REEP & REEP Plus update
Regional Energy Efficiency Programme for the Western Balkans

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Energy Efficiency Coordination Group
Energy Community Secretariat
Vienna
14 November 2018
Topics for discussion

- **Overview** of Regional Energy Efficiency Programme (REEP) and its extension (REEP Plus) in the Western Balkans
- **Progress Update on Programme Windows**
  - Policy Dialogue & ESCO Support
  - Intermediated Financing
  - Direct Financing
  - Direct Lending to Municipalities
- **Donor Visibility**
Programme Structure
REEP Structure (2013 – 2016)

REEP is an integrated package of finance, technical assistance and policy dialogue, implemented jointly with the Energy Community Secretariat.

**Objective**

Support EU accession in the Western Balkans
Sustainable market for energy efficiency in the Western Balkans

**Window 2**
Intermediated financing &

**Window 3**
Direct financing

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**WeBSEFF II**
€117m financing + €14.5m grants
- Credit line for local FI
- For smaller scale EE & RE projects
- For both public & private sector borrowers, including ESCOs
- Grant funds support TA and investment incentives.

**WeBSEDFF (ext.)**
€50m financing + €6.49m grants
- Direct financing facility
- Medium scale RE and EE improvements implemented by private sector borrowers, incl. via ESCOs.

**Window 1**
ESCO support &
Policy dialogue

**Energy Service Companies (ESCO)**
€5m grants
- Legislative support
- Technical project preparation

**Policy dialogue**
€1.1m (EWBJF) + €1m (EBRD & SIDA)
- NEEAP and EPBD
- Utility EEO
- Procurement of EE goods
REEP PLUS Structure (2017 – 2019)

REEP Plus is an integrated package of finance, technical assistance and policy dialogue, implemented jointly with the Energy Community Secretariat.

Objective

Support EU accession in the Western Balkans
Sustainable market for energy efficiency in the Western Balkans

Window 4
Direct Lending to Public Sector

€20m direct EBRD financing
€4.5m grants (€2m EU IPA + Other Donors)
- Direct loans to the State, cities or municipal companies
- Focus on public buildings EE
- Capital expenditure grant co-financing and TA

Window 2
Intermediated financing
Window 3
Direct financing

€135m EBRD & KfW financing via FI
€28.05m grants (€22.45 EU IPA + Other Donors)
- SME and public sector lending (KfW)
- Residential sector lending across all 6 WB countries (EBRD).

€30m direct EBRD financing
€1m grants (€500k EU IPA + Other Donors)
- Direct lending for Medium scale RE, EE
- Target financing of ESCOs
- TA for project preparation

Window 1
ESCO support
Policy dialogue

ESCO development
€3m grants (€1m EU IPA + Other Donors)
- TA for ESCO projects and tenders preparation

Policy dialogue
€3.25m grants (€2.5 EU IPA + Other Donors)
- Key focus on residential sector regulations
Window 1
(a)ESCO Support; (b)Policy Dialogue
REEP Window 1 Overview

At a glance: 35 deliverables, including ESCO contract templates for 5 countries, and 28 policy outputs; 28 accepted/adopted, or likely to be adopted by Jan’2019

Croatia
1. ESCO contract template
2. ESCO enabling legislation
3. EPBD: Inspections
4. EPBD: Calc. Software
5. EPBD: EPC registry specs
6. EED: Article 7 (EEO scheme)

Bosnia and Herzegovina
7. Fed/ESCO contract template
10. Fed/EPBD: NCM
11. RS/ESCO contract template
12. RS/EPBD: Inspections

Montenegro
13. ESCO contract template
14. EED 6: Procurement
15. EED 15: EE in transmission
16. EED 7: EEO secondary leg.

