Toolkit:

Enabling investment with energy efficiency policies

Buildings: Session 5

#energyefficientworld

Buildings energy efficiency sessions in partnership with:

IFC International Finance Corporation WORLD BANK GROUP

Energy Efficiency Training Week: Buildings Program

1. **Where to start:** Understanding energy use in buildings
2. **Where to start:** Energy efficiency potential in buildings
3. **Toolkit:** Energy efficient building design
4. **Toolkit:** Energy efficient building technologies

   Where do I get help? IEA's Technology Collaboration Programmes
5. **Toolkit:** Enabling investment with energy efficiency policies
6. **What are the steps :** Building energy codes and standards

   Site Visit: Ministry of Public Works and Housing
7. **What are the steps:** Set targets and develop policies
8. **Did it work:** Evaluating the multiple benefits of energy efficiency
9. **Did it work:** Tracking progress with energy efficiency indicators

   Where do I get help? International and regional energy efficiency initiatives
10. **Energy Efficiency Quiz:** Understanding energy efficiency in buildings

Energy Efficiency Training Week: Buildings

5. Toolkit: Enabling investment with energy efficiency policies

Trainers: Brian Dean and Autif Sayyed

Session: 1 hour

Purpose: To teach the fundamentals of energy efficiency policies that can be used to reduce energy use in buildings and how energy efficiency policies can enable effective investment and finance for energy efficiency in buildings.

Scenario: You continue to hear from stakeholders that all they need is money and then they will consider doing energy efficiency in buildings. *What policy approaches can be used to enable energy efficiency investment?*

Why do we need policies

Bridging the gap

Enable market transformation

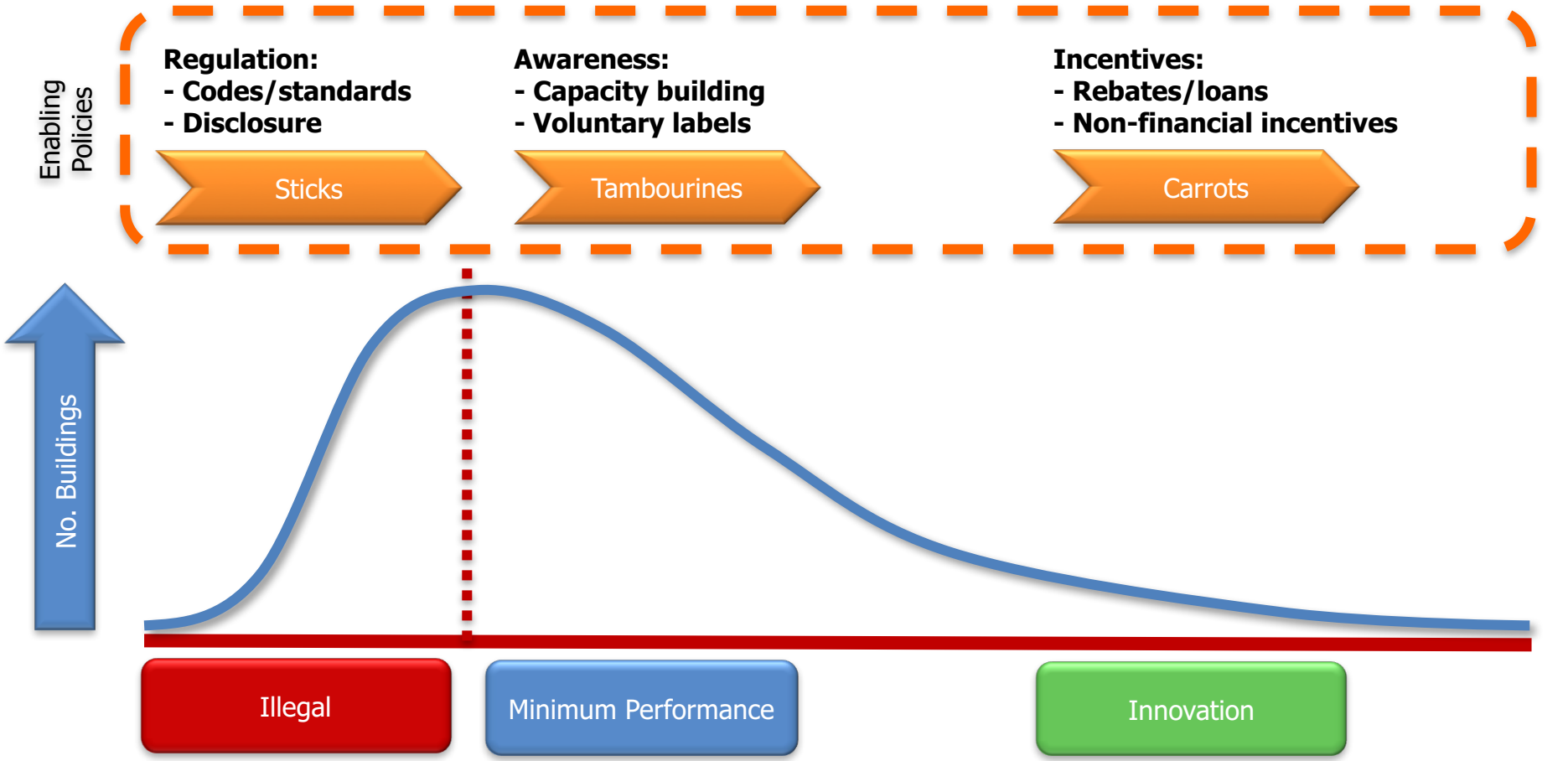
Why do we need policies?

"What if we don't change at all ...
and something magical just happens?"

Why do we need policies? Bridging the efficiency gap

Source: Institute for Building Efficiency, WRI

Why do we need policies? Market transformation

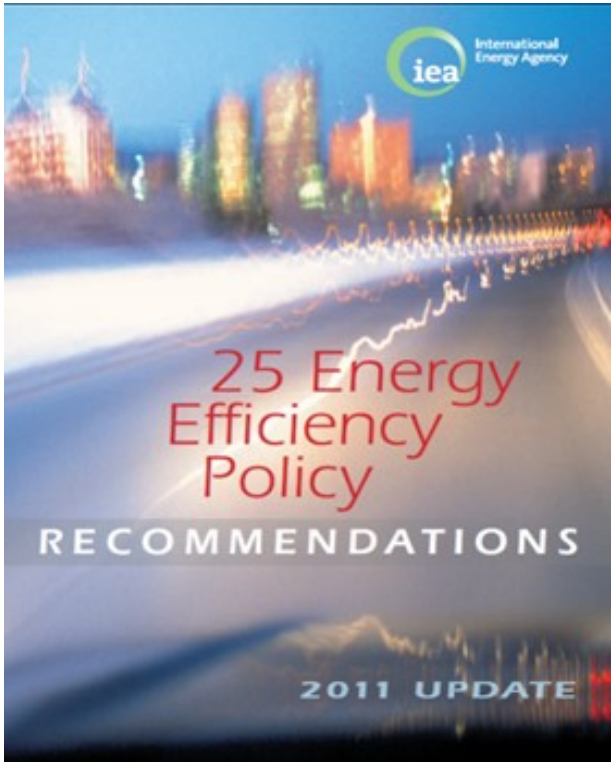


Source: adapted from GBPN

Policy Recommendations

25 Energy Efficiency Policy Recommendations

Energy efficiency policy recommendations



Buildings

6 Mandatory building codes and MEPS

7 Net-zero energy consumption in buildings

8 Improved energy efficiency in existing buildings

9 Building energy labels or certificates

10 Energy performance of building components and systems

Cross-sectoral 1

Buildings 2

Appliances and equipment 3

Lighting 4

Transport 5

Industry 6

Energy utilities 7

www.iea.org/topics/energyefficiency/

25 energy efficiency policy recommendations

Cross-sectoral

1. Energy efficiency data collection and indicators
2. Strategies and action plans;
3. Competitive energy markets with appropriate regulation;
4. Private investment in energy efficiency
5. Monitoring, enforcement and evaluation of policies and measures.

Buildings

6. Mandatory building energy codes and minimum energy performance requirements;
7. Aiming for net zero energy consumption in buildings;
8. Improving the energy efficiency of existing buildings;
9. Building energy labels or certificates;
10. Improved energy performance of building components and systems.

