





HOW TO ENCOURAGE PRIVATE SECTOR TO SCALE UP MASSIVELY THEIR INVESTMENTS IN RESIDENTIAL BUILDINGS?

Strategy - goals and KPIs Public&Private hand in hand EU Funds 2021-2027 + RePower EU - a major stimulus for investments Hybrid financing the non-repayable subsidies/grants from public funds financing/guarantees from international or domestic development banks the repayable financing offered by private investors, including commercial banks Risk mitigation/sharing Standardisation **Simplification Acceleration**



Scale

BNP PARIBAS THE BANK FOR A CHANGING WORLD



WE DRAW ON 200 YEARS OF BNP PARIBAS GROUP EXPERIENCE

- Strategic shareholder
- Leading financial institution in Europe and globally

Business areas:

- Retail Banking
- Investment & Protection Services:
 specialised savings, investment and insurance services
- **Corporate & Institutional Banking** for corporations and institutional investors



200 years of banking history



~190,000 employees



65 countries worldwide



EUR 3,009.3 bn in assets

Leading bank in the eurozone

EUR 8.0 bn EUR 38.3 bn EUR 125.4 bn

net profit

As at the end of Q3 2022

revenue

equity

EUR 869.5 bn

gross loans*

* measured at amortised cost

Recognised sustainability leader

Investment

EUR 210 bn

towards
UN Sustainable
Development Goals
by the end of 2022

Finance

EUR 18 bn

in renewable energy projects by the end of 2021 Support

EUR 6.3 bn

via microfinance and social enterprises by the end of 2021



BANK BNP PARIBAS IN POLAND

- Universal bank with a global reach
- **Complete product range** for retail and Wealth Management Clients and businesses in the micro, SME and corporate banking segments.
- **Sustainable finance leader.** As the Bank of Green Changes, it supports Clients in the transition to a low-carbon economy, reducing the adverse environmental impacts of its activity.
- Leader of the Food&Agri segment (farmers and food processing industry), consumer segment and large and multinational corporate sector.
- Innovative online banking and mobile banking solutions GOonline and GOmobile.





PLN 146.4 bn

in assets

6th largest bank in Poland by assets

PLN 188.8 m

net profit

PLN 3,632.3 m

net banking income

PLN 10.9 bn

equity

PLN 95.2 bn

gross loans*

Diversified Client base

4.2 m

clients

1.6 m

digital clients

BNP Paribas Bank Polska Group data as at the end of Q3 2022

* measured at amortised cost

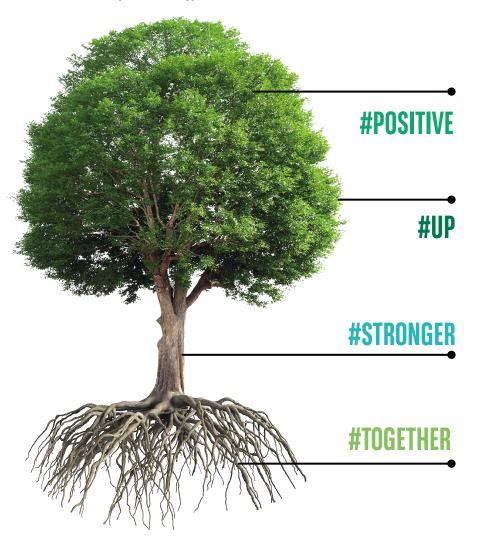


BNP PARIBAS STRATEGY 2022-2025



2022 - 2025 STRATEGY

Pillars and core of the strategy



Strategic pillars

Responsible & trusted financial partner, supporting positive and sustainable development of Clients, businesses and the society. Guiding Clients in the world of digital and sustainable transformation

Offering high quality banking & beyond banking products & services, as a key to larger Client base in omnichannel world. Delivering excellent experience through personalized Customer journeys

Global BNP Paribas Group strength & dynamic technological development, coupled with E2E process optimization as a backbone for organic growth and high Client satisfaction

