



CLIMATE
CHANGE
ADVISORY
COUNCIL



Annual Review 2025



**Supplemental
Indicators**

Supplementary Indicator Tables to Annual Review 2025

This spreadsheet provides a extended list of sectoral and cross cutting statistical indicators which can provide useful insight into changing greenhouse gas emissions and underlying activities driving emissions.

The data is collated from information available in the public domain by a broad range of official and sectoral stakeholders

While every effort has been made to ensure the Information in this spreadsheet is accurate and up to-date, the data is subject to continual update and revision. In considering this information. users are encouraged to reference the source material and most recent publications issued by original authors.

The data was last updated on 12 Nov 2025.

Agriculture, Forestry and other Land Use (AFOLU)													SEC		106		Provisional		Projections												
Agriculture													#DIV/0!	43.7	64.5	84.9															
Source	Name	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040			
https://www.epa.ie/publications/monitoring-assessment/climate	Sectoral emissions	Mt CO ₂ eq	19.9	20.5	21.1	21.4	21.3	21.6	22.0	21.8	20.8	20.4																			
	Emissions relative to 2018					0.0%	-0.6%	0.7%	2.6%	1.8%	-3.0%	-4.7%																			
	Year on year change						-0.6%	1.3%	1.9%	-0.8%	-4.7%	-1.7%																			
	Ag WEM												21.0	21.1	21.2	21.5	21.5	21.6	21.7	21.7	21.6	21.5	21.5	21.5	21.6	21.6	21.6				
https://www.epa.ie/publications/monitoring-assessment/climate	Sectoral emissions CH ₄	Mt CO ₂ eq	14.2	14.6	15.0	14.9	15.1	15.3	15.3	15.3	15.0	14.5																			
	CH ₄ Emissions relative to 2018	kt CH ₄	505.5	521.1	536.3	532.1	539.3	545.4	546.7	546.6	534.0	518.3																			
	CH ₄ Year on year change					0.0%	1.3%	2.5%	2.8%	2.7%	0.4%	-2.6%																			
	CH ₄ Year on year change						1.3%	1.1%	0.3%	0.0%	-2.3%	-2.9%																			
https://www.epa.ie/publications/monitoring-assessment/climate	Sectoral emissions N ₂ O	Mt CO ₂ eq	4.8	4.9	5.1	5.3	5.1	5.2	5.3	4.9	4.4	4.5																			
	kt N-N ₂ O		18.0	18.3	19.3	20.1	19.3	19.4	20.1	18.4	16.8	17.0																			
	N ₂ O Emissions relative to 2018					0.0%	-4.0%	-3.3%	-0.3%	-8.3%	-16.5%	-15.5%																			
	N ₂ O Year on year change						-4.0%	0.7%	3.2%	-8.0%	-9.0%	1.2%																			
https://www.epa.ie/publications/monitoring-assessment/climate	Sectoral emissions CO ₂ emissions	Mt CO ₂	1.0	1.1	1.0	1.2	1.1	1.1	1.3	1.6	1.4	1.4																			
						100.0%	91.1%	96.9%	113.1%	136.3%	115.5%	118.7%																			
https://data.cso.ie/table/AAA09	Dairy Cows (June)	Thousands	1,296	1,398	1,433	1480.9	1504.8	1567.7	1604.5	1627.3	1646.6	1624	1587.9																		
https://data.cso.ie/table/AAA09	Other cows (June)	Thousands	1,076	1,104	1,081	1047.9	999.7	983.3	940.3	913.2	872.1	825.3	778.5																		
https://data.cso.ie/table/AAA09	Other cattle (June)	Thousands	4,592	4,720	4,850	4,820	4,704	4,764	4,814	4,856	4,823	4,734	4,538																		
https://data.cso.ie/table/AAA09	Total Cattle (June)	Thousands	6,964	7,221	7,364	7,349	7,209	7,315	7,359	7,396	7,342	7,183	6,905																		
https://data.cso.ie/table/AAA09	Total Sheep (June)	Thousands	5,139	5,179	5,197	5,109	5,146	5,520	5,609	5,968	5,674	5,176	5,099																		
https://data.cso.ie/table/AKM01	Milk deliveries (domestic)	million litres	6,395	6,651	7,263	7,585	7,986	8,296	8,759	8,825	8,458	8,428																			
https://data.cso.ie/table/PFS01	Nitrogen Fertilizer Use/sales	t N	330,959	339,104	369,089	408,495	367,364	379,519	399,164	343,193	280,569	310,411																			
https://data.cso.ie/table/AIM09	Prices CAN (27.5% N) per pr t/N	€ per tonne N						€874	€1,161	€3,069	€1,899	€1,332	€1,497																		
	Prices Urea (46% N) per t/N	€ per tonne N						€730	€962	€2,219	€1,357	€1,029	€1,149																		
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Dairy production efficiency	kg CO ₂ eq per kg FPCM	1.03	1.06	1.12	1.12	1.01	1	0.99	1	0.99	1.01																			
	Dairy Nitrogen Use Efficiency	%	25	24	24.3	21.5	24.2	25.5	26.8	27.7	29	25.2																			
	Dairy N Balance	Excess kg N inputs over outputs per hectare	155.9	164.8	172.3	201	179.4	177	164	162.1	144.9	165																			
	Dairy Use of protected Urea	% of farms			0	0	3%	5%	11%	18%	28%	40%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Top							8%				52%																			
	Middle							4%				40%																			
	Bottom							2%				26%																			
	Milk Recording %	% of farms			41%	38%	46%	43%	52%	61%	61%	52%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Top							58%				62%																			
	Middle							44%				65%																			
	Bottom							23%				42%																			
	Use of LESS	% of Dairy farms			5%	5%	32%	52%	68%	77%	82%	85%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Application of Lime	% Dairy farms liming					36%	38%	46%	58%	51%	49%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Dairy Profitability (gross margin)	€ per hectare	1710	1457	2113	1730	1802	1920	2459	3666	2218	2920																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Dairy Economic Viability	% of farms	75%	69%	85%	73%	75%	80%	86%	93%	53%	82%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Beef production efficiency	kg CO ₂ eq per kg beef	11.2	10.8	11	11.5	11.2	11	11.5	9.7	10.9	10.3																			
	Beef Nitrogen Use Efficiency	%	22.6%	23.2%	24.2%	20.8%	22.4%	23.0%	21.7%	30.3%	31.3%	27.3%																			
	Beef N Balance	Excess kg N inputs over outputs per hectare	53.6	63.2	65.2	70.9	59.2	59.9	66.8	47.5	45.4	54.6																			
	Beef Use of protected Urea	% of farms					1%	2%	2%	5%	5%	13%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Top							0%				22%																			
	Middle							0%				9%																			
	Bottom							0%				7%																			
	Use of LESS	% of Beef farms			5%	5%	12%	18%	24%	34%	37%	45%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Application of Lime	% Beef farms liming					11%	11%	21%	24%	23%	15%																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag	Beef Profitability (gross margin)	€ per hectare	463	507	533	483	495	511	654	754	1020	1099																			
National Farm Survey - Sustainability Report 2024 - Teagasc Ag																															

