

Current status in sphere of use of alternative and renewable energy sources in the Republic of Azerbaijan: **achievements and goals**

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**State Agency on
Alternative and Renewable
Energy Sources**

Contents

- Background of AREA
- Activity areas
- Strategic development: goals and targets
- International Cooperation
- Projects

Background of ABEMDA

State Program on Use of Alternative and Renewable
Energy Sources
(October 24, 2004)



State Agency on Alternative and Renewable Energy
Sources under the Ministry of Industry and Energy
was established (July 16, 2009)



State Company on Alternative and Renewable Energy
Sources (June 1, 2012)



“Azalternativenerji” LLC
(February 1, 2013)

**State Agency on Alternative and Renewable Energy
Sources (February 1, 2013)**

State Agency

Is the central executive body carrying out followings in the field of RES and EE:

- State policy and regulation;
- Efficient organization of activity and liaison;
- State control.

Activity Areas

- Formation of state policy and implementation;
- Creation of infrastructure;
- Implementation of alternative and renewable energy in economic sectors;
- Efficient use of energy;
- State registration and cadastre;
- Activity on setting up standards.



RENEWABLE ENERGY STRATEGY OF AZERBAIJAN



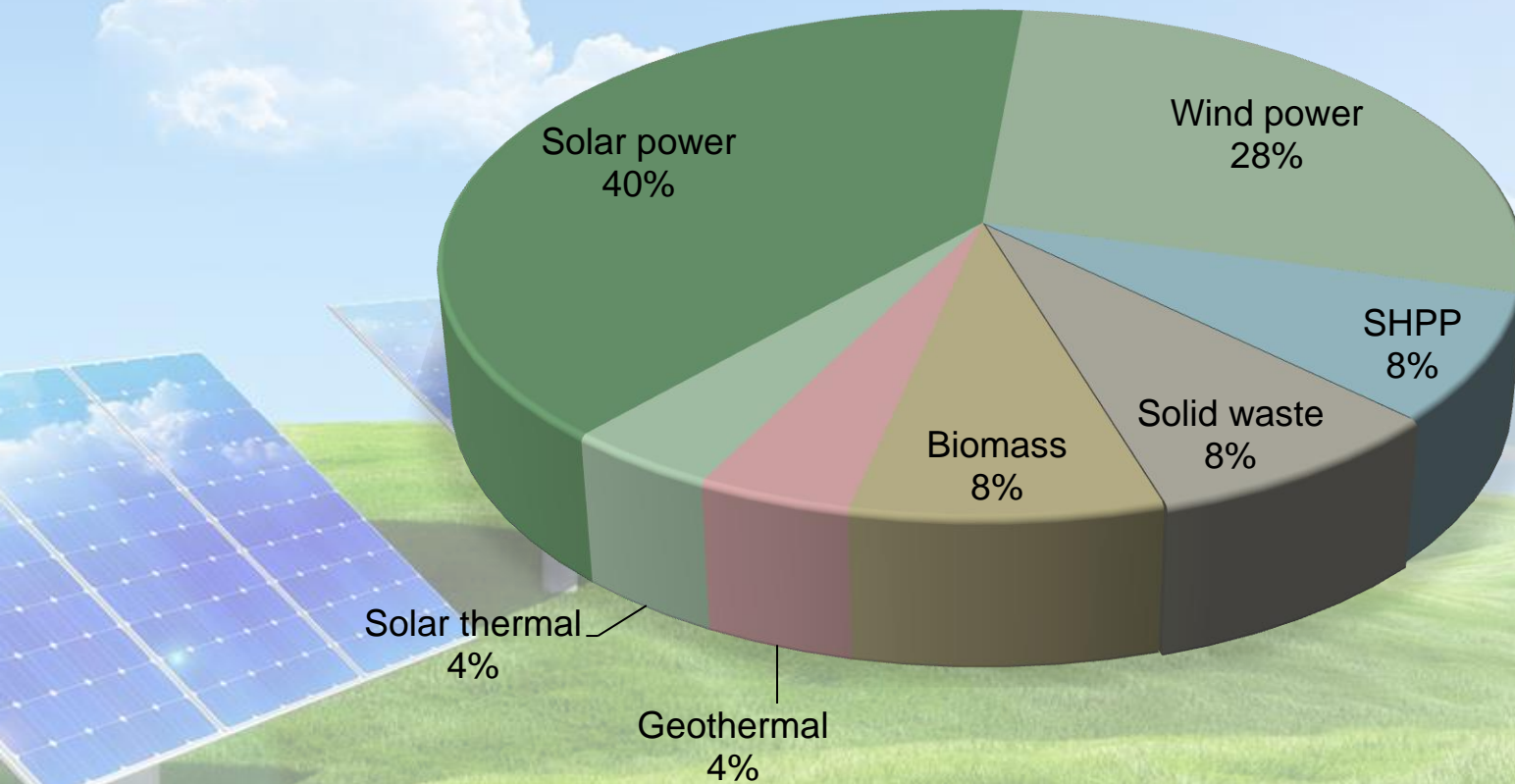
29 December 2011,

Order of the President of the Republic of Azerbaijan on preparation of National Strategy on the use of Alternative and RES for 2012-2020

Objectives:

- To create truly sustainable energy system for Azerbaijan
- Determination of key directions for the production of electrical and thermal energy from renewables.
- Creation of legal framework conditions for the usage of REC
- To establish optimal conditions for the promotion of renewable energy sector (production, transfer, distribution and delivery of energy, efficient energy use and renewable sources for heating, and transport)

Distribution of types of renewable energy in 2020



International Cooperation

- **European Union;**
- **UN Development Program;**
- **International Renewable Energy Agency (IRENA);**
- **The World Bank;**
- **Asian Development Bank;**
- **Kingdom of Norway with the “Norsk Energy”**
- **Energy Efficiency Agency of Ukraine;**
- **Energy Research Institute of Korea;**
- **KfW of Germany;**
- **Organization of the Black Sea Economic Cooperation;**
- **INOATE;**
- **GUAM and etc.**

EU – Azerbaijan Cooperation



Signing of Memorandum
between EU & AR on
November 7, 2006

Purposes of the memorandum:

- Modernization of electric grid, enhancement of security and reliability of energy infrastructure;
- Development of programs and regulations for renewable energy sector;
- Achieve the efficient use of energy.

EU – Energy Reforms Support Program

- **Action Plan on RES and EE**

- Short-term - 2011-2012;
- Midterm – 2013-2015.
- Perspective – 2015-2020.

This project, based on European Directives(2006/32/EC) and describing efficient use of energy by the end-user, is accepted as the first Action Plan of Azerbaijan on energy

- **Harmonization of legislation with EU countries**
- **Awareness and promotion campaigns**

Projects implemented in the country

Plants	Capacity, MW
Total	159,5
Wind Power Plants (Yeni Yashma, Shurabad, Mushfigabad, Gobustan)	62.4
Hydro Power Plants	31.2
Solar modules and collectors (Projects in social buildings in Gobustan, Baku and regions)	17,2
Heat pumps (Projects implemented in social buildings in Baku and districts)	2.7
Bioenergy projects (Processing of solid waste, Gobustan)	46.0

The projects implemented by the Agency

№	Facilities	Total number	Type
1.	“Gobustan Hybrid Type Polygon and Training Center”	1	Hybrid power plant
2.	“Azguntex” PV modules factory	1	Manufacturing enterprises
3.	Installation of heat pumps and solar panels (PV modules) at schools № 235 and 149 in Khazar district, schools № 166 and 320 Garadagh district, school № 90 in Nizami district, medical center in Hovsan and SOS Children and youth school.	8	Solar power plant and heat pumps
4.	Providing heat and electricity with solar power supply at 6 schools and 6 kindergartens in Bilasuvar district	6	Heat pumps
5.	Construction of sport complexes and providing electric supply by solar power in Beylagan and Masalli districts	2	Solar power plant
6.	Installation of solar panels (PV modules) at boarding schools and secondary school № 239 in Turkan by Grant of the Centre for Renewable Energy Sources of Greece.	2	Solar power plant
7.	Construction solar power station in Pirallah, Samukh, Sanqachal, Sumqait	4	Solar power plant
8.	Construction Hydro power station in Sheki		

Gobustan Hybrid Type Power Plant



Was put into operation : September 13, 2011

Total capacity - 5,5 MW

Wind Power Plants - 2,7 MW

Solar Power Plants - 1,8 MW

Biogas Plants - 1,0 MW

Gobustan Hybrid Type Power Plant

1 000 000 KW.h were produced and turned over to “Azerenerji” OJSC on October 22, 2013 at 16:26.

58.5 % and 41.5 % of energy were produced by solar and wind power plants respectively.



“Azguntex” PV module factory



Was put into operation : 24.04.2012

Polycrystalline modules:

- The number of PV cells - 60
- Capacity - 36 V 250 W
- Size –997mm/1663mm
- Weight – 20 kg



Production capacity of the first line:

120 000 modules/year (30 MW)

Production capacity of the second line:

250 000 modules/year (62.5 MW)

Solar power projects implemented in social buildings



Children's Polyclinic №16
(25 kW Electric, 40 kW Heating)



Secondary school № 149 in
Bina
(60 kW Heating)



Secondary school of № 166
(32 KW Electric, 60 kW Heating)



Secondary school № 235
(25KW Electric, 40KW Heating)



Secondary school № 239
(5 KW Electric, 3 KW Heating)



Secondary school № 320
(25 KW Electric, 40 KW Heating)



Biləsuvar distr.
(6x50 KW Elektrik, 6x135 RW Heating)



Masallı Sport Complex
(70 KW Electric, 90 KW Heating)



Hovsan Dispensary
(10 KW Electric, 20 KW Heating)



SOS Children and youth school
(20 KW Electric, 44 KW Heating)



Beylagan Sport Complex
(70 KW Electric, 90 KW Heating)



Turkan children orphanage
(25 KW Electric)

Ongoing Projects

Samukh Agro-Energy Complex

- Solar PP - 15 MW, PP on biomass – 5 MW
- Wind PP – 7 MW,
- Geothermal – 3 MW
- Surakhani solar PP – 2,8 MW
- Pirallahi solar PP – 2,8 MW
- Sanqachal solar PP – 2,8 MW
- Sumqait solar PP – 2,8 MW
- Sheki HEPS

- Солнечная на ПП - 15 МВт,
- На биомассе - 5 МВт
- Ветряная - 7 МВт
- Геотермальная - 3 МВт

Suraxani Soler PP- 2,8 MW





Thank you for your attention!

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