The EBRD Green Economy Financing Facility

Mark will present then take questions with Participating Financial Institutions

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www.ebrdgeff.com/romania

www.bancatransilvania.ro

www unicredit ro

www.ucfin.ro
The EBRD Green Economy Financing Facility

1. Green Economy Transition (GET)
2. Green Economy Financing Facility
3. GEFFs in Romania 2008-2018
4. The new residential GEFF in Romania
5. Q&A with Banca Transilvania & UniCredit
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1. GREEN ECONOMY TRANSITION

Context: EBRD’s G.E.T. approach

- The EBRD has adopted a sequence of cross-sectoral strategies to mainstream green financing operations.

- The ‘GET approach’ goes beyond EBRD’s Sustainable Energy and Sustainable Resource initiatives which supported energy efficiency and renewable energy investment.

- GET involves not only energy efficiency and renewables, but also water efficiency, climate change resilience, waste minimisation, materials efficiency, pollution control and environmental improvement.

- GET emphasises innovation and uses capacity-building, policy dialogue, multiple delivery channels.
2. GREEN ECONOMY FINANCING FACILITY

- A financing initiative in Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Egypt, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Moldova, Mongolia, Montenegro, Morocco, Poland, Romania, Russia, Serbia, Slovak Republic, Tajikistan, Turkey and Ukraine.

- Transition from the Sustainable Energy Finance Facility (SEFF) to Green Economy Financing Facility under the new GET approach.

- Combines technical knowledge with finance to help clients invest in high performing technologies.

- Impact (so far) of almost four billion EUR of EBRD GEFF financing:
  - 120,000 clients of 130 local financial institutions avoid...
  - ... almost seven million tonnes of CO₂ emissions per year.
2. GREEN ECONOMY FINANCING FACILITY

EBRD SEFF developed projects with different looks, websites and procedures...

... tailored to local market conditions
2. GREEN ECONOMY FINANCING FACILITY

EBRD SEFF developed projects with different looks, websites and procedures... 
... tailored to local market conditions... including three facilities in Romania.
2. GREEN ECONOMY FINANCING FACILITY

EBRD GEFF brings a single look, a single website and standard procedures...

... while maintaining flexibility to tailor facilities to local country conditions
2. GREEN ECONOMY FINANCING FACILITY

Some characteristics are common to (almost) all EBRD GEFFs

- Donor-funded contracts
- Facility Consultant
- Marketing
- Training
- Incentives
- Technical support (implementation)
- Credit lines
- Participating Financial Institutions
- Sub-loans
- Sub-Borrowers
- Green Economy Investment
2. GREEN ECONOMY FINANCING FACILITY

GEFFs that feature grants to sub-borrowers also feature independent verification.

- Donor-funded contracts
- Facility Consultant
  - Marketing
  - Training
  - Incentives
- Credit lines
  - Participating Financial Institutions
- Sub-loans
  - Sub-Borrowers
- Grants
- Green Economy Investment
- Verification Consultant
  - Technical support (verification)
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EBRD GEFFs have financed sustainable energy investments in Romania since 2008.

Energy Efficiency

Do more with less

Renewable Energy

Capture renewable energy resources from the sun, soil, wind, water or earth.
3. GEFFS IN ROMANIA 2008-2018

Tractebel Engineering has worked with EBRD on GEFFs in Romania for 10 years.

- **6 partner banks**
  - BCR, BRD, Banca Transilvania, CEC Bank OTP Raiffeisen
  - **129 industrial investments** totaling **111 MEUR**

- **1 partner bank**
  - BRD
  - **3 municipal investments** totaling **10 MEUR**

- **4 partner banks**
  - BCR, BRD, Banca Transilvania, UniCredit
  - **341 SME investments**, totaling **68 MEUR**

And now...
3. GEFFS IN ROMANIA, 2008-2018

Tractebel is again helping EBRD to roll out financing for energy efficiency in Romania...

