



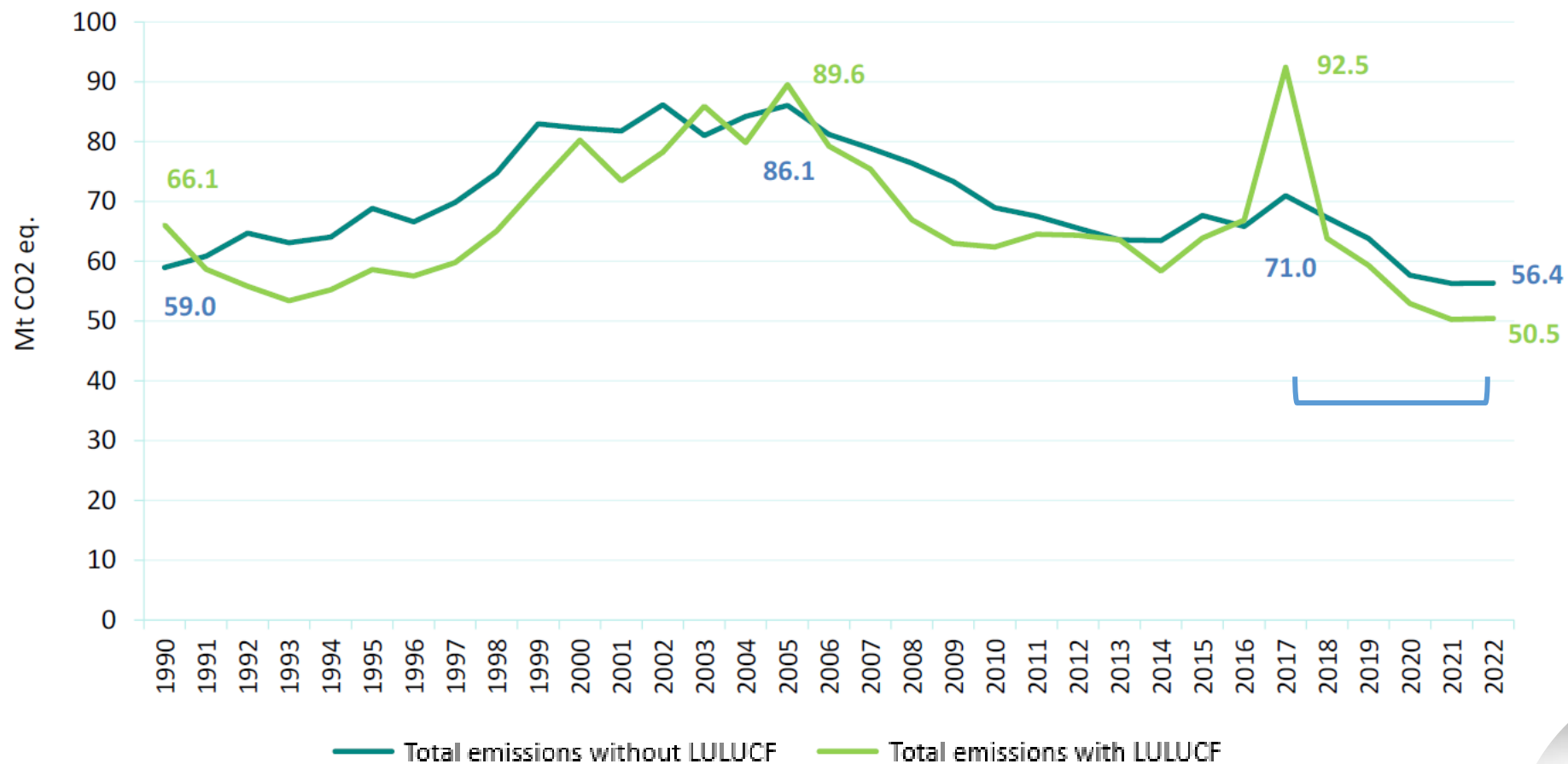
Multilateral Assessment

8th National Communication and 5th Biennial Report of Portugal

