



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of the Environment,
Transport, Energy and Communications DETEC

Swiss Federal Office of Energy SFOE

June 2022

Energy Consumption in Switzerland 2021

Extract from the Swiss Overall Energy Statistics 2021

Available from August 2022 (German/French)

BBL/Bundespublikationen, 3003 Bern

Phone +41 58 465 50 50

Order by internet: www.bundespublikationen.admin.ch

Order number: 805.006.21 d/f

Internet: www.bfe.admin.ch/statistics

Figures press release

Figure 1 - Changes in consumption of gasoline & diesel oil and aviation fuel, 2000-2021

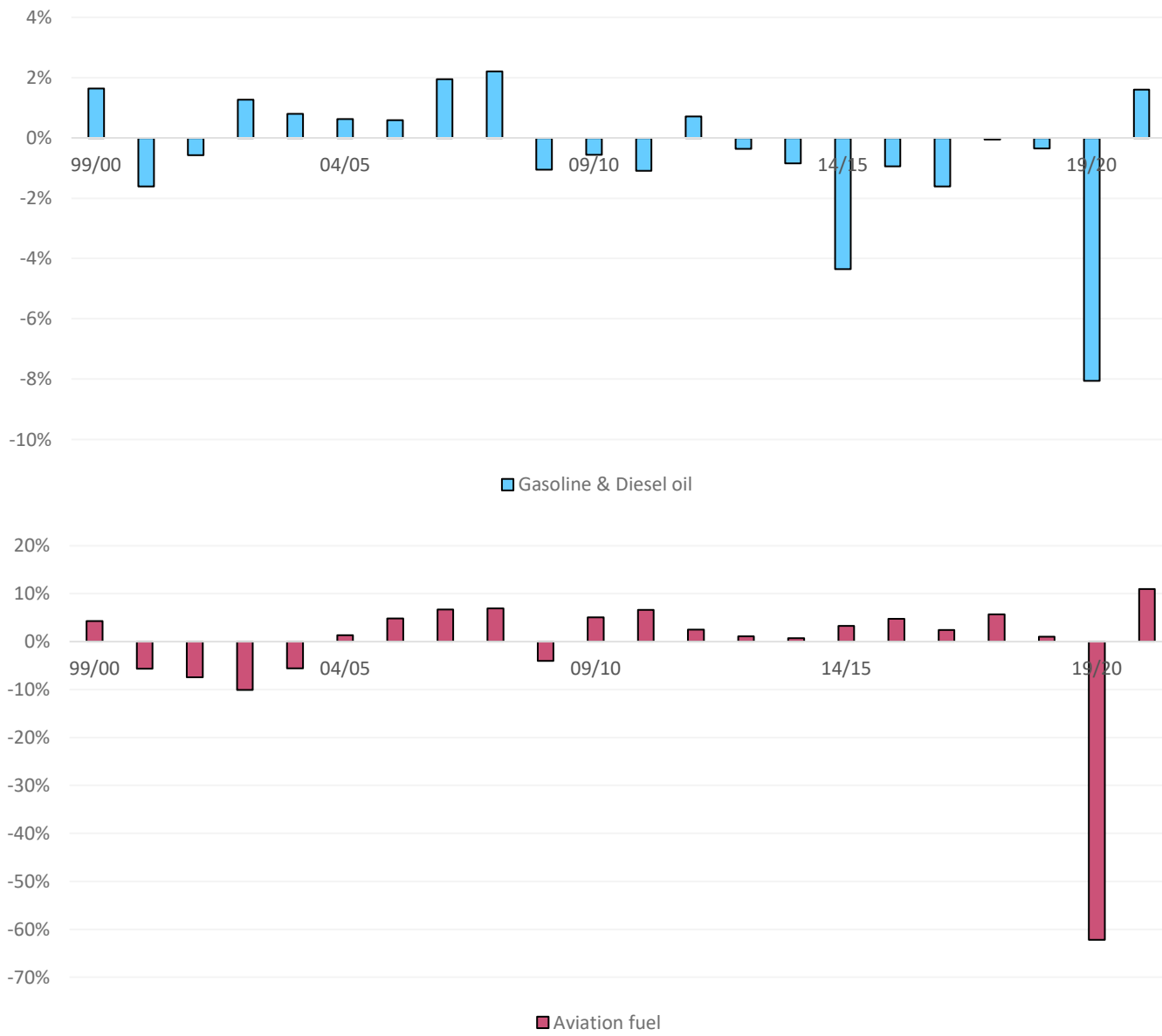
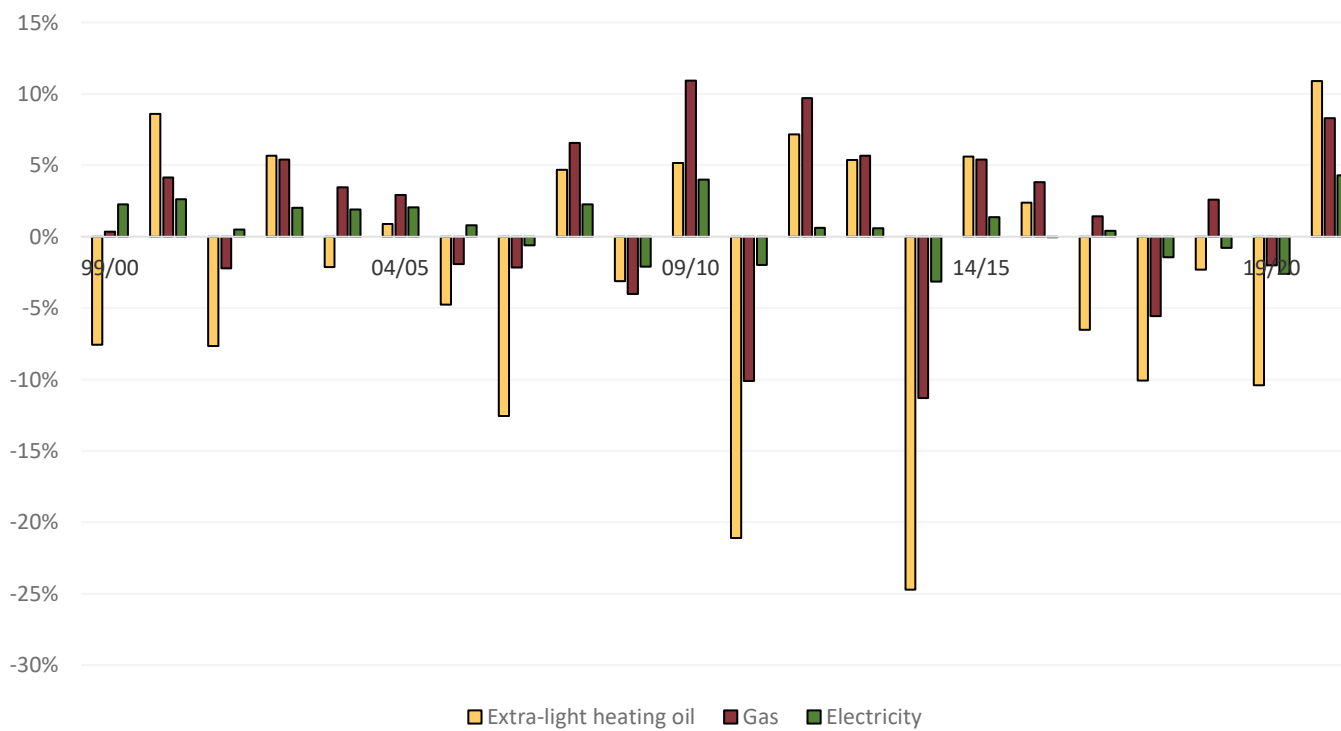


Figure 2 - Changes in consumption of electricity, gas and heating oil, 2000-2021



Switzerland's energy balance for 2021 (in TJ)

