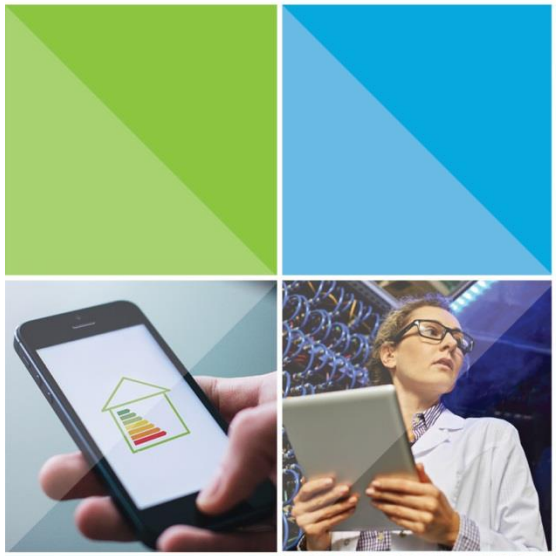




Romania
final national energy and climate plan

Elena Popescu – Director Energy Policies, Transition and Renewables, Acting General Director for European Affairs
Ministry of Economy, Energy and Business Environment

Decarbonisation (GHG)

	2018 *	2030	UNITS
National 2030 target for non-ETS GHG emissions covered under the Effort Sharing Regulation compared to 2005		-2	%
(Estimated) Cumulative annual national ESR limits 2021-30		N/A	
LULUCF commitments for 2021-25 and 2026 to 2030**		-24 068.2	kt CO_2 eq.
Other key national total GHG objective or sector target or adaptation goal, if available			

**based on draft Forest Reference Level for the first commitment period 2021-2025

How did you take into account Commission recommendations on decarbonisation - GHG emissions ? (where applicable)

- Draft FRL under public consultation
- LULUCF Romanian legal, institutional and procedural framework enabled in August 2019, first results expected in late 2020
- Coal to gas and RES switch to be completed by 2030/2035 to significantly reduce GHG/Nox, SO2 emissions in energy sector

*What is the national 2050 ambition of the **national long term strategy** (total GHG incl. LULUCF; RES; EE)?*

Long Term Strategy to follow after NECP approval

**** Or latest information available***

European Commission

Decarbonisation (Renewable energy)

	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 - T share as contribution to overall target					

** Please specify if waste heat & cold is taken into account*

How did you take into account Commission recommendations on decarbonisation - Renewable energy?

- Increased level of ambition for overall RES share to 30.7%
- Additional 7,028 MW of RES-E (onshore wind/large scale and rooftop PVs) installed capacity by 2030
- Deployment of alternative fuels and advanced biofuels; increased electrification in transport sector
- Promoting active consumers, installation of solar panels and heat pumps in the public buildings/residential sector (Long-term Renovation Strategy, under approval - LTRS)

Energy efficiency

	2018	2030	UNITS
National contribution for energy efficiency: - Primary energy consumption in 2030 - Final energy consumption in 2030	32.5 23.5	32.3 25.7	Mtoe Mtoe
Cumulative amount of energy savings to be achieved over the period 2021-2030 under Article 7(1)(b) on energy saving obligations of Directive 2012/27/EU		10.12	Mtoe
Contribution to the energy efficiency target of the long-term strategy for the renovation of the national building stock (if available)	N/A	3.4**	Mtoe

**Cumulative amount of energy savings to be achieved over the period 2021-2030

How did you take into account Commission recommendations on energy efficiency?

- LTRS under debate: provisions for renovation of existing building stock, moving towards the "near-zero" standard – necessary amount of EURO 12.8 billion
- Continue Policies & measures established in the National Energy Efficiency Action Plan IV
- Fiscal measures and financial incentives for promoting energy efficiency investments (e.g. National Energy Efficiency Fund)

*How did you take into account the **energy efficiency first** principle?*

- Prioritize RES-E investments over conventional sources, smart grids to cut grid losses
- High efficiency cogeneration combined with future RES prospects in DH & industrial steam consumption