Appliances and Equipment

11. Mandatory MEPS and labels for appliances and equipment;
12. Test standards and measurement protocols for appliances and equipment
13. Market transformation policies for appliances and equipment

Lighting

14. Phase-out of inefficient lighting products and systems;
15. Energy efficient lighting systems

Transport

16. Mandatory vehicle fuel efficiency standards;
17. Measure to improve vehicle fuel efficiency;
18. Fuel-efficient non-engine components
19. Improved vehicle operational efficiency through Eco-driving and other measures .
20. Transport system efficiency

Industry

21. Energy Management in industry;
22. High efficiency industrial equipment and systems;
23. Energy efficiency services for small and medium enterprises;
24. Complementary policies to support industrial energy efficiency

Energy utilities

25. Energy Utilities and end-use energy efficiency.

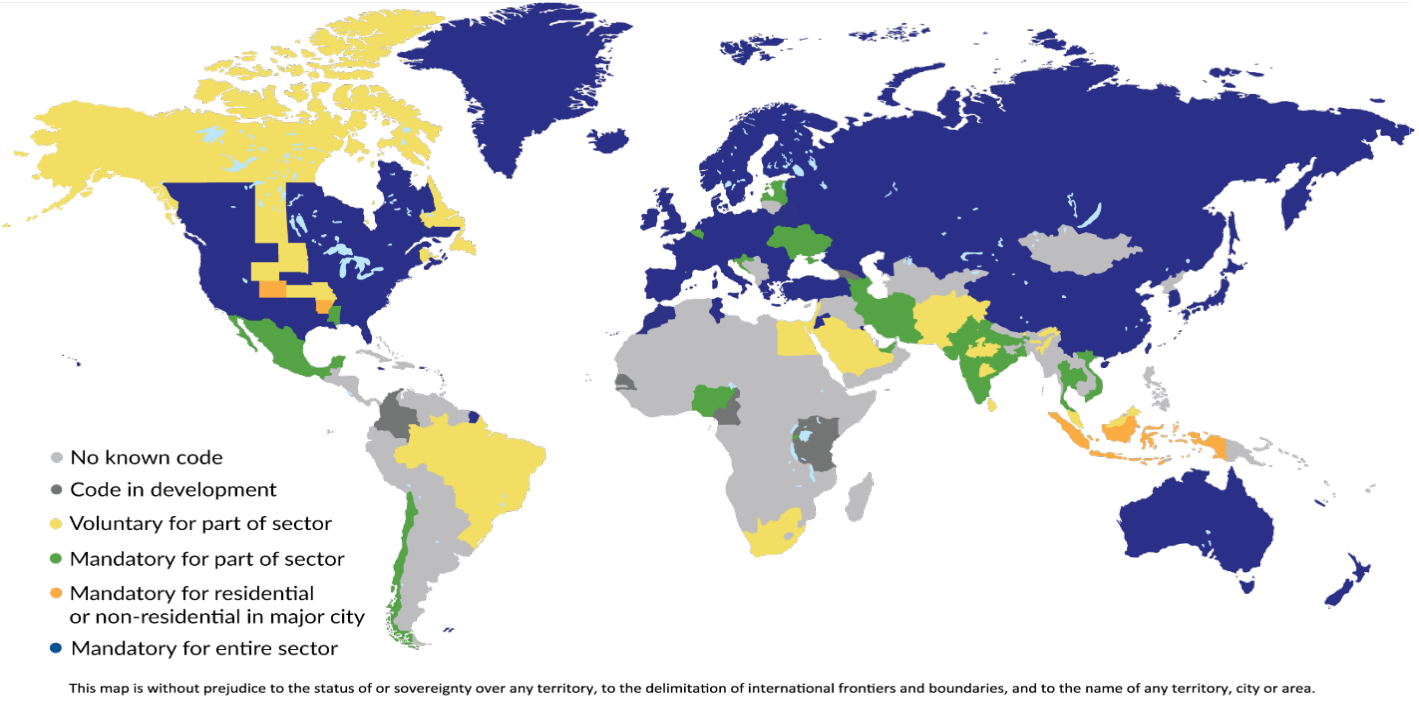
Energy efficiency policy recommendations

#6 Mandatory building energy codes and minimum energy performance standards

- New buildings & buildings undergoing renovation
- Building envelope and equipment
- Energy codes and minimum energy performance standards (MEPS)
- Enforced and regularly strengthened
- To minimise life-cycle costs.

Energy codes for buildings

Building energy codes by country, state and province, 2016-2017



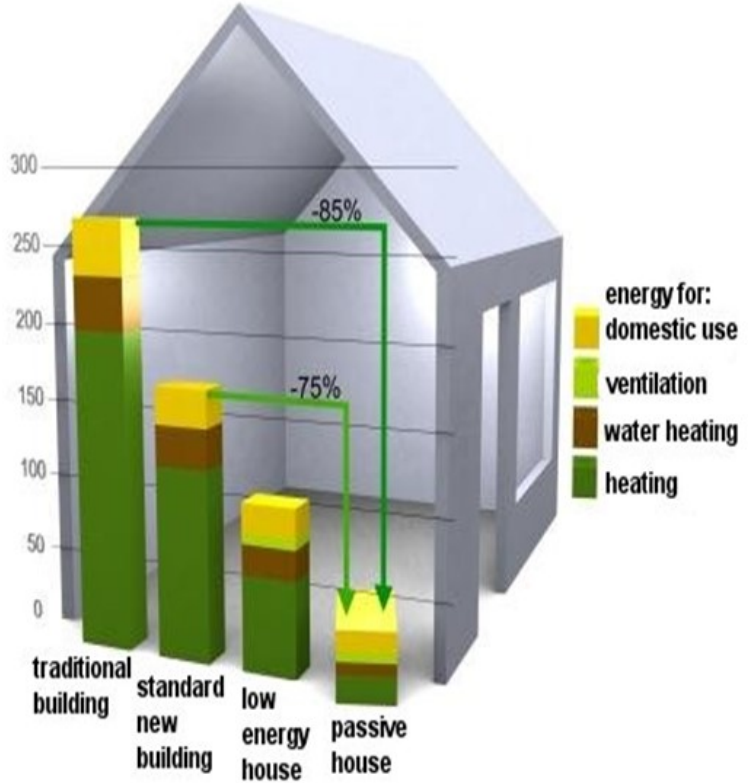
Nearly two-thirds of countries do not have mandatory building energy codes in place today.

Source: GABC Global Status Report 2017

Energy efficiency policy recommendations

#7 Aiming for net-zero energy consumption in buildings

- Governments should support and encourage
- Make commonly available, when economically viable on a life-cycle cost basis
- Set targets for market share for new construction by 2020
- Set future building codes and MEPS based on net-zero building standards



Energy efficiency policy recommendations

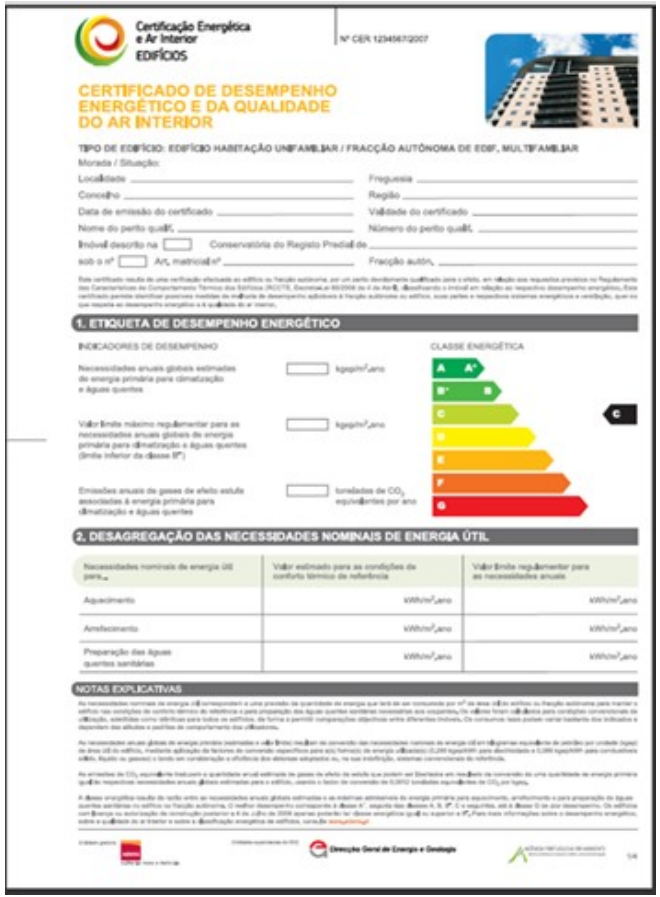
#8 Improving the energy efficiency of existing buildings

