



2016  
CORPORATE  
RESPONSIBILITY

# REPORT

A sustainably sourced light show installation built with Intel® technology and recycled materials.



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For a high-level overview of Intel's approach to Corporate Responsibility, supporting documents and data, past reports, and to customize a report with the sections you choose, visit our [Corporate Responsibility](#) and [Report Builder](#) websites.

We prepared this report using the Global Reporting Initiative\* (GRI) Sustainability Reporting Guidelines, and self-declare the report to be prepared in accordance with the GRI Standards: Comprehensive option. Our GRI Content Index is provided on our [Report Builder](#) website.

# 2016 CORPORATE RESPONSIBILITY HIGHLIGHTS

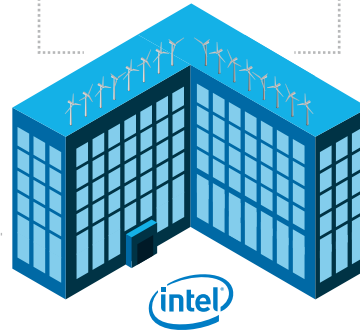
**\$122.7 M**  
corporate and Intel Foundation charitable giving

**1.2 M**  
employee volunteer hours



**1.39 M**  
women in Africa reached through the Intel® She Will Connect Program to date

**\$3.5 M**  
in fees returned to workers by suppliers since 2014, as a result of our work on the issue of forced and bonded labor



**\$555 M**  
spent with diverse suppliers

**\$25 M**  
invested in 9 diversity-focused technology career pathways programs



**57 B**  
gallons of water conserved since 1998

**4.3B KWH**  
of purchased green power, equivalent to 100% of U.S. power use and 80% of global power use

## BUILDING A BETTER WORLD IS OUR BUSINESS

### What Corporate Responsibility Means at Intel

Intel is empowering people to solve the world's biggest challenges. We are using technology to empower more people to do more and contribute to the well-being of others and the planet. Technology has the power to connect people to new information and data, greater opportunities and to one another. More connections means more diverse ideas, more realized potential, and more sustainable solutions around the world. Connected by innovative thinking and technology, we can make the most amazing experiences possible.

Intel has a long-standing commitment to corporate responsibility. We set ambitious goals and make strategic investments to drive improvements in environmental sustainability, supply chain responsibility, diversity and inclusion, and social impact. We believe our focus on corporate responsibility—built on a strong foundation of transparency, governance, and ethics—creates value for Intel and our stockholders by helping us mitigate risks, reduce costs, build brand value, and identify new market opportunities.

A foundational element of our corporate responsibility approach is our commitment to transparency. We published our first voluntary environmental report in 1994, and over the past 20 years have continued to evolve our reporting to meet the needs of our stakeholders. This year's report provides a comprehensive summary of our management approach and performance for 2016.



# A LETTER FROM OUR CEO



2016 was a year of tremendous change for Intel. We accelerated our evolution from a PC company to one that powers the cloud and billions of smart, connected computing devices. We restructured the company while launching exciting products and investing for growth. Our efforts help position Intel as the driving force behind the data revolution that is transforming industries and enabling new experiences like artificial intelligence and autonomous driving.

While the world and our company are changing, our commitment to corporate responsibility remains as strong as ever. We deeply integrate corporate responsibility into our business in ways that create value for Intel and our stockholders. We see amazing potential to empower more people through our technology and to harness the power of data to help address society's most complex issues—from climate change and energy efficiency, to economic empowerment and human rights.

Throughout 2016, we invested in new initiatives to catalyze positive change for Intel, our industry, and society. We advanced progress against ambitious goals in multiple areas:

**Environmental Sustainability.** We continued to invest in conservation actions and new onsite alternative energy projects that enable us to drive toward the lowest environmental footprint possible in support of our 2020 goals, and worked to empower others to use Intel® technology to reduce their own environmental impact.

**Supply Chain Responsibility.** We significantly increased the percentage of our suppliers who meet our advanced expectations in ethics, environmental performance, labor, and human rights practices. We also continued our work to establish a responsible mineral supply chain for Intel and our industry.

**Diversity and Inclusion.** We made progress toward our goal—supported by a \$300 million investment—to achieve full representation of women and underrepresented minorities in our U.S. workforce by 2020. Our inclusive hiring practices and programs to improve diversity across the technology industry have created strong momentum toward achieving our goal.

**Social Impact.** We took important steps to ensure that the next generation of workers and innovators is diverse, inclusive, and ready to succeed in our rapidly changing digital world. Our new Intel® Innovation Generation initiative aims to empower young people around the world through increased access to technology skills and innovation experiences.

As we continue to evolve our business, innovating and delivering dependable products that enable amazing experiences, we remain committed to transparency and making the decisions that will allow our company, our people, and the planet to thrive. I am proud that at Intel our words and commitments are backed by actions and developed through input from our stakeholders. As you read this report summarizing our 2016 performance and our ambitious goals for the future, we welcome your feedback and collaboration.

**BRIAN KRZANICH**, Chief Executive Officer  
Intel Corporation



# TRANSFORMING OUR BUSINESS





# COMPANY PROFILE

We are a world leader in the design and manufacturing of essential products and technologies that power the cloud and an increasingly smart, connected world. Intel delivers computer, networking, and communications platforms to a broad set of customers including original equipment manufacturers (OEMs), original design manufacturers (ODMs), cloud and communications service providers, as well as industrial, communications, and automotive equipment manufacturers.

We are expanding the boundaries of technology through our relentless pursuit of Moore's Law and computing breakthroughs that make amazing experiences possible.

Intel is headquartered in Santa Clara, California and incorporated in the state of Delaware.

**600 FACILITIES IN  
63 COUNTRIES**



**106 K EMPLOYEES  
WORLDWIDE**

**50% OF EMPLOYEES  
LOCATED IN U.S.**

## ABOUT INTEL

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## SOLVING GLOBAL CHALLENGES WITH BIG DATA

Harnessing the capability of the cloud, the ubiquity of the Internet of Things, the latest advances in memory and programmable solutions, and the promise of always-on 5G connectivity, Intel is empowering people to build a better world.



**98%**  
**OF THE CLOUD  
RUNS ON INTEL**



**90%**  
**OF THE WORLD'S SUPERCOMPUTERS  
RUN ON INTEL**

## Our Vision and Strategy

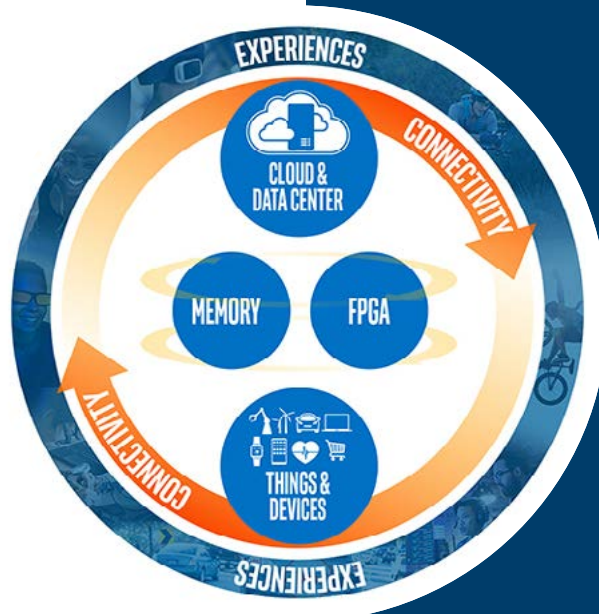
Our vision is if it is smart and connected, it is best with Intel.

People are experiencing a dramatic shift in their relationship to technology as things and devices become increasingly connected to each other and the cloud, merging the digital and physical worlds. Computing is becoming pervasive everywhere and in everything, driving demand for technologies for processing, analyzing, storing, and sharing exponential quantities of data.

As a result, our strategy is to drive a “Virtuous Cycle of Growth” that enables the expansion of the data center as well as the proliferation of smart, connected things and devices, while continuing to fuel technology with the economics of Moore’s Law. The Virtuous Cycle of Growth leverages Intel’s core assets to power the cloud and drive the increasingly smart, connected, and data-driven world.

## Virtuous Cycle of Growth

Our businesses across the **cloud and data center**, through **things and devices**, are accelerated by **memory and FPGA technologies**—all of which are bound together by **connectivity** and enhanced by the economics of **Moore’s Law**.



**The Cloud and Data Center.** We believe that the most important trend shaping the future of the smart and connected world is the cloud. We design and optimize our products to deliver industry-leading performance and best-in-class total cost of ownership for cloud workloads. Intel is adding new products and features to our portfolio to address emerging, high-growth workloads such as artificial intelligence, media, and 5G.



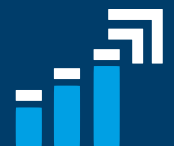
**Things and Devices.** Things and devices encompass all smart devices, including PCs, sensors, consoles, and other edge devices that are connected to the cloud. When a “thing” is connected to the cloud, the data it captures can be measured in real time and accessed virtually from anywhere. We will continue to deliver leadership, performance, and innovation in PCs. In our Internet of Things business, we focus our investments on areas where we see growth potential, such as the autonomous vehicle, industrial, and retail market segments.

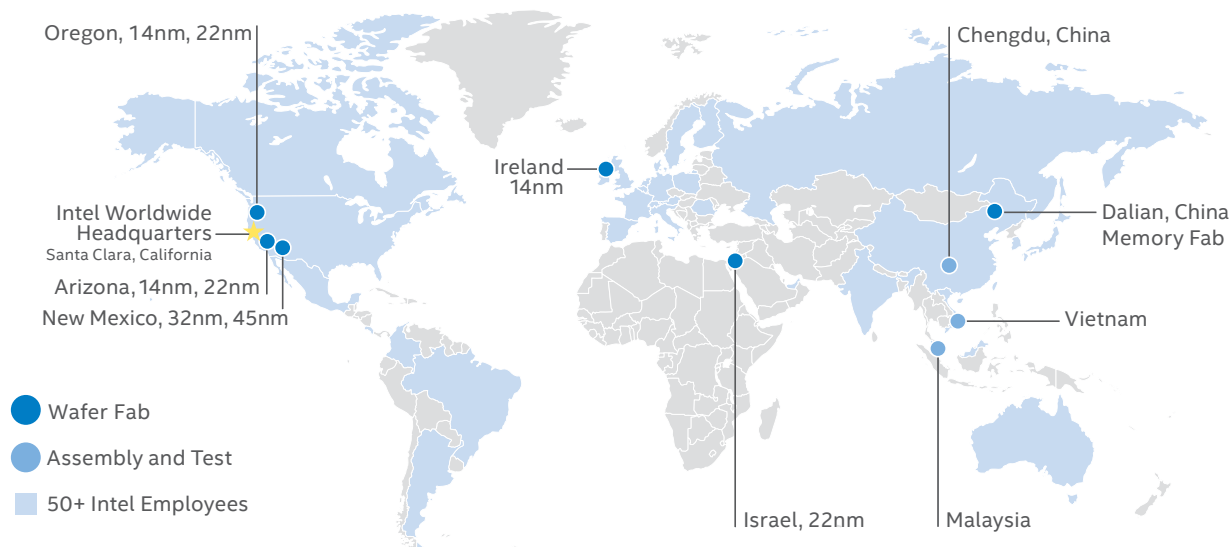
**Memory and Programmable Solutions.** Advancements in memory technology and programmable solutions, such as field-programmable gate arrays (FPGAs), make possible entirely new classes of products for the data center and Internet of Things. The need for faster storage and greater memory capacity unlocks value in the cloud as the demand to automate and analyze exponential quantities of data increases. FPGAs can efficiently manage the changing workload demands of next-generation data centers and offer the flexibility for users to change their workloads in real time. FPGAs are also used in a wide range of other applications, such as machine learning and Advanced Driver Assistance Systems.

**Connectivity.** As connectivity technologies continue to evolve, more things and devices are able to connect with each other and the cloud. The ability to connect and to derive actionable insights from massive amounts of data brings new experiences to our daily lives and transforms businesses.



**Moore’s Law.** Our co-founder Gordon Moore predicted, in what is known as Moore’s Law, that transistor density on integrated circuits would double about every two years. Intel’s advancement of Moore’s Law has driven significant computing power growth and increasingly better economics and pricing. We will continue to harness the value of Moore’s Law by enabling new devices with higher functionality and complexity while controlling power, cost, and size.





In 2016, the majority of our wafer manufacturing was conducted within the U.S. As of December 31, 2016, our microprocessors were manufactured on 300mm wafers, with a substantial majority manufactured using our 14nm and 22nm process technologies.

### Business Organization and Operations

Leveraging our core assets enhances our strategy and provides us with the scale, capacity, and global reach to establish new technologies and respond to customers' needs quickly. Our core assets include: silicon and manufacturing leadership; architecture and platforms; software and services; customer orientation; acquisitions and strategic investments; and leadership in corporate responsibility.

We have long been the leader in silicon manufacturing process technology and we aim to continue our lead through investment and innovation in this critical area. Unlike many other semiconductor companies, we primarily manufacture our products in our own manufacturing facilities, which enables us to optimize performance, shorten our time-to-market, and scale new products more rapidly. We believe this competitive advantage will be extended in the future as the costs to build leading-edge fabrication facilities (fabs) increase over time.

### Business Organization

#### Client Computing Group (CCG)

Includes platforms designed for notebooks, 2 in 1 systems, desktops (including all-in-ones and high-end enthusiast PCs), tablets, phones, wireless and wired connectivity products, and mobile communication components.

#### Data Center Group (DCG)

Includes workload-optimized platforms and related products designed for enterprise, cloud, and communication infrastructure market segments.

#### Internet of Things Group (IOTG)

Includes platforms designed for Internet of Things market segments, including retail, transportation, industrial, video, buildings and smart cities, along with a broad range of other market segments.

#### Non-Volatile Memory Solutions Group (NSG)

Includes NAND flash memory products primarily used in solid-state drives.

#### Intel Security Group (ISecG)

Includes security software products designed to deliver innovative solutions that secure computers, mobile devices, and networks around the world.

#### Programmable Solutions Group (PSG)

Includes programmable semiconductors (primarily FPGAs) and related products for a broad range of market segments, including communications, data center, industrial, military, and automotive.

#### All Other

Includes results from our other non-reportable segment and corporate-related charges.

The above chart represents our operating segments as of December 31, 2016. We manage our business through these operating segments. For additional information about Intel's business organization and operations, refer to the [Intel Annual Report and Form 10-K](#).

## OUR KEY COMPETITIVE ADVANTAGES INCLUDE:

### WELL-POSITIONED

for growth in a smart, connected world

### TRANSITIONS

to next-generation technologies

### COMBINATION OF OUR NETWORK

of manufacturing and assembly and test facilities with our global architecture design teams



While we manufacture the significant majority of our products internally, we use third-party foundries to manufacture wafers for certain components, including communications, connectivity, networking, FPGA, and memory products. In addition, we primarily use sub-contractors to manufacture board-level products and systems. We purchase certain communications and connectivity products from external vendors primarily in the Asia-Pacific region. In addition to our own assembly and test facilities, we use subcontractors to augment capacity to perform assembly and test of certain products, primarily chipsets and communications, FPGAs, connectivity, and memory products.



In early 2017, we announced plans to complete Fab 42, which is targeted for 7nm process technology, in Arizona.

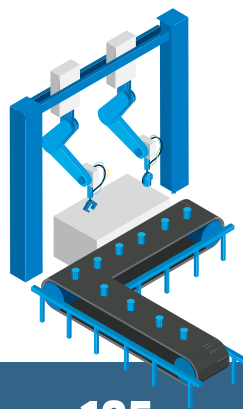


**19,000**  
SUPPLIERS

**100**  
COUNTRIES

**105**  
COMMODITIES

[LEARN MORE  
intel.com/supplychain](http://intel.com/supplychain)



Intel completed 12 acquisitions in 2016, consistent with the number of transactions and levels of investment in 2015 and 2014. In Q1 2016, we completed the acquisition of Altera, a global semiconductor company that designs and sells programmable semiconductors and related products, and subsequently formed the Programmable Solutions Group (PSG). We worked to integrate Altera throughout 2016, and the business continues to deliver new products and grow. During the first quarter of 2017, we entered into a definitive agreement to acquire Mobileye N.V. (Mobileye), a leading supplier for computer vision systems in the automotive industry. The transaction extends Intel's strategy to invest in data-intensive market opportunities that build on our strengths in computing and connectivity from the cloud, and is expected to position Intel as a leading technology provider in the fast-growing market for autonomous vehicles. On April 3, 2017, subsequent to the first quarter of 2017, we completed the planned divestiture of ISecG to establish a new standalone cybersecurity company, called McAfee.

Our multi-tiered supply chain fulfills our various materials, equipment and services needs, and comprises thousands of suppliers. We set expectations for supplier performance, work with our suppliers to implement improvements when necessary, and collectively address issues through our leadership in the Electronic Industry Citizenship Coalition (EICC). For more information, see the [Supply Chain Responsibility](#) section of this report.



## Our Products

We offer platforms that incorporate various components and technologies, including a microprocessor and chipset, a stand-alone System-on-Chip (SoC), or a multichip package. A platform may be enhanced by additional hardware, software, and services offered by Intel. Platforms are used in various form factors across our Client Computing Group (CCG), Data Center Group (DCG), and Internet of Things Group (IoTG) operating segments. We derive a substantial majority of our revenue from platforms, our principal product. In 2016, we released our 7th generation Intel® Core™ processor, formerly code-named Kaby Lake, as well as the Intel® Xeon® processor E5 v4 family, formerly code-named Broadwell.



### Intel® Quark™ Processor

Designed with a level of integration for applications where lower power, size, and cost take priority including wearable technologies and the next generation of intelligent, connected devices



### Intel Atom® Processor

Designed to deliver performance and mobility in tablets, and 2 in 1 systems, and smartphones as well as power-efficiency in microservers



### Intel® Pentium® Processor

Designed to deliver quality, reliability, and performance for work and play



### Intel® Celeron® Processor

Designed to deliver quality, reliability, and performance for work and play



### Intel® Core™ m3 Processor

Designed to deliver performance and mobility in thin, sleek, fanless devices



### Intel® Core™ i Processor

Designed to deliver maximum performance and built-in security for the most demanding applications



### Intel® Xeon® Processor

Designed to deliver advanced performance and energy efficiency for cost effective solutions that scale to address diverse compute, network, and storage requirements



### Intel® Xeon Phi™ Processor

Designed to deliver optimized performance for highly parallel workloads



### Intel® Itanium® Processor

Designed to deliver mainframe reliability and enterprise performance on a platform that shares common characteristics of the rest of the data center

We offer a range of platforms based upon the microprocessors in the graphic above. For additional product information, see our [Annual Report and Form 10-K](#).

Our products primarily compete based on performance, energy efficiency, integration, innovative design, features, price, quality, reliability, brand recognition, technical support, and availability. The importance of these factors varies by the type of end system for the products. We must continually improve the cost, integration, and energy efficiency of our products, as well as expand our software capabilities to provide customers with comprehensive computing solutions.

Our products have the potential to impact the environment during three phases: manufacturing, use, and disposal. Intel supports a precautionary approach to the materials that we use in our products. We seek to reduce the environmental impact of our products through product ecology and e-waste initiatives and by designing products with improved energy-efficient performance, which helps us meet customer needs and identify market expansion opportunities. For more information, see the [Environmental Sustainability](#) section of this report.

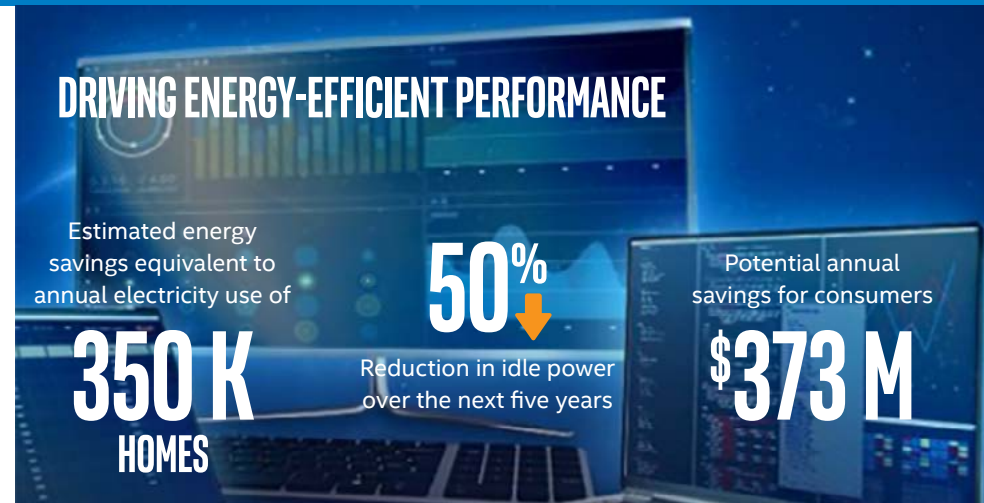
We recognize that innovation, growth, and the continued success of our business and the high-tech industry depend on individuals' trust in their use of technology and in the responsible, protected collection and processing of their data. Intel helps improve cybersecurity both as a consumer and a developer of technology. For more detail, see [Respecting Human Rights](#) later in this section of the report.

Our products are increasingly being used to solve global challenges—from empowering individuals, companies, and governments to reduce their environmental impact, to driving positive social impact in areas such as healthcare and education. For more information, see the [Applying Technology to Solve Global Challenges](#) content within this section of the report.

### Product Security

The 7th generation Intel Core processor family is based on Intel's latest, most advanced 14nm process technology, and include a variety of security features built into the silicon.<sup>1</sup> Intel® Authenticate Technology reduces users' exposure to identity theft attacks such as phishing and screen scraping with fingerprint, Bluetooth\* proximity, protected PIN, location, and facial recognition options available for customization on PCs.

For consumers, adding biometrics plus hardware-based security makes it both easier and safer to buy online. Intel is working with partners to enable secure fingerprint touch to pay and Secure Guest Checkout, which provides hardware-level data protection to better verify identity. We are also working with Password Manager providers to provide simpler and more secure web login to online sites and services through password



### New California Energy Commission Standard

Intel supported the historic [Computers and Monitors energy-efficiency standard](#), adopted by the California Energy Commission in December 2016. We look forward to the expected positive global impact of this standard over the next five years.

The vast majority of the environmental impact resulting from the use of our products relates to the consumption of energy. For more information, refer to the [“Product Energy Efficiency”](#) content in the Environmental Sustainability section of this report.

manager applications that take advantage of Intel security hardware. These password managers can take advantage of Intel® Software Guard Extensions to manage passwords with access through a protected master password that is secured in hardware. Use of two-factor authentication defeats a vast number of attacks targeting online user passwords. In addition, Intel® Online Connect provides consumers with hassle-free, built-in, two-factor authentication for Dropbox\* and other industry-leading online services. [Read more.](#)

<sup>1</sup> No computer system can provide absolute security under all conditions. Built-in security features available on select Intel Core processors may require additional software, hardware, services, and/or an Internet connection. Results may vary depending upon configuration. Consult your PC manufacturer for more details. For more information, visit [www.intel.com/technology/security](http://www.intel.com/technology/security).

## Customers

We focus on providing compelling user experiences by developing our next generation of products based on customer needs and expectations. In turn, our products help enable the design and development of new user experiences, form factors, and usage models.

We sell our products primarily to OEMs and ODMs. Our customers also include other manufacturers and service providers, such as industrial and communication equipment manufacturers and cloud service providers, who buy our products through distributor, reseller, retail, and OEM channels throughout the world.

Our worldwide reseller sales channel consists of thousands of indirect customers—systems builders that purchase Intel® processors and other products from our distributors. We have a program that allows distributors to sell our microprocessors and other products in small quantities to customers of systems builders. Our microprocessors and other products are also available in direct retail outlets.

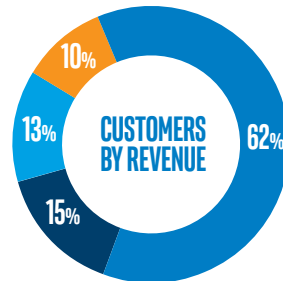
## Competitors

We compete against other companies that make and sell platforms, other silicon components, and software to businesses that build and sell computing and communications systems to end users. Our competitors also include companies that sell goods and services to businesses that use them for their internal and/or customer-facing processes (e.g., businesses running large data centers).

In 2016, we exceeded our customer satisfaction goals, resulting in two additional days of pay for our employees.

OUR THREE LARGEST CUSTOMERS ACCOUNT FOR

38%



OF NET REVENUE

- All Others
- Lenovo
- Dell
- HP

## Research and Development

We are committed to investing in world-class technology development, particularly in the design and manufacture of integrated circuits.

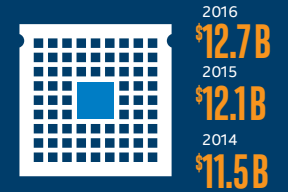
Our research and development (R&D) activities are directed toward the delivery of solutions consisting of hardware and software platforms and supporting services across a wide range of computing devices. We are focused on developing the technology innovations that we believe will deliver our next generation of products, which will in turn enable new form factors and usage models for businesses and consumers.

Our R&D efforts are intended to enable new levels of performance and address areas such as energy efficiency, system-level integration, security, scalability for multi-core architectures, system manageability, and ease of use. We have continued expanding on the advances anticipated by Moore's Law by bringing new capabilities into silicon and producing new products optimized for a wider variety of applications.

## Intel Capital

Our global investments and mergers and acquisitions organization, Intel Capital, is one of the largest venture capital organizations in the world. Intel Capital invests in innovative and strategically important start-ups targeting computing and smart devices, cloud, data center, security, the Internet of Things, wearable and robotic technologies, and semiconductor manufacturing. In 2016, Intel Capital invested \$447 million in 90 companies. Intel Capital has also created the Intel Capital Diversity Fund, the largest venture capital fund ever to focus on diverse entrepreneurs.

## R&D EXPENDITURES



Intel invested \$12.7 billion in R&D in 2016

## INTEL CAPITAL

INTEL'S GLOBAL INVESTMENT ORGANIZATION

1991

\$11.8 B INVESTED

57 COUNTRIES

1,478 COMPANIES

Results of Investments:

214 companies have gone public

403 were acquired or participated in a merger

2016

\$11.8 billion invested by Intel Capital in 1,478 companies in 57 countries since 1991 through the end of 2016

## 2016 Financial Summary

2016 has been a transformative year for Intel. We are building on our strong position in client computing and are investing for growth in the data center, Internet of Things market segments, and disruptive differentiated memory technology. We achieved record revenue of \$59.4 billion in 2016, up \$4 billion, or 7%, from 2015. The increase was driven by the inclusion of PSG and growth in the DCG, CCG, and IoTG businesses. Net income for 2016 was \$10.3 billion, and cash flow from operations was \$21.8 billion. Intel's effective tax rate in 2016 was 20.3%, up from 19.6% in 2015.

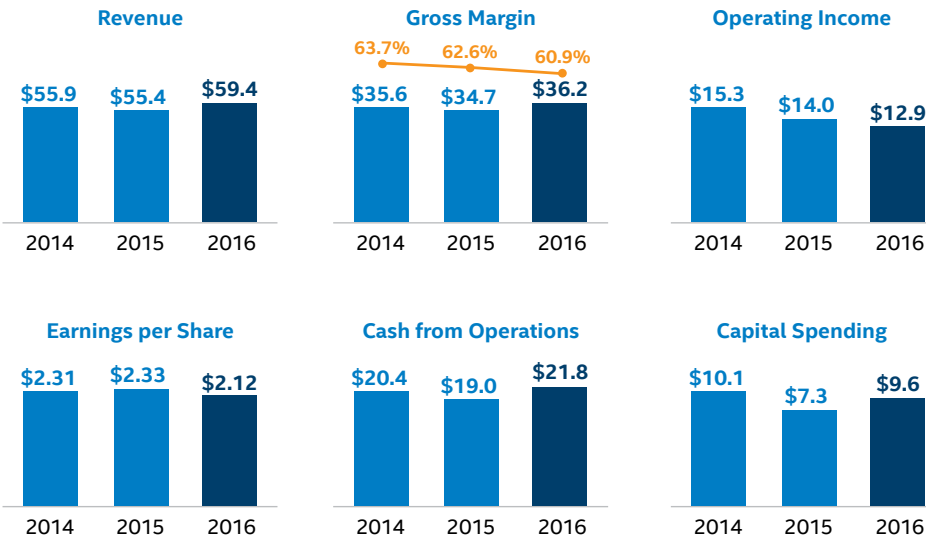
In the second quarter of 2016, our management approved and commenced the 2016 Restructuring Program to accelerate our transformation from a PC company to one that powers the cloud and billions of smart, connected computing devices. Under this program, we are in the process of closing certain facilities and reducing head-count globally to align our operations with evolving business needs by investing in our growth businesses and improving efficiencies. Restructuring actions related to this program are expected to impact approximately 15,000 employees by mid-2017.

## Economic Impact

We provide high-skill, high-paying jobs at Intel sites around the world. We also impact economies through our sourcing activities, consumer spending by our employees, and tax revenue. In addition, Intel makes sizable capital investments and provides leadership in public-private partnerships to spur economic growth and innovation. Our investments in education and digital skills training also help communities and countries advance economic development and improve competitiveness.

## 2016 Financial Highlights

(Dollars in Billions, Except Per Share Amounts)



For additional 2016 financial information, see the [Intel Annual Report and Form 10-K](#).

In recent years, we have engaged with third-party organizations to conduct analyses of the direct, indirect, and induced economic impacts of our operations inside and outside the U.S. For example, a [PricewaterhouseCoopers study](#) found that Intel's total impact on the U.S. gross domestic product (GDP) from 2008-2012 was \$408 billion. The study also found that in 2012, each Intel full- and part-time position supported 13 additional jobs.

Periodic local assessments help us better understand our economic impact at the community level. For example, a [2012 study in Oregon](#) found that "total economic impacts attributed to Intel's operations, capital spending, contributions, and taxes amounted to almost \$14.6 billion in economic activity." In addition, a 2012 economic impact study of our Intel Israel operations estimated direct and indirect reciprocal procurement at \$737 million.

## INTEL'S ECONOMIC IMPACT

U.S.

**\$408 B**

Total impact on U.S. GDP from 2008-2012

**+13**

Each Intel full- and part-time position supported 13 additional jobs

**\$14.6 B**

Total economic impact in Oregon based on 2012 study

Outside the U.S.

**\$737 M**

Israel operations' direct and indirect reciprocal procurement

Intel has commissioned third-party research to help understand our direct and indirect economic impact.



# INTEGRATED STRATEGY, GOVERNANCE, AND ETHICS

More than just words, the [Intel Values](#) define who we are and how we act as a company as we work to achieve our goals and strategies. The Intel Values include: quality; risk-taking; an inclusive, great place to work; discipline; customer orientation; and results orientation. In addition, the [Intel Code of Conduct](#) sets clear expectations for integrity and ethics for all employees, officers, non-employee directors, wholly owned subsidiaries, and suppliers.

We have developed additional guidelines and policies on key corporate responsibility issues to advance our strategy and leadership, taking into account frameworks such as the [United Nations Sustainable Development Goals](#) (SDGs) and the concept of shared value. We believe the achievement of the UN Sustainable Development Goals will be critical to creating opportunity for all, and we believe technology will play a key role in achieving the SDGs. Our business practices, social impact programs,

and partnerships support the achievement of the goals. In the [Appendix](#) of this report, we've mapped how our current efforts and strategies actively support the SDGs.

Intel has been a member of the [United Nations Global Compact](#) since 2009, and our [Human Rights Principles](#) reference external standards such as those of the [International Labour Organization](#) and the [Guiding Principles on Business and Human Rights](#) endorsed by the United Nations Human Rights Council.

## Integrating Corporate Responsibility

We believe that our integrated approach to financial matters, corporate governance, and corporate responsibility drives increased accountability, improves decision making, and ultimately creates long-term value.

We also believe that embedding corporate responsibility across the company is the most effective management approach. We have established cross-functional Management Review Committees (MRCs) consisting of senior executives who manage corporate responsibility and sustainability activities across the organization. Our global Corporate Responsibility Office acts as an internal adviser to the business groups and MRCs to drive strategic alignment and incorporate external stakeholder feedback into decision processes.

Many Intel business groups have established teams dedicated to corporate responsibility issues, or conduct due diligence and implement policies and procedures for specific issues. For example, our mergers and acquisitions process incorporates criteria to help assess environmental, governance, "conflict minerals," and a number of other factors that could affect Intel's acquisitions. Intel Capital has integrated additional criteria into its due diligence process to identify potential risks in new investments, and has put in place investment strategies, such as

# CORPORATE RESPONSIBILITY

Governance and Management



We have integrated oversight and management for corporate responsibility issues at multiple levels of the company and across different countries where we operate. Read more on our [Report Builder](#) website.

## Intel Guidelines and Policies on Strategic Corporate Responsibility Issues:

- Intel Values
- Intel Code of Conduct
- Intel Human Rights Principles
- Intel Statement on Slavery and Human Trafficking
- Intel EICC Commitment Letter
- Intel EHS Policy
- Intel Climate Policy
- Intel Water Policy
- Intel Political Accountability Guidelines
- Intel Conflict Minerals Sourcing Policy

ACCESS DOCUMENTS AT [intel.com/responsibility](https://intel.com/responsibility)



the [Intel Capital Diversity Fund](#), to support Intel's diversity goals.

## Linking Compensation to Corporate Responsibility Factors

Through our Annual Performance Bonus (APB), since 2008 we have linked a portion of our executive and employee compensation to corporate responsibility factors such as environmental sustainability and diversity. The formula for determining APB payouts is based on absolute and relative financial performance and performance to operational goals. In 2016, employees and executives earned an incremental bonus tied to our 2020 diversity and inclusion goal related to hiring and retention of women and under-represented minorities. Previous metrics have focused on areas such as carbon emissions and recycling. For more information, see [Intel's 2017 Proxy Statement](#).

## Integrated Value Framework

Risk Management	Operations	Brand	Revenue
<b>License to Operate and Governance</b> <ul style="list-style-type: none"> <li>Regulatory risk (e.g., environmental)</li> <li>Community engagement</li> <li>Supply chain</li> </ul>	<b>Cost Savings and Continuous Improvements</b> <ul style="list-style-type: none"> <li>Operational efficiency</li> <li>Management quality</li> <li>Employee engagement</li> </ul>	<b>Reputation and Goodwill</b> <ul style="list-style-type: none"> <li>Differentiation</li> <li>Trusted partner</li> <li>Goodwill</li> </ul>	<b>Growth and Innovation</b> <ul style="list-style-type: none"> <li>Market expansion</li> <li>Product innovation</li> <li>New customer needs</li> </ul>

Integrating corporate responsibility and sustainability into our business and decision-making creates value for Intel in four main ways. It helps us: reduce risk and protect our license to operate, improve the efficiency and effectiveness of our operations, protect and build brand value, and drive revenue growth through innovation and identification of market opportunities.

## Investor Outreach

We use an integrated approach to investor engagement. Our outreach team, led by representatives from our Investor Relations group, Corporate Responsibility office, and Corporate Secretary's office and including representatives from other business groups as needed, engages proactively with a broad base of investors throughout the year. Our engagement model ensures that the Board and management consider and effectively address the issues that matter most to our stockholders.

For more than 15 years, we have met with leading environmental, social, and governance (ESG) research firms and socially responsible investors to review our reporting, gain a better understanding of emerging issues, and gather feedback on our performance. In 2016, we significantly expanded our investor outreach on ESG issues, doubling the number of firms we engaged with through our annual ESG investor meetings and attendance at investor conferences.

In addition, we further integrated corporate responsibility information into our [Annual Report and Form 10-K](#) and [Proxy Statement](#), and launched a more integrated [Investor Relations](#) website.

## Corporate Governance and Board Oversight

Intel's Board of Directors oversees, counsels, and directs management in the long-term interests of the company and our stockholders. Matters in which the Board is actively engaged include business strategy, risk oversight, succession planning, and corporate responsibility.

Since 2003, the Board's Corporate Governance and Nominating Committee has had formal responsibility for reviewing and reporting to the Board on corporate responsibility and sustainability issues at Intel. The committee receives formal updates twice each year on the company's corporate responsibility performance, including a review of the annual Corporate Responsibility Report and information on specific corporate responsibility issues such as political contributions and climate change. The committee regularly reviews the Board's practices and composition to make sure it has the necessary breadth and diversity of skills and experience. A number of directors have expertise in key corporate responsibility areas, including corporate governance, education, and environmental sustainability. As part of every Board search, our Board is committed to actively seeking women and minority candidates, as well as candidates with diverse backgrounds, experiences, and skills.

A full description of the Board's responsibilities, director biographies, and compensation practices are available in Intel's [2017 Proxy Statement](#) and on our [Investor Relations](#) website.

## Risk Management

One of the Board's functions is the oversight of risk management. Risk is inherent in business, and the Board's oversight, assessment, and decisions regarding risks occur in the context of and in conjunction with other activities of the Board and its committees. The Board receives periodic briefing and informational sessions by management on the types of risks the company faces and enterprise risk management. Management is responsible for identifying risk and risk controls related to significant business activities; mapping the risks to company strategy; and developing programs and recommendations to determine the sufficiency of risk identification, the balance of potential risk to potential reward, and the appropriate ways to control risk.

The types of risks that Intel faces include:

- Macro-economic risks such as inflation, deflation, reductions in economic growth, or recession
- Political risks such as restrictions on access to markets, confiscatory taxation, and expropriation of assets
- Event risks such as natural disasters
- Business-specific risks related to strategic position, operational execution, financial structure, legal and regulatory compliance, corporate governance, and environmental stewardship

Intel Crisis Management (ICM) handles our end-to-end response to crises and major business disruptions. Every mission- and business-critical function at Intel is required to embed business continuity into its core business practices. Through ICM, which is sponsored by our CEO, Intel maintains an "all hazards" response structure designed to address any disruption, regardless of cause. This structure, along with individual business continuity and site-specific plans, is regularly tested across all aspects of the company.



## Ethics and Compliance

Uncompromising integrity and professionalism have been the cornerstones of Intel's business since the company's founding in 1968. Our CEO sets the tone for our ethical culture and holds managers accountable for communicating ethics and compliance expectations. Each year, our CEO communicates with employees and senior managers about the importance of ethics and legal compliance. This "tone from the top"—combined with our annual ethics and compliance training, regular communications throughout the year, and educational resources on our employee intranet site—helps to create an ethical and legally compliant culture. We also conduct periodic ethics culture surveys to monitor employees' perception of manager tone and their comfort with raising concerns.

We maintain a robust process for reporting misconduct, and employees are encouraged to raise ethical questions and concerns. We have multiple channels for reporting

## World's Most Ethical Companies\* honored for the 7th year.

### ETHISPERE'S ANNUAL LIST

concerns—anonously, if preferred and as permitted by law—including a [telephone and online reporting tool](#). We clearly communicate our non-retaliation policy, which protects those who, in good faith, report a concern or participate in an investigation.

The Board and senior management receive periodic reports of overall misconduct statistics, as well as details about key investigations that are in progress or completed. Our Ethics and Compliance Business Champions review quarterly investigative packages with leaders of their respective business groups. The largest categories of verified cases in 2016 were corporate travel card misuse, expense reporting misconduct, conflict of interest, falsification of documents, and misuse of assets. Consistent with our commitment to maintain the highest levels of ethics and compliance, we address these concerns through senior management discussions, employee communications, and individual corrective action measures.

Each year, Intel's Ethics and Compliance Oversight Committee (ECOC) invites various Intel organizations to assess and report on ethics and compliance in their respective businesses or sites, and reviews risk topics that span business groups. In 2016, three Intel business groups and one country completed comprehensive risk assessment reviews with the ECOC. Business groups also monitor their performance (including training, management tone, risk assessment, and more) on a quarterly basis, and send results to the Ethics and Legal Compliance Group. Since 2010, through the Intel Ethics and Compliance Excellence Awards program, we have regularly recognized teams and individual employees for their contributions to ensuring Intel's ethics and compliance environment.



