was more on addressing the disruptions caused by the pandemic, primarily emphasising the necessity for enhanced liquidity measures and working capital support for SMEs. This situation underlined the flexibility required in financial planning to adapt to sudden economic shifts, an aspect that was separate from the ongoing strategic considerations related to renewable energy investments.

2.4 The financial instrument launched

Funding source

The RES Loan Fund was financed from the ERDF Regional Operational Programme for Pomorskie Voivodeship 2014-2020, aiming to support eligible renewable energy projects within the region. It is supplemented by the co-financing provided by the body implementing the Specific Fund. As set out in the Investment Strategy and Business Plan, the co-financing from the own funds of the body implementing the Specific Fund should ensure a leverage of minimum 1.1 at the portfolio's level. Such modest leverage indicates that the main priority of the financial instrument was the achievement of the policy objectives via higher transfer of benefit.

Type of financial product

The **PFP** offered a **loan product**, specifically designed to support the development and enhancement of renewable energy projects in the Pomorskie Voivodeship.

The loan product was flexible, accommodating various project sizes and complexities, from smaller community-based installations to extensive commercial energy operations. The **loan agreement** was entered into between the borrower (referred to as the **final recipient**) and **PFP**.

The RES Loan Fund subordinated the ERDF and state budget financing to the co-financing of the body implementing the Specific Fund, meaning that repayments would first be used to repay the loans of the body implementing the Specific Fund from own funds before the ERDF and state budget loans are being serviced. The benefits of this subordination must be fully passed on to final recipients through the transfer of benefit mechanisms agreed upon between the body implementing the Specific Fund and the body implementing the Holding Fund.

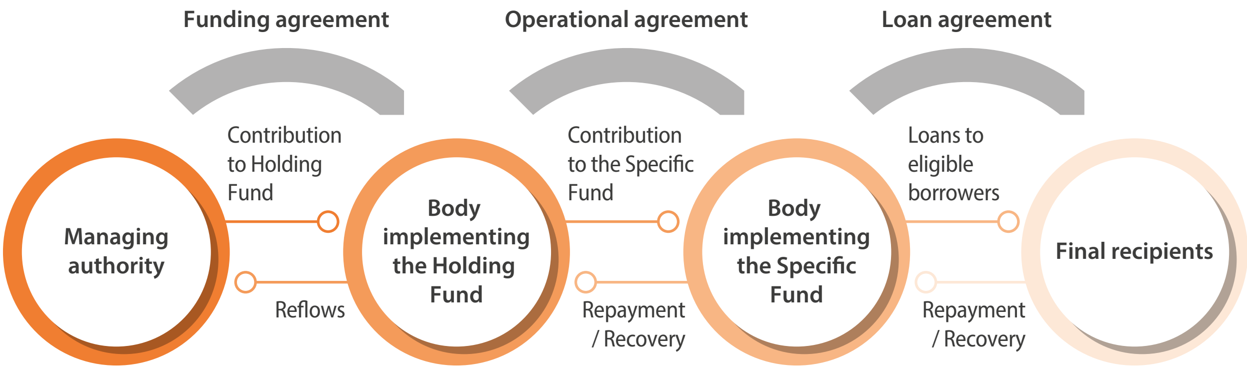
Transfer of benefits to the final recipients

To ensure the advantages of financial support are passed on to the final recipients, PFP has employed the following mechanisms within the RES loan programme:

- **Lower interest rates:** the interest rates for the portion of the loan provided from PFP's own funds were aligned with those of the portion financed from the Operational Programme. This alignment resulted in a lower overall interest rate on each individual loan, reducing the cost of borrowing for the final recipients and making the projects more financially viable;
- **Waiver of transaction fees:** for the part of the loan that was co-financed from PFP's own funds, all fees related to the granting and servicing of the loan were waived. By waiving these fees, the financial burden on final recipients was further reduced, thereby increasing their capacity to invest in and expand renewable energy initiatives.

The implementation structure of the instrument is outlined in Figure 3 below.

Figure 4: The mechanism of the RES Loan Fund



2.5 Timetable for set-up and implementation

Below, the key events and milestones in the implementation of the RES Loan Fund are listed, categorised into three types:

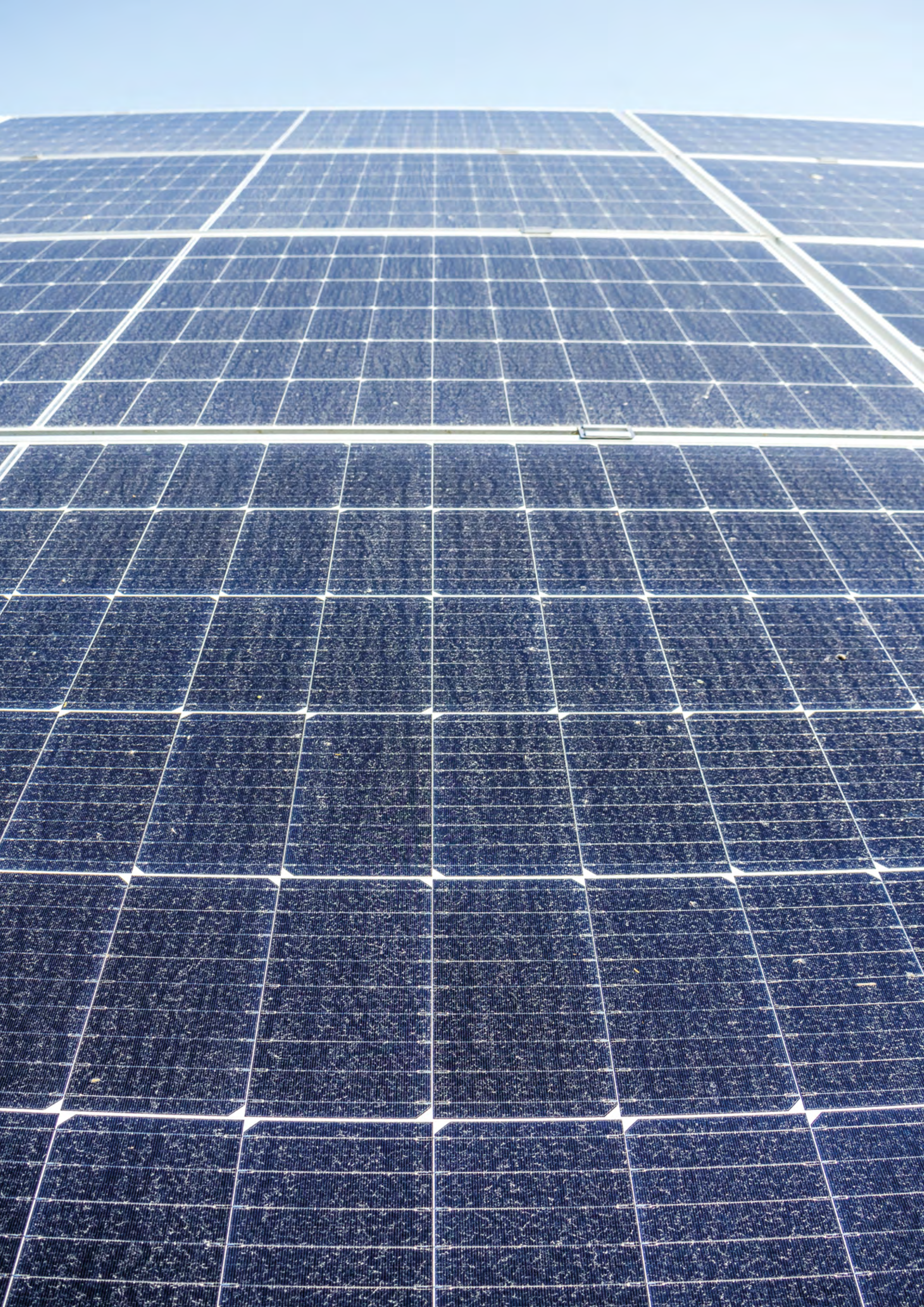
- activities involving the distribution of funds (indicated by **blue** with a icon);
- administrative activities (marked in **black** with a icon); and
- various analyses supporting planning and implementation (denoted in **grey** with a icon).

