

Celanese 2019 Sustainability Metrics



Safety

Total Recordable Incident Rate (Total)	0.19	Number of OSHA recordable injuries per year, per 100 employees and contractors working a 40-hour work week, divided by total hours worked.
Total Recordable Incident Rate (Employees)	0.19	Number of OSHA recordable injuries per year, per 100 employees working a 40-hour work week, divided by total hours worked.
Total Recordable Incident Rate (Contractors)	0.20	Number of OSHA recordable injuries per year, per 100 contractors working a 40-hour work week, divided by total hours worked.
Lost Time Incident Rate (Total)	0.04	Number of injuries per year resulting in lost time from work, per 100 employees and contractors working a 40-hour work week, divided by total hours worked.
Lost Time Incident Rate (Employees)	0.05	Number of injuries per year resulting in lost time from work, per 100 employees working a 40-hour work week, divided by total hours worked.
Lost Time Incident Rate (Contractors)	0.03	Number of injuries per year resulting in lost time from work, per 100 contractors working a 40-hour work week, divided by total hours worked.
Incidents (Total)	22	Number of incidents resulting in harm to employees or contractors. Includes all incidents and not just those that resulted in lost time.
Incidents (Employees)	15	Number of incidents resulting in harm to employees. Includes all incidents and not just those that resulted in lost time.
Incidents (Contractors)	7	Number of incidents resulting in harm to contractors. Includes all incidents and not just those that resulted in lost time.
Fatalities (Total)	0	Number of employees, contractors, or third parties who have died at a Celanese facility or as a result of Celanese operations.
Fatalities (Employees)	0	Number of employees who have died at a Celanese facility or as a result of Celanese operations.
Fatalities (Contractors)	0	Number of contractors who have died at a Celanese facility or as a result of Celanese operations.



Social

Employees (Worldwide)	7,682	Individuals employed on a continuing basis at Celanese as of December 31, 2019.
Employees (North America)	3,508	Individuals employed on a continuing basis at Celanese as of December 31, 2019.
Employees (Europe)	2,968	Individuals employed on a continuing basis at Celanese as of December 31, 2019.
Employees (Asia)	1,076	Individuals employed on a continuing basis at Celanese as of December 31, 2019.
Employees (Rest of World)	130	Individuals employed on a continuing basis at Celanese as of December 31, 2019.
Women in Workforce	23.5%	Number of women employed at Celanese as a percentage of the total number of employees.
Employees Unionized	53%	Estimated percentage of employees covered by collective bargaining or works council agreements as of the end of 2019.
Employee Average Age	43	Average age in years of individuals employed on a continuing basis at Celanese.
Employee Turnover	7.8%	Number of employees that left Celanese during 2019 as a percentage of the average total number of employees.
Charitable Donations (\$M)	\$4.4MM	Charitable donations made by Celanese and its employees through the Celanese Foundation, in millions of U.S. dollars.
Charities Served	> 1500	Non-profit organizations which benefited from financial or time donations by Celanese and its employees.
Volunteer Projects Completed	~2,000	Community volunteer opportunities coordinated by Celanese or its employees.
Hours Volunteered	250,000	Total hours donated by Celanese employees and guests participating in volunteer projects.
Employee Volunteer Engagement (%)	73%	Number of Celanese employees who participated in a volunteer project as a percentage of the total number of employees.