People first: engaged & satisfied employees drive delighted Customers. Agile@Scale and new corporate culture allowing for diverse, inclusive work environment characterized by trust, courage & creativity

How we understand "beyond"

Deliver a selection of convenient & tailored products & solutions that will exceed Customer expectations and market standards, while being at a forefront of sustainable transformation

Challenge the status quo Ouestion bank and market realities to deliver more

Dynamic implementation of changes on a scale that goes beyond incremental development, creating a solid foundation for effective and efficient operations. Allow our employees to act to their potential, by setting up constructive and empowering work environment



KEY COMMITMENTS AT POSITIVE PILLAR









3 PRIORITIES OF STRATEGY AS A RESPONSE TO CHALLENGES OF THE POLISH TRANSFORMATION



Very high emission/GDP: a threat also to the competitive position of Poland



Financing: 30% of the EU budget for 2021-2027 for climate goals. The need to mobilize private funds - key role of banks.



How to stop the growth of emissions in transportation: electrification alone is not enough



Emissions in agriculture: technological challenges



Decarbonisation of the industry: many technologies still require commercialization



What after the coal? Where are we heading? What goals, when and how do we want to achieve them?

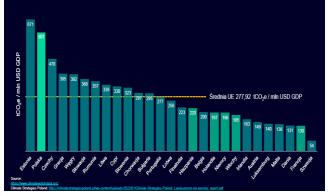


Challenges and opportunities on the labor market: new jobs in green sectors, migrations, silver economy

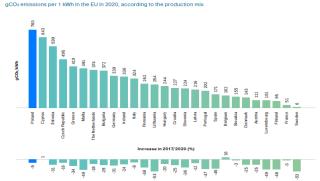


Mass construction and thermodernization of zero-emission buildings (buildings are responsible for 38% emissions in Poland).





The average emission intensity of electricity in Poland is the highest in the EU. 2-15 times higher than in the leading countries



Buildings in Poland split by the type as at 1st January 2020 No. of buildings in kPLN Category

•	multi-family residential buildings	553
•	single-family residential buildings	5 604
•	collective accommodation buildings	3,9
•	public buildings	420
	production, utility, storage buildings	5 116
•	other non-residential buildings	2 491

^{*} a building as defined by the Polish Construction Law

Source: Long-term Renovation Strategy

Median of the annual demand for non-renewable primary energy of public buildings split by the building's purpose and the year of its commissioning [kWh / (m2 · year)]

	<1994	1994 -1998	1999 -2008	2009 -2013	2014 -2016	2017 -2018	2019 -2020
Office	272,8	268,3	236,9	210,3	155,9	155,2	152,2
For public administration	229,0	234,7	217,3	192,3	180,5	158,9	136,6
For culture	232,2		182,7	200,8	250,7	109,2	164,0
For health care	341,7	442,9	257,2	387,9	374,5	358,9	320,2
For sports	370,4	214,8	232,1	165,9	164,2	132,8	146,5
For judicial system	267,2	181,7	217,3	180,5	186,6	171,4	165,9
For education, high education, science	196,4	218,4	166,4	142,6	156,9	122,6	103,2

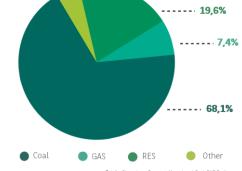
Indicator levels are reflected by colours from highest (red) to lowest (blue). Source: Long-term Renovation Strategy

We build our products strategy and priorities based on 3 main attention points for low carbon transition:

- (1) Renewable Energy (2) Energy Efficiency for buildings and production lines
- (3) Transformation of business models. Green transportation just behind the podium.