Table 1: Set-up and implementation timeline of the RES Loan Fund

	Time period	Action taken
	1 December 2016	Ex-ante assessment for the use of financial instruments within the RPO WP 2014-2020
	9 December 2016	Funding Agreement between the managing authority and the European Investment Bank
	5 July 2017	Deadline for the first call for expression of interest to select the body(ies) implementing the Specific Fund that will receive resources from the Holding Fund (European Investment Bank) – no expression of interest received[9]
	6 April 2018	Launch of procedure of negotiations without prior publication with PFP
	25 October 2018	Updated ex-ante assessment for the use of financial instruments within the RPO WP 2014-2020
	19 December 2018	Operational Agreement between the EIB and PFP regarding the RES Loan Fund
	5 March 2019	Cooperation Agreement between PFP and BAPE on supporting the project appraisal process with external expertise
	1 October 2019	First contract signed with final recipients
	June 2020	Updated ex-ante assessment for the use of financial instruments within the RPO WP 2014-2020 due to the COVID-19 pandemic
	7 December 2022	Implementing Decision of the European Commission approving the "European Funds for Pomerania 2021-2027" Programme
	31 December 2023	End of the eligibility period

Sources: programme documents

9 See more details in Section 3.3



03 Set-up of the financial instrument

3.1 Governance structure

Maintaining the existing structure

The governance structure for the 2014-2020 period has been designed to accommodate the nature of the financial instruments being implemented. Building on the experiences from the 2007-2013 period, the regional government decided to maintain the existing structure, deemed optimal for the programme's needs. This decision was grounded in the belief that specialised fund managers are better equipped to handle the complexities of the financial instruments, ensuring both efficient implementation and compliance with regulatory standards.

Managing authority: guiding regional development

The managing authority (MA), The Board of the Pomorskie Voivodeship, holds the primary responsibility for overseeing the implementation of the RPO WP. The MA sets strategic objectives, allocates resources, and ensures that the programme aligns with both regional development goals and broader EU policy directives. As the overarching body, the MA supervises the financial instrument's operational framework, coordinates with the Holding Fund and the body implementing the Specific Fund (EIB and PFP, respectively, in this case), and ensures compliance with European Union regulations. Additionally, the managing authority is responsible for monitoring programme effectiveness, reporting on progress, and making necessary adjustments to meet the evolving needs of the region.

Pomeranian Investment Council for Returnable Instruments

The Council was an advisory body to The Board of the Pomorskie Voivodeship, providing non-binding guidance on financial instruments. Active from 2017 to 2023, it consisted of a Chairman and Deputy Chairman (delegated by The Board of the Pomorskie Voivodeship without voting rights), expert members with voting rights, and observers, including the EIB, without voting rights. The Council met quarterly to review investment strategies, select financial intermediaries, and analyse financial instrument performance, and it was established voluntarily based on positive past experiences, including experts in finance, SME sectors, innovation, revitalisation, and energy.

European Investment Bank: disbursing funds to the Specific Fund

The EIB serves as the implementing body for the Holding Fund associated with this financial instrument. Tasked with the management and disbursement of funds, the EIB ensures that specific funds are utilised effectively. Under the terms agreed in the Funding Agreement with the managing authority, the EIB negotiates operational agreements and manages transactions with financial intermediaries. It establishes and maintains robust control systems, aligns agreements with intermediaries to the funding agreement requirements (including leverage ratios) and oversees fund allocation and decommitment strategies. Additionally, the EIB is responsible for safeguarding funds through effective litigation management and ensures management of dedicated accounts and resources.

Pomorskie Loan Fund: deploying funds to final recipients

PFP, established in 2004 by the initiative of the Marshal of the Pomorskie Voivodeship, is the selected body implementing the Specific Fund for this financial product.

Tasked with the direct administration and distribution of financial instruments, PFP facilitates the effective deployment of funds to eligible projects and entities. Operating under the strategic directives set by the EIB and the managing authority, PFP ensures that loans and other financial products are aligned with the broader objectives of regional development. PFP's primary responsibilities include, among others,

- identifying, selecting, and structuring financial investments in viable projects that align with the Investment Strategy and Business Plan;
- managing the project portfolio to meet specific indicators and deadlines;
- ensuring compliance with all applicable laws and objectives of the call;
- monitoring and controlling projects, providing necessary data for compliance with reporting obligations to the European Commission; and
- executing marketing and information measures.

PFP also secures co-financing to ensure adequate leverage of funds, and actively manages the funds received, including all reuses of resources (subject to approval by the managing authority). Key bodies within PFP are as follows:

Supervisory Board

The Supervisory Board oversees PFP, setting its strategic direction and ensuring operations comply with regulatory and ethical standards. It adopts and amends the fund's lending regulations, playing a key role in maintaining the fund's transparency and accountability.

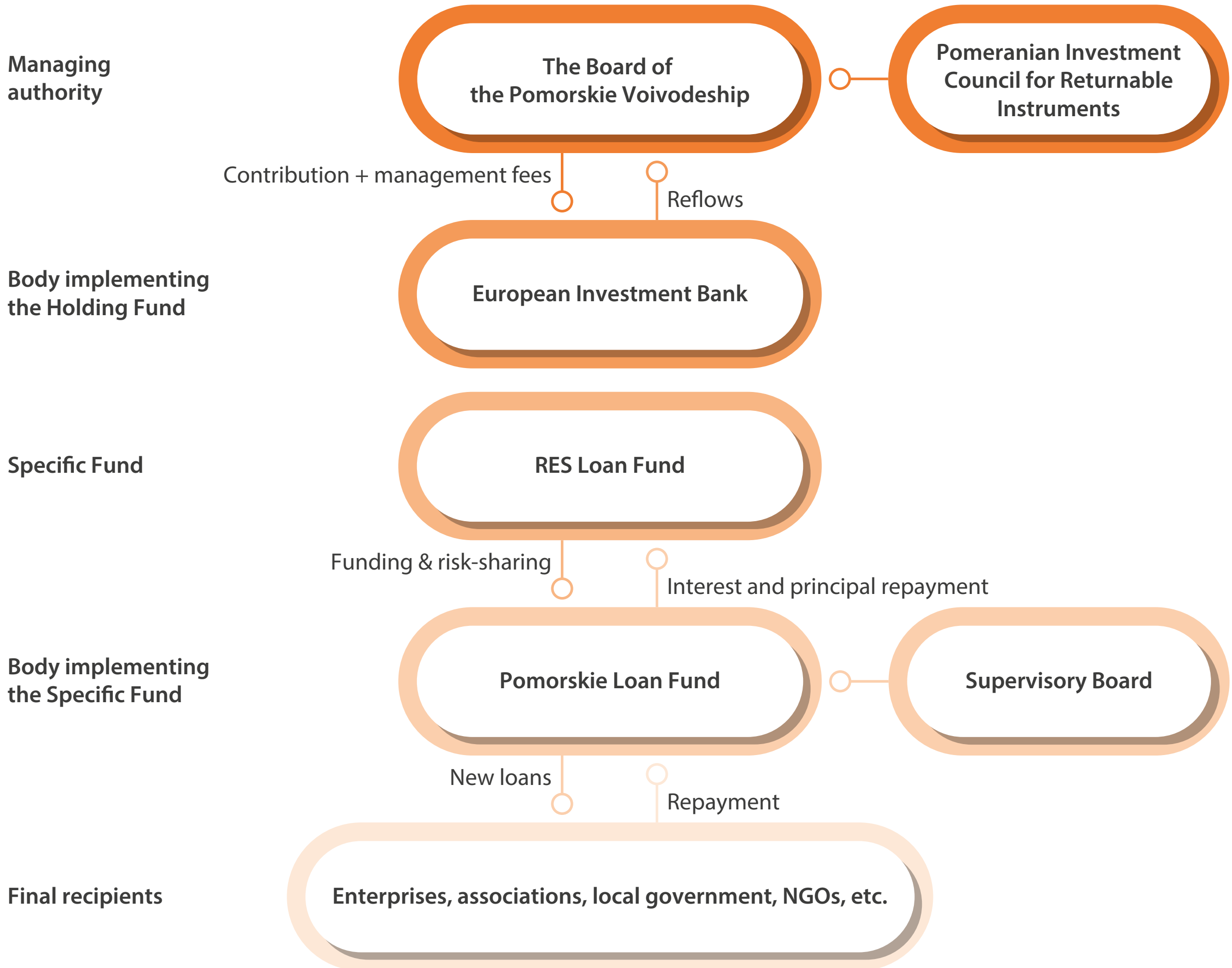
Management Board

The Management Board oversees PFP's daily operations and implements lending activities in line with strategies and policies set by the Supervisory Board. Its responsibilities include executing the operational plan, managing resources, and ensuring efficient support for regional development and entrepreneurship.

Loan Committee

The Loan Committee, an advisory body to PFP, comprises 3 to 6 members appointed by the Management Board and approved by the Supervisory Board. It evaluates the viability and alignment of loan applications with the Fund's objectives, ensuring loans are granted based on merit and strategic fit to maintain the fund's integrity and purpose.

Figure 4: Governance structure



Source: EIB

3.2 Financial size and payments

During the 2014–2020 programming period, EUR 2.8 billion from the ESIF budget was allocated to financial instruments in Poland, representing about 4% of the Member State's combined ERDF and ESF resources.

Specifically, within the Regional Operational Programme for Pomorskie Voivodeship 2014-2020, there were three policy windows implemented by the Holding Fund managed by the European Investment Bank:

- Renewable energy sources;
- Urban renewal;
- Energy efficiency in housing (including both residential and public buildings since September 2021).

The **total eligible expenditure for the RES Loan Fund was EUR 32.5 million**, EUR 31.5 million of which was contributed by the OP (constituting approximately 44% of the funding to the Holding Fund and 12% of the total funding allocated to the respective investment priority within the OP). The other two policy windows under the Holding Fund each received EUR 20 million from the OP. The source of the funds for the RES Loan is detailed in the table below.

Table 2: Funding sources and amounts

Specific Fund	Funding source	Amount
RES Loan Fund	**Regional Operational Programme for Pomorskie Voivodeship 2014-2020**	**EUR 31.5 million**
	of which from ERDF	EUR 28.8 million
	of which from national co-financing	EUR 2.7 million
	Own contribution of the body implementing the Specific Fund	**EUR 1.0 million**
TOTAL		**EUR 32.5 million**

Source: Managing authority

3.3 Selection of the body implementing the Specific Fund

Navigating challenges in intermediary selection: direct negotiation approach

The first **"Call for Expression of Interest"** to select the body(ies) implementing the Specific Fund that will receive resources from the Holding Fund was launched with a deadline of 5 July 2017.

However, the initial call did not attract any submissions by financial institutions. Feedback by prospective banks and loan funds indicated several reasons for their reluctance to participate, including unfavourable legal conditions for investing in RES, declining profitability in these investments, challenges in planning investments in the absence of regular RES auctions, and concerns about some banks' overexposure to RES projects.

In line with available procedural options for such scenarios, the EIB initiated a **direct negotiation process** without prior publication. According to the EIB's procurement procedures, which reflect article 32 of the Public Procurement Directive 2014/24/EU, the use of such procedure for public service contracts is allowed in specific cases and circumstances, including when no tenders or no requests to participate have been submitted in response to an open procedure, provided that the initial conditions of the contract are not substantially altered. This approach facilitated a focused negotiation with PFP, resulting in the successful signing of an operational agreement between EIB and PFP on December 19, 2018.

Key selection criteria for direct negotiations

During the direct negotiation process, specific requirements were established to select a body capable of efficiently implementing the Specific Fund.

- Firstly, PFP needed to demonstrate the operational standards typical of a regional loan fund. This encompassed a robust corporate governance structure suitable for managing such funds. For PFP, unlike a typical financial institution, the verification of comprehensive procedures, including loan originations and signatures was a crucial aspect of the due diligence process;
- Secondly, PFP was required to fulfil the conditions necessary for concluding an operational agreement. This included the ability to implement the Specific Fund according to the established guidelines and within the governance framework set by PFP's corporate policies. Additionally, since PFP is not a bank and does not have its own bank account, it was necessary to open a bank account with a third party to ensure fund safety, which was a significant aspect of the contract negotiation as well;
- Furthermore, previous experience in implementing similar financial instruments played a crucial role in the selection process to ensure that the loans could be rolled out efficiently without further delays.

Key elements of the business plan

The business plan for the RES loan was comprehensive, **ensuring alignment with the overarching Investment Strategy** of the managing authority.

Key elements included in the plan were PFP's investment strategy, which had to be consistent with the managing authority's goals, and stringent compliance with eligibility conditions at the level of the body implementing the Specific Fund. The business plan detailed the product parameters, a methodology for selecting final beneficiaries, and explicit rules for granting loans. It also included rigorous frameworks for the assessment of project eligibility, risk management, and internal control systems.

This structured approach aimed to optimise the transfer of benefits to final recipients, effectively manage pricing and collateral requirements, and integrate non-financial support to enhance the overall impact of the financial instrument.

3.4 State aid[10]

Three state aid options for the final recipients

Due to the transfer of benefit requirement, the RES loan is free of state aid at the level of the body implementing the Specific Fund. Therefore, state aid considerations apply only to the final recipients.

At the level of final recipients, the financial instrument could operate:

- on **market terms**;
- under the **EU's General Block Exemption Regulation (GBER)**, particularly Article 41 GBER (investment aid for promoting energy from renewable sources); or
- under the **de minimis rule**, which allows for small amounts of aid (up to EUR 200 000 over three fiscal years) to be provided without the need for formal approval from the European Commission.

Renewable Energy Sources Act

The Renewable Energy Sources Act of 2015 (RES Act) was passed in Poland to stabilise the support system for renewable energy sources, prevent electricity prices from increasing, and contribute to the country's target of renewable energy production. It established support mechanisms such as feed-in tariffs, auctions, and certificates of origin to incentivise investment in renewable energy projects.

State aid under the RES Loan Fund was granted in line with Article 39 RES Act, which outlines the maximum amount of state aid that can be received by an electricity producer from renewable energy sources in a renewable energy installation. The article also defines the components that make up the total state aid and sets conditions for participating in auctions. Article 39 RES Act aligns with Article 41 GBER, which provides specific conditions under which state aid for renewable energy can be granted without prior notification to the European Commission.

Article 39 RES Act also establishes the **principle of cumulating operating and investment aid** for the purpose of state aid. Operating aid typically includes incentives like feed-in tariffs or feed-in premiums that support ongoing operations and production of electricity from renewable sources, while investment aid is provided to support the initial capital expenditures required to establish the renewable energy installations. This cumulative approach is consistent with the provisions of Article 41 GBER, which allows for the combination of different types of state aid provided they comply with the overall aid intensity limits specified in the regulation.

10 It is the Member State's responsibility to ensure compliance with State aid rules when they give aid through financial instruments (co-) financed by EU shared management funds. This section presents the State aid regime adopted in Poland and is not an assessment or official position of the European Commission.

Dominance of de minimis and GBER in state aid applications

Out of 137 loan agreements signed, 53% (72) were under de minimis aid, and 45% (62) followed Article 41 of the GBER. There were 3 instances where loans were issued at market interest rates, all of which attributable to specific project circumstances such as aid eligibility concerns or the commencement of project works prior to aid application.

The table below outlines the distribution of state aid applications.

Table 4: Distribution of state aid applications for the RES loans

Category		TOTAL	a) market interest rate	b) de minimis aid	c) GBER Article 41
1	Number of loans granted	137	3	72	62
2	Value of public aid granted	EUR 10.3 million	0	EUR 1.0 million	EUR 9.3 million
3	Value of loans granted	EUR 32.3 million	EUR 2.1 million	EUR 30.2 million	
4	*Average loan value*	*EUR 236k*	*EUR 707k*	*EUR 226k*	

Source: PFP

3.5 Monitoring and reporting

Monitoring activities

The managing authority carried out its monitoring activities in compliance with Article 40 of Regulation No 1303/2013 (CPR). Verification activities were based on the information supplied by the body implementing the holding fund, including payment claims, progress reports, control reports, and other relevant documents outlined in the funding agreement. Additionally, the managing authority conducted its own checks at the level of the Specific Fund.

At the level of the Specific Fund, PFP itself conducted a monitoring regime that covered various aspects of loan implementation. This included monitoring the repayment terms, documenting how loan funds are spent, and the final execution of investments. PFP also conducted planned and ad hoc inspections as part of its Annual Control Plan. These activities ensured that the loans are used as intended and that the investments are executed effectively.