Serbia
19. ESCO contract template
20. ESCO enabling legislation
21. EPBD: Inspections
22. EED 6: Procurement
23. EED 7: Policy notification
24. EPBD: Alternatives to heating inspection

Kosovo
25. EPBD: Primary Law
26. EPBD: NCM
27. EPBD: EPC
28. EPBD: MEPS
29. EPBD: Inspections
30. EPBD: Calc. software

FYR Macedonia
31. EPBD: MEPS
32. EPBD: NCM
33. EPBD: EPC
34. EPBD: Inspections
35. EPBD: Calc. software

Albania
17. EPBD: Primary Law
18. EED: NEEAP

€5 million for Window 1a (EU WBIF), €2 million for Window 1b (EU WBIF, SIDA, EBRD SSF)
Policy Deliverables under REEP (2013-2016) Themes and Adoption Status

**Themes and Adoption Status**

- **Support delivered, needs formal adoption**
- **Support delivered, in process of adoption**
- **Delivered support – accepted and not requiring further adoption / adopted**

**Primary legislation**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**MEPS**
- REEP Plus
- REEP Plus

**NCM**
- REEP Plus
- REEP Plus

**EPC**
- REEP Plus
- REEP Plus

**Inspections/ Altern.**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**Calculation software**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**EPC registry**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**EE in procurement**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**Art. 7 - legisl./ notif.**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**EE in transmission**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**NEEAP**
- ALB
- BA-RS
- BA-F
- FYRM
- KOS
- SRB
- MNE
- CRO

**KEY**
- Support delivered, needs formal adoption
- Support delivered, in process of adoption
- Delivered support – accepted and not requiring further adoption / adopted
**REEP Plus policy assignments build on previous activities and target new policy areas**

<table>
<thead>
<tr>
<th>Activity</th>
<th>ALB</th>
<th>BA-RS</th>
<th>BA-F</th>
<th>FYRM</th>
<th>KOS</th>
<th>SRB</th>
<th>MNE</th>
<th>Regional</th>
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<tbody>
<tr>
<td>EE primary legisl. (EED, EPBD)</td>
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<td>EPBD regulations &amp; software</td>
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<td>Building renovation strategies</td>
<td>Ext.</td>
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<td>nZEB plans</td>
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<td>NEEAP / NECP</td>
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<td>Ext.</td>
<td>Ext.</td>
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<td>EE in procurement</td>
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<td>EED Art. 7 - legisl./ notification</td>
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<td>Ext.</td>
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<td>EE in heating and cooling</td>
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<td>EE in transmission</td>
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<td>Training energy auditors</td>
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<tr>
<td>Eco-design &amp; Labelling</td>
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<td>Ext.</td>
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</table>

- **Completed/ Ongoing, completion by end-2018**
- **Ongoing, expected completion by mid-2019**
- **Scope of support under consideration**
Policy Assignments: Budget allocation
(as of end-OCT’2018)

<table>
<thead>
<tr>
<th>EUR</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Funding</td>
<td>2,500,000</td>
<td>750,000</td>
</tr>
<tr>
<td>USED to-date</td>
<td>1,388,820</td>
<td>737,362</td>
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</tbody>
</table>

- **WBIF**
- **EBRD SSF**
ESCO Market Development
REEP / REEP Plus

OBJECTIVE
• Increase public sector low-carbon investments by using private sector expertise and finance in ESCO projects
• Promote an enabling legislative environment for ESCO business models
• Provide technical support for project/tender preparation.

ACTIVITIES AND RESULTS
• Legislative support, including
  ✓ Primary and secondary legislation
  ✓ Procurement, laws, taxation, budgeting
• Model ESCO contract templates
• Legal gap analyses
• Standardising public procurement and contracting documents and processes
• Project preparation support

OUTCOMES
• Total potential capex of >€98m in public sector low-carbon investments
• Preparation of 43 street lighting projects, 4 building and 4 district heating projects
ESCO support continues under REEP Plus

BACKGROUND
• **EUR 1 million** of technical assistance to support preparation of ESCO projects (additional to EUR 350k remaining funds)

UPCOMING ACTIVITIES
• Deepening the ESCO market development
  – Reducing transaction costs during project preparation by supporting authorities to make approval processes efficient and clarify secondary legislation
• Broadening the ESCO market development
  – Mainstreaming/piloting newer project types (buildings, district heating and water)
  – Mainstreaming additional commercial concepts of energy supply contracting
Window 2
Intermediated Finance
## WeBSEFF II - Results Update

<table>
<thead>
<tr>
<th><strong>TOTAL ACHIEVEMENTS</strong></th>
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<tbody>
<tr>
<td><strong>Countries</strong></td>
<td>Bosnia &amp; Herzegovina, Croatia, FYR Macedonia, Serbia</td>
</tr>
<tr>
<td><strong>Private Financial Institutions (PFI)s</strong></td>
<td>9 (2 BiH, 3 Croatia, 2 Serbia, 2 FYR Macedonia)</td>
</tr>
<tr>
<td><strong>Total financing available to PFIs</strong></td>
<td>EUR 117 mln</td>
</tr>
<tr>
<td><strong>Total signed sub-loan amount to date</strong></td>
<td>EUR 79.8 mln <strong>(additional EUR 0.3mln)</strong></td>
</tr>
<tr>
<td><strong>Total no. of sub-projects to date</strong></td>
<td>306 <strong>(additional 2 projects)</strong></td>
</tr>
<tr>
<td><strong>Current pipeline value</strong></td>
<td>EUR 5.16 mln / 9 Sub-projects</td>
</tr>
<tr>
<td><strong>Total CO₂ savings</strong></td>
<td>117,339 t/year</td>
</tr>
<tr>
<td><strong>Total equivalent primary energy savings (MWh/y):</strong></td>
<td>500,912 MWh/year</td>
</tr>
<tr>
<td><strong>- (which includes Renewable energy capacity added (MW):</strong></td>
<td>54 (MW)</td>
</tr>
</tbody>
</table>
WeBSEFF II – Current status

- **90% of the funds under the existing facility (EUR 92 million) were utilised**, remaining amount unutilised mostly by one PFI in Croatia (~EUR 9 million); funds close to full utilisation in BiH, FYR Macedonia and Serbia

- **EUR 25 million** extended, of which EUR 15 million was signed in October 2018 with a repeating PFI in Serbia

- Almost **EUR 1m TC funds** remaining for disbursement of sub-loans (relating to generic tasks such as marketing, pipeline origination, preliminary eligibility, verification etc.)

- Current pipeline, primarily under the above mentioned credit line, stands at **EUR 5.16 million** for 9 Sub-projects, of which **3 new projects** for EUR 0.3m in the public sector (public lighting, waste collection modernisation)
WeBSEFF II Case Study
Agri-pellet combustion chambers in Backi Petrovac, Serbia

CLIENT
Petrovec d.o.o. is a private company established in 2000 dealing with cultivation of crops (cereals, vegetable and fruits). The company also owns a plant for production of agri-pellets from wheat straw and other agricultural waste.

PROJECT
• Two WeBSEFF II sub-loans
• Purchase and installation of agri-pellet furnace and two crop drying chambers
• Decreased energy cost, utilization of its own agricultural waste as biomass, improved product quality.

FINANCIAL STRUCTURE
Total project cost/loan €443,691/ €360,000
Incentive amount €36,000 (10%)

EXPECTED IMPACT
• Annual savings: €255,600
• Payback period: 1.7 years
• CO2 avoided emissions (t CO2/a): 2,760
• Primary energy savings (MWh/a): 14,280
GEFF Residential – Model & Structure

- **EUR 85m EBRD financing** for residential EE investments across the WB6

- GEFF implementation supported by **EU grants**:
  - Investment Incentives (EUR 17.5mln)
  - Technical Assistance (EUR 5.1mln)
## Funding: Progress to November 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Credit lines signed (#)</th>
<th>Signed (€m)</th>
<th>Expected Signing in 2019 (€m)</th>
<th>Total (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>At June 2018</td>
<td>At Nov 2018</td>
<td>At June 2018</td>
<td>At Nov 2018</td>
</tr>
<tr>
<td>Albania</td>
<td>0</td>
<td>2</td>
<td>0.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>4</td>
<td>4</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>FYR Macedonia</td>
<td>2</td>
<td>2</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Kosovo</td>
<td>3</td>
<td>3</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Montenegro</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td>0</td>
<td>2</td>
<td>0.0</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>13</strong></td>
<td><strong>34.5</strong></td>
<td><strong>53.5</strong></td>
</tr>
</tbody>
</table>

- Total signing amount has reached **EUR 53.5 million** with **13 PFIs** by November 2018
- EBRD aims to sign all EUR 85 million with 16-18 PFIs by YE2019
## Impact: Progress to November 2018