Table 1

	Wood	Coal	Waste	Crude oil	Petroleum products	Gas	Hydro	Nuclear	Other renewable energy	Electricity	District heating	Total
Inland production	50'750		59'930				142'200		41'610			294'490
+ Imports	1'880	3'720		100'940	259'830	129'750		202'150	6'250	113'520		818'040
+ Exports	-90				-15'550					-104'830		-120'470
+ Change in stock ¹		-20		600	23'050							23'630
= Total primary energy supply	52'540	3'700	59'930	101'540	267'330	129'750	142'200	202'150	47'860	8'690		1'015'690
+ Transformation sector:												
• Hydro plants							-142'200			142'200		0
• Nuclear plants								-202'150		66'710	1'520	-133'920
• Conventional thermal electricity, CHP and heat plants	-3'630		-47'900		-420	-8'420				8'310	24'300	-27'760
• Gas-fired power plants						0						0
• Refinery				-101'540	101'540							0
• Renewables	-2'520					1'330			-14'760	13'950		-2'000
+ Own use, distribution losses, used for storage					-5'040	-380				-30'650	-2'730	-38'800
+ Non-energy use					-18'490							-18'490
= Total final consumption	46'390	3'700	12'030		344'920	122'280			33'100	209'210	23'090	794'720

¹ + decrease in stock
- increase in stock

Final Energy Consumption

Table 2

Energy source	Final consumption in original units		Final consumption in TJ		Change in %	Share in %	
	2020	2021	2020	2021	2020-2021	2020	2021
Petroleum products	7'646'000 t	8'043'000 t	327'830	344'920	5.2	43.8	43.4
Electricity	55'714 GWh	58'113 GWh	200'570	209'210	4.3	26.8	26.3
Gas¹	31'362 GWh	33'966 GWh	112'900	122'280	8.3	15.1	15.4
Coal	151'000 t	152'000 t	3'660	3'700	1.1	0.5	0.5
Wood	-	-	39'860	46'390	16.4	5.3	5.8
District heating	5'847 GWh	6'414 GWh	21'050	23'090	9.7	2.8	2.9
Waste	-	-	11'610	12'030	3.6	1.6	1.5
Other renewable Energy thereof:	-	-	30'420	33'100	8.8	4.1	4.2
Biogenic fuels	-	-	7'260	6'570	-9.5	1.0	0.8
Biogas ²	-	-	1'840	1'890	2.7	0.2	0.2
Solar thermal	-	-	2'660	2'660	0.0	0.4	0.3
Ambient heat from soil, groundwater, air, etc.	-	-	18'670	21'970	17.7	2.5	2.8
Total final consumption	-	-	747'900	794'720	6.3	100.0	100.0

¹ Net calorific value (NCV: 36,3 MJ/Norm m3); in gas industry the gross calorific value (GCV: 40,3 MJ/Norm m3) is commonly used; NCV = 0,9 * GCV

² In 2021, 1'330 TJ of Biogas was injected into the gas distribution system and is included in Gas (2020: 1'330 TJ)

Petroleum Products

Table 3

Energy source	Final consumption in t		Final consumption in TJ		Change in % 2020-2021	Share in %	
	2020	2021	2020	2021		2020	2021
Fuel oils	2'358'000	2'604'000	101'110	111'710	10.5	30.8	32.4
thereof:							
Extra-light heating oil	2'270'000	2'517'000	97'380	107'980	10.9	29.7	31.3
Heavy fuel oil	1'000	0	40	0	-100.0	0.0	0.0
Petroleum coke	22'000	19'000	700	600	-14.3	0.2	0.2
Others	65'000	68'000	2'990	3'130	4.7	0.9	0.9
Motor fuels	5'288'000	5'439'000	226'720	233'210	2.9	69.2	67.6
thereof:							
Gasoline	2'021'000	2'065'000	86'090	87'970	2.2	26.3	25.5
Aviation fuel	709'000	787'000	30'630	34'000	11.0	9.3	9.9
Diesel oil	2'558'000	2'587'000	109'990	111'240	1.1	33.6	32.3
Final consumption	7'646'000	8'043'000	327'830	344'920	5.2	100.0	100.0

