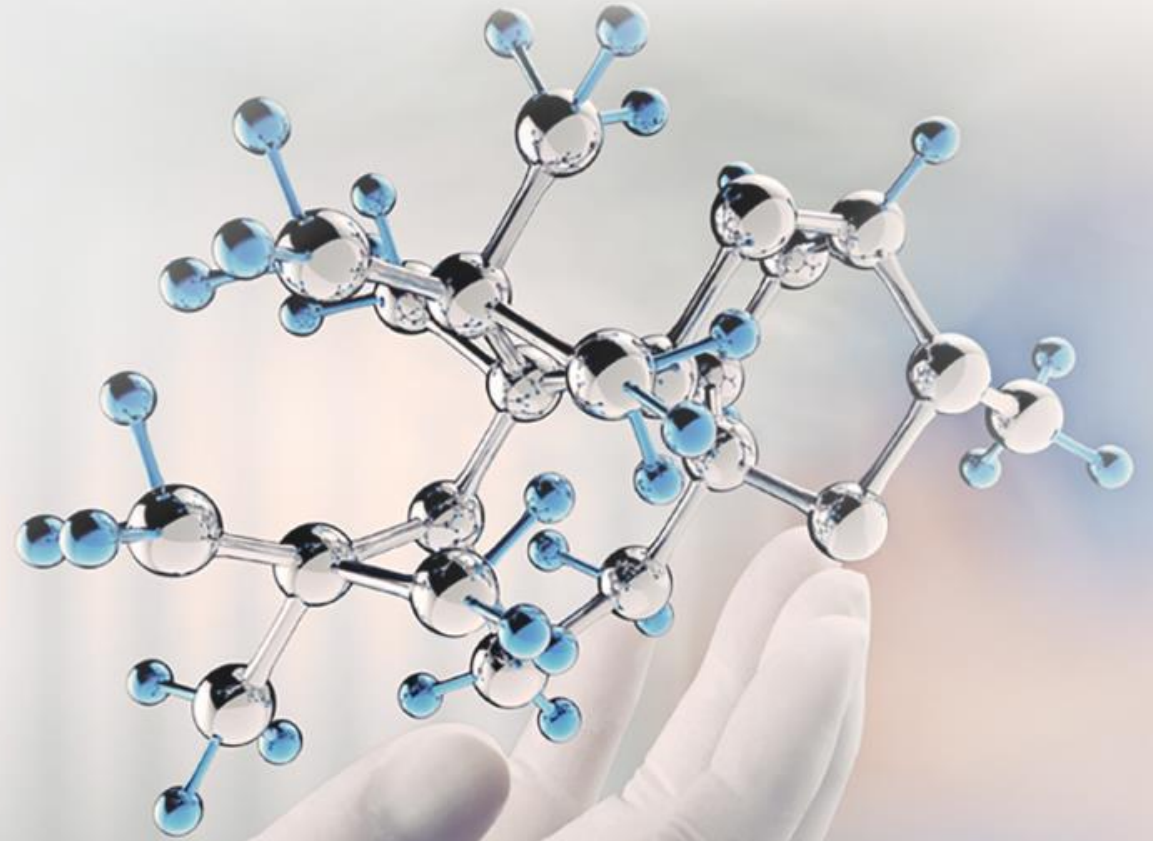


# Entegris Global Corporate Social Responsibility and Sustainability



## CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY

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- Entegris seeks to achieve Corporate Social Responsibility and Sustainability by creating value responsibly. We will balance the demands of doing business with the need to protect the environment and its resources and to ensure the health and safety of our employees, customers, and the communities in which we work and live.
- Entegris is committed to applying these principles to product stewardship, environmental protection, employee health and safety, and plant security. In addition, we are committed to aligning our operations with the Electronic Industry Code of Conduct (EICC).



**Improved Process = Efficiency = Sustainability = Bottom Line**

## OUR APPROACH

- Alignment with industry standards
  - Entegris global EHS policy and management system
  - Based on ISO 14001 and OHSAS 18001 principles
  - Product Stewardship
  - Participant in EICC
  - Member SEMI Global Care
- Entegris Code of Business Ethics



### Global Environmental, Health and Safety (EHS) Policy

It is the policy of Entegris, Inc. to provide a safe and healthful workplace for all of its employees and to minimize the impact of our activities, products and services on the environment. Compliance with Environmental, Health and Safety (EHS) laws is a basic tenet of the Entegris Code of Business Ethics and is to be integrated into all of our operating practices. This Global EHS policy is intended to implement and supplement those provisions.

#### General Principles

- Vigorous implementation of the EHS performance standards specified in the Entegris Code of Business Ethics.
- Effective management of our plants and other production and service facilities to minimize their impact on the environment and human health and safety. We shall pursue continual improvement in our EHS performance by designing, implementing and maintaining an EHS management system and programs to achieve the principles specified in this policy.
- Compliance with all applicable EHS laws, regulations and directives relating to our business.

#### Environmental Principles

- Entegris will promote recycling and the implementation of good product stewardship practices by integrating the consideration of the environmental impact of our products into the product design process. We will search for sensible innovations to reduce the impact of our products on the environment.
- Entegris will comply with applicable product-related directives and our customer-specific agreements relating to the content and materials of construction of our products.
- We will prevent pollution at the source wherever and whenever possible.
- We will develop programs to encourage the conservation of natural resources through the use of reclamation and other appropriate methods, and to improve energy efficiency in our existing operations and in new equipment and facilities.
- We will conduct vigorous training programs at all of our plants and production and service facilities to promote the foregoing.

- Entegris shall establish quantifiable objectives to measure our progress towards achieving each of the foregoing environmental principles. We will periodically review this data to determine our progress. We will adjust the foregoing objectives to assure that we pursue a process of continual improvement in achieving these environmental principles.

#### Health and Safety Principles

- All employees are responsible for ensuring a safe and healthy workplace. The health and safety of our employees and of our work environment is integral to our productivity and success. All employees are expected to conduct business in a safe and efficient manner and to adhere to all safety policies and procedures.
- We believe that accidents are preventable. The Entegris EHS Management System includes the assignment of responsibility for illness and injury prevention to managers, supervisors and employees. Mechanisms for periodic inspections, hazard assessments and corrective/preventative action shall be established and maintained.
- We will maintain an "open door" policy to address employee safety concerns and suggestions and will encourage communication with management and coworkers about working conditions perceived to be unsafe or hazardous, and will respond appropriately.
- We will incorporate appropriate safety and health considerations into our daily job duties and business decisions.
- We will operate and maintain equipment, facilities and processes in a safe manner.
- We will conduct vigorous training programs at all of our plants and production and service facilities to promote the foregoing.

BERTRAND LOY  
Chief Executive Officer and President



## OUR PATH

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- Phase I – Investigation
  - Process for new product development
    - Green House Gases (GHG)
    - Energy use (electricity, natural gas, fuel oil)
    - Water use and recycle
    - Solid waste and recycle
    - Design for Environment
    - Customer content restrictions
  - Work with our supply chain
    - Adopt EICC principles
    - Certifications for raw materials
      - Conflict Minerals, REACH, RoHS
- Phase II – Identify sustainability priorities and opportunities
  - Short term – programmatic
  - Long term – footprint reductions
- Phase III – Expand monitoring and reporting

## ESTABLISHING PERFORMANCE METRICS

	Performance Metrics							
<b>Environmental</b>	2010	2011	2012	2013	2014	2015	2016	2017
Scope 1 Greenhouse Gas Emissions* (metrics tons/\$M revenue)	21.1	22.9	22.6	22.0	24.9	25.0	17.5	14.5
Scope 2 Greenhouse Gas Emissions* (metric tons/\$M revenue)	75.7	88.5	88.5	97.4	79.9	79.6	74.5	68.4
Electricity Use (1000 kWh/\$M revenue)	139	141	147	155	142	144	139	128
Natural Gas (1000 Therms/\$M revenue)	2.16	2.14	2.37	2.47	3.09	2.59	2.30	2.26
Water Withdrawn (M <sup>3</sup> /\$M revenue)	526	617	691	751	673	8.13	840	646
Water Recycled (M <sup>3</sup> /\$M revenue)	27.9	42.8	26.9	186.3	102.8	51.6	108	79.0
Solid Waste Generated (1000 kg)		1924	2367	1950	3268	3963	4280	6097
Solid Waste Recycled (1000 kg)		1390	1481	1103	1802	1966	2182	3635
Solid Waste Generated (1000 kg/\$M Revenue)		2.57	3.31	2.98	3.39	3.67	3.64	4.54
Solid Waste Recycling Rate (%)		72.3	62.5	56.5	55.1	49.6	51.0	59.6
<b>People</b>	2010	2011	2012	2013	2014	2015	2016	2017
Safety - Recordable Rate (WorldWide Operations)	1.43	1.15	1.31	1.78	1.68	1.20	1.37	1.73
Safety - Days away case rate (World Wide Operations)	18.1	8.69	17.83	28.86	18.39	13.20	17.00	5.55
<b>Code of Ethics and Human Rights</b>			2012	2013	2014	2015	2016	2017
Percentage of persons certifying compliance to Entegris Code of Ethics which includes matters relating to Human Rights			100%	100%	100%	100%	100%	100%