Greenhouse Gas (GHG) Emissions (Scope 1)	1,935.3	Scope 1 GHG emissions are those emitted from sources that are owned or controlled by Celanese, in thousands of metric tonnes.
GHG Emissions (Scope 2)	986.2	Scope 2 GHG emissions are those emitted as a consequence of the activities of Celanese, but occur at sources owned or controlled by another entity, in thousands of metric tonnes.
Total GHG Emissions (Scope 1 + 2)	2,921.6	The total of Scope 1 and Scope 2 GHG emissions, in thousands of metric tonnes.
GHG Intensity (MT/MT)	0.32	Intensity based metric expressed as the aggregate metric tonnes of Celanese Scope 1 and Scope 2 GHG emissions divided by metric tonnes of production.
Volatile Organic Compounds (VOC) Emissions	1.982	Total amount of nonmethane VOCs emitted by Celanese, in thousands of metric tonnes.
VOC Intensity (kg/MT)	0.21	Intensity based metric expressed as the kilograms of Celanese Nonmethane VOC emissions divided by metric tonnes of production.
Nitrogen Oxide (NOx) Emissions	1105.9	Total amount of NOx emitted by Celanese, in metric tonnes.
Sulfur Oxide (SOx) Emissions	60.22	Total amount of SOx emitted by Celanese, in metric tonnes.
Total Waste	121.9	Total amount of waste Celanese discarded including both hazardous and non-hazardous waste, in thousands of metric tonnes.
Hazardous Waste	54.0	Total amount of hazardous waste Celanese discarded, in thousands of metric tonnes.
Non-Hazardous Waste	67.9	Total amount of non-hazardous waste Celanese discarded, in thousands of metric tonnes.
Waste Recycled	52.7	Total amount of waste Celanese recycled, in thousands of metric tonnes.
Waste sent to Landfills	42.4	Total amount of Celanese waste sent to landfills, in thousands of metric tonnes.
Solid Waste Intensity (MT/MT)	0.013	Intensity based metric expressed as the aggregate metric tonnes of Celanese hazardous and non-hazardous waste divided by metric tonnes of production.
Renewable Energy Used	94.1	Amount of energy consumed that was generated by a renewable energy source, in thousands of megawatt hours (MWh). This includes REC (Renewable Energy Certificates) amounts purchased as well.
Renewable Energy Certificates	0	Amount of bundled and unbundled energy attributes purchased in the form of tradable certificates from an official registry, in thousands of megawatt hours (MWh).
Power Purchase Agreement	0	Capacity, in megawatts (MW), of power purchase agreements (PPAs) which are used to procure renewable electricity. Includes all signed and/or operational PPAs during the year.
Total Energy Consumption	14464.5	Includes energy directly consumed through owned manufacturing assets including combustion, steam, and electricity, in thousands of megawatt hours (MWh).
Purchased Net Grid Electricity	1056.4	Net total amount of electricity purchased by Celanese, in thousands of megawatt hours (MWh).
Self-Generated Renewable Electricity	24.5	Amount of renewable electricity generated for direct use at Celanese-owned on-site or off-site installations, in thousands of megawatt hours (MWh).
Energy per Unit of Production	0.000707066	Energy intensity metric expressed as the megawatt hours (MWh) of energy consumed per pound of production.
Energy Intensity (MBTU/lb)	2.41	Intensity based metric expressed as the total energy consumption in thousands of British thermal units (MBTU) divided by pounds of production.
Fuel Used (Coal/Lignite)	0.0	Total mass amount of coal used as fuel by Celanese, in thousands of metric tonnes.
Fuel Used (Natural Gas)	850,631	Total volume of natural gas used as fuel by Celanese, in thousands of cubic meters.
Fuel Used (Crude Oil/Diesel)	0.586	Total volume of crude oil and its distillates used as fuel by Celanese, in thousands of cubic meters.
Steam Purchased	1,701.63	Steam purchased from external sources, in thousands of MWh.
Energy Council Site Conservation Projects	119	Total number of energy reduction projects executed by Celanese in 2019.
Sustainable Cost Savings (\$M)	\$15	Measured sustainable cost savings associated with energy council conservation projects, in millions of U.S. dollars.
Number of ISO 50001 Sites certified	6	Number of sites Celanese owned at year-end that are certified by the ISO 50001 energy management standards.
Total Water Intake	112,375	Water withdrawn by Celanese from all sources, including but not limited to surface, groundwater, saltwater and municipal supplies, in thousands of cubic meters.
Total Water Discharged	109,835	Water discharged by Celanese, inclusive of wastewater and cooling water, in thousands of cubic meters.
Water Intake Intensity	0.012	Water withdrawn by Celanese, in thousands of cubic meters per metric ton of production.
Number of Sites	35	Number of locations Celanese owned and operated in 2019.
ISO 14001 Certified Sites	21	Number of sites Celanese owned at year-end that are certified by the ISO 14001 environmental management standards.
Percentage of Sites Certified	60%	Percentage of Celanese's total worksites certified by the ISO 14001 environmental management standards.
Major* & Significant** Environmental Releases	13	Number of environmental releases which exceeded 10% of the Celanese Reportable Quantity (CERQ) within a 24-hour window.
Loss of Primary Containment	0.08	Number of Tier 1 and Tier 2 process safety incidents per year, per 100 employees and contractors working a 40-hour work week.

* Major: quantity of chemical which enters the environment and reaches 100% of the Reportable Quantity within any 24-hour window.

** Significant: quantity of a chemical which enters the environment and reaches 10% of the Reportable Quantity within any 24-hour window.

In the table above, Significant environmental releases is inclusive of Major environmental releases.

Numbers are estimates and may be based on assumptions.