REEP & REEP Plus update

Regional Energy Efficiency Programme for the Western Balkans

Funded by the European Union



In cooperation with the Energy Community Secretariat

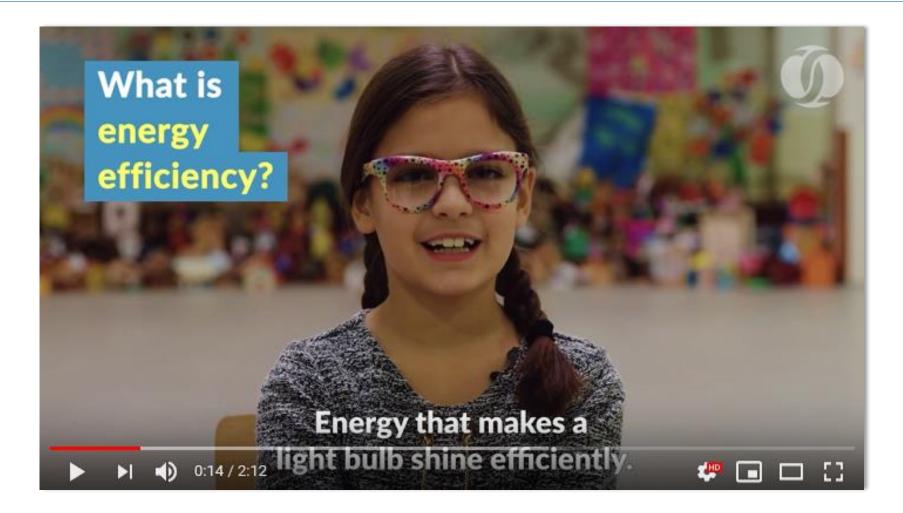


Nigel Jollands, Ana Bachurova Energy Efficiency & Climate Change Unit

Energy Efficiency Coordination Group Sarajevo 5 March 2019







https://www.ebrd.com/news/video/ebrd-and-eu-support-energy-efficiency-improvements-in-serbia.html







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 Public Sector

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

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 €27.55m 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 **€3**m 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, incl. ESCO contract templates for 5 countries, and 28 policy outputs;

29 accepted/adopted, or likely to be adopted by mid-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 ✓
- 8. Fed/ EPBD: Calc. Software ✓
- 9. Fed/ EPBD: EPC reg. specs ✓
- 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. ✓



Albania

- 17. EPBD: Primary Law ✓
- 18. EED: NEEAP ✓

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 ✓

North Macedonia

- 31.EPBD: MEPS
- 32.EPBD: NCM
- 33.EPBD: EPC
- 34.EPBD: Inspections
- 35.EPBD: Calc. software ✓

€5 million for Window 1a (EU WBIF), €2 million for Window 1b (EU WBIF, SIDA, EBRD SSF)

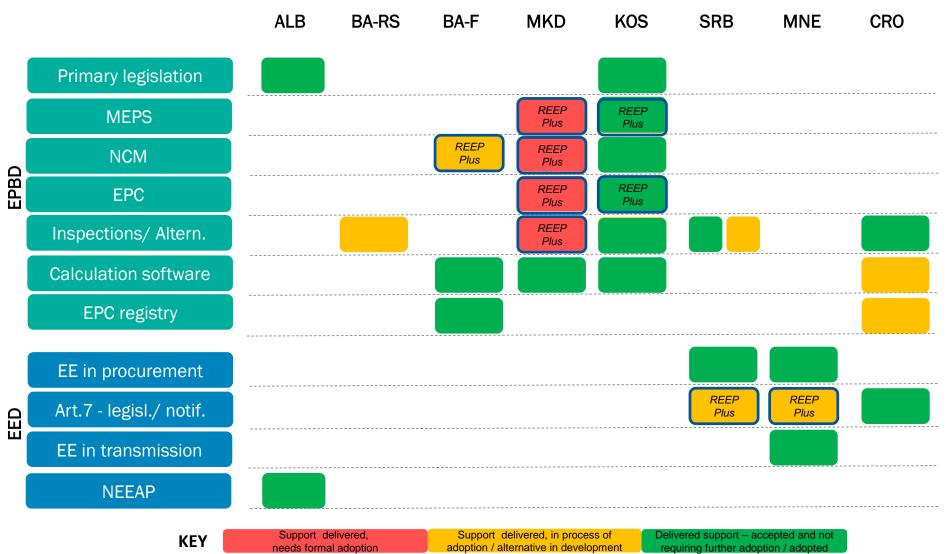






Policy Deliverables under REEP (2013-2016) Themes and Adoption Status











REEP Plus policy assignments build on previous activities and target new policy areas



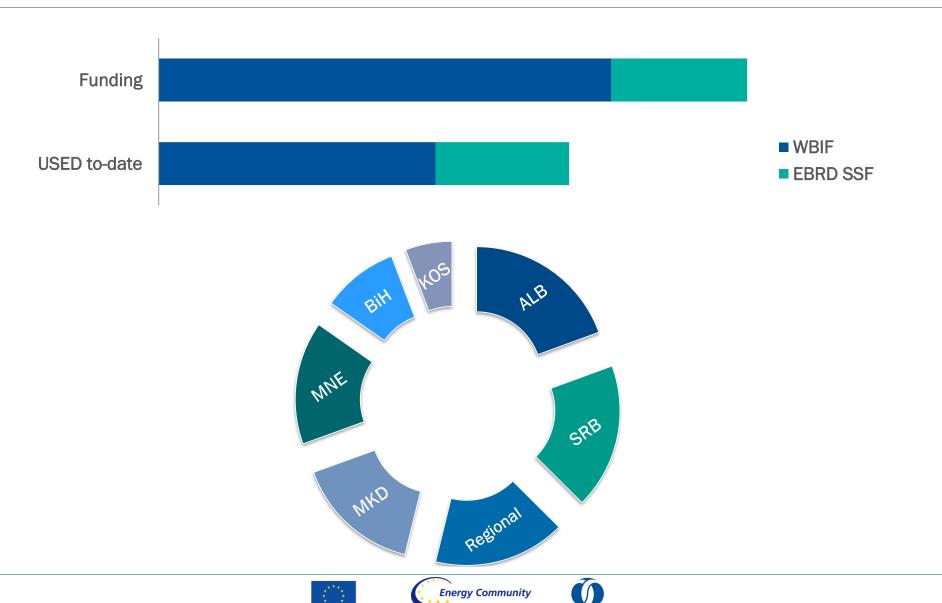
	ALB	BA-RS	BA-F	MKD	KOS	SRB	MNE	Regional
EE primary legisl. (EED, EPBD)								
EPBD regulations & software								
Building renovation strategies					TOR			
nZEB plans								
NEEAP / NECP							TOR	
EE in procurement								
EED Art.7 - legisl./ notification					TOR		TOR	
EE in heating and cooling								
EE in transmission								
Training energy auditors			TOR					
Eco-design & Labelling								
	Comple	eted	Ongoing	, expected co	mpletion in b	oy mid-2019		
差	Scope of support under consideration							







Policy Assignments: Budget allocation (end-FEB'2019)



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 in the Western Balkans and by providing technical support for project/tender preparation.

ACTIVITIES AND RESULTS (COMPLETED 1H/2018)

- Legislative support of EE projects, including primary and secondary legislation; regulations on procurement, laws, taxation, budgeting.
- Model ESCO contract templates for energy performance contracting and energy supply contracting,
- Standardising public procurement and contracting documents and processes to lower transaction costs,
- Energy Efficiency Project Preparation Support.

INVESTMENT OUTCOMES

 Total potential capex of >€98m in public sector low carbon investments arising from REEP policy and technical support.

ESCO MARKET DEVELOPMENT OUTCOMES

- Market in Serbia developing, 33 street lighting ESCO projects <u>approved</u>, biggest implemented project to date in Krusevac. ESCO project in Veliko Gradiste: see film.
- Market in Bosnia Herzegovina gradually developing,
- North Macedonia market initiated with 12 municipalities indicating interest in street lighting ESCO projects.
- First discussions in Kosovo and Albania.



Project preparation

Tendered, contracted or implemented



Feasibility studies done



Tenders under preparation

ESCO policy work

Legal analysis and ESC, EnPC contract templates prepared for all Western Balkan countries.







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. This would allow ESCO projects that are not feasible today due to long payback periods.
 - This applies mainly to Serbia and Bosnia Herzegovina
- Broadening the ESCO market development
 - Mainstreaming/piloting newer project types (buildings, district heating and water)
 - Mainstreaming additional commercial concepts of energy supply contracting
 - This applies mainly to Serbia and Bosnia Herzegovina







Window 2 Intermediated Finance



WeBSEFF II - Results Update

TOTAL ACHIEVEMENTS				
Countries	Bosnia & Herzegovina, Croatia, North Macedonia, Serbia			
Private Financial Institutions (PFI)s	9 (2 BiH, 3 Croatia, 2 Serbia, 2 North Macedonia)			
Total financing available to PFIs	EUR 117 mln			
Total signed sub-loan amount to date	EUR 82.3 mln (+EUR 2.5m since last EECG)			
Total no. of sub-projects to date	312 (+6 projects since last EECG)			
Current pipeline value	EUR 5.66 mln / 10 Sub-projects			
Total CO ₂ savings	135,817 t/year (+18k t/yr since last EECG)			
Total equivalent primary energy savings (MWh/y):	556,635 MWh/year (+55k MWh/yr since last EECG)			
- (which includes Renewable energy capacity added (MW):	56 (MW) (+2 MW since last EECG)			







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 fully utilised in BiH and close to full utilisation in North Macedonia and Serbia
- EUR 25 million extended, of which EUR 15 million was signed in Serbia with a repeating PFI in October 2018 and is now 18% utilised
- Overall funds committed by PFIs is EUR 107 million, and the remaining EUR 10 million is expected to be committed by Q3 2019
- Almost EUR 0.9m 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 5.66 million for 10 sub-projects, all in the private sector (heat pumps, cogeneration, RE and process equipment)







WeBSEFF II Case Study Advertisement media lighting in Serbia

CLIENT

Alma Quattro d.o.o.is a leading outdoor advertisement company in Serbia, with over 4,300 billboards, scrollers, columns, and bigboards across the country.

PROJECT

- Replacement of lighting on 165 city lights, 95 backlights and 13 megaboards with newest generation LED lamps and spotlights
- Expected reduction of lighting costs as a result of reduced energy consumption
- Expected reduction of maintenance costs due to improved quality of equipment

FINANCIAL STRUCTURE

Total project cost/loan Incentive amount

€224,342/ € 200,000 €20,000 (10%)



EXPECTED IMPACT

• Annual savings: €14,753

Payback period: 4 years

Primary energy savings (MWh/a): 1,427

CO2 emissions reduction (







WeBSEFF II Case Study Public lighting replacement in Serbia

CLIENT

Municipal administration of Boljevac located in eastern Serbia with approximately 15,000 inhabitants.

