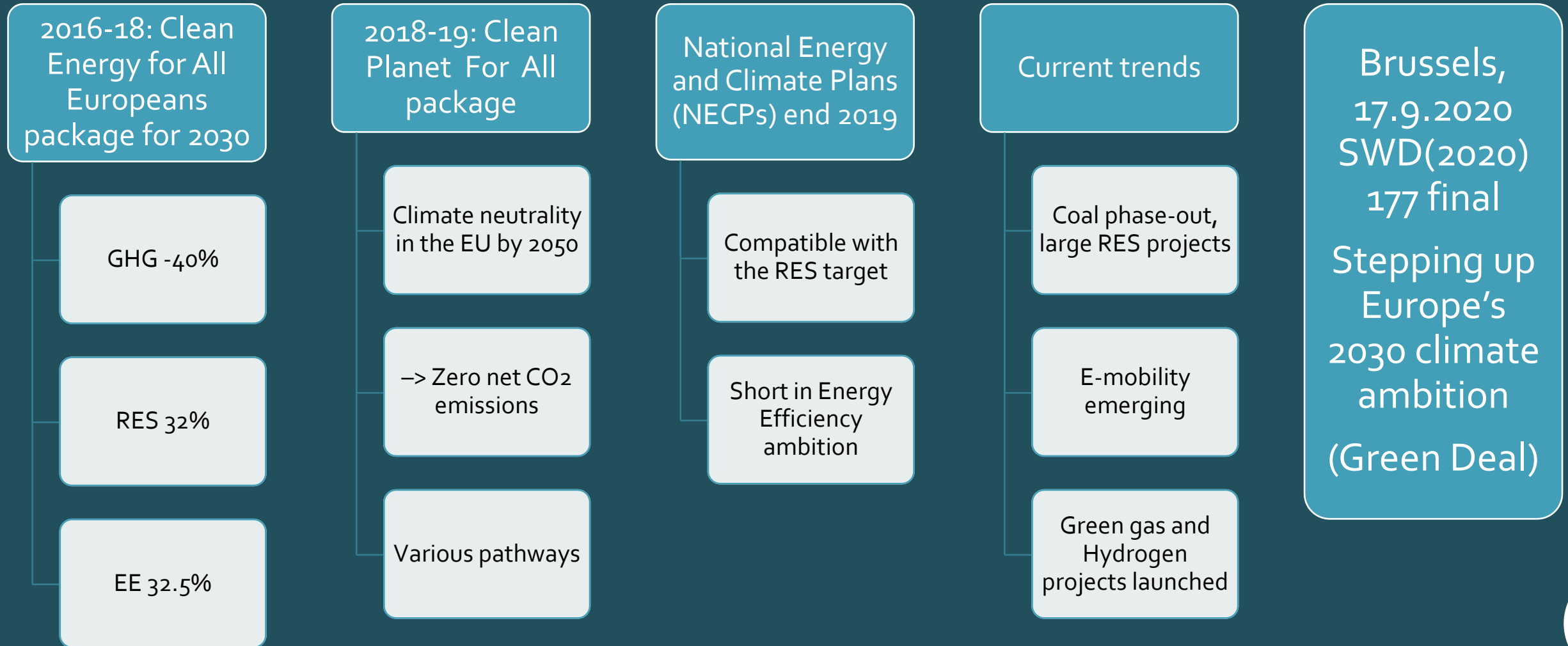


*Few thoughts
about key
energy policy
issues for
Greece*



*Pantelis CAPROS, E3Modelling, Professor at NTUA
Workshop IENE, 25 November 2020*

