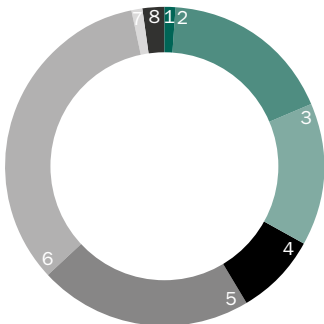




# SUSTAINABLE ENERGY FINANCING FACILITIES: INNOVATIVE PRODUCTS FOR BUSINESSES AND HOME OWNERS

SINCE 2006, THE EBRD HAS PROVIDED OVER **€2.8 BILLION** IN SUSTAINABLE ENERGY FINANCING TO MORE THAN **104** FINANCIAL INSTITUTIONS, REACHING **75,000** CLIENTS IN **22** COUNTRIES. THESE PROJECTS HAVE LED TO ANNUAL CO<sub>2</sub> EMISSIONS REDUCTIONS OF OVER **FOUR MILLION** TONNES.



	€ million
1 Central Asia	46
2 Central Europe and the Baltic states	617
3 Eastern Europe and the Caucasus	386
4 Russia	199
5 South-eastern Europe	551
6 Turkey	971
7 Southern and eastern Mediterranean	25
8 Regional*	50
Total	2,845

\* Regional projects are those which cover several countries and/or regions.

**Energy efficiency is a powerful mechanism by which businesses can pursue modernisation to boost profitability and increase competitiveness. For home owners energy efficiency offers the chance to increase comfort while reducing utility bills.**

**Through Sustainable Energy Financing Facilities (SEFFs), the EBRD extends credit lines to local financial institutions which on-lend the funds to their clients, including small and medium-sized businesses, corporate clients, and retail clients.**

**Loans under the SEFFs provide financing for sustainable energy projects in two key areas:**

- **energy efficiency**
- **small-scale renewable energy.**

**Recognising that sustainable energy represents a new area of investment, SEFFs provide expert guidance to build capacity in appraising the financial and technical potential of such investments:**

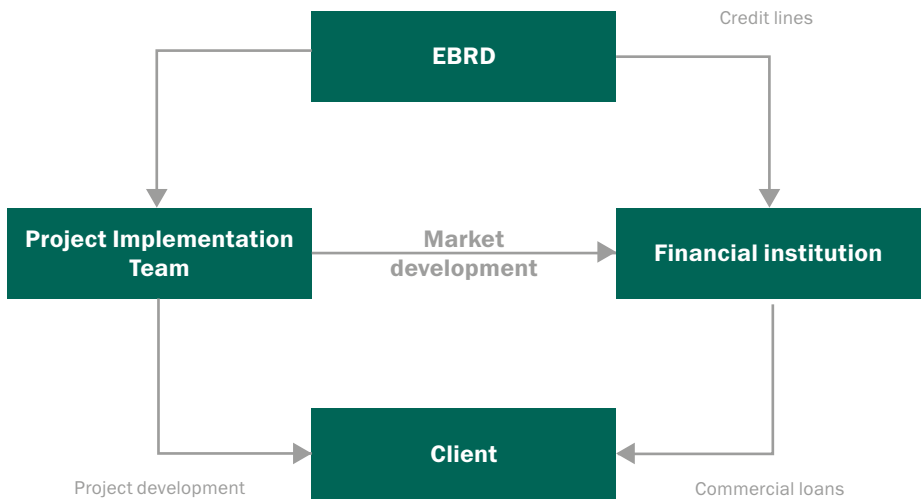
- **Financial institutions learn how to assess the feasibility of energy efficiency and renewable energy projects and how to develop suitable financial products**
- **Clients receive access to a new line of financial products and learn how sustainable energy investments can improve productivity and increase profits.**

# BUILDING CONFIDENCE AMONG EARLY MOVERS

Energy efficiency and renewable energy projects are often perceived as a “good idea”; but often financial institutions, businesses and property owners do not fully grasp their actual value.

With the express aim of building knowledge and confidence among all parties, SEFFs provide financial institutions and clients with expert guidance in designing lending products and assessing opportunities to turn sustainable energy projects into sound investments.

