Environmental Data

GHG Emissions – Absolute

	Unit	2023	2022	2021	2020	2019
Total GHG direct, Scope 1[1]	mn t CO_2 equivalent	10.0	11.7	13.5	10.9	10.8
CO_2	mn t	9.6	10.9	12.4	9.9	9.4
CH_4[2]	t	12,109	20,019	32,193	41,906	57,405
N_2O[3]	t	283	938	818	217	74
Total GHG indirect, Scope 2[4]	mn t CO_2 equivalent	1.1	0.9	1.1	0.3	0.4
Total GHG indirect, Scope 3[5,6,7]	mn t CO_2 equivalent	124.0	133.6	156.4	117.7	126.1
GHG emissions from processing of sold products (Scope 3, category 10)	mn t CO_2 equivalent	8.5	9.6	10.4	9.4	9.8
of which from oil for non-energy use	mn t CO_2 equivalent	5.1	5.5	5.4	7.1	7.8
of which from gas for non-energy use	mn t CO_2 equivalent	1.3	1.6	2.6	2.3	2.0
of which from chemicals	mn t CO_2 equivalent	2.0	2.4	2.40	0.01	0.01
GHG emissions from use of sold products (Scope 3, category 11)	mn t CO_2 equivalent	91.0	99.4	119.5	102.8	110.0
of which from oil to energy	mn t CO_2 equivalent	57.5	57.2	58.4	54.8	68.2
of which from gas to energy	mn t CO_2 equivalent	30.6	36.5	54.5	48.0	41.8
of which from chemicals	mn t CO_2 equivalent	3.0	5.7	6.6	n.r.	n.r.
GHG emissions from purchased goods and services (Scope 3, category 1)[7]	mn t CO_2 equivalent	13.8	12.1	13.0	5.3	6.1
GHG emissions from capital goods (Scope 3, category 2)	mn t CO_2 equivalent	0.5	0.7	0.5	0.2	0.2
GHG emissions from fuel- and energy-related activities not included in Scope 1 or 2 (Scope 3, category 3)	mn t CO_2 equivalent	0.3	0.4	0.5	n.r.	n.r.
GHG emissions from waste generated in operations (Scope 3, category 5)	mn t CO_2 equivalent	0.3	0.3	0.3	n.r.	n.r.
GHG emissions from end-of-life treatment of sold products (Scope 3, category 12)	mn t CO_2 equivalent	9.8	11.1	12.1	n.r.	n.r.

	Unit	2023	2022	2021	2020	2019
Biogenic CO_2 emissions	mn t CO_2 equivalent	1.49	1.50	1.55	1.44	1.53

[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] Decrease mainly driven by production shutdown in Yemen

[3] Decrease mainly driven by the divestment of Borealis Nitro

[4] 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., International Energy Agency, supplier-specific emission factors, etc. The data in the table refers to the market-based approach. Location-based is 0.8 mn t.

[5] 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, DBEIS, 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.

[6] Borealis Scope 3 category 15 emissions are accounted for as 19.9 mn t CO_2 equivalent, but not yet included in OMV's Group consolidation.

[7] 2022 data restated to reflect additional feedstock amounts that had previously not been included

n.r. = not reported

GHG Emissions – Targets 2030[1]

	Unit	2023	2022	2021	2019 (baseline)
Total GHG direct, Scope 1	mn t CO_2 equivalent	9.3	10.0	11.6	12.4
of which from energy business segments	mn t CO_2 equivalent	6.5	7.2	8.4	9.2
of which from non-energy business segments	mn t CO_2 equivalent	2.8	2.7	3.2	3.1
Total GHG indirect, Scope 2	mn t CO_2 equivalent	1.0	0.8	0.9	1.3
of which from energy business segments	mn t CO_2 equivalent	0.2	0.2	0.2	0.3
of which from non-energy business segments	mn t CO_2 equivalent	0.8	0.6	0.7	0.9
Total GHG indirect, Scope 3[2]	mn t CO_2 equivalent	103.2	106.4	118.1	114.5
of which from energy business segments	mn t CO_2 equivalent	87.4	90.0	100.2	96.5
of which from non-energy business segments	mn t CO_2 equivalent	15.9	16.3	17.8	18.1
Carbon intensity of energy supply[3]	g CO_2/MJ	69.1	67.5	67.4	69.8
Methane intensity[4]	%	0.3	0.4	0.6	1.3

