

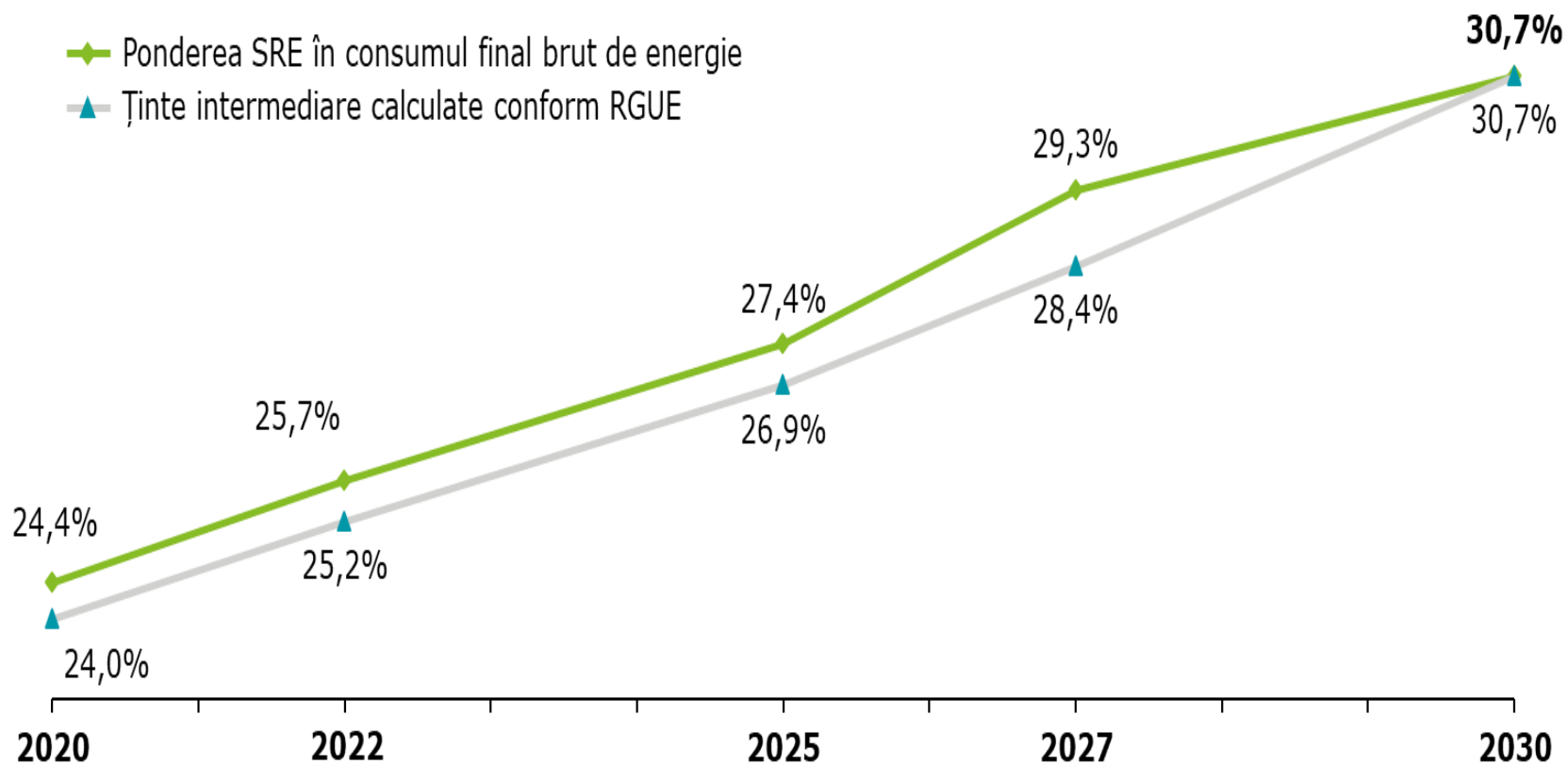
National Energy and Climate Plan (NECP) Romania Renewable energy