Electricity

Table 4

	GWh (1 GWh =3.6 TJ)		Change in %	Share in %	
	2020	2021	2020-2021	2020	2021
<u>Production</u>					
Hydroelectric plants	40'616	39'500	-2.7	58.1	61.5
Nuclear power plants	22'990	18'530	-19.4	32.9	28.9
Conventional thermal power plants:	2'789	2'310	-17.2	4.0	3.6
thereof:					
non-renewable	1'605	1'197	-25.4	2.3	1.9
renewable	1'184	1'113	-6.0	1.7	1.7
Miscellaneous renewables:	3'528	3'875	9.8	5.0	6.0
thereof:					
Wood	395	482	22.0	0.6	0.8
Biogas	389	405	4.1	0.6	0.6
Photovoltaics	2'599	2'842	9.3	3.7	4.4
Wind	145	146	0.7	0.2	0.2
Domestic production	69'923	64'215	-8.2	100.0	100.0
Consumption by storage pumps (-)	4'459	4'145	-7.0	6.4	6.5
Net production	65'464	60'070	-8.2	93.6	93.5
Import (+) ¹	26'988	31'532	16.8	-	-
Export (-) ¹	32'548	29'119	-10.5	-	-
Domestic consumption	59'904	62'483	4.3	100.0	100.0
Losses (-)	4'190	4'370	4.3	7.0	7.0
Final consumption	55'714	58'113	4.3	93.0	93.0
<u>Final consumption by sector:</u>				100	100
Households	19'197	20'134	4.9	34.5	34.6
Agriculture	922	962	4.3	1.7	1.7
Industry	16'443	17'362	5.6	29.5	29.9
Services	14'511	14'825	2.2	26.0	25.5
Transport ²	4'641	4'830	4.1	8.3	8.3

¹ physical

² thereof railways 2021: 2'799 GWh (2020: 2'799 GWh)

thereof electromobility 2021: 457 GWh (2020: 376 GWh)

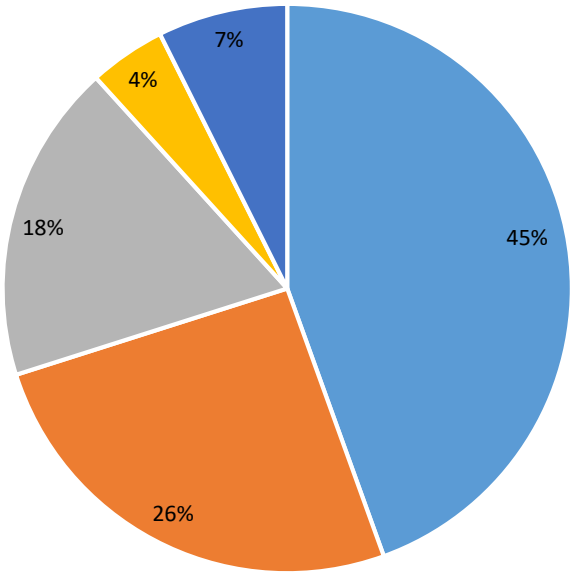
Gas

Table 5

	GWh ¹ (1 GWh =3.6 TJ)		TJ		Change in %
	2020	2021	2020	2021	2020-2021
Imports of natural gas	33'148	36'041	119'330	129'750	8.7
Feed-in of biogas into the gas distribution system	369	370	1'330	1'330	0.0
Total	33'517	36'411	120'660	131'080	8.6
Natural gas used for district heating and electricity production (-)	2'050	2'339	7'380	8'420	
Distribution losses and gasworks' own consumption (-)	105	106	380	380	
Final consumption	31'362	33'966	112'900	122'280	8.3

¹ net calorific value (NCV: 36,3 MJ/Norm m3); in gas industry the gross calorific value (GCV: 40,3 MJ/Norm m3) is commonly used; NCV = 0,9 * GCV.

Final Energy Consumption 1980
(Total: 698'290 TJ)



Final Energy Consumption 2021
(Total: 794'720 TJ)