[1] For the purpose of setting GHG emissions reduction targets, a meaningful and consistent comparison over time requires the setting of a performance date (base year) with which to compare current emissions. For its 2030 and 2040 GHG reduction targets, the OMV Group has set 2019 as the base year including full-year Scope 1 to 3 emissions data of Borealis. In accordance with best practice guidance (i.e., GHG Protocol), when a company undergoes significant structural changes due to acquisitions, divestments, and mergers, GHG data shall be recalculated for all years dating back to the base year. OMV has set a threshold that a significant change means that the cumulative effect of mergers/acquisitions/divestments represents a higher effect than 5% on the OMV Group's base year absolute GHG emissions. Accordingly, this table shows the recalculated emissions for the categories of emissions relevant for the 2030 targets. The previous table, GHG Emissions – Absolute, does not have recalculated data to give as transparent a picture as possible.

[2] The following Scope 3 categories are included: Category 11: Use of Sold Products for OMV's energy segment, Category 1: Purchased Goods (feedstocks) from OMV's non-energy business segment, and Category 12: End-of-Life of Sold Products for OMV's non-energy segment.

[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 CO_2) from the use of sold energy products, against the total energy value of all externally sold energy products (in MJ) (excluding purely traded volumes).

[4] The methane intensity refers to the volume of methane emissions from OMV's operated E&P oil and gas assets as a percentage of the volume of the total gas that goes to market from those operations. The approach is aligned with the Oil and Gas Climate Initiative's (OGCI) methane intensity. Unlike the other figures in this table, the methane intensity is not subject to a baseline recalculation, as the target is a fixed value and the target achievement is not compared to the base year. In case of mergers and aquisitions, new operations will be expected to endorse the existing target.

GHG Emissions – Targets 2025[1]

	Unit	2023	2022	2021	2020	2019	2010 (baseline)
GHG intensity of operations	OMV Group Carbon Intensity Index[2]	80	83	82	82	80	100
Reduction achieved vs. 2010	%	20	17	18	18	20	n.a.
GHG intensity of product portfolio	mn t GHG per mn t oil equivalent	2.6	2.6	2.5	2.5	2.5	2.6
Achieve at least 1 mn t of CO_2 reductions in 2020–2025 from operated assets (cumulative reductions) (Scope 1)	t CO_2 equivalent	703,146	644,946	532,907	77,900	n.a.	n.a.
thereof from concrete reduction initiatives	t CO_2 equivalent	327,612	269,412	157,374	77,900	n.a.	n.a.
thereof from divestments	t CO_2 equivalent	375,534	375,533	375,533	0.0	n.a.	n.a.

[1] Excluding Borealis

[2] Direct CO_2 equivalent emissions produced to generate a certain business output using the following business-specific metric – Upstream: t CO_2 equivalent/toe produced, refineries: t CO_2 equivalent/t throughput (crude and semi-finished products without blended volumes), power: t CO_2 equivalent/MWh produced – consolidated into an OMV Group Carbon Intensity Index, based on weighted average of the business segments' carbon intensity. The Carbon Intensity Index was developed in 2018.

n.a. = not applicable

Other Air Emissions

	Unit	2023	2022	2021	2020	2019
SO_2	t	2,581	2,878	2,544	2,720	2,627
NO_x	t	8,539	9,052	10,302	7,701	7,441
NMVOC	t	8,090	12,278	12,259	10,898	11,011
Particulate emissions	t	100	606	635	172	124
Ozone-depleting substances	t	0.3	0.1	0.2	0.5	0.4

Flaring and Venting

	Unit	2023	2022	2021	2020	2019
Hydrocarbons flared[1]	t	100,162	241,038	360,138	378,431	417,384
Hydrocarbons vented	t	8,967	10,550	16,499	28,122	43,149

[1] In Yemen, the security situation remains challenging, with drone attacks carried out and further threats made toward crude oil shipping operations. Production was disrupted during the whole of 2023. Subsequently, ongoing projects have been paused and activities in the field reduced to maintenance, inspection, and preservation operations. This is reflected in the significant decrease observed in the routine flaring value.