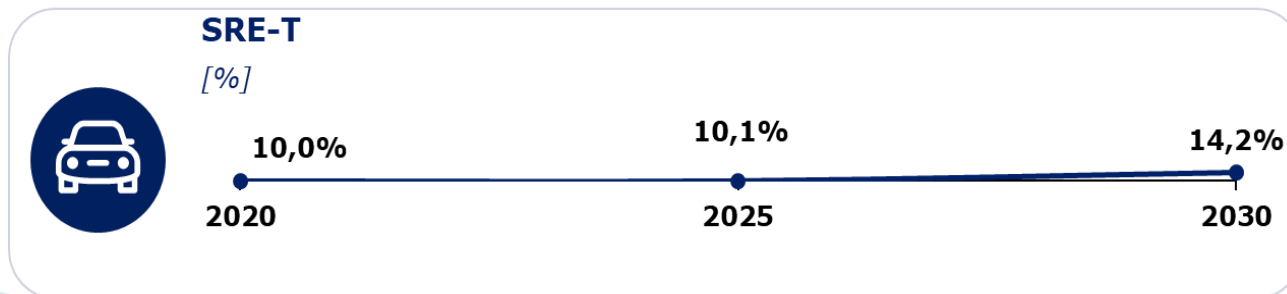
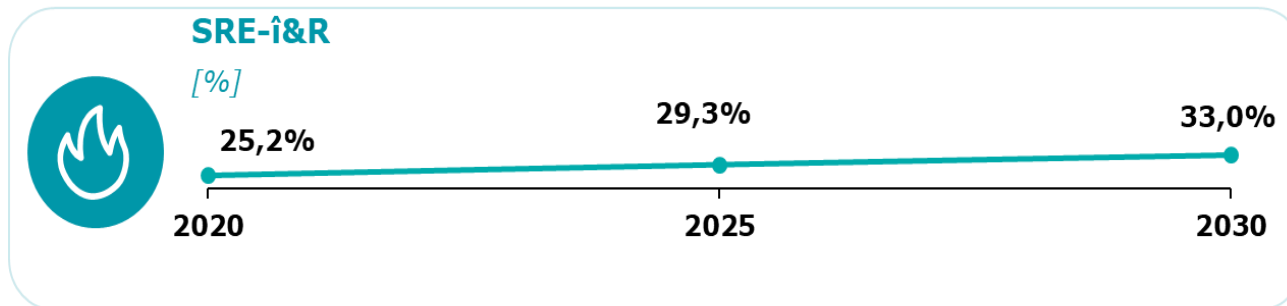
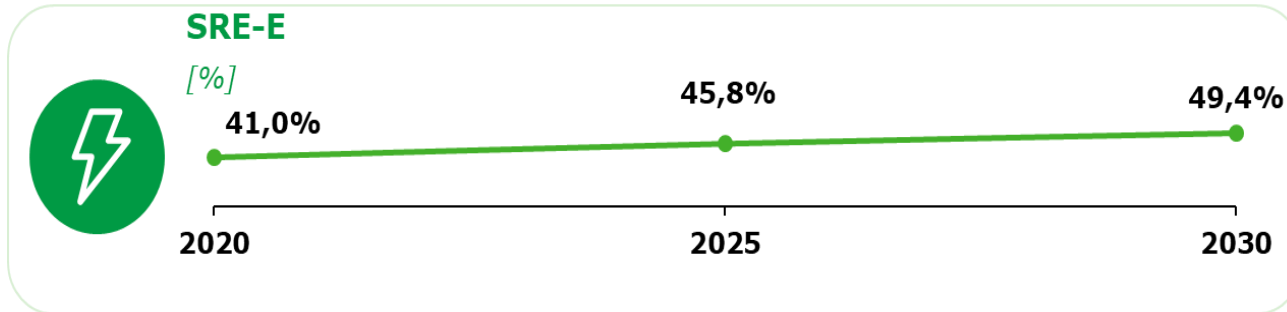
RES targets in NECP

	2020	2022	2025	2027	2030
Renewable contribution as a share of energy from renewable sources in gross final consumption of energy in 2030 and indicative trajectory	24.45%	25.72%	27.41%	29.32%	30.75%
RES - H&C share* (incl. waste heat&cold)	25.23%	27.35%	29.32%	31.30%	32.95%
RES - E share	41.02%	43.50%	45.75%	48.56%	49.39%
RES - T share	10.05%	8.92%	10.12%	12.48%	14.24%

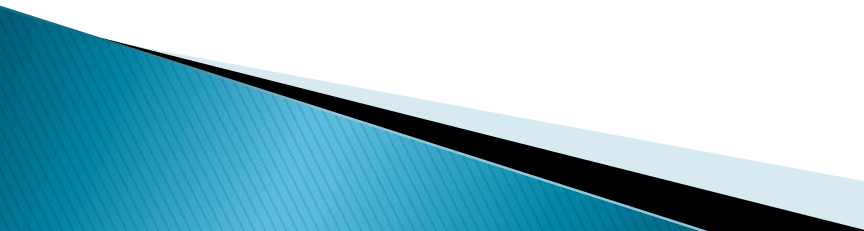
RES targets in NECP



RES targets in NECP



Main assumptions NECP for RES

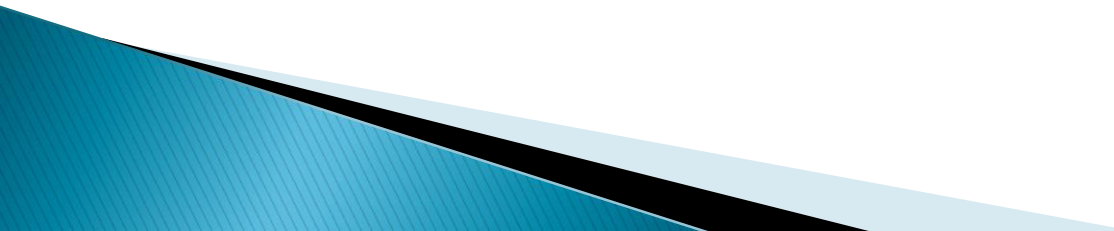
- ▶ Cost of technology will gradually decrease, making RES (especially wind turbines and solar panels) cost competitive
 - ▶ Grid parity is expected to be reached around 2025
 - ▶ The electricity consumption is expected to increase due to increase of industrial production, living standards, heat pumps and electromobility
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Key Policies and Measures

- ▶ New Renewable energy power plants by 2030:
 - Additional capacity of 3.000MW onshore wind energy
 - Additional capacity of 3.700MW solar energy
 - Repowering of the existing 3.000MW onshore wind
 - Repowering of the existing 1.300MW PV solar energy
- ▶ Implementation of a Contract for Difference state aid scheme in order to support the predictability of revenues for the investors (bid based)

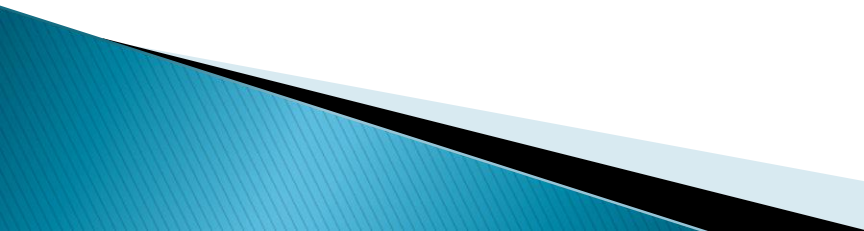
Key Policies and Measures

Offshore Wind:

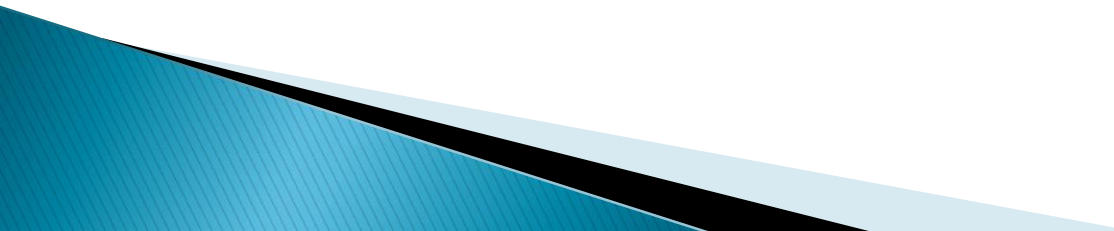
- ▶ Although now expensive, LCOE of offshore wind is expected to drop in the next years
 - ▶ Hidroelectrica plans to develop a 300 MW offshore project by 2025
 - ▶ Romania offshore potential (according to a World Bank study) is approximately 75 GW
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Key Policies and Measures

FLEXIBILITY AND RES INTEGRATION:

- ▶ Digitization of the Romanian energy system. The development of smart meters and networks will contribute to a greater integration of RES in the SEN.
 - ▶ Grid reinforcement
 - ▶ Development of electricity storage capacities to integrate RES in the SEN, given their intermittent / variable nature.
 - ▶ Extend the interconnection capacities at the horizon of 2030
 - ▶ Continue to integrate the day-ahead and intra-day electricity markets into the European Single Day-Ahead and Intra-Day Coupling power markets (SDAC and SIDC respectively)
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Key Policies and Measures

- ▶ Investment in onshore/offshore wind, solar, micro hydro and hydrogen projects by state owned energy Romanian companies;
 - ▶ Replacing several coal-fired capacities with gas-fired power plants to facilitate the energy transition, maintaining system flexibility and increasing RES integration (CE Oltenia Decarbonization Plan, Romgaz)
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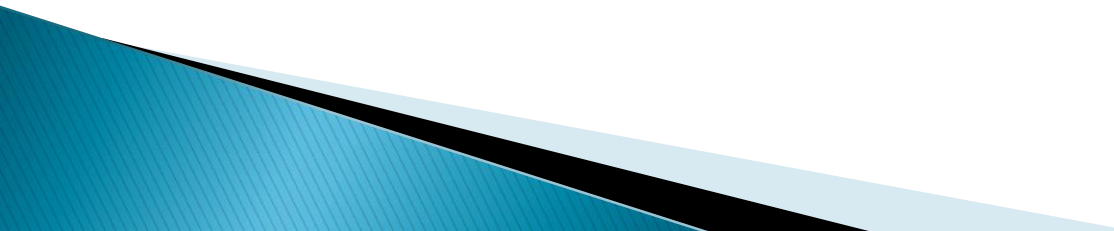
Key Policies and Measures

- ▶ Promoting electromobility in road transport (light vehicles and urban public transport)
 - Charging stations network
- ▶ Promoting the use of biofuels in transport (both continuing to use traditional ones and introducing advanced ones in road transport)
- ▶ Promoting active consumers
- ▶ Installation of solar panels and heat pumps in the public buildings/residential sector (Long-term Renovation Strategy, under approval – LTRS)

Main challenges in implementation

- ▶ The link between the power, heating and transport energy sectors (Power to X) requires a more complex supportive policy framework for a more integrated energy system
- ▶ A close collaboration of relevant ministries and national agencies and authorities is necessary in order to promote well coordinated policies
- ▶ We have forecasted prices for technologies that today are not market ready
- ▶ A number of national strategic documents are still in the process of being developed
- ▶ Strengthen the administrative capacity of government and local authorities to access all the financial instruments for RES investments
- ▶ European funding, including for technical assistance, is critical for the implementation of the NECP

Immediate goals

- ▶ The successful implementation of the Clean energy for all Europeans package in the national legislation, so that the Romanian energy landscape is attractive for clean energy investments;
 - ▶ Elaborating state support schemes for clean energy investments, e.g. Contracts for Difference;
 - ▶ Successfully use all the financial instruments that are available at EU level and obtain adequate national finance allocations that are able to ensure the achievement of the energy transition objectives;
 - ▶ Strengthen the Romanian administrative capacity in order to achieve all the above objectives.
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THANK YOU FOR YOUR ATTENTION