The [Intel Code of Conduct](#) affirms the principles that guide the behavior of our employees, officers, non-employee directors regarding their Intel-related activities, wholly owned subsidiaries, and suppliers. Through the Code, which is available in 15 languages, we seek to promote honest and ethical conduct, deter wrongdoing, and support compliance with applicable laws and regulations. We also communicate our ethical expectations, including compliance with our Code principles and anti-corruption policies, to our suppliers and third parties. The [Intel Human Rights Principles](#) complement the Code and express our commitment to human rights and responsible labor practices. For more information, see [Respecting Human Rights](#) in this section.

All employees are expected to complete annual Code of Conduct training, through which they also certify adherence to the Code. A large, targeted population also completes an annual disclosure process to monitor Code compliance. Depending on their roles and geographic locations, certain employees are assigned more in-depth ethics and compliance training on topics such as anti-corruption, import-export compliance, insider trading, and antitrust. In 2016, for example, approximately 31,500 employees—about 30% of our workforce—received additional training on anti-corruption. We also raise awareness through innovative and interactive communication campaigns. Our Ethics and Legal Compliance Group speaker series and newsletter educate our Champions on trends in areas such as conflicts of interest, privacy and security, antitrust, insider trading, product regulations and standards, anti-corruption, and export compliance.

# ETHICS AND COMPLIANCE

Governance and Management

CEO

Board of Directors,  
Audit Committee

Ethics and Compliance Oversight Committee

Ethics and Legal Compliance Group

Business Champions:

Business Units

Regional

Site Level

In addition to these groups, Intel organizations such as Finance, Audit, Human Resources, and Legal provide expertise to help management and employees meet our ethics and compliance expectations. Read more on our [Report Builder](#) website.



## Public Policy and Political Accountability

Intel works with governments, organizations, and industries around the world to advocate for policies that encourage new ideas, promote fair commerce, and protect resources. We also work to educate political candidates about the implications of public policy decisions for our business, and provide financial support to candidates who support or advance positions that are consistent with our business objectives.

The [Intel Political Accountability Guidelines](#) outline our approach to making political contributions, including details about accountability at the senior management and Board of Directors levels. Decisions on political contributions, whether from the Intel Political Action Committee (IPAC) or corporate funds, consider Intel's business objectives, corporate policies, and public policy priorities outlined on our [Public Policy](#) and [Corporate Responsibility](#) websites.

Our corporate contributions, IPAC contributions, and trade association membership dues are available on our [Report Builder](#) website.

## 2016 CONTRIBUTIONS

CONTRIBUTION TYPE:	AMOUNT
CORPORATE CONTRIBUTIONS	\$693,000
INTEL POLITICAL ACTION COMMITTEE CONTRIBUTIONS	\$663,071

For detailed reports of our direct and indirect contributions, please visit our [Report Builder](#) website.

**Direct Corporate Contributions.** Some states allow corporate contributions to state and local candidates and ballot initiatives. Intel makes relatively few direct political contributions using corporate funds. Intel has a policy of not making independent political expenditures or funding electioneering communications.

**Intel Political Action Committee.** IPAC was established in 1980 to enable employees to support candidates whose legislative goals align with Intel's public policy priorities. All IPAC funds come from voluntary contributions from Intel's employees and directors. No corporate funds are contributed to IPAC other than for administrative expenses. Donations are divided evenly between the two major U.S. political parties.

**Industry and Trade Associations.** Intel uses corporate funds to participate in industry and trade associations. Our memberships help us work collaboratively with other companies and groups to address key public policy issues. We disclose trade association membership dues and payments to other tax-exempt organizations such as 501(c)(4) and 501(c)(6) organizations annually, including the reported portion of dues used for political purposes for annual dues over \$50,000.

**Lobbying Expenses.** Intel files quarterly reports with the Secretary of the U.S. Senate and the Clerk of the U.S. House of Representatives that detail our lobbying activities. These reports can be found in the Senate's [Lobbying Disclosure Act Database](#). In 2016, our reported lobbying expenditures totaled \$4.2 million compared to \$3.8 million in 2015.

Top 5 ranking among  
500 U.S. companies.

CPA-ZICKLIN 2016 INDEX,  
Corporate Political Accountability and Disclosure

## KEY PUBLIC POLICY ISSUES

- Cloud
- Communications
- Customs and Trade
- Diversity and Inclusion
- Education
- Facilitation
- Cybersecurity
- Environment and Energy
- Global Trade
- Healthcare IT
- Immigration
- Internet of Things
- Intellectual Property
- Privacy
- Tax

### MORE INFORMATION

[Public Policy Website](#) and [Public Policy Blog](#)

We recognize that it is impractical and unrealistic to expect that we or our stockholders and stakeholders will agree with every issue that a politician or trade association may support, particularly given our strategy of bipartisan giving. We aim to support issues that we believe will have the greatest benefit for our stockholders and key stakeholders. We also take actions to make clear our positions on key issues by publicly supporting amicus briefs or other joint policy communications. Information on recent briefs and statements is available on our [Public Policy blog](#), addressing a range of issues from technology infrastructure and regulation of emerging technologies, to diversity and inclusion and climate change.

We regularly evaluate our political spending for alignment and effectiveness. We have put systems in place (including executive and Board-level review), completed internal analyses to assess areas of potential misalignment, and posted our positions on key public policy issues to ensure that they are available to all stakeholders.

# RESPECTING HUMAN RIGHTS

Human rights are the fundamental rights, freedoms, and standards of treatment to which all people are entitled. Respect for human rights wherever Intel does business is rooted in our values. The [Intel Code of Conduct](#) and the global [Intel Human Rights Principles](#) formalize our commitment to respecting human rights, and embody common principles laid out in the [United Nations \(UN\) Global Compact](#), the [United Nations \(UN\) Universal Declaration of Human Rights](#), core [International Labour Organization Conventions](#), and the [UN Guiding Principles for Business and Human Rights](#). The Intel Human Rights Principles, adopted in 2009, apply to all employees and contingent workers, as well the employees of our subsidiaries. Additional policies guide our actions in specific areas, such as supply chain; environmental, health, and safety; privacy; and the human right to water. For more information about these policies, visit our [Corporate Responsibility](#) website.

At Intel, respecting human rights is everyone's business. Global teams are responsible for devising and implementing policies and actions that demonstrate respect for human rights and address our salient human rights risks. We are committed to maintaining and improving systems and processes to avoid complicity in human rights violations related to our own operations, our supply chain, and our products. We also support the advancement of human rights through our efforts to help bridge the digital divide, expand education access, and promote social innovation around the world.

## Intel's Approach to Managing Human Rights

Establishing Policy	Assessing Impact	Due Diligence	Reporting Progress
The Intel Code of Conduct and annual Code training materials reference human rights, and our Philosophy on Protecting Personal Information supplements our Online Privacy Notice	We conduct annual reviews and audits of our own facilities, policies, and practices	Our Board of Directors and senior management provide oversight	Our annual Corporate Responsibility Report provides updates on our performance, and our CSR and Public Policy blogs periodically cover human rights issues
We set expectations for our suppliers to comply with the EICC Code of Conduct and to maintain progressive employment practices	Our robust risk-based assessment and audit process for suppliers covers human rights issues	Our capacity-building initiatives address systemic human rights challenges in the electronics supply chain	We regularly engage with socially responsible investors, NGOs, and other stakeholders around human rights issues
Our Privacy by Design and Secure Development Life-cycle processes are designed to ensure integration of security and privacy into our products and services	The Intel Privacy and Product Security Group oversees compliance activities for our information assets, products, and services	We work to increase digital inclusion and education access, and educate consumers on privacy and security	Our Privacy Advisory Board of external privacy experts provides guidance to our Privacy and Product Security Group

Our overall approach to managing human rights issues is informed by external principles such as the [United Nations' Guiding Principles on Business and Human Rights](#).



## 2016 Human Rights Impact Assessment

As Intel's business evolves and we pursue our virtuous cycle of growth strategy, we advance our programs and processes to ensure that we address our most salient human rights risks. In 2016, Intel engaged a third party to conduct a human rights impact assessment (HRIA) to review our existing processes and further our human rights journey. The HRIA included interviews with operational and country teams, analysis of our current policies and reporting practices, and reviews of external research. The HRIA results validated that Intel was addressing the company's most salient human rights risks, and reaffirmed our need to continue to closely assess potential risks associated with new products, notably those related to big data or artificial intelligence.

Based on results of the HRIA, we plan to:

- Enhance our human rights oversight structure and due diligence processes to strengthen the proactive management of our salient risks and emerging issues.
- Continue to advance respect for human rights through stakeholder initiatives and peer learning.
- Identify new opportunities to apply technology to proactively address human rights challenges.
- Increase transparency of Intel's human rights efforts.

## OUR SALIENT HUMAN RIGHTS RISK AREAS



Discrimination



Health and Safety



Forced Labor



Working Hours



Legal Wages



Raw Materials



Water



Privacy



Freedom of Expression

## Our Approach to Managing Human Rights

### Our Operations

Our goal is to cultivate a safe, diverse, and respectful work environment where employees can thrive and innovate. As a member of the [EICC](#), we hold ourselves accountable to the same expectations we have for our suppliers. We manufacture the majority of our products in our own U.S. factories, so we have more control over the enforcement of the [Intel Code of Conduct](#) and [Human Rights Principles](#) than we would have if we outsourced more of our production. We apply the same high expectations and human rights standards for all of our employees, regardless of where they work.

The [Intel Environmental, Health, and Safety Policy](#) guides us to “provide a safe and injury-free workplace” through our core safety programs and injury-reduction initiatives—not only for our employees, but also for contractors working at our sites. In addition, the [Intel Water Policy](#) reinforces our respect for the human right to water by helping us responsibly meet our operational needs as well as those of our communities.

Our “open door” policy enables employees to bring any concerns directly to all levels of management. We conduct quarterly organizational health polls to assess the satisfaction level of our employees. Employees and external stakeholders may also report human rights concerns through other channels, such as a third-party-operated [ethics reporting portal](#) and community advisory panels.

### Our Supply Chain

We have invested significant time and resources in collaborating with others to influence system-level, industry-wide improvements on issues such as human trafficking and responsible minerals sourcing. For more information, see the [Supply Chain Responsibility](#) section of this report.

### Our Products

As the range of products and services we offer broadens and changes, we evaluate potential concerns about how technology products may be used to infringe on human rights. The challenges range from product misuse and limits on freedom of expression, to health and safety concerns that may arise from new technologies such as self-driving cars. We continually review our policies and assessment processes to analyze these potential risks.

We have also long been committed to respecting privacy and security related to the development and use of our products, from software to network equipment and consumer electronics devices. We recognize that innovation, growth, and the continued success of our business depends upon individuals’ trust in their use of technology and in the responsible, protected collection and processing of their data. Intel helps improve cybersecurity as both a consumer and developer of technology, and we integrate security technology throughout our product line.

Our Privacy by Design and Secure Development Life-Cycle processes define actions, deliverables, and checkpoints aimed at integrating security and privacy protections into our products and services. Our development process includes an analysis of how products protect against unauthorized access, use, destruction, modification, or disclosure of personal information, and we review the security and privacy implications of our products with internal or external experts. Intel does not participate in any efforts to decrease security in technology and does not design backdoors for access into our products. We also publish our [Philosophy on Protecting Personal Information](#), which outlines our general approach to managing personal information. In addition, we advocate for global policies and standards to protect data privacy and security, and proactively communicate our positions on our [Public Policy blog](#).

## Artificial Intelligence (AI) Helps Find Missing and Exploited Children

The [National Center for Missing and Exploited Children](#) (NCMEC) is the U.S. clearinghouse for reports of missing children and child sexual exploitation, receiving more than 8 million tips in 2016 alone. Intel is helping NCMEC develop a comprehensive plan to store massive volumes of data, run multiple queries, and enable the data to be shared consistently by all the applications used by the organization. Our efforts include providing AI technology and advising the center with the goal of accelerating the critical work of NCMEC’s 25 analysts to respond to reports of child sexual exploitation. We are optimistic that AI and other technologies will also enable other organizations to identify new ways to help missing and trafficked individuals. Read [this article](#) to learn more.

460K

reports of missing kids

8M

reports of child sexual exploitation

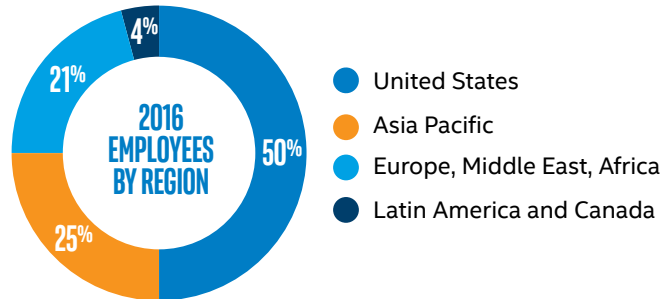
A team of only  
**25 ANALYSTS**

# INVESTING IN OUR PEOPLE

Our global workforce is highly educated, with employees holding more than 6,500 PhD or equivalent, 8,000 masters of science, and 4,000 masters of business administration degrees. Approximately 85% of our people work in technical roles.

Given the highly technical nature of our business, our success depends on our ability to attract and retain talented and skilled employees. From hiring, onboarding, and integration, to performance management, career development, and industry-leading compensation and benefits, we are committed to creating a diverse and inclusive environment where our employees can deliver their workplace best every day. Detailed information on our diversity and inclusion initiatives are available on our [Diversity](#) website and in the [Diversity and Inclusion](#) section of this report.

Intel's Human Resources (HR) organization has primary responsibility for the management of our workplace and talent development activities, and the [Intel Values](#), [Intel Code of Conduct](#), and [Intel Human Rights Principles](#) form the foundation of our workplace policies and practices.



As of December 31, 2016, we had 106,000 employees worldwide, with approximately 50% of those employees located in the U.S. A list of sites with more than 50 employees is included on our [Report Builder](#) website.

In April 2016, Intel announced a restructuring initiative to help accelerate the company's evolution from a PC company to one that powers the cloud and billions of smart, connected computing devices. The restructuring was designed to enable Intel to intensify investments in areas that fuel our growth—including the data center and Internet of Things—and drive more profitable mobile and PC businesses. The restructuring was expected to result in a reduction of up to 15,000 positions across Intel's global sites by mid-2017. We expect to achieve that reduction through voluntary and involuntary departures, global site consolidation, and efficiency initiatives.

[Our Business](#)

# A GREAT PLACE TO WORK

**Communication and Transparency.** Open and direct communication has been a hallmark of Intel culture since our founding, and we believe that our success depends on employees understanding how their work contributes to the company's overall strategy. Our "open door" policy enables employees to speak directly with all levels of management about their ideas, concerns, and problems. We use a variety of open communications channels, including quarterly business update meetings, open forums, internal social media sites, our "Circuit" intranet portal, on-site video screens, and an employee app.

**Growth and Development.** Intel invests significant resources to develop the talent needed to keep the company at the forefront of innovation. Career development is viewed as a continuing conversation between employees and their managers. We recognize that people at Intel grow by continuously learning—on the job, in the classroom, and by working with others as part of non-traditional development opportunities. We also have multiple recognition programs at the corporate, division, group, and peer levels to celebrate individual and team successes throughout the year.

**Health and Safety.** We believe that all workplace injuries are preventable, and our ultimate goal is to achieve zero injuries through continued investment in and focus on our core safety programs and injury-reduction initiatives. We also provide access to a variety of innovative, flexible, and convenient employee health and wellness programs.

**Compensation and Benefits.** We strive to provide benefits and services that help meet the varying needs of our employees—from working parents and those with eldercare responsibilities, to those in the military reserves. Our total rewards package goes above and beyond competitive compensation, with the inclusion of stock grants, comprehensive health and wellness programs, robust retirement benefits, generous paid time off, flexible work schedules, career development opportunities, and more.





### Measuring Our Progress

We use a variety of methods to solicit employee feedback on Intel culture, management, career opportunities, and compensation and benefits. The Organizational Health Poll is one channel by which employees can voice their perceptions of the company and their work experience. Introduced in late 2015, the poll aims to monitor high-level trends on a focused set of topics, including employee emotional commitment, job fit, trust, and organizational direction. The poll, usually administered once per quarter, provides more frequent opportunities for input and trend identification than our previous annual or biannual Organizational Health Survey. Each cycle, roughly 25% of the employee population is randomly invited to participate in the poll (excluding those previously invited), resulting in most employees having the opportunity to participate about once per year. Trends are monitored at the corporate, business group, and country levels.

Individual business groups also conduct their own surveys to gather employee input and assess progress. For example, our Ethics Program Office surveys employees on the state of ethics at the company, and our Corporate Services organization measures satisfaction with workplace design, cafeterias, and other on-site employee services. In 2016, we also completed an in-depth study on retention and progression to help us assess our diversity and inclusion strategy. In addition, we regularly monitor employee turnover by performance rating, and gather information through employee exit interviews to help us spot potential issues and trends swiftly.

### Growth and Development

We offer career development programs that make Intel an employer of choice. These include in-person and web-based trainings for different employee segments: New to Intel, Employee Development, Manager Development, and Leader Development.

On-the-job development opportunities are also created through rotation or temporary assignment programs. Our web-based development tool enables employees to apply for part-time or temporary assignments across the company. Our U.S. sabbatical program also creates growth opportunities through 90-day job coverage assignments; many of the 8,000 employees who completed sabbatical coverage assignments in 2016 gained valuable management experience by covering for their direct managers.

### 2016 Learning and Development Statistics

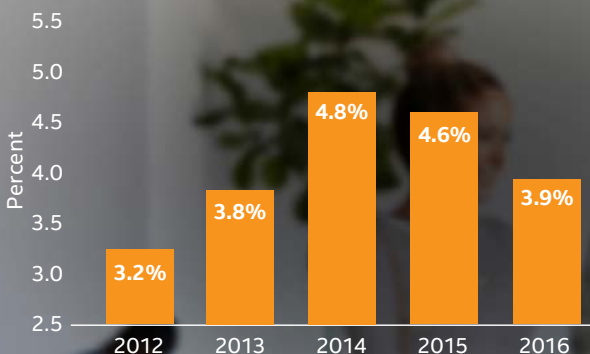
Total learning hours delivered <sup>1</sup>	4,479,000
Number of learners who received training <sup>2</sup>	122,776

Most of Intel's internal courses are led by employee volunteers, who leverage their skills and knowledge of a particular subject to teach other employees.

<sup>1</sup> Includes a mix of training methods, such as instructor-led classroom (14%), virtual classroom (2%), and multimedia (84%). 74,000 learners received an additional 244,000 hours of training through Environmental, Health, and Safety courses, which included targeted courses with job-specific information.

<sup>2</sup> Includes Intel employees, contractors, suppliers, and interns.

### Global Turnover



Our turnover declined from 4.6% in 2015 to 3.9% in 2016. These figures include all regular Intel employees, but do not include contract employees, interns, or employees who have left due to divestiture, retirement, or redeployment. Our hiring and turnover data is published in the [Intel Diversity and Inclusion 2016 Annual Report Addendum](#).

<sup>1</sup> Responses from the 2016 Organizational Health Poll, averaged from quarterly polls.

# 86%

"I like the kind of work I do"<sup>1</sup>

# 84%

"I would like to be working at Intel one year from now"<sup>1</sup>

# 83%

"I know what I need to do to be a valued contributor at Intel"<sup>1</sup>

### Recognition and Appreciation

A top priority for Intel is celebrating the accomplishments of our employees, through everyday thank-yous to formal reward programs with cash or stock awards at the corporate, division, or group level.

**Intel Achievement Award.** The IAA is the company's highest honor for personal and small-team accomplishments. Less than one-half of 1% of all employees receive an IAA each year.

**Intel Quality Award.** IQAs are given annually to a few Intel organizations that have made long-term commitments to operational excellence and have demonstrated performance to Intel Values.