Energy

	Unit	2023	2022	2021	2020	2019
Energy consumption inside the organization						
Total energy consumption[1,6]	PJ	142.9	163.2	176.2	131.1	117.4
thereof fuel consumption within the organization	PJ	122.1	146.1	176.6	141.4	128.6
thereof gaseous fuels[2]	PJ	101.1	101.1	130.1	117.9	n.r.
thereof liquid fuels[3]	PJ	15.2	38.8	39.5	16.3	n.r.
thereof solid fuels[4]	PJ	5.8	6.2	7.0	7.3	n.r.
thereof self-generated non-fuel renewable energy for own consumption	PJ	0.124	0.084	0.052	0.0003	n.r.
thereof purchased electricity consumption[5,6]	PJ	13.0	13.2	16.3	8.6	2.9
thereof from renewable sources	PJ	5.6	3.9	4.0	2.6	0.7
thereof heating	PJ	0.86	0.01	0.01	0.09	n.r.
thereof from renewable sources	PJ	0.006	0.006	0.008	0.006	n.r.
thereof cooling	PJ	0.0	0.0	0.0	0.0	n.r.
thereof from renewable sources	PJ	0.0	0.0	0.0	0.0	n.r.
thereof steam	PJ	4.3	3.9	4.3	0.8	n.r.
thereof from renewable sources	PJ	0.0	0.0	0.0	0.0	n.r.
Energy consumption outside the organization[6]						
Total energy sold	PJ	1,380	1,503	1,829	1,667	1,748
thereof from non-renewable sources	PJ	1,359	1,482	1,807	1,647	1,726
thereof fuels sold	PJ	1,331	1,433	1,770	1,604	1,678
thereof electricity sold	PJ	24.8	46.1	33.8	40.0	45.1
thereof heating sold	PJ	2.9	2.2	2.7	2.7	2.8
thereof cooling sold	PJ	0.0	0.0	0.0	0.0	0.0
thereof steam sold	PJ	0.0	0.0	0.4	0.4	0.4
thereof from renewable sources	PJ	21.0	21.3	21.9	20.3	21.6
Total energy consumption (inside the organization) per net sales revenues	PJ/EUR mn	0.004	0.003	0.005	0.008	0.005

1 Refers to the total energy used for operations based on site calculations with specific data, conversion factors, and methodologies.

2 Refers to natural gas, residual gas, and other gaseous fuels.

3 Refers to diesel, heating oil, and residue/waste oil, as well as other liquid fuels.

4 Refers to FCC coke and other solid fuels. OMV does not consume any coal.

5 Includes only electricity purchased and consumed. Electricity consumed from own generation is included in fuel consumption or in self-generated non-fuel renewable energy for own consumption.

