

	2018	2019	2020	2021	GOAL 2030	PERSPECTIVE
ENERGY — OPERATIONS (continued)						
Grid electricity %	N/A	83.8	87.3	86.7	N/A	
Renewable energy ^{1,2} %	17.4	21.2	21.0	24.2	N/A	In 2021, over 35% of our electrical energy was obtained from renewable or alternative sources.
Alternative energy ³ %	15.1	14.3	12.0	13.0	N/A	
Energy intensity /A/ absolute gigajoules energy use/million dollars of sales and revenues	461	445	463	404	N/A	
Absolute greenhouse gas (GHG) emissions /A/ ^{5,12} million metric tons CO ₂ e	2.22	1.78	1.47	1.51	1.55	Our absolute GHG emissions decreased 32% from 2018 to 2021.
Scope 1 Direct emissions /A/ ¹² million metric tons	0.94	0.91	0.70	0.74	N/A	
Scope 2 /A/ Market-based indirect emissions from purchased electricity, heat or steam ^{4,12} million metric tons	1.28	0.87	0.77	0.77	N/A	
Scope 2 /A/ Location-based ⁴ million metric tons	1.32	0.93	0.83	0.85	N/A	
GHG intensity /A/ ^{5,12} absolute metric tons of CO ₂ e/million dollars of sales and revenues	40.6	33.0	35.0	29.7	N/A	In 2021, we reduced our GHG emissions intensity by 27% from our 2018 baseline.
WATER — OPERATIONS						
Water management strategies /A/ % of in-scope facilities that meet all nine management elements	N/A	N/A	N/A	11%	100%	Water management strategies is a new goal for Caterpillar and data collection began in 2021. Previous years are listed as N/A as this is a newly composed goal. In this first year of implementation, we are pleased to see foundational progress begin toward our 2030 goal.
Water management strategies % of management elements completed by in-scope facilities	N/A	N/A	N/A	27%	N/A	
Total water /A/ billion gallons	3.85	3.74	3.38	3.70	N/A	In 2021, we reduced our absolute water consumption by nearly 3% since 2018.
Total water consumption by source						
Cooling water from foundry operations /A/	32.8%	35.2%	35.2%	37.4%	N/A	
Municipal water/A/	30.6%	30.8%	29.6%	28.8%	N/A	
Surface water /A/	18.3%	18.0%	20.4%	19.4%	N/A	
Other water /A/	0.4%	0.7%	0.6%	0.5%	N/A	
Groundwater /A/	17.9%	15.4%	14.2%	13.9%	N/A	
Water consumption intensity /A/ ¹³ absolute thousand gallons of water/million dollars of sales and revenues	70.4	69.4	80.9	72.6	N/A	Through 2021, we have reduced water consumption intensity at our facilities by a total of 5% from our baseline year of 2018.

N/A = Not Applicable

/A/ Data assured by ERM CVS. Please see our [data assurance statement](#).