\*Scope 1 and 2 GHG emissions calculated using The Climate Registry Reporting Protocols Data reported for all manufacturing sites unless otherwise stated.

## DESIGN FOR ENVIRONMENT

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- Entegris new product development process takes into account DfE principles to ensure new designs meet customer and governmental material content restrictions that include, but may not be limited to the following:
  - PFOA elimination
  - Banned/restricted substances
  - Conflict Minerals
  - European union WEEE/RoHS and REACH
  - China RoHS



## SUPPLY CHAIN

- Developing strong relationships with our suppliers
  - Commitment to EICC principles
  - Product material content
  - Conflict Minerals
- Use industry best practice software to track requirements by commodity



ENVIRONMENTAL, SAFETY, HEALTH & SECURITY



### Global Corporate Social Responsibility

April 12, 2012

Dear Valued Supplier:

Entegris, Inc. has a commitment to Corporate Social Responsibility (CSR) which includes growing our business in a strong and sustainable manner, preserving and protecting our environment, promoting a safe and healthy work place and treating people with dignity and respect. This commitment extends to our supply chain. To further this commitment, Entegris has implemented measures to demonstrate conformance to the Electronic Industry Citizenship Coalition (EICC) Code of Conduct.

In conjunction with our efforts, Entegris expects that our business partners operate in an ethical manner, utilize sound environmental operating principles, operate in a manner that promotes the health and safety of its employees, and respects the fundamental rights of all people.

Recently, our customers have been requesting participation in several new initiatives in support of the goals set forth by the EICC. These new initiatives include participation in EICC Validated Audit Programs (VAP), participation in the Carbon Disclosure project (Carbon Reporting System), and supporting a commitment to keep Entegris products from of any Conflict Materials, which is a relatively new requirement for Entegris and its customs under the laws of the United States. To support these initiatives we are seeking the following commitments from our business partners.

To help Entegris build a sustainable supply chain, we require the below initiatives be adopted and implemented by the end of calendar year 2012:

1. Declare your commitment to adhering to the policies of the EICC Code of Conduct by signing the attached EICC Code of Conduct Declaration document. A copy of the EICC Code of Conduct can be found at the EICC's website: [www.eicc.info/eicc\\_code.shtml](http://www.eicc.info/eicc_code.shtml).
2. As a part of this commitment, your company is required to operate in full compliance with the laws, rules and regulations of the countries in which it operates.
3. Agree to start reviewing your supply chain for Conflict Materials. Conflict Materials are gold (Au), tantalum (Ta), tungsten (W), and tin (Sn) sourced from the Democratic Republic of the Congo (DRC) or adjoining countries. This initiative is in connection with legislation passed in the United States which requires companies like Entegris to begin looking for Conflict Materials in its supply chain. A link to the legislation can be found at DRC




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# SUPPLY CHAIN

- Materials used in Entegris products are evaluated for material content
  - Banned substances
  - Conflict Minerals
  - RoHS, REACH
- Suppliers provide material declarations at the homogeneous level
- Entegris laboratory capability
  - Verification of metals, Bromine levels
- Proper material registration within emerging global REACH rules

		<b>Supplier Substance Declaration for Materials and Products</b>				 	
I. Supplier Name:		Vendor ID:		Entegris P/N:			
Supplier Contact:		Supplier Contact E-mail:		Supplier P/N:			
Phone/Fax:		Material/Part Description:		Country of Origin:			
Date of Request:		ISO 14001 Certified (Yes/No/Planned):		Export Control # (e.g. US ECCN):		Weight of Part (grams):	

II. The material(s) and/or product(s) listed on this form meet the requirements of the following directives/requirements (check with an "x" all that apply)

This material/product meets the EU-RoHS (no exemptions) and China RoHS MCV threshold requirements at the homogeneous material level (Rows #2 through #7);

This material/product meets the EU-RoHS threshold requirements with exemption. State the exemption and substance that exceeds MCV(s) and concentration (if available) in the comments column.