- 6 partner banks: BCR, BRD, Banca Transilvania, CEC Bank OTP Raiffeisen
  - 129 industrial investments totaling 111 MEUR

- 4 partner banks: BCR, BRD, Banca Transilvania, UniCredit
  - 341 SME investments, totaling 68 MEUR

- 2 partner banks: Banca Transilvania, UniCredit
  - A recent 100 MEUR residential framework

... but it is the first time we have worked together on the household sector
3. GEFFS IN ROMANIA 2008-2018

The first GEFF in Romania was the EU EBRD Energy Efficiency Finance Facility (EEFF) for private sector industrial companies:

- Loans – up to 2.5 MEUR per company from participating banks
- Free (EU financed) technical consultancy from Tractebel Engineering
- EU grants of 15% of the loan value (max. 375,000 Euro each)

Results

- 129 investments totaling 111 million Euro
3. GEFFS IN ROMANIA 2008-2018

The EU EBRD Municipal Fund for Energy Efficiency (MFFEE) financed streetlighting.

- An experimental GEFF with 10 million Euro, one participating bank.
- Loans of up to 5 million Euro per investment
- Free (EU financed) technical consultancy from Tractebel Engineering
- EU grants (to the municipality) of 20% of the loan value

Results

- Three public lighting investments totaling 10 million Euro
3. GEFFS IN ROMANIA 2008-2018

The EU EBRD Romania Sustainable Energy Finance Facility (RoSEFF) financed SMEs

- Loans to a wide range of private sector SMEs through four participating financial institutions.
- Free (EU financed) technical consultancy from Tractebel Engineering
- EU grants of 10% or 15% of the loan value
- Fast-track technical eligibility for small, simple projects using a Technology Selector (list of eligible measures and equipment)

Results

- 341 investments totaling 69 million Euro
3. GEFFS IN ROMANIA 2008-2018

The new **residential** GEFF in Romania features

- **Concessional financing** from Taiwan ICDF for EBRD loans to Banca Transilvania and UniCredit
- **GEF financing for consultancy** by Tractebel Engineering
- There are **no grants** for end users (unlike previous GEFFs)

**Eligible investments include**

- **Pre-approved** measures that meet defined performance standards from an online **GEFF Technology Selector**
- **Assessed** investments with a free **Assessment (report)** that demonstrates technical eligibility.
GEFFs finance robust investments by robust investors

- Sub-borrowers (investors) must be creditworthy
- Investments must be energy efficiency or renewable energy
- Specific rules vary from GEFF-to-GEFF

Investments must be green economy investments

- Either: Assessed individually to bring minimum 20% specific energy savings;
- Or: Selected from a database of eligible technologies that meet defined energy performance standards.

Companies make green economy investments for commercial reasons; households for lifestyle, comfort and financial savings.

3. GEFFs in Romania 2008-2018
GEFFs have wide geographical outreach

- The Facility Consultant trains local PFI branches in how to recognise and act upon energy efficiency lending opportunities...

- ... so outreach is as wide as the branch networks of the local banks
3. GEFFS IN ROMANIA 2008-2018

GEFFs help investors to afford better technologies

- Production lines
- Automation
- Compressors
- CNC machines
- Lifting
- Lighting
- Cogeneration
- Motors
- Vehicles
- Shaping
- Solar
- Biomass/biogas
- Hydroelectricity
- Insulation
- Combustion
- Heat recovery
- Cooling/chilling
- and more...
GEFFs have financed energy efficiency in a very wide range of sectors:

- Metalworking
- Plastics
- Retail
- Hotels
- Textiles
- Baking
- Wood sector
- Housing
- Agriculture
- Printing
- Machine building
- Paper
- Hydroelectricity
- Public lighting
- Automotive
- Civil engineering
- Food and drinks
- and more…

3. GEFFS IN ROMANIA 2008-2018
3. GEFFS IN ROMANIA 2008-2018

GEFFs raise awareness

- Online and offline publications
- Short movies
- Technical case studies
- Awards events
- Public events
- A technical Help Desk
- Training
- Site visits
- ... and much more....

Targeted information for specialist audiences highlight benefits of investing in energy efficiency and renewable energy.
3. GEFFS IN ROMANIA 2008-2018

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- Online and Offline publications
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- A technical Help Desk
- Training
- Site visits
- ... and much more....

More than 70 EEFF and RoSEFF clips about successful investments may be found on YouTube
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Gala Awards events recognise companies who chose to prioritise sustainable energy investments
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- Training
- Site visits
- ... and much more....