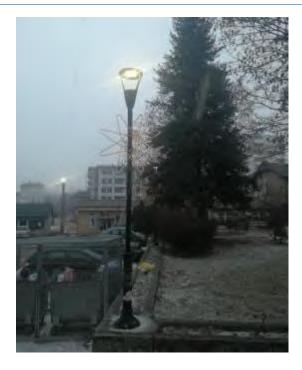
PROJECT

- Replacement of 2,167 fluorescents, sodium and metal halogen lamps and spotlights with new efficient
- Expected reduction of maintenance costs due to improved quality of equipment and guarantee provided by the producer of the technology
- 82% reduction in street lighting electricity costs

FINANCIAL STRUCTURE

Total project cost/loan Incentive amount

€359,028 / €119,676 €17,951 (15%)



EXPECTED IMPACT

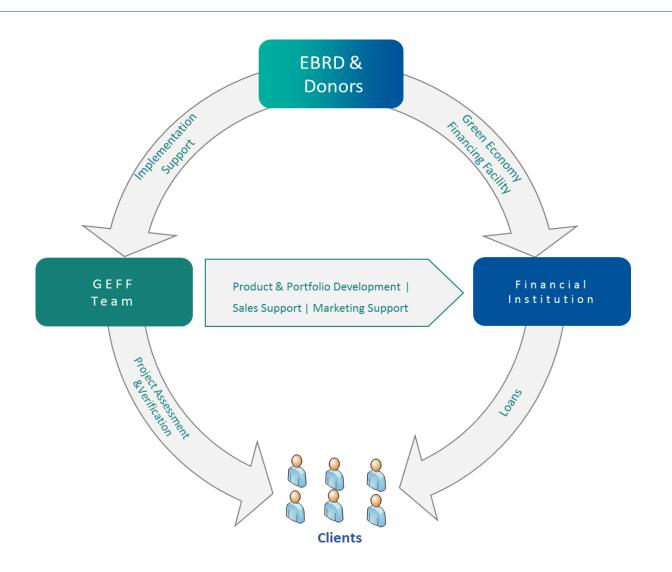
- Annual electricity cost savings: €146,600
- Payback period: 2.45 years
- Primary energy savings: 3,340 MWh/a
- CO2 emissions reduction: 475 t/annum







GEFF Residential – Model & Structure



- 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 March 2019

Country	Credit lines signed (#)		Signed (€m)		Expected Signing in 2019 (€m)	Total (€m)
	At Nov 2018	At Mar 2019	At Nov 2018	At Mar 2019		
Albania	2	2	9.0	9.0	3.0	12.0
Bosnia & Herzegovina	4	4	22.0	22.0	0.0	22.0
North Macedonia	2	2	4.0	4.0	6.0	10.0
Kosovo	3	3	8.5	8.5	5.0	13.5
Montenegro					2.0	2.0
Serbia	2	2	10.0	10.0	15.5	25.5
Total	13	13	53.5	53.5	31.5	85

- Total signing amount has **not changed** from previous period; **EUR 53.5 million** with **13 PFIs**
- EBRD aims to sign all EUR 85 million with 16-18 PFIs by YE2019







Impact: Progress to March 2019

	Key figures
Countries	5 countries: Bosnia & Herzegovina, North Macedonia, Serbia, Kosovo, Albania
Total Financing provided to PFIs	EUR 53.5 million
Total signed sub-loan amount	EUR 5.82 million (+ EUR 1.81m since last EECG)
Total no. of sub-projects	1,100 (+EUR 309 since last EECG)
Average sub-loan amount	EUR 5,291
Total GHG emissions avoided	5,692 t/year (+4,280 t/yr since last EECG)
Total equivalent primary energy savings (MWh/y):	20,490 MWh/year





Implementation Deliverables (Technical Assistance)

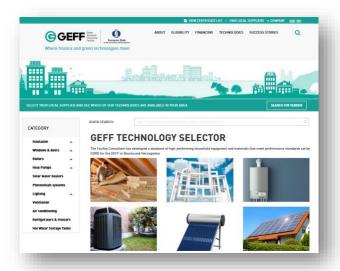
Technology Selector (online platform of GEFF eligible technologies) launched in 5 countries and available **on local websites**, supporting the PFI lending process:

- Products available: >10,000 (+ 3,000 since last EECG)
- Total number of suppliers: >3,000

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

Capacity building to PFIs: trained >1,000 loan officers in 13 PFIs (+ 2 PFIs since last EECG)













Awareness Raising Donor Visibility

Vendor workshops to attract local vendors & suppliers to register their EE products on the TS and develop the market for green technologies .