<table>
<thead>
<tr>
<th>Key figures</th>
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</thead>
<tbody>
<tr>
<td><strong>Countries</strong></td>
<td>5 countries: Bosnia &amp; Herzegovina, FYR Macedonia, Serbia, Kosovo, Albania</td>
</tr>
<tr>
<td><strong>Total Financing provided to PFI</strong></td>
<td>EUR 53.5 million</td>
</tr>
<tr>
<td><strong>Total signed sub-loan amount</strong></td>
<td>EUR 4.01 million</td>
</tr>
<tr>
<td><strong>Total no. of sub-projects</strong></td>
<td>791</td>
</tr>
<tr>
<td><strong>Average sub-loan amount</strong></td>
<td>EUR 5,075</td>
</tr>
<tr>
<td><strong>Total GHG emissions avoided</strong></td>
<td>1,411 t/year</td>
</tr>
<tr>
<td><strong>Total equivalent primary energy savings (MWh/y):</strong></td>
<td>4,091 MWh/year</td>
</tr>
</tbody>
</table>
GEFF Technology Selector (online platform of GEFF eligible technologies) launched in 5 countries and available on local GEFF websites, supporting the PFI lending process:

Total number of products available: ~7,000
Total number of suppliers: 3,525

Regional hubs: Two regional hub offices established, Belgrade and Tirana

Capacity building to PFIs: trained 1,100 loan officers in 11 PFIs
Awareness raising & Donor visibility

**Participation in fairs:** Sfera fair (Mostar) and Energa fair (Sarajevo); Renexpo (Belgrade); Green festival (Pristina); Build & Construction Fair (Skopje); Energy Expo & Forum Fair (Tirana)

**GEFF marketing campaigns** following the launch events, including billboards, digital campaigns, TV and radio appearances

**GEFF launch events**
Sarajevo (November 2017)
Pristina (March 2018)
Skopje (April 2018)
Belgrade (September 2018)
Vendor workshops and seminars:
Vendor event in cooperation with “Velux” (Sarajevo); Vendor seminar (Prishtina); Kosovo Sustainable Development Week (Pristina); Series of Educational Events on EE in cooperation with Sparkasse bank for vendors and sub-borrowers (various locations in Macedonia)

Case studies: first three success stories published on GEFF BiH website https://youtu.be/e9XiRZ2YaaY
## Window 2: Intermediated Financing  KfW

Loan Agreements signed until December 2017

<table>
<thead>
<tr>
<th>REEP plus SME sector</th>
<th>Bosnia &amp; Herzegovina and Serbia</th>
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<tbody>
<tr>
<td>Countries</td>
<td>Bosnia &amp; Herzegovina and Serbia</td>
</tr>
<tr>
<td>Number of PFIs</td>
<td>2 PFIs (1 BiH and 1 Serbia)</td>
</tr>
<tr>
<td>Total Financing provided to PFIs</td>
<td>EUR 16 mln</td>
</tr>
<tr>
<td>Total signed sub-loan amount to date</td>
<td>114.913 EUR</td>
</tr>
<tr>
<td>Total no. of sub-projects to date</td>
<td>36</td>
</tr>
<tr>
<td>Total GHG emissions savings</td>
<td>892 t / year</td>
</tr>
<tr>
<td>Total equivalent primary energy savings (MWh/y):</td>
<td>280 MWh / year</td>
</tr>
<tr>
<td>- (which includes Renewable energy capacity added (MW)):</td>
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</tbody>
</table>
### Window 2: Intermediated Financing  KfW

Loan Agreements to be signed in December **2018**

<table>
<thead>
<tr>
<th>REEP plus SME sector</th>
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<tbody>
<tr>
<td>Country</td>
<td>Serbia</td>
</tr>
<tr>
<td>Number of PFIs</td>
<td>2 PFIs</td>
</tr>
<tr>
<td>Total Financing available to PFIs</td>
<td>EUR 34 mln</td>
</tr>
<tr>
<td>Total signed sub-loan amount to date</td>
<td>none</td>
</tr>
<tr>
<td>Total no. of sub-projects to date</td>
<td>none</td>
</tr>
<tr>
<td>Total CO$_2$ savings</td>
<td>Too early to report</td>
</tr>
<tr>
<td>Total equivalent primary energy savings (MWh/y):</td>
<td>Too early to report</td>
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<tr>
<td>- (which includes Renewable energy capacity added (MW)):</td>
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Window 3
Direct Financing
FINANCIAL STRUCTURE

