



Summary of GHG Emissions for Japan

Base year (Convention) = 1990

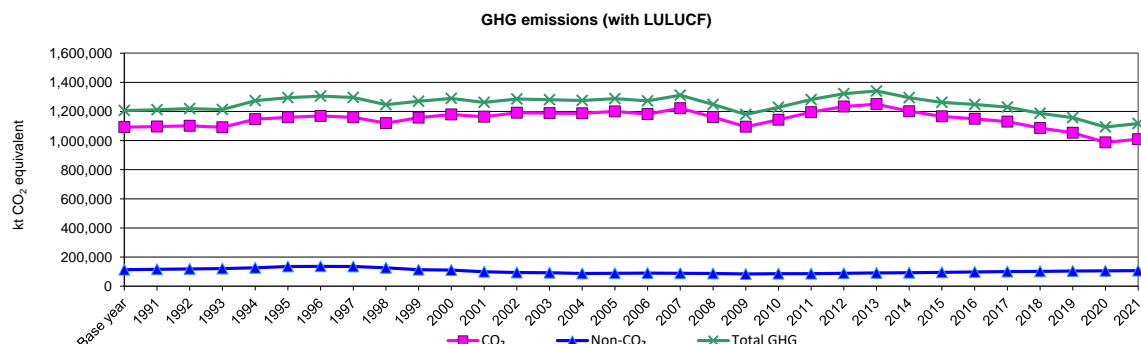
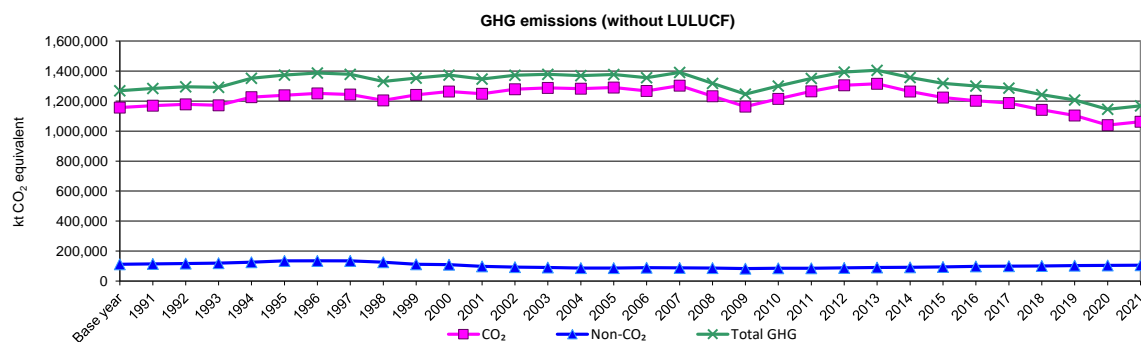
	Emissions, in kt CO ₂ equivalent		
	Base year	2000	Last Inventory Year (2021)
CO ₂ emissions without LULUCF	1,157,195.6	1,263,754.8	1,062,129.2
CO ₂ net emissions/removals by LULUCF	-64,342.1	-84,946.8	-52,177.8
CO ₂ net emissions/removals with LULUCF	1,092,853.5	1,178,808.0	1,009,951.4
GHG emissions without LULUCF	1,269,334.0	1,373,303.4	1,168,094.5
GHG net emissions/removals by LULUCF	-63,272.2	-84,085.5	-51,694.6
GHG net emissions/removals with LULUCF	1,206,061.8	1,289,217.9	1,116,399.9
Indirect CO ₂	5,481.5	4,232.8	1,871.7

	Changes in emissions, in percent		
	From Base year to 2000	From 2000 to Last Inventory Year (2021)	From Base year to Last Inventory Year (2021)
CO ₂ emissions without LULUCF	9.21%	-15.95%	-8.22%
CO ₂ net emissions/removals by LULUCF	32.02%	-38.58%	-18.91%
CO ₂ net emissions/removals with LULUCF	7.87%	-14.32%	-7.59%
GHG emissions without LULUCF	8.19%	-14.94%	-7.98%
GHG net emissions/removals by LULUCF	32.89%	-38.52%	-18.30%
GHG net emissions/removals with LULUCF	6.89%	-13.40%	-7.43%

	Average annual growth rates, in percent per year		
	From Base year to 2000	From 2000 to Last Inventory Year (2021)	From Base year to Last Inventory Year (2021)
CO ₂ emissions without LULUCF	0.88%	-0.82%	-0.28%
CO ₂ net emissions/removals by LULUCF	2.82%	-2.29%	-0.67%
CO ₂ net emissions/removals with LULUCF	0.76%	-0.73%	-0.25%
GHG emissions without LULUCF	0.79%	-0.77%	-0.27%
GHG net emissions/removals by LULUCF	2.88%	-2.29%	-0.65%
GHG net emissions/removals with LULUCF	0.67%	-0.68%	-0.25%

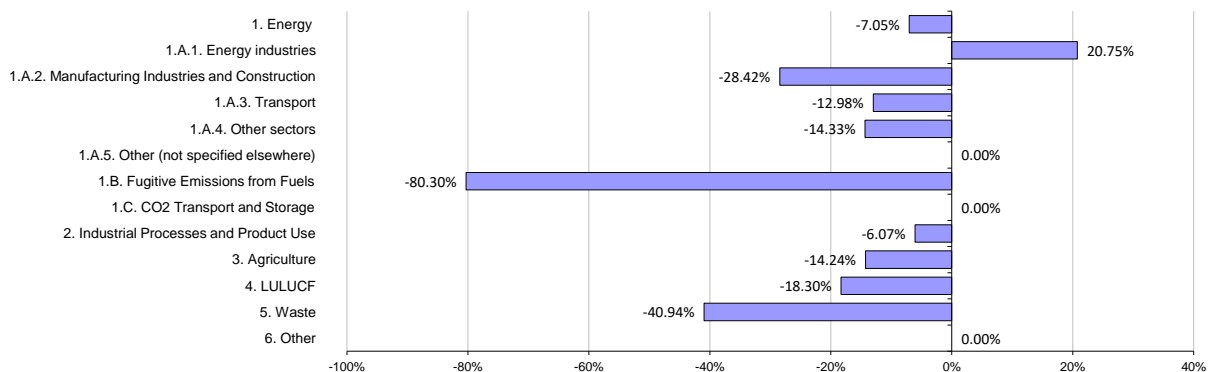
The base year under the Climate Change Convention is 1990 except for Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986), as defined by decisions 9/CP.2 and 11/CP.4.

Total GHG emissions, without and with LULUCF



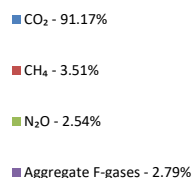
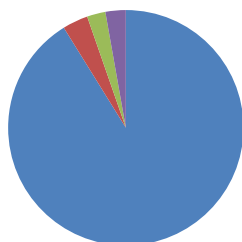


Change in GHG emissions/removals from 1990 to 2021

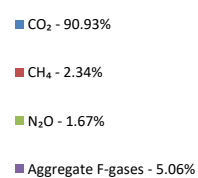
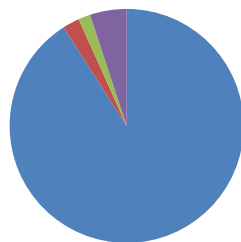


GHG emissions by gas

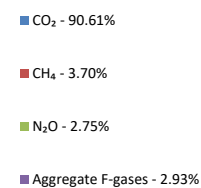
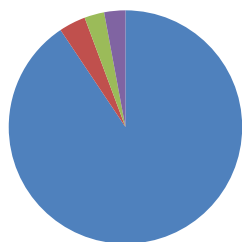
1990 (without LULUCF)



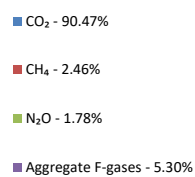
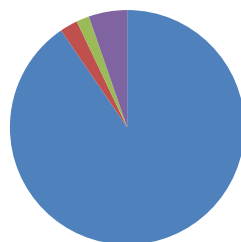
2021 (without LULUCF)



1990 (with LULUCF)

