

# Biomass - Policy and Practice in Georgia Taking a step back from excessive use

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## Main Biomass Facts in Georgia



- Biomass is the second largest domestic supply to energy balance of Georgia. Fuel Wood comprises about 8% of primary energy and 35% of domestic supply. Biomass is the main source of heating in rural Georgia and about 90% of rural population depend on wood for heating, in spite of gasification of villages. Acceptance of numbers by officials
- Biomass is harvested and used unsustainably for decades. Annual consumption is about 2.1 million m<sup>3</sup> while the sustainability quota allocated by forestry agency is only .6-.8 million. The mechanism of "social cuts" allows the population to cut the allocated trees. This creates safety concerns and inability to strictly monitor the illegal cuttings. BIOMASS not a part of Energy Policy
- SUSTAINABILITY a problem. Unsustainable illegal use of biomass has devastated the forests especially around towns and villages and in vicinity of forest roads. Results are biodiversity loss, lanslides and land erosion, flashfloods and growing energy poverty as biomass becomes less and less available
- Residual biomass from forestry and agriculture briquettes, chips. Efficiency of stoves, dwellings and use of dry wood, natural gas subsidies etc.
- INDC has the forestry management as the main measure Forestry reform and wood supply are strongly interdependent

#### **FUELWOOD USE**





- Surveys should inform the policy and be gradually improved. Even simple assessment is easy and sufficient current goal realize a big problem and start addressing.
- Poor efficiency and health hazards
  - Inefficient stoves and buildings
  - Wet wood used to keep it burning longer
  - Indoor air quality among the worst in the world causes health hazard
- Gasification does not work
  - People continue to use the cheap fuel wood for heating
  - Expensive network investment largely stranded
- Some types of residues being used
  - Hazelnut, sawdust, vine cuttings, bay brush, etc.
- Energy and economic security
  - Harvesting and sale of fuel wood is a local economic activity (although not fully legal). Switching to gas would send the money out of the country
- According to conducted survey, the forestry and agriculture residues could substitute about 1/3 of fuel used.

#### **Past Activities**



- UNDP Project
  - Residual biomass potential studied
  - Pilot projects conducted and 3 SMEs supported with grants one established
  - Strategy for advanced solid biofuels developed
  - Biomass Association established
  - A new production facility established under forestry agency
- USAID,GIZ and other donors
  - Household surveys to assess the use of fuel wood
  - Pilot projects on hybrid systems
- GEOSTAT residential survey
- Forestry agency and Ministry of Environment Forestry reform initiation

## **Current state and recent dynamics**



- Policies not supportive to legal use of biomass but changing:
  - Strict and nonflexible legislation residues left in forest, even forestry agency was unable to use the forestry residues and stopped the own factory. A new amendment to legislation allows to chip and evacuate the biomass from forests
  - Still no legislation for residue collection or sale.
    - Waste management legislation does not cover the biodegradable waste and does not oblige to collect and dispose.
    - Tax code considers waste delivered to producer as his revenue
- Social Cuts abolished for public entities will be supplied centrally
- State program for supplying the rural schools and other public entities with fuel wood
  has closed the market for upgraded biofuel producer SMEs. The small producers have
  difficulties in sales and are stalled, asking for help.
- Biogas and biofuels included in NREAP, however without percentage targets

## **Ongoing Activities**





- In accordance to Directive 2009/29/CE on utilization of energy from RE Sources A new Georgian Law on Renewable Energy is being developed. The draft version is completed and commented by EnC secretariat. The comments are being incorporated into the draft. The law defines the conditions for production transportation and sale of biogas and biofuels.
- National Renewable Energy Plan (NREAP) developed under UNDP project. The draft plan does not provide
  quantitative targets for biomass. The Forestry Reform plan prepared by forestry agency incorporated into the
  NREAP and the document is under review and approval procedure in the government.
- Public discussion procedures have been completed for the new Forestry Code. The Document is being submitted to the government and parliament for review and adoption. Under these documents forest management is completely changed and "Social Cuts" abolished
- Energy efficiency center has started a project for utilization of agriculture residues in Telavi municipality through EU Covenent of Mayors' demonstration project grant of 700Thd EUR. 20% co-financing done by municipality
- Ministry of Environment Protection and Agriculture in cooperation with GIZ/FAO preparing a project proposal for Green Climate Fund
- New Technology Center together with Lithuanian Enerstena is conducting a feasibility study of 5-10 MW hybrid central heating systems using biomass solar and heat pumps) in three municipalities: Borjomi, Akhaltsikhe, Dusheti. The study to be completed by September
- Other pilots underway

### Outlook



- The new RE law and NREAP to be adopted by end of 2018 will address the biomass
- EE Law and NEEAP to be adopted in 2018 will help with Stove efficiency
- Forestry code to be adopted in 2018 to be submitted to Parliament soon
- After 2022 all fuel wood shall be supplied by forestry agency and Social Cuts completely abolished
- Application for GCF by GIZ/FAO to be submitted in 2018 40mln USD project.