**Division Recognition Award and Spontaneous Recognition Award.** DRAs recognize employees for reaching critical milestones or completing projects that demonstrate a strong commitment to the Intel Values. SRAs can be given by any employee at any time to show appreciation for a peer, subordinate, or manager.

**Other Awards.** Formal programs recognize employees for a range of contributions, including Intel Involved Hero Awards for employee volunteerism and Intel Environmental Excellence Awards for environmental projects.



### Employee Health, Safety, and Wellness

We believe that all workplace injuries are preventable, and our ultimate goal is to achieve zero injuries through continued investment in and focus on our core safety programs and injury-reduction initiatives. Our health and safety programs help employees enjoy a better quality of life and contribute to Intel's success, since employees who are physically and mentally fit can be more productive.

[The Intel Environmental, Health, and Safety Policy](#) guides us to "provide a safe and injury-free workplace" through our core safety programs and injury-reduction initiatives—not only for our employees, but also for contractors working at our sites. We set high safety training and performance expectations with our suppliers during our contracting process, including specific new contractor orientation for new suppliers. For more information, refer to the [Supply Chain Responsibility](#) section of this report.

Employees, contractors, and suppliers receive extensive safety training, starting with orientation sessions and continuing on the job. Training helps employees under-

stand their safety responsibilities, and covers information needed for specific jobs (such as electrical safety, ergonomics, control of hazardous materials, and chemical safety). Business groups share responsibility for driving safety awareness and safety management programs throughout their organizations. In 2016, we continued to maintain our comprehensive, corporate-wide EHS compliance assurance program. For information about this program and our Notices of Violation, refer to the [Environmental Sustainability](#) section of this report.

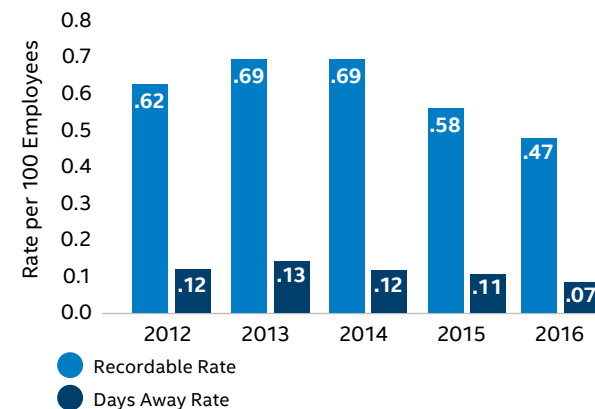
We maintain a fully integrated [multi-site registration](#) for OHSAS 18001, the internationally recognized standards for occupational safety and health management systems. Intel ended 2016 with an Occupational Safety and Health Administration (OSHA) recordable rate of 0.47, nearly two times better than the U.S. semiconductor industry average recordable rate of 0.9.<sup>1</sup> Our recordable rate decreased by 19%, and our days away case rate was down slightly compared to 2015. Our days away case rate<sup>2</sup> of 0.07 is well below the semiconductor industry average of 0.4.<sup>1</sup> Ergonomic-related or "cumulative trauma disorders"

<sup>1</sup> Bureau of Labor Statistics.

<sup>2</sup> Days away begins the day after the accident.

(CTDs) remained the most prevalent type of injury experienced at Intel in 2016, followed by strain/sprains, cut/lacerations, and contusion/bruises. Our First Aid to Recordable Ratio for CTDs declined from 3.1 to 1 in 2015 to 2.8 to 1 in 2016.

### Recordable and Days Away Injury Rates



In 2016, Intel's total injury rate, including first aid, was 2.02 (1.69 in Asia Pacific; 1.55 in Europe, Middle East, and Africa; and 2.34 in the Americas). Intel's lost day rate was 2.27 (0.59 in Asia Pacific; 1.29 in Europe, Middle East, and Africa; and 3.47 in the Americas).

Health and wellness are essential to maintain quality in all aspects of our employees lives—from personal to professional. That's why at Intel, we believe having a healthy workforce is essential to our business. To support our employees we provide access to a variety of innovative, flexible, and convenient health and wellness programs that work together to support the personal needs of our employees.

The **Intel Vitality Program** helps employees achieve their personal best with free individualized plans focusing on four pillars of wellness: mindset, nutrition, movement, and recovery. In its third year, this program is one way we activate our vision to have the healthiest workforce on the planet.

**12,460** EMPLOYEES IN 2016 participated in Intel Vitality program

**Our Free Health Screening Program**, offered at several Intel campuses and at off-campus labs, helps employees identify if they are at risk for certain health conditions.

**Connected Care** is an innovative, patient-centric approach to healthcare. Intel is contracting directly with two regional health systems in the U.S. to provide high-quality, cost-efficient healthcare with added convenience and a better overall experience for employees and their families.

### Intel Vitality Program in 2016 Quick Facts

- 65% completed the digital assessment
- 8,221 engaged in at least one in-person/phone service
- 8,557 engaged in at least one digital service



who attended small-group training returned for more than one session

## Compensation and Benefits

Our total rewards program goes beyond competitive compensation, with the inclusion of stock grants, comprehensive health and wellness programs, robust retirement benefits, generous paid time off, flexible work schedules, career development opportunities, and much more. This approach aligns company, employee, and stockholder interests, and provides employees with incentives to focus on meeting or exceeding business objectives.

Our bonus programs are cornerstones of our pay strategy, linking employees' compensation directly to Intel's financial and operational performance metrics:

- **Quarterly profit bonus:** Cash awards paid to employees four times per year based on Intel's financial success.
- **Customer excellence program:** Two days extra pay based on achievement of customer satisfaction metrics.
- **Annual performance bonus:** Cash awards based on Intel's achievement of financial and operational metrics. Since 2008, we have included criteria related to corporate responsibility metrics such as diversity and environmental sustainability.

We grant equity in the form of restricted stock units to 90% of our employees each year. In addition, through our Employee Stock Purchase Plan, full-time and part-time employees and interns can purchase stock through payroll deductions at 85% of Intel's stock price.

We also offer comprehensive health benefits, including medical, dental, vision, and employee assistance programs for employees and their families. In addition, we offer multiple retirement plan options, including 401(k) retirement contributions by Intel, defined benefits plans, and post-retirement medical benefits.



Included on the 2016 *Working Mother* 100 Best Companies List.



## BENEFITS AT A GLANCE

### Compensation

- Bonuses
- Employee discount programs
- Retirement planning and savings
- Stock awards and Stock Purchase Plan

### Family and Flexibility

- Adoption support
- Conception benefits
- Dependent care assistance program
- Eldercare programs
- Flexible work options
- Family fun events
- Life insurance
- Live homework help
- Scholarships
- Commute reduction options

### Health

- Flu prevention program
- Health benefits
- Healthy choices in cafeterias
- Short- and long-term disability Plans

### Learning and Development

- Career advising
- Employee education and tuition assistance
- Encore Fellowship program
- Tuition for Teaching program
- Volunteer opportunities and matching grants

### On-Site Amenities

- Employee use of facilities for events, parties, etc.
- Free fruit and beverages
- Nursing mother's rooms
- Fitness classes and facilities
- Health centers
- Spas

### Time Off

- Multiple leave programs (pregnancy, bonding, parental, military)
- Paid time off and vacation
- Paid sabbatical
- Voluntary time off without pay

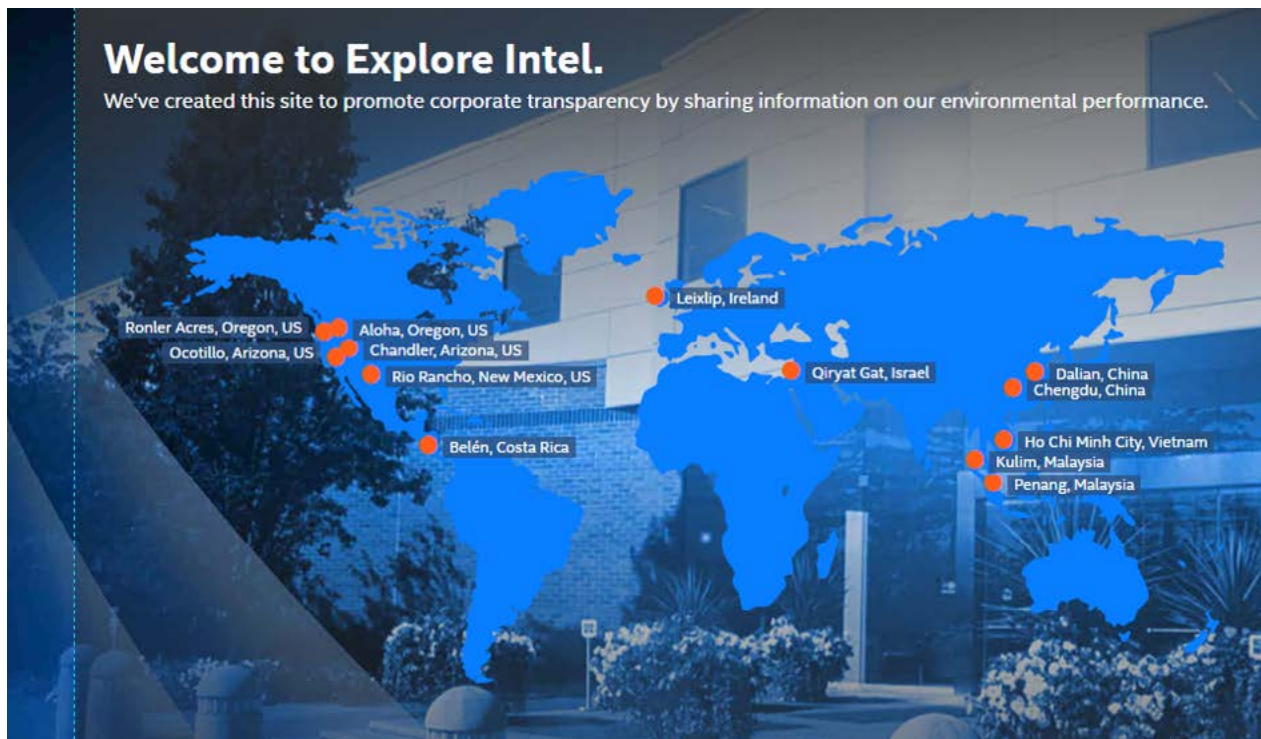
# STAKEHOLDER ENGAGEMENT

Our business success depends on our ability to build strong relationships with all stakeholders, including employees, customers, suppliers, governments, and communities. We work to develop a strong culture of trust through open and direct communication, and are committed to operating with transparency. We maintain formal management systems to engage with, listen to, and learn from our stakeholders and incorporate their feedback into our thinking and planning.

In addition to face-to-face meetings, a number of web and social media channels provide us with valuable, ongoing feedback on our performance and strategy. Our corporate responsibility [e-mail account](#) enables stakeholders to share their issues, concerns, and comments directly with members of our corporate responsibility team. Through this account, we receive and respond to hundreds of messages each year on a wide variety of topics. We also receive and respond to feedback through our [CSR@Intel](#) blog, [Exploreintel.com](#) website, [Facebook](#) page, and [@intelinvolved](#) Twitter account.

We engage with local stakeholders to consider our impact when we are entering, operating in, or exiting a community:

- **Entering:** We conduct needs assessment studies to prioritize our community engagement activities.
- **Operating:** We solicit ongoing input through community advisory panels, working groups, and community perception surveys.
- **Exiting:** We work to minimize impact on our employees and to properly dispose of affected assets and operations.



Our interactive [Explore Intel](#) website provides real-time disclosures and other information for communities surrounding our manufacturing sites and larger campuses. The site's videos, photos, real-time environmental data, and contact information make it easy for community members to learn about and engage with our environmental and community relations managers on an ongoing basis.





## Identifying and Prioritizing Issues

We use a variety of internal and external sources and stakeholder feedback processes to identify and prioritize issues for our reporting and inform our strategies and actions. This corporate responsibility materiality matrix illustrates the topics we believe are of greatest interest to our stakeholders to help them inform decisions regarding Intel's environmental, social, and economic performance.

### 1. IDENTIFY

We use a range of methods and inputs to identify priority topics and emerging issues from our stakeholders.

#### Sources

- Corporate responsibility channels: website, e-mails, CSR@Intel blog, and social media
- Investor outreach meetings and proxy resolution negotiations
- Results of community advisory panels and community perception surveys
- Customer data requests and survey data
- Employee open forums, and blogs, and surveys
- Meetings with governments and international development agencies
- Human rights impact assessment and information from our ethics and compliance processes
- Research on external standards, trends, and frameworks, such as the UN Sustainable Development Goals

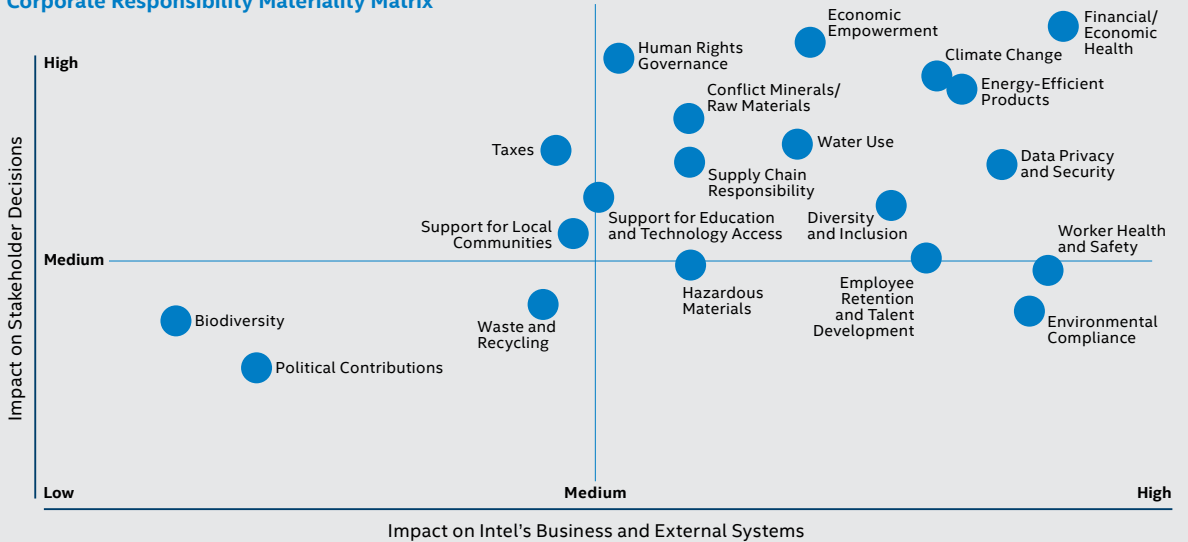
#### Issues Identified:

- **Business/Economic:** Stock price/financial performance, business strategy, employee relations, taxes/incentives, political accountability, human rights, privacy and data security, labor unions, corporate governance practices, cybersecurity
- **Environment:** Climate change, water conservation, air emissions, energy-efficient performance, materials and chemicals usage, e-waste, green buildings, biodiversity
- **Supply Chain:** Conflict minerals, forced and bonded labor, EHS/human rights supplier concerns, supplier audit results
- **Diversity:** LGBTQ rights, pay equity, board diversity
- **Social Impact:** Support for education programs, gender equality, youth technology skills, community engagement

### 2. PRIORITIZE

We review issues and consider both the potential impact on stakeholder decisions and the impact on Intel's business and external systems. We take into account factors of business continuity, impact to brand/reputation, applicability to multiple regions, alignment with Intel business strategies, impact on the community, ability to attract and retain talent, and regulatory implications. This year, we engaged a third party to moderate an online stakeholder input process to provide additional input into the issue prioritization process.

#### Corporate Responsibility Materiality Matrix



### 3. REVIEW

We review priority issues with internal and external groups and use this information to inform changes to our strategies, goals, and ongoing engagement and disclosure practices.

#### Internal Review

- Board of Directors and Management Review Committee updates
- Corporate strategic discussions and business group planning

#### External Review

- Corporate Responsibility Report review
- Online stakeholder materiality review process
- Socially responsible investor outreach

#### Decisions/Actions

- Set new performance goals
- Initiate new projects or develop new policies
- Expand disclosure

# KEY CORPORATE RESPONSIBILITY CHALLENGES AND OPPORTUNITIES

Based on our corporate responsibility materiality analysis, we believe that the following issues represent key challenges and opportunities for Intel's business:



## Climate Change

As impacts to climate and energy have become major focus areas for businesses and governments, expectations for companies to continue to reduce absolute emissions from operations and to address the climate change impact of products have increased. Discussions about net zero carbon and science-based targets are occurring. Worldwide efforts to reduce emissions and address climate change also present potential market opportunities for Intel® technologies, including those for smart grids, transportation, and sensing, as well as those related to big data and machine learning to support climate modeling.



## Privacy and Data Security

The continued success of our business depends upon individuals' trust in their use of technology and in the responsible, protected collection and processing of their data. We have long been committed to respecting privacy, security, and human rights related to our products and business operations and to supporting the fundamental human rights of privacy and freedom of expression. As we transform our business and expand into new product areas and industries, we will continue to evolve our policies, management oversight, accountability structures, and product design processes to address new complexities as they arise.

## Workforce Talent and Diversity

Our ability to attract and retain top talent is key to our business success and is dependent upon our reputation



as an employer that invests in cultivating a safe, respectful, and ethical work environment that enables employees to thrive both on the job and in their communities. We also have an opportunity to lead in our industry through targeted external programs aimed at building talent pathways in engineering and technical disciplines and through initiatives to expand diversity in the electronics industry supply chain and Intel Capital investment portfolio.

## Water Use

Sustainable water management is a key expectation for our industry. We face challenges in reducing our water use as our manufacturing processes become more complex. In recent years, we have made significant investments in water conservation, expanded disclosure on our water use and conservation efforts, and engaged with external organizations on emerging best practices. The increasing focus on water scarcity worldwide also presents an opportunity to apply our technology to help others conserve water in a wide range of areas—from smart factories to agricultural applications.



## Technology Access and Inclusion

Technology is a force for positive social impact and has the power to be a great equalizer, but it also has the potential to disrupt entire industries. Rapid technology changes are now fueling a "Fourth Industrial Revolution" that has broad implications for the technology and innovation skills that today's youth will need to succeed in the future. Recognizing the lack of access to technology and education that still exists for many people around the world—and the importance of enabling that access to spur economic development—we have expanded our engagement efforts and partnerships in this area.



## Human Rights and Supply Chain Responsibility

Expectations for companies around the topic of human rights and protection of vulnerable workers in global supply chains continue to evolve. New legislation related to human trafficking and forced and bonded labor present opportunities for companies to make improvements in policies and processes for managing human rights issues. As technology becomes more pervasive, additional stakeholder concerns are emerging surrounding the use of technology products by governments in ways that raise censorship and human rights issues. These human rights challenges also provide opportunities for collaboration and leadership. Intel, for example, has led the industry on the "conflict minerals" issue.

# APPLYING TECHNOLOGY TO SOLVE GLOBAL CHALLENGES

Intel's technology and investments empower individuals, companies, and governments to help solve environmental and social challenges and improve lives around the world. New technologies—such as artificial intelligence, machine learning, unmanned aerial vehicles, and autonomous vehicles—are being applied to develop new approaches to societal challenges.

## Smarter Cities and Cleaner Air with Environmental Monitoring

With the rapid increase in mega-cities and hyper-densification of cities, environmental monitoring has become critical. [A World Health Organization study](#) showed that 7 million people died in 2012 as a result of air pollution exposure. Combine this statistic with lives affected by water and soil pollution, weather conditions, forest fires, and landslides, and it's easy to see the profound impact environmental monitoring can have on human life and safety. Internet of Things (IoT)-based environmental monitoring solutions that harness the power of connectivity, including the upcoming 5G technology, can enable continuous environmental monitoring, timely alerts, and trend analysis.

Using Intel® IoT technology, Bosch has created the [Micro Climate Monitoring System](#) (MCMS), a real-time, low-cost, highly localized air quality monitoring solution that helps manage air quality around the world in ways that have never been possible before.