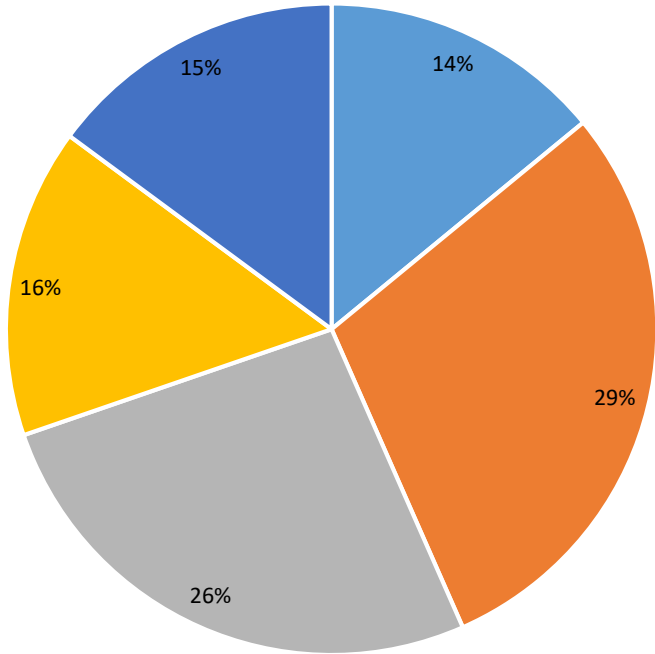
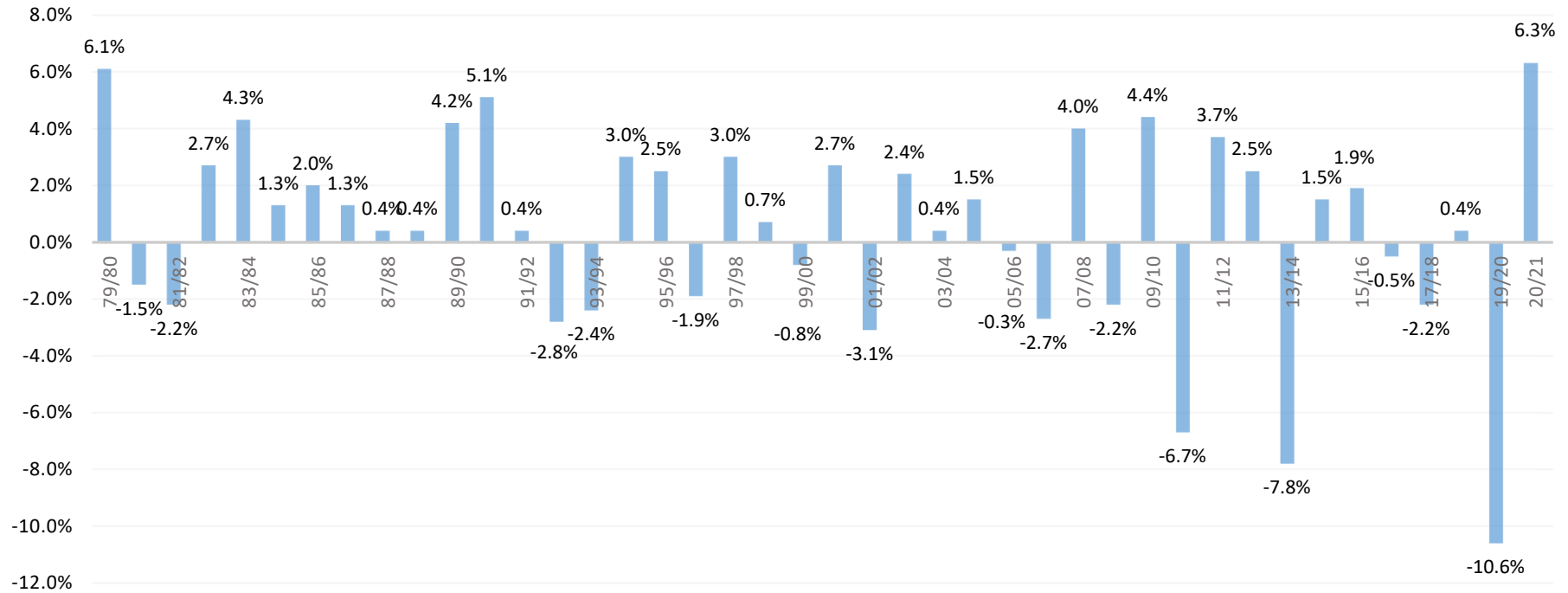


Figure 1

- Fuel oils
- Motor fuels
- Electricity
- Gas
- Others

Rate of Change in Final Energy Consumption per Year

Figure 2



Final Energy Consumption since 1910

Figure 3

