



The State Agency on Alternative and Renewable
Energy Sources of the Republic of Azerbaijan



Sustainable development in energy sector of Azerbaijan



7TH INTERNATIONAL
**FORUM ON
ENERGY FOR
SUSTAINABLE DEVELOPMENT**
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**Pathways for sustainable energy:
National approaches to a global
challenge”
Workshop**

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Baku

Current status of RE development in Azerbaijan

The State Program on Use of Alternative and Renewable Energy Sources in Azerbaijan Republic:

- ▶ To determine potential of alternative and renewable energy in the electricity power generation;
- ▶ To increase the efficiency of utilization of energy resources through attracting exploitation of renewable energy;
- ▶ To provide additional job places by creating new energy production facilities;
- ▶ To increase energy capacity and achieve energy security at expense of renewables by considering total capacity of traditional energy sources in Azerbaijan Republic.



Strategic directions of RE development in Azerbaijan (2012-2020)

- ▶ Clarification of the main objectives of the heat and power energy production in RE sector;
- ▶ Creation of the base of legal framework in RE and EE;
- ▶ Preparation of incentive measures on the use of RE;
- ▶ Application of RE and EE in the spheres of economy;
- ▶ The production of electricity and thermal energy to determine the main directions for the years 2012-2020 by ARES;
- ▶ Establishment of legal and regulatory framework in the sphere of ARES;
- ▶ Implementation of promotional events on the use of ARES;
- ▶ Provision using ARES in all sectors of economy based on domestic and international scientific and technical potential.



Targets for RE development by 2020

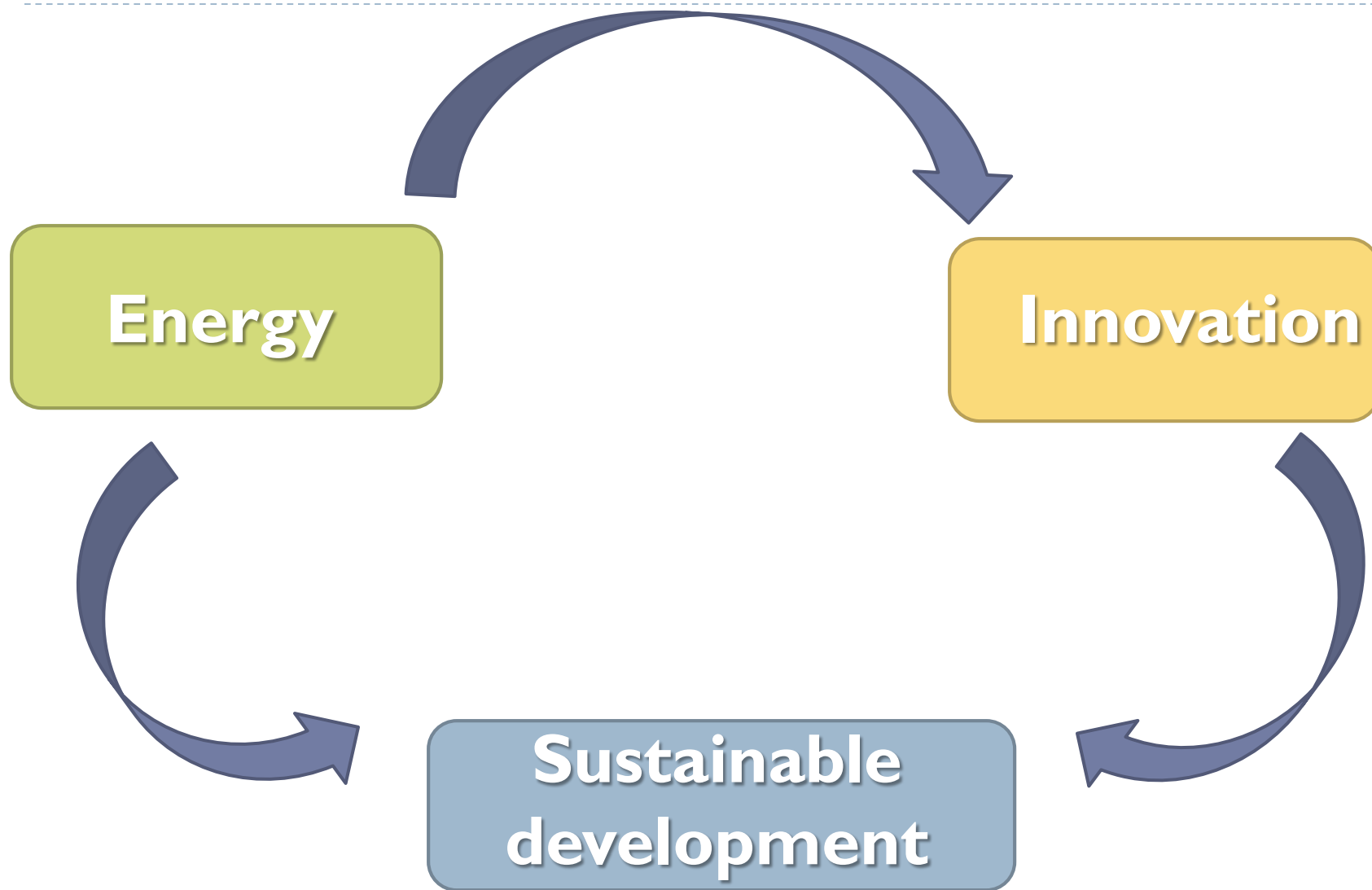


20% share of RE
in electricity

9.7% share of
RE in all energy
consumption

2,000 MW of
installed RES
capacity by 2020

The implementation directions of Agency's state policy



RE Development

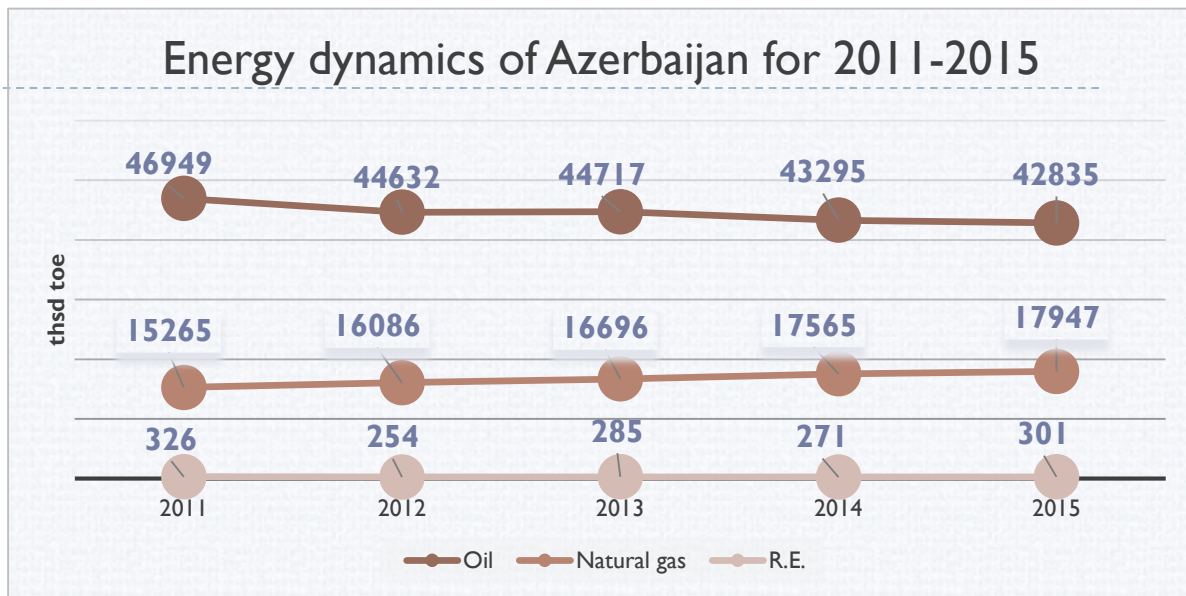
Renewable Energy Projects in Azerbaijan (2009-2015)

RE Sources	Capacity in MW
Wind	~ 67
Solar	~ 49
Hydro	~ 1125
Biomass	~ 2
Waste	~ 45

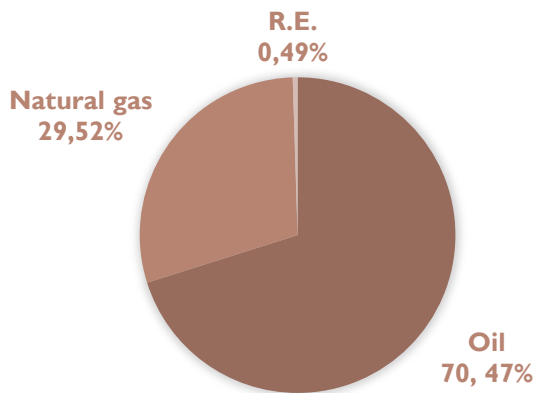


RE Development

Energy dynamics of Azerbaijan for 2011-2015



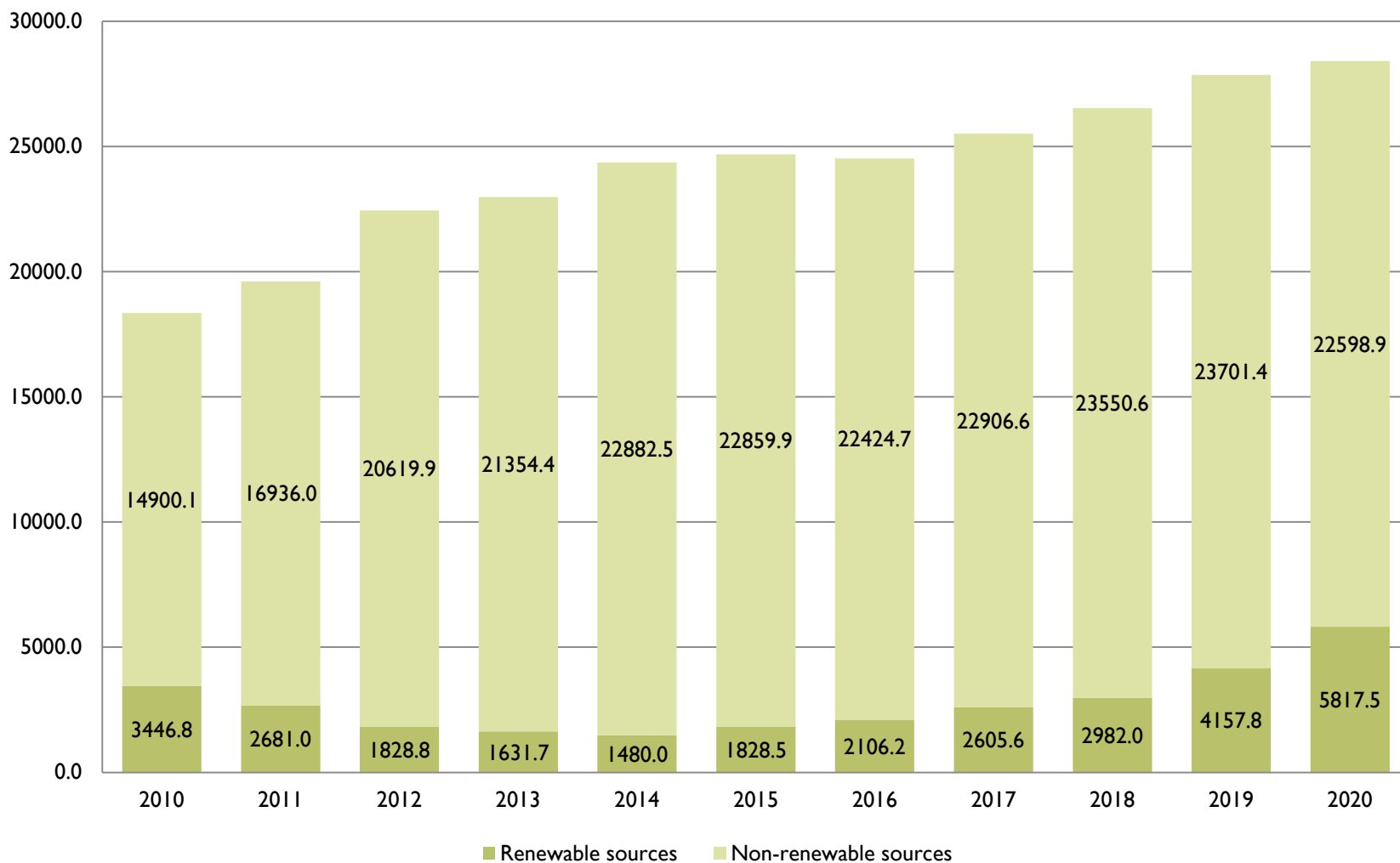
ENERGY SHARE OF AZERBAIJAN



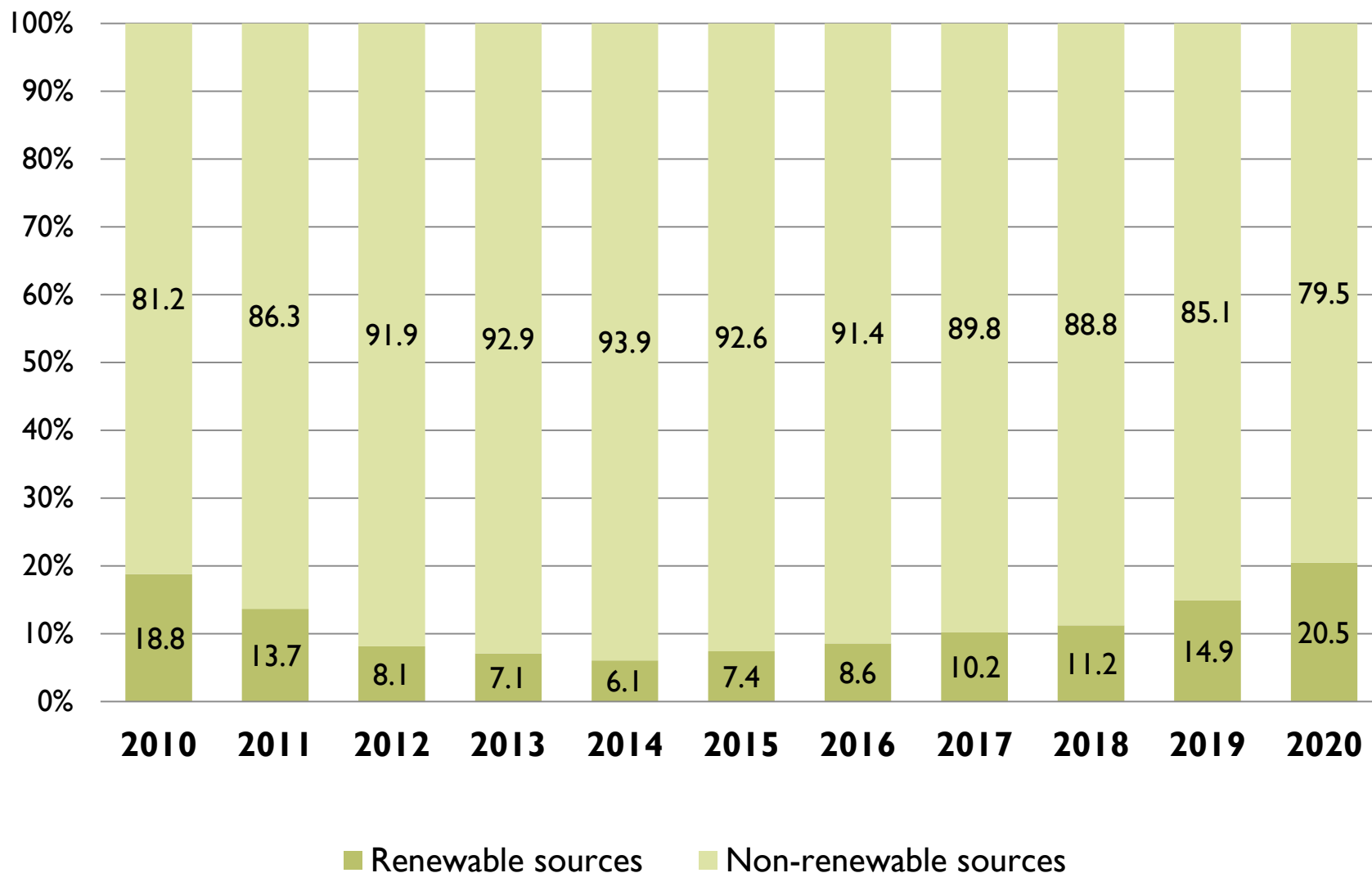
Emissions of air pollutants from stationary sources



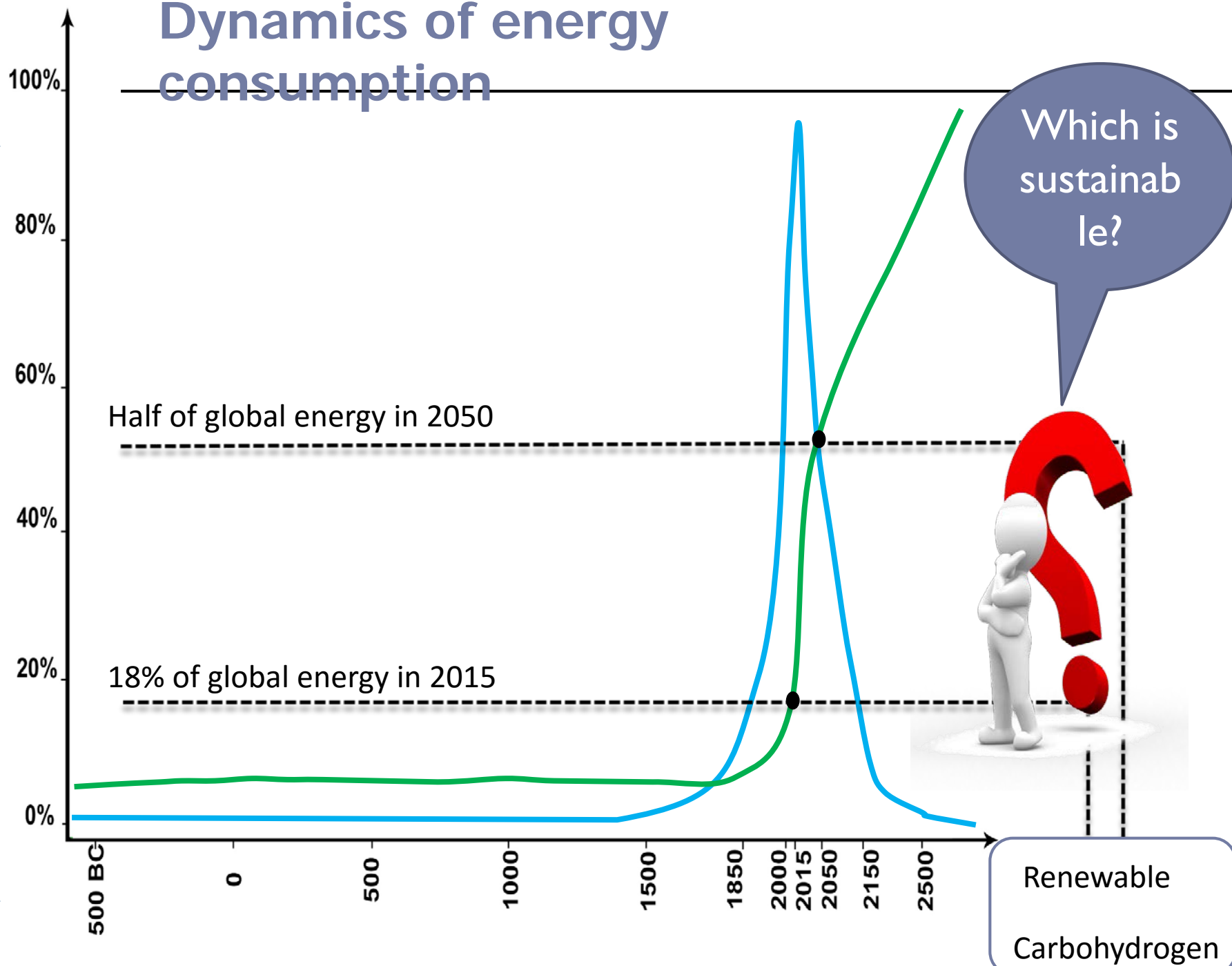
Share of RE & non-RE sources in energy supply, mln kW hour



Share of RE & non-RE sources in energy supply, %



Dynamics of energy consumption



AREA Projects

Small-sized

- **1 building – 1 power plant** 14 buildings with Solar panels (schools, medical centers, sport complexes)

Medium-sized

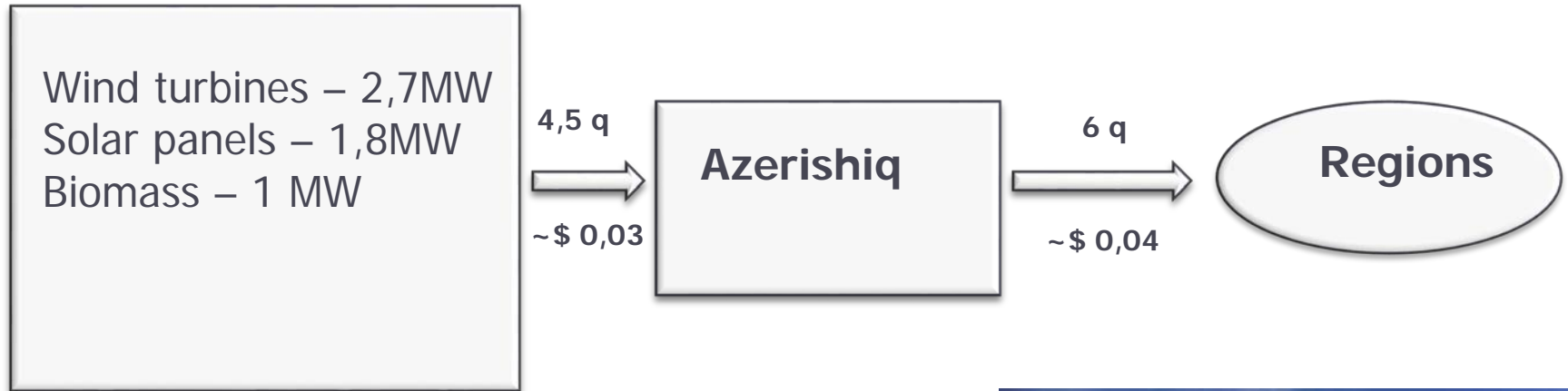
- **Hybrid power plants**
- Gobustan Experimental Polygon
- Pirallahy Wind Islands
- Surakhany Solar Electric station

Large-sized

- **Wind, Biogas and Concentrated Solar plants**
- Samukh Agro-Energy Residential Complex
- Yeni Yashma Wind Farm
- Wind Island
- Absheron Wind Farm
- Power Plants on Biomass



Gobustan Polygon (5,5MW)



Pirallay Wind Islands (200MW)

**Project cost - 400
mln euros**

Project period 2016-2018

Goals:

Creation of advanced electric power infrastructure

Support of sustainable development

Reduction of environment pollution

Cut of natural gas production



Azguntex

Azguntex (2011) is a unique power plant on producing advanced solar modules and LED lamps with total capacity of 30MW.

