

# Georgia -First National Energy Efficiency Action Plan

**OFFICIAL USE** 

Division of Energy Efficiency and Alternative Energy Resources

Ministry of Energy of Georgia

Margalita Arabidze

10<sup>th</sup> EECG Meeting, Vienna, 10 March 2016



## **Development of Georgia's first NEEAP**

- > External background: signed EU Association Agreement (2014); Aspiring for full membership in the Energy Community
- ➤ Internal conditions: commitment to reduce dependence on energy imports and enhance energy security;
- ➤ Georgia's first NEEAP launched in June 2015 → technical assistance received by **EBRD** and financial support by Swedish International Development Agency (**SIDA**)
- > the Working group of key stakeholders main decisions
- ➤ Ministry of Energy expressed a preference for the **EED-based NEEAP** both in term of the **format and measures** with **adjustments** specific to Georgia's characteristics.

#### ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲔᲜᲔᲠᲒᲔᲢᲘᲙᲘᲡ ᲡᲐᲛᲘᲜᲘᲡᲢᲠᲝ

#### **Current status of NEEAP**

Key stage/ Deliverable	Description	Date of delivery by the Consultants
Draft NEEAP measures	Full draft of measures currently in discussion with various stakeholders	March 2016 – bilateral discussions with stakeholders to discuss measures and assumptions  Late March 2016 – Stakeholder workshop to finalize proposed measures
Final NEEAP Report	To be discussed with the Government, Energy Community Secretariat, Broader stakeholders	May/June 2016

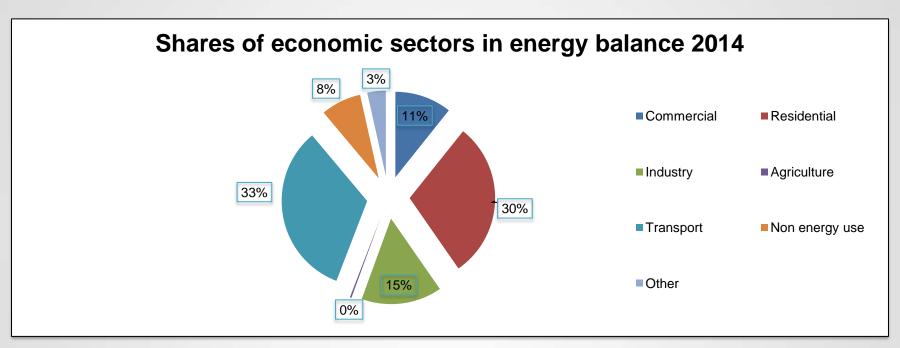
**OFFICIAL USE** 





#### ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲔᲜᲔᲠᲒᲔᲢᲘᲙᲘᲡ ᲡᲐᲛᲘᲜᲘᲡᲢᲠᲝ

## Energy Balance of Georgia



Source: Geostat (2015) Energy Balance of Georgia, 2014

 The main energy consumers are the residential, transport and industry sectors.





#### ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲔᲜᲔᲠᲒᲔᲢᲘᲙᲘᲡ ᲡᲐᲛᲘᲜᲘᲡᲢᲠᲝ

# Georgia's 1st NEEAP - Highlights #1

	1 <sup>st</sup> Period of implementation from 2017 – 2019, with indicative targets set	
	for 2020, 2025 and 2030	
	Georgia will need assistance with:	
	☐ Access to finance and targeted investment to unlock sector potential	
	☐ Technical assistance in capacity building (in particular industry and building sector)	
	☐ Technical assistance in legislative and programme development	
	☐ Grants	
☐ Consultancy team are working with the Ministry of Energy and various		
	stakeholders to calculate investment needs and energy savings per sector	
	according to government priorities	
	☐ Significant opportunities for investment – potentially up to EUR 260 million from 2017 to 2019 alone for measures in various sectors (not including major infrastructure projects	
	☐ Investments are to be described including information on size of investment, cost per MWh saved, and IRR	

**OFFICIAL USE** 



### Georgia's 1st NEEAP – Measures

### Horizontal Measures – highlights

- Financing schemes for setting up an **Energy Efficiency Fund** (the Ministry is looking at best practices on efficient and sector-focused energy efficiency funds in EU countries)
- ➤ Gradual introduction of **energy audits and management systems** (large enterprises first), **boiler inspections** in the industry sector
- **EPBD Transposition and Enforcement**: Standards and norms and certification schemes in buildings
- ➤ Mandatory labeling for electrical home-appliances from [2017] and ban on import of low efficient home appliances
- ➤ Amendment in the law on procurement procedures considering the "Green Procurements" component





### Georgia's 1<sup>st</sup> NEEAP – Measures

#### **Sector Measures**

- Energy transformation, transmission, distribution, and demand response
  - Natural gas savings through replacement of old Thermal Power Plants with efficient Combined Cycle Gas Turbine technology
  - Energy efficiency savings potential (36% of all measures for 2020)
- > Reduction of losses in hydropower production
  - Investments in renovating hydropower stations and investigating changes to the dispatch system to improve efficiency/costs
  - Energy efficiency savings potential (8% of all measures for 2020)
- Regulations on the Rules of calculation of normative electricity losses & Reduction of losses in gas pipelines
- > Efficient wood-burning stoves





### Georgia's 1st NEEAP – Measures

#### **Sector measures**

- Lighting: Potential savings examined for each sub-sector: street-lighting, industry, commercial/residential buildings, public buildings total of **7% of all savings** for 2020
- Recommended savings programmes in **industry** covering various sectors (cement, metal industries, cross-cutting related to boilers/steam production and distribution and cross-cutting related to fans, pumps, compressors and refrigeration system)

#### > Buildings:

- Construction Permits for design and construction shall be issued according to the EE measures – from 2016
- Reconstruction and retrofitting of Public Buildings considering the EE measures from 2016
- ➤ **Transport** improvements in cities which are signatories of the Covenant of Mayors (Est. 7 10% of savings of all measures)
- Measures linked with technical assistance, energy audits, and awareness raising



## Thank you for your attention!

#### Margalita Arabidze

Division of Energy Efficiency and Alternative Energy Resources Ministry of Energy of Georgia

M.Arabidze@energy.gov.ge

OFFICIAL USE