Each SEFF establishes a Project Implementation Team, comprising local and international experts carefully selected by the EBRD, to provide direct support in building capacity at financial institutions and with their clients. The Team works with both parties to identify solutions and assess feasibility, thereby increasing the acceptance rate of loan applications. Once a loan is disbursed, the Team also steers implementation and provides project monitoring services to maximise energy savings.



# INCREASING THE VALUE OF SEFF FINANCE

The true value of the SEFFs comes from the Project Implementation Team's ability to provide expert guidance to both financial institutions and their business and residential clients throughout the entire project cycle.



## Financial institutions

- TRAINING STAFF IN PROMOTING NEW PRODUCT
- SUPPORTING STAFF IN RECOGNISING TECHNICALLY ELIGIBLE PROJECTS
- MARKETING THE BENEFITS OF THE FINANCE PROGRAMME
- CREATING STANDARDS FOR ENVIRONMENTAL AND SOCIAL DUE DILIGENCE
- ENCOURAGING CLIENTS TO ORIGINATE INVESTMENT OPPORTUNITIES.

## Business and residential clients

- IDENTIFYING SUSTAINABLE ENERGY INVESTMENTS AND ENHANCING PROJECT DESIGN
- PROMOTING THE BENEFITS OF HIGH PERFORMANCE TECHNOLOGIES
- SUPPORTING THE COMPLETION OF FINANCE APPLICATIONS
- PROVIDING GUIDANCE DURING AND AFTER PROJECT IMPLEMENTATION.





# WHO IS BORROWING?

## **SEFF finance to the commercial sector**

typically ranges from a few hundred thousand to a few million euros, most often to support the purchase and installation of equipment, systems or processes.

Across the EBRD countries of operations, SEFF finance has supported diverse projects in virtually all sectors, including:

- **FOOD PROCESSING**
- **MANUFACTURING**
- **INDUSTRY**
- **SERVICES**
- **CONSTRUCTION**
- **AGRIBUSINESS**
- **RENEWABLE ENERGY.**

## **SEFF loans to the residential sector**

typically range from a few thousand to a few hundred thousand euros, most often to support improvements on the building envelope. Various client groups have benefited from SEFF loans, including:

- **INDIVIDUAL HOUSE OWNERS**
- **INDIVIDUAL FLAT OWNERS**
- **GROUPS OF HOME OWNERS**
- **MULTI-APARTMENT ASSOCIATIONS.**



Russian Sustainable Energy  
Financing Facility

Российская Программа Финансирования  
Устойчивой Энергетики

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Устойчивой Энергетики



Разработана:



Европейский банк  
реконструкции и развития

При фи  
Специ  
Акцио





# THOUSANDS OF PROJECTS DEMONSTRATE THE VIABILITY OF THE SEFF MODEL

In diverse contexts, a wide range of SEFF projects have delivered excellent return on investment to businesses and property owners, while financial institutions report rapid payback and increased demand for sustainable energy finance.

**Energy efficiency finance** has been used for:

- ON-SITE CO-GENERATION OF HEAT AND ELECTRICITY
- REHABILITATION OR REPLACEMENT OF BOILERS
- SWITCHING OF HEATING SYSTEMS AND/OR FUELS
- INDUSTRIAL PROCESS IMPROVEMENTS
- REHABILITATION OF COMPRESSED AIR OR STEAM
- INSTALLATION OF HEAT RECOVERY SYSTEMS OR ABSORPTION CHILLERS
- ENERGY MANAGEMENT SYSTEMS
- INSTALLATION OF VARIABLE SPEED DRIVES ON ELECTRIC MOTORS
- THERMAL MODERNISATION OF BUILDINGS
- HIGH-EFFICIENCY LIGHTING.

**Renewable energy finance** has been used to install or upgrade:

- WIND FARMS
- RUN-OF-RIVER HYDRO PLANTS
- SOLAR SYSTEMS FOR GENERATING HOT WATER FOR PROCESS OR HEATING
- BIOMASS SYSTEMS TO PRODUCE HEAT AND/OR ELECTRICITY
- GAS ENGINES USING BIOGAS
- DIESEL ENGINES USING BIODIESEL
- GEOTHERMAL HEAT SUPPLY
- WASTE-TO-ENERGY PROJECTS.

