



Environmental Data

GHG Emissions – Absolute

	Unit	2020	2019	2018	2017	2016
Total GHG direct, Scope 1 ¹	mn t CO ₂ equivalent	10.7	10.6	11.1	11.1	11
of which from Upstream activities	mn t CO ₂ equivalent	3.5	4.2	3.6	3.5	4
of which from Downstream activities	mn t CO ₂ equivalent	6.6	6.4	7.6	7.7	7
of which from Borealis ⁴	mn t CO ₂ equivalent	0.6	n.r.	n.r.	n.r.	n.r.
CO ₂	mn t	9.9	9.4	10	10.2	9.7
CH ₄	t	32,999	49,376	44,782	38,807	54,753
N ₂ O	t	217	74	57	52	60
Total GHG indirect, Scope 2 ^{2,5}	mn t CO ₂ equivalent	0.3	0.4	0.4	0.3	0.4
Total GHG indirect, Scope 3 ^{3,5}	mn t CO ₂ equivalent	118	126	108	108	113
GHG emissions from product portfolio (Scope 3)	mn t CO ₂ equivalent	112.2	119.8	100.4	107.2	111.5
of which from oil to energy	mn t CO ₂ equivalent	54.8	68.2	58.2	73.8	85.5
of which from oil for non-energy use	mn t CO ₂ equivalent	7.1	7.7	6.2	6.6	5.1
of which from gas to energy	mn t CO ₂ equivalent	48	41.8	34.4	25.9	20.3
of which from gas for non-energy use	mn t CO ₂ equivalent	2.3	2	1.5	0.9	0.7
of which from chemicals	mn t CO ₂ equivalent	0.01	0.01	0.01	0.01	0.01
GHG emissions from purchased goods and services and capital goods (Scope 3)	mn t CO ₂ equivalent	5.5	6.3	7.2	1.3	1.2
of which from purchased goods and services	mn t CO ₂ equivalent	5.3	6.1	5.7	1.1	1.1
of which from capital goods	mn t CO ₂ equivalent	0.2	0.2	0.2	0.1	0.2
Biogenic CO ₂ emissions ⁵	mn t CO ₂ equivalent	1.44	1.53	1.30	1.24	1.23

¹ Scope 1 refers to direct emissions from operations that are owned or controlled by the organization. We use emission factors from different sources, e.g., IPCC, API GHG Compendium, etc. Since 2016, OMV has been applying global warming potentials of the IPCC Fourth Assessment Report (AR4 – 100 years).

² Scope 2 refers to indirect emissions resulting from the generation of purchased or acquired electricity, heating, cooling, or steam. We use emission factors from different sources, e.g., national authorities, supplier-specific emission factors, etc. The data in the table refers to the market-based approach. Location-based is also 0.3 mn t.

³ Scope 3 refers to other indirect emissions that occur outside the organization, including both Upstream and Downstream emissions. We use emission factors from different sources, e.g., IPCC, PlasticsEurope, etc. The data includes Scope 3 emissions from the use and processing of sold products. Pure “trading margin” sales as well as intracompany sales are excluded. Since 2015, Scope 3 emissions from purchased goods and services and capital goods are included. Since 2018, net import of refinery feedstock is included.

⁴ Only EU ETS emissions from November and December included

⁵ Excluding Borealis

n.r. = not reported



GHG Emissions – Intensities ¹

	Unit	2020	2019	2018	2017	2016
GHG intensity of operations	OMV Group Carbon Intensity Index ²	81	78	86	n.r.	n.r.
Reduction achieved vs. 2010	%	19	22	14	n.r.	n.r.
GHG intensity of product portfolio	mn t GHG per mn t oil equivalent	2.5	2.5	2.5	2.6	2.7
GHG intensity of purchased goods and services and capital goods	mn t GHG per USD bn	0.9	0.8	0.8	0.7	0.6
Carbon intensity of energy supply ³	g CO ₂ /MJ	67.2	68.5	70	n.r.	n.r.