Interconnections / market integration

	2018	2030	UNITS
Level of electricity interconnectivity by 2030	>7	15.4	%
The cross border wholesale price differential: yearly average of absolute hourly price differentials of €/MWh (BG-RO)	**13.1**	**2**	**EUR/MWh**
The electricity demand and possible import need: nominal transmission capacity / peak load 2030	**1.4/9.802**	**3.5/…**	**GW/MWh**
The electricity supply and the export potential: nominal transmission capacity / installed renewable generation capacity 2030* (incl. large hydro)	**1.4/…**	**3.5/18.039***	**GW/MWh**

How did you take into account Commission recommendations on internal energy market? (where applicable)

- Full market liberalization (both electricity and natural gas) by 2021
- Pursue SDAC and SIDC market coupling within the European energy market
- Fully establish the legal status of "vulnerable consumers" by the end of 2020
- Initiate primary and secondary legislation proposals to harmonize the national gas and electricity legislation with Regulation 2019/943 and Directive 2019/944

Security of supply

- *National objectives with regards to security of supply:*
  - *Increasing installed capacity by 35% by 2030, reducing import dependency to 17.8% by 2030*
  - *Building at least one nuclear power plant at Cernavodă by 2030 and refurbishment of Unit 1*
  - *Decarbonisation Plan for CEOltenia by transfer from coal to gas and RES, to facilitate the energy transition, maintaining system flexibility and increasing RES integration*
  - *Promoting demand response and energy storage capacities, system integration for electricity, natural gas, heating & cooling, supported by the digitization process*
  - *Upgrading and optimizing the infrastructure in order to take over new energy carriers such as Hydrogen and renewables gases*

- *How did you take into account Commission recommendations on energy security? (where applicable)?*
  - *Defined priority infrastructure projects in terms of gas and electricity transmission, including interconnections*
  - *Draft legislation proposal for promoting investment in the Black Sea, for the modification of Law no. 256/2018 and the Petroleum Law no. 238/2004*
  - *Provided more details on the strategy to ensure the long-term supply of nuclear materials and fuel in view of the enlargement of the nuclear generation capacity and more information concerning the strategy to maintain our domestic capabilities in the fuel cycle*
  - *Promoting high-efficiency cogeneration*
  - *Measures for risk management and prevention, including cybersecurity*