# CREATING OPPORTUNITIES FOR ENERGY SOLUTIONS



By building capacity on both sides of the lender-client relationship, SEFFs help early movers leverage existing expertise and experience to optimise energy solutions.

## **Financial institutions tap into a growing market**

Local financial institutions play the central role in SEFF programmes: they have the credit expertise needed to capitalise on financing opportunities that make sense in the local context. With experience, they will become the partner of choice for clients wanting to finance sustainable energy projects.

## **Businesses improve productivity and increase profits**

Incorporating energy efficiency into strategic planning delivers rapid results in optimising operations and increases competitiveness. It can also free up capital for investments in other areas.

## **Buildings are made more comfortable and cost less to heat**

Businesses and homeowners enhance comfort and reduce costs by reducing energy wastage and improving energy efficiency.



## LAYING THE FOUNDATION FOR SUSTAINABLE ENERGY MARKETS

SEFFs demonstrate that sustainable energy projects are a sound investment. Financial institutions and their clients both learn “why” investing in sustainable energy is good business and “how” to make it turn a profit.

As more players become involved, demand for financial services increases and higher performance technologies become recognised as cost-effective solutions. The sustainable energy market becomes well-established – profitable and competitive in its own right.

# ENERGY EFFICIENCY AND RENEWABLE ENERGY TO BOOST ENERGY SECURITY

COUNTRY

MOLDOVA

SEFF FINANCE

€75 MILLION

SUSTAINABLE ENERGY

380,000 MWh/YEAR

EXPECTED EMISSIONS AVOIDANCE

100,000 tCO<sub>2</sub>E/YEAR

## The three components to developing sustainable energy markets

**Policy dialogue:** The EBRD has established a close relationship with stakeholders focused on improving efficiency and tapping into renewable energy sources to reduce Moldova's dependence on energy imports. The EBRD worked closely with policy-makers to reduce barriers to sustainable energy use, including immature markets, a lack of appropriate regulations and limited supply of high performance technologies.

In implementing new standards for commercial and residential buildings, Moldova became one of the first countries in the post-Soviet area to transpose the EU Building Directive into its energy strategy.

**SEFF investments:** Having laid the foundation through policy dialogue, the EBRD launched the Moldova Residential Energy Efficiency Financing Facility (MoREEFF) which targets individual

households, groups of residents, housing associations, condominiums and cooperatives, as well as housing management and energy service companies. SEFF loans can be used to purchase equipment, appliances, window glazing, thermal insulation, biomass or gas stoves/boilers, solar energy devices and heat pumps.

The EBRD also provided financing to the Moldova Sustainable Energy Financing Facility (MoSEFF), which helps small and medium-sized businesses discover the benefits of process modernisation and efficiency upgrades.

**Technical assistance:** The two SEFF programmes offer unique support to financial institutions, businesses, service providers and individuals. They build skills in carrying out energy audits, appraising investment opportunities and marketing lending programmes.

# INDUSTRY MOVES TO CAPTURE THE FINANCIAL BENEFITS OF ENERGY EFFICIENCY

COUNTRY

UKRAINE

SEFF FINANCE

€180 MILLION

SUSTAINABLE ENERGY

2,600,000 MWh/YEAR

EXPECTED EMISSIONS AVOIDANCE

680,000 tCO<sub>2</sub>E/YEAR

## Financial returns increase as energy prices rise

The Ukraine Energy Efficiency Programme (UKEEP) demonstrates that even in the absence of strong policy and regulation, a business case for lowering costs and boosting profits can prompt investments in energy efficiency.

Rising energy prices and insecurity surrounding energy availability prompted companies to prioritise rational energy use in their investment plans.

## Success stories

A large cheese factory installed nano-filtration to replace an old vacuum evaporation system. The new system eliminates gas consumption and saves more than 25 per cent of electricity use. The UKEEP investment of US\$ 1 million provided immediate savings of US\$ 1.5 million per year in reduced energy costs.