- Ambitious timeline and renovation rate
- MEPS for and significant improvements to building envelopes and systems during renovations
- Energy audits, energy ratings and energy performance certification
- Finance and incentives to encourage investment to increase market penetration of long-lasting high efficiency improvements
- Training to improve building retrofit services
- Improvements to the efficiency of public-sector buildings

Energy efficiency policy recommendations

#9 Building energy labels or certificates

- Governments should require building energy performance labels or certificates
- To provide information to owners, buyers and renters.
- At sale or rental


Certificação Energética e Ar Interior
EDIFÍCIOS

Nº CER 1234567/2007

CERTIFICADO DE DESEMPENHO ENERGÉTICO E DA QUALIDADE DO AR INTERIOR

TIPO DE EDIFÍCIO: EDIFÍCIO HABITAÇÃO UNIFAMILIAR / FRACÇÃO AUTÓNOMA DE EDIF. MULTIFAMILIAR

Morada / Situação:

Localidade — Freguesia

Concelho — Região

Data de emissão do certificado — Validade do certificado

Nome do perito qualif. — Número do perito qualif.

Imóvel descrito na Conservatória do Registo Predial de

sob o nº Art. matricial nº Fracção autón.

1. ETIQUETA DE DESEMPENHO ENERGÉTICO

INDICADORES DE DESEMPENHO

CLASSE ENERGÉTICA

Necessidades anuais globais estimadas de energia primária para climatização e águas quentes — kgep/m².ano

Valor limite máximo regulamentar para as necessidades anuais globais de energia primária para climatização e águas quentes (limite inferior da classe B⁻) — kgep/m².ano

Emissões anuais de gases de efeito estufa associadas à energia primária para climatização e águas quentes — toneladas de CO_2 equivalentes por ano

A+ A B⁻ B C D E F G

C

2. DESAGREGAÇÃO DAS NECESSIDADES NOMINAIS DE ENERGIA ÚTIL

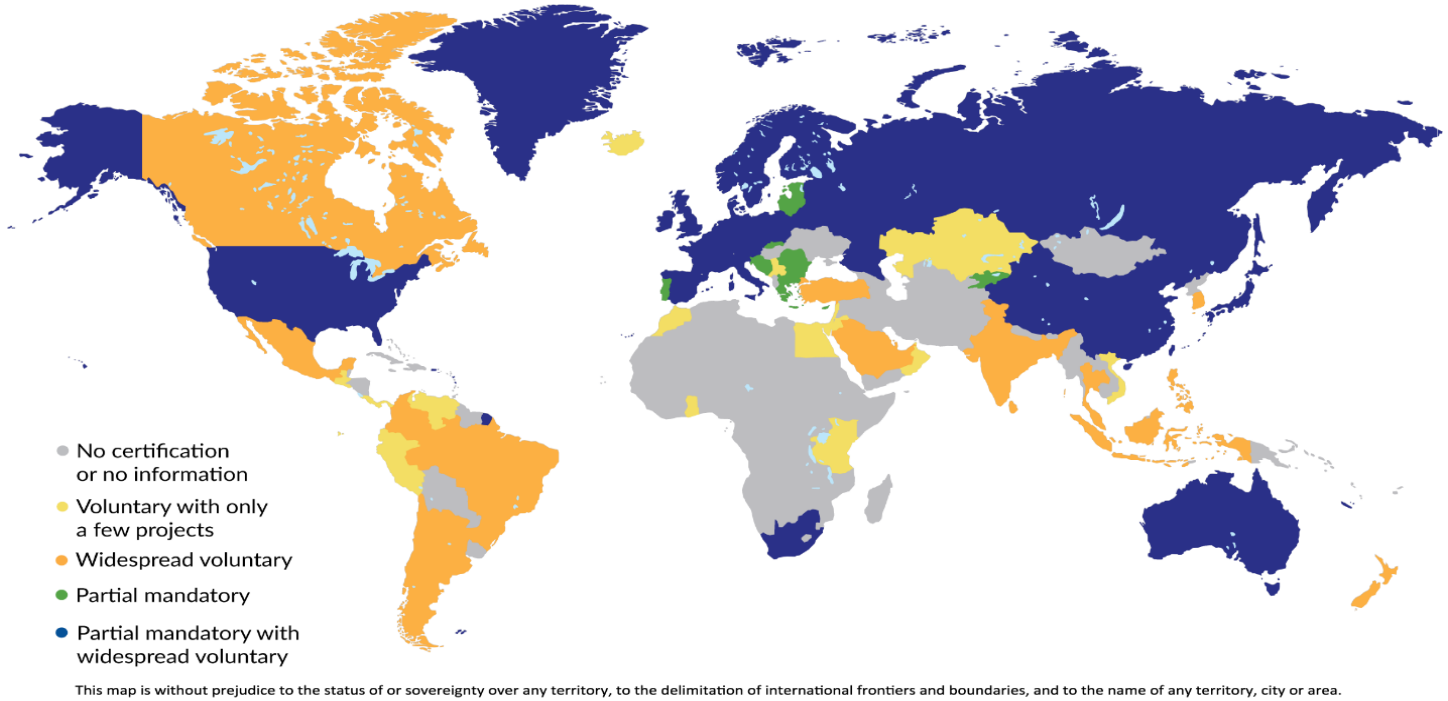
Necessidades nominais de energia útil para...	Valor estimado para as condições de conforto térmico de referência	Valor limite regulamentar para as necessidades anuais
Aquecimento	kWh/m².ano	kWh/m².ano
Arrefecimento	kWh/m².ano	kWh/m².ano
Preparação das águas quentes sanitárias	kWh/m².ano	kWh/m².ano

NOTAS EXPLICATIVAS

Direcção Geral de Energia e Geologia

Energy certification for buildings

Building energy certification by country, 2016-2017

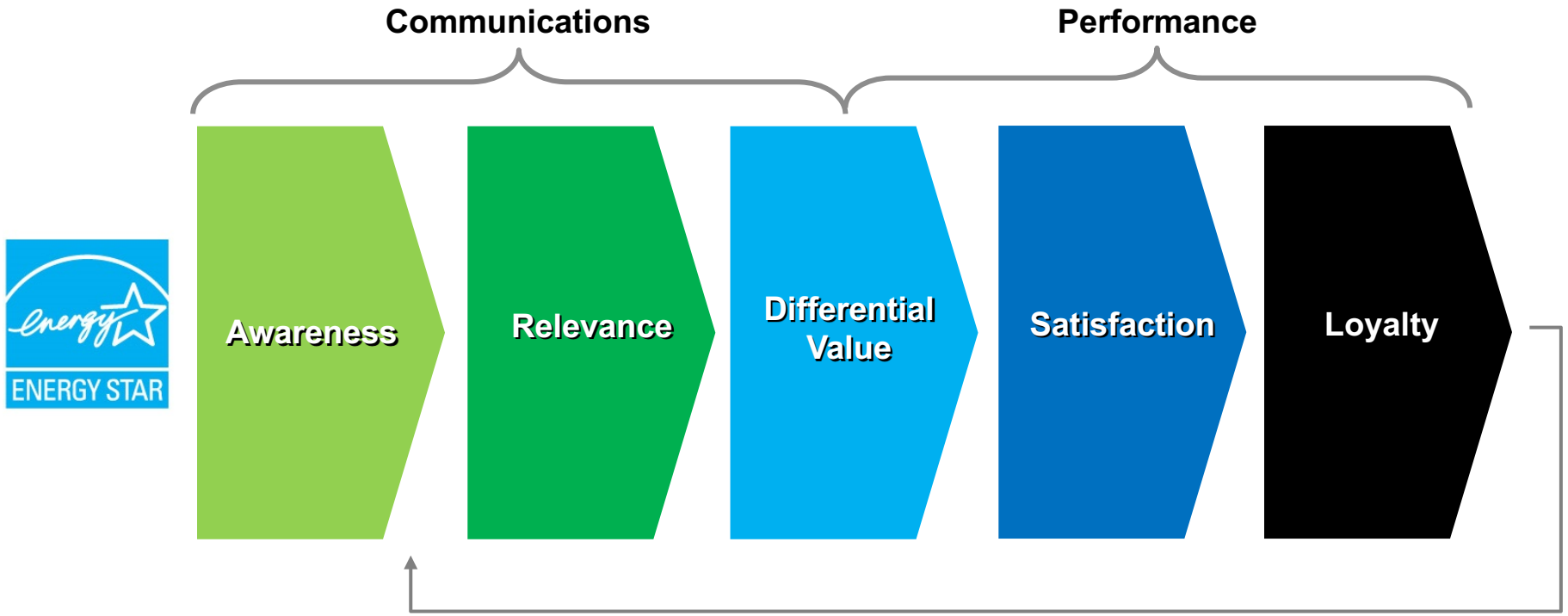


While increasingly common in more countries, building energy certifications are typically voluntary.

