Environmental commitments

To minimize environmental impacts, TI implements strategies to reduce water consumption, waste and greenhouse gas emissions. These are summarized below along with the progress we are making towards our reduction goals.

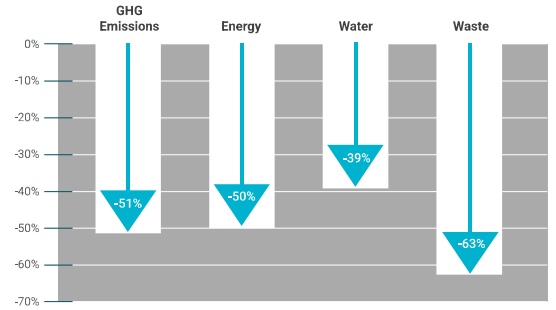
	FOCUS	GOAL	PROGRESS BY YEAR-END 2021
Greenhouse gas (GHG) emissions	**TI actions to reduce emissions:** • Use alternative gases and chemicals. • Install emissions abatement devices. • Purchase electricity from renewable energy sources. • Optimize product manufacturing, shipping and distribution. • Avoid unnecessary business travel and subsidize employee commuting at certain sites.	**By year-end 2025:** 25% reduction in absolute scope 1 and scope 2 emissions by from a 2015 base year[6].	18.6% Reduction of GHG emissions
Energy	**TI actions to reduce energy consumption:** • Design and operate buildings and fabrication sites to optimize efficiency. • Upgrade and refurbish tools and equipment. • Use sensors and other automated controls. • Implement routine energy conservation projects.	**By year-end 2025:** 50% reduction in energy intensity per chip from a 2015 base year.	33% Reduction in energy intensity per chip
Water	**TI actions to reduce water consumption:** • Improving the efficiency of our deionized water plants through actions such as optimizing the recovery rates of our reverse osmosis filters. • Reducing manufacturing tool water use by optimizing flow rates. • Identifying additional manufacturing tools where water can be reused in other processes. • Expanding the use of microfilters and ultrafilters to recover more wastewater.	**In 2021, conserve:** 2.6% equivalent of 2020 total water usage in 2021.	2.8% Reduction in water use
Waste and materials management	**TI applies a three-step approach to waste and materials management:** • Examine what we need. • Reuse what we can. • Recycle what is allowed.	**In 2021, divert:** 90% of solid waste materials generated from landfills.	90% Materials diverted from landfills

[6]TI's 2015 GHG emissions baseline was adjusted in 2022 to reflect structural changes to our operations, including the divestiture of a wafer fabrication plant in Scotland and the acquisition of a 300-mm wafer fabrication plant in Utah. The 2015 baseline has been adjusted from 2,471,357 to 2,832,709 in line with the guidance provided by the WBCSD/WRI's *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*.

2021 per-chip efficiency improvements

TI has been working for years to drive efficiencies in its fabrication processes and equipment to reduce materials consumption; water, chemical and energy use; and associated air and greenhouse gas (GHG) emissions. When comparing our per-chip data from 2010 to 2021, TI has reduced its manufacturing-related impacts and resource consumption.

2010-2021: Per-chip* efficiency improvements



Making chips more efficiently

Being a manufacturer of billions of chips a year, it is critical that we do so efficiently and with a commitment to continued improvement. One way we measure our success is on a per-chip basis in four key areas of sustainability: energy, water, greenhouse gas emissions and waste. We also invest in 300-mm advanced analog manufacturing facilities. These investments will enable us to reduce emissions, and increase water and energy efficiency.

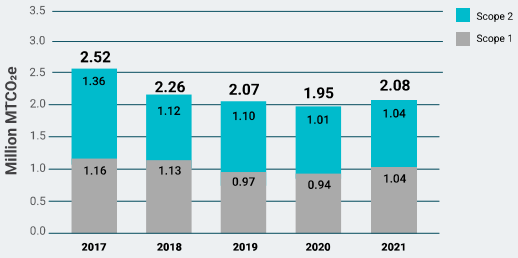
*Normalized, or per-chip efficiency data, is a way to develop a baseline and track changes in energy, water, GHG and material consumption based on the number of chips manufactured each year. We measure GHG emissions intensity to assess the overall GHG efficiency of our manufacturing processes. GHG emissions refer to the total GHGs emitted, which depend on the amount of production. GHG emissions intensity attempts to normalize usage by looking at GHG emissions per unit of output (by dividing our total GHG emissions by our total production). This same definition applies to water and waste intensity per chip data.

Greenhouse gas emissions

Our commitment to reducing GHG emissions

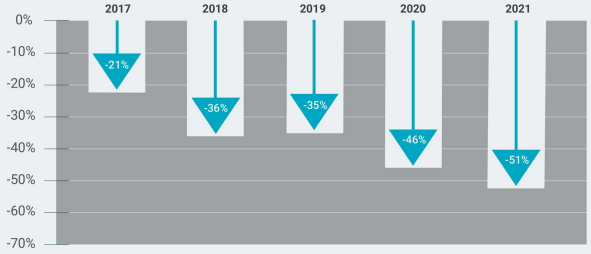
TI sets greenhouse gas (GHG) emission and energy reduction goals to reduce environmental impacts and improve efficiencies. By 2025, TI has a goal to reduce absolute scope 1 and 2 GHG emissions from a 2015 base year, including emissions from all manufacturing and nonmanufacturing sites greater than or equal to 50,000 square feet.

Total GHG emissions[7] (Million metric tons of CO_2 equivalent)



TI's unit production increased 34% from 2017 to 2021.

GHG emissions per chip



Scope 1 GHG emissions by type

Metric tons of carbon dioxide equivalent ($MTCO_2e$)	2017	2018	2019	2020	2021
Carbon dioxide (CO_2)	76,574	79,622	78,731	75,190	84,904
Methane (CH_4)	44	46[8]	46	44	39
Nitrous oxide (N_2O)	20,872	24,438[8]	23,440	28,452	31,557
Hydrofluorocarbons (HFCs)	42,059	39,982	36,552	37,532	44,633
Perfluorocarbons (PFCs)	850,379	830,018	669,757	622,526	665,457
Sulfur hexafluoride (SF_6)	64,537	71,240	62,084	64,061	71,189
Nitrogen trifluoride (NF_3)	108,869	113,839	94,853	110,701	142,671

Scope 2 GHG emissions by type

Metric tons of carbon dioxide equivalent ($MTCO_2e$)	2017	2018	2019	2020	2021
Carbon dioxide (CO_2)	1,357,931	1,122,336	1,102,843	1,012,985	1,041,346
Nitrous oxide (N_2O)	2,595	1,679	1,673	1,386	1,294
Methane (CH_4)	375	271	269	241	233

[7]Apex Companies LLC provided limited assurance verification of TI's scope 1 and scope 2 market-based GHG emissions for 2021.
[8]The 2018 increase in methane and nitrous oxide was caused by updated emission factors and the inclusion of this data from TI's international sites.