Next workshop planned for Banja Luka in April, in cooperation with Unicredit Bank



Launch events

Sarajevo (November 2017) Pristina (March 2018) Skopje (April 2018) Belgrade (September 2018)

Tirana (planned March 2019)



Marketing campaigns following the launch events, including billboards, digital campaigns, TV and radio appearances



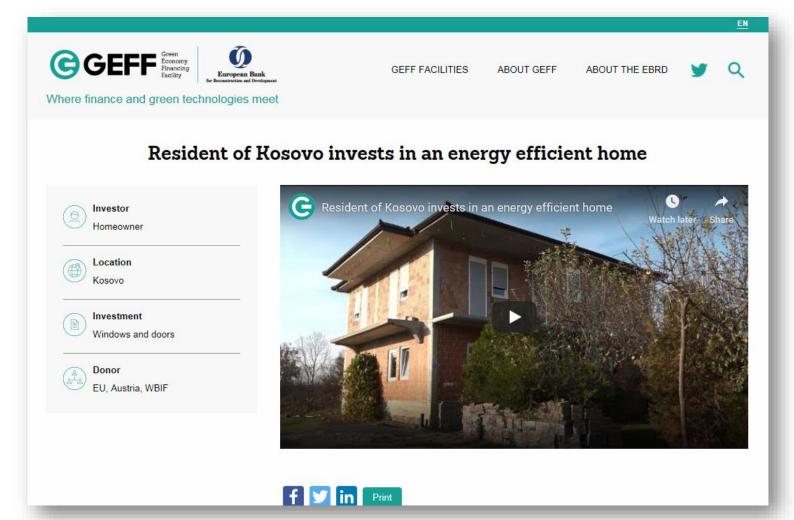








Awareness Raising Donor visibility (cont'd)



Case studies: Two new success stories published on local websites for BiH and Kosovo







Window 2: Intermediated Financing KfW

Loan Agreements signed until December 2017

REEP p	
Countries	Bosnia & Herzegovina, Serbia
Number of PFIs	2 PFIs (1 BiH and 1 Serbia)
Total Financing provided to PFIs	EUR 16 mln
Total signed sub-loan amount to date	940.500 EUR
Total no. of sub-projects to date	59
Total GHG emissions savings	892 t / year
Total equivalent primary energy savings (MWh/) - includes renewable energy capacity added (N	280 MWn / Vear







Window 2: Intermediated Financing KfW

Loan Agreements signed in December 2018

REEP plus SME sector				
Country	Serbia			
Number of PFIs	2 PFIs			
Total Financing available to PFIs	EUR 34 mln			
Total signed sub-loan amount to date	none			
Total no. of sub-projects to date	none			
Total CO ₂ savings	Too early to report			
Total equivalent primary energy savings (MWh/y): - includes renewable energy capacity added (MW):	Too early to report			







Window 3 Direct Financing



WeBSEDFF II (REEP)



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 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 JANUARY 2019

• First project identified – a wind farm in Kosovo of 32 MW (EBRD financing of up to EUR 27.5 million). REEP Plus funding (up to EUR 50k) 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)
- First transaction signed in 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.
- Tender for works is expected to be published in Q1'2019.
- Another transaction is expected to be signed in 2019 which will utilize the remaining grant amount.









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 planed 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
 - Serbia street lighting video: 23,000 views and growing
 - Zenica video: almost 125,000 views
 - More in planning
- Dedicated colleague based in Belgrade for EU-funded activities (REEP, infrastructure, etc.) in WB
- Continuous promotion: features, photo/AV material, social media, events, etc.



















Thank you