Source: GABC Global Status Report 2017

Energy efficiency policy recommendations

ENERGY STAR is a voluntary label for market transformation that has been developed as a brand.



Source: US DOE ENERGY STAR

Energy efficiency policy recommendations

#10 Improved energy performance of building components and systems to improve the energy performance of all buildings

- Windows and other glazed areas
  - maximum share of glazed area
  - MEPS for windows to minimise life-cycle costs
  - A requirement for performance labelling
  - Standard test protocols and certified product testing
- HVAC systems
  - MEPS for HVAC systems to minimise life-cycle costs
  - A requirement for energy efficiency labelling
  - Information and training for building designers, owners and others
  - HVAC systems size, installation, testing and maintenance
- Energy management and control systems

Identify Policy Options

Online resources

Policy mapping

Online resource: IEA's Building Energy Efficiency Policies database

Country

- + Australia
- Austria
- + Belgium
- Brazil
- + Canada
- + China
- Czech Republic
- Denmark
- Finland
- France

Reset Search

Type

- Codes
- Incentive
- Labels

Building type

- New residential
- Existing residential
- New non-residential
- Existing non-residential

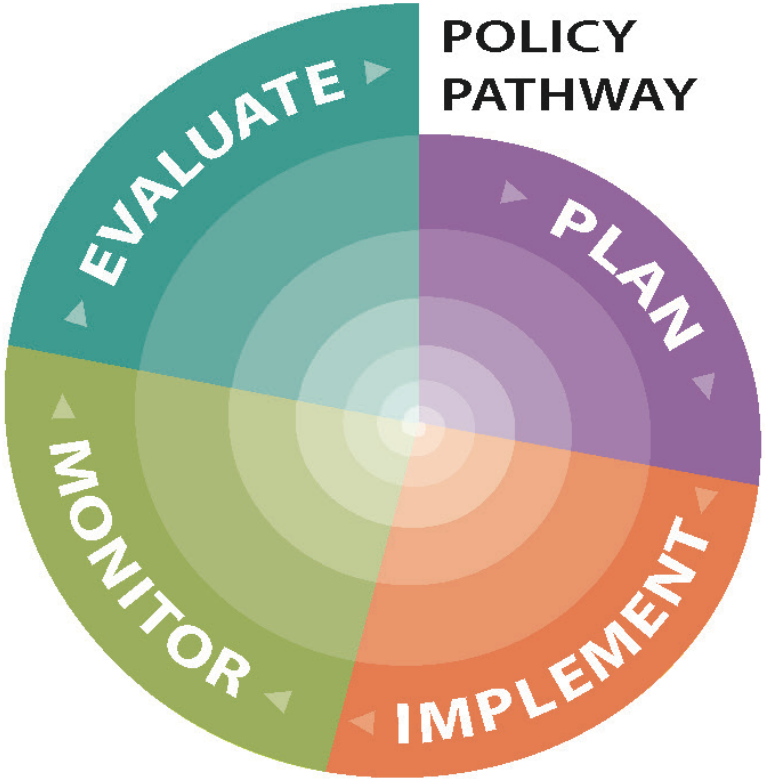
Requirement type

- Mandatory
- Model Code
- Voluntary

Search by keywords

www.iea.org/beep/

Online resource: IEA's Policy Pathway series



www.iea.org/publications/policypathwaysseries/

Investment-grade energy efficiency policy

Why investment-grade

Introduction to a “banker”

Why is “investment-grade energy efficiency policy” important?

$16 trillion

Estimated additional investment needed for energy efficiency in buildings through 2050

Source: EBRD and IEA

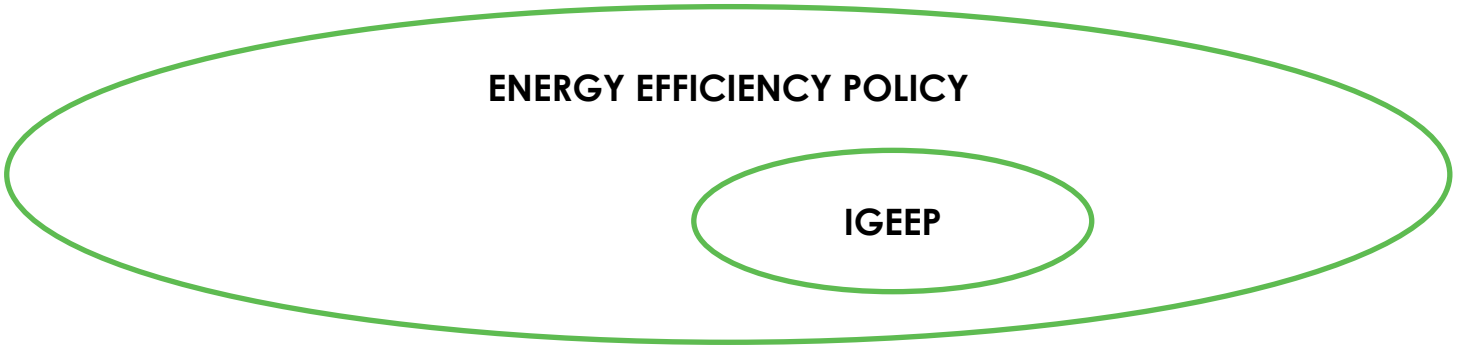
Investment-grade energy efficiency policy. What do I mean?

- **What is energy efficiency policy?**

  A set of strategies, legislation, regulations, measures, programmes that together stimulate energy efficiency improvement

- **What is investment-grade energy efficiency policy?**

  A set of strategies, legislation, regulations, measures and programmes that together stimulate energy efficient enable investments improvement



Source: EBRD

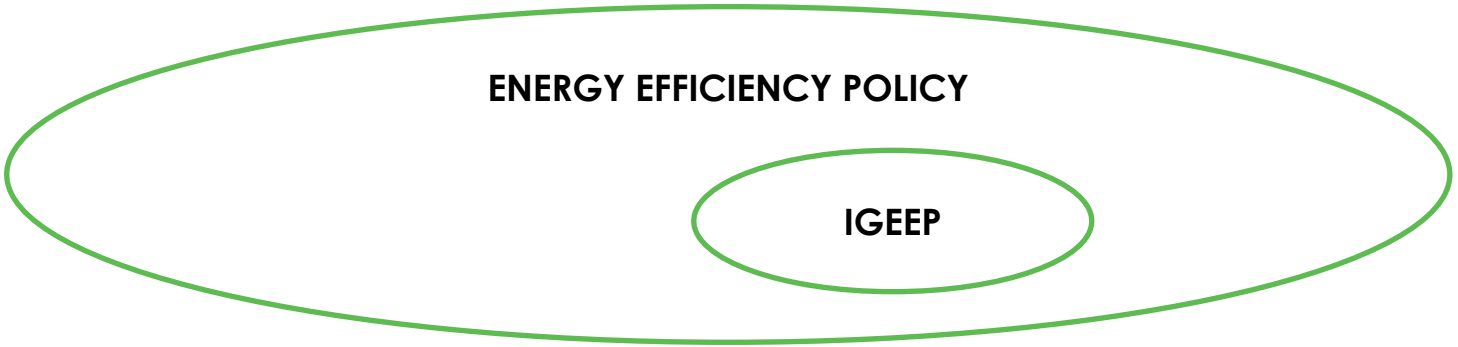
Investment-grade energy efficiency policy. What do I mean?

- **What is energy efficiency policy?**

  A set of strategies, legislation, regulations, measures, programmes that together stimulate energy efficiency improvement

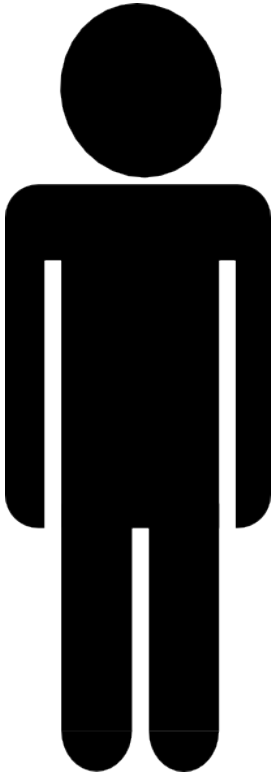
- **What is investment-grade energy efficiency policy?**

  A set of strategies, legislation, regulations, measures and programmes that together *enable investments* that stimulate energy efficiency improvement



Source: EBRD

Introductions to a banker



Policy maker

Long term	**Time horizon**	Short term
Public good	**Motivation**	Revenue target
Social cost benefit analysis	**Evaluation criteria**	Internal rate of return (IRR)
Political	**Relationship to risk**	Legal
Casio	**Type of watch**	Rolex
Economic impact Political impact	**Big concerns**	Risk, bankability, creditworthiness,

Banker

Source: EBRD

Investment-grade policy

How is it different?

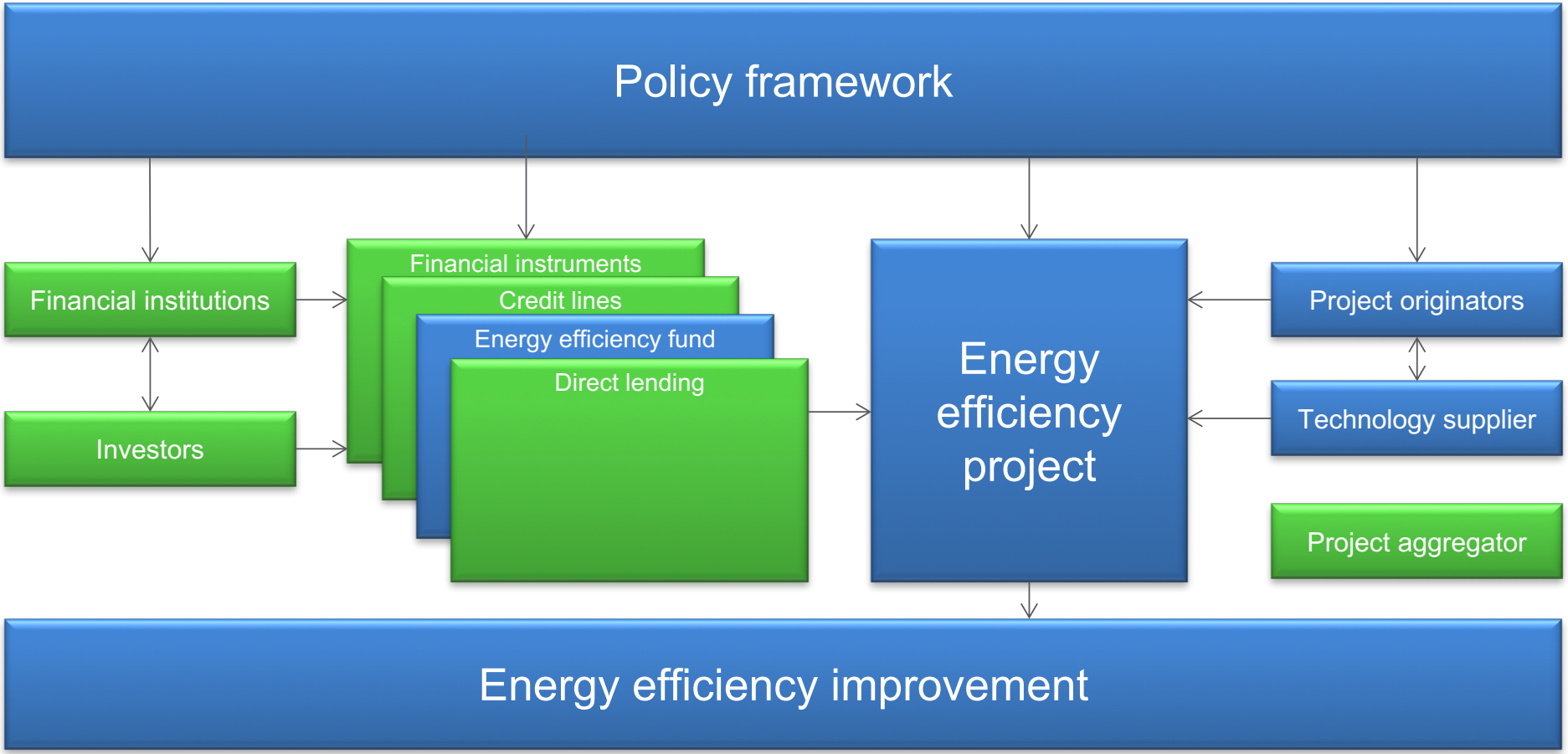
What does it look like?

How is investment-grade different to ordinary energy efficiency policy?

- Focused **goal**
- Focus on specific set of **barriers**
- Focused group of **stakeholders**
- Specific **criteria**
  - for evaluating appropriateness of measures
  - for evaluating success of measures
- Specific **types of measures**
  - including those not traditionally associated with energy efficiency

Source: EBRD

Investment-grade energy efficiency policy. What does it look like?



Source: EBRD

Investment-grade policy examples

Russia: energy efficiency in multi-family apartments

Western Balkans: energy efficiency in buildings

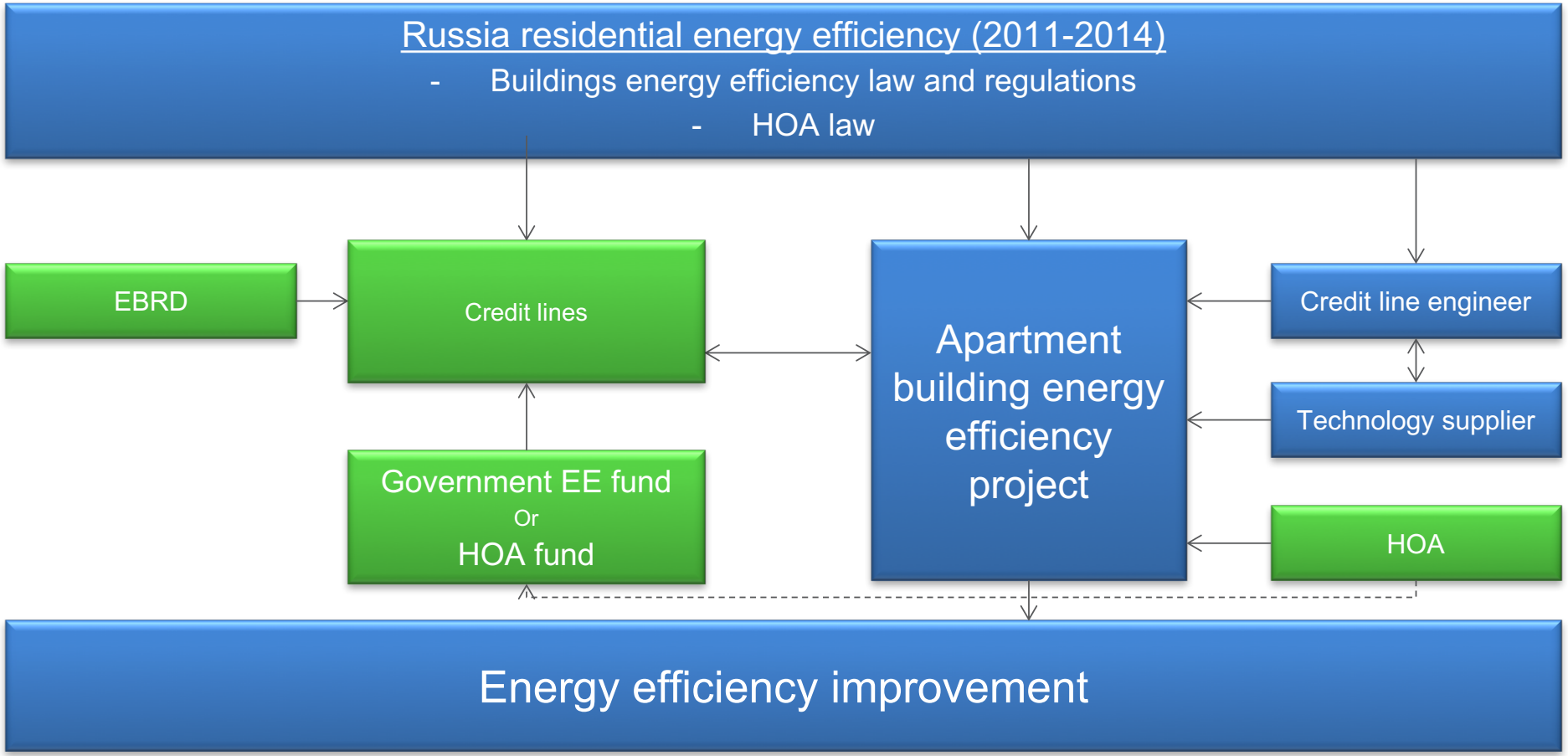
Western Balkans: ESCOs

Source: EBRD

Russia: Residential energy efficiency in apartment buildings

Source: EBRD

Russia: Residential energy efficiency in apartment buildings



Source: EBRD

Western Balkans: Buildings energy efficiency (REEP Plus)