With access to comprehensive air quality data, city leaders are equipped to quickly and easily take action.

## Wearables Save Lives

More than 2 billion people, one-third of all humans, light fires indoors to cook, releasing toxic carbon monoxide and particulates into kitchens and living spaces. This little-known, but massive global health challenge contributes to 4.3 million deaths every year—more than from tuberculosis, malaria, and HIV combined—according to [estimates by the World Health Organization](#).

In small villages across India and Bangladesh, women are helping to pilot a unique wearable health device—a brightly colored bangle with a tiny built-in carbon monoxide sensor. When the sensor detects carbon monoxide at a dangerous level, a red LED flashes. The bangle also produces a voice warning, customized to the wearer's language, to open windows and doors, or get outside. The device is a solution developed by [Grameen Intel Social Business](#), a collaboration developing technologies that address social issues facing billions of people in the world's developing nations. [Read more.](#)

## Architecting the Future of Transportation for a Safer World

Intel's automotive solutions are increasingly enabling vehicles to sense, reason, and act to adapt to the real world. Autonomous cars can learn from data (vehicle-to-network communication) and the experience of millions of cars (vehicle-to-vehicle communication), ultimately resulting in safer roads, more enjoyable commutes, reduced congestion, and greater mobility for people who do not drive. [Read more.](#)

The ability to connect to each other, our devices, and the cloud—and to derive actionable insights from the massive amount of data generated through this connectivity—will bring new experiences to our daily lives and transform businesses. Intel will continue to develop technologies to bring connectivity to a variety of new IoT devices, and to forge industry partnerships around the world to develop and transform network infrastructure technologies.



### WEARABLE SOLUTION FOR CARBON MONOXIDE DEATHS

**4.3M** Deaths each year from indoor cooking fires

**DETECT** Colorful bangle has built-in carbon monoxide sensor

**ALERT** Red light flashes at dangerous levels

### Solutions Made Possible by Collaborations With Intel

# 15X

earlier detection of sepsis, with **60% greater accuracy**

READ MORE:  
[Penn Signals](#)



Virtual reality headsets **helping doctors** with complicated surgeries

READ MORE:  
[Surgical Theater](#)

# 30%

reduction in shipping costs, and 20% shorter lead times

READ MORE:  
[Shimane Fujitsu](#)

# \$250 M

new investments by Intel Capital for autonomous driving

[Read More](#)

## Better Living Through Big Data

People have more access to personal and environmental data every day, which helps them make informed decisions and better understand the world. Big data is contributing to better living in areas like farming, fitness, and health-care. Intel technology is enabling companies and organizations to efficiently and effectively capture, process, analyze, and store vast amounts of data of all types. [Read more.](#)

## Artificial Intelligence Is Changing Lives

[Artificial Intelligence](#) (AI) promises to transform society on the scale of the industrial, technical, and digital revolutions before it. Machines that can sense, reason, and act will accelerate solutions to large-scale problems in numerous fields, such as science, finance, medicine, and education.

Read how Intel® AI technology is speeding up searches for missing children in [Respecting Human Rights](#), earlier in this section of the report.

## Power of the Cloud

The cloud is a key enabler of economic growth and social change worldwide. Cloud computing is transforming entire industries, from transportation and financial services to education and entertainment. We believe that to move toward effective and safe cloud computing, individual organizations and the IT industry as a whole need to focus on efficiency, simplification, and security. To learn more, read our [Cloud Policy](#).

We're working with IBM to combine Intel technologies and expertise with IBM Cloud to create a cloud-native architecture that drives machine efficiency, maximizes resource utilization, and enables the creation of vastly scalable and powerful new applications like artificial intelligence (AI) and cognitive computing. [Read](#) how we are collaborating with IBM to create a smarter, more secure cloud.

## Growing Innovative Start-Ups to Advance Education

To foster innovation in education, [Intel Education](#) and Intel Capital support the growth of emerging education technology companies through the [Intel Education Accelerator Program](#). The support and guidance that start-ups receive from the program can be transformative, as evidenced by the things these companies in from the program's 2016 cohort are doing:

- **Comprend.io:** Automating personalized feedback for students and actionable analytics for teachers.
- **KiraKira:** Redesigning the way girls learn engineering.
- **LearnMetrics:** Changing the way that school districts work with data.

See how some young inventors are using Intel® technology to address global challenges in the [Social Impact](#) section of this report.

## IoT for a Smarter, Connected Tomorrow

As part of the [Intel-Google Cloud strategic alliance](#), we are working on IoT solutions in multiple areas. Included is a precision agriculture solution aimed at transforming today's food chain with smart, connected, and secure technology.

We are also collaborating with a rapidly growing number of additional industry partners to develop IoT solutions to address other needs. Read more in the [Environmental Sustainability](#) section of this report and on [IQ.intel.com](#).

## Smart Lighting

The shift to using more efficient lights inspired GE and Intel to create smart LEDs that can see, hear, and sense their surroundings, creating data that can improve efficiency and empower smart city services. Together, we're exploring different ways of making cities, buildings, and factories smarter and connected. [Read more.](#)

In collaboration with Cisco, we installed a Power over Ethernet (PoE) "Smart Ceiling" lighting retrofit at our Santa Clara site. The smart LED lighting system is powered using network switches, harvests daylight to reduce energy costs, and will be the backbone for future office sensing, monitoring, and connected applications. This proof-of-concept project will help Intel select a lighting solution for future new and retrofit building projects and can serve as an example for other organizations to inform their own sustainability strategies.



# PERFORMANCE SUMMARY AND GOALS

## Progress Toward Goals

Discussions of our performance to goals and future goals are integrated into each relevant section of this report. The following table provides a high-level summary of our company-wide goals in key corporate responsibility areas. A summary of our goals for 2017 and beyond is included on the next page of this report.

Report Section	Goal	2016 Progress
<a href="#">Environmental Sustainability</a>	Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.	<b>On track:</b> Our direct (Scope 1) emissions decreased 8% on an absolute basis and 6% on a normalized per unit basis from 2015.
	Grow the installation and use of on-site alternative energy to three times our 2015 levels by 2020.	<b>On track:</b> In 2016, we increased our on-site, greener alternative energy installations by nearly 50% compared to 2015.
	Continue 100% green power in our U.S. operations and increase alternative energy use for our international operations from 2015 to 2020.	<b>On track:</b> Since 2008, we have been the largest voluntary corporate purchaser of green power in the U.S., according to the U.S. EPA. Our 2016 purchases equal 100% of our U.S. electricity use and 80% of our global electricity use.
	Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.	<b>On track:</b> Since 2012, we have achieved cumulative energy savings of 2.3B kWh.
	Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels. <sup>1</sup>	<b>On track/at risk:</b> Our data center products are on track, currently 8x more efficient than 2010 volume servers. Our client computing market has continued to evolve, impacting our ability to meet our notebook goal.
	Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.	<b>On track:</b> In 2016, we completed a review of available alternative assessment tools to determine the best strategy for our suppliers to be able to successfully implement green chemical concepts into their development of chemistries.
	Reduce water use on a per unit basis below 2010 level by 2020.	<b>On track:</b> Our water use was flat on a per unit basis from our 2010 baseline and we made new water conservation investments in 2016 that will save an estimated 1.2 billion gallons annually.
	Achieve zero hazardous waste to landfill by 2020.	<b>Achieved, ongoing:</b> In 2016, we sent less than 1% of our hazardous waste to landfill (we define zero hazardous waste to landfill as less than 1%).
	Achieve 90% non-hazardous waste recycle rate by 2020.	<b>On track:</b> We recycled 82% of our non-hazardous waste in 2016 and 14 of our sites achieved recycling rates of 90% or better.
	Design all new buildings to a minimum LEED* Gold certification between 2015 and 2020.	<b>On track:</b> We continue to design our new buildings in line with this goal. Over the past five years, our LEED-certified square footage has increased 126%.
<a href="#">Supply Chain Responsibility</a>	Complete or review an on-site audit for each of our Top 75 suppliers by the end of 2016.	<b>Achieved:</b> In 2016, we accomplished our goal of completing on-site audits for 100% of our top 75 suppliers.
	Validate our broader product base as conflict-free <sup>2</sup> in 2016.	<b>Ongoing:</b> We made substantial progress towards the goal and will continue our pursuit of conflict-free supply chains as we enter new markets and acquire new companies.
	Establish an 85% "green" Intel ground transportation fleet by 2016.	<b>Ongoing:</b> We made progress toward our goal (achieving 73%), and will continue to work toward our goal of 85% in 2017.

<sup>1</sup> Data center energy efficiency is determined by server energy efficiency (as measured by SPECpower\_ssj2008 or equivalent publications and using a 2010 baseline of an E56xx series processor-based server platform) as well as technology adoption that raises overall data center work output (such as virtualization technology). Notebook computer energy efficiency is determined by average battery life, battery capacity, screen size, and number of recharge cycles of volume notebook computers in that model year.

<sup>2</sup> "Conflict-free" refers to products, suppliers, supply chains, smelters, and refiners that, based on our due diligence, do not contain or source tantalum, tin, tungsten, or gold that directly or indirectly finance or benefit armed groups in the Democratic Republic of Congo or adjoining countries.



## Progress Toward Goals, continued

Report Section	Goal	2016 Progress
<a href="#">Diversity and Inclusion</a>	Increase our annual spending with diverse-owned suppliers to \$1 billion by 2020.	<b>On track:</b> We exceeded our diverse supplier goal for 2016, spending \$555 million (well above our target of \$400 million) with certified diverse-owned suppliers.
	Achieve full representation <sup>1</sup> of women and underrepresented minorities at Intel in the U.S. by 2020.	<b>On track:</b> We exceeded our 2016 hiring target, and met our overall diverse retention goal.
<a href="#">Social Impact</a>	Through the Intel® She Will Connect program, reach 5 million women in Sub-Saharan Africa by 2020.	<b>On track:</b> In 2016, we made progress toward our goal by reaching nearly 1.4 million women through face-to-face training and online education content.

<sup>1</sup> Full representation is the point at which Intel's workforce in the U.S. matches the supply of skilled talent available (market availability) for current roles at Intel.

## Goals for 2017 and Beyond

Report Section	Goal
<a href="#">Environmental Sustainability</a>	Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.
	Grow the installation and use of on-site alternative energy to three times our 2015 levels by 2020.
	Continue 100% green power in our U.S. operations and increase alternative energy use for our international operations from 2015 to 2020.
	Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.
	Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels. <sup>1</sup>
	Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.
	Reduce water use on a per unit basis below 2010 level by 2020.
	Achieve zero hazardous waste to landfill by 2020.
	Achieve a 90% non-hazardous waste recycling rate by 2020.
<a href="#">Supply Chain Responsibility</a>	Design all new buildings to a minimum LEED* Gold certification between 2015 and 2020.
	Ensure that 90% of suppliers participating in our Program to Accelerate Supplier Sustainability (PASS) meet advanced expectations in ethics, environmental performance, and labor practices by end of 2017.
<a href="#">Diversity and Inclusion</a>	Establish an 85% "green" Intel ground transportation fleet by 2019.
	Increase our annual spending with diverse-owned suppliers to \$1 billion by 2020.
<a href="#">Social Impact</a>	Achieve full representation of women and underrepresented minorities at Intel in the U.S. by 2020.
	Through the Intel® She Will Connect program, reach 5 million women in Sub-Saharan Africa by 2020.

<sup>1</sup> Data center energy efficiency is determined by server energy efficiency (as measured by SPECpower\_ssj2008 or equivalent publications and using a 2010 baseline of an E56xx series processor-based server platform) as well as technology adoption that raises overall data center work output (such as virtualization technology). Notebook computer energy efficiency is determined by average battery life, battery capacity, screen size, and number of recharge cycles of volume notebook computers in that model year.

<sup>2</sup> Full representation (or full workforce representation) is the point at which Intel's workforce in the U.S. matches the supply of skilled talent available (market availability) for current roles at Intel.



## Key Performance Indicators

Report Section	2016	2015	2014	2013	2012
<b>Our Business and Financial Results</b>					
Net revenue (dollars in billions)	\$59.4	\$55.4	\$55.9	\$52.7	\$53.3
Net income (dollars in billions)	\$10.3	\$11.4	\$11.7	\$9.6	\$11.0
Provision for taxes (dollars in billions)	\$2.6	\$2.8	\$4.1	\$3.0	\$3.9
Research and development spending (dollars in billions)	\$12.7	\$12.1	\$11.5	\$10.6	\$10.1
Capital investments (dollars in billions)	\$9.6	\$7.3	\$10.1	\$10.7	\$11.0
Customer survey "Delighted" score	87%	87%	90%	91%	92%
Employees at year end (thousands)	106.0	107.3	106.7	107.6	104.7
Employee Safety – recordable rate <sup>1</sup> /days away case rate <sup>1</sup>	0.47/0.07	0.58/0.11	0.69/0.12	0.69/0.13	0.62/0.12
<b>Environmental Sustainability</b>					
Greenhouse gas emissions (million metric tonnes of CO <sub>2</sub> equivalent) <sup>2</sup>	1.63	2.00	2.08	1.69	1.85
Energy use (billion kWh – includes electricity, gas, and diesel)	6.5	6.4	5.9	5.6	5.5
Total water withdrawn (billions of gallons)	9.4	9.0	8.4	8.7	9.0
Hazardous waste generated (thousand tons)/% to landfill	63.6/0.7%	61.6/2%	49.4/0.4%	41.3/1%	35.5/2%
Non-hazardous waste generated (thousand tons)/% recycled	81.0/82%	80.8/82%	94.7/86.4%	120.7/89.4%	150.6 <sup>3</sup> /88%
<b>Supply Chain Responsibility</b>					
On-site supplier audits (third-party and Intel-led audits)	150	121	129	133	101
<b>Diversity and Inclusion</b>					
Women in our global workforce	26%	25%	25%	26%	26%
Women on our Board at year end	18%	18%	18%	20%	20%
<b>Social Impact</b>					
Employee volunteerism rate	38%	41%	39%	43%	47%
Worldwide charitable giving (dollars in millions) <sup>4</sup>	\$122.7	\$90.3	\$102.3	\$109.5	\$105.5
Charitable giving as a percentage of pre-tax net income	1.0%	0.6%	0.6%	0.9%	0.7%

<sup>1</sup> Rate based on 100 employees working full time for one year.

<sup>2</sup> Including purchases of Renewable Energy Certificates.

<sup>3</sup> An estimated 42% of this total was due to construction waste related to the building of two new fabrication facilities.

<sup>4</sup> Includes total giving (cash and in-kind) from Intel Corporation and the Intel Foundation.



# INNOVATING ENVIRONMENTAL SUSTAINABILITY

# ENVIRONMENTAL SUSTAINABILITY





# ENVIRONMENTAL SUSTAINABILITY



“For more than two decades, we have driven significant reductions in our environmental footprint at Intel and through our supply chain. We invest proactively in emission reductions, partner for shared results, and identify ways technology can be used by others to reduce their impact.”

—DR. ANN KELLEHER, Vice President and General Manager, Technology and Manufacturing Group

## GLOBAL IMPACT

### Climate Change


**20%** ↓  
**BY 2030**

The amount that global carbon dioxide emissions could be reduced by 2030 through the application of Internet-enabled solutions in energy, health, buildings, agriculture, and education.<sup>1</sup>

### Water Use

According to the World Bank, the economic impact of water scarcity could put at risk 6% of GDP by 2050.<sup>2</sup>

**6%**  
**OF GDP**  
**BY 2050**



### Smarter, Greener Operations

**8%** ↓

The reduction in power consumption an Internet of Things Building Management System is expected to provide in one year.<sup>1</sup>

## OUR APPROACH

### Climate Change

Over the past two decades we have set aggressive greenhouse gas emissions goals and reduced our carbon emissions by 60% on an absolute basis. In 2016, we allocated \$30 million for energy conservation and alternative energy projects.

**60%** ↓  
**OF CARBON**  
**EMISSIONS**

### Water Use

We invest in innovative water conservation projects throughout our global operations. Today we treat and return approximately 80% of our water withdrawals to local communities.



### Smarter, Greener Operations

We have been incorporating green design standards and building concepts into the construction of our facilities for many years. Our policy is to design all new buildings to a minimum LEED\* Gold certification level.



## 2016 PROGRESS

### Climate Change

Our energy savings since 2008 add up to enough to power 285,000 U.S. homes for one year.<sup>3</sup>

**3.9B**  
**kWh**

### Water Use

#### CONSERVED

**>57B**  
**GALLONS**

Since 1998, we have conserved enough water to sustain more than 520,000 U.S. homes<sup>4</sup> for an entire year.

### Smarter, Greener Operations

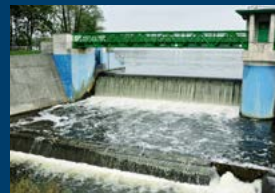
We have increased our on-site, greener, alternative energy installations by nearly 50% compared to 2015.



## 2016 HIGHLIGHTS



Our newest smart and green building in India, has more than 9,000 sensors used to optimize lighting, energy consumption, and occupancy.



We estimate that our 2016 investments in new water conservation projects will save approximately 1.2 billion gallons of water per year.



Since 2008, Intel has been the largest voluntary corporate purchaser of green power in the U.S., according to the U.S. Environmental Protection Agency (EPA).<sup>5</sup> Purchases were equivalent to 100% of our U.S. electricity use in 2016.

<sup>1</sup> Digital Efficiency, “Driving Decarbonization and Unlocking Business Value Across Industries”.

<sup>2</sup> World Bank, “High and Dry: Climate Change, Water, and the Economy”.

<sup>3</sup> U.S. EPA Greenhouse Gas Equivalencies Calculator.

<sup>4</sup> U.S. EPA Understanding Water Use.

<sup>5</sup> “EPA Honors 2016 Green Power Leaders” press release.

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# STRATEGY AND MANAGEMENT APPROACH

Building on our historical reductions in energy and greenhouse gases, water, and waste, we continue to drive to achieve the lowest environmental footprint possible, while proactively investing in our “handprint” to empower others to use Intel® technology solutions to reduce their own environmental impact. To minimize the environmental impact of our global manufacturing operations, we invest in conservation projects and green power purchases, establish company-wide environmental targets, and set expectations for suppliers. As we believe that technology is key to solving the world’s environmental challenges, we collaborate with others to find and promote ways to integrate smart and green technology solutions that can help people everywhere create a more sustainable future.

Our sustainability practices drive efficiency, lower costs, help decrease negative impacts on the communities where we operate, and reduce resource use. They also enable us to expand our operations without correspondingly increasing our environmental footprint.

The [Intel Code of Conduct](#), [Climate Change Policy](#), [Water Policy](#), and [Environmental, Health, and Safety Policy](#) guide our sustainability strategy and helped us set our 2020 environmental goals. Multiple groups across Intel drive our progress in achieving our goals, and we work to engage all of our employees in helping to reduce our environmental impact.

<b>CONSERVE</b>	We continuously strive to improve energy efficiency, reduce emissions, and reduce our footprint throughout our operations.
<b>COLLABORATE</b>	We partner with governments, leading companies, and nonprofits to address environmental challenges.
<b>CREATE</b>	Our technology solutions enable others to reduce their own environmental impacts.

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# ENVIRONMENTAL SUSTAINABILITY

## Governance and Management



We have integrated oversight and management responsibility for environmental sustainability issues at multiple levels of the company, and across the countries where we operate. Read more on our [Report Builder](#) website.

## Governance and Management

Unlike many companies in the electronics industry that outsource their production, we manufacture a majority of our products in our own wafer fabrication facilities. Doing so results in Intel having a more significant direct environmental footprint than those of our “fab-less” competitors. We consider our environmental impact when we select sites, design buildings, set performance levels for manufacturing tools, and establish goals for new production processes. Our site selection process includes an environmental impact assessment designed to evaluate potential positive and negative impacts a proposed project may have on a community, including environmental, social, and economic aspects.