Transport

Source	Name	Unit	Year to date										
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
https://www.epa.ie/publications/monitoring--assessment	Sectoral Emissions	Mt CO ₂ eq	11.81	12.30	12.13	12.31	12.32	10.40	11.09	11.76	11.79	11.65	
	Emissions relative to 2018	%				0.0%	0.1%	-15.5%	-9.9%	-4.5%	-4.2%	-5.3%	
[nrg_ind_ren] Share of energy from renewable sources	Renewable Energy Sources in Transport (RES-T)	%	5.9%	5.2%	7.4%	7.2%	8.8%	10.1%	4.6%	5.8%	4.6%	-	
https://www.seai.ie/data-and-insights/seai-statistics/	Total Motor Petrol Deliveries	ktoe		1,058	964	865	831	610	648	733	796	847	
https://www.seai.ie/data-and-insights/seai-statistics/monthly	Total Road Diesel Deliveries	ktoe		2,935	3,049	3,198	3,265	2,832	2,968	3,140	3,101	3,111	
https://data.cso.ie/table/THA18	Distance travelled by private car	Millions km	35,020	36,623	37,181	35,975	26,102	30,216	35,453	34,952	35,126	-	
https://data.cso.ie/table/THA19	Distance travelled by goods vehicles	Millions km	7,021	7,410	7,785	7,891	7,283	8,812	8,023	9,356	8,775	-	
https://data.cso.ie/table/THA10	Distance travelled by PSVs	Millions km	1,167	1,194	1,219	1,228	1,240	823	721	960	1,113	-	
https://data.cso.ie/table/THA24	Journeys by Public Transport (weekly average up to week 43)	Million Journeys					155	99	90	162	207	-	
https://data.cso.ie/table/TEA27	New Private Car (M1) BEV share in new registrations	%	0.34%	0.29%	0.50%	0.87%	1.82%	2.68%	5.30%	10.75%	14.52%	10.59%	
https://alternative-fuels-observatory.ec.europa.eu/transport	Fleet of alternative fuelled BEV passenger cars (M1) as a percentage of the total fleet.	%	0.05%	0.08%	0.13%	0.21%	0.38%	0.55%	0.93%	1.51%	2.50%	3.05%	
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of BEV passenger cars (M1)	Number	1,120	1,700	2,770	4,610	8,590	12,720	21,440	36,970	59,400	72,640	85,731
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of PHEV passenger cars (M1)	Number	135	416	739	1,631	2,947	5,659	17,570	25,318	35,785	41,933	53,379
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of BEV light commercial vehicles (N1)	Number	88	92	152	165	453	890	1,548	2,227	3,205	4,150	5,201
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of publicly accessible AC recharging points	Number						866	768	1,947	2,355	2,802	2,963
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of publicly accessible DC recharging points	Number						199	197	273	470	786	987
https://alternative-fuels-observatory.ec.europa.eu/transport	Total number of recharging points (AC+DC)	Number	838	993	1,044	1,057	1,145	1,065	965	2,220	2,825	3,588	3,950