Grants

€30m EU IPA, €1.8m WBIF, €2.7m Austrian Federal Ministry of Finance, €5m to be mobilised from other donors

Objective

Sustainable market for energy efficiency in the Western Balkans

Window 4
Direct Lending to Municipalities

€20m direct EBRD financing
€4.5m grants (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

€108m EBRD & KfW financing via FI
€27.05m grants (EU IPA + Other Donors)

- SME and public sector lending (KfW)
- Residential sector lending in all 6 WB countries (EBRD).

€1.8m WBIF, €2.7m Austrian Federal Min. of Finance for TC

€30m direct EBRD financing
€1m grants (EU IPA + Other Donors)

- Direct lending for Medium scale RE, EE
- Target financing of ESCOs
- TA for project preparation

WeBSEDFF Western Balkans Sustainable Energy Direct Financing Facility

Window 1
ESCO support
&
Policy dialogue

ESCO development
€3m grants (EU IPA + Other Donors)

- TA for ESCO projects and tenders preparation

Policy dialogue
€2.5m grants (EU IPA)

- Key focus on residential sector regulations

Source: EBRD

Western Balkans: ESCO development

OBJECTIVE

Support enabling environment for ESCO business models in the Western Balkans.

ACTIVITIES AND RESULTS (COMPLETED 2017)

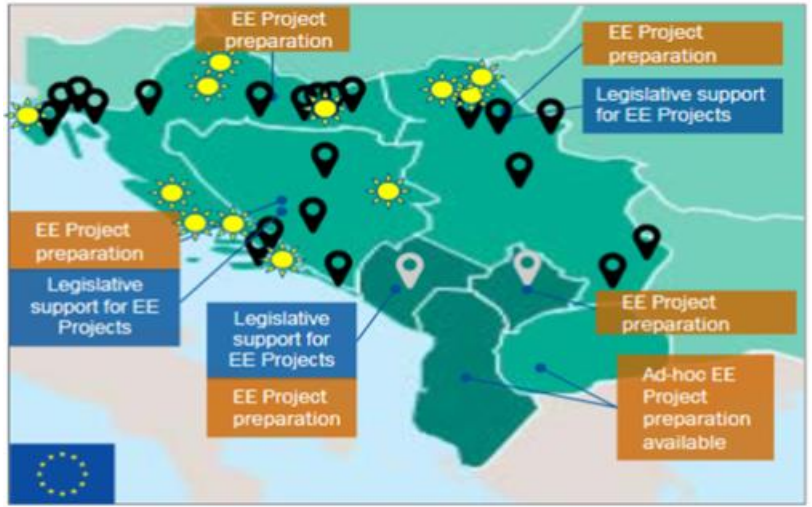
- **Legislative support of EE projects,**
- **Providing model ESCO contracts** including energy performance contracting and energy supply contracting,
- **Standardising public procurement and contracting documents** to lower transaction costs,
- **Energy Efficiency Project Preparation,**
- **Procurement laws.**

TARGETED GET OUTCOMES

- 11 street lighting projects tendered/implemented, 6 projects to be tendered and implemented in Q1/2017, 20 projects under preparation for tendering, including street lighting in Belgrade and Novi Sad

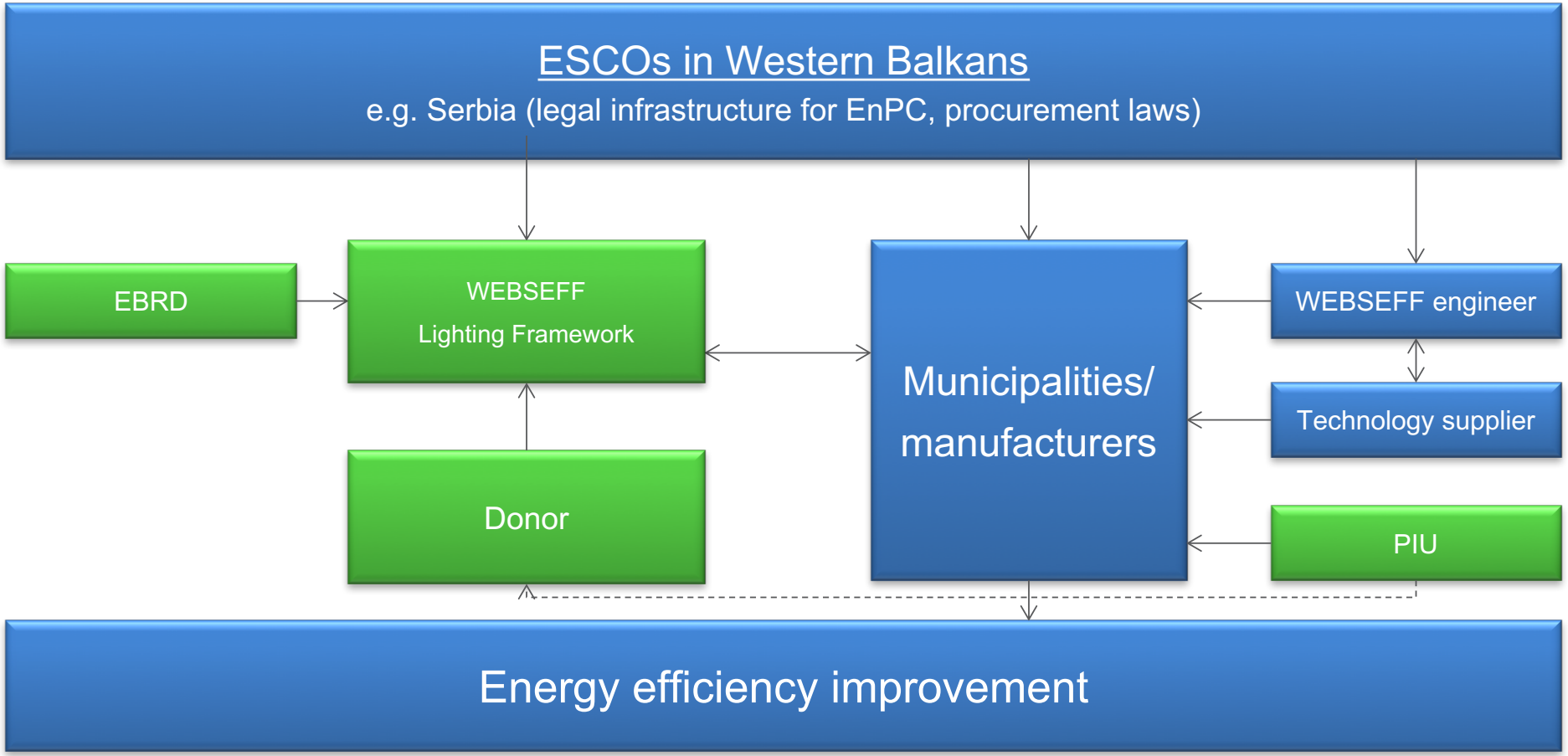
INVESTMENT OUTCOMES

- Total potential capex of ca. €53m arising from REEP support



Source: EBRD

Buildings energy efficiency in Western Balkans



Source: EBRD

Group exercise

Scenario:

You continue to hear from stakeholders that all they need is money and then they will consider doing energy efficiency in buildings.