For over a decade, Intel has maintained a multi-site, third-party-verified ISO 14001 registration, which helps us evaluate the effectiveness of our environmental management system. In addition to third-party audits completed to maintain these certifications, we conduct environmental, health, and safety (EHS) program self-assessments to validate site-level EHS compliance. These self-assessments cover compliance across a broad range of EHS regulations and standards, and include reviews of environmental performance, site health and safety, ergonomics, and health and well-being programs.

Intel's structured approach to energy management has been recognized with five sites—Leixlip, Ireland; Kulim and Penang, Malaysia; Chengdu, China; and Ho Chi Minh City, Vietnam certified to the ISO 50001 Energy Management standard. This demonstrates Intel's implementation of an international best practice to achieve continuous improvement in energy efficiency in our operations. It also provides a framework to support compliance and helps us demonstrate our commitment to the Electronic Industry Citizenship Coalition ([EICC](#)).

Our senior corporate EHS professionals also partner with legal counsel to complete ongoing internal EHS audits related to compliance, management systems, and business risk at various Intel sites. The audits include in-depth documentation and records reviews, interviews with site leadership, and physical inspections related to EHS compliance.

### Compliance Reporting and Transparency

In 2016, we continued to maintain our comprehensive, corporate-wide EHS compliance assurance program. EHS officials from various regulatory agencies regularly visit our sites. In 2016, officials made 115 visits (including audits and inspections) to Intel sites across the globe (51 Health and Safety Agency and 64 Environmental inspections). Intel received six environmental Notices of Violation (NOVs) and two health and safety-related NOVs in 2016.

Year	Number of NOVs	Fines or Fees
2012	5	\$500
2013	7	\$2,500
2014	4	\$143,000
2015	11	\$0
2016	8	\$0



### Biodiversity

In areas of rich biodiversity, we have undertaken several voluntary environmental projects. Our 530-acre Ronler Acres campus in Oregon, for example, has 50 acres of wetlands that provide wildlife habitat and storm water retention. Intel's Leixlip, Ireland site includes more than 50 acres of forested land with an arboretum of native Irish trees and a 300-year-old orchard. Biodiversity was incorporated into Intel Ireland's Environmental Management System (ISO 14001:2015), and we share a biodiversity map with all employees to raise awareness of on-site biodiversity.

Details on NOVs are provided in the [Appendix](#) of this report and available in our previous Corporate Responsibility Reports, which are posted on our [Report Builder](#) website. Corrective actions were put in place and tracked to completion for all identified concerns.

On an annual basis, we report Intel's emissions releases, waste transfers off-site, and treatment of reportable chemicals in the U.S., in accordance with state and U.S. Environmental Protection Agency (EPA) regulations. For our most recent SARA Title III Reportable Chemicals by Site report, access the [Report Builder](#).

Our commitment to transparency and environmental sustainability led us to develop the [Explore Intel](#) website, which provides in-depth environmental performance data and information for our manufacturing and assembly and test locations for local community stakeholders.

### Collaboration and Policy Advocacy

To identify and share best practices, we regularly benchmark our environmental performance, including water use and reuse, with semiconductor and other large companies. We have participated in environmental performance benchmarking activities with other members of the [World Semiconductor Council](#), the [Semiconductor Industry Association](#), and [SEMI](#). Benchmarking enables us to better understand how Intel compares to others in our industry.

Intel is helping to shape public policy responses to climate change both at the international level and in the countries and regions where we operate. Our engagement includes both unilateral activities as well as participation in several climate-focused organizations. These include the International Climate Change Partnership, the [Center for Climate and Energy Solutions](#) (C2ES), and [Advanced Energy Economy](#). Our participation in these organizations centers around helping to build a supportive policy environment for private sector leadership on climate change. We are also actively working with the [U.S. Green Building Council](#) to expand the number of manufacturers implementing green building practices. For more information on our approach to environmental policy issues, read the [Public Policy](#) section and the [Climate and Energy](#) section of this report.

### Supply Chain Environmental Impact

As part of our commitment to transparency, we disclose our greenhouse gas emissions and climate change risk and water use through the Carbon Disclosure Project ([CDP](#)). In 2016, we requested that our top suppliers also report through CDP. To learn more about this effort and the other environmental expectations we establish for our suppliers, see the [Supply Chain Responsibility](#) section of this report.

# EMPLOYEE ENGAGEMENT

We believe that engaging employees is key to achieving our environmental strategies and goals. Our “Learn, Act, Share” model helps employees understand sustainability issues, priorities, and goals; work together to take action; and share information about our priorities with others.

## Intel Sustainability Leaders Speaker Series

Since 2011, the Intel Sustainability Leaders Speaker Series has aimed to increase employee engagement by sharing Intel’s sustainability efforts, providing direct communication between employees and the company’s environmental leaders, and fostering a corporate-wide sense of a sustainability community. Initially a lunch discussion among three employees, the series now reaches employees via video collaboration rooms (on 10 campuses) and audio bridges. The success of the series is attributed to its ability to tap into our employees’ inherent desire to learn about the company’s environmental pursuits and gain access to environmental experts within Intel. [Read more.](#)

## Intel Environmental Excellence Awards

Each year, our employees receive monetary awards and company-wide recognition for innovative projects that they propose and implement to reduce environmental impact, support local communities, and generate bottom-line results. In 2016, employees were awarded for their efforts to cut greenhouse gas (GHG) emissions, conserve water and other resources, and reduce waste. Projects included:

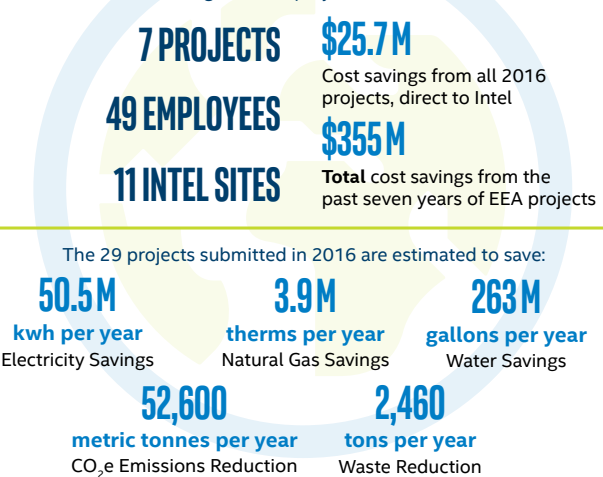
### Clean Technologies Cut On-Site Carbon Emissions

To reduce an Intel India site’s carbon emissions and dependence on the electrical grid, employees installed alternative energy sources, including solar thermal, solar electric, and innovative storage devices. The team proactively worked to educate government agencies

[Environmental Sustainability](#)

## INTEL ENVIRONMENTAL EXCELLENCE AWARDS

In 2016, we had 29 project submissions, and 7 winning teams consisting of 49 employees across 11 Intel sites.



and acquire permits for this first-of-its-kind project. The system has the capacity to provide 100% of the power for the site’s data centers and to eliminate capital investments for an electrical substation and on-site systems.

### Low-Temp Solder Paste Leads to Industry-Wide Greenhouse Gas Reductions

Collaborating with suppliers and device manufacturers, an Intel team developed a new process for mounting chips to circuit boards using solder at a lower temperature. As a result, ovens used for the mounting process can operate at 60% of their typical energy use, enabling Intel’s Original Equipment Manufacturer (OEM) and Original Device Manufacturer (ODM) partners to have the potential to reduce their carbon footprints by as much as 125,000 metric tonnes of CO<sub>2</sub>e per year, while saving millions in energy costs.

[Read](#) how another EEA-winning team worked to reduce solvent use.



## Reducing Chemical Waste: A Dedicated Team’s Multi-year Efforts

In 2012, a team in our procurement organization began partnering with Intel suppliers to explore new ways to manage chemical waste. The team’s ultimate goal is to recover and transition chemical waste into material for reuse, instead of disposing of it.

In 2013, the team piloted a program to convert an ammonia-based waste byproduct into a reusable product for the fertilizer industry in Arizona and Oregon.

In 2015, the same Intel team identified an opportunity to collect an unused chemical for reuse in secondary industries rather than incinerating it. As a result, over 140 tons of the chemical have been sent to alternative markets.

In 2016, the team worked closely with one of our top-performing chemical waste suppliers to capture and sell 650 tons of a valuable solvent recovered from our mixed solvent waste. In addition to solvent recovery, the team transitioned 40% of Intel’s most-difficult-to-treat domestic aqueous solvent waste stream in the U.S. into a low BTU fuel for managing aluminum byproducts, reducing the reliance on purchased petroleum.

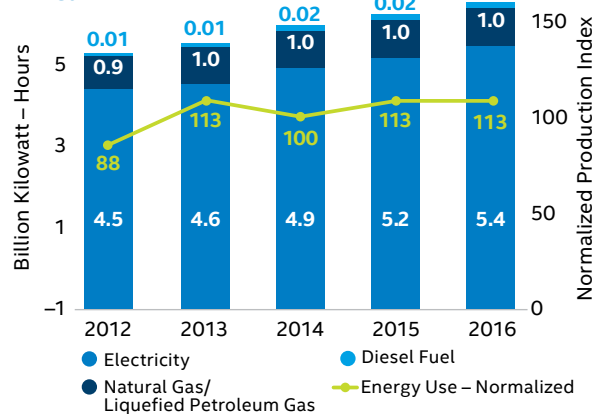
In 2017, the team plans to extend the solvent recovery project to all of our major manufacturing sites, and continue to explore innovative ways to better manage our chemical waste.

# CLIMATE AND ENERGY

We believe that climate change is a serious environmental, economic, and social challenge. We focus on reducing our own direct climate “footprint”—the emissions resulting from our own operations and our supply chain. Reducing our energy use is a key component of our overall climate change strategy. In addition, we have been an industry leader in renewable energy purchasing and alternative energy investments. We also focus on increasing our “handprint”—the ways in which Intel technologies and those of the information and communications technology sector can help others reduce their footprints. In addition, we collaborate with others to drive industry-wide improvements and policy change.

Our [Climate Change Policy](#) outlines our formal position on climate change and provides a more detailed history of our action in this area.

## Energy Use



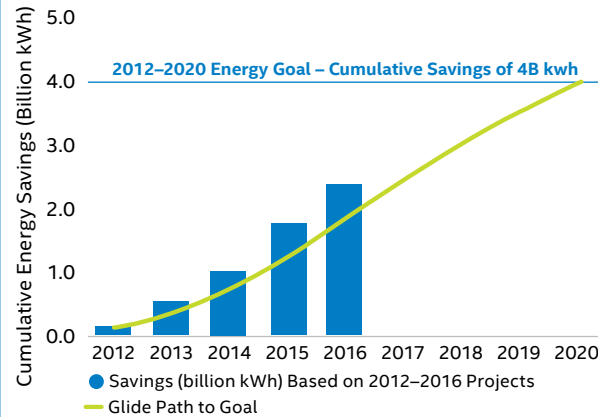
Our 2016 absolute energy use increased 3% compared to 2015, and our 2016 normalized energy use increased 7% from 2015 to 2016. However, our Scope 2 emissions associated with our electricity use decreased 32% from 2015 to 2016 as a result of our renewable energy purchases.

## GOAL

**Energy Conservation:** Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.

**Our Progress:** On track

**Commentary:** Since 2012, we have achieved cumulative energy savings of 2.3 billion kWh and remain on track to hit our 2020 energy conservation goal. In 2016, we completed 289 energy conservation projects, saving 121 million kWh of electricity. We also completed 140 projects that saved 4 million therms of natural gas.



We want to increase our “handprint” to help others reduce their footprint.



## Reducing Our Operational Carbon Footprint

For close to two decades, Intel has been setting aggressive GHG reduction goals to conserve energy and minimize emissions, and over that time, our emissions have decreased by about 60% on an absolute basis. Our 2020 environmental goals include a commitment to further reduce our direct GHG emissions 10% on a per unit basis from 2010 levels, while we continue to expand our manufacturing capacity.

For almost two decades, we have also been collaborating with others in our industry to reduce the use of fluorinated gases in the production of semiconductors. We eliminated the use of ozone-depleting substances in our manufacturing in the 1990s. We also work to minimize our emissions of volatile organic compounds (VOCs), hazardous air pollutants (HAPs), nitrogen oxides (NOx), and carbon monoxide (CO) emissions through the use of thermal oxidizers and wet scrubbers.

Our Information Technology (IT) organization has improved the efficiency of our data center operations to increase compute, storage, and IT capabilities while driving toward a lower carbon footprint. For example, Intel converted a 5,000-square-foot wafer fabrication facility into a high-density, high-efficiency data center using Intel® architecture-based servers. The new data center has the total capacity of three legacy data centers, and uses free air cooling that allows Intel to run the center’s temperature up to 95°F. The center’s power usage effectiveness is 1.06 and server cooling density is 1,100 watts per square foot—10 times the industry average in cooling density and efficiency.<sup>1</sup>

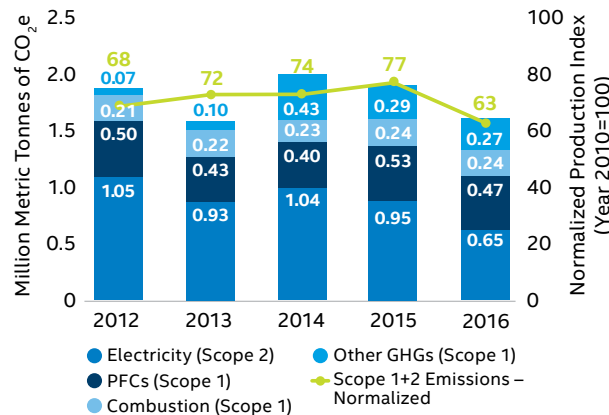
<sup>1</sup> <http://www.intel.com/content/dam/www/public/us/en/documents/best-practices/intel-it-extremely-energy-efficient-high-density-data-centers-paper.pdf>

## GOAL

**Greenhouse Gas Emissions:** Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.

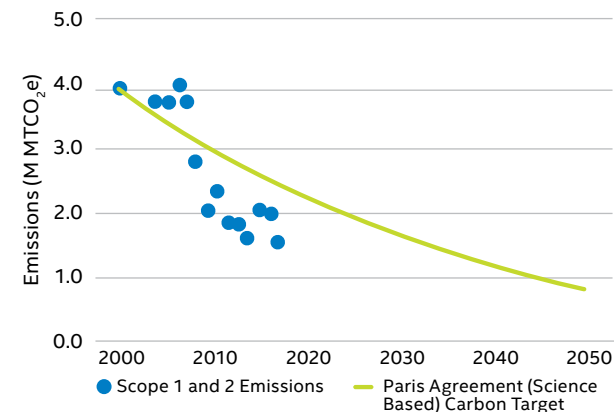
**Our Progress:** On track

**Commentary:** In 2016, we decreased our direct (Scope 1) emissions by 8% on an absolute basis and 6% on a normalized basis from 2015. Since 2010, our direct emissions decreased by 6% on an absolute basis and 14% on a normalized basis. We are on track to meet our 2020 goal. As shown in the chart, our combined Scope 1 (direct) and Scope 2 (indirect) emissions decreased by 19% (absolute) from 2015 and 31% (absolute) from 2010.



Normalized numbers include only the direct GHG emissions to reflect our progress to goals. In previous CSR reports, we erroneously included "indirect" emissions.

## Intel's Scope 1 and 2 Emissions—Where are We Headed?



More than 20 years ago, Intel established public environmental goals to reduce our environmental footprint, including greenhouse gas emissions.

## 2016 Greenhouse Gas Emissions Reported by Type (metric tonnes of CO<sub>2</sub>e)

Scope	Emissions	Notes
Scope 1 Emissions	976,000	–
Scope 2 Emissions	647,000	Market-based method <sup>1</sup> ; includes renewable/REC purchase
<b>Total Scope 1 and 2 Emissions</b>	<b>1,623,000</b>	
<b>Scope 3 Emissions Total<sup>3</sup></b>	<b>2,740,000</b>	
Leased Vehicles & Commuting	522,000	Employee leased vehicles and commuting
Logistics & Distribution	227,000	Upstream and downstream transport and distribution
Employee Business Travel	147,000	Air travel, car rentals, and hotel stays
Supply Chain	1,050,000	Estimated based on approximately 90% of materials used in manufacturing.
Capital Goods <sup>2</sup>	8,000	Extraction, production, and transport of capital goods purchased
Fuel and Energy Related Activities <sup>2</sup>	176,000	Impacts related to extraction, production and transportation of fuels and energy purchased, not already included in Scope 1 or 2
Waste Generated in Operations <sup>2</sup>	28,000	Disposal and treatment of waste generated in our operations
Processing of Sold Products <sup>2</sup>	582,000	Processing of intermediate products sold to downstream manufacturers

<sup>1</sup> Using location-based Method Scope 2 Emissions (which does not account for any renewable energy/REC purchases) would equal 2,439,000 metric tonnes CO<sub>2</sub>e/year.

<sup>2</sup> New Scope 3 categories added in 2016. To improve our understanding and transparency of our entire value chain carbon footprint, we have assessed all relevant categories as outlined in the GHG Protocol and CDP's Climate Change reporting.

<sup>3</sup> Refer to the Product Energy Efficiency content in this section of the report for Product Use Phase Emissions.

Since 2008, Intel has invested more than \$175 million in energy conservation projects at our facilities worldwide, saving more than 3.9 billion kWh of energy through the end of 2016.

## Alternative Energy for a Greener Footprint

In addition to conserving energy, Intel proactively invests in green power and on-site alternative energy projects providing power directly to Intel buildings.

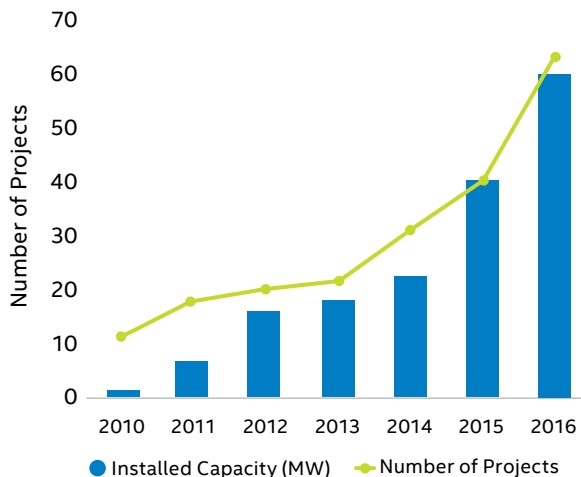
### GOAL

**Alternative Energy and Green Power Projects at Intel:** In 2015, [we pledged](#) to grow the installation and use of on-site renewable energy to three times our then-current levels, to continue 100% green power in our U.S.

operations, and increase renewable energy use for our international operations.

**Our Progress:** On track

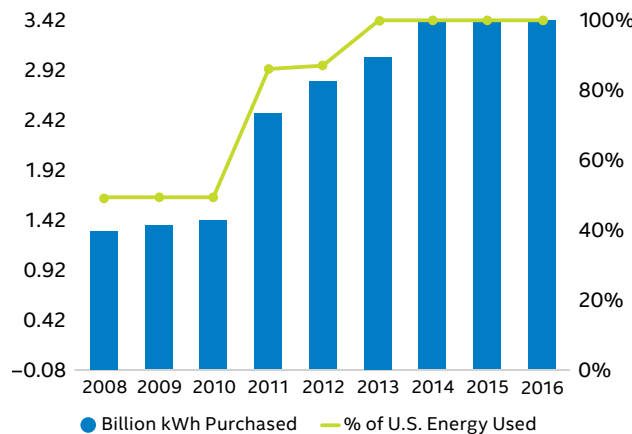
**Commentary:** In 2016, we increased our on-site, greener alternative energy installations by nearly 50% compared to 2015. Our green power purchases in 2016 were equivalent to 100% of our U.S. and E.U. electricity use and 80% of our global electricity use.



Around the world, we have facilitated the installation of more than 60 on-site projects to use solar, wind, fuel cell, and other alternative energy sources. These projects, which are often pilots of innovative technology applications, help us understand future installation opportunities for both Intel and the broader alternative energy market—and are often the largest corporate on-site projects of their type in a country or region. Recent projects include the largest corporate solar-covered parking lot and the largest micro wind turbine array in the U.S., at the time of installation. Our portfolio approach to alternative energy investments is intended to provide leadership, help spur the market, make these options less expensive and more accessible over the long term, and reduce our emissions.