Paulo Lourenço
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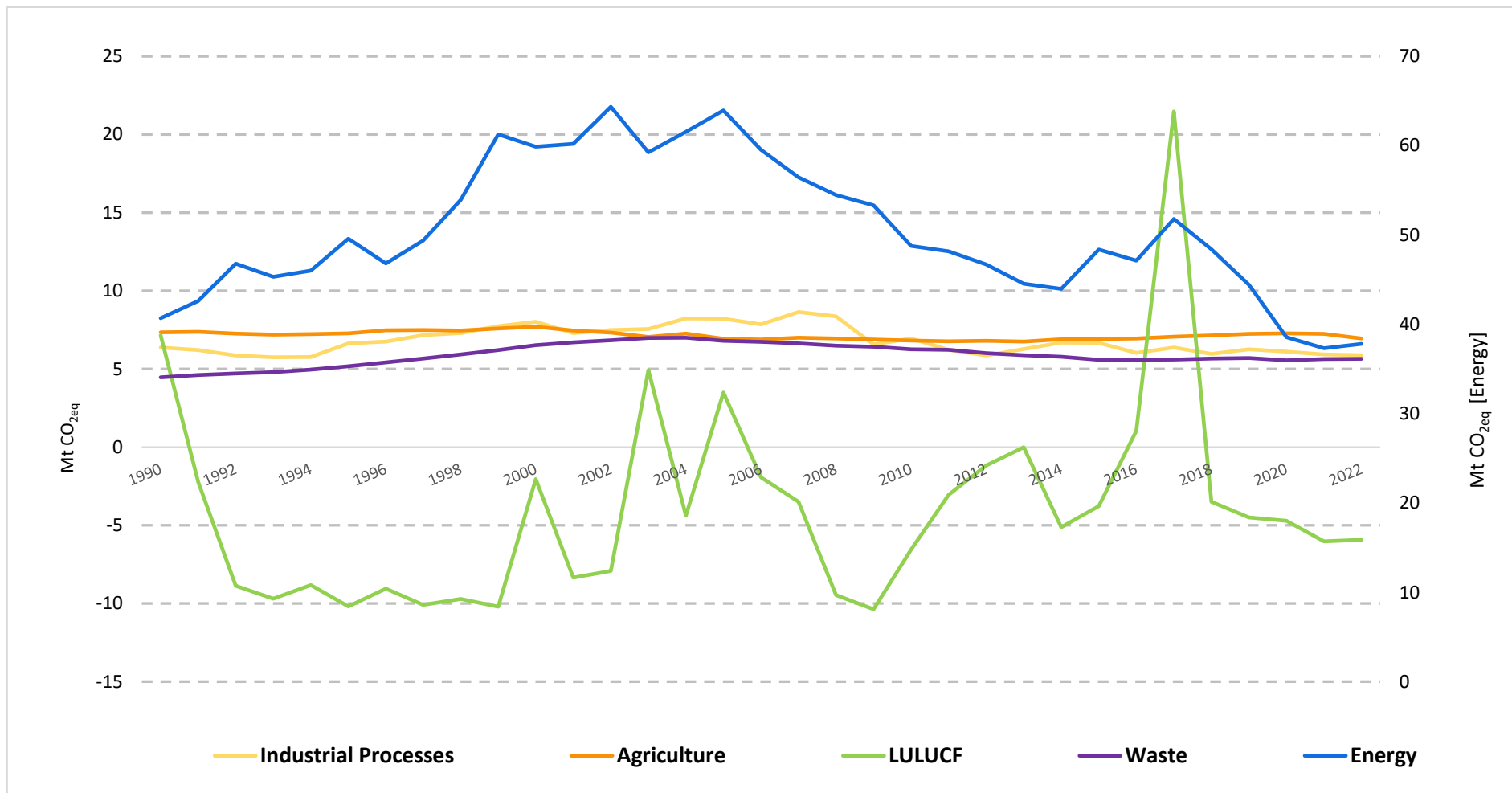
Portugal national GHG emissions



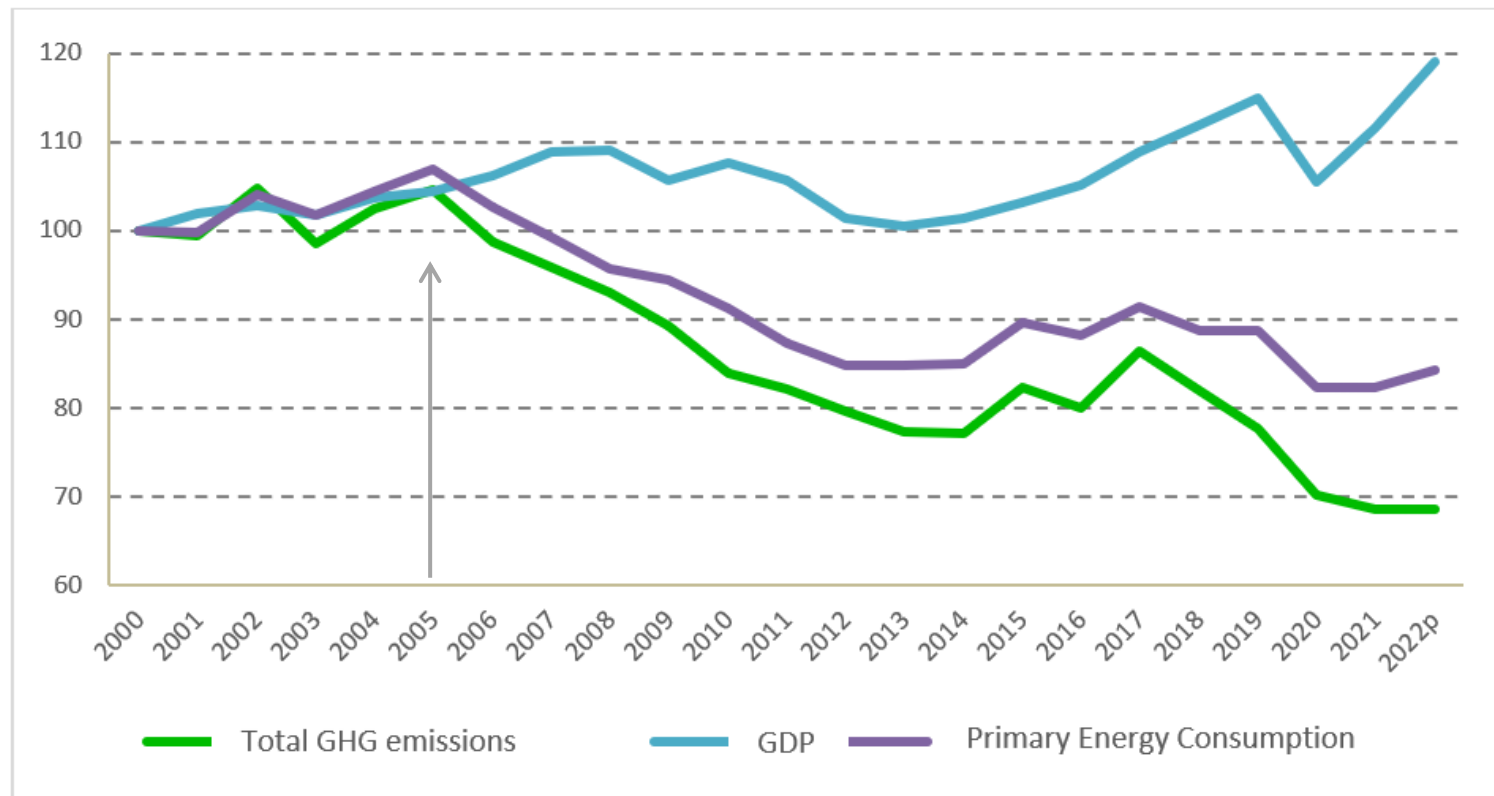
Sectors	2022	Reduction (baseline 1990)	Reduction (baseline 2005)
Total without LULUCF (Mt CO ₂ e)	56.4	4.4%	34.8%
Total with LULUCF (Mt CO ₂ e)	50.4	23.6%	43.7%