This material/product meets the JIG-101 ED, 4.0

This material/product meets the EU-Packaging MCV

This material/product meets the EU-REACH SVHC

We have a system in place to ensure that product

Substance	Directive, Regulatory Customer Standard
III. Disclose the concentration of each of the following substances:	
1 Cadmium (Cd) / Cd-Compounds in resins & polymer composites	EU(CN)-RoH JIG-101 E&A
2 Cadmium (Cd) / Cd-Compounds in composites	EU(CN)-RoH JIG-101 E&A
3 Chromium, Hexavalent (Cr+6) / Cr+6-Compounds	EU(CN)-RoH JIG-101 E&A
4 Lead (Pb) / Pb-Compounds	EU(CN)-RoH JIG-101 E&A
5 Mercury (Hg) / Hg-Compounds	EU(CN)-RoH JIG-101 E&A
6 Polybrominated Biphenyls (PBB)	EU(CN)-RoH JIG-101 E&A
7 Polybrominated Diphenyl Ethers (PBDE)	EU(CN)-RoH JIG-101 E&A
8 The sum of Cd + Cr+6 + Pb + Hg	EU-Packaging
9 Ozone Depleting Substances, Class I (CFCs, HCFCs, HBCs, carbon tetrachloride, methyl chloroform, methyl bromide)	JIG-101 E&A
10 Ozone Depleting Substances, Class II (HCFCs) (Report if Greater than 1000 PPM)	JIG-101 E&A
11 Lead (Pb) / Pb-Compounds in cable/cords with thermoplastic or thermoplastic surface coatings	JIG-101 E&A
12 Asbestos	JIG-101 E&A
13 Radioactive Substances	JIG-101 E&A
14 Polychlorinated Biphenyls (PCBs) / Polychlorinated Biphenyls (PCBs)	JIG-101 E&A
15 Polychlorinated Naphthalenes (more than 3 chlorine atoms)	JIG-101 E&A
16 Tin-substituted organotin compounds, including Triphenyl Tin (TTP) and Triphenyl Tin (TPP)	JIG-101 E&A
17 Triphenyl Tin Oxide (TPTO)	JIG-101 E&A
18 Dibutyl Tin (DBT) compounds	JIG-101 E&A
19 Dioctyl Tin (DOT) compounds	JIG-101 E&A
20 Tetrabromobisphenol A (CAS # 78-34-1)	JIG-101 E&A
21 Dimethyl Fumarate (DMF), CAS# 624-43-7	EU Directive 2002/27/EC JIG-101 E&A
22 Parabenzoic acid	JIG-101 E&A
23 Perfluorooctanesulfonate (PFOS)	EU Directive 2006/122/EC JIG-101 E&A
24 Perfluorooctanoic acid (PFOA)	EU Directive 2006/122/EC



## Entegris Banned and Restricted Materials

### Banned and Restricted Materials With Known CAS Numbers

**Banned Substances**  
Substances that when used in products or subparts, or used in the manufacturing of such components, are subject to currently enacted legislation, which prohibits use, restricts use or requires reporting or results in other regulatory obligations

**Asbestos & Asbestos Materials**

Substance	CAS Number
Asbestos	1332-21-4
Actinolite	77536-66-4
Amosite (Grunertite)	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

**Cadmium/Cadmium Compounds**

Substance	CAS Number
Cadmium	7440-43-9
Cadmium oxide	1306-19-0
Cadmium sulfide	1306-23-6
Cadmium chloride	10108-64-2
Cadmium sulfate	10124-36-4
Other cadmium compounds	-

**Chromium (VI) Compounds**

Substance	CAS Number
Chromium (VI) oxide	1333-82-0
Barium chromate	10294-40-3
Calcium chromate	13765-19-0
Chromium trioxide	1333-82-0
Lead (II) chromate	7758-97-6



