



European Bank
for Reconstruction and Development

Financing Sustainable Energy

What has changed from last year?

Sergiy Maslichenko

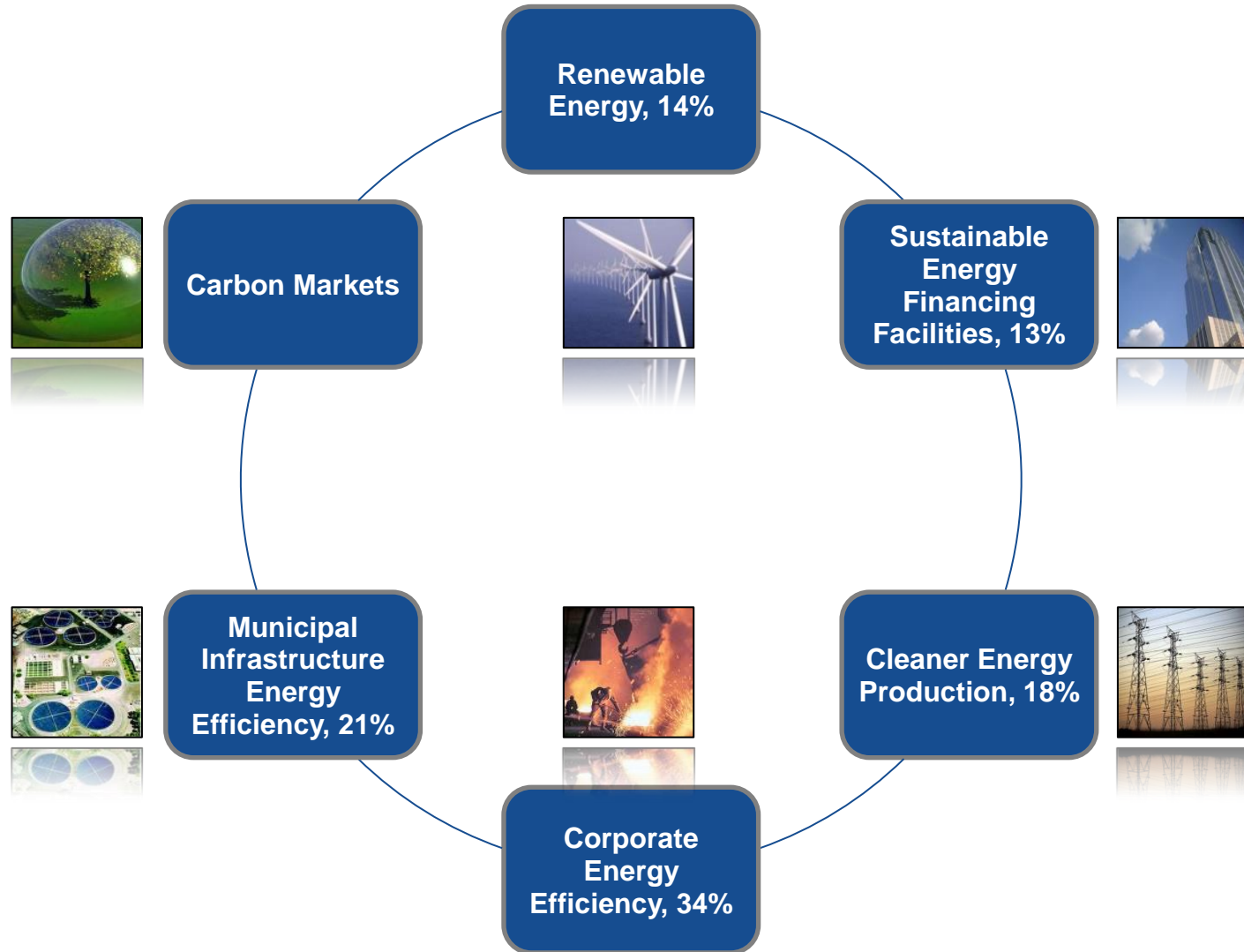
Senior Manager

Energy Efficiency and Climate Change, EBRD

EBRD sustainable energy investments in Ukraine

- **SEI investments since 2006 – €1.9 billion**
- **Number of sustainable energy projects – 100**
- **Avoided GHG emissions in Ukraine – 10 million tones or 3% of Ukraine's annual emissions**
- **Primary energy savings – 4 million toe per year or 7% of Ukraine's annual energy imports**

Sustainable energy investments: Sector breakdown



What has changed from the last year?

Corporate energy efficiency

- 5 sustainable energy projects in Agribusiness sector, including:
 - Slavuta biomass
 - Danosha biogas
- One large deal with Ukrgrafit EUR 19 m

Energy Efficiency Credit Line

- USD 100 million extension of UKEEP
 - Raiffeisen Aval USD 20 million

Renewable Energy

- 2 new USELF deals – Ivankiv biomass and Ecoprod biogas

Energy efficiency in municipal sector

- Landmark Dnipropetrovsk ESCO project
- 2 district heating projects in Lugansk and Lviv – EUR 20 million each with additional EUR 15 million grant co-financing for both from E5P

EBRD Direct Lending on Energy Efficiency:

Overcoming technical barriers and bringing in commercial financing

- EBRD performs **free-of-charge energy audits** for potential clients and provides competitive financing for the implementation of this project
- Some examples of implemented projects:



• Astarta

- EUR 16 million Energy Efficiency Programme
- €325,000 Energy Efficiency Management System grant
- 30% natural gas savings, 30% of raw materials



• Ukrproduct

- EUR 13 million investments in energy efficiency
- Energy consumption reduced by 48%, water savings - by 5%



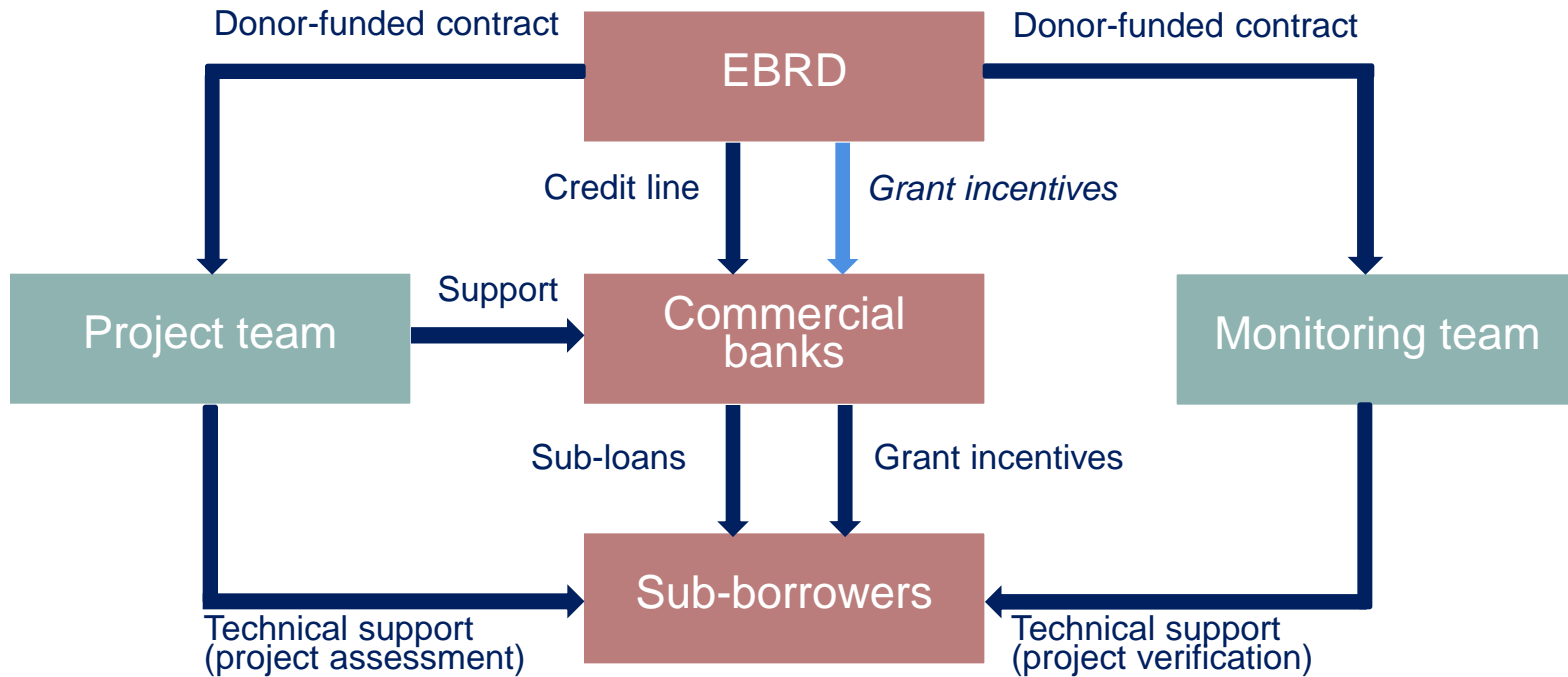
• Lugcentrokuz

- EUR 6.2 million Energy Efficiency programme
- Natural gas savings - 10%, electricity savings - 12%

Sustainable Energy Financing Facilities:

SEFFs - leveraging local banks

SEFFs are effective in reaching a wide range of industrial and residential clients

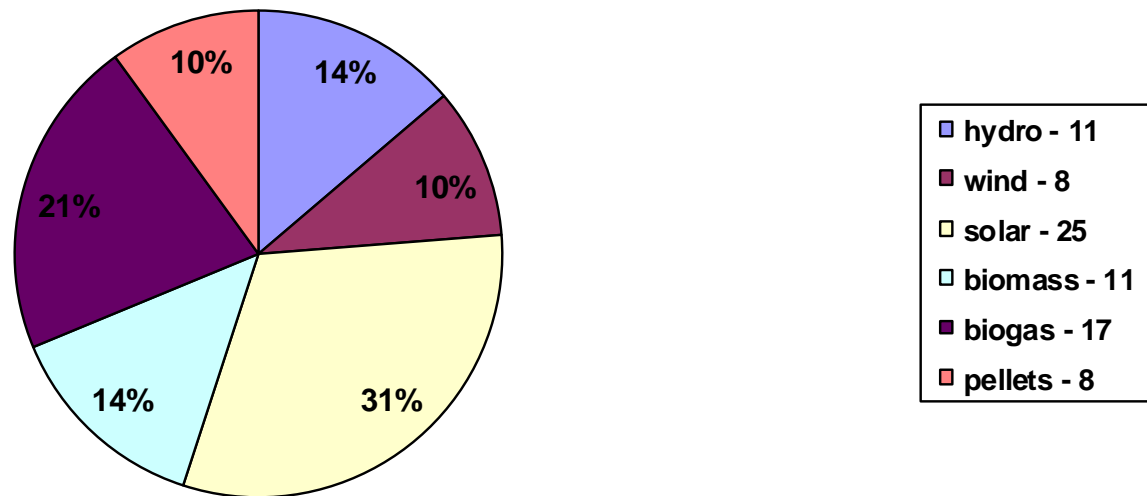


- Impact to date: 300 projects screened; 50 energy audits completed; 80 projects worth € 120 million committed

USELF

Ukraine Sustainable Energy Lending Facility

- USELF is now replenished by another EUR 70 million – Phase 2
- Over 100 applications received, 20-25 projects are feasible, most of them are not bankable or require substantial additional work