Reporting requirements and practices

PFP is required to provide detailed reports to EIB on both a monthly and quarterly basis. Monthly reports include registration data of final recipients, descriptions of the projects funded, the amounts and terms of the loans, and financial details concerning public aid received and funds disbursed or returned.

For quarterly reporting, the body implementing the Specific Fund must provide additional information such as the specifics of the implemented projects, detailed financial data on loan payments, repayments, outstanding balances, any repayment delays, and comprehensive data on bank flows related to the project. The body implementing the Specific Fund also reports on promotional activities, inspections conducted at final recipients, and investment outcomes, ensuring a thorough oversight of project implementation and financial management.

The information in the reports fed into the annual implementation report that the managing authority submitted to the EC according to article 46 of the CPR. These reports included a description of the financial instrument and implementation arrangements, financial performance, leverage, etc. It also provided performance data for the contribution of the financial instrument to priorities of the OP.

04 Implementation of the financial instrument

4.1 Terms and conditions of financing

Eligible projects

Eligible projects were projects implemented and **located in the Pomorskie Voivodeship** that

- increased installed RES capacities;
- generated renewable energy; and
- reduced greenhouse gas emissions.

This included:

- Projects involving installations that generate energy from renewable sources, including micro-installations;
- Projects that produce electricity or heat from renewable sources such as biogas, biomass, solar, geothermal energy, and hydropower[11];
- Projects aimed at constructing or modernising facilities that produce energy from renewable sources, which may include purchasing necessary equipment and building infrastructure for grid connection; and
- Projects focused on reconstructing or expanding the electricity distribution network, provided they are part of a supported RES project.

Projects financed by the RES loans also had to be aligned with the appropriate local **air quality programme**(s).

The loan could not be used for financing the borrower's own contribution or expenses already covered by ESI Funds, other EU programmes, or national subsidies. Refinancing completed projects, leasing loans, and public-legal liabilities of the borrower were also excluded.

The following project examples showcase the range of initiatives implemented with the contribution of the RES loan.

Nordowi Môl: integrated system with heat pumps, solar collectors, and ground-based photovoltaics

Sector: accommodation and food service activities (HORECA)
Policy window: renewable energy
Intermediary: PFP
Total value of the investment: EUR 124k
Loan amount: EUR 101k
Location: Celbowo (Pomorskie Voivodeship)

Nordowi Môl is a restaurant owned and operated by Ewa and Marek Hewelt. Situated in Celbowo near Puck, the restaurant has been delighting both regulars and newcomers alike with Polish cuisine carefully crafted with regional Kashubian dishes for over 15 years. Nordowi Môl offers several dining rooms accommodating 20, 40, and even 130 guests, suitable for lunch, dinner, business meetings, or family celebrations. The restaurant also features

11 Hydropower plants were only eligible for modernisation.

a shop offering regional food products, including homemade fish, cold cuts, preserves, and pierogi prepared using traditional recipes. The restaurant building is modelled after 19th-century architecture, featuring over 100-year-old original bricks and timber framing, while the interior showcases a Kashubian and Art Nouveau ambiance.

As part of the implemented project, an integrated renewable energy system was introduced to power the facility with heat and electricity. The investment included the construction of air-to-water heat pumps, solar collectors on the restaurant's roof, and ground-based photovoltaic installations. The investment aims not only to save on energy costs but also to have a positive environmental impact by reducing the consumption of non-renewable resources, particularly fossil fuels, and limiting the emission of pollutants and carbon dioxide into the atmosphere.

The total project value amounted to EUR 124k, which was partially financed by the RES loan and partially by the final recipient's own funds (EUR 23k for the latter). The loan contract was signed in March 2020, and it was provided with a preferential 0.25% interest rate, and 180 months maturity, including a 6 months grace period.

Paula Fish: construction of three photovoltaic farms

Sector: manufacture of food products
Policy window: renewable energy
Intermediary: PFP
Total value of the investment: EUR 5.2 million
Loan amount: EUR 3.5 million
Location: Charnowo, Reblino and Bierkowo (Pomorskie Voivodeship)

Paula Fish is one of the leading salmon processors in Europe. The company offers comprehensive services in the production and processing of Baltic and Atlantic salmon, sourced directly from trusted and certified Norwegian suppliers. Their operations cover the entire processing cycle, including freezing and storage of fish products, production of fish meal and oil, and transportation services.

The primary goal of the investment funded by the RES loan is to achieve sustainable production operations by increasing the share of renewable energy in the company's overall energy balance. The project involves the construction of three photovoltaic farms with a total capacity of 5.8 MW, including the necessary infrastructure. All the farms will be located in Słupsk County, specifically in Charnowo, Reblino, and Bierkowo. The electricity generated by these PV installations will be used for the own needs of Paula Fish.

This investment aims to enhance the company's competitiveness by reducing electricity costs and, consequently, production costs, while also minimising the plant's potential negative environmental impact. The estimated reduction in CO_2 emissions due to the investment is over 4,000 tons per year. The project involves innovative solutions, including the use of high-efficiency bifacial PERC monocrystalline PV panels with improved performance under low sunlight conditions, inverters with smart interfaces for continuous monitoring and quick issue resolution, and support structures based on pre-stressed concrete technology.

The total project value amounted to EUR 5.2 million, which was partially financed by the RES loan and partially by the final recipient's own funds (EUR 1.7 million for the latter). The loan contract was signed in September 2023, and it was provided with a preferential 0.25% interest rate, and 120 months maturity.

Marek Mokwa farm: roof-mounted photovoltaic panels on a barn

Sector: crop and animal production
Policy window: renewable energy
Intermediary: PFP
Total value of the investment: EUR 26k
Loan amount: EUR 26k
Location: Subkowy (Pomorskie Voivodeship)

Marek Mokwa has been managing his family farm in Subkowy for over 20 years. This multigenerational farm was previously run by his grandparents and then his parents. Today, Marek's wife and children are also actively involved in its operations. Since taking over, Marek Mokwa has focused on the continuous development of the farm, emphasising grain cultivation and specialising in pig breeding. The farm currently operates the largest breeding stock in Tczew County and is one of the most dynamic pig farms in the Kociewie region. The farm places a strong emphasis on animal welfare, optimal nutrition, and preventative care. The farm is renowned in the region as an exemplary agricultural operation, frequently visited by delegations of farmers and agricultural advisors from both Poland and abroad. It has received several awards, including the Beautiful Village competition in 2013 and the Pomeranian Province Agroliga Champion in 2014. The modernisation of the farm has been continuous over the past years.

The project funded by the RES loan involved the use of renewable energy sources, specifically solar energy, to generate electricity for the farm's own use. As part of the project, photovoltaic panels were installed on the roof of the barn. This installation generates renewable electricity, replacing conventional energy sources (mainly coal) that power the national grid. Besides the economic benefit of reducing energy costs, the investment is environmentally friendly: as PV energy generation is emission-free, it reduces carbon dioxide and other pollutants. The electricity generated by these PV installations will be used for the own needs of the farm.

The investment was financed entirely through the RES loan. The loan agreement was signed in February 2020, and it was provided with a preferential 0.25% interest rate and 180 months maturity, including a 24 months grace period.

CET-EKO: construction of an agricultural biogas cogeneration plant

Sector: manufacture of electronic products
Policy window: renewable energy
Intermediary: PFP
Total value of the investment: EUR 352k
Loan amount: EUR 253k
Location: Gdańsk (Pomorskie Voivodeship)

CET-EKO, led by Tomasz Cegiełka, specialises in the trade and sale of waste for biogas plants.

With experience in managing agricultural biogas plants, Tomasz Cegiełka has launched a biogas power plant project in Mątowy Małe, valued at over EUR 1.9 million. The project resulted in a cogeneration unit that produces both electricity and heat using agricultural biogas, contributing to the production of green energy free of particulate and gas emissions. Additionally, the digestate produced in the process will be used as a natural fertiliser. Plans for 2020-2021 include expanding the project with a heat pipeline to supply nearby farms with heat. The biogas plant will add 0.5 MW of renewable energy capacity, which will reduce CO_2 emissions by an estimated 3.2 thousand tons per year.