Portugal national GHG emissions – by sector



Evolution of GHG emissions/GDP



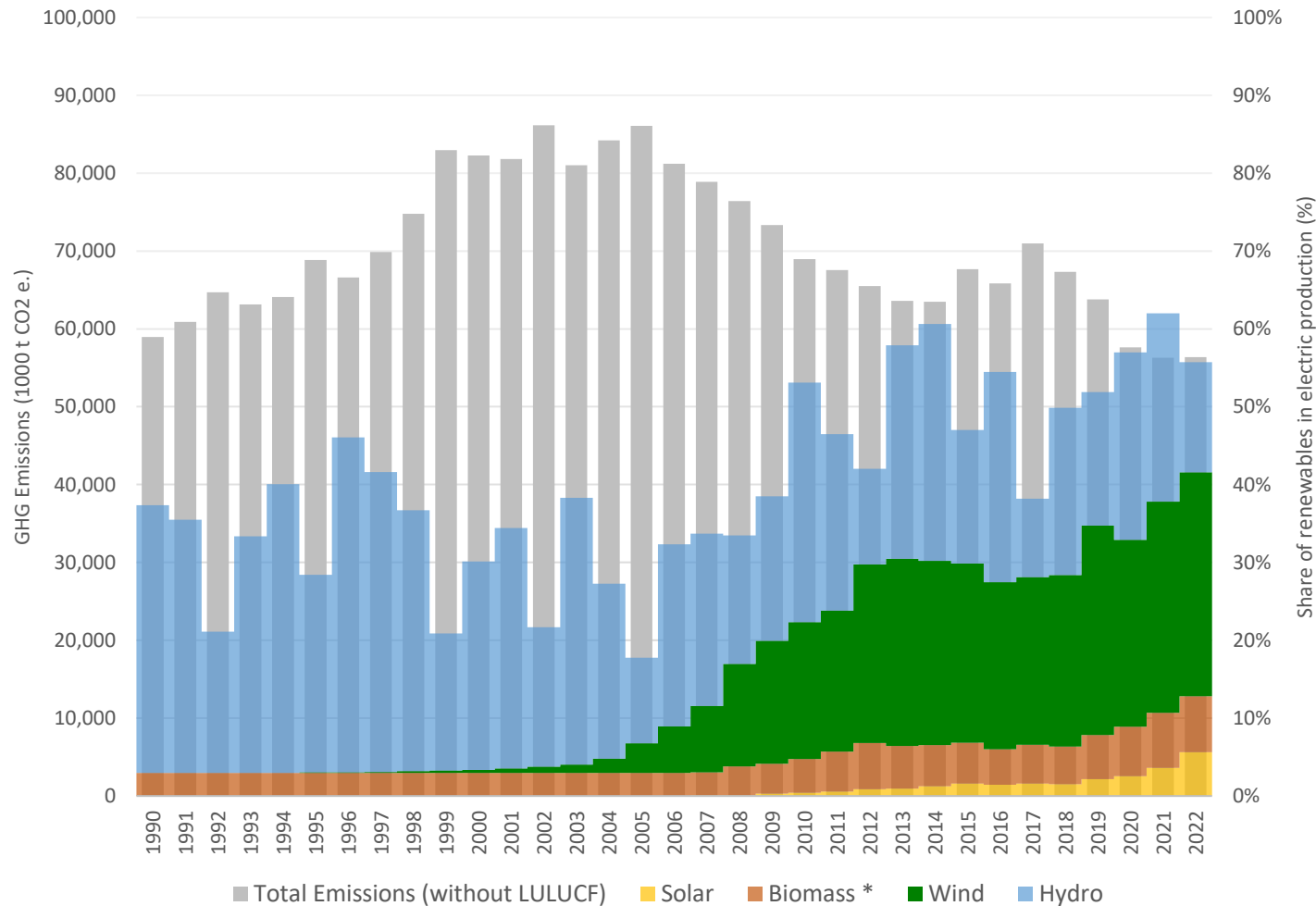
Several factors contributed to this progress:

- Significant growth in energy produced from **renewable energy sources**.
- Implementation of **energy efficiency** measures.
- **Closure of coal-fired power plants**.

The carbon intensity of emissions in 2022 decreased approx. 40% compared to 2005 (0.27 kt CO₂e/M€)



Total GHG emissions and renewables capacity trend



Biomass * - includes vegetable/forest waste, sulphite liquors, biogas and urban solid waste (renewable part)

Growth of renewable energy sources

Share of renewables in electricity production:

- 1990 – 37%
- 2005 – 18%
- 2022 – 56%

The investment in **wind energy** allowed a lower dependence of renewables on dry hydrological years.

In 2017, despite the low precipitation, the share of electricity production from renewable sources was 39%.