Direct finance €50m
Incentives €4.24m
Technical cooperation €2.25m

PROGRESS

- **6 projects** financed to date (3 SHPP, 1 biomass, 2 biogas), for a total of €25.9m
  - 1 new project since the previous SC meeting
- **1 more project** approved for up to €6.0m (SHPP)
- All projects are operational, delivering renewable energy broadly in line with original estimates

RESULTS

- **21.2MW** installed, equivalent to the annual electricity needed by the street lighting systems of cities the size of Sarajevo, Tuzla and Mostar combined
- CO2 emissions saved: **325,974 tonnes/year**

ISSUES

- Continuing challenges with identifying suitable ESCO projects for financing
Direct Financing (REEP Plus)

BACKGROUND

• **EUR 20-30 million** EBRD financing for up to 12 projects, without grant co-financing

• To be utilized for direct loans to developers of renewable energy projects, as well as ESCOs and possibly industrial energy efficiency projects

• The REEP Plus funding will be used for covering due diligence and other finance preparation costs (on a cost sharing basis)

PROGRESS TO OCTOBER 2018

• First project identified – a wind farm in Kosovo of 32 MW (financing parameters to be determined), REEP Plus funding will be used to support the technical due diligence

UPCOMING ACTIVITIES

• Identification of other potential projects for financing and development of a pipeline will take place over the next 12-24 months
Window 4
Direct Lending to Public Sector
Direct Lending to Public Sector

BACKGROUND

- **EUR 20 million** EBRD financing for up to 4 projects, with **EUR 2 million** grant co-financing available (ca. 10% grant)
- To be utilized for direct loans to states, cities or municipal companies to improve EE in public buildings (i.e. schools, hospitals, government buildings)

PROGRESS TO OCTOBER 2018

- **First transaction signed June 2018**: A sovereign EBRD loan of EUR 10 million for EE retrofit of the Zenica Cantonal Hospital.

- The loan is accompanied with a EUR 1 million investment grant (WBIF) and EUR 200k for project preparation and procurement support.

- Zenica is among the most polluted cities in Bosnia, and the hospital second largest polluter.

- The project will result in reduction of energy consumption by 60% and heating demand by 44%. 
Direct Lending to Public Sector

CURRENT EBRD-PIPELINE / PREPARATORY ACTIVITIES

• On-going pipeline development under Window 4 (REEP Plus); in 2019 we are expecting to sign a new loan under window 4 which will utilise the full remaining amount;

REEP EVOLUTION

• The EBRD is having active discussions in Kosovo and Bosnia to prepare public buildings EE investments;
• Targeted public buildings are in the municipal, educational, administrative, health sectors;
• Scoping studies will be launched to support the structuring and prioritisation EE investments;
• Demand exceeds the supply thus additional sources of funding (outside REEP) are being investigated by the EBRD for WB6.
Direct Lending to Public Sector

Current KfW-Pipeline / preparatory activities

- In active discussions with all 6 Western Balkan Contracting Parties.
- Mixture of scaling up existing programs and new programs
- Targeted public buildings in the educational, administrative, health and social sector
- Demand exceeds the supply (reduction from originally 25m to 15m EUR)
- Most advanced/ prepared programs in Albania, Serbia and Montenegro
- Standardized Energy Audits partly existing
- For cross-country comparisons, unified calculation methodology and approach applied (room for coordination of promoted approaches across the Balkans)
- Cooperation with Fraunhofer Institute for Building Physics
- Showcases planned to promote “exemplary role of the public sector” (e.g. energy plus, passive house, building automation systems, deployment of RE etc.)
Donor Visibility
EU Visibility and Communications

• **Launch events/press**: four countries + announcements (press/social media etc)

• **Various videos**: tell human story and impact
  - Zenica video: 122,000 views

• **New colleague**: for EU-funded activities (REEP, infrastructure, etc.) in WB

• **Continuous promotion**: features, photo/AV material, social media, events, etc.

We’re supporting investments in #EnergyEfficient technologies in #Kosovo. With @EU_near, #Austria and #WBF
bit.ly/2mB2Lpq

Dr KASIM SPAHIĆ
Zenica Cantonal Hospital

Dušan Tešević
The project supported by the EU, Austria and Vojtěch Bulíkova Investment Framework in cooperation with the
Energy Community Secretariat.
Thank you