What policy approaches can be used to enable energy efficiency investment?

- ***Break into groups*** *(preferably one region or country per group)*
- ***Select a policy instrument*** *(e.g. one you are working on/have worked on/would like to see)*
- ***Evaluate the strong and weak investment grade components*** *(e.g. what stakeholders were involved? what investment does it lead to? etc.)*

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Removing barriers to investment in buildings through policy dialogue

Aim: Apply appropriate best-practice policy instruments in COOs to remove well-known barriers to investments and market development for **improving energy performance of buildings**

Barriers to investment	Policy tool to address the barriers	Description of main tools	Indicative cost and time
Building owners do not consider lifecycle cost and split incentives	**Minimum energy performance requirements for buildings**	Introduction of legislation, regulations, and modifying building codes to mandate minimum energy performance requirements for buildings (e.g. transposition of EPBD Art. 4,5), based on local climatic conditions and costs.	Approximately 700k EUR and 1-3 years.
Limited information suppresses demand	**Energy Performance Certification**	Energy Performance Certification (e.g. transposition of EPBD Art. 11) gives information on building performance, and ensures that it is communicated in a clear and consistent way, and associated support for data management and IT systems.	300k and 1-2 years.
Up-front cost, constrained budgets	**Mandatory public renovation programmes**	Mandatory renovation programmes covering 3% of floor area per year of public buildings (e.g. EED Art. 5) forces allocation of government budget to economically sound investments.	200-300k EUR and 1-2 years.
Lack of technical capacity in the market	**Public procurement of high EE buildings;**	Government acts as a first-mover through public procurement of high energy efficient buildings (e.g. EED Art. 6) stimulates the market and helps develop local technical capacity.	200-300k EUR and 1-2 years.
Dispersed actors and transaction costs	**Energy efficiency obligation (EEO) schemes;**	Energy efficiency obligation schemes (e.g. EED Art. 7) require energy distributors and/or retail energy sales companies to achieve end-use energy savings.	200-300k EUR and 1-2 years.
Lack of overarching strategic framework	**National Energy Efficiency Action Plans (NEEAPS)**	National Energy Efficiency Action Plans (NEEAPs) (e.g. EED Art. 24) set out estimated energy consumption, and planned energy efficiency measures, providing a strategic framework .	200-300k EUR and 1-2 years.
Existing legal frameworks limit effectiveness of ESCO business models.	**Legislative and regulatory reform for ESCOs / Energy Performance Contracts**	ESCO market assessments to identify potential barriers for ESCOs. Amendments and / or introduction of primary law and secondary regulation (s) to enable ESCO business models through Energy Performance Contracting.	200-300k EUR and 1-2 years.
Lack of information	**Information & awareness raising**	Website development, workshops, targeted information campaigns	50k EUR and 6- 12 months
Low government capacity	**Support for voluntary, industry-led green building certification**	LEED and BREEAM certification	100k EUR and 1 year

Source: EBRD

Ukraine: Transposing the Energy Performance in Buildings Directive

OBJECTIVE

Ukraine lacks a legislative and regulatory framework for energy efficiency measures in residential buildings. This project aims to support MinRegion transpose EPBD to help build a market for EE investments.

ACTIVITIES AND RESULTS (ON-GOING)

- **Raising awareness of energy efficiency in buildings through capacity building and the maintenance of a website** www.teplydim.com.ua (funding now ceased for this site). This site received over 500 visits per month.
- **Roadmap developed** to achieve improved energy efficiency in the residential sector (2013).
- **Five regulations approved and in force** from the 13 required for EPBD transposition (2014).
- **EPBD law approved** in 1st reading in Rada (04/2017)
- **Software developed** for MEPS, EPC and Energy Passports (2016-2017).
- **Active participation in regular donor coordination meetings** on buildings EE policy.

TARGETED GET OUTCOMES

- Estimated energy efficiency market potential over the next 5 years is approx 11.5 million MWh/year (9% of total energy consumption), representing a cumulative present value of about 2.64 billion UAH (€ 230 million) in savings.
- Improving the energy performance of buildings will positively influence energy security concerns and the local economy.

INVESTMENT OUTCOMES

- Clear policy framework needed for effective implementation of €75 million Ukraine Residential Energy Efficiency Financing Facility (IQ energy).

Source: EBRD

Western Balkans Regional Energy Efficiency Programme (REEP/REEP+): Policy dialogue (EPBD/EED)

OBJECTIVE

Many countries in the Western Balkans lack legislative and regulatory frameworks to incentives building EE investments. This programme supports EPBD transposition, supporting EBRD finance facilities.

ACTIVITIES AND RESULTS (ON-GOING)

REEP (first phase), in close cooperation with Energy Community Secretariat (ECS), submitted 27 deliverables, including:

- **Adopted Energy Efficiency in Buildings Laws** for Kosovo and Albania.
- **EPBD implementation support** to Albania, Bosnia and Herzegovina (FBiH and RS), Croatia, Former Yugoslav Republic of Macedonia, Kosovo and Serbia.
- **Support for the development of public energy efficiency procurement policies,** guidelines and codes in Montenegro and Serbia.
- **Support for the development** of utility energy efficiency obligation (EEO) schemes in Croatia and Montenegro.

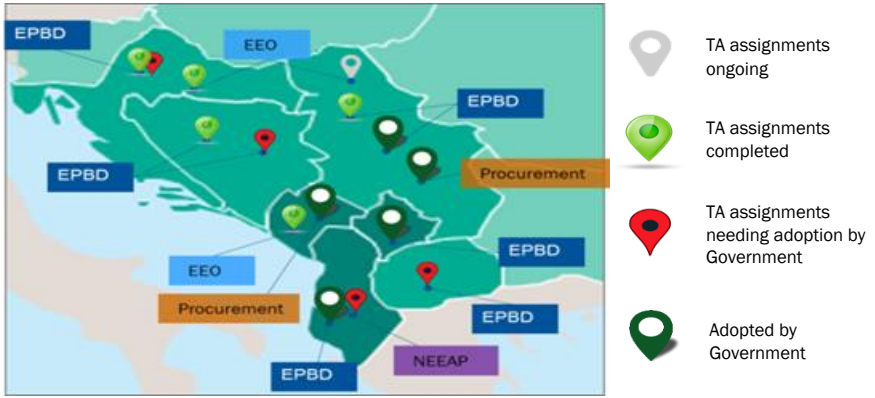
REEP+ (second phase) will continue these efforts (now excluding Croatia), particularly in the residential sector.

TARGETED GET OUTCOMES

- The energy intensity of the six Western Balkans' countries (Albania, Bosnia & Herzegovina, Kosovo, FYR Macedonia, Montenegro, Serbia) is around three times higher than the average for the EU. This project helps reduce this intensity.

INVESTMENT OUTCOMES

- Supports Western Balkans Credit Lines (€177m), financing for RES through WeBSEDFF (€80m), and direct lending for municipalities (€20m). It also supports EBRDs 25m EUR investment in the Green for Growth Fund.



Source: EBRD

Creating an enabling legal framework for ESCO projects in Ukraine

OBJECTIVE

Work with MinRegion on improving the regulatory framework for ESCOs in Ukraine, in order for the public sector to be able to procure energy efficiency works and services according the principles of an energy performance contracting (EnPC) approach.

ACTIVITIES AND RESULTS (COMPLETED 2017)

- **Identified remaining regulatory barriers to fully flexible use** of EnPC mechanism for public buildings in Ukraine.
- **Drafted documentation to effect required changes** for preparing, procuring, implementing and monitoring EnPC projects, commercial EnPC contract template, EnPC tender package and commercial EnPC forfeiting contract template.
- **Supported approval of amendments to ESCO Laws enabling e-procurement for ESCO contracts, ultimately approved** by the Rada (parliament) of Ukraine (2017).

TARGETED GET OUTCOMES

- Ukraine has done much in recent years to reduce its energy intensity. However, there is still significant potential in public sector buildings such as hospitals, schools, and kindergartens. Wasted energy resources in these buildings create a burden on municipal budgets and inadequate heating and uncomfortable environment for vulnerable groups that rely on public institutions for their care.
- Estimated potential energy savings can be as high as 50% and require significant investments.

INVESTMENT OUTCOMES

- UKEEP is designed to utilize EUR 100 million for individual municipal loans to participating Ukrainian cities by way of loans of up to EUR 20 million to municipal companies under guarantee of the city to improve energy efficiency in public buildings (i.e. schools, hospitals, government buildings) and street lighting.