Contact

GEFF Help Desk

Tel. 031 22 48 104
3. GEFFS IN ROMANIA 2008-2015

‘Financing Sustainable Energy’

1. Why Sustainable Energy?
   - What is Energy Efficiency? What is Renewable Energy?
   - Why banks and their clients need to understand sustainable energy

2. Typical Energy Efficiency Investments
   - Industry – Machines/Production – Combustion – Cooling – Processes

3. Typical Renewable Energy Investments

4. Economics of Sustainable Energy
   - Cash Flow – DCF – NPV – Payback – IRR Sensitivity Analysis

5. Subsidies for Sustainable Energy
   - Green Certificates – White Certificates – EU ETS – Structural Funds
   - Cogeneration Bonus – Casa Verde – Other/future subsidies

Training bankers is a core GEFF activity.
Specialist engineers from Tractebel Engineering visit sub-borrowers to identify technically and financially sound energy-saving opportunities.

GEFFs raise awareness

- Online and Offline publications
- Short movies
- Technical case studies
- Awards events
- Public events
- A technical Help Desk
- Training
- Site visits

... and much more....
3. GEFFS IN ROMANIA 2008-2018

GEFFs are streamlined

- Well-designed systems
- Rapid technical approval

Investment proposals move fast

- Simple online procedures for standard investments.
- Rapid, effective, free technical consultancy for complex projects

Independent verification

- For investments with EU grants

Investors do not want to wait – so rapid response and lightweight procedures are integral features of GEFFs
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4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Tractebel is again helping EBRD to roll out financing for energy efficiency in Romania...

6 partner banks
BCR, BRD, Banca Transilvania, CEC Bank OTP Raiffeisen
129 industrial investments totaling 111 MEUR

1 partner bank
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... and now...
### 4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Tractebel is again helping EBRD to roll out financing for energy efficiency in Romania...

<table>
<thead>
<tr>
<th>Category</th>
<th>Partner Banks</th>
<th>Number</th>
<th>Investments</th>
<th>Totaling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>BCR, BRD, Banca Transilvania, CEC Bank OTP Raiffeisen</td>
<td>6</td>
<td>129</td>
<td>111 MEUR</td>
</tr>
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<tr>
<td>SME</td>
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<td>4</td>
<td>341</td>
<td>68 MEUR</td>
</tr>
<tr>
<td>Residential</td>
<td>2 partner banks (Banca Transilvania, UniCredit)</td>
<td>2</td>
<td>A recent</td>
<td>100 MEUR</td>
</tr>
</tbody>
</table>

... but it is the first time we have worked together on the **household sector**
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

The latest GEFF was launched in Romania on 27th June 2017

- A 100 MEUR EBRD financing framework for the household sector

Donors

- TaiwanICDF provides concessional financing through EBRD
- Global Environment Facility (GEF) finances consultant support

Participating Financial Institutions (PFIs)

- Banca Transilvania with 40 MEUR
- UniCredit Bank and UniCredit Consumer Financing with 45 MEUR

Facility Consultant (FC)

- Tractebel Engineering consortium – technical consultants
EBRD designed GEFF to be flexible, enabling PFIs to choose how to bring green energy investments to households into households

- Credits of up to 100,000 Euro for physical persons for eligible green economy investments in the home; and
- Credits of up to 5 million Euro for multi-household buildings and for businesses who supply households with green economy goods and services.

PFIs have chosen to focus on physical persons

- **Home mortgages** for energy-efficient homes;
- **Consumer loans** for green economy products;
- **Credit card payments** for green economy products from selected retailers who partner with PFIs;

What are eligible household investments?

1. Energy-efficient homes
2. Home renovation products
3. Energy or water-saving home products (boilers, fridges...)
4. Home renewables (solar systems, biomass boilers...)
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

There are two procedures... fast and very fast!

GEFF Assessment
A (free) GEFF report from Tractebel Engineering that confirms technical eligibility to be financed using GEFF

GEFF Technology Selector (TS)
An online list of pre-approved technologies that meet high technical performance standards
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

GEFF home mortgages

- New and recent homes with an EPC (Energy Performance Certificate) of ‘A’ or ‘upper B’ are technically eligible for GEFF.
- Older homes and major renovation projects may be eligible if the FC can demonstrate that 20% energy savings will be achieved.

