

TI Corporate Citizenship Topic Brief



Energy use

Energy use

Why it matters

Semiconductor manufacturing is energy-intensive, and our fabrication sites and other offices contribute to our carbon footprint. We take great care to reduce the impacts of our operations across the globe.



In the last five years*, TI has conserved 1,453,871 mmBTU of energy – the equivalent of powering 39,400 homes for a year.
*2012-2016



We have controls in place to use energy wisely. Each year, we implement more than 100 efficiency projects that reduce our greenhouse gas emissions and collectively save an average of more than \$5 million in energy costs.

Our approach

Our manufacturing operations account for about 90 percent of our total energy use and are the focal point for our global energy strategy. Our sites voluntarily establish specific energy reduction goals to lower costs and emit fewer greenhouse gas emissions. We annually report combined results in our [Citizenship Performance Report](#).

Reduction strategies

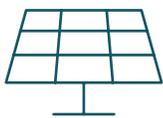
Our long-term sustainability depends heavily on how we build and operate these facilities. The key ways we manage energy use include:

Reducing costs



- Securing reliable and affordable energy supplies, which may include renewable resources
- Consuming energy directly, such as natural gas used on-site, and indirectly, such as electricity purchased off-site
- Pursuing utility rebates and allocating capital for efficiency projects

Greening facilities



- Making buildings, equipment and systems more efficient:
 - For new construction, we adhere to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) building standards
 - For existing buildings, we share and implement best practices among global sites
- Optimizing building performance by refurbishing or upgrading manufacturing, heating, ventilation, air conditioning and central plant operations equipment to be more efficient
- Improving building envelopes by using reflective roofs, and insulating windows and walls
- Using LED lighting and sensors to conserve energy
- Using more efficient computers, servers, printers and data centers

Creating efficient technology



- Designing and manufacturing semiconductor products that enable energy efficiency
- Investing in strategic research and development to further reduce consumption

Engaging employees



- Promoting conservation through activities, events and information, leadership support and global awareness-building events, such as Earth Day
- Recognizing resource conservation efforts in our annual Environmental, Safety and Health (ESH) Excellence Awards, given to our facilities that best embody and demonstrate ESH principles

Energy intensity

When calculating energy intensity, we divide the total energy consumption by the number of wafer chips (not including external manufacturing) produced in each year. We then compare this to the 2005 baseline to report a ratio, which is based only on internal energy consumption. The energy types included in the ratio are natural gas, gasoline, diesel, electricity, propane, fuel oil, liquid petroleum gas and district heating.

Evaluating our progress

We are required to comply with the energy use and building codes applicable in the countries where we operate, as well as with our own standards. We also assess sites annually to see if they achieve cost and consumption goals.

[Learn more about our energy management system, polices, governance structure and grievance mechanisms in Environment, safety and health.](#)