




**Renewable Energy Potential  
in Georgia and How to Use it**  
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**INFORSE**  
International Network for Sustainable Energy

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**ENERGY RESOURCES OF GEORGIA**

**Georgia has vast resources of almost all types of renewable energy:**

- **Solar energy** – (An average of 1550 kWh of solar energy is annually irradiated on a surface of one m<sup>2</sup> in Georgia. This is equivalent to about 190 kWh of electricity or 1200 kWh of thermal energy (hot water) annually).
- **Wind energy** – (total theoretic wind energy potential amounts to 1300 gigawatt hours (GWh) and exceeds the total theoretic river energy potential (135 GWh) almost ten times).
- **Hydro energy** – (360 rivers can be considered as having significant energy potential. The total theoretic hydro energy potential of small rivers is estimated at 40 TWh/year while the technical potential is evaluated at 19.5 TWh per annum).
- **Geothermal energy** – (The total theoretic thermal capacity of all geothermal sources at 10-250C was estimated at 300 MW of thermal capacity. Total achievable potential is estimated at 30% or 100MW of thermal capacity).
- **Biomass energy** – (The total energy potential of residues from farming and poultry breeding consists of 6.9 GWh, that is equal to 0.6 million tons of oil equivalent (MTOE)).

**Less than 1% of this potential is used currently!!!**

**Development of Renewable Energy is important for Georgia in order to:**

- Increase the safe energy supply;
- Development of rural regions in economical and social point of view;
- Reduce poverty by creating access to sustainable energy;
- Reduction of negative influence on environment;

**Problems?**

**LEGAL AND INSTITUTIONAL ENVIRONMENT FOR RES DEVELOPMENT**

There are a number of international documents having relevance to development of renewable energy sources in Georgia: (The Energy Charter Treaty, Framework Convention on Climate Change and the Kyoto Protocol; The Energy Community Treaty; European Neighborhood Policy and others).

For Georgia, who has joined or requested membership to organizations that execute and/or abide by these regulating documents, implementation of the recommendations and opportunities given by these documents is both beneficial and in some cases mandatory.

## GEORGIA'S LEGAL AND INSTITUTIONAL FRAMEWORK

No special legislation has been devoted for development of Renewable Energy Sources in Georgia currently.

No state support for development and spreading renewable energy technologies;

High prices and taxes for imported technologies and no local production;

No established clear and consistent definition of renewable energy sources to be used uniformly across Georgia's legislation.

No designated authority responsible for development of RES;

## Solution...



Greens  
Movement of  
Georgia

Joint program for developing and spreading  
Renewable Energy Technologies in rural  
areas for reduce of poverty by creating  
access to sustainable energy.



Women in  
Europe for a  
Common Future

## Activities

- ✓ Organizing meetings and consultations with international and local experts on RES.



## Activities

- ✓ Carrying out studies of different regions of the country



## Activities

- ✓ Identify individual needs and opportunities for different regions and settlements



### Activities

- ✓ Carrying out different awareness rising activities in different stakeholders on RES (Workshops, seminars, trainings with school children, rural settlements, farmers, women groups, local NGO's, local authorities, etc)



### Activities

- ✓ Preparation and distribution of different educational material in general public



### Activities

- ✓ Carrying out training for construction and exploitation of cheap and simple technologies for households, such as warm-water collectors (different models), solar fruit-driers, bio-gas plant, solar green-houses.



### Examples



**THANK YOU FOR  
ATTENTION**



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