14%



29%



7%



6%



Quantified economy-wide 2020 emission reduction target

Pledge under the Convention for EU and its Member States:

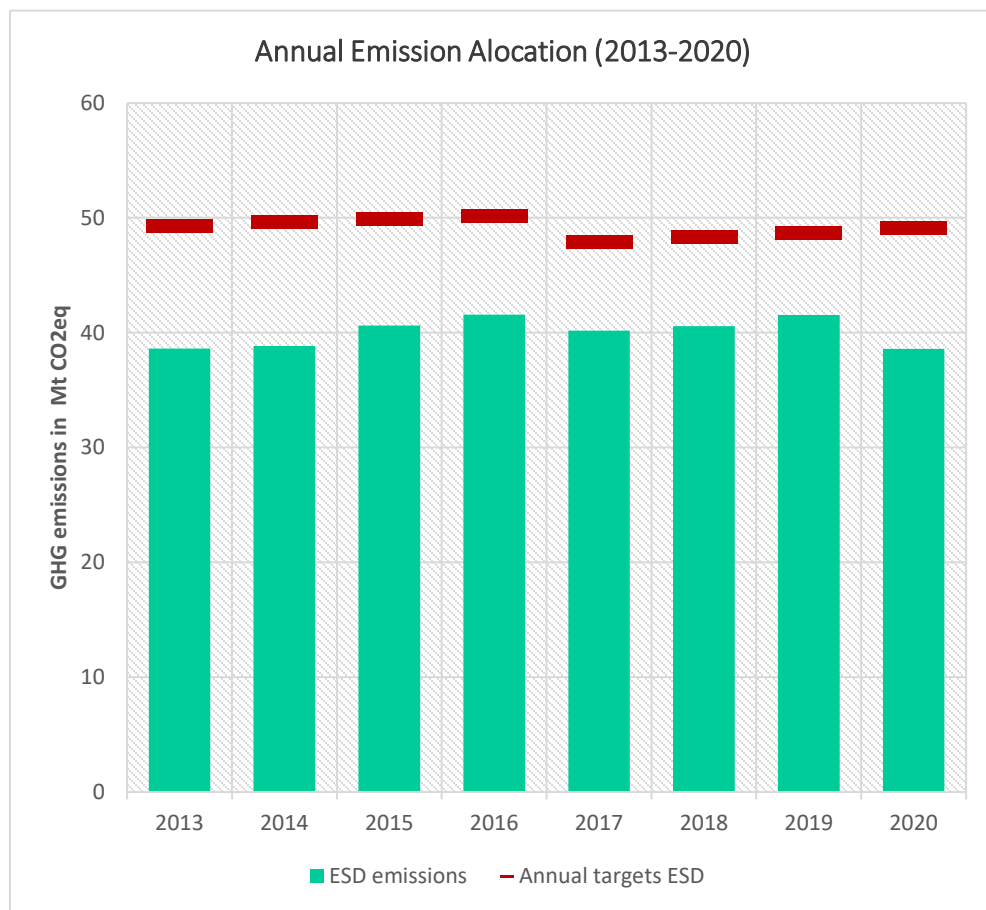
- Unconditional quantified economy wide emission reduction target of 20% by 2020 (vs 1990 levels)

Binding commitment under the Kyoto Protocol

- CP2: joint fulfilment of the commitments of the EU, its Member States and Iceland to reduce average annual emissions during 2013-2020 by 20% vs 1990 - **overachieved (31%)**
 - Emissions Trading Scheme (ETS) 2020 collective EU target = -21% (vs 2005) - **overachieved (-41%)**
 - Effort Sharing Decision (Non-ETS) 2020 collective EU target = -10% (vs 2005) - **overachieved (-16,3%)**
 - Non-ETS Portugal's 2020 target = +1% (vs 2005) – **overachieved (-21%)**
 - LULUCF using KP CP2 rules



Effort Sharing 2020 emission reduction target



Effort Sharing Decision (ESD)

- Establishes **annual binding GHG emission targets** for Member States for the period **2013-2020**.
- These targets concern emissions from sectors not included in the EU Emissions Trading System (ETS), such as **transport**, **buildings**, **agriculture** and **waste**.
- For the period **2013-2020**, **Portugal** met all defined annual targets, achieving a **21% reduction in 2020 compared to emissions from the ESD sectors in 2005**.

