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Multilateral Assessment - Finland

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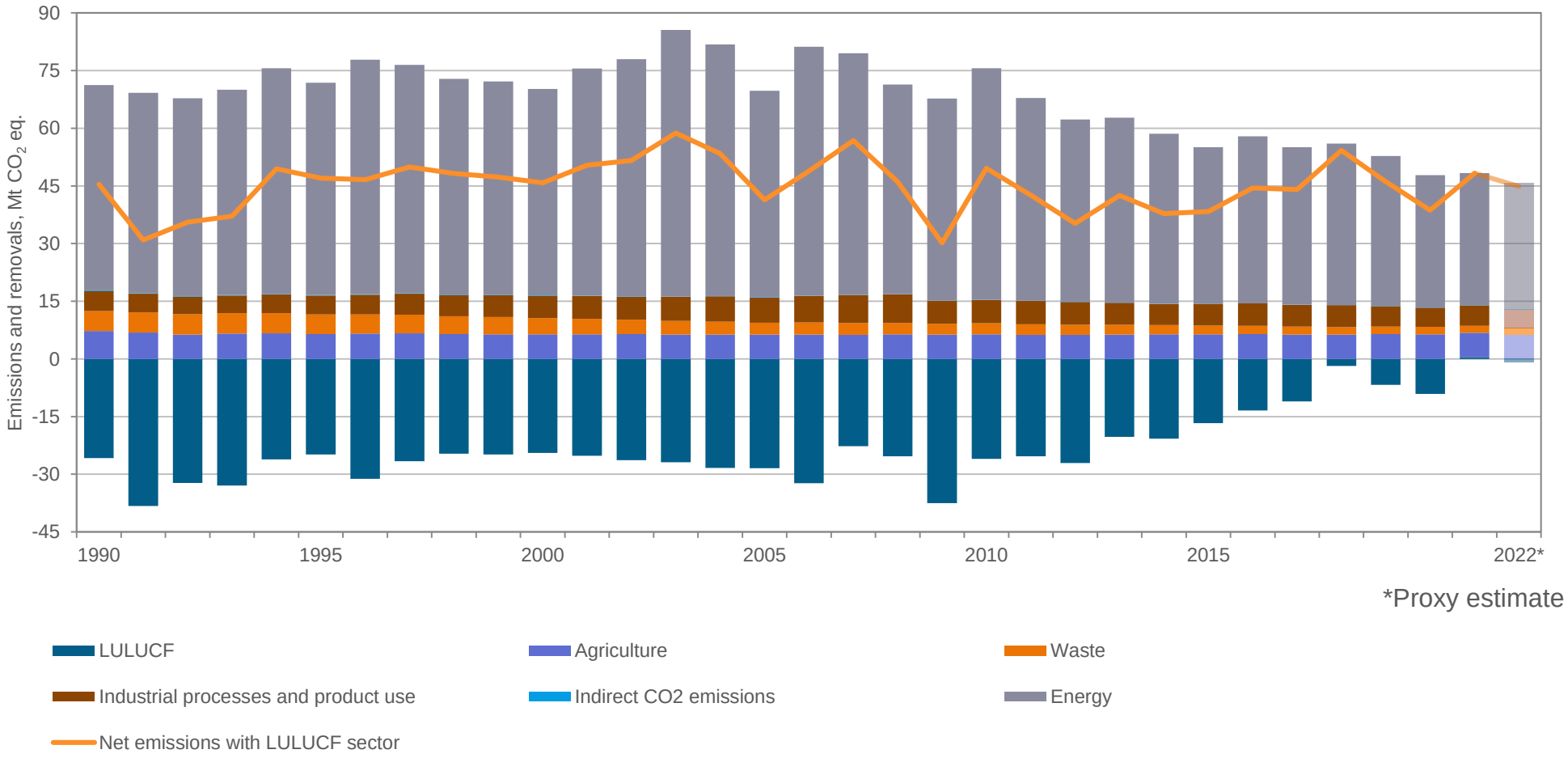
Finland: Greenhouse gas emissions & removals