Source: EBRD

Kyrgyz Republic: Transposing the Energy Performance in Buildings Directive

OBJECTIVE

Assist the Kyrgyz Government to develop a set of primary legislation and regulations based on principles of the EPBD.

ACTIVITIES AND RESULTS (ON-GOING)

- **Adoption in 2012 of the Law on Energy Performance of Buildings.**
- Approval of a Government Decree in 2012 introducing implementation procedures for **energy performance certifications of buildings, regular inspections of boilers and heating systems and minimum energy performance requirements** (in compliance with ISO EN 13790/2008).
- **Harmonising the Law on Energy Savings with the LEPB and in addition insert provisions for financial instruments** (having in mind Kyrseff), potentially paving the way of blending Kyrseff III with concessional finance from global carbon funds (2015-)

TARGETED GET OUTCOMES

- The building sector is by the far the largest energy end-user in Kyrgyzstan with more than half of the total national final energy use.
- Kyrgyz Republic became the first country in the post-Soviet area (except the three Baltic states) to set legislation on energy efficiency of buildings based on EU best practice.

INVESTMENT OUTCOMES

- Policy framework supports EE lines of Kyrgyz Sustainable Energy Financing Facility (KyrSEFF) phases 1 and 2 of US$ 20 million and US$ 35 million, respectively.

Source: EBRD

Turkey: Development of the National Energy Efficiency Action Plan

OBJECTIVE

To work with the Turkish Government to develop, adopt, and publish a National Energy Efficiency Action Plan ("NEEAP") which includes a wide range of sector-based resource efficiency measures aimed at achieving Turkey's 2023 energy efficiency targets.

ACTIVITIES AND RESULTS (COMPLETED 2015)

- **Undertook analysis of existing regulatory framework and sector-specific situation** including comparing average EE performance for different sectors and assessing EE strategy and policy gaps.
- **Identified key drivers of EE investments in Turkey** highlighting potential constraints to growth.
- **Prepared and supported introduction of NEEAP to the business community.**
- **Prepared guidelines for multi-year communication plan** to increase public awareness nationwide.

TARGETED GET OUTCOMES

- SEI impact as of 2013 - GHG savings: 4.6 million tonnes of CO2-eq/year (or 1.5% of Turkey's emissions in 2010), Primary energy savings: 1.5 million toe/year (or 1.5% Turkey's annual primary energy supply in 2010)

INVESTMENT OUTCOMES

- Supports TurSEFF (600m EUR phase 1 and 2 – 400m EUR new financing in 3rd phase), MidSEFF (1 billion EUR facility) and TuREEFF (270m USD fund) facilities, and direct lending to the corporate sector (e.g. iecam, Aksa, EtiAlu and Suta transactions).

Source: EBRD

Kyrgyz Republic: Policy support for buildings energy efficiency

POLICY DIALOGUE ACTIVITIES

Comprehensive assistance to prepare:

- Primary Law on Energy Performance of Buildings, introducing responsibilities of building owners and instruments to promote EE in buildings
- Secondary legislation on energy performance certifications and regular inspections of boilers and heating systems
- Tertiary legislation on harmonising technical standards (on thermal protection of buildings, heating networks, water supply, etc.)

REGULATORY RESULTS

- The new legislation transposes all key provisions of the EU Directive on Energy Performance of Buildings (EPBD) up to the best practice level in EU countries.
- Primary law was approved by Parliament and signed by the President of the Kyrgyz Rep. in 2012. It defines legal obligations related to energy efficiency of building owners, public bodies and state authorities.
- Secondary legislation introduces minimum mandatory energy efficiency requirements, a methodology for energy performance assessment (in compliance with ISO EN 13790/2008) and for certification of buildings.

WIDER MARKET DEVELOPMENT

- Legislative upgrades incentivize developers, owners and residents to invest in thermal rehabilitation and equipment upgrades.
- Policy dialogue part of wider, integrated, market development approach – in parallel, the Kyrgyz Sustainable Energy Financing Facility was launched, to enhance the availability of financing for energy efficiency.
- KyrSEFF offers credit lines to 4 partner banks to on-lend to energy efficiency projects in the business and residential sectors. Commercial funding is complemented by incentive grants and technical assistance from the EU.

Source: EBRD

SEFFs in Romania: Sustainable energy in the commercial and industrial sectors

PROGRAMME

Two EBRD Sustainable Energy Financing Facilities were active in Romania in 2008-2015 aiming to develop the local financing market for sustainable energy projects in the industrial and commercial sectors.

EEFF and RoSEFF combined credit lines to local partner banks, technical assistance for sub-project appraisal and banks' capacity building, and partial grant incentives.

STRUCTURE OF FACILITIES

EBRD credit lines	€ 130 million
Incentive payments and technical assistance from the EU	€ 19 million € 7 million

RESULTS TO DATE

- 7 local participating banks
- 470 sub-projects, total investment value of €164 million
- 290,000 tonnes of CO_2 estimated annual emission reductions – comparable to 15% of the annual emissions from the energy use of buildings in Bucharest
- 900 GWh estimated energy savings – comparable to 6% of the hydroelectricity produced in Romania.

PROJECT EXAMPLE

- SE-GES, a Romanian ESCO, received a SEFF loan of € 1.1 million from BRD Groupe Société Générale to build a heat and power cogeneration unit.
- The unit supplies baseload electricity and hot air to the factory of one of Europe's largest maize-based food producers, Sam Mills.
- The "Build-Own-Operate-Transfer" model means the ESCO builds the unit, gradually recovers the costs from energy sales and eventually transfers it to the site owner.
- The investment received an EU grant of €165,000.
- Primary energy savings were of 32% and emission reductions of 3,300 tCO_2/year.

Source: EBRD

SEFF: Promoting energy efficiency in public buildings in Central Europe

PROGRAMME

MunSEFF has been setup to develop the capacity of banks in Hungary, Romania and Slovakia to provide financing for municipal sector energy efficiency opportunities.

The facility brings together dedicated credit lines, technical assistance to supplement local capacity in running tenders, as well as grant support for the less commercial rehabilitation measures often required by these projects.

STRUCTURE OF THE FACILITY

EBRD credit lines (2009-2014)	€ 105 million
Technical Assistance from the EU	€ 5 million
Grant support for partial incentive payments	€ 21 million

RESULTS TO DATE (by end of 2015)

- 2 partner banks in Hungary, 1 in Romania and 2 in Slovakia
- 420 projects supported up to date with 94% of the MunSEFF funds. 80% are energy efficiency projects in buildings, the rest municipal infrastructure projects, mainly public lighting.
- 66 of the projects are implemented under concession or long-term maintenance or supply contracts.
- 18,000 tonnes of CO_2 estimated annual emission reductions and 88GWh of primary energy savings.

Source: EBRD

PROJECT EXAMPLE

- Refurbishment of the heating system of a primary school in the municipality of Szombathely (of 80,000 inhabitants)
- The executing company, entered into an 12 years energy supply contract with the public authority, and delivered measures leading to 30% energy savings.
- The company benefited from a MunSEFF loan of €30,000 and an incentive payment of €4,500.

Mongolia: Climate technology transfer for commercial buildings

THE FINTECC PROGRAMME

FINTECC (Finance and Technology Transfer Centre for Climate Change) enables the uptake of high efficiency technologies in countries with underdeveloped supply chains and low market penetration rates.

The programme offers up to 25% grant cover for the cost of eligible climate technologies with high replication potential. Targets early market development, affordability and "first-mover" barriers. The programme is supported by the Global Environment Facility.

PROJECT EXAMPLE

A subsidiary of Mongolia's leading retailer for consumer goods and apparel is building a chain of new wholesale and retail stores.

Based on technical assistance support, the company will be including solar voltaic installations in the investment plans of the new buildings.

EBRD loan	€ 10.2 million
of which EBRD green finance and grant support from the Global Environment Facility	€ 0.9 million

PROJECT EXAMPLE

A Mongolian group with interest in consumer goods manufacturing and trade is constructing a state-of-the-art car repair and maintenance centre.

Based on the efficiency audit supported with grants from the Japanese Government, the company will include high-grade insulation and efficient HVAC systems in its new building.

EBRD loan	€ 10.2 million
of which EBRD green finance and grant support from the Global Environment Facility	€ 0.4 million

Source: EBRD