A vegetable oil and fat company decreased dependency on gas for process heat by installing a biomass boiler. The company is now using waste seed husks as fuel, thereby eliminating the need to transport and dispose of husks. The investment of US\$ 12 million led to annual savings of US\$ 2.7 million and reduced dependence on an unreliable natural gas supply.

A cucumber and tomato producer invested US\$ 1.2 million in new boilers, irrigation systems and control systems for a large greenhouse complex. Gas and electricity consumption were significantly reduced, leading to a return on investment of 25 per cent per year.



# SCALING UP SUSTAINABLE ENERGY INVESTMENTS

COUNTRY

TURKEY

SEFF FINANCE

€1 BILLION

SUSTAINABLE ENERGY

6,400,000 MWh/YEAR

EXPECTED EMISSIONS AVOIDANCE

3,000,000 tCO<sub>2</sub>E/YEAR

## Private sector energy savings help reduce national import demand

The Turkish Sustainable Energy Financing Facility (TurSEFF) targets small and medium sized enterprises. Loans of up to €4 million are offered to finance energy efficiency and small-scale renewable energy projects.

To date, TurSEFF, has served more than 350 clients throughout the country, from Izmir to eastern Anatolia. They operate in various sectors, ranging from food manufacturing and tourism to textiles and machine manufacturing. Investments vary from purchase of modern process machinery to installation of solar panels and insulation.



## Scaling up investments and returns

The success of TurSEFF prompted the EBRD to scale up its initiative by launching the Turkey Mid-size Sustainable Energy Financing Facility (MidSEFF) with seven partner banks.

With investments from €10 to €50 million per project, MidSEFF has a strong focus on renewable energy projects such as wind, hydro, geothermal and solar power plants, as well as biogas and biomass projects. The facility also supports energy efficiency and waste-to-energy projects.

## OTHER AREAS OF SEI ACTIVITY

[www.ebrd.com/sei](http://www.ebrd.com/sei)



### INDUSTRIAL ENERGY EFFICIENCY

Making energy efficiency investments in energy-intensive industrial processes such as steel manufacturing, aluminium smelting, cement and glass production, as well as major transport investments, such as in railway operating companies.

### POWER SECTOR ENERGY EFFICIENCY

Improving the energy efficiency of transmission networks and thermal power stations which generate the majority of energy in the region. The ageing energy infrastructure includes a large number of plants with low generation efficiency, high running costs, and excessive pollution and carbon emissions.

### RENEWABLE ENERGY

Supporting the development of renewable energy sources by providing project finance and technical cooperation to shape the institutional and regulatory frameworks for renewable energy investments.

### MUNICIPAL INFRASTRUCTURE ENERGY EFFICIENCY

Upgrading neglected municipal infrastructure to provide efficient district heating, public transport networks and water supply systems.

### CLIMATE CHANGE ADAPTATION

Developing approaches to integrate climate risk management and adaptation into project appraisal and development with a particular focus on the private sector.

### CARBON MARKET DEVELOPMENT

Promoting the financing of low carbon projects in the region through the use of carbon market tools. The development of this market requires the creation of new institutions, clear regulatory frameworks and a critical mass of investments.



**European Bank**  
for Reconstruction and Development

# SEI

SUSTAINABLE  
ENERGY  
INITIATIVE

The EBRD is investing in changing people's lives and environments from central Europe to Central Asia, the Western Balkans and the southern and eastern Mediterranean region. With an emphasis on working with the private sector, we invest in projects, engage in policy dialogue and provide technical advice that fosters innovation and builds sustainable and open-market economies.

## CONTACTS

European Bank for Reconstruction and Development  
One Exchange Square  
London EC2A 2JN  
United Kingdom  
Tel: +44 20 7338 7478  
Fax: +44 20 7338 6942  
Web site: [www.ebrd.com/sei](http://www.ebrd.com/sei)

Energy Efficiency and Climate Change Team

Josué Tanaka, Managing Director  
Email: [tanakaj@ebrd.com](mailto:tanakaj@ebrd.com)

Terry McCallion, Director  
Email: [mccallit@ebrd.com](mailto:mccallit@ebrd.com)

Ian Smith, Head of Sustainable Energy  
Financing Facilities Pillar  
Email: [smithi@ebrd.com](mailto:smithi@ebrd.com)

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