Source: Statistics Finland

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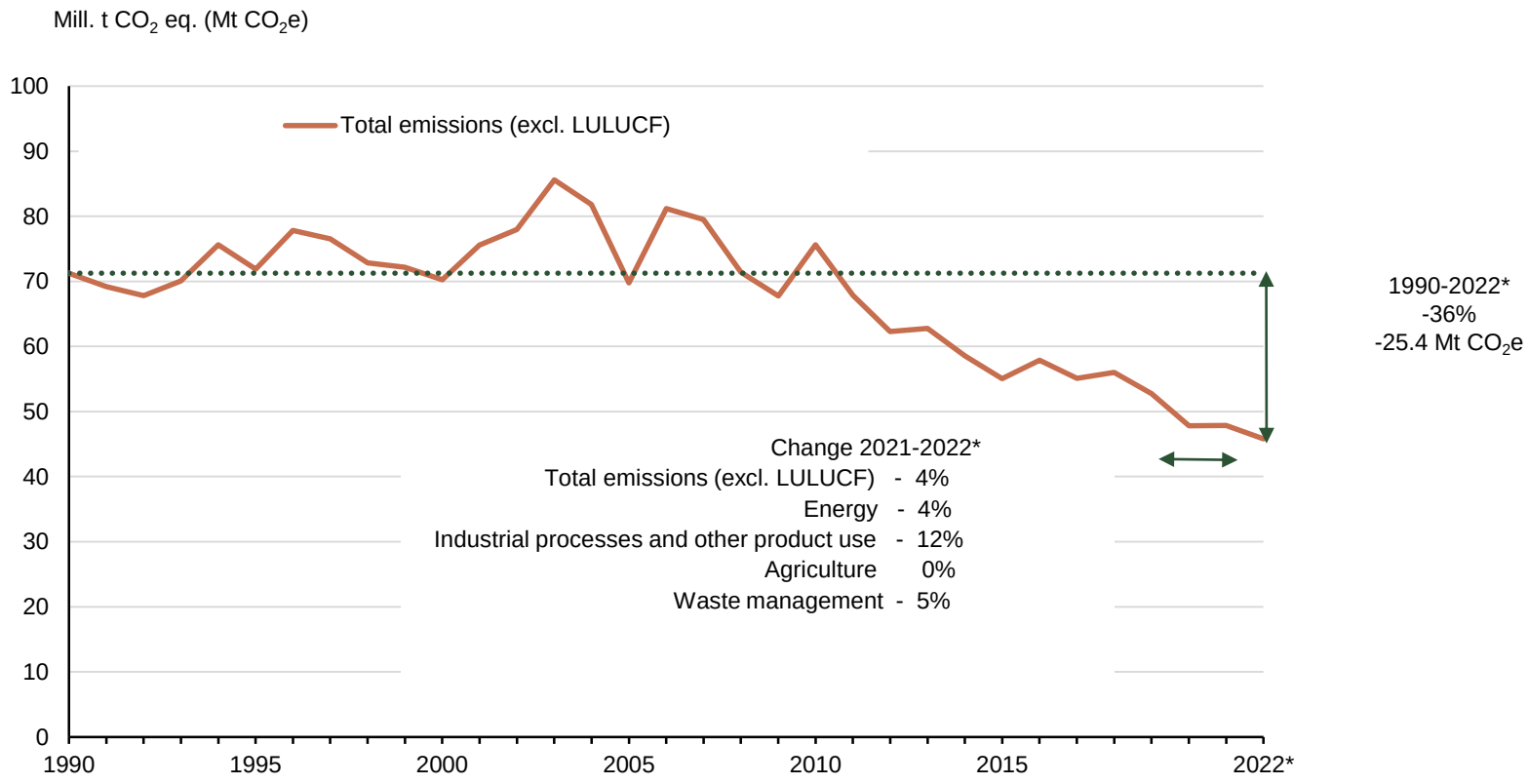
GHG emissions 1990-2022* (without LULUCF) and emissions in 2022* compared with those in 1990 & 2021



* Proxy estimate
LULUCF refers to the land use, land-use change and forestry sector