The investment was financed partially by the RES loan and partially by the final recipient's own funds (EUR 928k for the latter). The loan contract was signed in October 2019, and it was provided with a 2.62% interest rate and 180 months maturity, including 12 months grace period.

Siled: roof-mounted photovoltaic system on a production facility

Sector: manufacture of electronic products
Policy window: renewable energy
Intermediary: PFP
Total value of the investment: EUR 352k
Loan amount: EUR 253k
Location: Gdańsk (Pomorskie Voivodeship)

Siled Sp. z o.o. is a Polish company manufacturing electronic products. In 2022, the TSTRONIC brand, under Siled, and its production plant in Gdańsk, has celebrated 15 years of operation. The company prides itself on using the latest technologies, efficient communication with clients, and collaboration with reliable partners. TSTRONIC specialises in comprehensive Electronics Manufacturing Services (EMS). If needed, TSTRONIC offers its R&D department to collaborate with clients in creating entirely new products. The company's solutions emphasise high quality, reliability and durability. Besides EMS, Siled is a recognised producer of LED fixtures and intelligent lighting management systems.

Siled claims to build its competitive edge through investments in modern technologies, having completed projects both independently and in consortiums financed from EU funds. The current investment project involved installing a photovoltaic system on the roof of the production hall. This project aimed to meet the company's energy needs by replacing electricity from the national grid with energy generated from a small renewable energy installation. This transition has led to cost savings and positively impacted environmental protection. The ecological benefits align with decarbonisation efforts by reducing reliance on coal-based energy from the grid in favour of solar energy. The photovoltaic system generates emission-free energy, avoiding CO_2 emissions and other pollutants. The electricity generated by these PV installations will be used for the own needs of the plant.

The total project value amounted to EUR 352k, which was partially financed by the RES loan and partially by the final recipient's own funds (EUR 99k for the latter). The loan contract was signed in May 2021, and it was provided with a preferential 0.25% interest rate and 180 months maturity, including a 6 months grace period.

Key characteristics of the RES loan are as follows:

Loan value

The **maximum loan value** under the loan agreement was EUR 3.5 million, with no prescribed minimum.

Interest rate

The **interest rate** on the RES loan was determined annually and could be either market-based or preferentially lower for projects that aligned with one or more of the following areas of preference:

- projects in line with municipal documents in the field of low-carbon economy or energy supply;
- projects using innovative solutions in the field of equipment and systems used;
- projects providing the highest environmental effect (e.g. reduction of greenhouse gas emissions) in relation to financial expenditure.

At **market conditions**, the interest rate was determined by the reference rate, which was calculated using the applicable base rate plus a margin[12].

12 As outlined in the European Commission's Communication on revising the method for setting reference and discount rates (Official Journal of the European Union, C 14, 19.01.2008 or subsequent updates).

In the event a project qualified for one of the three preferred areas, the interest rate on the loan was set at 0.5% per annum. If a project qualified in two or three of these preferred areas, the interest rate was reduced to 0.25% per annum.

Maturity, grace period and terms of repayment

The **maximum duration for loan repayment** was set at 180 months from the date the loan was disbursed. This extended period allowed borrowers to manage their cash flow and project returns more effectively over time.

Borrowers benefited from a **grace period** where principal payments on the loan could be deferred. This grace period was typically up to 24 months from the date of loan disbursement. During this time, borrowers were required to pay only the interest accrued, which helped in reducing the financial burden during the initial phase of project implementation.

Following the grace period, repayment of the loan occurred in **monthly instalments** that included both principal and interest. These instalments were designed to align with the borrower's revenue flows, thus facilitating smooth financial management.

Borrowers had the option to **repay the loan early** in whole or in part without incurring additional fees. This flexibility allowed for financial planning and debt management according to the project's success and cash flow situations.

Final recipients

Eligible borrowers included a **wide range of entities** such as small and medium-sized enterprises (SMEs), large corporations, local government units and their organisational units, associations and associations of local government units, other units of the public sector, energy companies, clusters of energy, non-governmental organisations, social economy actors and social enterprises, scientific units, educational institutions, universities, their associations, governmental bodies involved in running schools and groups of agricultural producers.

These recipients had to be legal persons or organisational entities with a **registered office** or involved in **business activities in the Pomorskie Voivodeship**.

Eligible costs and lending intensity

Eligible costs and expenditure included those that were necessary for the implementation of the project, in accordance with the purpose of financing indicated in the loan agreement.

The loan could **cover 100% of the project cost**, although the borrower's own contribution could be required for certain investments.

Loan disbursement

The disbursement of the RES loan was tailored to the nature and demands of each approved project. The loan could be issued in one lump sum or in multiple tranches depending on project milestones and requirements. Borrowers were not required to pay any fees or commissions during the loan application process.

Borrowers have received the funds within 180 days from the date of concluding the loan agreement.

The RES loan was available until 31 December 2023 to the final recipients.

Table 5: Financial product key characteristics

Loan value	Maximum **EUR 3.5 million**, no prescribed minimum.
Interest rate	• loan at market conditions: - reference rate (= base rate + margin) • loan at preferential conditions: - project qualifying for one area of preference: 0.5% per year (fixed) - project qualifying for two or three areas of preferences: 0.25% per year (fixed)
Maturity of the loan	Up to **15 years**
Grace period	Up to **2 years**
Early repayment	**Possible in whole or in part**, without incurring any additional fees.
Eligible final recipients	• micro, small, medium and large enterprises • local government units and their organisational units • associations and associations of local government units • other units of the public finance sector • energy companies • clusters of energy • non-governmental organisations, social economy actors and social enterprises • scientific units, educational institutions, universities, and their associations • government administration bodies related to running schools • groups of agricultural producers
Eligible operations	• Implemented and located in the Pomorskie Voivodeship • Contributing to the increase of installed RES capacities, enabling additional capacity to generate renewable energy and an estimated annual decrease in greenhouse gas emissions • Compliance with the local air quality programme(s).
Eligible cost	Costs and expenditure necessary for the implementation of the Project.
Lending intensity	Up to **100% of the eligible project cost**.
Lending fees and commissions	None
Eligibility Period	Until 31 December 2023

Source: PFP

4.2 Appraisal process

Defining eligibility for the RES Loan Fund

When setting the eligibility criteria for the RES Loan Fund, the main considerations revolved around the **potential environmental impact** and **cost-effectiveness** of the projects. The instrument was designed to fund projects involving the installation of renewable energy systems that would significantly contribute to increasing the installed capacity of renewable energy sources.

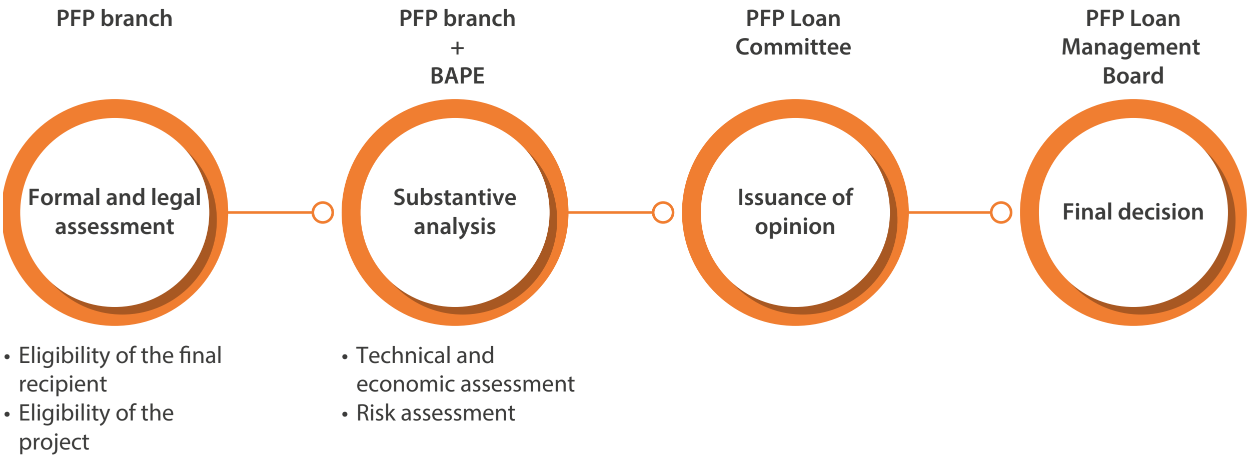
These objectives were partially translated into strict **eligibility criteria**, such as integrating projects into local air quality programmes, and further embodied in three **areas of preference** that emphasise high environmental impact, innovation, and strategic alignment with municipal policy documents.