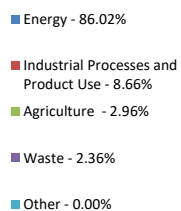
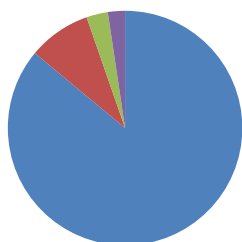


2021 (with LULUCF)

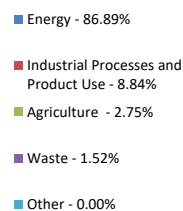
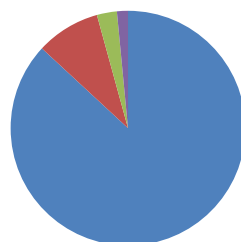


GHG emissions by sector (without LULUCF)

1990



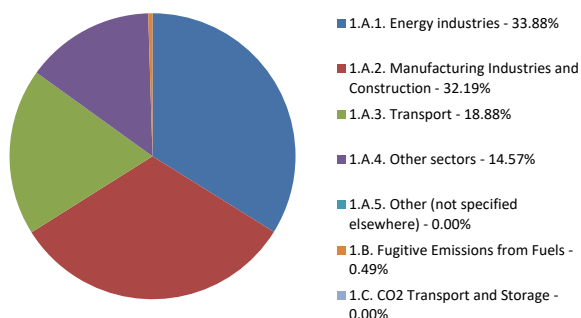
2021



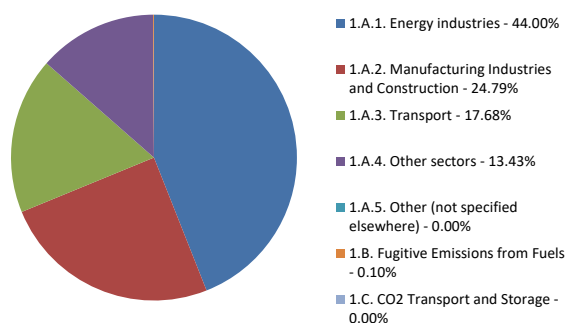


Breakdown of GHG emissions within the energy sector

1990

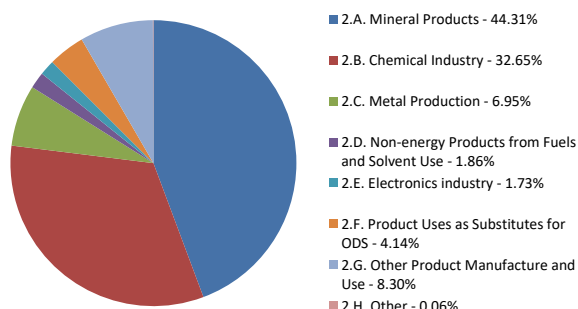


2021

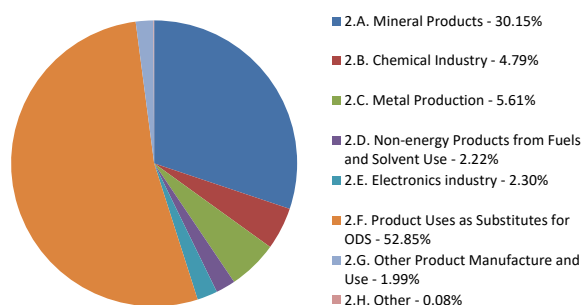


Breakdown of GHG emissions within the industrial processes and product use sector

1990

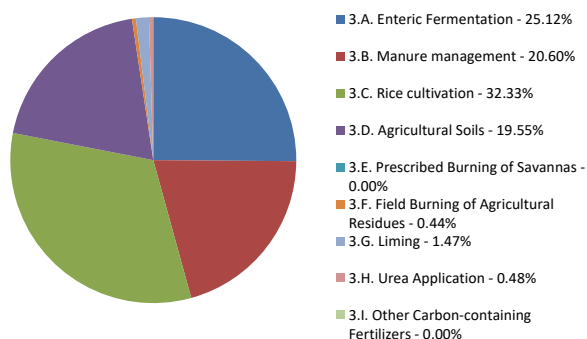


2021

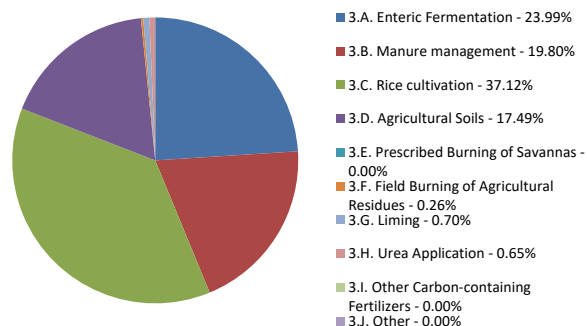


Breakdown of GHG emissions within the agriculture sector

1990



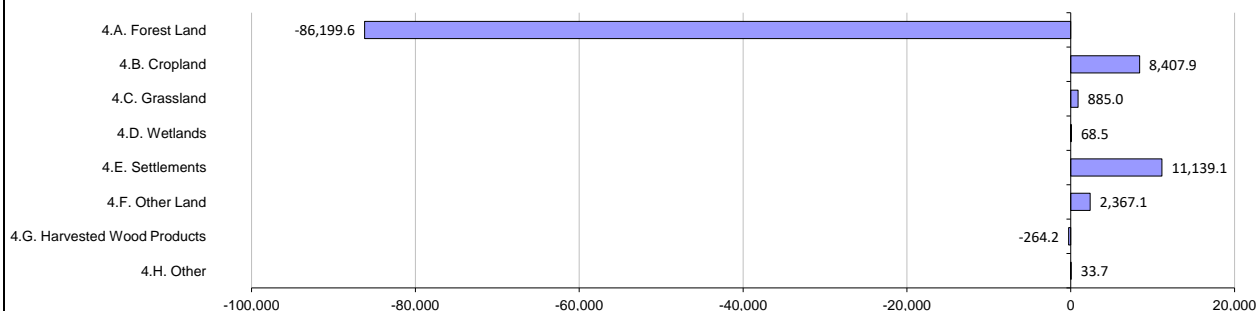
2021



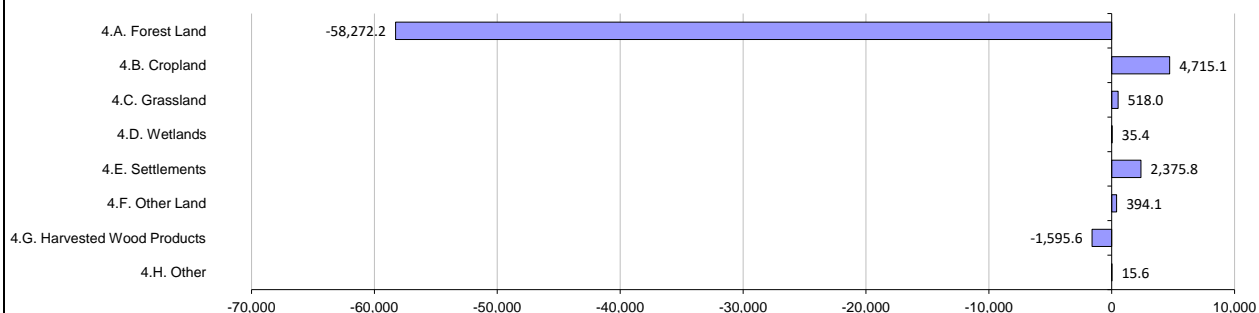


Breakdown of GHG emissions/removals within the LULUCF sector (kt CO₂ equivalent)

1990

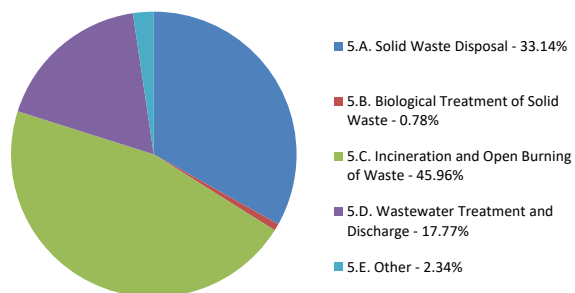


2021



Breakdown of GHG emissions within the waste sector

1990



2021