Since 2008, we have been the largest voluntary corporate purchaser of green power in the U.S., according to the U.S. EPA. A combination of renewable energy certificates (RECs) and on-site alternative energy projects earned us this distinction.

### U.S. Green Power Purchasing



All purchases are certified by the nonprofit Center for Resource Solutions' Green-e\* program, which certifies and verifies green power products to meet the requirements of the U.S. EPA's Green Power Purchasing Program. We purchase RECs from Green-e certified sources of generation, including wind, solar, low-impact hydro power, and geothermal.

## SINCE 2008, INTEL'S RENEWABLE AND REC PURCHASES HAVE TOTALED 24 BILLION KWH OF GREEN POWER

Direct purchase renewable energy and RECs purchased globally in 2016

4.3 B kWh

100%  
of Intel's U.S. and E.U. power use

80%  
of Intel's global power use



Largest voluntary corporate purchaser of green power since 2008, according to the U.S. EPA.

# ALTERNATIVE ENERGY AT INTEL

Including distributed energy generation systems installed in:

## 35 BUILDINGS IN 8 COUNTRIES



### UNITED STATES

Largest voluntary corporate green power purchaser

9 CONSECUTIVE YEARS

### UNITED STATES

Largest corporate solar carport

Ranked top 20 installed solar electric facilities

First and largest micro wind turbine array

### MEXICO

Intel's first two wind power installations

### EUROPEAN UNION

Purchased 100% renewable energy for our sites

### IRELAND

Largest voluntary green power purchaser

### ISRAEL

First energy generation from water/air exhaust

### CHINA

Solar heat pump hybrid system

### VIETNAM

Largest solar PV rooftop power project

### MALAYSIA

Largest solar thermal system installed in a semiconductor plant

### INDIA

Largest solar-powered adsorption cooling

First and largest fuel cell power project

All declarations are at time of installation within the country



## Product Energy Efficiency

The vast majority of environmental impact related to the use of our products pertains to consumption of energy. We are committed to helping customers lower the energy costs associated with computing and data centers. Each generation of process technology can enable us to build products that offer higher performance, lower cost, or improved energy efficiency compared to previous generations. Building energy efficiency into our products not only reduces our Scope 3 GHG emissions, but also lowers the Scope 2 emissions of our customers while reducing their energy costs and lowering their environmental impact.

### GOAL

**Product Energy Efficiency:** Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels.<sup>1</sup>

**Our Progress:** On track (data center products), at risk (notebook computers)

**Commentary:** Intel continues to lead the industry in maximizing the productivity and energy efficiency of data center products. Our data center products are on track to meet our 2020 energy efficiency targets, and are currently 8x more efficient than 2010 volume servers. The client computing market has continued to evolve, which impacts our ability to meet this goal. Our most recent platform (Kaby Lake) was designed for the 4K media playback experience and we delivered significant improvements in the energy efficiency in this use case (1.75x more battery life). This is a different metric than we have been tracking for the 2020 goals, and we are at risk of missing our 2020 energy efficiency target for notebook computers.

As part of our carbon footprinting efforts, Intel has estimated that the total energy used in a year by Intel® processors in servers and desktop and notebook computers sold in 2016 was 3,430,000 metric tonnes of CO<sub>2</sub> equivalent. This figure represents 2016 emissions from products sold in 2016, calculated using the U.S. Energy Star\* typical energy consumption model for computing products, and the Greenhouse Gas Protocol Corporate Value Chain Accounting and Reporting Standard. The lifetime emissions associated with these processors is 12,680,000 metric tonnes of CO<sub>2</sub> equivalent.

## Policy Advocacy for Product Energy Efficiency

Intel became involved with the International Energy Agency and its 4E initiative, which focused on the proliferation in energy consumption of connected devices. The work advanced into the G20 (made up of the world's largest economies) Energy Efficiency Action Plan and the Networked Devices initiative, the scope of which were broadly similar. These initiatives focused solely on the footprint of connected devices and messages to policy makers of G20 countries that connected devices are consuming too much power. Intel, together with our industry trade associations, sought to address this policy direction, and as a result, developed voluntary design and policy principles. In addition, Intel introduced the information and communications technology (ICT)-enabling opportunity known as Intelligent Efficiency, which seeks to promote the ways that ICT deployment introduces greater efficiency savings within today's digital economies.

The result of these efforts has been the creation of the Connected Devices Alliance (CDA). The [CDA Voluntary Principles for Energy Efficient Connected Devices](#) were developed by the G20 Networked Devices Task Group, consisting of industry and government representatives.



## Case Study

Power and cooling dominate a cloud service provider's month-to-month operating expenses. KIO Networks used the Intel® Solid State Drive Data Center Family and Ceph\* software to cut storage power consumption while increasing operational efficiency and flexibility.

[Read more](#)

The principles provide designers, manufacturers, and protocols authors with guidance on the key features of energy-efficient connected devices, networks, and communications protocols. They also provide a common global framework that can be used to develop government policies and measures.

On December 14, 2016 the California Energy Commission (CEC) adopted the historic [Computers and Monitors energy-efficiency](#) standards by a unanimous vote, after a four-year period of challenging and lengthy negotiations between the CEC and industry. The final standards, while challenging, are achievable. From the start, Intel partnered with the tech industry and collaborated with the CEC on the new computer standards. Read more about the collaboration in the [ITI/TechNET press release](#).

<sup>1</sup> Data center energy efficiency is determined by server energy efficiency (as measured by SPECpower\_ssj2008 or equivalent publications and using a 2010 baseline of an E56xx series processor-based server platform) as well as technology adoption that raises overall data center work output (such as virtualization technology). Notebook computer energy efficiency is determined by average battery life, battery capacity, screen size, and number of recharge cycles of volume notebook computers in that model year.

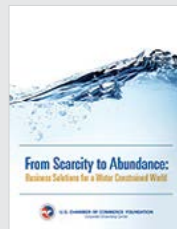
# WATER MANAGEMENT

Sustainable water management is a key expectation for our industry. Many of our operations are located in semi-arid regions that may become increasingly vulnerable to prolonged droughts due to climate change. Given that our fabrication facilities require significant water use, responsibly managing our operational water use helps us meet our business needs as well as those of our communities. To learn more, read the [Intel Water Policy](#).

Our multifaceted water strategy has three main objectives: **conserve** the amount of water used in our operations, **collaborate** on water initiatives with our local communities, and **create technology solutions** to help others reinvent the way they use and conserve water. As the impacts of water use vary greatly by location, we rely on water and energy experts at our sites around the world to research and manage ways to reduce consumption. Our efforts include incorporating water conservation elements into the design of our facilities and establishing water use goals for new process technologies. We estimate that our water conservation efforts saved over 4.6 billion gallons during 2016. See detail on our water use by location in the [Appendix](#).

## From Scarcity to Abundance: Business Solutions for a Water Constrained World

The U.S. Chamber of Commerce Foundation Corporate Citizenship Center showcases innovative approaches companies are taking to help solve the global water challenge. Read the Intel case study in the [report](#).

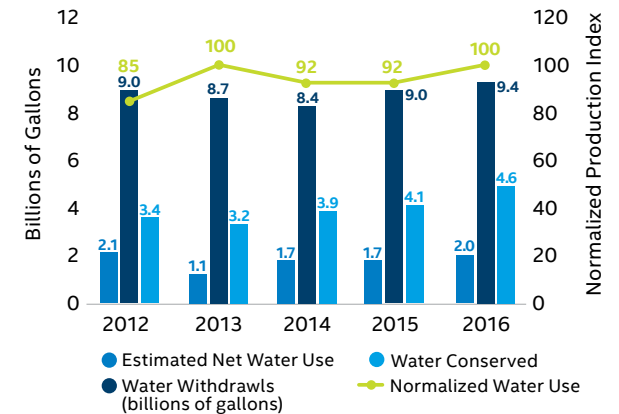


## GOAL

**Water Use:** Reduce water use on a per unit basis below 2010 level by 2020.

**Our Progress:** On track

**Commentary:** In 2016 we lowered our reporting threshold, which added 15 sites into our water reporting. As a result, our water usage appeared to increase by 4% (absolute) and 4% (normalized) from 2015. However, comparing only to the sites included last year, our usage increased by 1% on an absolute basis from 2015 and remained flat on a normalized basis from our 2010 baseline.



We define water withdrawals as total gallons of fresh water used in our operations. "Operations" includes all manufacturing sites and non-manufacturing sites with 500 or more employees where Intel has operational control. Note that prior to 2016, our reporting threshold was higher, including all sites >35 gal/day/person. Normalized water withdrawals in the chart are calculated using the previous threshold since the new sites were not included in the 2010 baseline. Water usage, withdrawals, and conserved figures are calculated using our new threshold.

## INTEL'S WATER FOOTPRINT

(in gallons per year)

**9.4 B**

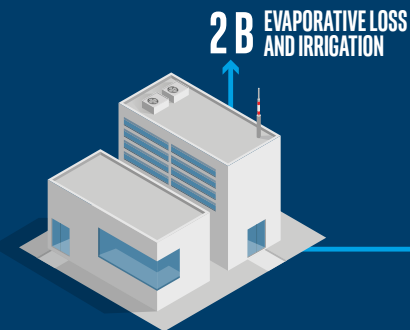
**FRESH WATER SUPPLY**

Fresh water from municipal ground and surface sources

**1.1 B**

**RECLAIMED WATER**

From the city



**4.6 B**

**ONSITE CONSERVATION**

Water conserved in manufacturing and support operations, such as in cooling towers and air scrubbers, as well as water that is used directly in irrigation

**8.5 B**

**ON-SITE WATER TREATMENT**

Further treatment at publicly owned treatment works

**REUSED BY COMMUNITY**

Intel's estimated net water use in 2016 was 2 billion gallons. We treated and returned approximately 80% of our water withdrawals back to municipal water treatment operations.

## Conserve

In support of our 2020 water goal, in 2016, Intel invested in new global water conservation projects that are expected to save about 1.2 billion gallons of water per year. Below are descriptions of the types of water conservation projects we implemented in 2016:

**Ultrapure Water (UPW) Conservation.** A significant amount of our water use is related to production of ultrapure water (UPW) used to clean silicon wafers during fabrication. Our strategy is to reuse UPW after the manufacturing process for other industrial purposes or irrigation, and to continue to increase the efficiency of how water is used throughout the UPW process. We implemented new conservation projects within UPW that are estimated to save more than 230 million gallons and over \$1.4 million in utility costs annually.

**Water-Efficient Facilities.** Our buildings and manufacturing facilities incorporate water efficiency as an integral part of our overall green building design practices. During 2016, we implemented several new water conservation projects within our facilities aimed at reducing the amount of freshwater used throughout our operations. Descriptions of a few of these projects follow:

- Intel's newest and greenest building in India incorporates low-flow faucets, onsite treatment and reuse of gray water, and rainwater and condensate harvesting. The reclaimed and harvested water is used on site in areas such as cooling towers, restrooms, and irrigation, and is estimated to reduce total freshwater consumption by nearly 80% each year.
- At Intel Costa Rica, a dual system collects rainwater and condensate from on-site air-handler units for use in cooling towers. We estimate that the project saves close to 4.8 million gallons per year of freshwater used in the cooling towers.

- To reduce the amount of freshwater used in on-site irrigation, a new rainwater harvesting system was installed in Chengdu, China to expand the capability of an existing harvesting system. We estimate that the new system will offset about 400,000 gallons of freshwater annually.
- A new [state-of-the-art recycling facility](#) at Intel's Ronler Acres campus in Oregon will treat industrial water from manufacturing operations and recycle it to replace incoming water that is used for cooling towers, scrubbers, and abatement equipment. Once operational, the recycling facility will have the capacity to save up to 1 billion gallons of water each year.

## Collaborate

Although our ultimate vision is to continuously reuse water in semiconductor manufacturing, we currently discharge water from our operations in compliance with local permits. We focus on the quality and quantity of water we discharge, and currently treat and return approximately 80% of our water withdrawals back to municipal water treatment operations, where it can be reused for irrigation or other purposes within the community or returned to the water environment. The remaining balance is lost to evaporation, waste streams, or taken up by plants through irrigation. Our water discharge methods vary by site, based on the needs of individual communities. For example, at our site in Arizona, we partner with the City of Chandler to use a reverse osmosis process to treat wastewater that is then used to replenish a local aquifer.

We complete comprehensive reviews of wastewater discharge based on a number of aspects, including—but not limited to—permit limits for our sites and municipal treatment plants, activated sludge inhibition criteria, and receiving-stream water quality. We use a number of key tenets derived from the U.S. Clean Water Act to guide our actions globally, including never causing pass-through or interference at local municipal treatment plants or impacting their ability to reuse their wastewater or sludge.

In 2017, we are launching a new global initiative to close the approximate 20% gap in our water balance by investing in local watershed conservation projects. We will continue to focus on reductions in our freshwater withdrawals, while funding additional projects in our communities to address the remaining balance. Projects will be selected with input from local stakeholders and environmental groups, and prioritized based on the impact on direct, long-term improvements to the local watershed (or water supply). Selected projects could be related to agriculture and irrigation conversion and efficiency, IoT solutions, and wildlife and ecosystem restoration projects.

## Create Technology Solutions

We work with leading companies and nonprofits to use technology to enable both Intel and others to save water. One example is an agricultural IoT pilot project that we are conducting in partnership with The Nature Conservancy and Bonneville Environmental Foundation in the Camp Verde area of Northern Arizona. Instead of conventional methods to sense when crops need water, the IoT sensor technology collects soil moisture data to help the farmer decide when to plant and irrigate, potentially reducing overall water use and increasing yield.

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We have invested more than \$234 million in water conservation projects at our global facilities since 1998. To date, these have saved over 57 billion gallons of water, enough to sustain 520,000 U.S. homes for one year.

# WASTE MANAGEMENT

Most of the waste generated from our operations is tied to the manufacturing of our products. Building and updating facilities also results in significant construction waste. Approximately 40% of our waste is hazardous, the disposal of which is regulated. The other 60% of our waste is non-hazardous, and encompasses non-regulated wastes such as plastics, metal, organics, and paper.

## Hazardous Waste

Although our hazardous waste generated has risen both on an absolute and per unit basis due to the increasing complexity of our manufacturing processes, we recycled 78% and sent less than 1% of it to landfills in 2016. To continue progress toward achieving our 2020 hazardous waste goal, multiple groups across Intel are working to identify innovative ways to recycle or recover waste streams for reuse, or even convert them into sources of revenue. In addition, our green chemistry initiative's focus on the use of alternative chemicals in our manufacturing processes could reduce our overall hazardous waste generation.

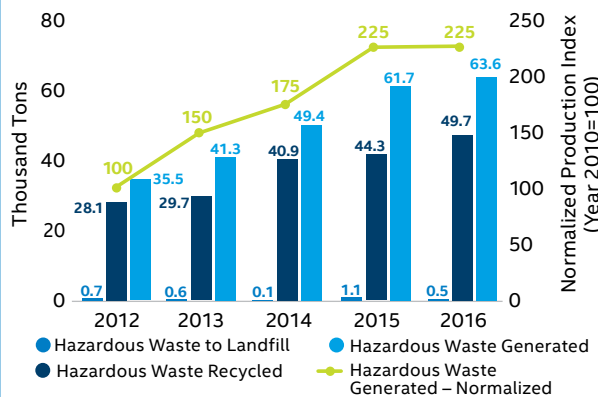


## GOAL

**Hazardous Waste:** Achieve zero hazardous waste to landfill by 2020.

**Our Progress:** Achieved, ongoing

**Commentary:** Intel defines zero hazardous waste to landfill as less than 1%. In 2016, we sent 0.5% of our hazardous waste to landfill, achieving our 2020 goal. From 2015 to 2016, our absolute waste increased 3% and our normalized waste was flat. The increase was primarily due to advancement in the technology manufacturing node in Ireland from 45nm to 14nm. The more advanced technology node is more chemical-intensive. The site and materials teams found novel recycle, reuse, and treatment technologies for over 50% of the Ireland manufacturing waste, and have a roadmap for continuing to meet our 2020 goal of zero waste to landfill.



Hazardous waste not recycled or sent to landfills was incinerated or biotreated.

## Non-Hazardous Waste

We have implemented several programs to reduce, reuse, and recycle office furniture and other non-hazardous materials, including donating items to schools and non-profits, and engaging our employees in recycling efforts.

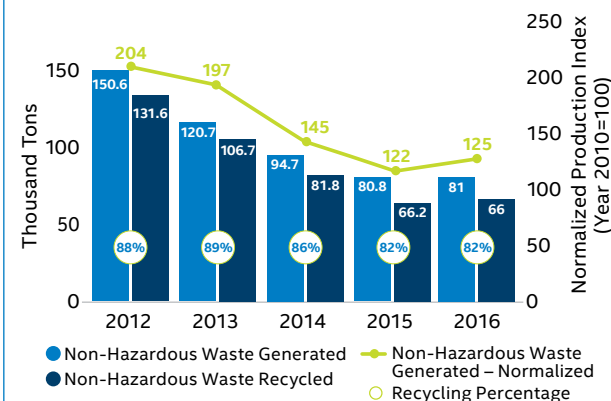
Fourteen sites, including our facilities in Bangalore, India and Shanghai, China have achieved recycling rates of 90% or better. We are working to share best practices among sites to raise our recycling rates worldwide and achieve our 2020 recycling goal.

## GOAL

**Non-Hazardous Waste:** Achieve 90% non-hazardous waste recycle rate by 2020.

**Our Progress:** On track

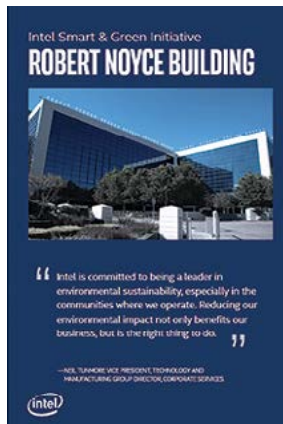
**Commentary:** We recycled 82% of our non-hazardous waste in 2016. We generated 38% less non-hazardous waste in 2016 compared to 2012, primarily due to a lower number of construction projects compared to past years. Our normalized non-hazardous waste generated also decreased by 23% since 2012.



# GREENER BUILDINGS AND THE INTERNET OF THINGS

Our engineers have long incorporated green design standards and concepts into the new construction and renovation of our facilities. We also partner with leading companies and nonprofits in an effort to optimize building usage and efficiency for Intel and for others. We share our learnings with the goal of expanding the number of manufacturers implementing green building practices.

Intel's new building in India includes world-class smart and green features. Our SRR3 building in Bangalore is equipped with more than 9,000 sensors to monitor and/or optimize temperature, lighting, water use, energy consumption, and occupancy. The sensors—70% of which are embedded in SRR3's "digital ceiling"—generate a 24/7 stream of green building performance data. Occupancy monitoring is integrated with the building's lighting and air conditioning. In addition to solar hot water heating, rainwater harvesting, and a gray water re-use system, SRR3 is outfitted with LED lighting that reduces the building's energy demand by 50% compared to traditional office buildings.



## Advancing and Sharing Technology Solutions

As part of Intel's commitment to transparency, we share our real-time building performance in the U.S. At the Robert Noyce Building (RNB) headquarters in Santa Clara, California, a display using Intel® technology features our energy and water conservation efforts and provides updates on our performance. The data provided by the system also arms our facilities managers with information to optimize building functions.

We have installed smart lighting systems across several Intel buildings, and have additional installations planned. The systems not only reduce energy consumption through daylight harvesting

and occupancy sensing, but also create a platform on which we can build in future building management technologies.

The Internet of Things (IoT) is rapidly expanding across industries—including building automation technology, which has undergone an unprecedented transformation. Working with ecosystem partners, [Intel is advancing solutions](#)—for smart building energy management, predictive maintenance of HVAC and other building systems, overall building safety and security, and more.