“Thousand houses – thousand power stations” is a project to transform the solar energy to electric energy and provide each house separately with ecologically pure solar energy

Advantages:

automated high-tech

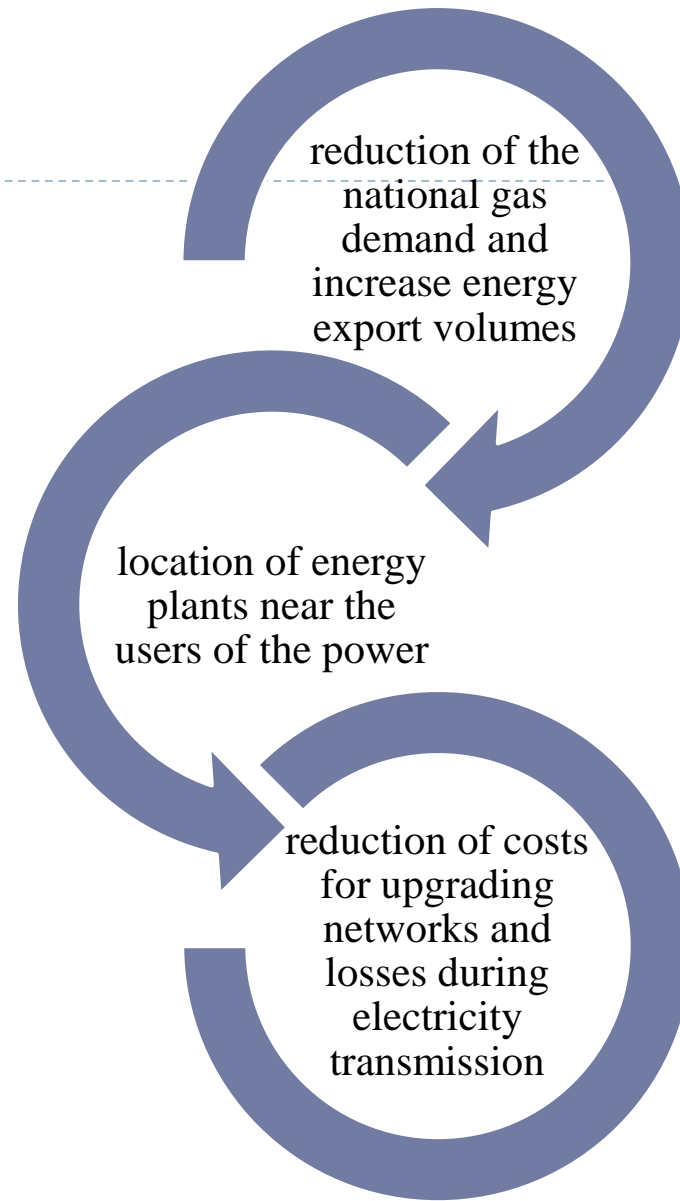
high efficiency

Implementation of polycrystal cells



RE in our life

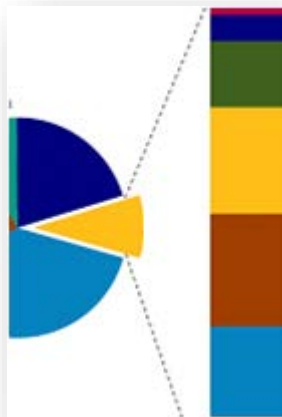
Energy policy on RE



Future aims



**Improvement of
Legislative base**



**Enhancement of RE
share in Electricity
and Heat Generation**



**Development
of stimulation
mechanisms**



**Application of RE
in all sectors of
economy**



Thank you for your attention!

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