Main steps of the process

- **Formal and legal assessment of the application**
  - Verification of eligibility for the RES loan, assessing if the applicant and the project meet all required criteria, ensuring the application is complete, and confirming the entity's eligibility for public aid.
  - Determination of the project's eligibility for the RES loan support, including:
  - Assessment of the project's compliance with the supported project types;
  - Analysis of the available documentation, project concept, and technical feasibility for implementing renewable energy investments at the proposed location (e.g., availability and suitability of the plot or roof for PV cell installation, connection capabilities);
  - Evaluation of the appropriateness of the proposed technology, including its potential for energy and heat generation from the RES installation;
  - Preliminary qualification of the project for Technical and Economic Assessment.
- **Substantive analysis of the application**
  - Technical and economic assessment of the project, conducted by external experts from BAPE[13] to evaluate the renewable energy project's viability and effectiveness;
  - Risk assessment, evaluating the applicant's potential for non-payment under the loan agreement.
- **Issuance of opinion by the Loan Committee**
- **Final decision by the Management Board to grant the loan**

13 BAPE (Bałtycka Agencja Poszanowania Energii Sp. z o.o. – Baltic Energy Conservation Agency) is an entity cooperating with PFP in the implementation of the RES loan on the basis of the Cooperation Agreement of 5 March 2019. See more details below.

Figure 5: Appraisal process



Source: PFP

Effective capacity building in RES: collaboration with BAPE

PFP has strategically partnered with the Baltic Energy Conservation Agency "BAPE" to enhance its capability in assessing technical project proposals, particularly those related to RES. BAPE, headquartered at Gdańsk, is a limited liability company, originally established in 1996 under the name of Bałtycka Agencja Poszanowania Energii S.A. BAPE's mission is to implement sustainable development principles, promote renewable energy, and improve energy efficiency.

BAPE collaborates with a diverse range of stakeholders, including local and regional authorities, energy agencies, and biofuel manufacturers. The agency's activities span consultancy, expertise services, and educational initiatives in energy conservation and renewable energy utilisation. BAPE's portfolio includes energy planning, thermal imaging, and the issuance of energy performance certificates. It also conducts due diligence for wind farms and assists in grant application preparation and feasibility studies.

The expert service fees of BAPE were covered by PFP's own sources. The decision by PFP to leverage BAPE's external expertise, rather than building internal capacity, has proven highly effective. By internalising the technical proficiency of BAPE's experts, PFP ensures thorough and competent assessments of loan requests for RES projects in a timely manner. This approach allowed PFP to maintain high standards of technical evaluation and project monitoring without the need for extensive internal training and development. BAPE's involvement also ensures ongoing oversight and control of the investments.

4.3 Visibility and communication

Through a strategic approach to visibility and communication efforts, PFP has successfully raised awareness and encouraged uptake of the RES loan.

Collaborative promotions and regional engagement

PFP has actively engaged in a range of information and promotional activities to enhance the visibility of its financial instruments. Collaborating with the network of Business Environment Institutions (BEIs) in the region, PFP worked alongside regional energy conservation agencies, agricultural chambers, energy clusters, regional development agencies, and various other organisations such as local government units, employers' associations, and industry groups. Additionally, associations and foundations supporting entrepreneurship, technology incubators, science and technology parks, acceleration programmes, technology transfer centres at universities, and technology brokers were integral in disseminating information and promoting the available financial options to a broad audience.

Media and digital marketing campaigns

A significant part of PFP's strategy involved a robust advertising campaign across various media platforms, aimed at capturing a wide audience. This was complemented by a targeted internet campaign, which included the distribution of newsletters and direct marketing efforts. Specifically, these online campaigns focused on reaching entities whose projects had not been supported by grants through the RES subsidy calls under the Operational Programme, providing them with tailored information and alternative financial solutions.

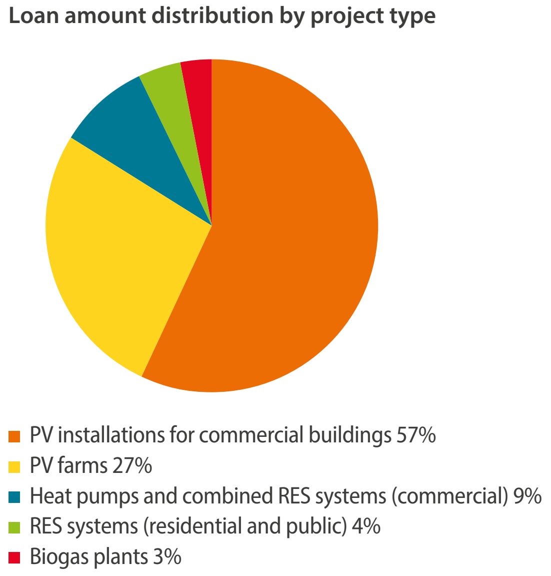
Active participation in industry events

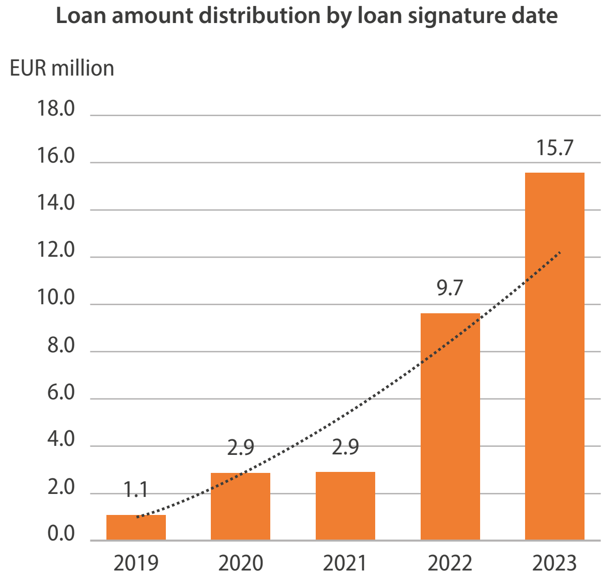
PFP's visibility efforts were further supported by its active participation in industry-specific conferences and meetings within the region. These events provided a platform for direct engagement with stakeholders, fostering discussions, sharing insights, and networking with potential investors and partners. By participating in these gatherings, PFP not only increased its visibility but also enhanced its reputation as a proactive and supportive financial entity in the renewable energy sector.

05 Achievements

The RES Loan Fund in the Pomorskie region has made significant achievements with respect to the objectives in the Regional Operational Programme. Specifically, the instrument has successfully increased the utilisation of energy from renewable sources, with a particular focus on distributed generation.

Figure 5: Loan amount distribution by project type and loan signature date

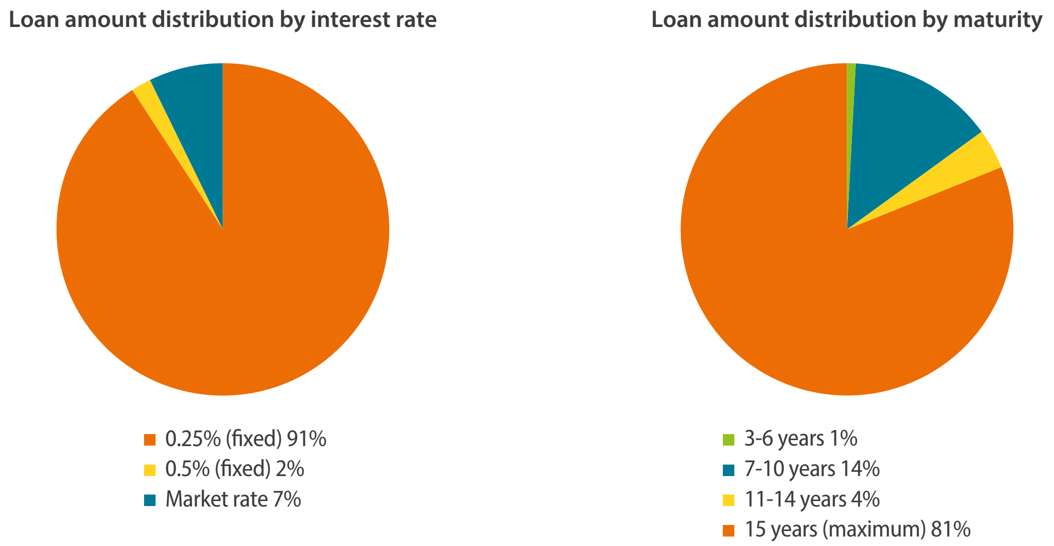




Source: monitoring data

Photovoltaic installations for commercial buildings (EUR 18.6 million) and PV farms (EUR 8.7 million) received the highest loan amounts. Additionally, several projects focused on installing heat pumps and combined renewable energy systems in various commercial environments (EUR 2.8 million). There was one project implemented in a school building, one in a residential building, and one aimed at a biogas plant. The absorption of RES loans gradually increased over the years, gathering momentum in response to shifts in the macroeconomic landscape by 2022.

