

Policies and Methodologies for Fostering and Assessing the Deployment of Low-Carbon Technologies in the ETC and SEMED Regions

Implementation of alternative and renewable
energy sources in economic sectors

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Deputy Chairman

15-16 June, 2015
Istanbul, Turkey

State Agency on Alternative and Renewable Energy Sources - AREA



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

- ▶ State policy and regulation
- ▶ Efficient organization of activity and coordination
- ▶ State control



Goals and targets of strategic development



State Strategy on Use of Alternative and Renewable Energy Sources (2012-2020) was prepared by the Decree of the President of Azerbaijan Republic dated 29 December 2011.

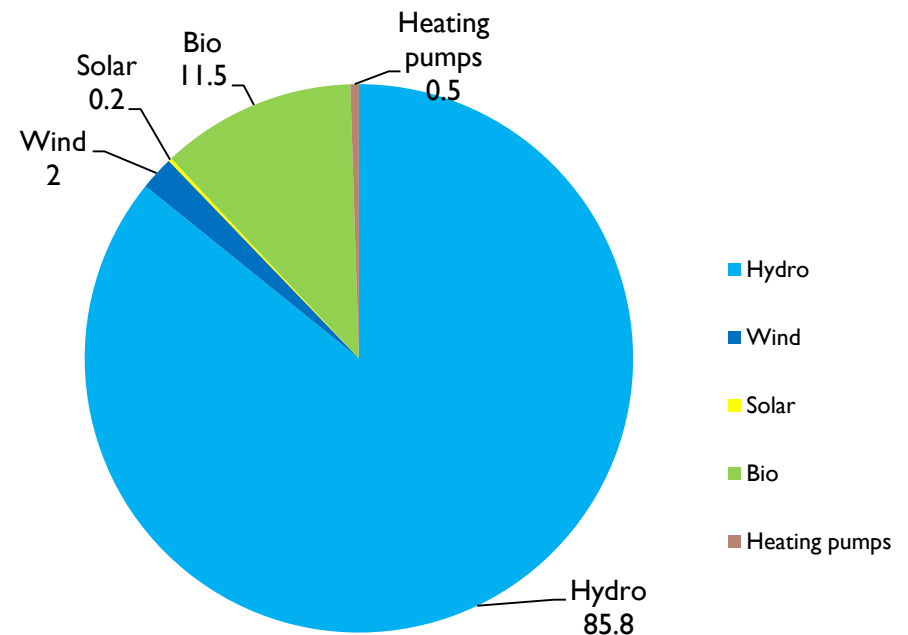
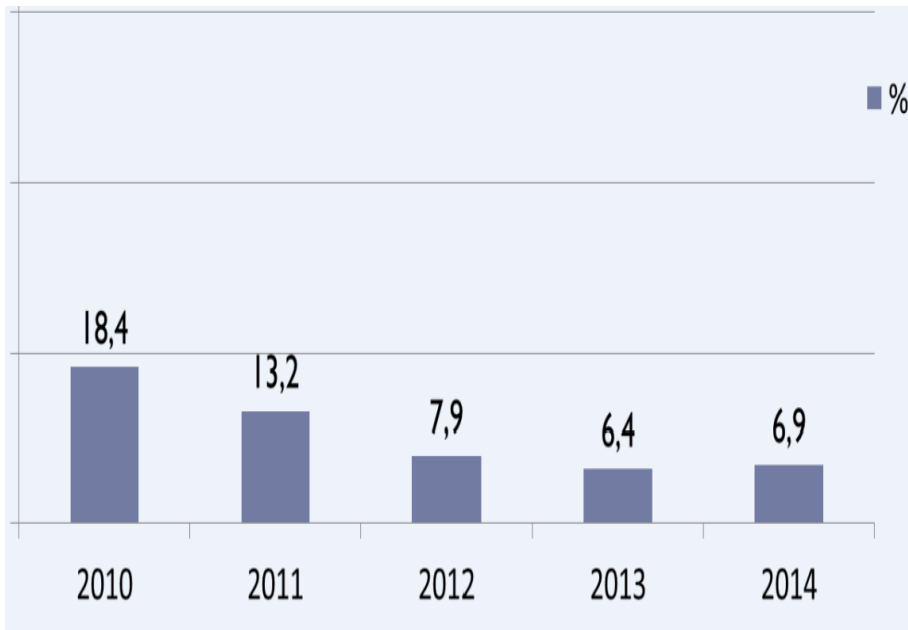
- Determination of main directions for 2012-2020 on electric and thermal power production by using alternative and renewable energy sources;
 - Enforcement of legislative framework;
 - Stimulating measures;
 - Implementation of alternative and renewable energy sources in economic sectors.
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Action Plans

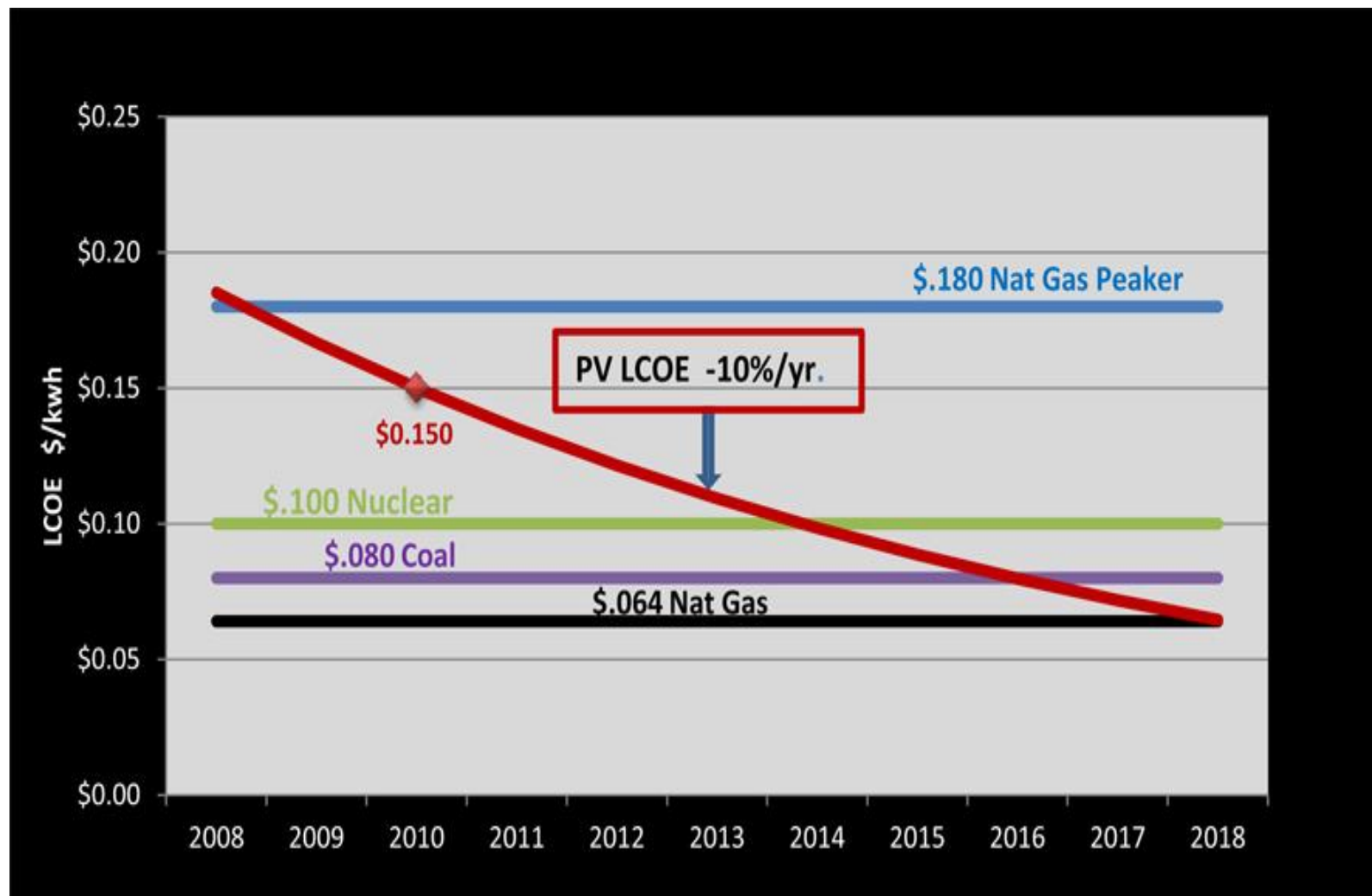
- ▶ State Program on Use of Alternative and Renewable Energy Sources (2004)
- ▶ State Program on Ensuring Reliable Population in the Republic of Azerbaijan in Food Provision (2008-2015)
- ▶ State Program on Socio-economic Development of Regions (2014-2018)
- ▶ State Program on Poverty Reduction and Sustainable Development for the Republic of Azerbaijan (2008-2015)

Share of RES in total energy production



Share of RES types in RE production, 2014, %

Levelized cost of energy as a key indicator of deployment of low-carbon technologies



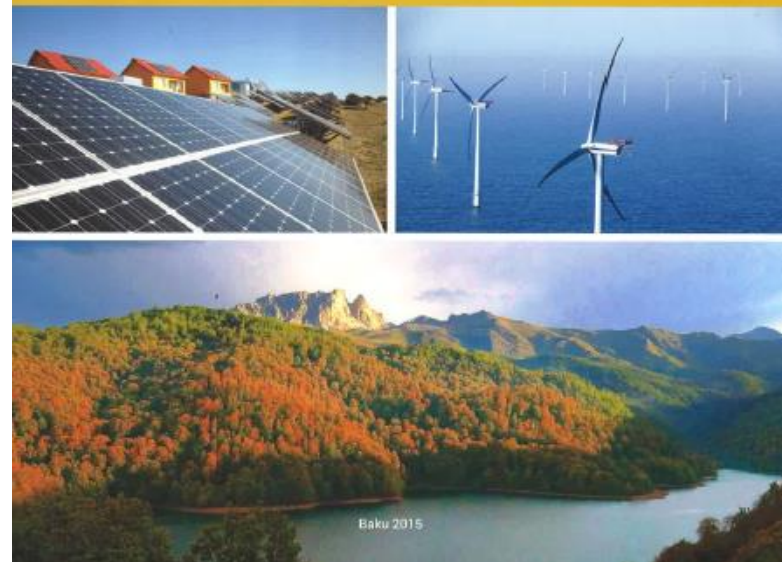
AREA – Projects classification

- ▶ Large-size power plants for industrial purposes
- ▶ Implementation of RE in buildings
- ▶ Creation of agro-energy complexes



STATE AGENCY ON ALTERNATIVE AND RENEWABLE ENERGY
OF AZERBAIJAN REPUBLIC

USE OF ALTERNATIVE AND RENEWABLE ENERGY SOURCES



Large-size power plants for industrial purposes



Power Plant	Capacity , MW	Status
Gobustan Hybrid Power Plant	5.5	Implemented
Surakhany SPP	2.8	Implemented
Pirallahy SPP	2.8	Implemented
“Wind Island – 1” Offshore Wind Farm	198	Pre-Feasibility study preparation
Absheron Wind Farm (with PV component)	80	Feasibility study preparation
Power Plants on Biomass	16	Feasibility study preparation
Yeni Yashma Wind Fram	50	Commissioning



Large-size power plants for industrial purposes (continued)



Gobustan HPP



Pirallahy SPP



Surakhany SPP



"Wind Island – 1" Offshore Wind Farm
(design)



Yeni Yashma Wind Farm

Implementation of RE in buildings



1 building – 1 power plant

- ▶ Projects in more than 10 schools, 2 medical centers, 2 sport complexes
- ▶ Project at secondary school in Turkan (Baku city) was implemented by the grant of the Centre for Renewable Energy Sources of Greece



Creation of agro-energy complexes



Samukh Agro-Energy Residential Complex

Implementation of alternative and renewable energy sources in economic sectors

- ▶ Total capacity:
31 MW electric,
48 MW thermal

Installation of solar component (2.8 MW) has already begun

Project period: 2014-2018



The diagram illustrates the Azalternativenerji Network, a circular flow system connecting various energy sources and users. The central node is the **Azalternativenerji Network**. It is connected to three main user groups: **Plants and factories** (blue circle), **Administrative buildings** (red circle), and **Residential buildings** (green circle). These user groups are connected to three main energy sources: **Agriculture** (circle with a turkey and cow), **Farming** (circle with green grass), and **Waste** (circle with brown waste). **Agriculture** is connected to **Fertilizers** (circle with brown fertilizer), which is connected to **Biogas power plant** (circle with a biogas plant). **Waste** is connected to **Biogas power plant**. **Biogas power plant** is connected to **HPP** (circle with a hydroelectric plant). **HPP** is connected to **Geothermal** (circle with a geothermal plant), **Wind power plants** (circle with wind turbines), and **Solar power plants** (circle with solar panels). **Geothermal** is connected to **HPP**. **Wind power plants** is connected to **HPP**. **Solar power plants** is connected to **HPP**. **HPP** is connected to **AZERENERJI Network** (circle with the Azerenerji logo). **AZERENERJI Network** is connected to **Administrative buildings** and **Residential buildings**.



Thank you for your attention!

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