



## The 9<sup>th</sup> International Forum on Energy for Sustainable Development

UNDP's experience with sustainable financing  
Mechanisms in the Europe & CIS Region

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## GEF and GCF Portfolio

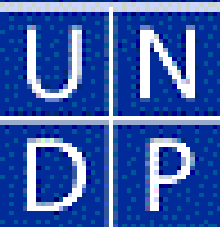
**\$117 million USD of Projects under implementation, total portfolio of projects including those under development is over \$200 million.  
70% or more of the projects deal with energy-efficiency**



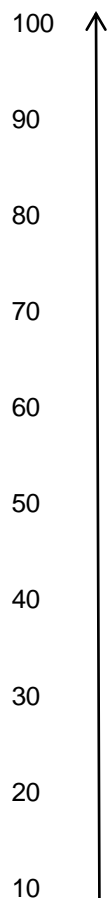
26 projects, \$80 million  
Energy-Efficiency, Renewable Energy, Transport  
Average project size: \$3.1 million



2 projects, \$37.34 million  
Energy-Efficiency Buildings Only  
Armenia & Bosnia & Herzegovina  
Average project size: \$18.67 million



## Energy-Efficiency is the largest area of UNDP support in the field of Sustainable Energy in Europe & CIS Region



24 projects



- 40 sustainable energy proj. under Implementation of which 30 deal with energy efficiency
  - Pipeline of another \$150 million USD incl. new GCF project in Armenia and Bosnia & Herzegovina)
  - 24 projects dealing with energy-efficiency and
  - Approx. \$100 million USD
- 60% of all proj. deal with energy-efficiency  
Approx 70% of the grant resources available

8 projects



Energy-Efficiency

Renewable Energy

Transport



## Supporting energy-efficiency is consistent with the Sustainable Development Goals ... in Particular SDG-7.



## Types of Energy Efficiency Projects Implemented by UNDP



### EE Lighting

(e.g – Russia, Ukraine, Kazakhstan)



### EE Standards & Labels

(e.g – Russia, Turkey, Kazakhstan)



### EE Buildings (Public & Residential) – nearly every country incl. Ukraine (ESCO + EMIS)



### Industrial Energy-Efficiency (e.g – Turkey)

# Types of Sustainable Transport Projects Implemented by UNDP



## Promoting Public Transport

(e.g – Georgia, Slovakia)



## Promoting Carpooling

(e.g – Slovakia)

Sustainable  
Urban Transport  
Plans = **ALL**



## Promoting Cycling

(e.g – Russia, Serbia, Slovakia, Georgia)



## Parking Strategies

(e.g – Russia, Serbia, Slovakia, Georgia)



## Types of Renewable Energy Projects Implemented by UNDP



### Wind Energy

(e.g – Republic of Belarus, Kazakhstan)



### Solar PV Energy

(e.g – Turkey)



### Biomass Energy

(e.g – Moldova, Ukraine, Serbia, Georgia)



### Small Hydro Power

(e.g – Georgia, Kyrgyzstan)

## Importance of Partnerships for Innovative Approaches

The purpose of this presentation is to outline the experience of UNDP in working with IFIs in the Europe and CIS region with IFI's on climate change mitigation projects. Examples: from 6 countries: Georgia, Kazakhstan, Ukraine, Turkey, Armenia, Bosnia & Herzegovina.

UNDP leads on the technical assistance - IFI Partner leads on the investment





## Innovative Types of Financial Instruments

UNDP has provided support to various types of innovative financial mechanisms:

Type of Innovative Financial Instrument	Country where UNDP has tried this instrument
ESCO – Energy Service Company	Moldova, Ukraine
Blended Finance – Grants + Soft Loans	Armenia, Bosnia & Herzegovina, Kazakhstan, Turkey
Green Bonds	Idea being explored in several countries
Revolving Fund	Georgia (small hydro)
Interest Rate Subsidy	Kazakhstan (SME sustainable energy projects)
Loan Guarantee	Moldova, Kazakhstan

## Example 1: ORKOY Solar PV project in Turkey

<b>Project Name</b>	<b>Sustainable Energy Financing Mechanism for Solar Photovoltaic Systems in Forest Villages in Turkey</b>
National Implementing Partner	ORKOY (part of Ministry of Forestry and Water Affairs)
GEF Amount	\$ 3.780.000
Co-Financing	\$ 52.500.000 (incl. \$45 million from ORKOY)
Start Date	January 2016
Project Duration	4 years

**Project description:** This project will assist Turkey with the promotion and financing of on-grid village cooperative solar PV in forest villages.

**Aim:** The implementation of financing mechanism which is to foster 30MW of installed capacity by the end of the project with further scaling up at end of project. First 500 Kw will be with 100% grants, next 1.5MW with 12.5% subsidy, then soft loans only for the remainder of the project. Delays in implementation.



## Example 2: Urban NAMA Project in Kazakhstan

**US\$6.08 million USD UNDP GEF grant leveraging \$30 million USD + in private investment**

The Project supports the identification, design, and implementation of Nationally Appropriate Mitigation Actions (NAMAs) in the urban sector. NAMAs, consisting of investments in infrastructure supported by capacity building, awareness raising and technical assistance, will contribute to achieving the country's GHG emission reduction voluntary target while improving urban services and the quality of life of citizens in Kazakh towns and cities. Project involves a strong partnership with Damu Foundation.



Project has implemented a financial support mechanism with interest rate subsidy  
And with a loan guarantee package with UNDP and Damu Foundation  
Pilot projects realized in Almaty (airport EE fog lights), Karaganda (EE boilers),  
And Astana (EE lighting in Transport Towers). Sustainability is a key issue.

**Project Started:** April 2015

**Key Partner:** Damu Foundation

**Project Duration:** 5 Years

**Planned End Date:** April 2020 – possible 18 months extension

## Lessons Learned: A few words about transformational projects

- Transformational projects do a lot more than organize workshops, seminars, and conferences and do awareness raising activities;
- Setting up the financial support mechanism can easily consume at least the first two years of the project;
- Market transformation takes a long time (example: Kazakhstan wind energy)
- GEF projects are supposed to transform markets and a key indicator of success is tonnes of CO2 reduced
- Market Transformation means changing laws/ regulations and sustainable financial mechanisms. Grants alone approach is not sustainable.



Blended Finance: Grant + Loan = Greater chance of sustainability



# Thank you !!



**11 Case Studies from 9 countries**

[http://www.eurasia.undp.org/content/rbec/en/home/library/environment\\_energy/--experience-in-europe-and-the-cis-region-with-clean-energy--und.html](http://www.eurasia.undp.org/content/rbec/en/home/library/environment_energy/--experience-in-europe-and-the-cis-region-with-clean-energy--und.html)