Annex 2. Trends and projections in Danish GHG emissions and removals 1990-2040

Trends and projections in Danish GHG emissions and removals 1990-2040 with the effects of existing national and EU policies and measures as of May 2023 (the WEM scenario) - by gas, by IPCC sectors, in the EU ETS, in EU non-ETS (ESD/ESR), the LULUCF sector and different energy sectors.

GREENHOUSE GAS EMISSIONS	1990	1995	2000	2005	2010	2015	2020	2021	2025	2030	2035	2040
	CO2 equivalent (kt)								CO2 equivalent (kt)			
CO2 emissions without net CO2 from LULUCF	53477	61653	54307	51535	49190	35111	28300	29608	21329	12891	10384	9068
CO2 emissions with net CO2 from LULUCF	60017	66734	59141	56356	51386	35635	31073	31697	26033	16362	13646	12715
CH4 emissions without CH4 from LULUCF	9107	9617	9578	9352	8962	8451	8559	8553	7531	7025	6731	6943
CH4 emissions with CH4 from LULUCF	9401	9904	9861	9632	9243	8732	8848	8843	7889	7552	7270	7482
N2O emissions without N2O from LULUCF	7768	6927	6495	5361	5172	5204	5388	5116	4859	4573	4524	4477
N2O emissions with N2O from LULUCF	7831	6987	6546	5403	5210	5247	5428	5156	4901	4618	4572	4527
HFCs	0	238	728	870	807	450	317	275	329	241	155	83
PFCs	0	1	23	19	10	0	0	0	0	0	0	0
Unspecified mix of HFCs and PFCs	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA
SF6	44	107	59	21	38	125	47	15	14	15	15	16
NF3	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA	NO,NA
Total (without LULUCF)	***70396***	***78543***	***71190***	***67158***	***64177***	***49340***	***42611***	***43567***	***34063***	***24744***	***21809***	***20587***
Total (with LULUCF)	***77292***	***83970***	***76358***	***72302***	***66694***	***50189***	***45713***	***45987***	***39166***	***28788***	***25658***	***24822***
Total (without LULUCF, with indirect CO2)	**71516**	**79602**	**72028**	**67844**	**64668**	**49658**	**42853**	**43812**	**34263**	**24923**	**21968**	**20726**
Total (with LULUCF, with indirect CO2)	***78412***	***85029***	***77197***	***72988***	***67185***	***50507***	***45955***	***46233***	***39367***	***28967***	***25817***	***24962***
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2021**	**2025**	**2030**	**2035**	**2040**
CO2 equivalent (kt)	CO2 equivalent (kt)								CO2 equivalent (kt)			
1. Energy (with indirect CO2)	53501	61573	54376	51465	49516	34622	27157	28553	21400	15386	12264	9027
2. Industrial processes and product use	2143	2838	3573	2751	1882	1821	1907	1851	1719	1376	1316	1276
3. Agriculture	13896	13453	12674	12432	12085	12029	12389	12074	11096	10394	10179	9915
4. Land use, land-use change and forestry	6897	5427	5168	5144	2517	849	3102	2420	5103	4044	3849	4236
5. Waste	1975	1643	1394	1171	1053	1050	1184	1196	948	967	910	1408
6. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
GREENHOUSE GAS EMISSIONS in EU ETS and non-ETS SECTOR CATEGORIES	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2021**	**2025**	**2030**	**2035**	**2040**
	CO2 equivalent (kt)								CO2 equivalent (kt)			
EU ETS (CO2 emissions from stationary installations also included in the inventory) [1990-2004: No PROXY estimates]	NO	NO	NO	26864	25269	15796	10833	11619	6256	3563	3039	2834
EU ETS (CO2 emissions from domestic aviation also included in the inventory)	NO	NO	NO	0	0	137	78	85	131	138	140	142
EU ETS (Total CO2 emissions in ETS also included in the inventory) [1990-2004: No PROXY estimates]	NO	NO	NO	**26864**	**25269**	**15933**	**10911**	**11704**	**6387**	**3701**	**3180**	**2976**
Non-ETS GHG emissions, without LULUCF, with indirect CO2 (2013-2020: ESD / 2021-2030: ESR) [1990-2004: No PROXY estimates]	NO	NO	NO	**40980**	**39400**	**33725**	**31942**	**32108**	**28776**	**24422**	**21489**	**18650**
GREENHOUSE GAS NET EMISSIONS and ACCOUNTING QUANTITIES in the LULUCF SECTOR	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2021**	**2025**	**2030**	**2035**	**2040**
	CO2 equivalent (kt)								CO2 equivalent (kt)			
LULUCF under the UNFCCC (net emissions from "4. Land use, land-use change and forestry")	**13793**	**10854**	**10336**	**10288**	**5034**	**1698**	**6203**	**4840**	**10207**	**8088**	**7698**	**8472**
LULUCF accounting quantities (net credits if negative): KP1(2008-2012), KP2(2013-2020), EU/LULUCF(2021-2030)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-3960**	**-1117**	**1953**	**NE**	**NE**
GREENHOUSE GAS EMISSIONS in the different ENERGY SECTORS	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2021**	**2025**	**2030**	**2035**	**2040**
	CO2 equivalent (kt)								CO2 equivalent (kt)			
1. Energy (with indirect CO2)	53501	61573	54376	51465	49516	34622	27157	28553	21400	15386	12264	9027
A. Fuel combustion (sectoral approach) (with indirect CO2)	52967	60848	53256	50523	48899	34205	26947	28366	21228	15199	12096	8876
1. Energy industries (with indirect CO2)	26350	32716	26284	23374	24173	12897	7210	8375	4314	2539	2024	1889
2. Manufacturing industries and construction	5876	6352	6144	5737	4432	3654	3581	3742	2562	1009	835	653
3. Transport	11557	12788	12983	13964	13646	12736	12112	12309	11925	10243	7957	5090
4. Other sectors	9004	8656	7630	7054	6429	4720	3799	3714	2229	1213	1084	1048
5. Other	181	336	215	394	218	198	246	226	198	195	195	195
B. Fugitive emissions from fuels	535	725	1119	943	617	417	210	187	173	187	168	150
1. Solid fuels	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2. Oil and natural gas and other emissions from energy production	535	725	1119	943	617	417	210	187	173	187	168	150
C. CO2 transport and storage	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO