







CN2045		2018	2030	2040	2045	2018– 2030 p. a. net	2030– 2045 p. a. net
GHG emissions (Mt CO ₂ e)	Energy sector 	305	98	26	-18	-17	-8
	Industry 	195	123	19	-30	-6	-10
	Transport 	162	89	11	0	-6	-6
	Buildings 	117	65	19	3	-4	-4
	Agriculture 	70	58	46	41	-1	-1
	Waste and other 	10	5	3	2	0	0
	Sum	858	438	124	-2	-35	-29
	Reduction relative to 1990 (%)	31	65	90	100		
	LULUCF for informational purposes	-27	2	0	-11	2	0
	Primary energy consumption (PJ)	13 129	8 578	7 328	6 458	-379	-141
	Coal	2 909	349	6	0	-213	-23
	Mineral oils	4 452	2 108	203	17	-195	-139
	Fossil gases	3 099	2 613	856	27	-41	-172
	Gross power consumption (TWh)	595	643	902	1 017	4	25
	Renewable share of gross power consumption (%)	38	69	87	100**		
	Wind onshore (GW)	52	80	140	145	2	4
	Wind offshore (GW)	6	25	60	70	2	3
	Photovoltaics (GW)	45	150	300	385	9	16
	Number of electric vehicles (incl. plug-in hybrids; in millions of units)	0	14	32	36	1	1
	Freight transport rail (billions of km)	135	190	210	230	5	3
	Number of heat pumps (millions of units)	1	6	11	14	0,4	0,5
	Net energy demand for buildings (kWh/(m ² ·a))	106	85	69	57	-2	-2
	Electrolysis in Germany (GW)	0	10	37	50	1	3
	Use of hydrogen (TWh)	0	63	223	265	5	13
	Renewable hydrogen production in Germany (TWh)	0	19	65	96	2	5
	Imported hydrogen (TWh)	0	44	158	169	4	8
	Other imported synthetic fuels (TWh) – incl. international transport	0	1	57	158	0	10
	Carbon capture and storage (gross volume, Mt CO₂)	0	-1	-32	-73	0	-5
	Process emissions and waste (Mt CO ₂)	0	-1	-11	-16	0	-1
	Negative emissions (Mt CO ₂)	0	0	-22	-57	0	-4
	Negative emissions, incl. binding of materials (Mt CO₂)	0	0	-22	-65	0	-4
	Biomass CCS (BECCS, Mt CO ₂)	0	0	-20	-37	0	-2
	Direct Air Capture CCS (DACCS, Mt CO ₂)	0	0	-2	-20	0	-1
	Green polymers from imported feedstock (Mt CO ₂)	0	0	0	-7	0	0
	Population in Germany (millions)	83	83	81	80	0	0
	EU-ETS, EUR 2019/t	16	52	70	80	3	2