Every GEFF home mortgage receives a (free) Assessment

- Standard mortgages for dwellings that already have an eligible EPC receive a simplified Assessment within two days. (We also check that various EBRD financing rules satisfied).
- Non-standard mortgages receive a full Assessment which takes a little longer. (e.g. for older homes, or refurbishments, or new home under construction that don’t have an EPC yet).
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

The GEFF Technology Selector

- An online list of **high-performing household technologies**
- Pre-approved to be financed using GEFF – no technical Assessment is required

The Technology Selector is an open list

- Home lighting, heating, air conditioning, refrigeration, windows, insulation, more...
- All models meet clearly defined, published technical performance standards.
- Adding equipment to the list is free...

Click ‘Technology Selector’ at [www.ebrdgeff.com/romania](http://www.ebrdgeff.com/romania)
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

The GEFF Technology Selector includes
Lighting improvements are simple way to save energy in the home

- **LED lighting** come in a wide range of 'warm' and 'cold' colours
- **Controls** like presence sensors, day-night controls; and even smartphone apps. can control lighting levels and lower costs.
- **Typical energy savings**: up to 80% if replace conventional lighting.

**GEFF eligibility rule:**

- **Equipment**: LED lamps rated ≥ 80 lumens/Watt
- **Other**: auxiliary/installation costs up to 20%
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

A cool home can be achieved in several ways

- **Shade** south-facing windows;

- **Insulate** – to keep air-conditioned rooms cool in summer (and heated rooms warm in winter).

- Select an **energy-efficient air conditioner** model;

- Make sure it is **correctly sized** for the space

- **Typical energy savings**: Replacing an old air conditioner with a new, correctly-sized energy-efficient model can cut your cooling bills by 45% - or more if combined with shading and insulation.

- **GEFF eligibility rule**: Energy Label A++ or A+++
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Did you know that your fridge uses more electricity than your washing machine?

- Surprising, but true (in most homes) as your refrigerator consumes electricity 24 hours-a-day, 365 days-a-year. It is one of the biggest energy consumers in our homes.

- **Typical energy savings:**
  - Replacing a quite modern A+ model with an A+++ model can almost half your electricity use.
  - Replacing a 10-15 year old fridge with a new, A+++ model can bring up to 70% electricity savings.

- **GEFF eligibility rule:** Energy Label A++ or A+++
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Heat pumps are not a solution for everyone, but can be a good alternative to electric heating and cooling

- The ground beneath our homes and gardens always stays at a roughly constant temperature. A heat pump system uses this for both winter heating and summer cooling.

- A well-designed system to replace conventional electric heating and air conditioning may be a viable household investment.

- **Typical energy savings:** in an ideal application – up to 80%.

- **GEFF Eligibility rules:**
  - **Equipment:** Coefficient of Performance ≥ CoP 4.3
  - **Other:** Auxiliary/installation costs up to 50%
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Insulation for your home is a 'lifestyle' investment that:

- **Thermal insulation** saves money on heating and cooling your home;
- Keeps you **warm** in winter and **cool** in summer; and
- Improves the **looks and value** of your home

**Walls, basements, roofs, windows, doors**

- **Typical energy savings:** insulating the building envelope can lower heating and cooling costs by **more than 30%**.
- **GEFF eligibility rules:** Equipment rules for insulation are a bit long and technical for this presentation, so please see website. **Other** eligible auxiliary/ installation costs are 50% for insulation and 15% for sealed double-or-triple glazed **windows and doors**.

**GEFF Technology Selector**

- **Thermal insulation of walls, roofs, basements**
- **Sealed glazing**
  - **U-Value ≤1.3 W/m²K**
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Hot water for your family doesn't need to be expensive!

- Washing represents a substantial part of household energy costs. A solar-assisted hot water system pre-heats water entering the hot water system, which lowers use of gas, fuel or electricity.

- Vacuum tubes are a better technology than flat plates. A well-insulated hot water cylinder maximises energy cost savings.

- Typical energy savings 65% (more in summer, less in winter).

- GEFF eligibility rules:
  - Equipment – the entire system providing that solar collectors have a Solar Keymark (or are ≥ 75% efficient)
  - Other: installation: labour costs up to a ceiling of 15%
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

A photovoltaic (PV) system installed on the roof of your home converts sunlight into free electricity!

- **Typical energy savings**: A PV system offsets your electricity consumption 1:1, so every 1 kWh that you generate at home is 1 kWh that you don't need to buy from your electricity supplier.

- **GEFF Eligibility rules**:
  - **Equipment**: PV panels electrical efficiency $\geq 14\%$ and the rest of the solar system including inverters, cables, connection boxes and auxiliary equipment are considered to be eligible costs.
  - **Other**: installation costs up to a ceiling of 15% over-and-above eligible equipment costs are eligible costs.

If PV panels are $\geq 14\%$ efficient, the entire system is GEFF-compatible.
Condensing gas boilers are smart!

- An old-fashioned conventional gas boiler pumps hot exhaust gases out of your home through the flue. A **condensing** gas boiler captures the heat before it pumps out the exhaust gases. The heat is redirected back where it belongs - into your home. The result: **more heat for less money**.

- **Typical energy savings**: changing an old boiler for a condensing model can lower natural gas consumption by up to **20%**.

- **GEFF eligibility Rules**:
  - **Equipment**: only **condensing** models
  - **Other**: installation costs of up to 10% over-and-above the cost of the eligible boiler.
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Biomass appliances

- **Biomass boilers and stoves** typically use low cost wooden logs and briquettes. Pellets boilers are a more expensive but more convenient solution as a pellets boiler can 'feed itself' with fuel.

- **Typical energy savings**: Replacing an old biomass boiler with a sophisticated modern model can lower fuel consumption by 20%.

- **GEFF eligibility rules**:
  - **Equipment** that achieves a thermal efficiency ≥ 85%.
  - **Other**: Delivery and installation up to 10%
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Hot water cylinders

- **A well-insulated hot-water cylinder** (tank) is a simple, effective way to save money.

- Avoid re-heating water that you already heated.

- All non-instantaneous hot water systems (that pre-heat and store water) can benefit from this technical solution.

- **Typical energy savings** – Replacing an old, poorly-insulated tank with a well-insulated one can lower costs by up to 50%.

- **GEFF eligibility rules**: Energy label ‘A’ or ‘B’
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Is it better to use a personal loan or a credit card to buy from the Technology Selector?

**Personal loans**

Advantage for the customer: may buy eligible technologies from any retailer.

*but*

Slightly more bureaucratic than a typical loan – an additional form to complete

**Credit cards**

Advantage for the customer: no forms to complete (zero bureaucracy!)

*but*

Only possible at defined retailers with partnership agreements with a PFI.
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Procedure a personal loan for items from the Technology Selector

- Borrower must complete and sign a short, simple form, with:
  - A table of eligible equipment with check boxes for what will be acquired with the loan and in what proportion (fridge? solar? insulation? etc).
  - A declaration: “I intend to use the credit to buy energy efficiency, renewable energy and/or water saving technologies for which GEFF Eligibility Certificates are shown in the Technology Selector at www.ebrdgeff.com/romania”.
  - This data is required so stakeholders know how GEFF financing is used.
  - The form is additional to the PFI’s normal loan application procedures.
  - Includes clear explanatory notes (for the customer and the loan officer).

The GEFF form has two sides of clear, information and ‘check boxes’
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Using credit cards for items on the Technology Selector

- BT set up successful one-month GEFF pilot with eMAG for A++ and A+++ refrigerators, freezers and air conditioners.

- Household customers who used a BT StarCard received a 50 RON eMAG voucher and 10 months interest-free credit.

- Promotion started on day of the official GEFF launch, 27.6.2017 and led to 149 transactions totalling more than 50,000 Euro.

- This model works very well, so may be extended

- A non-bureaucratic way to deliver green economy financing within an existing product... so no separate application is needed.

- Interest-free credit makes energy-saving products affordable.

Romania is the first GEFF to successfully use credit cards to finance green economy investments.
4. THE NEW RESIDENTIAL GEFF IN ROMANIA

Apply to use the GEFF at Banca Transilvania or UniCredit branches, or online

www.ebrdgeff.com/romania

links to EBRD GEFF product pages of Participating Financial Institutions

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So it's time to introduce the GEFF Participating Financial Institutions...

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for
Banca Transilvania

Sorin Dragulin
for
UniCredit Bank & UniCredit Consumer Financing
GEFF Help Desk
021 224 8104
romania@ebrdgeff.com
www.ebrdgeff.com/romania

Green Economy Financing Facility

Developed by:
European Bank for Reconstruction and Development

Supported by:
TAIWAN ICDF
GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET