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South-East Europe Electricity Roadmap

RES-E policy and planning in Romania

Romania's RES evolution
up to 2030

1. Present RES-E support scheme

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Is RO on the path to reach its 2020 RES-E target?

- Romania has already achieved its 2020 RES target of 24% of total energy demand

Key barriers and success factors

- ***Success factors***:
  - generous cap-and-trade support scheme based on green certificates (GC), introduced per Law 220/2008 (in operation since Nov 2011)
  - sizeable share of hydropower; biomass in rural areas

1. Present RES-E support scheme

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Barriers:

- Multiple changes in the support scheme, to curb costs:
  - Reduction in GCs per MWh generated, because of identified risk of overcompensation for wind, solar, hydro accredited after Dec 2013
  - Some GCs not tradable between July 2013 and March 2017
  - Reduction in quota for suppliers from 2014
  - Payment capped by notified electricity quantities, after July 2013
  - Shortened validity of GC, reduced from 16 to 12 months
  - Reduction in purchasing obligation for energy intensive users, which has transferred the cost obligation on the other consumers

No new projects are eligible under this scheme after December 31, 2016

2. Impact of 2014 State Aid Guidelines on RES-E support

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- How does RO plan to fulfil the requirements of the State Aid Guidelines with relation to RES-E?
  - Competitive support allocation
  - New marketing rules
- Have your country started tendering RES-E support for certain technologies?
  - No E-RES support scheme in place as of January 1, 2017
- If not, do you plan to do so?
  - Currently, a Biomass Law in the making – relevant for biomass-fuelled power generation and cogeneration.
- What are the main rules of tendering?
  - Feed-in premiums envisaged for capacities under 500 KW

3. Long term energy/electricity vision of your country

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- Do you have official long term energy plans?

The Romanian Energy Strategy 2016-2030, with an Outlook to 2050

- published in December 2016
- to undergo SEA procedure (at least six more months)
- likely to be assumed by the Government through Gov. Ordinance

- Regularly updated?
  - To be updated at least every five years
- Main characteristics? (modelling tool used and sectoral coverage):
  - PRIMES/GEM-E3 + qualitative analysis – every energy sector + transports + agriculture + buildings; macroeconomic analysis

3. Long term energy/electricity vision of your country

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What are the main assumptions regarding:

- Electricity demand
- Technology deployment
- Carbon pricing

Electricity production in 2015

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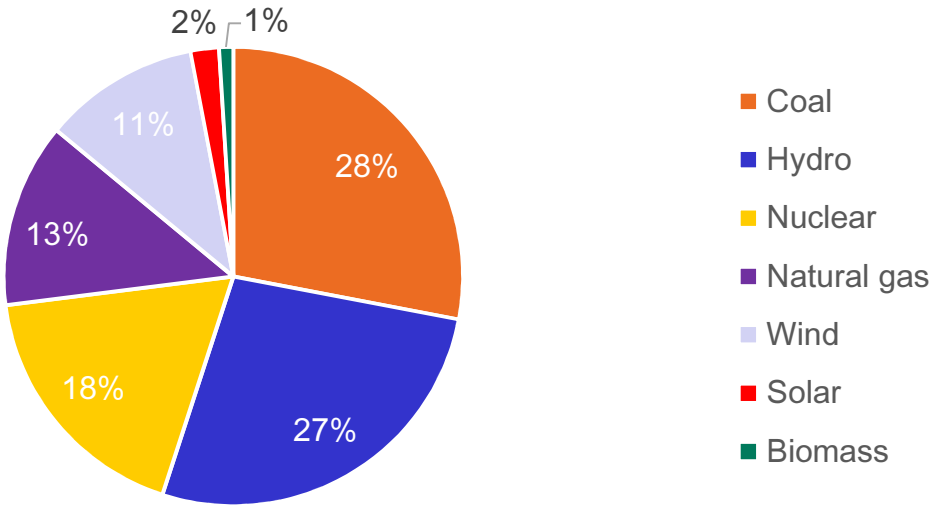

RES-E: 42%

No emissions: 60%

Low CO_2 emissions: 75%

Installed capacity: Wind – 3000 MW; Solar – 1300 MW

Total primary energy demand 2030, 2050

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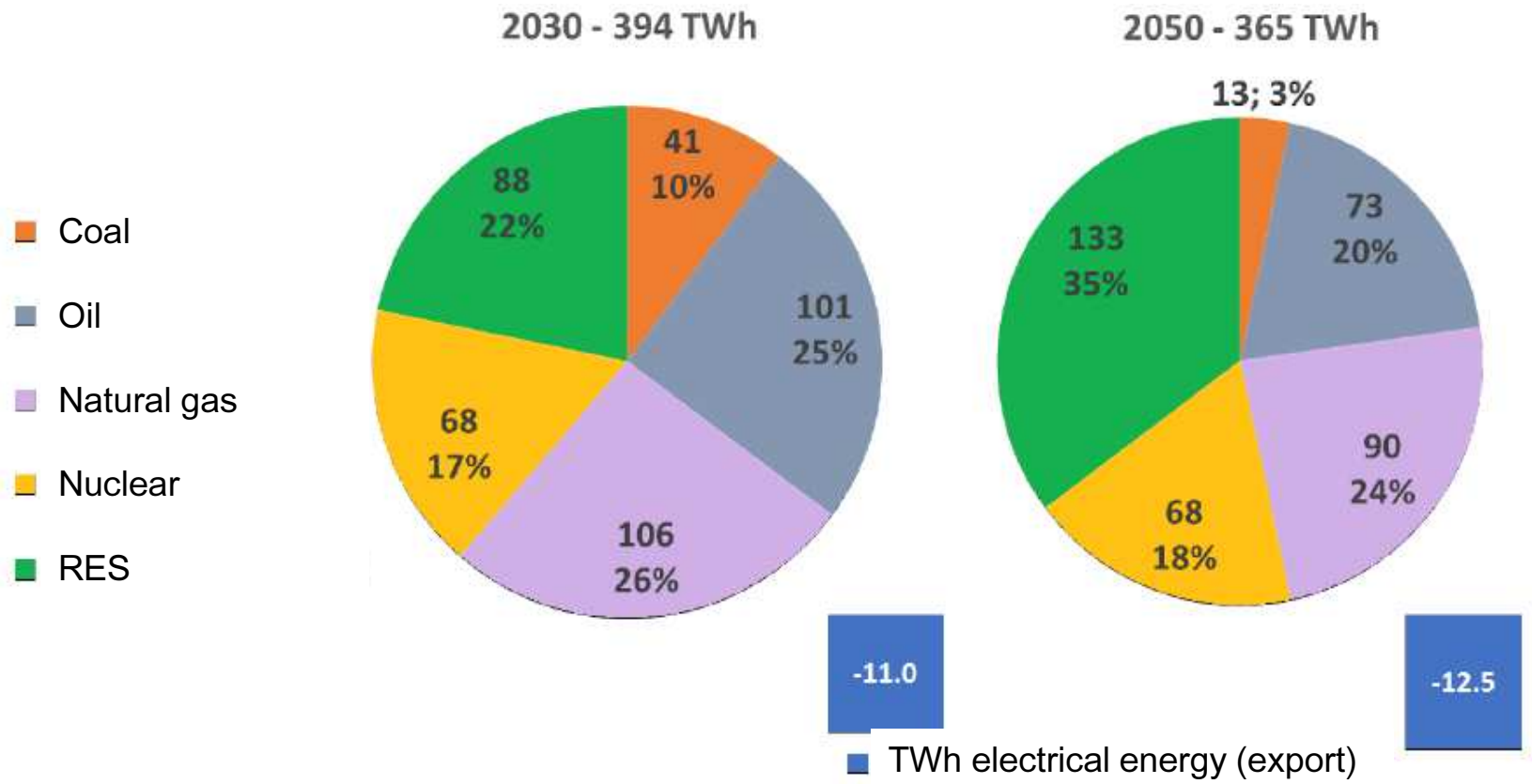

Source: PRIMES

Primary energy production 2015-30-50

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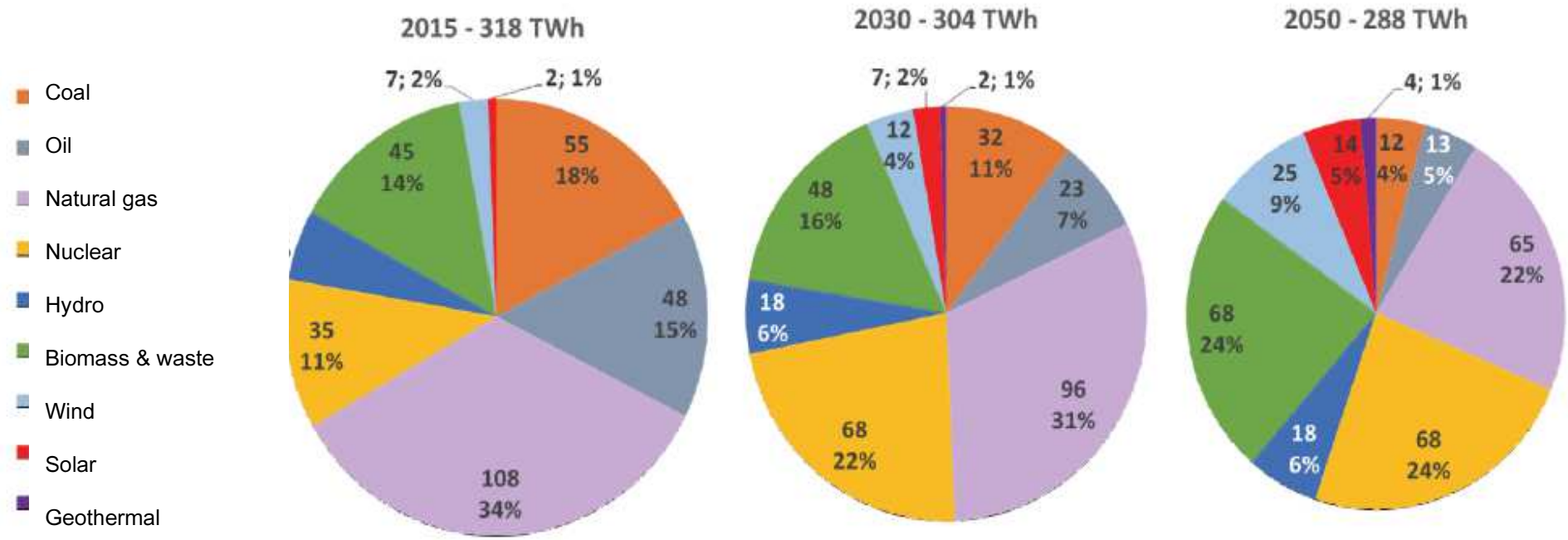

Source: PRIMES

Final electricity price (incl. tariffs and taxes)

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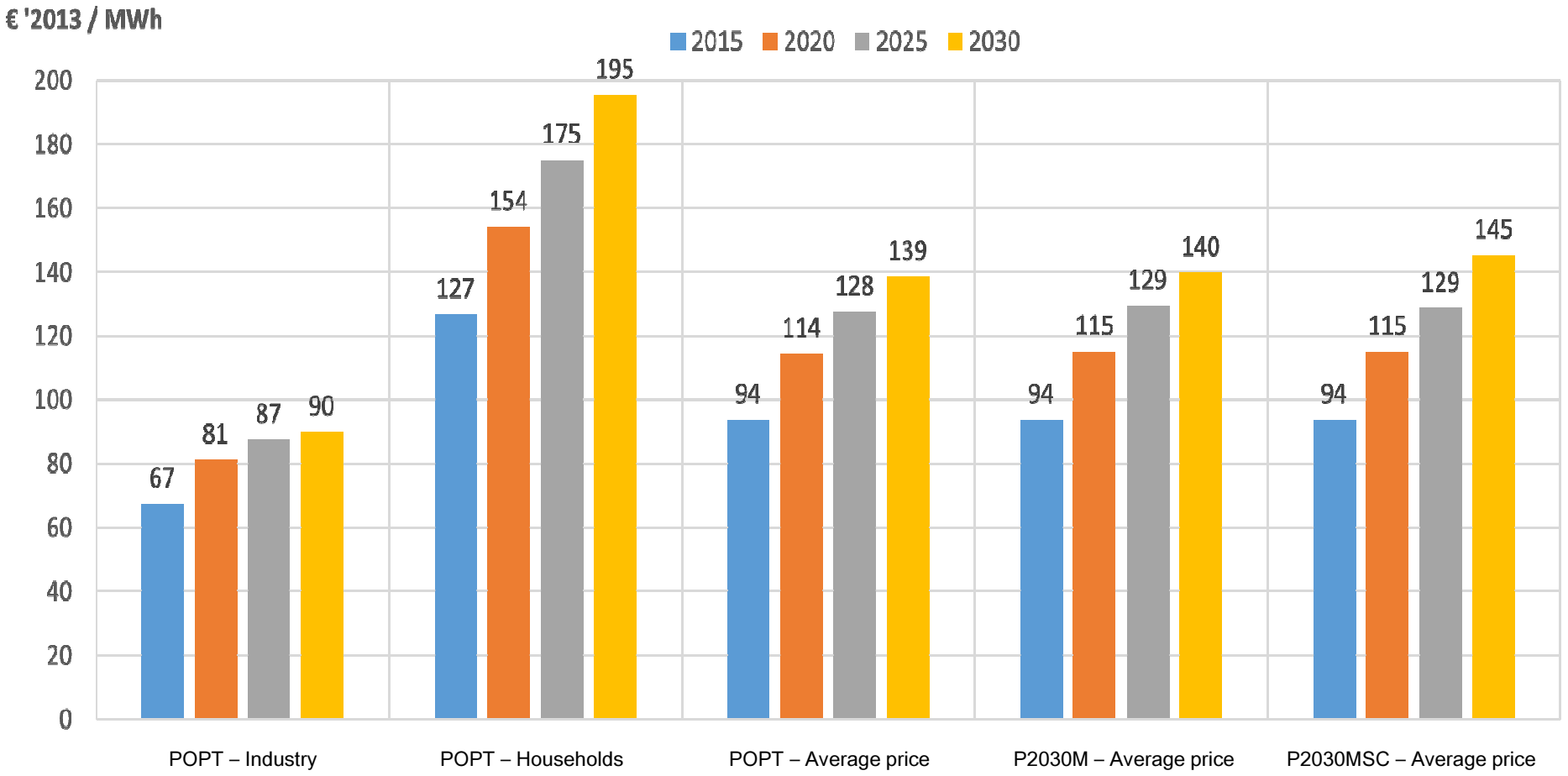

EU ETS price, 2020-2035 (PRIMES)

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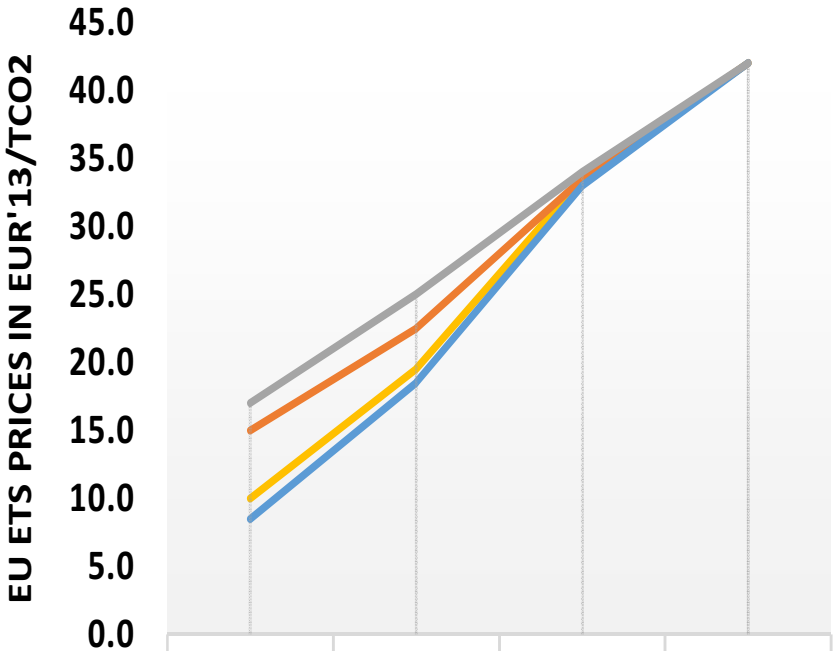
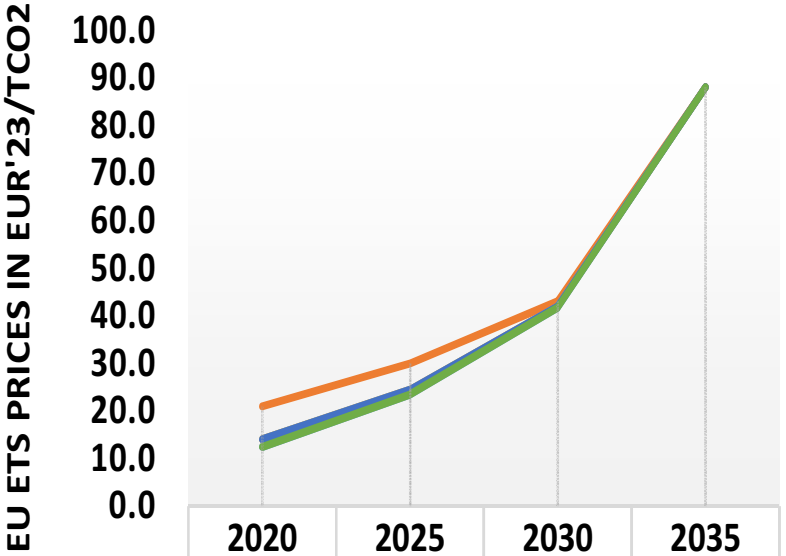


	2020	2025	2030	2035
RM	10.0	19.5	33.5	42.0
RMa	15.0	22.5	33.5	42.0
Rlow	8.5	18.5	33.0	42.0
Rhigh	17.0	25.0	34.0	42.0



	2020	2025	2030	2035
P2030M	14.0	24.5	42.0	88.0
P2030Low	12.5	23.5	41.7	88.0
P2030High	21.0	30.0	43.0	88.0
POPT	14.0	24.5	42.0	88.0
P3050M	14.0	24.5	42.0	88.0
P3050Low	12.5	23.5	41.7	88.0

Structure of electricity production 2015, 2030

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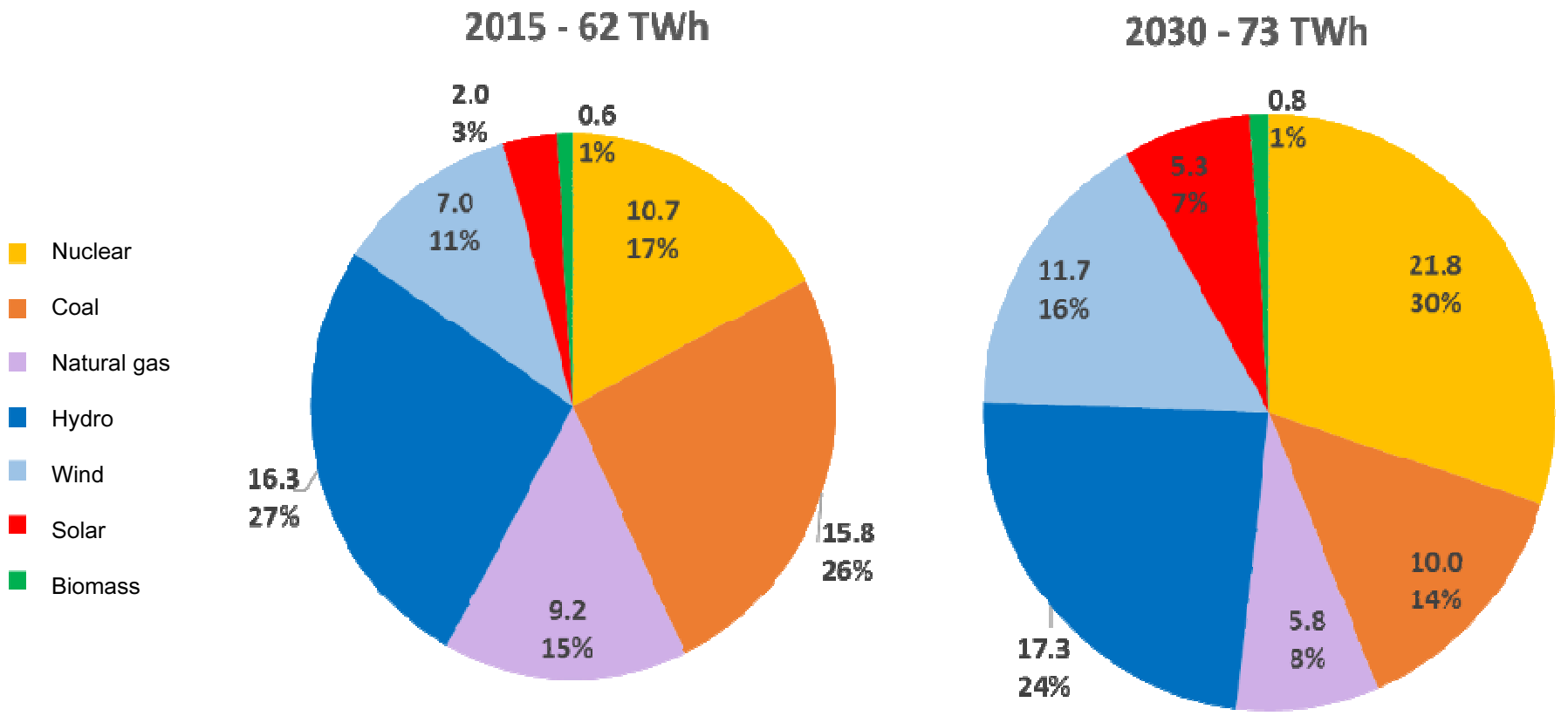