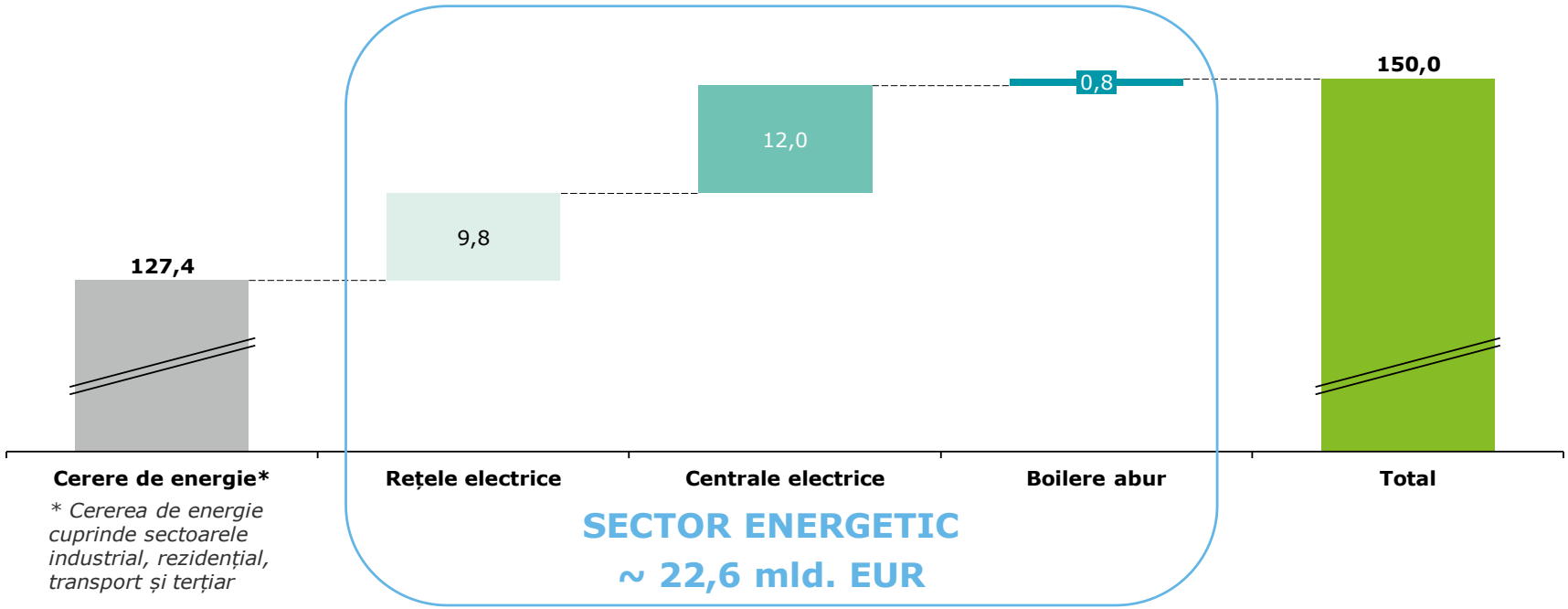
Investment needs

- *22.6bn EUR estimated for the energy sector during the 2021 – 2030*
- *12.8bn EUR estimated for implementation of LTRS*
- *Provided a general assessment of sources of finance, considering the coherence with the new MFF 2021 – 2027*
- *Provided information on specific projects aiming to ensure transition from coal to gas and RES*

Just transition (including energy poverty)

- *Romania will face significant challenges in the energy transition, especially in regards to the reconversion of mono-industrial and carbon intensive regions*
- *Valea Jiului was included in the European Platform for Coal Regions in Transition, and a transition strategy is being developed*
- *State assistance for other such regions in Romania, including the Oltenia region, where is located the major coal electricity generator*
- *Union support, e.g. from Just Transition Fund, will be especially important in overcoming energy transition challenges. Support needed for coal companies, even in difficulty, to ensure transition to gas and RES and sites' regeneration and decontamination*
- *Energy poverty: inter-ministerial working group on the issue of vulnerable consumers to make necessary legislative changes and establish a course of action in this regard*

Cumulative necessary investments between 2021 - 2030 to achieve the proposed objectives (WAM)



The priority investment programme

Priority investments – the needed investments on the whole energy chain to fulfil the national objectives on energy and climate change:

1. Investments in low carbon technologies in generation sector, by transfers from coal to gas and RES;

2. Increase RES by using the Romanian potential in on-shore wind and solar but also in off-shore wind

- *Aditional capacity of of 3.000MW onshore wind energy*
- *Aditional capacity of 3.700MW solar energy*
- *Repowering of the existing 3.000MW onshore wind*
- *Repowering of the existing 1.300MW PV solar energy*

3. The increase of nuclear units – LTO of Unit 1 and finalization of Unit 3 and 4 at Cernavoda NPP

4. Investments in modernisation of gas and electricity grids by introducing of digitalisation and smart grids – the essential measures for supporting energy sector integration and energy transition

5. Investments in interconnections with our neighbours, both on gas and electricity

6. Storage capacities, considering the hydrogen and new gaseous potential in energy system integration process.

Key Policies and Measures

1. ***Flexibility and res integration***
   - *Grid reinforcement*
   - *Development of electricity storage capacities*
   - *Extend the interconnection capacities at the horizon of 2030*
   - *Investment in onshore/offshore wind*

2. ***New investment plans in clean energy production of the romanian state – owned energy companies*** *(Hidroelectrica, Romgaz, CEO and SNN)*

3. ***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 (transposition of Directives and CfD);*

4. ***Successfully use of all 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*

Planned next steps

CONCRETE NEXT STEPS IN IMPLEMENTATION, INCLUDING:

- *Key new policies & measures*
- *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*
- *Regional cooperation*
- *Synergies between NECP and the European Green Deal.*

MAIN CHALLENGES IN IMPLEMENTATION

- Due to the complexity of the plan, a close collaboration of relevant ministries and national agencies and authorities is necessary
- National strategic documents are still in the process of being developed
- European funding, including for technical assistance, is critical for a good implementation of the plan
- A border carbon adjustment will be needed. Romania has border with many non-EU countries and cheap electricity imports from these regions, which have no obligation regarding the EU-ETS scheme, may jeopardise NECP implementation
- NECP will be updated also when others strategies which are still under elaboration or debate (long term buildings renovation strategy, long term climate strategy, national strategy for intelligent specialisation etc) will be finalised

THANK YOU FOR YOUR ATTENTION!

European Commission