Electricity

Source	Indicator Name	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024				Source
https://www.epa.ie/publications/monitoring-assessment	Sectoral Emissions	Mt CO ₂ eq	11.6	12.4	11.6	10.2	9.0	8.4	9.9	9.7	7.6	7.0				https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/irelands-provisional-greenhouse-gas-emissions-1990-2024.php
https://www.epa.ie/publications/monitoring-assessment	Sectoral Emissions relative to 2018	%	13%	21%	13%	0%	-12%	-18%	-3%	-5%	-26%	-32%				https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/irelands-provisional-greenhouse-gas-emissions-1990-2023.php
Electricity	% of electricity generation by Coal (%)		17.80%	16.62%	12.53%	7.20%	1.93%	2.52%	8.85%	7.84%	3.69%	2.76%				Electricity
Electricity	% of electricity generation by Gas		42.22%	51.14%	51.35%	50.78%	49.58%	49.71%	44.52%	47.81%	43.17%	40.94%				Electricity
Electricity	% of electricity generation by Wind		24.64%	21.43%	25.51%	29.34%	34.09%	37.75%	32.57%	34.97%	39.05%	38.91%				Electricity
Electricity	% of electricity generation by Solar (%)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	1.39%	2.44%				Electricity
Electricity	% of electricity generation by Net Imports(%)		2.48%	-2.56%	-2.39%	-0.09%	2.16%	-0.50%	5.05%	0.78%	9.92%	14.76%				Electricity
Electricity	Renewable Energy Source Indigenous Generation Share (%)		24.68%	22.62%	26.74%	29.99%	34.06%	38.55%	31.38%	35.25%	36.93%	35.68%				Electricity
Data Centres Metered Electricity Consumption 2024 - Central Statistics Office	Data Centre Electricity Consumption (GWh)		1238	1480	1760	2180	2488	3027	4010	5271	6336	6969				Data Centres Metered Electricity Consumption 2024 - Central Statistics Office
Data Centres Metered Electricity Consumption 2024 - Central Statistics Office	Data Centre Electricity Consumption Change (%)		NA	20%	19%	24%	14%	22%	32%	31%	20%	10%				Data Centres Metered Electricity Consumption 2024 - Central Statistics Office
Data Centres Metered Electricity Consumption 2024 - Central Statistics Office	Data Centre % of metered electricity consumed (%)		5.00%	5.80%	6.80%	8.20%	9.40%	11.20%	14.10%	17.70%	20.70%	21.80%				Data Centres Metered Electricity Consumption 2024 - Central Statistics Office
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Installed Onshore Wind Capacity (MW)		-	-	-	-	-	4297	4307	4502	4715	4909				https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Installed Offshore Wind Capacity (MW)		-	-	-	-	-	25	25	25	25	25				https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Installed Solar Capacity (TSO/DSO Grid only) (MW)		-	-	-	-	-	0.06	43.79	450.179	753.319					https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Installed Hydro Capacity (MW)		-	-	-	-	-	235	235	235	235					https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Installed Other Capacity (MW)		-	-	-	-	-	156	156	278	285					https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Battery Storage Capacity (MW)		-	-	-	-	-	266	474	549	679.6					https://www.eirgridgroup.com/how-the-grid-works/renewables/
https://www.eirgridgroup.com/how-the-grid-works/renewables/	Pumped Hydro Capacity (MW)		-	-	-	-	-	292	292	292	292					https://www.eirgridgroup.com/how-the-grid-works/renewables/
CIS database: Log in - CIS Online (cisisreland.com)	Wind Plans Awaiting Decision (MW)		-	-	-	-	-	-	-	-	460 ^a	1598				CIS database: Log in - CIS Online (cisisreland.com)
CIS database: Log in - CIS Online (cisisreland.com)	Wind Plans Granted		-	-	-	-	-	-	-	-	530 ^a	717				CIS database: Log in - CIS Online (cisisreland.com)
CIS database: Log in - CIS Online (cisisreland.com)	Wind Plans Refused		-	-	-	-	-	-	-	-	130 ^a	677				CIS database: Log in - CIS Online (cisisreland.com)
CIS database: Log in - CIS Online (cisisreland.com)	Solar Plans Awaiting Decision		-	-	-	-	-	-	-	-	600 ^a	1600				CIS database: Log in - CIS Online (cisisreland.com)
CIS database: Log in - CIS Online (cisisreland.com)	Solar Plans Granted 2023		-	-	-	-	-	-	-	-	780 ^a	900				CIS database: Log in - CIS Online (cisisreland.com)
CIS database: Log in - CIS Online (cisisreland.com)	Solar Plans Refused 2023		-	-	-	-	-	-	-	-	135 ^a	90				CIS database: Log in - CIS Online (cisisreland.com)

^a Not available at time of publication of the Electricity Chapter of the Annual Review

^b Estimated from Local Authority Planning applications recorded on CIS database

Formerly was i

Source	Name	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emission	Built Environment Emissions Total	Mt CO2	8.29	8.49	7.94	8.55	8.27	8.69	8.31	7.18	6.73	7.11
https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emission	Built Environment (residential) Emissions	Mt CO2	6.71	7.00	6.51	7.00	6.73	7.34	6.87	5.75	5.35	5.61
	Residential Emissions Reduction relative to 2018	%				0.0%	-3.9%	4.9%	-1.9%	-17.8%	-23.6%	-19.8%
https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emission	Built Environment (commercial and public services) Emissions	Mt CO2	1.57	1.49	1.43	1.55	1.54	1.34	1.44	1.42	1.38	1.49
https://www.seai.ie/data-and-insights/seai-statistics/monthly-energy-data/	Heating Kerosene Deliveries	ktoe		906	858	949	913	1,065	944	789	785	853
https://www.cso.ie/en/releasesandpublications/ep/p-ngc/networkedgasconsumption2024/	Residential Gas Demand	GWh	7,250	7,163	7,060	8,010	7,458	7,915	7,810	6,670	5,980	6,175
Gas Networks Ireland, “Ireland Monthly Gas Demand Report,” 2025	NDM Industrial and Commercial Gas Demand (SME)	GWh			4,465	4,789	4,810	4,511	4,273	4,088	3,990	4,261
https://ec.europa.eu/eurostat/databrowser/view/nrg_ind_ren__custom_18864507/default/ta	Renewable Heat	%	6.2	6.2	6.6	6.4	6.3	6.3	5.6	5.5	7.9	-
https://www.seai.ie/sites/default/files/publications/SEAI-Retrofit-Full-Year-Report-2024.pdf	Number of property upgrades under SEAI Programmes	Number					24,776	17,546	15,244	27,200	47,953	53,984
https://www.seai.ie/sites/default/files/publications/SEAI-Retrofit-Full-Year-Report-2024.pdf	Capital Expenditure under SEAI Programmes €m	€m					103	79	99	188	320	417
https://www.seai.ie/sites/default/files/publications/SEAI-Retrofit-Full-Year-Report-2024.pdf	Number of B2s achieved under SEAI Programmes	Number					2,423	3,275	4,340	8,476	17,601	21,817
https://www.seai.ie/sites/default/files/publications/SEAI-Retrofit-Full-Year-Report-2024.pdf	Number of heat pumps installed under SEAI Programmes	Number					1,129	1,455	1,971	2,272	3,767	3,600
https://www.seai.ie/sites/default/files/publications/SEAI-Retrofit-Full-Year-Report-2024.pdf	Solar PV installs under SEAI Programmes	Number					1,822	2,916	4,077	10,017	22,214	28,424
Energy Efficiency Retrofitting Programme - Expenditure & Output 2013 - 2023 https://www.oir	Number of LA Retrofits	Number	16,002	11,303	5,421	4,453	3,763	1,470	1,584	1,948	2,252	2,607
Energy Efficiency Retrofitting Programme - Expenditure & Output 2013 - 2023 https://www.oir	Capital Expenditure under LA Programmes	€	26,903,781	22,532,835	8,665,268	12,942,633	23,379,615	9,972,802	21,741,056	54,150,439	70,236,006	88,805,697
Central Statistics Office	% A and B BER rated domestic dwellings	%	13.04%	17.42%	22.75%	27.01%	32.66%	40.41%	41.96%	49.41%	53.15%	51.22%
Central Statistics Office	% A and B BER rated commercial buildings	%	13.05%	13.10%	14.40%	16.52%	17.09%	16.66%	19.70%	22.86%	30.21%	33.61%
Central Statistics Office, Pers Comm, 5_6_26	New domestic dwellings using electricity as main space heating fuel	Number				6,313	12,622	12,528	13,904	19,965	17,112	-
Central Statistics Office, Pers Comm, 5_6_27	% new domestic dwellings using electricity as main space heating fuel	%				46.37	64.23	78.54	90.67	93.42	96.32	-
https://www.cso.ie/en/releasesandpublications/ep/p-ndber/non-domesticbuildingene	Existing commercial buildings with electricity as main space heating	Number				32,392	35,096	36,913	39,188	41,735	43,715	-
https://www.seai.ie/business-and-public-sector/public-sector/monitoring-and-reporting/publi	% Energy Efficiency Gains in Public Bodies (includes heating and electricity)	%	21%	20%	24%	27%	29%	34%	32%	33%	35%	-
https://www.seai.ie/business-and-public-sector/public-sector/monitoring-and-reportir	Energy Consumption of Public Bodies* GWh (includes heating and electricity)	GWh	9,343	9,375	10,248	10,178	9,898	9,160	9,787	9,888	9,543	-
https://www.seai.ie/publications/District-Heating-and-Cooling.pdf	District Heating Capacity/Supply									<1% all heat	<1% all heat	-

Enterprise and Waste

Source

<https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands->

<https://www.seai.ie/data-and-insights/seai-statistics/key-statistics/energy-data/>

<https://www.seai.ie/data-and-insights/seai-statistics/key-statistics/energy-data/>

<https://www.seai.ie/data-and-insights/seai-statistics/key-statistics/energy-data/>

<https://www.seai.ie/data-and-insights/seai-statistics/key-statistics/energy-data/>

<https://www.seai.ie/data-and-insights/seai-statistics/key-statistics/energy-data/>

<https://data.cso.ie/table/MIA04>

<https://data.cso.ie/table/MIA04>

[UNIDO Statistics Data Portal](#)

[UNIDO Statistics Data Portal](#)

[UNIDO Statistics Data Portal](#)

<https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-provisional-greenhou>

https://ec.europa.eu/eurostat/databrowser/view/sdg_12_41/default/table?lang=en

[Statistics | Eurostat \(europa.eu\)](#)

[Municipal | Environmental Protection Agency \(epa.ie\)](#)

<https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/biodegradable-municipal-wa>

https://ec.europa.eu/eurostat/databrowser/view/env_wasmun/default/table?lang=en

https://ec.europa.eu/eurostat/databrowser/view/sdg_11_60/default/table?lang=en

https://ec.europa.eu/eurostat/databrowser/view/cei_wm020/default/table?lang=en

https://ec.europa.eu/eurostat/databrowser/view/cei_wm020/default/table?lang=en

Gas Networks Ireland (pers comm): Gas Historical Monthly Report

Indicator	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sectoral emissions (from manufacturing combustion & industrial processes)	Mt CO ₂ eq	6.24	6.46	6.69	6.95	6.82	6.73	7.09	6.65	6.3	6.0
Percentage electricity in industry energy consumption	%	28%	28%	27%	25%	25%	26%	26%	27%	28%	-
Percentage renewables in industry energy consumption	%	9%	8%	9%	9%	9%	8%	0.1	0.1	8%	-
Percentage natural gas in industry energy consumption	%	40%	42%	42%	44%	45%	46%	44%	42%	41%	-
Percentage fossil fuels in industry energy consumption	%	61%	62%	62%	64%	64%	64%	63%	62%	60%	-
Percentage non-renewable waste in industry energy consumption	%	2%	2%	3%	2%	3%	2%	2%	3%	4%	-
Industrial Production Index (manufacturing industries)	Base year (2021) = 100 %	59	62	65	63	67	77	100	112	110	-
Industrial Production Index (other non-metallic mineral products)	Base year (2021) = 100 %	68	78	84	88	89	87	100	123	121	-
UNIDO IIP (Food Products)	Base year (2015) = 100 %	100	98	94	97	96	99	121	129	130	143
UNIDO IIP (other non-metalic mineral products)	Base year (2015) = 100 %	100	114	123	128	130	127	146	180	177	175
UNIDO IIP (Basic Metals)	Base year (2015) = 100 %	100	111	112	103	118	110	122	155	176	182
Sectoral emissions (from waste)	Mt CO ₂ eq	1.02	1.02	0.98	0.93	0.90	0.88	0.82	0.87	0.84	0.84
Circularity rate	%	2.1	2	1.9	1.9	1.8	1.8	2.1	2.1	2.3	-
Waste	Mt	-	15.3	-	14.0	-	16.2	17.6 ^a	15.34	-	-
Municipal waste	Mt	Data gap	2.76	2.77	2.91	3.09	3.21	3.17	3.19	3.13	-
Biodegradable municipal waste to landfill	Mt	278,000	390,000	307,000	190,000	145,000	104,000	109,000	129,500	169,864	-
Percentage municipal waste landfilled	%	Data gap	26	23	14	15	16	16	15	14	-
Percentage recycling of municipal waste	%	Data gap	41	40	38	37	41	41	41	42	-
Percentage recycling of packaging waste	%	67.5	67	65.5	63.9	62.5	62.4	59.3	61.7	61	-
Percentage recycling of plastic packaging waste	%	34	35.7	33.8	31	27.8	29	27.9	32.1	29.6	-
ROI Gas demand (Industrial and Commercial)	GWh	-	-	-	-	-	-	-	15673	14862	16,172

^a Data provided by EPA.

2023-2050 GHG Emissions Projections (kt CO2 eq)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Energy Industries	7859.87	6797.35	7093.48	6231.52	5085.53	4633.58	4722.84	4361.89	3649.52	2876.02	2734.28	2733.78	2871.61	2884.09	2953.98	3124.39	2637.78	2461.68	2188.96	2045.38	2312.74	2319.12	2454.34	2142.56	1888.16	1874.02	1826.95	1935.74	1836.08	1832.26	1860.75	1850.19	1802.06
Public electricity and heat production	7449.81	6417.30	6703.00	5840.83	4701.23	4251.55	4369.77	3981.55	3273.83	2505.51	2365.20	2395.17	2503.03	2516.36	2586.68	2756.95	2303.87	2099.74	1829.02	1686.65	1952.78	1959.45	2094.23	1784.73	1532.24	1518.58	1472.07	1580.42	1481.63	1478.09	1506.67	1496.43	1448.84
Petroleum refining	287.15	275.30	305.33	305.33	305.33	305.33	275.30	305.33	305.33	305.33	305.33	275.30	305.33	305.33	305.33	305.33	275.30	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33
Solid fuels and other energy industries	33.64	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.87	3.87	3.87	3.87	3.88	3.88	3.88	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Fugitive emissions	89.27	100.89	81.29	81.49	75.11	72.84	73.91	71.15	66.49	61.31	59.88	59.44	59.37	58.52	58.09	58.23	54.78	52.79	50.79	49.57	50.81	50.52	50.95	48.67	46.77	46.28	45.72	46.17	45.30	45.02	44.93	44.61	44.07
Residential	5347.26	5420.22	5494.47	5563.42	5619.72	5658.91	5687.22	5702.41	5593.44	5484.51	5375.26	5267.49	5160.39	5054.71	4951.05	4848.41	4823.37	4789.58	4771.27	4748.03	4729.37	4715.51	4699.83	4680.14	4658.19	4637.97	4619.98	4603.42	4592.96	4575.40	4564.93	4549.09	4538.47
Manufacturing Combustion	4151.92	4097.13	4042.34	4047.94	4051.00	4066.08	4072.16	4072.92	4092.15	4095.78	4097.21	4101.78	4100.83	4061.17	4026.34	3991.07	3957.05	3897.16	3870.33	3842.60	3813.90	3785.26	3749.70	3710.57	3671.00	3630.99	3616.97	3601.11	3561.58	3521.78	3481.77	3443.88	3405.84
Commercial / Public Services	1386.05	1440.42	1494.97	1516.10	1486.90	1466.35	1429.23	1389.95	1346.74	1279.29	1209.22	1136.93	1064.14	982.02	899.84	815.65	769.40	733.46	726.62	720.81	715.16	710.10	703.82	694.33	684.46	675.66	667.30	659.83	645.50	631.95	618.53	608.89	599.10
Transport	11789.74	11710.47	11652.46	11592.69	11522.09	11440.69	11347.90	11242.92	11147.83	11047.00	10934.46	10816.49	10544.81	10190.28	9845.62	9505.66	9130.27	8719.71	8281.49	7853.38	7429.15	7018.99	6624.52	6241.97	5872.03	5515.73	5175.56	4987.66	4916.17	4886.83	4868.37	4859.19	4862.55
Domestic aviation	23.22	31.19	31.11	31.50	32.43	32.94	33.48	33.75	33.75	37.18	37.18	37.18	37.18	37.18	37.18	37.18	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61
Road transportation	11194.27	11103.98	11039.79	10975.34	10900.59	10816.20	10721.71	10615.34	10521.35	10419.44	10309.83	10194.84	9926.41	9576.90	9237.05	8902.03	8526.42	8119.70	7682.73	7255.95	6833.37	6424.66	6031.94	5650.89	5282.52	4928.00	4588.68	4401.68	4331.85	4304.20	4287.46	4279.93	4284.89
Railways	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35
Domestic navigation	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65
Other transportation	149.25	152.30	158.55	162.85	166.07	168.55	169.71	170.82	169.72	167.37	164.44	161.46	158.21	153.20	148.39	143.44	140.23	136.40	135.14	133.81	132.16	130.71	128.97	127.46	125.90	124.12	123.27	122.36	120.70	119.01	117.30	115.64	114.04
Industrial Processes	2155.21	1869.29	2209.44	2235.75	2264.22	2292.85	2321.73	2350.96	2380.57	2410.55	2440.90	2471.54	2502.58	2534.01	2565.85	2566.88	2567.89	2568.89	2569.87	2570.83	2571.77	2572.70	2573.61	2574.51	2575.34	2576.15	2576.94	2577.70	2577.70	2577.70	2577.70	2577.70	2577.70
Mineral industry	1933.89	1647.10	1985.23	2010.70	2037.48	2064.65	2092.19	2120.11	2148.43	2177.14	2206.26	2235.78	2265.72	2296.08	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86
Chemical industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Metal industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Non-energy products from fuels and solvent use	179.34	180.13	182.09	183.58	184.95	186.10	187.12	188.11	189.08	190.03	190.96	191.77	192.56	193.32	194.08	194.81	195.52	196.21	196.89	197.57	198.23	198.88	199.51	200.12	200.72	201.29	201.84	202.36	202.36	202.36	202.36	202.36	202.36
Other product manufacture and use	41.99	42.05	42.11	41.46	41.78	42.10	42.42	42.74	43.06	43.37	43.68	43.99	44.30	44.61	44.91	45.21	45.52	45.82	46.12	46.40	46.68	46.96	47.24	47.52	47.76	48.00	48.24	48.48	48.48	48.48	48.48	48.48	48.48
F-Gases	675.46	672.08	671.05	638.58	625.48	600.61	589.55	591.01	600.50	598.23	608.50	623.77	644.10	663.30	681.26	704.46	728.58	752.13	775.91	800.05	824.27	848.69	872.34	896.04	919.73	943.43	967.07	990.75	1014.30	1037.81	1061.07	1083.97	1106.80
Agriculture	20716.52	20988.39	21149.83	21151.24	21457.62	21528.13	21599.46	21634.78	21657.97	21665.18	21589.73	21512.24	21450.11	21484.98	21519.52	21554.24	21587.56	21624.80	21656.80	21690.62	21724.62	21758.80	21793.00	21827.55	21860.65	21893.93	21929.25	21964.55	21997.82	22032.75	22067.84	22103.11	22138.54
Enteric fermentation	13039.10	12927.25	12889.17	12900.66	12961.88	13023.63	13095.63	13148.63	13173.61	13200.06	13165.94	13131.60	13106.75	13136.26	13165.93	13195.74	13225.69	13255.80	13286.05	13316.46	13347.01	13377.71	13408.57	13439.57	13470.73	13502.05	13533.51	13565.14	13596.92	13628.85	13660.94	13693.20	13725.61
Manure management	2449.57	2452.05	2422.01	2427.10	2444.71	2463.02	2481.83	2495.61	2503.40	2510.90	2506.84	2502.33	2500.15	2500.62	2501.09	2501.56	2502.03	2502.51	2502.98	2503.46	2503.94	2504.42	2504.90	2505.39	2505.87	2506.36	2506.85	2507.34	2507.83	2508.32	2508.82	2509.32	2509.81
Agricultural soils	3805.55	3920.41	4100.86	4083.58	4096.22	4085.17	4065.06	4033.63	4021.95	3993.93	3955.44	3916.26	3880.37	3882.79	3885.22	3887.66	3890.11	3892.56	3894.97	3897.39	3899.82	3902.25	3904.69	3907.15	3909.60	3912.07	3914.55	3917.03	3919.52	3922.02	3924.53	3927.04	3929.57
Liming	457.80	668.90	668.90	668.90	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00
Urea application	139.42	146.96	148.33	146.79	147.48	145.85	143.30	140.05	138.95	136.45	133.86	131.22	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73	128.73
Agriculture/Forestry/Fishing fuel combustion	825.08	872.82	920.56	924.21	927.33	930.47	933.63	936.86	940.06	943.84	947.64	950.84	954.12	956.58	958.55	960.55	961.00	965.20	964.06	964.58	965.12	965.68	966.10	966.71	965.71	964.72	965.61	966.31	964.82	964.82	964.82	964.82	964.82
Waste	844.43	819.94	800.85	781.68	761.97	741.43	720.24	698.58	677.62	658.41	640.76	624.29	609.09	595.06	581.88	569.69	558.41	547.95	538.28	529.34	521.06	513.40	506.30	499.71	493.60	487.92	482.64	477.71	472.01	466.68	461.69	457.04	452.69
Landfills	593.98	571.99	548.45	525.89	503.07	479.94	456.43	432.53	409.37	388.00	368.24	349.94	332.96	317.18	302.30	288.45	275.55	263.53	252.31	241.84	232.06	222.93	214.39	206.41	198.95	191.97	185.45	179.35	173.65	168.31	163.33	158.67	154.32
Biological treatment of solid waste	50.16	50.55	51.49	52.22	52.88	53.43	53.92	54.40	54.87	55.33	55.78	56.17	56.55	56.92	57.28	57.64	57.98	58.32	58.65	58.97	59.29	59.60	59.91	60.21	60.49	60.77	61.03	61.28	61.28	61.28	61.28	61.28	61.28
Incineration and open burning of waste	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55
Wastewater treatment and discharge	163.73	160.86	164.36	167.02	169.47																												

2023-2050 GHG Emissions Projections (kt CO2 eq)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Energy Industries	7859.87	6797.35	7036.66	6016.46	4924.86	4469.85	4330.88	3383.07	3084.16	2241.69	2332.65	2372.39	2379.08	2443.84	2415.61	2579.94	2135.02	1969.66	1702.17	1619.11	1807.34	1807.55	2045.35	1744.44	1582.32	1565.45	1566.02	1662.57	1624.67	1663.90	1714.07	1729.55	1717.28
Public electricity and heat production	7449.81	6417.30	6645.70	5626.50	4541.30	4089.30	3982.00	3012.52	2717.64	1880.90	1971.95	2042.01	2019.55	2084.88	2057.75	2222.03	1810.55	1617.78	1352.88	1271.31	1459.39	1460.56	1697.93	1399.90	1239.81	1224.12	1225.43	1322.35	1285.40	1325.12	1375.73	1391.77	1379.81
Petroleum refining	287.15	275.30	305.33	305.33	305.33	305.33	275.30	305.33	305.33	305.33	305.33	275.30	305.33	305.33	305.33	275.30	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33	305.33
Solid fuels and other energy industries	33.64	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.87	3.87	3.87	3.87	3.87	3.88	3.88	3.88	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Fugitive emissions	89.27	100.89	81.77	80.77	74.36	71.36	69.72	61.36	57.32	51.59	51.50	51.22	50.32	49.75	48.65	48.69	45.35	42.73	40.13	38.65	38.80	37.84	38.27	35.39	33.36	32.18	31.43	31.07	30.12	29.63	29.18	28.63	28.32
Residential	5347.26	5420.22	5489.02	5506.62	5514.77	5503.79	5480.04	5445.40	5239.36	5035.20	4829.42	4630.73	4433.54	4236.74	4040.67	3844.80	3742.92	3413.38	3187.79	2963.60	2742.08	2524.29	2308.62	2093.39	1876.68	1662.11	1447.70	1231.89	1003.36	774.04	544.30	319.31	307.47
Manufacturing Combustion	4151.92	4097.13	4042.34	4047.94	4051.00	4066.00	4030.92	3798.67	3610.15	3607.11	3603.28	3597.24	3590.93	3545.90	3499.91	3449.46	3404.88	3289.22	3192.70	3093.55	2991.39	2888.29	2777.41	2661.69	2543.50	2421.18	2359.72	2261.90	2181.65	2099.96	2015.01	1940.00	1871.69
Commercial / Public Services	1386.05	1440.42	1481.46	1497.15	1432.12	1309.75	1110.23	992.00	877.86	822.60	764.95	704.97	646.31	580.30	513.45	445.98	411.83	360.77	343.03	325.75	307.82	290.91	273.51	254.72	234.33	212.46	193.79	168.53	142.48	116.95	91.96	76.03	73.33
Transport	11789.74	11710.47	11641.70	11263.22	10885.14	10506.20	10124.54	9739.36	9598.62	9458.55	9300.25	9128.24	8894.13	8591.67	8296.33	8006.07	7694.47	7369.30	7031.44	6705.95	6389.08	6091.41	5816.23	5556.95	5315.07	5092.93	4925.27	4810.24	4783.47	4765.14	4755.34	4753.50	4764.23
Domestic aviation	23.22	31.19	31.11	31.50	32.43	32.94	33.48	33.75	33.75	37.18	37.18	37.18	37.18	37.18	37.18	37.18	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61
Road transportation	11194.27	11103.97	11029.63	10646.83	10266.33	9888.85	9513.83	9139.67	9012.05	8871.25	8716.42	8547.96	8317.24	8019.98	7729.77	7444.94	7133.83	6816.77	6484.04	6163.87	5852.62	5560.43	5291.12	5037.46	4801.46	4585.44	4421.66	4312.25	4288.45	4274.87	4269.95	4272.34	4284.62
Railways	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35	136.35
Domestic navigation	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65	286.65
Other transportation	149.25	152.30	157.96	161.89	163.37	161.41	154.23	142.93	129.82	127.12	123.65	120.10	116.70	111.51	106.38	100.95	97.02	88.92	83.79	78.46	72.85	67.37	61.49	55.87	50.00	43.88	39.99	34.38	31.41	26.65	21.78	17.55	16.00
Industrial Processes	2155.21	1869.29	2209.44	2235.75	2264.22	2292.85	2321.73	2350.96	2380.57	2410.55	2440.90	2471.54	2502.58	2534.01	2565.85	2566.88	2567.89	2568.89	2569.87	2570.83	2571.77	2572.70	2573.61	2574.51	2575.34	2576.15	2576.94	2577.70	2577.70	2577.70	2577.70	2577.70	2577.70