Wind and solar capacity, 2030-2050

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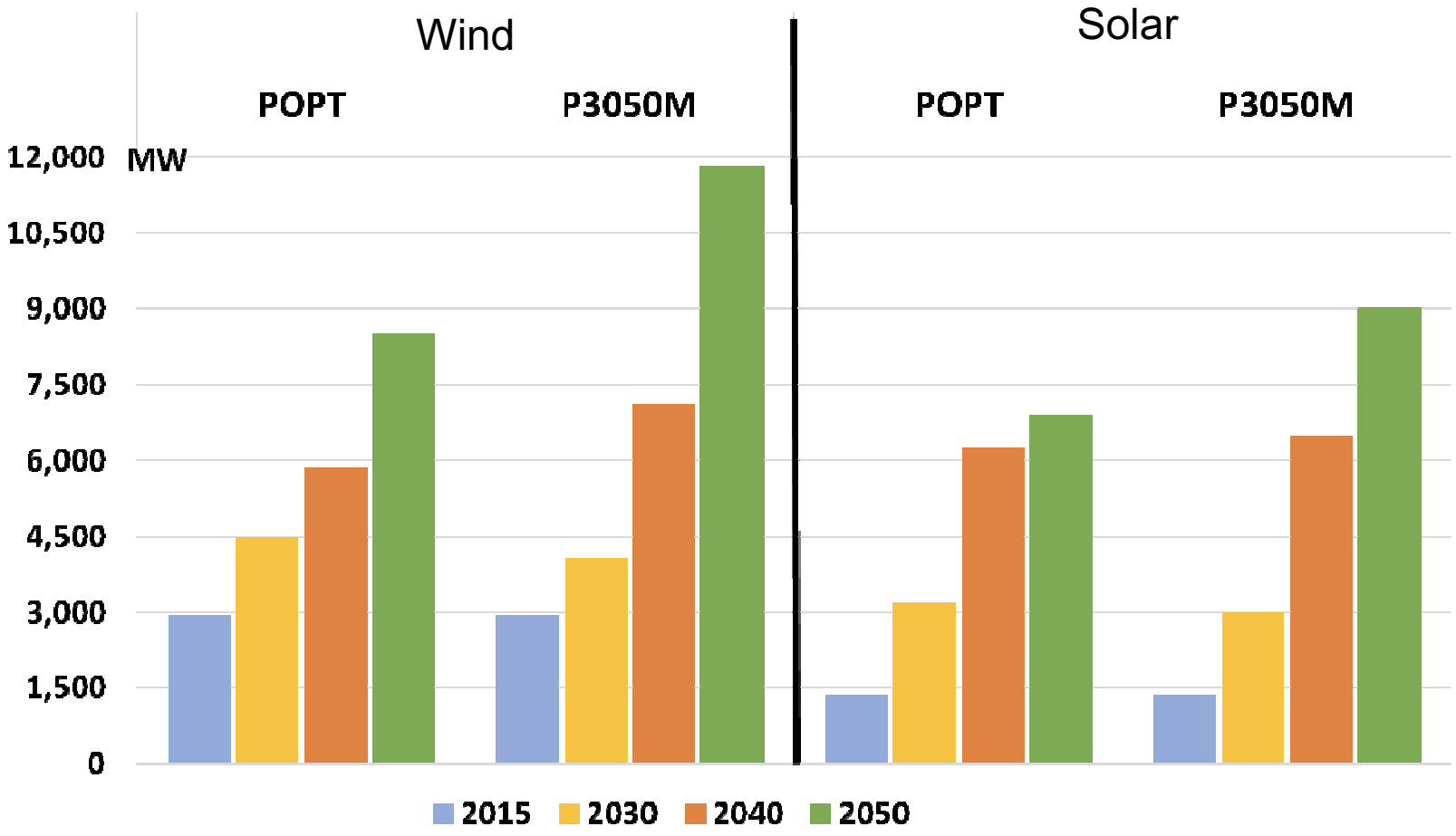

Decarbonization targets

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Indicator	unit	2015	2020	2030	2050
RES	%	26.3	24	27	47
RES-E	%	43.7	44	55	78
RES-T	%	4.6	10	13	60
Energy intensity	toe/mil $€_{2013}$	218	190	155	105
Energy intensity – electricity and heat	gCO_2/kWh	319	300	170	50

Thank you for your attention!

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