TI Corporate Citizenship
Topic Brief

Environment safety and health (ESH)

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Why it matters

Our company designs, manufactures, assembles and tests billions of integrated circuits (semiconductor chips) each year. We believe we have the legal and social responsibility to protect the health and safety of our workers and the environment, and to reduce the consumption of natural resources.

Our approach

The global operations of our administrative and design centers, fabrication and assembly/test sites consume raw materials, chemicals, energy and water. They also generate air and greenhouse gas emissions, wastewater and solid waste. We put controls in place to minimize these impacts.

We have a strong history of stewardship, and continuously maintain compliance and improve environmental, safety and health (ESH) performance at our sites worldwide. We take pride in our ability to meet customer expectations and manage risks, while many of our competitors outsource manufacturing.

Our goals

We strive to:

- Maintain compliance and reduce environmental impacts while being economically conscientious
- Achieve zero wasted resources
- Enable strong, winning teams worldwide by providing site ESH support

Additionally, we voluntarily establish site-specific goals as needed to address resource efficiency, waste or emissions. Our worldwide ESH objectives are to:

- Maintain a days away from work, restricted or job transfer case rate of 0.08 or less
- Maintain a recordable case rate of 0.20 or less
- Reduce absolute greenhouse gas emissions by 15 percent from a 2015 baseline by 2020

How we manage

We are committed to operating efficiently, responsibly and lawfully. We foster sustainability at our sites worldwide through operational efficiency, quality, risk management, compliance and transparency. Our ESH management system also provides a framework to systematically manage risks and hazards. It proactively:

- Identifies, manages, monitors and controls environmental issues
- Helps us adhere to operational and regulatory standards
- Monitors the completion of corrective actions

When issues arise, we quickly investigate and determine the root cause, and then make necessary changes that are tracked until completion.

Environment safety and health (ESH)

Figure 1: Components of TI's Environmental Safety and Health management system

Planning
Laws/regulations
TI Code of Conduct
Responsible Business Alliance* Code of Conduct
ESH policy and principles
TI ESH standards
Execution
Roles, responsibilities, authority and accountability
Determine required controls
Training, awareness and consultation
Documentation
Emergency preparedness and response
Evaluation
Monitor and measure performance
Assess compliance
Audit
Management oversight
Monitor compliance
Strengthen or add controls
Address corrective actions and close gaps

*Formerly called the Electronics Industry Citizenship Coalition (EICC)

Policies

Our ESH policy and principles, signed by our chairman, president and CEO, guide our efforts to operate sustainably. The Code of Conduct includes sections on protecting human health and the environment. We also use the Code of Conduct developed by the Responsible Business Alliance as a tool to align and adopt best practices and processes within the industry.

Accountability

Numerous teams, senior leaders and board members oversee our ESH programs, protocols and processes. They regularly assess performance, training, achievement of targets, trends and completion of actions. Additionally, all TI organizations are expected to identify and reduce potential ESH risks to our employees, business practices, supply chain and the environment.

Our ESH governance structure includes:

Audit Committee, board of directors
Oversees internal controls, compliance and performance

Chief financial officer/senior vice president of Technology and Manufacturing Group
Establishes and maintains effective ESH leadership, strategic direction and effective communication

Vice president, Worldwide Facilities
Holds TI accountable for providing a safe, secure work environment

Learn more about our ESH policy and principles:
– English
– Traditional Chinese
– Simplified Chinese
– Japanese
– Malay
– Spanish

Our ESH management system is certified to stringent criteria set by:

1. International Standards Organization (ISO) 14001, which provides an internationally agreed approach to measure and improve environmental performance
2. ISO Quality Management System 9001, which helps businesses operate efficiently and improve customer satisfaction
3. ISO/TS 16949, which is a quality management system for automotive production and relevant service part organizations
4. Occupational Health and Safety Assessment Series (OHSAS) 18001, which helps control occupational health and safety risks, and improve overall performance

These organizations conduct independent reviews and audits to verify performance against their standards. Additionally, our company has its own ESH standards that apply to all sites worldwide. These standards often exceed regulatory requirements.

Environment safety and health (ESH)

Vice president, Worldwide ESH
Provides leadership, guidance and direction of ESH programs worldwide

Process systems teams and strategy teams
Improve site efficiency and execute organizational priorities

ESH risk and compliance team
Monitors performance and compliance

Site/building ESH support
Advises and consults in all ESH activities; develops and documents programs to ensure compliance; and assesses risks and controls

Employees
Follow applicable ESH regulations, internal policies and standards, work area or assignment procedures, and take ownership of their own safety and that of their coworkers

Resources
Our company spends millions in ESH-related capital and operating expenses each year on:
– **Site decommissioning**
– **Environmental controls and monitoring system improvements**
– **Remediation**
– **ESH personnel**
– **Efficiency projects**
– **Responding to regulations**

Key programs and strategies

We conduct environmental impact assessments prior to site selection to evaluate potential positive and negative impacts that a proposed project may have on a community.

At our manufacturing sites, we use safer chemicals when feasible and incorporate conservation, efficiency, recycling and safety practices into everyday operations. All our products, including Education Technology, are subject to controls for restricted chemicals and materials. While we outsource the manufacturing of our Education Technology products, we require suppliers and contractors to comply with applicable laws and regulations, as well as our own standards, to ensure that they are made responsibly.

Please refer to specific topic briefs for more information about ESH programs and strategies.

Evaluating our progress

We primarily perform ESH compliance and management system audits at each facility at least every three years; in interim years, the facilities perform self-assessments. This effort entails:

- Assessing compliance with legal and TI standards as well as the effectiveness of ESH training
- Evaluating audit findings and trending data to determine potential program improvement areas

Additionally, we survey employees and external stakeholders, conduct legally required inspections and monitor incident rates. Benchmarking is performed against the Responsible Business Alliance's self-assessment questionnaire and its Code of Conduct, as well as against peers and members of the Semiconductor Industry Association.

We communicate gaps and best practices to other sites so similar issues will not occur. No significant adjustments have been made to our corporate-level ESH management system due to audit findings. Each manufacturing site also reports performance using a scorecard that measures energy use, chemical reduction and water efficiency. We share scorecards internally for transparency and best-practice awareness, and as an accountability mechanism.

For questions or concerns about ESH

We offer several channels through which internal and external stakeholders can submit ESH questions, concerns or grievances. Employees may:

- Contact their supervisor, site ESH staff or an ESH committee representative
- Participate in ESH surveys and assessments, and submit suggestions
- Anonymously contact the TI Ethics Office

Customers may contact www.ti.com/support and all other ESH-related inquiries can be directed to citizenshipfeedback@list.ti.com.