Source: Statistics Finland

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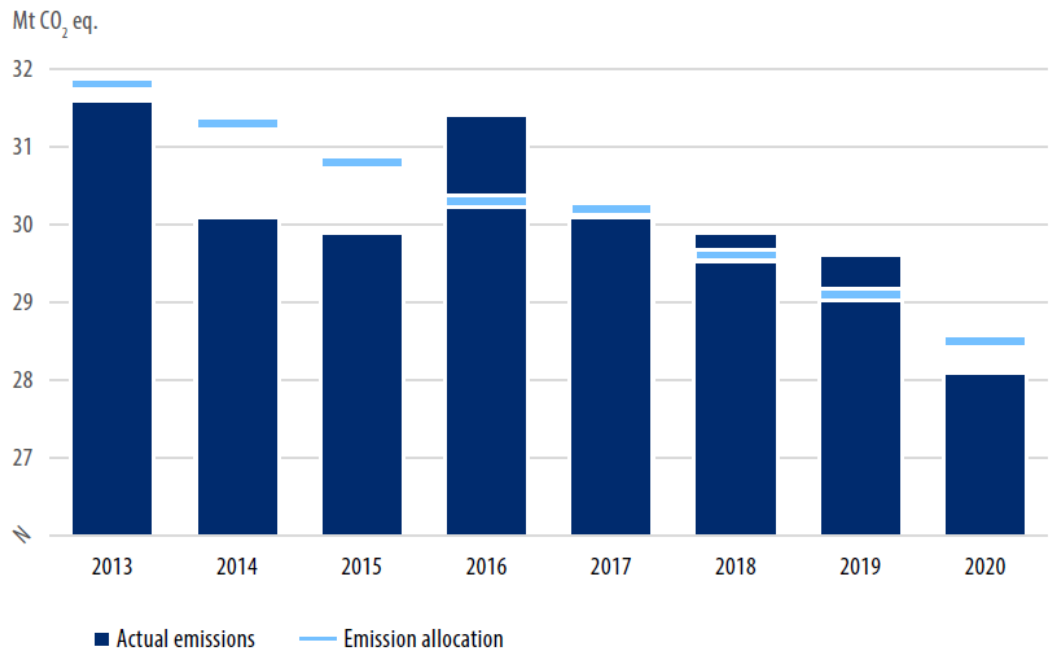
Quantified economy-wide emission reduction target

- EU and its Member States committed to achieving a joint target of 20 per cent below the 1990 level by 2020. The EU has substantially overachieved the reduction target.

- At EU level the target was divided between the sectors covered by the EU Emissions Trading System (EU ETS) and the sectors under the Effort Sharing Decision (ESD). Binding national targets were set for Member states under the ESD.

- Under the ESD Finland had 0.8 Mt CO2 –eq. surplus units calculated cumulatively for the entire 2013–2020 period.
- Finland met emission reduction commitments under the EU and the Kyoto Protocol concerning the entire period 2013 to 2020. The fulfilment of commitments is ensured after international reviews and the so-called true-up period during 2022 to 2024.



EU legislation: Finland's target under EU 2030 climate and energy package

	Finland	EU
Emission reduction (reference year 1990)	EU level target	-55 %*
EU ETS (reference year 2005)	EU level target	-62 %
Non-ETS emissions (reference year 2005)	-50 %**	-40 %
Renewable energy of final consumption	51 %	42,5 %
Energy efficiency (EU energy efficiency Directive)	Will be assessed during 2023-2024	11,7 %***

*The joint pledge of the EU and its Member States under UNFCCC (reduction in total emissions without the LULUCF sector)
** Member States' national emission reduction obligations are defined in the EU Climate and Energy Package 2030
***Compared to EU 2020 reference scenario, (36 % compared to EU 2007 reference scenario).

National climate change mitigation objectives and preparation of actions

- At national level, Finland's climate policy is defined and the mitigation actions are presented in national strategies, programmes and plans, of which the most relevant for climate change mitigation were finalized in 2022:
  - National energy and climate strategies
  - Medium-term Climate Change Policy Plan (→ focus on effort sharing sector)
  - Climate Plan for the Land Use Sector
- The national Climate Act was reformed in 2022:
  - Carbon neutrality target for 2035 was included
  - National target for 2050 was updated
  - New targets for 2030 and 2040 were included
  - The scope of the Act was extended to cover the land-use, land-use change, and forestry (LULUCF) sector, and a target for the strengthening of carbon sinks was added.

