Bio-Energy Promotion Experience of Georgia

Division of Energy Efficiency and Alternative Energy Resources

Ministry of Energy of Georgia

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Biomass as an Energy Sources

Firewood is playing a major role in Georgia's heat supply.

About 700,000 households and public buildings in rural areas of Georgia use on average about 9 m^3 firewood per household for heating and cooking (7 m^3) and for hot water (2 m^3).

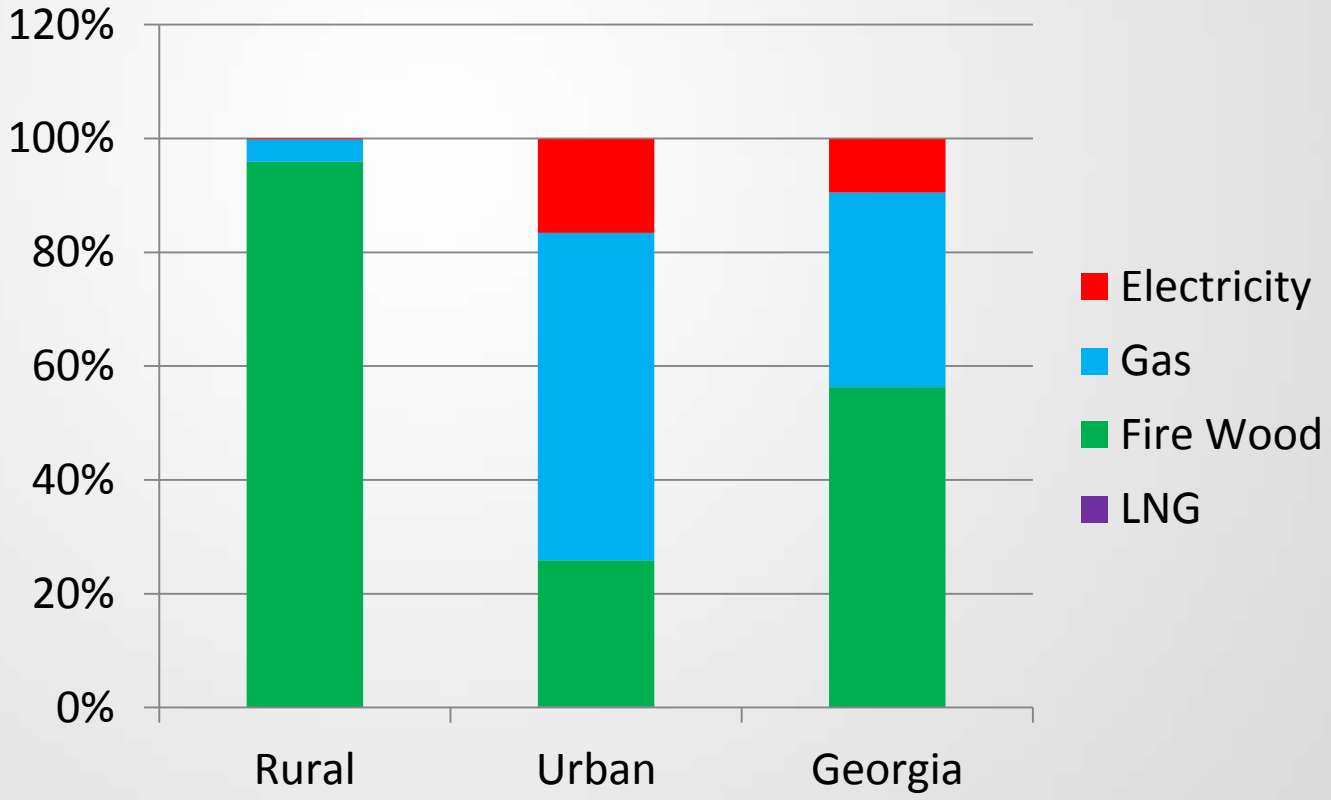
Energy needs for 95 % of rural population are met with wood and other conventional energy sources – for heat and cooking.

In total firewood consumption is about 3.6 million m^3

Firewood core heating resource

More **Firewood** is used for heating in **Georgia** than **gas**, electricity and all other **sources;** firewood accounts for 60% of all heating resources.

USAID/HPEP Research on household consumption; 2014



Energy Efficiency Action Plan & NAMA
Efficient wood-burning stoves

Energy saving achieved through introduction of energy efficient wood-burning stoves in households:

-Upgrading inefficient stoves (installation of airtight combustion chamber, inlet air control, flue air control, and additional heat transfer area);

-Installation of new energy efficient stoves;

-Educational and awareness raising activities

-Assistance from donors (either within Georgia or outside) to provide grants for stove purchase (50%) and other market creation activities.

Primary energy savings of 88 GWh in 2020 and 277 GWh in 2025

PROMOTION OF BIOMASS PRODUCTION AND UTILIZATION IN GEORGIA

Ministry of Environment Protection of Georgia

MoENRP Executing Agency
UNDP –implementing Agency;
MoE – stakeholder
GEF –financial supporter

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Goals:

to promote sustainable production and utilization of upgraded biomass fuels in Georgia,

to encourage the stakeholders to establish the pilot production projects through grant investments; start and develop biomass fuel utilization in the municipal sector.

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IMPLEMENTED ACTIVITIES

- ✓ Research of biomass raw materials availability in Georgia;
- ✓ Production of promotional and study materials, nationwide biomass fuel production and utilization;
- ✓ Business plan competition and first tranches of investment grants were awarded to support winning business plans and biomass bracket production is launched;

Ministry of Environment Protection of Georgia

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NEXT STEPS UNTIL 2017

- Development of national bio-energy strategy and action plan, quality standards of bio-fuels and equipment;
- Establishment of bio-energy association,
- Formulating a proposal for improving access to finance for biomass projects,
- Various public awareness activities related to popularization of biomass fuel in Georgia.

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Additional information can be found at

http://biomass.ge/en

http://www.ge.undp.org/content/georgia/en/me/operations/projects/environment_and_energy/promoting-the-production-and-use-of-biomass-in-georgia.html

Biogas Power Plant

3 MW- Installed Capacity
25 mln. KWh-annual Generation

Resource - Amaranth
&
agricultural residuals

- MOU signed between the Ministry of Energy and Altenergy LLC; January 28, 2016

PILOT PROJECT ECO-BUSES

Goals:

- Promotion of biodiesel as alternative, renewable, eco-friendly biofuel,
- To maintain the municipality buses powered by biodiesel - named “ Eco-Buses”,
- create a documentary-educational movie and launch a web site www.biodiesel.ge
- public awareness raising on the ecological benefits and economical potential of biodiesel.

IMPLEMENTED ACTIVITIES

- The University has successfully adopted and implemented innovative methods for producing alternative, eco-friendly fuel – biodiesel.
- A new lab for producing biodiesel was launched and today it is fully operational.
- The raw material for biodiesel is plant oil - Rapeseeds, (Canola, Latin: Brassica napus)
- Under the ILIAUNI project “Biodiesel in Georgia” 10 hectares of land were cultivated in Kakheti region, eastern Georgia.

This new plant culture was adopted very well in eastern Georgia

Canola (*Rapeseed*) is an excellent material for Crop Rotation for wheat

Canola (*Rapeseed*) fields in Kakheti region, Eastern Georgia, May 2012

- Additional information can be found at http://biodiesel.ge/index.html

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Thank you for attention!

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