Poland: Energy Mix for Electricity, IQ 2022





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Support Instruments for Retrofit of Residential Buildings



THE POWERFUL SUPPORT LANDSCAPE FOR FINANCING RETROFIT OF RESIDENTIAL BUILDINGS

ELENA with EIB

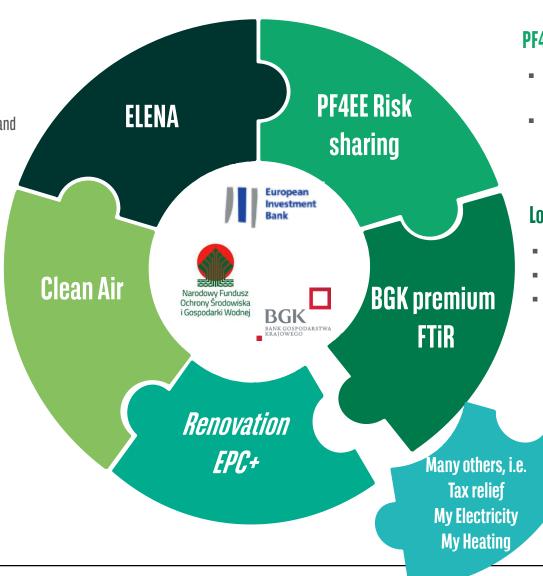
- For Housing Associations (multi-family buildings)
- Support: Technical Assistance energy audits and advisory to Investment Loans for thermal modernisation

Clean Air Loan with NFOŚiGW&BGK

- For Single-family buildings
- Support: Grant (the partial repayment of the Bank's loan)
 & guarantee for Clean Air Loans

Renovation EPC+ with NFOSiGW

Now open for HA only



PF4EE with EIB

- For Housing Associations (multi-family buildings)
 & for owners of single-family buildings
- Risk sharing in Investment Loans for thermal modernisation
 Instalment Loans for PV/heat pumps

Loan with BGK bonus/grants

- For Housing Associations (multi-family buildings)
- Subsidy / grants for Investment Loans
- The Fund of Thermal Modernisation & Renovation

Many others, i.e.

- Tax relief retrofit of the existing building
- My Electricity PV micro-installations
- My Heating Heat pumps in new single-family buildings



Zoom on PF4EE Risk Sharing



PF4EE: RISK SHARING INSTRUMENT FOR PV & EE OF RESIDENTIAL BUILDINGS (START JAN. 2020)

Risk Sharing Instrument

- It mitigates the Bank's credit risk when financing EE/RES projects
- The risk protection covers 80% of losses from individual loans up to the maximum agreed amount (cap)

EIB Loan

- EBI provides a long-term financing to the Bank to be on-lent for financing EE/RES
- It complements Risk Sharing

Technical Assistance

 The support from the experts in the area of energy efficiency for development of products etc.

- Individual Clients for Renewable energy projects installation of photovoltaic panels& heat pumps in single-family houses
- Housing associations for Energy efficiency projects in multi-family buildings











RES - PV installation Individual Clients



Energy efficiency -Housing Associations



PF4EE IN BNP PARIBAS BANK POLAND IN 2020-2022

Results of PF4EE - Jan.2020 - Dec.2022

- 29 600 installation of photovoltaic panels in single-family houses
- 470 improvement of energy efficiency, thermal modernization of multi-family buildings of housing associations
- PLN 1 billion total value of investments
- PLN 0,95 billion total value of loans granted

RES Energy production

153 000 MWh <u>yearly</u>

Energy savings (planned)

• 42 000 MWh yearly

Planned reduction of CO2 emission

• 146 000 ton <u>yearly</u>





This amount of CO2 is an equivalent of 68 000 tons of coal! = 1100 wagons with coal = 8 working days of biggest and an efficient coal power plant in Poland