¹ Excluding Borealis

² Direct CO₂ equivalent emissions produced to generate a certain business output using the following business-specific metric – Upstream: t CO₂ equivalent/toe produced, refineries: t CO₂ equivalent/t throughput (crude and semi-finished products without blended volumes), power: t CO₂ equivalent/MWh produced – consolidated into an OMV Group Carbon Intensity Operations Index, based on weighted average of the business segments' carbon intensity. The Carbon Intensity Index was developed in 2018.

³ The carbon intensity of energy supply is measured by assessing the intensity of their Scope 1 and 2 emissions plus Scope 3 emissions (in g CO₂) from the use of sold energy products, against the total energy value of all externally sold energy products (in MJ).

n.r. = not reported

GHG Emissions – Reductions ¹

	Unit	2020	2019	2018	2017	2016
GHG reductions from projects per year	t CO ₂ equivalent	77,900	154,522	374,000	174,000	82,000
GHG reductions from projects to date (from 2009)	mn t CO ₂ equivalent	1.9	1.8	1.7	1.2	n.r.

¹ Excluding Borealis

n.r. = not reported

Other Air Emissions

	Unit	2020	2019	2018	2017	2016
SO ₂	t	2,720	2,627	3,090	2,995	3,105
NO _x	t	7,701	7,441	11,231	12,730	12,050
NM VOC	t	10,898	11,011	9,400	8,689	10,229
Particulate emissions	t	172	124	138	145	139
Ozone-depleting substances ¹	t	0.5	0.4	0.4	0.5	0.5

¹ Excluding Borealis



Flaring and Venting

	Unit	2020	2019	2018	2017	2016
Hydrocarbons flared ¹	t	388,644	426,251	233,770	185,832	180,452
Hydrocarbons vented	t	17,909	34,282	37,420	32,834	50,173

¹ 2019 data restated

Energy

	Unit	2020	2019	2018	2017	2016
Energy consumption ¹	PJ	131.1	117.4	127.4	130.8	126.8
Fuel consumption within the organization ²	PJ	141.4	128.6	152.5	157.5	143.8
Self-generated non-fuel renewable energy	MWh	87.4	n.r.	n.r.	n.r.	n.r.
Purchased electricity consumption ³	PJ	8.6	2.9	3.5	2.9	4.3
Heating, cooling, and steam consumption	TJ	893	95	96	14.8	32.3
Electricity sold ⁴	PJ	14.2	11.3	23.9	24.5	17.2
Heating, cooling, and steam sold ⁵	PJ	3.1	2.9	2.7	3.3	3.2

¹ Refers to the total energy used for operations based on site calculations with specific data and methodology

² 2019 data restated

³ Includes only electricity purchased and consumed. Electricity consumed from own generation is included in fuel consumption.

⁴ Calculation methodology changed in 2020 to exclude electricity internally sold; prior years' data restated

⁵ Calculation methodology changed in 2020 to exclude heating, cooling, and steam sold internally

n.r. = not reported

Water and Wastewater

	Unit	2020	2019	2018	2017	2016
Water withdrawal						
Water withdrawn ¹	megaliters	224,971	103,637	100,381	98,523	99,592
thereof groundwater	megaliters	25,443	24,117	23,964	24,530	23,915
thereof freshwater ($\leq 1,000$ mg/l total dissolved solids) ²	megaliters	22,996	23,836	23,716	24,144	23,614
thereof other water ($> 1,000$ mg/l total dissolved solids) ²	megaliters	262	281	247	386	301
thereof surface water	megaliters	60,778	14,054	14,955	11,526	12,370
thereof freshwater ($\leq 1,000$ mg/l total dissolved solids) ²	megaliters	14,539	14,054	14,955	11,526	12,370