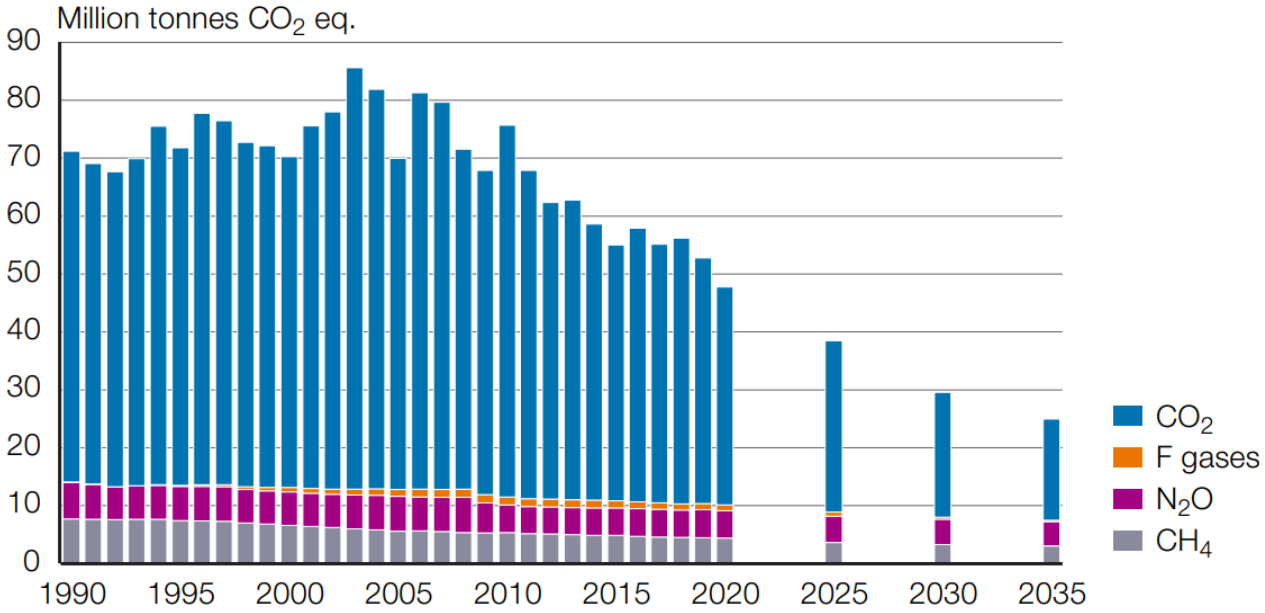
Long-term emission reduction targets

- The Climate Act sets out the national targets related to climate change. According to the Act, Finland aims to be carbon neutral by 2035.The government is working to ensure Finland is carbon neutral by 2035 & carbon negative soon after that → accelerating emissions reduction measures & strengthening carbon sinks
  - Additional measures for achieving carbon neutrality are proposed in the new Energy and Climate Strategy, the Medium-term Climate Change Policy Plan, and the Climate Change Plan for the Land Use Sector
- The Act specifies three emission reduction targets: the aim is to achieve greenhouse gas emission reductions of 60% by 2030, 80% by 2040 and 90% but aiming for 95% by 2050 compared to the levels in 1990
- Finland is committed to EU's climate neutrality target by 2050

Examples of key policies & measures

- EU ETS for reducing emissions in energy production and industry sectors
- Promoting renewable energy
  - E.g. premium schemes, investment subsidies, blending obligation for biofuels in transport sector
- Energy efficiency measures
  - E.g. energy audits, energy efficiency agreements, minimum standards for new buildings, subsidies to improve energy efficiency and promote renewable energy sources in building stock, voluntary energy efficiency agreements
- Implementation of the Landfill Directive and national legislation and strategies aimed at reducing the amount of waste generated and minimising the amount of waste disposed at landfill
- F-gas regulation: In recent years, the transition to lower GWP value for refrigerants, e.g. In accordance with the EU F-gas regulation has contributed to the reduction of F-gas emissions. Phase down of HFCs that can be placed on the EU market and the bans on the use of F-gases in different applications.

”With measures” projection



	Historical			WM Projection		
	2005	2010	2020	2025	2030	2035
	million tonnes CO_2 eq.					
Non-ETS	34.2	33.6	28.1	23.8	19.9	17.7
ETS	35.5	41.9	19.6	14.7	9.7	7.2
Civil aviation, CO_2	0.3	0.2	0.1	0.2	0.2	0.2
Total emissions[1]	**69.9**	**75.7**	**47.8**	**38.6**	**29.7**	**25.1**

1) For the non-ETS and ETS split, the 2013 scope of EU ETS has been used

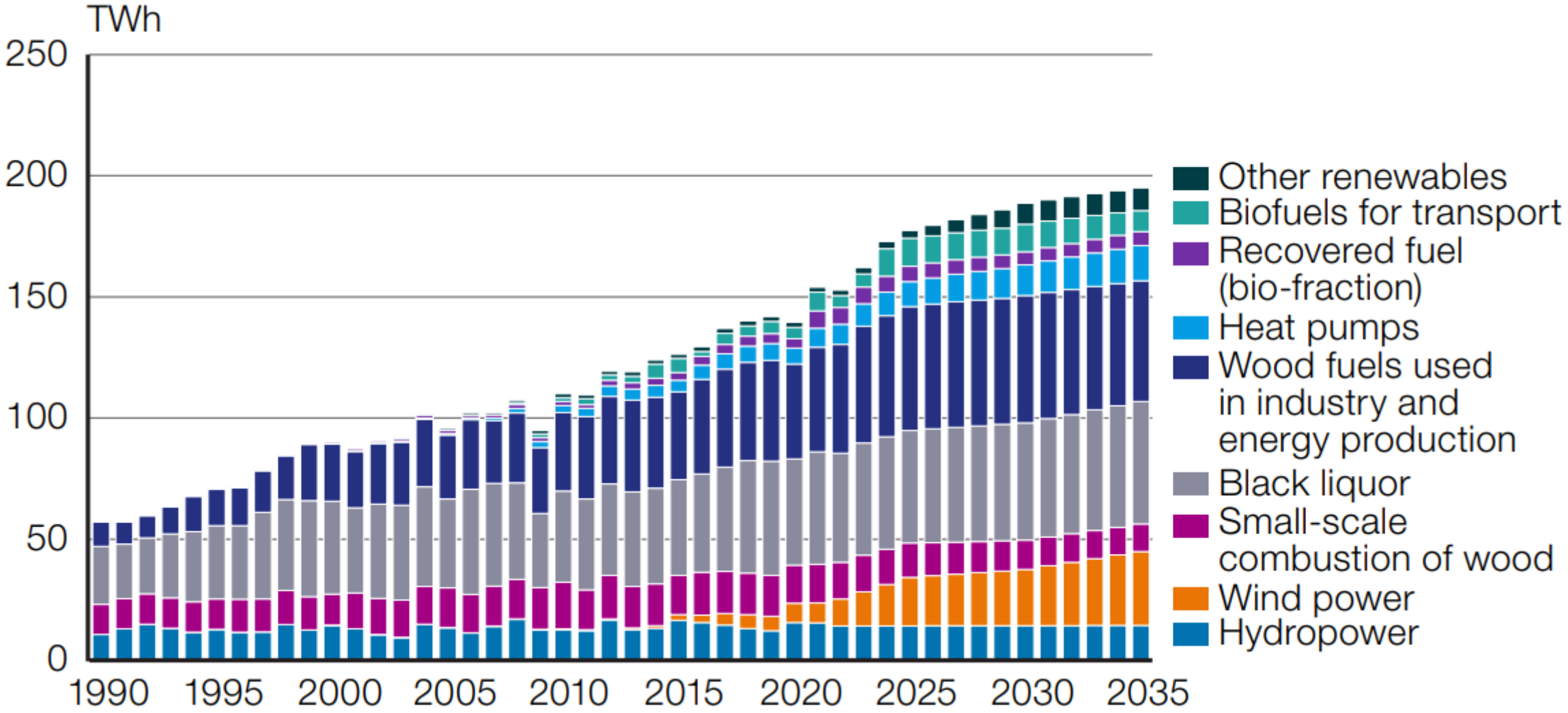
Greenhouse gas emissions without LULUCF, with indirect CO2 by gas according to the greenhouse gas emission inventory (1990 to 2020) and the WM projection (up to 2035), million tonnes CO2eq.

Source: 5th Biennial report

Successes and challenges in implementing climate change policies (1)

- Finland's energy sector emissions per capita are higher than in the EU on average due to the cold climate, energy intensive industry and low population density, and therefore long travelling distances
- Energy sector emissions have been reduced significantly since 1990 though energy consumption has increased
  - Share of renewable energy has increased since 1990 (being 42 % in 2022) and the use of fossil fuels has decreased
- Emissions from waste sector have decreased 66 % since 1990
  - Waste legislation in a key role → has significantly reduced landfilling of waste

Historic development and WM projection



Source: 5th Biennial report

Successes and challenges in implementing climate change policies (2)

- Emissions in the transport sector were 16 per cent lower in 2022 than in 1990, positive developments seen in recent years include
  - Number of electric cars has increased steadily and this trend is expected to continue
  - Distribution obligation for biofuels has reduced emissions from transport. The blending obligation will gradually increase, which will further reduce emissions in coming years
- Emissions from acriculture sector are hard to abate → emissions in 2021 were12 per cent lower than in 1990, but they have remained almost constant in 2005-2022
  - The amount of synthetic fertilisers used (based on sales statistics) has decreased by 36% from 1990 to 2021 and is the most important factor for the reduced emissions.

Thank you!

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