

## SUMMARY

This chapter presents a summary of the projections for the scenario ‘with existing measures’ (WEM). The main results for the five CRF sectors (without LULUCF) and all greenhouse gases are presented in CO<sub>2</sub> equivalent. Trend graphs include GHG totals by category and by gas.

### Total GHG emissions

The ‘with existing measures’ (WEM) scenario without LULUCF shows a decrease of 4.3% from 1990 to 2020 and a decrease of 14.6% from 1990 to 2035, i.e. from 78.8 in 1990 to 75.4 Mt CO<sub>2</sub> equivalent in 2020 and 67.3 Mt CO<sub>2</sub> equivalent in 2035.

Table 1: Historical trends and projections (2020–2035): greenhouse gas emissions (without LULUCF).  
(Umweltbundesamt)

	Inventory Trend [kt CO <sub>2</sub> eq]				Emissions ‘with existing measures’ [kt CO <sub>2</sub> eq]			
	1990	2005	2010	2015	2020	2025	2030	2035
Total (without LULUCF)	78 805	92 642	85 059	78 851	75 393	72 724	69 767	67 274
1 Energy	53 028	67 134	59 881	53 351	51 227	49 347	47 171	44 636
2 Industrial Processes	13 663	15 612	15 926	16 676	15 512	14 947	14 308	14 267
3 Agriculture	8 189	7 104	7 094	7 168	7 342	7 347	7 357	7 538
5 Waste	3 925	2 791	2 158	1 656	1 312	1 083	930	833

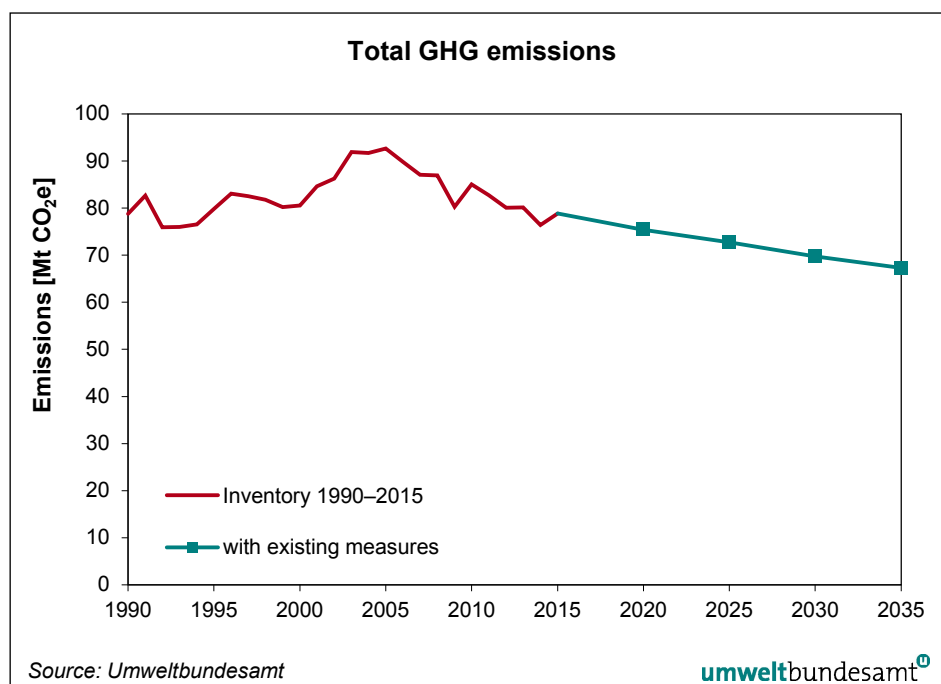


Figure 1:  
Past trend and scenario  
(2020–2035):  
total GHG emissions  
(without LULUCF).

Table 2:  
Past trend and scenario  
(2020–2035):  
GHG emissions by gas  
(without LULUCF).  
(Umweltbundesamt)

	Emission Trend [kt CO <sub>2</sub> eq]				Emissions 'with existing measures' [kt CO <sub>2</sub> eq]			
	1990	2005	2010	2015	2020	2025	2030	2035
CO <sub>2</sub>	62 293	79 369	72 547	66 724	63 562	61 702	59 525	57 136
CH <sub>4</sub>	10 514	7 808	7 211	6 575	6 312	6 064	5 920	5 942
N <sub>2</sub> O	4 342	3 633	3 399	3 517	3 544	3 490	3 440	3 445
F-Gases	1 656	1 831	1 901	2 034	1 975	1 468	881	751
<b>Total</b>	<b>78 805</b>	<b>92 642</b>	<b>85 059</b>	<b>78 851</b>	<b>75 393</b>	<b>72 724</b>	<b>69 767</b>	<b>67 274</b>

The WEM scenario predicts a decrease in total GHG emissions by 14.7% or 11.6 Mt CO<sub>2</sub> equivalent between 2015 and 2035.

This change is mainly driven by a decrease in the Energy sector of 16.3% or 8.7 Mt CO<sub>2</sub> equivalent and the Industrial Processes (reduction by 14.4% or 2.4 Mt CO<sub>2</sub> equivalent). Emissions from the Agricultural sector are forecast to increase by 5.2% or 0.4 Mt CO<sub>2</sub> equivalent. Emissions in the Waste sector are forecast to decrease by 49.7% or 0.8 Mt CO<sub>2</sub> equivalent.

In the Energy sector emissions from the sub-sector 1.A.1 Energy Industries are forecast to decrease by 30.5% or 3.3 Mt CO<sub>2</sub> equivalent and in 1.A.2 Manufacturing Industries and Construction emissions are forecast to increase by 5.8% or 0.6 Mt CO<sub>2</sub> equivalent.

Emissions from the sub-sector 1.A.3 Transport are forecast to decrease by 10.4% or 2.4 Mt CO<sub>2</sub> equivalent between 2015 and 2035, and emissions from the sub-sector 1.A.4 and 1.A.5 'Other sectors' are forecast to decrease by 37,9% or 3.4 Mt CO<sub>2</sub> equivalent.

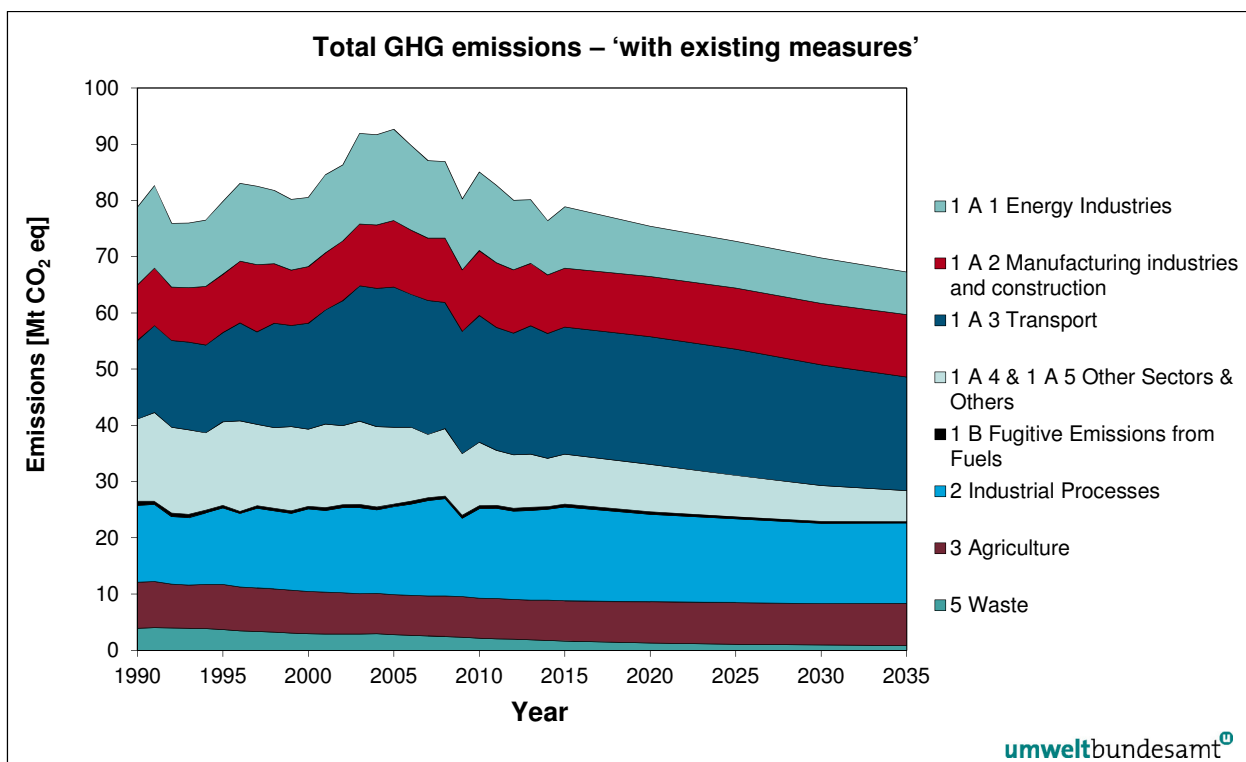


Figure 2: Past trend and scenario (2020–2035): total GHG emissions by sector.

According to the WEM scenario, the most important GHG in Austria will still be CO<sub>2</sub> with an almost constant share in the national total emissions from 2015 (84.6%) to 2020 (84.3%) and an increase to 84.9% in 2035. Between 2015 and 2035, total CH<sub>4</sub> emissions and N<sub>2</sub>O emissions (in CO<sub>2</sub> equivalents) are forecast to increase from 12.8% to 14.0%, whereas the percentage of emissions of fluorinated gases (HFC, PFC, SF<sub>6</sub> and NF<sub>3</sub>) is expected to decrease from 2.6% in 2015 to 1.1% in 2035.

An analysis of the past trend and the scenario by sector is presented in chapter 2 'Sectoral Scenario Results'. Tables with detailed emissions by sub-sector and gas are included in the Annex. Specific sectoral assumptions and activities are described in the sub-chapters 3.1 to 3.5.

### EU ETS/EU ESD emissions

GHG emissions covered by the EU Emissions Trading Scheme (ETS) show a downward trend until 2035. The driving force is the Energy sector with a projected decrease by about 24% from 2015 to 2035. A decrease is also projected for the Industrial Processes sector (– 8%).

Total EU Effort Sharing Decision (ESD) GHG emissions are expected to decrease by 14% over the same period.

	with existing measures [kt CO <sub>2</sub> eq]				
<b>EU ETS GHG emissions</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
<b>EU ETS GHG emissions</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Total (without LULUCF)	29.492	26.179	25.476	25.036	24.587
1. Energy	15.354	13.152	12.515	12.134	11.602
2. Industrial Processes	14.138	13.027	12.961	12.903	12.985
<b>EU ESD GHG emissions</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Total (without LULUCF)	49.295	49.142	47.167	44.637	42.580
1. Energy	37.947	38.027	36.783	34.985	32.980
2. Industrial Processes	2.525	2.462	1.953	1.364	1.230
3. Agriculture	7.168	7.342	7.347	7.357	7.538
5. Waste	1.656	1.312	1.083	930	833

Table 3:  
EU ETS and EU ESD  
GHG emissions  
(Umweltbundesamt)