Mineral industry	1933.89	1647.10	1985.23	2010.70	2037.48	2064.65	2092.19	2120.11	2148.43	2177.14	2206.26	2235.78	2265.72	2296.08	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86	2326.86
Chemical industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Metal industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Non-energy products from fuels and solvent use	179.34	180.13	182.09	183.58	184.95	186.10	187.12	188.11	189.08	190.03	190.96	191.77	192.56	193.32	194.08	194.81	195.52	196.21	196.89	197.57	198.23	198.88	199.51	200.12	200.72	201.29	201.84	202.36	202.36	202.36	202.36	202.36	202.36
Other product manufacture and use	41.99	42.05	42.11	41.46	41.78	42.10	42.42	42.74	43.06	43.37	43.68	43.99	44.30	44.61	44.91	45.21	45.52	45.82	46.12	46.40	46.68	46.96	47.24	47.52	47.76	48.00	48.24	48.48	48.48	48.48	48.48	48.48	48.48
F-Gases	675.46	672.08	671.68	640.45	628.75	605.56	596.39	599.76	611.96	612.25	624.97	642.56	665.07	686.33	706.23	731.27	758.94	790.11	820.74	852.73	885.43	918.50	953.37	987.70	1021.75	1055.33	1088.41	1121.07	1154.74	1187.96	1219.62	1257.45	1288.69
Agriculture	20716.52	20611.38	20192.29	19685.20	19444.00	18983.38	18522.45	18028.12	17966.43	17933.12	17831.03	17730.39	17640.64	17627.21	17614.76	17602.40	17592.27	17571.32	17552.59	17533.96	17515.41	17496.95	17478.67	17460.38	17443.13	17425.98	17407.95	17390.00	17365.92	17341.03	17316.19	17294.09	17280.76
Enteric fermentation	13039.10	12654.36	12265.06	11955.64	11689.05	11414.76	11141.68	10845.96	10811.24	10777.33	10694.41	10611.91	10536.86	10519.48	10502.16	10484.90	10467.69	10450.53	10433.44	10416.39	10399.40	10382.47	10365.58	10348.76	10331.98	10315.26	10298.60	10281.99	10265.43	10248.92	10232.47	10216.07	10199.72
Manure management	2449.57	2397.06	2328.30	2280.31	2235.76	2185.16	2128.78	2061.94	2034.84	2037.07	2028.80	2020.58	2014.18	2014.56	2015.02	2015.48	2015.94	2016.41	2016.87	2017.34	2017.81	2018.28	2018.75	2019.23	2019.70	2020.18	2020.66	2021.14	2021.62	2022.10	2022.59	2023.07	2023.56
Agricultural soils	3805.55	3873.27	3810.91	3607.82	3415.37	3230.47	3051.95	2875.35	2875.98	2875.78	2866.31	2856.83	2848.96	2851.45	2853.89	2856.33	2858.79	2861.25	2863.67	2866.09	2868.53	2870.97	2873.42	2875.88	2878.34	2880.82	2883.30	2885.79	2888.29	2890.79	2893.31	2895.83	2898.36
Liming	457.80	668.90	668.90	668.90	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00	880.00
Urea application	139.42	146.96	202.55	256.56	308.44	358.18	405.79	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26	451.26
Agriculture/Forestry/Fishing fuel combustion	825.08	870.83	916.58	915.97	915.38	914.80	914.25	913.63	913.12	911.68	910.25	909.81	909.39	910.47	912.44	914.44	918.60	911.87	907.36	902.88	898.42	893.98	889.66	885.26	881.85	878.46	874.14	869.84	859.33	847.95	836.58	827.86	827.86
Waste	844.43	819.94	800.85	781.68	761.97	741.43	720.24	698.58	677.62	658.41	640.76	624.29	609.09	595.06	581.88	569.69	558.41	547.95	538.28	529.34	521.06	513.40	506.30	499.71	493.60	487.92	482.64	477.71	472.01	466.68	461.69	457.04	452.69
Landfills	593.98	571.99	548.45	525.89	503.07	479.94	456.43	432.53	409.37	388.00	368.24	349.94	332.96	317.18	302.30	288.45	275.55	263.53	252.31	241.84	232.06	222.93	214.39	206.41	198.95	191.97	185.45	179.35	173.65	168.31	163.33	158.67	154.32
Biological treatment of solid waste	50.16	50.55	51.49	52.22	52.88	53.43	53.92	54.40	54.87	55.33	55.78	56.17	56.55	56.92	57.28	57.64	57.98	58.32	58.65	58.97	59.29	59.60	59.91	60.21	60.49	60.77	61.03	61.28	61.28	61.28	61.28	61.28	61.28
Incineration and open burning of waste	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55
Wastewater treatment and discharge	163.73	160.86	164.36	167.02	169.47	171.51	173.33	175.10	176.83</																								