TARGETS ESD SECTORS

+1%

Variation
2020/2005

ESD SECTORS
EMISSIONS

-21% ✓

Variation
2020/2005



Quantified economy-wide 2030 emission reduction target

NDC communicated under the PA – The EU and its MS are committed to binding target of at least 40% domestic GHG reduction by 2030 (vs 1990 levels) – **reviewed -55%**

- **Emissions Trading Scheme (ETS)**

- ETS 2030 collective EU target = -43% (vs 2005) – **reviewed -62%; New ETS 2* 2030 collective EU target = -42% (vs 2005)**

- **Effort Sharing Regulation (Non-ETS sectors)**

- Non-ETS 2030 collective EU target 2030 target = -30% (vs 2005) – **reviewed -40%**
 - Non-ETS Portugal's 2030 target = -17% (vs 2005) – **reviewed -28,7%**

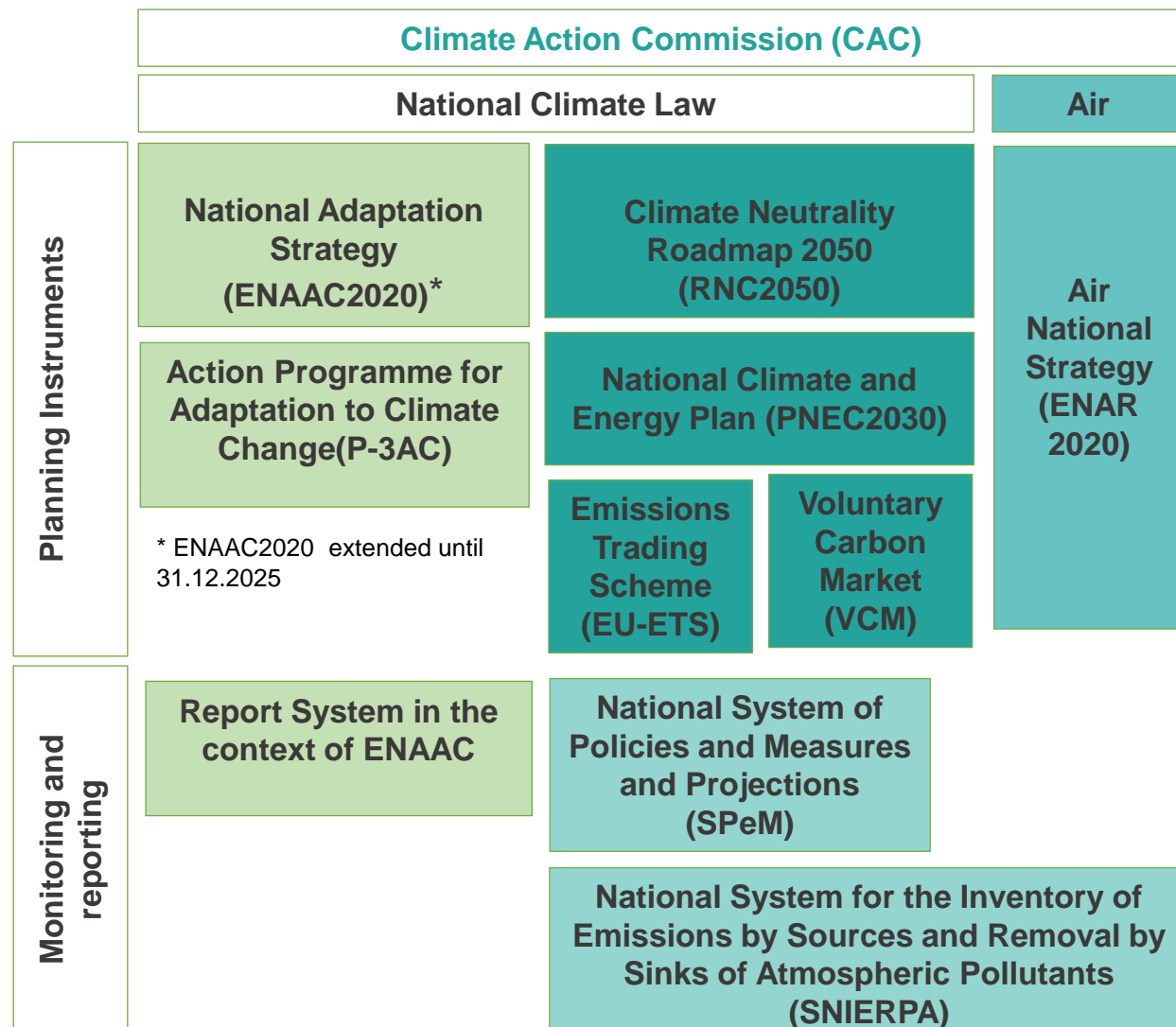
- **LULUCF**

- Net GHG removals 2030 collective EU target = at least 310 million tCO₂eq

* ETS 2 scope include fuel combustion in road transport and buildings and additional sectors such as small industry



