

7.2.b Share of electricity from renewable energy sources in gross electricity consumption

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Energy supply, in gigawatt-hours												
Renewable energies, total	306,326	317,798	354,394	366,991	360,453	391,426	391,411	423,498	437,298	459,297	476,844	472,363
Electricity generation from renewable energies	105,415	124,429	143,407	151,949	161,917	188,136	189,129	215,684	222,936	241,169	251,076	233,620
Hydropower	20,953	17,671	21,755	22,998	19,587	18,977	20,546	20,150	17,693	19,731	18,317	19,086
Wind power on land	38,371	49,280	50,948	51,819	57,026	72,340	67,650	88,018	90,484	101,150	104,796	89,474
Wind power at sea	176	577	732	918	1,471	8,284	12,274	17,675	19,467	24,744	27,306	24,374
Biomass	33,924	36,891	43,203	45,513	48,287	50,326	50,928	50,917	50,794	50,126	50,930	50,445
Photovoltaics	11,963	19,991	26,744	30,621	35,448	38,076	37,556	38,761	44,320	45,221	49,496	49,992
Geothermic	28	19	25	80	98	133	175	163	178	197	231	249
Heat consumption from renewable energies	165,300	158,032	173,788	180,789	163,211	170,017	168,663	173,215	178,404	182,112	181,667	199,376
Solid biomass	139,945	130,005	144,980	149,380	128,080	131,976	128,595	131,386	133,328	135,592	131,958	148,734
Liquid biomass	3,366	2,562	2,104	2,196	2,372	2,189	2,188	2,194	2,298	2,372	3,239	2,932
Gaseous biomass	10,078	11,871	11,819	13,214	15,139	16,914	17,822	18,325	19,123	19,564	20,089	19,843
Solar thermal	5,284	6,054	6,314	6,403	6,925	7,459	7,504	7,734	8,843	8,560	8,905	8,449
Geothermal, environment heat	6,627	7,540	8,571	9,596	10,695	11,479	12,554	13,576	14,812	16,024	17,476	19,418
Renewable energy consumption in the transport sector	35,611	35,337	37,199	34,253	35,325	33,273	33,619	34,599	35,958	36,016	44,101	39,367
Biodiesel	24,359	23,556	24,628	21,945	22,676	20,829	20,896	21,354	22,329	22,120	30,148	24,916
Vegetable oil	574	188	251	0	52	10	31	31	10	21	21	21
Bioethanol	8,537	9,031	9,149	8,832	9,002	8,589	8,604	8,464	8,685	8,353	8,014	8,382
Biomethane	75	92	333	483	449	345	379	445	389	660	884	965
Electricity consumption from renewable energies	2,066	2,470	2,838	2,993	3,146	3,500	3,709	4,305	4,545	4,862	5,034	5,083

- Notes:**
- 2021 provisional data.
 - Hydropower: In the case of pumped-storage power plants, only electricity generated from natural inflow.
 - Biomass: Solid and liquid biomass, biogas, landfill and sewage gas, biogenic wastes (estimated share in waste incineration plants 50%).
 - Solid biomass: Including biogenic share of waste, since 2010 including sewage sludge.
 - Liquid biomass: Including consumption of biodiesel in agriculture.
 - Gaseous biomass: Biogas including biomethane, sewage and landfill gas.
 - Geothermal, environment heat: Including heat from deep geothermic and renewable heat utilised by heat pumps.
 - Biodiesel: Consumption of biodiesel in the transport sector.

Data sources:
Working Group on Renewable Energy Statistics, Federal Ministry for Economic Affairs and Climate Action