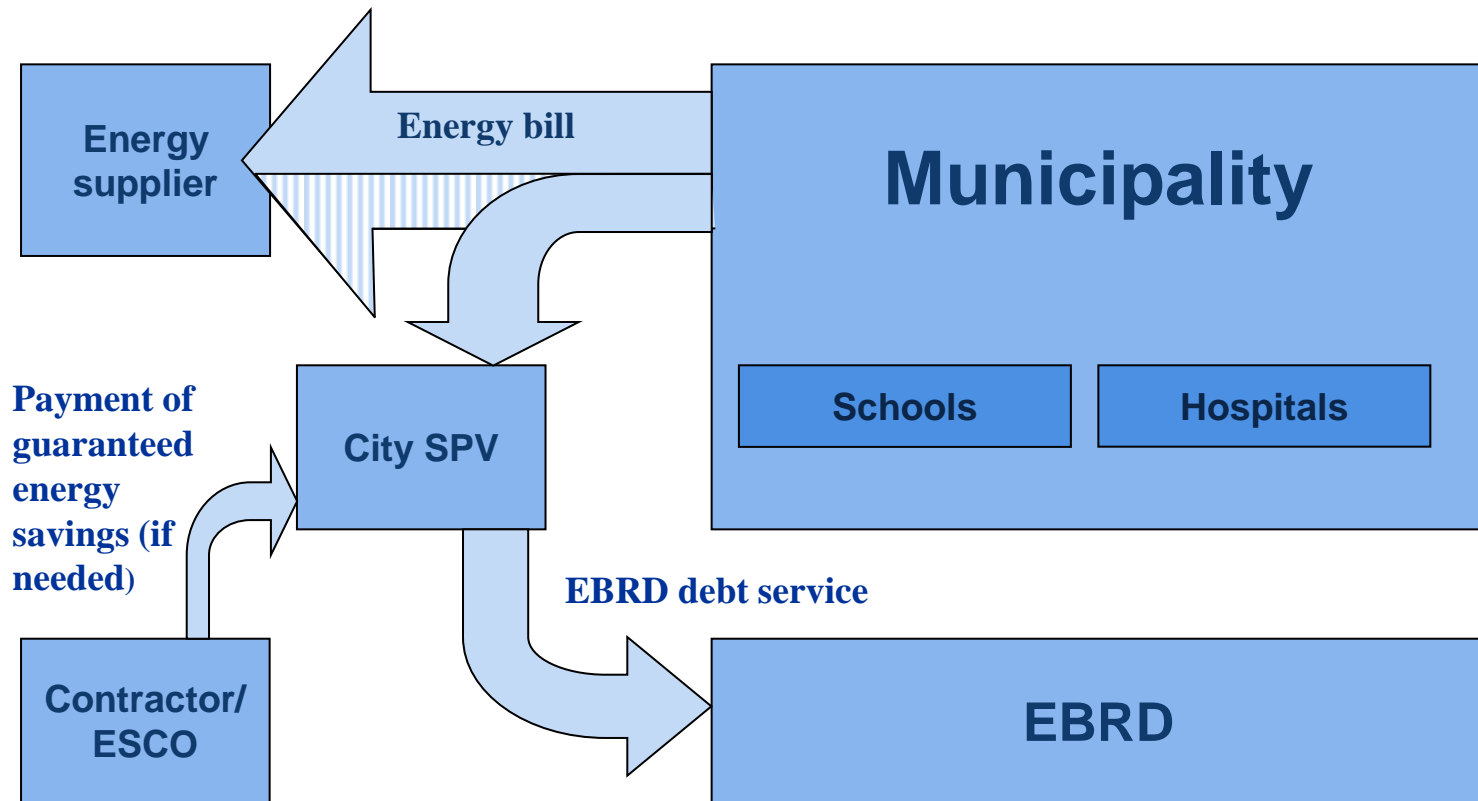


- 2 new projects signed; in total, 7 projects in 2012-2013 – biomass, biogas, small hydro, wind, and three solar

Dnipropetrovsk ESCO projects

- Project preparation started in 2009
- EnPC Budget Investment Programme approved by City Council of Dnipropetrovsk: EUR 20 million investments
- 84 buildings identified and 4 EnPC tenders prepared
 - Commercial efficiency investments with payback <7 years
 - EUR 6.7 million for demand side measures
 - about 30% energy savings
 - commercial contracts for EnPC projects prepared
- Additional buildings pre-selected for further EnPC projects
- EUR 20 million loan signed in December 2013
- Tender is ongoing, implementation from autumn 2014 onwards
- EUR 2.5 million grant from E5P; technical assistance of EUR558,000 from the EBRD Special Shareholders Fund

ESCO project



New Initiatives for Ukraine:

- ***Residential energy efficiency credit line*** – EUR 100 million with EUR 30 million grant co-financing – to finance residential buildings retrofits and equipment through local banks
 - Based on the preparatory work done by the EBRD and other IFIs and donors in this area, including draft legislation on HOAs, approved technical regulations, market assessment, pipeline of pilot projects
- ***Technology Transfer Financing*** – EUR 20 million – to support new innovative projects in the industrial and agribusiness sectors
 - Through incentive grants for eligible technologies with low market penetration aimed at encouraging early movers in implementing technology investments. Incentives will range between 5 and 25% of eligible costs depending on technology type

Thank you!

Sergiy Maslichenko

Senior Manager, PhD

Energy Efficiency and Climate Change Team

Email: MaslichS@ebrd.com

EBRD

16, Nemyrovycha-Danchenko Street,

Kyiv, Ukraine 01133

Tel: +380 (44) 277 1100

Fax: +380 (44) 277 1160