Impressive legislative initiatives in the EU



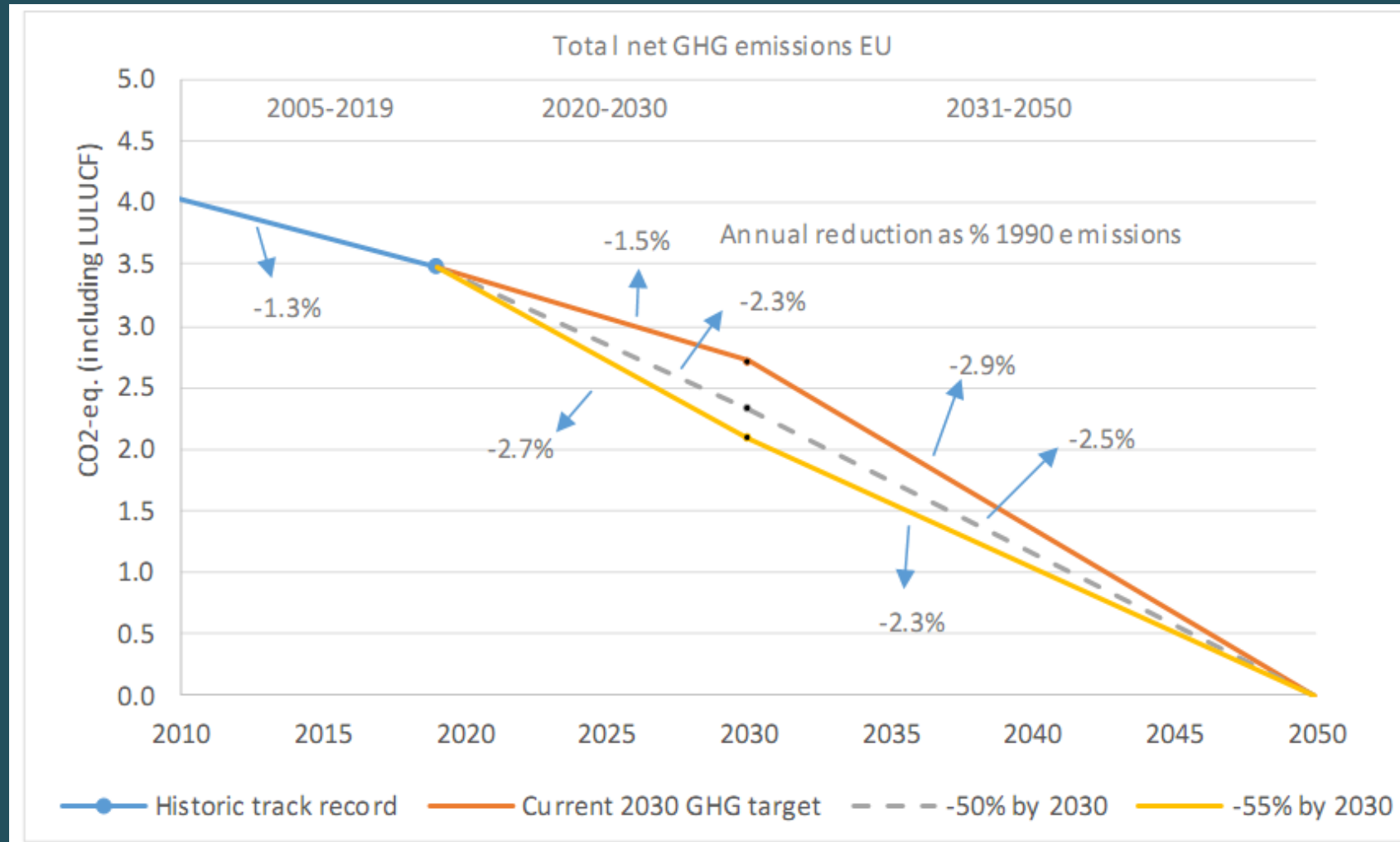
Stepping up Europe's 2030 climate ambition

The -40% GHG in 2030 is insufficient for climate neutrality by 2050

A -55% GHG in 2030 is recommended (-50% also assessed)

Four instruments

1. ETS - scope and MSR
2. Renewables
3. Energy Efficiency
4. Transport sector policy



Stepping up Europe's 2030 climate ambition

Implications for the NECP of Greece

The NECP of Greece must be revised and include significantly higher ambition for renewables in all sectors

Integration of RES in electricity up to 85% is a challenge

Natural gas consumption to decline, but storage, bio-energy and hydrogen to emerge

The increased ambition is affordable also for Greece

Scenarios	BSL	REG	MIX	CPRICE	ALLBNK
GHG in 2030	-41.8	-51%	-51.4%	-48%	-53%
RES-share overall	35.7%	48.2%	48.4%	48.0%	50.4%
RES H&C	38.8%	52.2%	49.9%	49.6%	53.8%
RES-E	62%	83%	87%	86%	88%
RES-T	15%	31%	28%	25%	33%
Final energy (Mtoe in 2030)	15.3	14.3	14.5	14.4	14.2
Power generation from RES (GWh in 2030)	44.7	59.1	61.9	61.9	62.9
Avg. electricity price (EUR/MWh)	130	129	129.5	122	129.4

Greece: Impressive progress but considerable uncertainties remain

– Challenge: resolve inefficiencies and secure investment

Great Progress

National Energy and Climate Plan – 2030 and long-term plan until 2050

- Coal phase-out
- New business orientation of PPC
- Renewables business prospects
- Target model
- Interconnection of islands
- Gas market liquidity
- New Energy Efficiency program for buildings
- Intention to further privatise

Inefficiencies

- RES out-of-market support
- Too much state intervention
- Too much regulation
- High costs and inert prices

Major uncertainties

- Investors wait to see state support – few pure merchant investment
- RES investment
- New CCGTs
- Full market coupling
- Distribution system investment
- FSRUs
- RES-Gas and Gas of non biological origin
- Biofuels