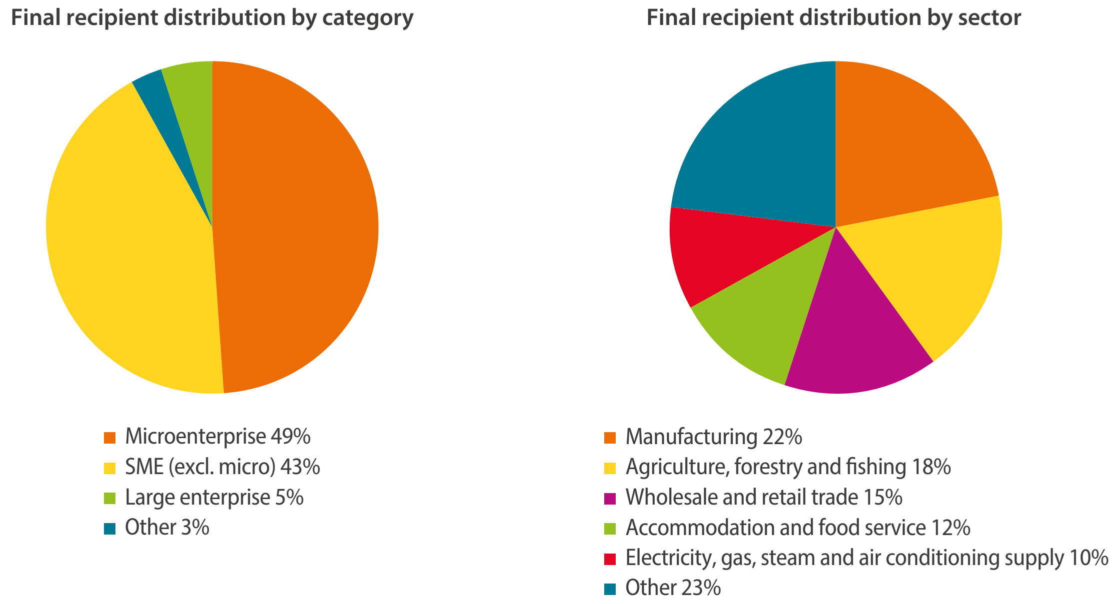
Figure 6: Loan amount distribution by interest rate and maturity



Source: monitoring data

The majority of loans were distributed at the 0.25% fixed preferential interest rate (EUR 29.5 million), with significantly smaller amounts contracted at the 0.5% fixed rate. Market rates were applied in case of three projects. 81% of the loan amounts were distributed with the maximum maturity of 15 years (EUR 26.1 million).

Figure 7: Final recipient distribution by category and industry



Source: monitoring data

Microenterprises received the most loans (49%), followed by small and medium enterprises (43%). The final recipients are spread across a variety of sectors, including manufacturing (22%), agriculture, forestry, and fishing (18%), wholesale and retail trade (15%), accommodation and food service (12%), and electricity generation (10%), highlighting the diverse range of industries benefiting from the loans.

The achievement of the RES Loan Fund is evidenced by the increase in **installed capacity in renewable energy sources of 40 MW within the region.** The added renewable energy generation capacity and the integration of this energy into the national power grid have contributed to a substantial **reduction in greenhouse gas emissions, equivalent to over 29 thousand tons of CO_2 per year**.

The Specific Fund has exceeded the target value with respect to both indicators, as presented in Table 6 below.

In this context, it is important to highlight installations that yield the highest volume of renewable energy, such as biogas plants. These projects stand out for their effectiveness in saving energy, cutting greenhouse gas and other pollutant emissions (especially from coal), and boosting renewable energy use in the region when replacing non-renewable sources.

Table 6: Key performance indicators

Indicator	Target	Results[14]
Number of final recipients	108 – 162	137
Leverage	1.1 – 1.2	1.1
Additional renewable energy generation capacity	10.6 – 12.8 MW	39.75 MW
Estimated annual decrease in greenhouse gas emissions	10.1 – 25.6 thousand tonnes of CO_2 equivalent	29.26 thousand tonnes of CO_2 equivalent

Source: Managing authority / EIB

Moreover, the instrument has had a significant impact on the local economy and energy landscape. By supporting renewable energy installations, it has contributed to job creation and economic activation, particularly in rural areas. This has not only boosted employment opportunities but also enhanced the region's energy security and predictability of electricity and heat supply, reducing the risk of price increases and fostering local energy independence.

Direct benefits for final recipients

Final recipients of the RES loan could achieve the following direct benefits as a result of their investments:

- **Reduced operating costs:** access to low-cost borrowing significantly lowered operating expenses, allowing businesses to develop competitively priced products and services;
- **Sustainable energy access:** recipients gained access to inexpensive and abundant renewable energy, which does not adversely impact the environment;
- **Quick return on investment:** significant reductions in ongoing costs such as electricity, water, and heating, combined with profits from selling renewable energy, led to a fast return on investment.

14 Results as at December 2023.

Indirect benefits for the Pomorskie region

The implementation of the RES Loan Fund also brings indirect benefits to the Pomorskie region, contributing to its sustainable development and economic resilience:

- **Enhanced energy security:** the projects increased the local security and predictability of energy supplies, contributing to the region's energy independence and resistance to electricity price fluctuations;
- **Economic boost:** the renewable energy sector stimulates job creation, supports the local economy, and activates economic growth, particularly in rural areas;
- **Environmental impact:** the increase in renewable energy capacity has reduced greenhouse gas emissions, aiding in the environmental sustainability of the region;
- **Energy independence:** direct impacts of these projects build the region's energy independence, contributing to a more self-sufficient and resilient local energy market;
- **Cultural shift in financing:** the successful use of the RES Loan Fund has familiarised final recipients with refundable financial instruments, supporting a gradual shift away from reliance on (non-refundable) grants.

The disbursement of the loans commenced in 2019 and during the eligibility period, the PFP signed 137 loan agreements with final recipients with an overall value of EUR 32.3 million. As at December 2023, EUR 2.3 million had been repaid to the Fund, and such reflows of the RES loan 2014-2020 are already available for re-use in the 2021-2027 programming period (see Section 6).

06

Transition to the 2021-2027 programming period

In Poland, in the current 2021-2027 programming period, a total of **EUR 706 million** is allocated to financial instruments for the development of renewable energy sources at the regional level, with **EUR 174 million of grants in combination** with financial instruments. This marks a significant increase compared to the previous period, where only EUR 54.3 million were available under financial instruments in three voivodeships of the country.

In Pomorskie, specifically, the planned allocation to support RES under the European Funds for Pomorskie 2021-2027 programme is EUR 50 million, with **EUR 21 million earmarked for RES non-grant support**. A portion of this EUR 21 million budget will be financed from **reflows**, specifically from the available repayment of the RES loan from 2014-2020, amounting to EUR 2.3 million as of December 2023.

Table 7: Allocation of funds in the European Funds for Pomerania 2021-2027 programme (in EUR)

Priority	EU support	National contribution	Total
2.6 RES grant	14 441 670	2 548 530	16 990 200
2.8 RES – community-led local development (CLLD)	10 000 000	1 764 706	11 764 706
2.8 RES - non-grant support	18 065 580	3 188 044	21 253 624

Source: Managing authority

Additionally, in the 2021-2027 period, there is a stronger emphasis on the areas of **circular economy in both regional and national programmes**, potentially supporting RES activities. Investments of this type are planned in the national Recovery and Resilience Plan as well.

The following key lessons learned from the 2014-2020 programming period provided valuable insights for the strategic priorities with respect to RES initiatives in the 2021-2027 programming period:

- The region's **high energy intensity** poses a significant barrier to development, emphasising the critical importance of heat conservation, especially in public buildings and residential areas;
- Despite meeting residents' heat demand, **high reliance on coal** for heat production leads to excessive CO_2 emissions, impacting air quality;
- The region has **significant further potential in renewable energy**, particularly **solar and wind** power, along with considerable biomass resources and sustainable biogas production potential;
- **Low awareness** of environmental and climate protection necessitates comprehensive awareness campaigns focusing on knowledge expansion and behaviour change;
- Building on the experience of the previous programming period, continued support is crucial for enhancing **energy efficiency** in buildings, utilities, and advancing urban district heating and renewable energy infrastructure;
- Developing **energy islands** specialised in renewable energy emerges as a necessity for sustainable energy practices and innovation.

Within the European Funds for Pomerania 2021-2027 programme, RES support is primarily aimed at projects that generate direct savings or revenue from sales. The support is structured as follows:

- **Grants** will be allocated for projects carried out under energy islands and community-led local development initiatives related to renewable energy storage and types of renewable energy sources that lack operational support systems, show technological challenges, or involve higher risk or lower profitability;
- **Financial instruments** will be available for other eligible project categories. Specifically, funds under **Priority 2.8 'Renewable Energy Sources - non-grant support'** will be provided for the construction and expansion of renewable energy sources for electricity and/or heat production. This support extends to energy storage facilities associated with RES sources and their integration into energy or heating networks. Additionally, funding may be allocated for building energy storage facilities for existing renewable energy sources as standalone projects.

07 Lessons learned

7.1 Main success factors

Significantly reduced interest rates attracted more applicants during high commercial rate periods

Offering reduced interest rates of 0.5% (for meeting one preference criterion) and 0.25% (for meeting two or three), proved particularly beneficial from 2022 as commercial rates increased in Poland. This feature, along with fixed preferential interest rates for the duration of the loan, made these loans highly competitive and appealing to potential borrowers.

Extended repayment terms and absence of fees enhanced loan accessibility and attractiveness

The RES loans featured a long repayment period of up to 15 years and a substantial maximum loan amount of EUR 3.5 million, with no prescribed minimum, providing considerable financial flexibility. The extended withdrawal period of up to 24 months, combined with no commissions or fees for loan processing, further improved the appeal and accessibility of RES loan.

A wide range of eligible final recipients and projects facilitated diverse applications and maximised the instrument's impact

The Specific Fund was designed to address the needs of a diverse array of eligible final recipients, encompassing a variety of stakeholders from both private and public sectors. It supports a broad spectrum of projects, such as those generating energy from renewable sources including solar, geothermal, biomass, biogas, and hydropower, projects aimed at constructing or modernising facilities, and projects dedicated to reconstructing or expanding the electricity distribution network, provided they are part of approved RES projects. This broad eligibility criterion ensures that a diverse range of projects can benefit, significantly extending the instrument's impact.

Attainable preference criteria incentivised projects along policy goals

The Specific Fund outlines well defined preference criteria that borrowers can reasonably meet to qualify for reduced interest rates. These preferences are designed to encourage projects with high environmental impact, innovative approaches, and strategic alignment with municipal policy documents. This approach incentivised the adoption of advanced renewable technologies and practices, supporting the overarching objectives of the Operational Programme.

Strong market knowledge, regional embeddedness and the professional support network of the body implementing the Specific Fund streamlined facilitate implementation

PFP's deep understanding of the regional market and previous experience with EU-funded financial instruments played important roles in the effective distribution of the RES loan. Collaborating with the Baltic Energy Conservation Agency for technical assessments of industry projects improved decision-making, evidenced by the fact that no loan agreements have been terminated by the body implementing the Specific Fund to date. Furthermore, personalised support from PFP advisors during the documentation phase of loan applications provided vital guidance, helping applicants navigate the process efficiently.

Availability of state aid options further enhanced attractiveness

The availability of two state aid mechanisms related to the RES loan significantly incentivised applicants by offering financial benefits, thus enhancing the economic viability of the projects. This accessibility to state aid has resulted in an increase in applications and has been important in the successful financial implementation of projects.

7.2 Main challenges

Addressing the lack of interest in the role of the body implementing the Specific Fund

Selecting the body implementing the Specific Fund for the RES loan initially presented a challenge when the first expression of interest, with submission due in 2017, failed to attract any eligible applications. This issue was effectively resolved through a direct negotiation process without prior publication. The negotiation led to a successful agreement between the EIB and PFP. This approach ensured the effective resolution of this unique challenge, securing a competent intermediary for the programme.

Adapting to market dynamics and initial disinterest

Initially, the Specific Fund faced challenges due to a lack of market interest, which was explained by low energy prices and competitive market loan rates. The situation was further complicated by the onset of the COVID-19 pandemic in 2020, which caused a significant slowdown in investments. However, from 2021 onwards, interest in the RES loan has significantly increased, driven by rising fuel and energy prices and an increase in commercial interest rates, which highlighted the attractiveness of the instrument compared to traditional commercial loans. Additionally, the onset of the war in Ukraine and the ensuing energy crisis further heightened interest, emphasising the need for energy independence. These events underscored the importance of adaptability and responsiveness in managing financial instruments.

Specialisation and market analysis challenges

Narrowing the focus of the RES loan to exclusively support the energy sector presented challenges. Initially, this specialisation limited the scope of the instrument, making it difficult to tailor-make the product to the needs of the sector and meet output targets. Broadening the scope of eligible projects and final recipients as well as involving the subject-matter expertise of a specialised agency in the technical assessment of the project plans have addressed initial challenges, ensuring that the financial instrument could meet the diverse needs and enhance the impact across the entire energy sector in the Pomorskie region.

Developing comprehensive evaluation and monitoring processes

One of the main challenges was the development of a robust process for evaluating and monitoring projects financed by the loan, accommodating a wide range of projects from small photovoltaic installations to large solar farms. This required a detailed understanding of the energy sector's unique characteristics and developing a monitoring framework that could adapt to the diverse nature of the projects and final recipients.

Mobilising sufficient private finance for RES investments in the region

During the establishment of the Specific Fund, a challenge arose in finding a financial intermediary partner capable of providing private resources to complement the funds from the OP and achieve a high leverage rate. However, it was a valuable learning experience to design the instrument even with a lower leverage compared to other financial instruments. This approach proved worthwhile as the macroeconomic circumstances changed over time. While the instrument may have had lower popularity during the initial years of implementation, it later served as a crucial financial safety net for the target group, enabling final recipients to access finance during challenging times and mitigating the disruptive effects of economic hurdles.

7.3 Outlook

As the Pomorskie region is halfway through the 2021-2027 programming period, there is a subtle shift in the allocation of funds for renewable energy initiatives. Despite the decrease in the total allocation for RES loans to EUR 21 million, this amount still represents 42% of the total allocations for RES interventions within the Operational Programme. This demonstrates the region's ongoing commitment to sustainable development in a financially viable manner and reflects the confidence in the demand for renewable RES financial instruments in the region. The allocation now targets more impactful local investments, building upon the lessons learned from the 2014-2020 programming period.

The continued utilisation of RES loans aligns with the broader objectives outlined in the European Green Deal, ensuring that Cohesion Policy investment contributes effectively to the region's sustainability goals. By prioritising projects with substantial potential for renewable energy generation, energy efficiency improvements, and environmental conservation, the Pomorskie region can optimise the use of available funds and drive meaningful progress towards a greener, more resilient future.

However, navigating this new landscape presents its own set of challenges. It requires innovative approaches to mobilise more private investments and achieve a higher leverage rate. Nevertheless, through longstanding strategic partnerships, knowledge exchange, and proactive engagement with local communities, the region is on a path to overcome these hurdles and progress towards sustainable development. By embracing a strategic approach to financial instruments and sharing a vision for a cleaner, more sustainable future, the Pomorskie region can continue to lead by example on a national and macro-regional scale.

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