6 Refers to energy sales volumes. We use conversion factors from different sources, e.g., IPCC, etc.

n.r. = not reported

Water and Wastewater

	Unit	2023	2022	2021	2020	2019
Water withdrawal						
Water withdrawn[1]	megaliters	612,206	731,894	827,558	224,971	103,637
thereof groundwater	megaliters	24,707	22,192	34,903	25,443	24,117
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	18,215	16,244	34,805	22,996	23,836
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	6,492	5,948	98	262	281
thereof surface water[1]	megaliters	131,850	261,557	294,617	60,778	14,054
thereof freshwater (≤1,000 mg/l total dissolved solids)[1]	megaliters	131,850	261,557	294,617	14,539	14,054
thereof once-through cooling water[1]	megaliters	102,986	205,971	276,359	47,124	0
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	0
thereof water from public supply systems	megaliters	4,508	2,181	3,825	1,755	1,360
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	4,508	2,181	3,825	1,092	1,360
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	0
thereof seawater	megaliters	400,380	393,372	436,337	75,718	920
thereof once-through cooling water	megaliters	399,751	396,926	435,493	71,784	0
thereof produced water	megaliters	50,760	52,591	57,875	61,256	63,186
Water withdrawn from all areas with water stress	megaliters	1,898	2,125	3,550	1,479	1,230
thereof groundwater	megaliters	1,122	1,436	2,179	491	399
thereof freshwater (≤1,000 mg/l total dissolved solids)[2]	megaliters	1,121	321	325	229	118
thereof other water (>1,000 mg/l total dissolved solids)[2]	megaliters	0	1,115	98	262	281
thereof surface water[2]	megaliters	346	0	0	0	0
thereof freshwater (≤1,000 mg/l total dissolved solids)[2]	megaliters	346	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	58	135	712	54	67
thereof freshwater (≤1,000 mg/l total dissolved solids)[1]	megaliters	58	135	24	54	67
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	372	555	659	607	764
Water discharge						
Water discharged by destination[1]	megaliters	541,682	661,962	758,033	25,464	n.r.
thereof to groundwater[1]	megaliters	209	351	846	0	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	209	351	846	0	n.r.

	Unit	2023	2022	2021	2020	2019
thereof to surface water[1]	megaliters	132,913	226,157	303,325	16,474	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	128,663	221,915	298,467	10,913	n.r.
thereof once-through cooling water	megaliters	102,986	205,971	276,363	47,124	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	4,250	4,242	4,857	5,561	n.r.
thereof to seawater	megaliters	402,389	397,573	438,920	4,581	n.r.
thereof once-through cooling water	megaliters	399,751	396,926	435,901	71,784	n.r.
thereof to third party	megaliters	6,171	37,870	14,937	4,409	n.r.
thereof to others	megaliters	58	11	5	n.r.	n.r.
Water discharged by destination to all areas with water stress	megaliters	1,245	1,376	2,467	61	n.r.
thereof to groundwater	megaliters	0	351	846	0	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	351	0	0	n.r.
thereof to surface water	megaliters	527	506	938	0	n.r.
thereof freshwater (≤1,000 mg/l total dissolved solids)	megaliters	527	506	0	0	n.r.
thereof other water (>1,000 mg/l total dissolved solids)	megaliters	0	0	0	0	n.r.
thereof to seawater	megaliters	0	0	0	0	n.r.
thereof to third party	megaliters	660	508	678	61	n.r.
thereof to others	megaliters	58	11	5	n.r.	n.r.
Water discharge – quality						
Hydrocarbons (oil) discharged	t	7	2	6	13	n.r.
Water consumption						
Water consumed[3]	megaliters	70,604	71,086	70,831	75,685	74,924
Water consumed in all areas with water stress[4]	megaliters	672	1,104	1,140	1,131	1,158
Water reuse						
Water recycled and reused[5]	megaliters	255,784	315,831	319,618	315,327	251,959
Produced water						
Produced water generated	megaliters	50,760	52,875	57,875	61,256	63,186
Produced water injected	megaliters	47,928	49,567	52,325	n.r.	n.r.
Produced water discharged	megaliters	750	678	3,060	n.r.	n.r.

[1] Decrease due to divestment of Borealis Nitro in 2023

[2] Figures affected because assignment to categories was updated in some locations (Borealis Beringen, Geleen) from non-freshwater to freshwater.

[3] Water consumption is calculated as water withdrawal minus water discharge. The figures above might not balance as other types of water, such as rainwater, are usually not included in water withdrawal.

[4] Decrease mainly due to production halt in Yemen in 2023. Consumption also went down slightly in Tunisia and Geleen.