	Unit	2020	2019	2018	2017	2016
thereof other water (>1,000 mg/l total dissolved solids) ²	megaliters	0	0	0	0	0
thereof water from public supply systems	megaliters	1,755	1,360	1,477	1,509	1,606
thereof freshwater (≤1,000 mg/l total dissolved solids) ²	megaliters	1,092	1,360	1,477	1,509	1,606
thereof other water (>1,000 mg/l total dissolved solids) ²	megaliters	0	0	0	0	0
thereof seawater	megaliters	75,718	920	586	577	382
thereof produced water	megaliters	61,256	63,186	59,400	60,382	61,319
Water withdrawn from all areas with water stress ³	megaliters	1,479	1,230	1,775	2,524	2,367
thereof groundwater	megaliters	491	399	645	1,144	1,119
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	229	118	398	758	819
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	262	281	247	386	301
thereof surface water	megaliters	0	0	0	0	0
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	0
thereof other water (>1,000 mg/L mg/l total dissolved solids)	megaliters	0	0	0	0	0
thereof water from public supply systems	megaliters	54	67	82	84	86
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	54	67	82	84	86
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	0
thereof seawater	megaliters	0	0	0	0	0
thereof produced water	megaliters	607	764	1,048	1,297	1,162
Water discharge ²						
Water discharged by destination	megaliters	25,464	n.r.	n.r.	n.r.	n.r.
thereof to groundwater	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof to surface water	megaliters	16,474	n.r.	n.r.	n.r.	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	10,913	n.r.	n.r.	n.r.	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	5,561	n.r.	n.r.	n.r.	n.r.
thereof to seawater	megaliters	4,581	n.r.	n.r.	n.r.	n.r.
thereof to third party	megaliters	4,409	n.r.	n.r.	n.r.	n.r.
Water discharged by destination to all areas with water stress	megaliters	61	n.r.	n.r.	n.r.	n.r.
thereof to groundwater	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof to surface water	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	n.r.	n.r.	n.r.	n.r.
thereof to seawater	megaliters	0	n.r.	n.r.	n.r.	n.r.



	Unit	2020	2019	2018	2017	2016
thereof to third party	megaliters	61	n.r.	n.r.	n.r.	n.r.
Water discharged – quality ²						
Hydrocarbons (oil) discharged	t	13	n.r.	n.r.	n.r.	n.r.
Water consumption ²						
Water consumed ⁴	megaliters	65,357	74,924	75,135	76,152	78,103
Water consumed in all areas with water stress	megaliters	647	1,158	1,691	2,428	2,267
Water recycled and reused	megaliters	315,327	251,959	7,041	6,859	6,733

¹ Excluding water withdrawn for once-through use (reported separately)

² Excluding Borealis

³ Total water withdrawn from all areas with water stress includes Borealis, however, the detailed breakdown below does not.

⁴ Excluding water withdrawn for once-through use (reported separately). Water storage does not have a significant impact.

n.r. = not reported



Waste

	Unit	2020	2019	2018	2017	2016
Total waste ¹	t	634,885	633,722	583,831	460,247	923,709
thereof non-hazardous waste	t	241,221	323,268	315,219	224,008	662,153
thereof non-hazardous waste to landfill	t	108,792	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for recycling	t	21,690	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for incineration	t	6,021	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for other disposal options	t	19,130	n.r.	n.r.	n.r.	n.r.
thereof other (preparation for reuse and other recovery options) ²	t	85,589	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste	t	393,664	310,453	268,611	236,239	261,556
thereof hazardous waste to landfill	t	7,995	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for recycling	t	308,580	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for incineration	t	20,066	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for other disposal options	t	48,222	n.r.	n.r.	n.r.	n.r.
thereof transboundary movement of hazardous waste (Basel convention) ²	t	8,129	n.r.	n.r.	n.r.	n.r.
thereof other (preparation for reuse and other recovery options) ²	t	672	20	0	0	0
Waste directed to disposal	t	204,120	308,523	360,357	258,086	390,669
Waste diverted from disposal	t	430,765	n.r.	n.r.	n.r.	n.r.
Waste recovery or recycling rate	%	68%	51%	38%	44%	58%

¹ Total waste amounts including those from one-time projects

² Excluding Borealis

n.r. = not reported

Spills

	Unit	2020	2019	2018	2017	2016
Spills	number	2,390	2,047	2,184	2,403	2,138
of which major (i.e., severity level 3 to 5)	number	0	1	2	1	2
of which minor (i.e., severity level below 3)	number	2,390	2,046	2,182	2,402	2,136
Spills volume	liters	41,355	56,641	36,874	173,909	103,490



Environmental Expenditures ¹

	Unit	2020	2019	2018	2017	2016
Environmental protection expenditures, excluding depreciation	mn EUR	135	220	196	197	208
Environmental investments for assets put into operation	mn EUR	84	98	134	57	105

¹ Excluding Borealis