PF4EE: INVESTMENT LOAN FOR HOUSING ASSOCIATIONS

- Dedicated Investment Loans for Housing Associations:
 - Up to 20Y of financing
 - Max amount: PLN 2.6 million
 - Own contribution: not required for loans up to PLN 1 million
 - Interest: floating WIBOR3M + margin
 - Financed investments EE improvement in multifamily buildings
- Grant support from the Polish Development Bank (BGK):
 - Grant up to 26% of eligible costs/up to 31% with RES
- Risk sharing Instrument with EIB
 - Instrument provided by EIB and the European Commission under the Program for Environment and Climate Action (LIFE Program)
 - Dedicated for supporting long term financing of investments in energy efficiency









Investment Loan

Subsidy/grant

Risk Sharing Instrument











CASE STUDY- USE OF EU SUPPORT IN THERMAL MODERNISATION PROJECT BY HOUSING ASSOCIATION



Total support:



Investment loan guaranteed by EIB guarantee under PF4EE



Energy audit for the investment prepared under ELENA Horizon 2020

- Technical Assistance Grant of PLN 23.2k



BGK Grant from Thermal modernization Fund: PLN 181.8k

- Description of the Investment
 - Building envelope insulation (roof, etc.)
 - Heating system modernization,
 - Hot water system modernization
- Investment cost PLN 1 136 500
- Investment loan PLN 1 079 600



Reduction of CO2 emissions – $107.42 \text{ tonCO}_2/\text{pa}$

Savings of energy consumption (%) – 43.6%/pa



Savings of energy consumption (GWh/pa) - 0.36 GWh

Reduction of energy costs - 252k PLN/pa



EXAMPLE OF BASIC INVESTMENT

Building's details:

- Type: Multifamily Building
- Year of construction: 1975
- Floor area: 6,067 square metres
- No. of units: 100
- No. of inhabitants: 269

Investments undertaken:

- **Roof insulation**
- Old windows replacement
- Thermal insulation of the building envelope
- Investment's value: PLN 842 000
- Financial scheme:
 - Loan value: PLN 774 000 (92%)
 - Own funds: PLN 68 000
 - Loan duration: 15Y
 - Grant value: PLN 134 000
 - SPBP: 6.85 Y
 - Technical documentation: 90% cofinanced from ELENA's funds
- **Expected Results:**
 - Energy savings (%): 40.7%
 - b. Energy savings (amount/Y): PLN 123 000



GOAL OF EEFFRB IS TO MOBILISE AS MANY AS POSSIBLE "BASIC + RES PROJECTS"



POTENTIAL RES PROJECT (INTEGRATED WITH THE BUILDING)

Building's details:

- Type: Multifamily Building
- Year of construction: 70s
- Floor area: 3,025 square metres
- No. of units: 48
- No. of inhabitants: 90
- Investment:

Hybrid installation (replacing old gas boiler):

- Heating Pumps (180 kW)
- PV (installed capacity 60 kW)
- Expected Investment value: PLN 950 000
- Proposed Financial scheme:
 - Loan value: PLN 950 000 (100%)
 - Own funds: not required
 - Loan duration: 15Y
 - Expected Grant: PLN 199 500
 - Technical documentation: 90% cofinanced from ELENA's funds
- Expected results:
 - a. Energy savings (%): 80%
 - b. Energy savings (amount/Y): PLN 108 500





GOAL OF EEFFRB IS TO MOBILISE AS MANY AS POSSIBLE "BASIC + RES PROJECTS"



Zoom on Clean Air Loan



CLEAN AIR LOAN: ENERGY EFFICIENCY OF SINGLE-FAMILY BUILDINGS (START - OCT. 2021)

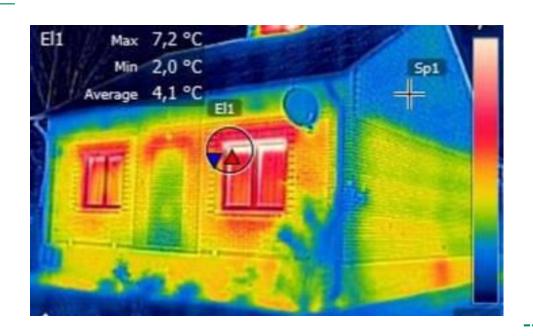


BENEFITS:

- 1. ONE STOP SHOP, THE GRANT APPLICATION SUBMITTED VIA THE BANK
- 2. PRE-FINANCING, MONEY FOR RENOVATION FROM THE BANK
- 3. THE GRANT REPAYS THE LOAN



CASE STUDY-CLEAN AIR LOAN: ENERGY EFFICIENCY OF A SINGLE FAMILY BUILDING



Total support:



The Clean Air program - grant from NFOŚiGW for EE for 1 co-owner - PLN 31 k



My Electricitiy - grant from NFOŚiGW for PV micro-installation 10 kWp - 2 co-owner - PLN 7k



Tax relief for both owners (eligible costs minus grant<PLN 53k) -PLN 21.2k

- A single family building: 125m2 with 2 co-owners
- Description of the Investment:
 - o replacing the old coal furnace with an air/water heat pump
 - heating system modernisation
 - o replacement of old windows and doors
 - PV microinstallation
- Investment cost PLN 138 750
- SPBP 5Y5M



Reduction of CO2 emissions - 16.32 ton/pa



Savings of energy consumption (GJ/pa) – 140,8 GJ

Reduction of energy costs -14.6k PLN/pa



Beyond banking
Model EPC/ESCO
for public buildings *Under development*



FINANCING OF PUBLIC BUILDINGS' ENERGY TRANSITION IN EPC/ESCO MODEL

- > Description
- Following the Bank's Go beyond strategy 2022-2025, the Bank plans to facilitate the energy transition of public buildings using the EPC/ESCO model;
- ESCO model allows i.e. local governments to make investments into public buildings retrofit without increasing their budget deficit & public debt.

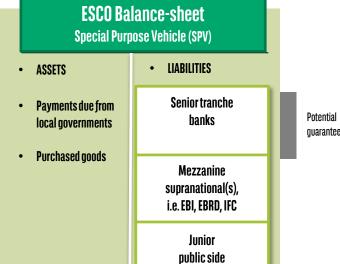
- Market potential:
- 420k public buildings constitute 3% of all buildings in Poland
- Only 5% of all public buildings constitute ca. PLN 29.4 bn of the potential private investment (out of a total 52.5 bn mix combining public and commercial funds)
- The Bank may act as an investor in the project providing a part of financing to ESCO

A scalable solution that may tackle the problem of inefficient buildings, insufficient financing and create a new business opportunity for the Bank

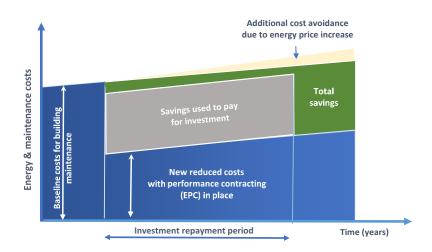
Energy Service Company (ESCO) & Risk Tranching

EnPC contracts

Energy Service Company (ESCO) is to be a special purpose vehicle (SPV). It shall sign the EPC contract with a local government and other contracts with all the service providers, i.e. the contractor which will carry out the EE/RE investments in buildings and infrastructure;



Energy Performance Contract (EPC) is signed between a local government and ESCO which guarantees the ecological effect of energy savings (performance guarantee) during the time of the contract.





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The examples of investments presented in the material have been developed on the basis of energy audits and other technical documentation and are for illustrative purposes only, and the results of the project depend on external conditions (energy prices, technologies used, condition of technical infrastructure). In order to make an investment decision regarding projects in the area of energy efficiency, it is appropriate to prepare a technical study corresponding to the needs and technical conditions of the enterprise, taking into account the current market situation.

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THANK YOU merci mèsitak GRAZIE chokrane dhanyavad ARIGATÔ dziękuję GRACIAS danke ευχαριστώ NANDRI спасибо MAHALO teşekkür ederim spas JEREJEF

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