[5] Decrease due to the planned shutdown at the Petrobrazi power plant between March 1, 2023, and June 30, 2023.

n.r. = not reported

Waste

	Unit	2023	2022	2021	2020	2019
Total waste[1]	**t**	**853,937**	**865,532**	**799,048**	**634,885**	**633,722**
thereof non-hazardous waste	t	582,419	525,848	431,420	241,221	323,268
thereof hazardous waste	t	271,518	339,683	367,627	393,664	310,453
Total waste diverted from disposal[2]	**t**	**634,485**	**545,869**	**539,985**	**430,765**	**n.r.**
thereof non-hazardous waste	t	455,521	n.r.	n.r.	n.r.	n.r.
thereof other (preparation for reuse and other recovery options)	t	394,790	293,735	211,853	85,589	n.r.
of which onsite	t	5,444	n.r.	n.r.	n.r.	n.r.
of which offsite	t	389,346	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for recycling	t	60,731	45,513	48,416	21,690	n.r.
of which onsite	t	5,340	n.r.	n.r.	n.r.	n.r.
of which offsite	t	55,391	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste	t	177,608	n.r.	n.r.	n.r.	n.r.
thereof other (preparation for reuse and other recovery options)[2]	t	1,688	1,451	1,421	8,129	n.r.
of which onsite	t	50	n.r.	n.r.	n.r.	n.r.
of which offsite	t	1,638	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for recycling	t	175,920	204,388	277,074	308,580	n.r.
of which onsite	t	133,335	n.r.	n.r.	n.r.	n.r.
of which offsite	t	42,586	n.r.	n.r.	n.r.	n.r.
Total waste directed to disposal[2]	**t**	**219,452**	**319,662**	**259,063**	**204,120**	**308,523**
thereof non-hazardous waste	t	126,899	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for incineration (with energy recovery)	t	16,058	15,060	n.r.	n.r.	n.r.
of which onsite	t	0	n.r.	n.r.	n.r.	n.r.
of which offsite	t	16,058	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for incineration (without energy recovery)	t	1,767	217	n.r.	n.r.	n.r.
of which onsite	t	21	n.r.	n.r.	n.r.	n.r.
of which offsite	t	1,746	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste to landfill	t	102,486	133,932	106,494	108,792	n.r.
of which onsite	t	22,756	n.r.	n.r.	n.r.	n.r.
of which offsite	t	79,729	n.r.	n.r.	n.r.	n.r.
thereof non-hazardous waste for other disposal options	t	6,588	37,391	38,399	19,130	n.r.
of which onsite	t	97	n.r.	n.r.	n.r.	n.r.
of which offsite	t	6,491	n.r.	n.r.	n.r.	n.r.

	Unit	2023	2022	2021	2020	2019
thereof hazardous waste	t	92,554	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for incineration (with energy recovery)	t	17,166	21,426	n.r.	n.r.	n.r.
of which onsite	t	0	n.r.	n.r.	n.r.	n.r.
of which offsite	t	17,166	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for incineration (without energy recovery)	t	3,114	1,451	n.r.	n.r.	n.r.
of which onsite	t	0	n.r.	n.r.	n.r.	n.r.
of which offsite	t	3,114	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste to landfill	t	20,060	7,660	6,294	7,995	n.r.
of which onsite	t	0	n.r.	n.r.	n.r.	n.r.
of which offsite	t	20,060	n.r.	n.r.	n.r.	n.r.
thereof hazardous waste for other disposal options	t	52,014	102,525	59,704	48,222	n.r.
of which onsite	t	529	n.r.	n.r.	n.r.	n.r.
of which offsite	t	51,485	n.r.	n.r.	n.r.	n.r.
thereof transboundary movement of hazardous waste (Basel convention)	t	1,356	781	1,221	672	20
Total waste recovery or recycling rate[2]	**%**	**74**	**63**	**68**	**68**	**51**

[1] Total waste amounts including those from one-time projects

[2] Decrease observed across our sites; less waste directed to disposal, more waste diverted from disposal. Increased recycling rate.

n.r. = not reported

Spills

	Unit	2023	2022	2021	2020	2019
Spills	number	2,027	2,003	2,232	2,390	2,047
of which major (i.e., severity levels 3 to 5)	number	4	2	3	0	1
Spills volume released	liters	185,745	223,462	80,976	41,355	56,641

Environmental Expenditures

	Unit	2023	2022	2021	2020	2019
Environmental protection expenditures, excluding depreciation[1]	EUR mn	624	443	240	135	220
Environmental investments for assets put into operation[1]	EUR mn	422	151	150	84	98

[1] In 2023 Borealis and SapuraOMV reported this value for the first time.