Portugal policy framework



RNC2050

Roteiro para a Neutralidade Carbónica



PNEC 2030



ENAAAC

Estratégia Nacional de Adaptação às Alterações Climáticas



RNA 2100



Portugal policy framework update

Review of the main climate and energy national strategys is ongoing






- **Short term** – National Energy and Climate Plan 2030 (NECP 2030)
- **Long term** – Roadmap for Carbon Neutrality 2050 (RNC2050)



- Obligation of EU Regulation (Governance of the Energy Union and Climate Action)
- National Climate Law
- New FIT for 55% and RepowerEU targets
- New pandemic context, energy crisis and Recovery and Resilience Plan (RRP)
- Accelerated growth of H2 and other technologies (BECCs, CCUS, etc.)
- Alignment between RNC and PNEC review (parallel processes)
- The anticipation of the climate neutrality target for 2045



Portugal policy framework update – by sector

PNEC 2030		Other national climate and energy objectives		
		Variation 2020 / 2005	Target 2020	Target 2030
	TRANSPORTS	-20%	→ -14%	-40%
	SERVICES	-68%	→ -65%	-70%
	RESIDENTIAL	-26%	→ -14%	-35%
	AGRICULTURE 1)	3%	→ -8%	-11%
	WASTE/WASTEWATER	-31%	→ -14%	-30%
NATIONAL TOTAL 2)		-33%	→ -18% to -23%	-55%

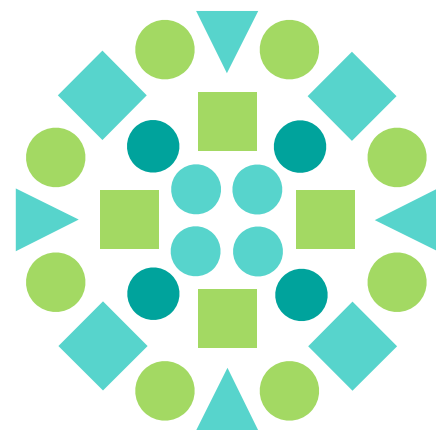
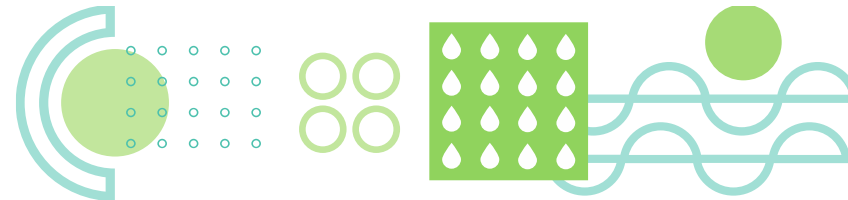
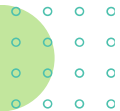
(1) Includes emissions from CRF3 as well as combustion in agriculture, forestry, and fisheries (1A4c)
 (2) Total: excludes LULUCF



Portugal policy framework update – Main messages

- **Portugal's 2020 targets under the EU framework were surpassed**, aligning with EU commitments, as a contribution to achieving the objectives of the Paris Agreement.
- Portugal remains committed to **supporting other Parties**, particularly the most vulnerable, in their climate transition by exploring **innovative solutions**.
- **Consistent emissions reduction path** aligns with the short and long term objectives
- A **robust climate policy framework** reflects Portugal's proactive stance, being one of the first countries globally to commit to climate neutrality by 2050.
- Updated policy framework enhances **cross-sector action and ambitious but achievable 2030 goals**, underscoring the urgency of accelerating economic decarbonization this decade.
- **Long-term objective moved forward to 2045**, reflecting the commitment to decarbonization.
- **Strong commitment to expanding renewable energy** through increased electrification and a shift towards renewable fuels, primarily hydrogen and biomethane.
- Portugal was the **fourth EU country to phase out coal for electricity production in 2021**, ahead of its initial commitment.
- **Aiming to double renewable electricity capacity by 2030**, and **phase out natural gas by 2040**.
- Ensure a green and **just transition**, promoting **social cohesion and quality employment nationwide**.





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