Intel is building a foundation for a plug-n-play IoT ecosystem that includes sensors, network connectivity, and advanced analytics options that will allow us to rapidly and cost effectively deploy IoT solutions. Working with Intel engineers, IT, and IoT partners, we have several proof-of-concept projects and pilots underway, including:

- Wireless water meters for rainwater capture.
- UPW analytical cart wireless monitoring.
- Wireless power meters for non-critical office building circuits.
- A "smart meters" lab for rapidly testing, integrating, and qualifying sensors and IT infrastructure for industrial IoT solutions.
- Exhaust motor wireless vibration and temperature monitoring for early automated problem detection and predictive maintenance.



## Digital Efficiency: Driving Decarbonization and Unlocking Business Value Across Industries

[Digital Efficiency](#), a white paper from GE and Intel, features collaborative projects implemented to demonstrate how IoT solutions can be used in industrial applications. IoT technologies can help manage buildings, industrial operations, and transportation networks to optimize production, minimize operating costs, and conserve natural resources. According to the report, in a scenario where just a handful of digital solutions are scaled across key industries, it is estimated that they would return \$81 billion in annual cost savings to businesses, while avoiding up to 823 million metric tonnes (Mt) of carbon dioxide emission per year.

[READ MORE ABOUT Smart, green, and connected possibilities](#)

### GOAL

**Green Buildings:** Design all new buildings to a minimum LEED\* Gold certification between 2015 and 2020.

**Our Progress:** On track

**Commentary:** We continue to design our new buildings in line with our goal. We have achieved LEED certification for >14.5 million square feet of space in 45 buildings, or approximately 25% of our total operational space. This is an increase of 126% since 2012, when we had LEED certification for 6.4 million square feet.

# PRODUCT ECOLOGY

Intel supports a precautionary approach to the materials that we use in our products, and seeks alternatives for hazardous materials. A key component of our chemical management strategy is a comprehensive review of all materials used. This review of chemical use and management helps us ensure the safety of our employees and the protection of the environment in our manufacturing facilities and in our communities.

The chemical use review begins with a regulatory search of all applicable chemical regulations and use restrictions. The search includes Intel-specific restrictions (which often go beyond regulatory requirements), and local and global regulations. The second phase of the review includes the identification of environmental and safety controls needed to protect personnel and the environment during the chemical's intended use. When possible, alternative chemicals that are safer or environmentally benign are identified to replace hazardous or regulated chemicals. Chemicals that are prohibited or restricted from being contained within an Intel product are also identified and removed from the manufacturing process to ensure compliance with applicable product content regulations.

For more than a decade, Intel has collaborated with suppliers and customers, and has participated in several industry consortia, in an effort to eliminate lead and halogenated flame retardants from our products. While legislation does not require the elimination of halogenated flame retardants, Intel has played a role in facilitating industry consensus around low-halogen practices and has chaired industry standards committees on materials selection and eco-design. We also have reviewed our products and engaged our suppliers to meet the requirements of the European Union's Registration, Evaluation,

Authorization, and Restriction of Chemicals ([REACH](#)) and other applicable product ecology regulations. When we must use hazardous materials, we take steps to ensure that they are handled safely from the time they enter our operations until they are properly disposed of or recycled.

## Designing Products With the Environment in Mind.

Each new generation of processors offers greater benefits to the consumer and the environment. Through our Design for the Environment principles, we strive to minimize the environmental impact of our products at all phases in their life cycle: development, production, use, and ultimate disposal. This, in turn, helps our customers reduce their energy costs and minimize their environmental impact.

**Electronic Waste.** Managing e-waste such as computers, monitors, and phones is a global concern. While our components are not typically subject to recycling or e-waste laws, we work with OEMs, retailers, customers, and others to identify shared solutions for used electronics. We also take steps to integrate environmental considerations into the design phase of our products to minimize environmental impacts of electronics at their end of life.

Many regulations govern the management of e-waste globally. Most of our products—including motherboards, microprocessors, and other components—are within the scope of e-waste laws only when they are incorporated into a final product, generally by an OEM. In some countries, our distributors provide recycling options for products covered by these e-waste laws.

[The Electronic Product Environmental Assessment Tool \(EPEAT\\*\)](#) rating system is designed to help purchasers in the public and private sector evaluate, compare, and select laptops, desktops, and monitors based on environmental attributes. We provide information about EPEAT to channel partners and customers.

## Green Chemistry

"Green chemistry" involves designing chemical products and processes in ways that minimize the creation of toxics and waste. We have completed a green chemistry benchmarking effort and developed the scope of pilot studies aimed at determining effective strategies for implementing green chemistry with our suppliers.

### GOAL

**Green Chemistry:** Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.

**Our Progress:** On track

**Commentary:** In 2016, we completed a review of available alternative assessment tools to determine the best strategy to enable our suppliers to successfully implement green chemistry concepts into their development of chemicals. Our next step is to conduct a detailed survey—including piloting an alternative assessment with select suppliers.



# ADVANCING

# SUPPLY CHAIN RESPONSIBILITY



# SUPPLY CHAIN RESPONSIBILITY



"Intel is committed to sustainable business practices throughout our operations and our extended supply chain. In partnership with industry peers and our suppliers, we drive broad solutions to ensure lasting change, and find innovative solutions to tackle new challenges."

—JACKLYN STURM, Vice President, Intel Global Supply Management

## GLOBAL IMPACT

### Protecting Vulnerable Workers

**21M** Number of people in the world who are subject to forced labor,<sup>1</sup> a serious violation of human rights.

### Advancing the Supply Chain

Of the companies assessed by CDP, only 22% are engaging with their suppliers on carbon emissions and just 16% are engaging on water use.<sup>2</sup>

OF 4,366 COMPANIES



ARE ENGAGING  
(including Intel)

### Pursuing Conflict-Free

"Conflict minerals"<sup>3</sup> used in electronics manufacturing can be sourced from mines that exploit workers to fund violence.



## OUR APPROACH

### Protecting Vulnerable Workers

We have worked with our top-tier suppliers to build a strong system to detect and address risks of forced and bonded labor in our supply chain. Our [Anti-Slavery and Human Trafficking Statement](#) details our expectations.



### Advancing the Supply Chain

To enable broad, sustainable change, we provide training, infrastructure, and tools to help our suppliers grow and improve. Our goal is to have 90% of suppliers participating in Intel's Program to Accelerate Supplier Sustainability (PASS) meet advanced expectations in ethics, environmental performance, and labor practices by end of 2017.

### Pursuing Conflict-Free

Intel's goal is to avoid directly or indirectly financing or benefiting armed groups in the DRC or adjoining countries. Since 2008, we have worked extensively to develop responsible sourcing options for Intel and our industry.



## 2016 PROGRESS

### Protecting Vulnerable Workers

\$3.5 million in fees have been returned to workers in our supply chain since 2014 through our requirement that suppliers not charge workers for their employment.

### Advancing the Supply Chain

**83%** The percentage of suppliers participating in PASS who have met all of the program requirements has increased from 57% in 2013.

### Pursuing Conflict-Free

In 2016, we made progress toward validating that our supply chain uses responsibly sourced minerals.



## 2016 HIGHLIGHTS



In 2016, 90 of the 94 top-tier Intel suppliers that we asked to participate in the CDP supply chain survey responded.



We achieved our goal of completing on-site audits for 100% of the top 75 companies on our 2014 supplier list.<sup>4</sup>



We have manufactured microprocessors that are conflict-free<sup>5</sup> since 2013.

<sup>1</sup> International Labour Organization, 2016. Forced labour, human trafficking, and slavery.

<sup>2</sup> CDP Global Supply Chain Report 2017.

<sup>3</sup> "Conflict minerals," as defined by the U.S. Securities and Exchange Commission (SEC), is a broad term that means tin, tantalum, tungsten, and gold, regardless of whether these minerals finance conflict in the Democratic Republic of the Congo (DRC) or adjoining countries.

<sup>4</sup> Goal of assessing top 75 suppliers was based on our 2014 list of top suppliers.

<sup>5</sup> In Pursuit of Conflict-Free Minerals.

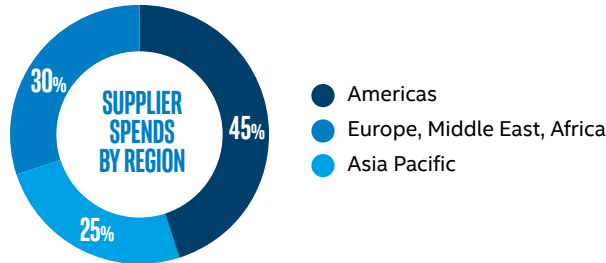
We're far from done, we'll continue to share our progress at [www.intel.com/supplierresponsibility](http://www.intel.com/supplierresponsibility)



# STRATEGY AND MANAGEMENT APPROACH

## Management Approach

Actively managing our supply chain creates business value for Intel and our customers by helping us reduce risks, improve product quality, achieve environmental and social goals, and raise the overall performance of our suppliers. We work to advance accountability and improve performance across our entire supply chain. Assessments, audits, and capability-building programs help us ensure that our supply chain is both resilient and responsible. These efforts are part of our broader focus on respecting human rights. Read more about our commitment to human rights in the [Our Business](#) section of this report.



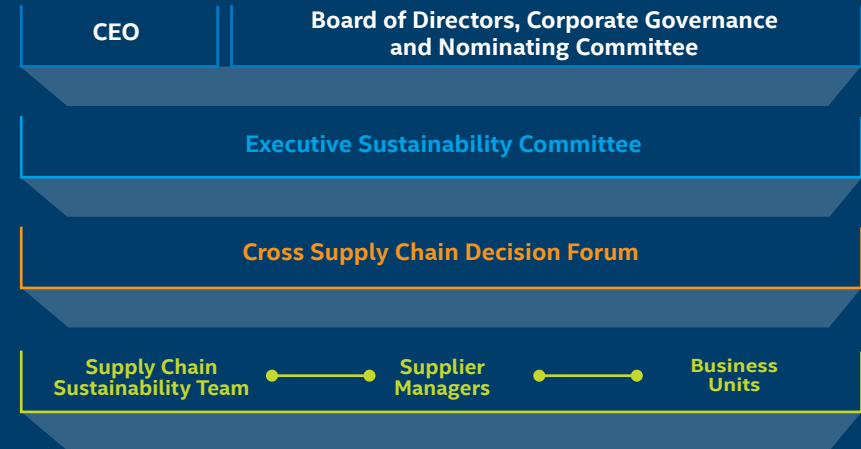
Our multi-tiered supply chain comprises more than 19,000 suppliers in over 100 countries. Suppliers provide direct materials for our production processes, tools and machines for our factories, logistics and packaging services, and non-production office materials and travel services. We also rely on others to manufacture, assemble, and test some of our components and products, particularly for our networking, mobile and communications, and NAND flash memory businesses. A list of our top 100 manufacturing, logistics, and services suppliers is available in the [Appendix](#) of this report.

## IN THIS SECTION

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Supplier Environmental Impact	p55
Responsible Mineral Sourcing	p56

# SUPPLY CHAIN RESPONSIBILITY

## Governance and Management

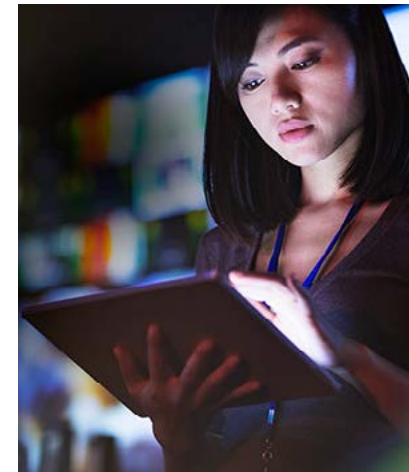


We maintain an integrated and horizontal approach to managing sustainability issues in our supply chain. Our crisis management function is embedded across all levels of our supply chain management structure. Read more on our [Report Builder](#) website.

## Holding Ourselves Accountable

We hold ourselves accountable to meet or exceed the same standards that we set for our suppliers, including auditing ourselves to the same standards. In 2016, our assembly and test facility in Chengdu, China was audited using the EICC Validated Assessment Process. One minor finding, in the area of health and safety training, was identified and addressed. For more details, see the [audit summary](#).

**FIND OUT MORE**  
[www.intel.com/supplierresponsibility](http://www.intel.com/supplierresponsibility)





### Setting Clear Expectations

We expect our suppliers to comply with the Intel Code of Conduct and the Electronic Industry Citizenship Coalition Code of Conduct ([EICC Code](#)). The EICC Code describes electronics industry standards around environmental, social, and ethical issues, and is consistent with our Human Rights Principles and the Intel Code of Conduct. We also expect our suppliers to ensure that their suppliers abide by the EICC Code.

In addition, we expect our suppliers to develop their own corporate responsibility strategies, policies, and processes; set goals and report on their performance; engage with and audit their own suppliers; and develop, manage, and regularly test business continuity plans similar to those that our own crisis management organization develops to manage Intel's end-to-end response to crises and major business disruptions.

We communicate our supplier expectations in our supplier contracts and request-for-proposal documents, and on our [supplier website](#). We also reinforce these expectations through regular communication at meetings and ongoing training events, and in our annual expectations letter to suppliers.

Intel's EICC Commitment letter, Code of Conduct, Human Rights Principles, and Anti-Slavery and Human Trafficking Statement are available on our [Corporate Responsibility](#) website.

### Building Skills and Capabilities

Many electronics industry supply chain issues are symptoms of systemic problems that may require upgrades to management systems and changes in business and company culture. To enable broad, sustainable change, we provide training, infrastructure, and tools to help our suppliers grow and improve. Examples of the ways we support suppliers include:

**Online Resources.** All suppliers have access to Intel's complimentary interactive Supplier Sustainability Resource Center. The center includes information on over 20 critical topics, including management systems, working hours, social insurance in China, EICC Code changes, and Lean\* manufacturing and its positive impact on sustainability. In 2016, the center's number of registered users increased 82% and webinar attendance increased 119% compared to 2015. We delivered more than 20 webinars in 2016, and expanded the languages in which content is delivered from two (English and Mandarin) to five (added Vietnamese, Japanese, and Bahasa Malay). This platform's user feedback feature enables direct, two-way dialogue, resulting in new insights about critical sustainability topics.

**Face-to-Face Workshops.** As part of a program launched in 2014, we engaged supply chain sustainability consultant ELEVATE to work closely with suppliers to address work-hours management. Since the program's inception, 36 factory sites have participated in the focused capability building program and 78% continue to meet the 60-hour-per-week threshold set by the EICC Code of Conduct.

**Direct Engagement.** In November 2016, Intel and Dell co-hosted an executive round table in Taiwan to collaborate in innovative ways to accelerate supplier progress on sustainability performance. The 13 shared suppliers who attended openly discussed insights, best practices, and the challenges they face as they implement sustainability management systems. The first-of-its-kind event brought together key operations leaders from multiple levels of the electronics supply chain and a diverse range of companies. The results were greater awareness of some of the roadblocks suppliers experience and the establishment of goals to help companies move forward with more efficient use of and sharing of tools, processes, and resources. Candid responses from participating suppliers set us on a path to tackling two major impediments to success: high workplace turnover; and sustainability OEM reporting and/or auditing requirements that suppliers struggle to meet. Together, Intel and Dell published an article to share our findings: [Call to Action: What Will It Really Take to Build Ethical Tech Supply Chains?](#)

We also conducted extensive capability building efforts around preventing forced and bonded labor in the extended supply chain. See [specific discussion](#) of those programs later in this section.

## SUPPLIER SUPPORT RESOURCES

### Online Resources

82%<sup>↑</sup>

increase in registered users from 2015

119%<sup>↑</sup>

increase in webinar attendance from 2015

### Face-to-Face Workshops

36

factory sites receiving customized training on workforce management

### Results

78%

of participating suppliers reached performance targets for working hours

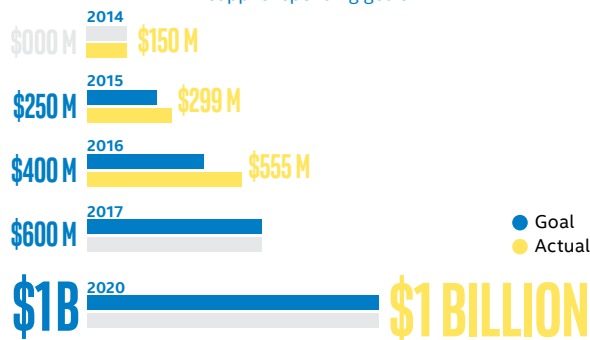
**Industry Collaboration.** We continue to work with a number of external industry associations and supply chain-related organizations—including the EICC, [Semiconductor Industry Association](#), and [SEMI](#)—to help set electronics industry-wide standards, develop audit processes, conduct training, address third-party anti-corruption issues, ensure membership compliance, and develop tools to track assessment data and emissions information.

### Supplier Diversity

We believe that working with a diverse supply chain brings more innovation and greater value to our business. While we have been committed to supplier diversity for many years, in 2015 we greatly strengthened that commitment with a new goal to increase our spending with diverse suppliers to \$1 billion by 2020.<sup>1</sup> To achieve this ambitious goal, we are increasing internal awareness, augmenting our diverse supplier outreach and engagement efforts, and continuing our collaborations with supplier diversity-focused organizations. For more details on our efforts and progress, see the [Diversity and Inclusion](#) section of this report.

### STRENGTHENING COMMITMENT

We are making progress toward our ambitious diverse supplier spending goals.



### Holding Suppliers Accountable

We use a variety of tools and processes to manage supplier performance to our expectations, including our Program to Accelerate Supplier Sustainability (PASS), our Supplier Report Card (SRC), assessments and audits, and targeted action plans.

**PASS.** This collaborative and proactive initiative is designed to help our suppliers build internal capacity around corporate responsibility through rigorous annual commitments to compliance, transparency, and capability-building.

Participating suppliers represented over 69% of Intel's supply chain spending in 2016. As of the end of 2016, 83% of participants had met all PASS requirements.

### PASS Participant Growth



The number of PASS participants has increased as we have broadened the program's scope to include more commodities.

## A RISK-BASED APPROACH TO SUPPLIER ASSESSMENTS

### New Supplier Assessment:

A short survey is sent to new suppliers to determine whether a facility is of potential high risk. We work with suppliers during the onboarding process to remedy any issues identified.

### Self-Assessment:

Strategic and high-risk suppliers complete a questionnaire to determine a facility's potential gaps to the EICC Code. In 2016, we assessed 277 supplier facilities.

### Audit:

Higher-risk suppliers must undergo either an on-site audit by qualified third-party auditors who use the [EICC Validated Assessment Process \(VAP\)](#), or an on-site audit by a qualified Intel auditor. The latter audits are specialized according to risk and compliance concerns for a particular supplier or facility. Lower-risk suppliers, as determined by the self-assessment, may also be audited at our determination.

<sup>1</sup>We recognize diverse suppliers as businesses that are 51% owned and operated by at least one of the following: minorities as defined by the country where the business was established; women; service-disabled veterans; persons who are lesbian, gay, bisexual, or transgender; or persons with a disability. Within the U.S., we also recognize suppliers that are owned and operated by veterans (including service-disabled veterans), Small Disadvantaged Enterprise, HUB Zone, and 8A categories, and are certified small as defined by the U.S. Small Business Administration.

## SUPPLIER FACILITIES COVERED BY VALID AUDITS

Cumulative Supplier Sites Receiving an Audit

2012  
**94**

2013  
**186**

2014  
**268**

2015  
**332**

2016  
**390**

### GOAL

#### Accelerate Supplier Sustainability:

Ensure that 90% of suppliers participating in our Program to Accelerate Supplier Sustainability (PASS) meet advanced expectations in ethics, environmental performance, and labor practices by end of 2017.

**Our Progress:** New

### GOAL

#### Supplier Requirements and Audits:

Complete or review an on-site audit for each of our Top 75 suppliers by the end of 2016.

**Our Progress:** Achieved

Total Audits Conducted	2012	2013	2014	2015	2016
EICC VAP Audits	31	36	25	63	57
Other Audits	70	97	104	58	93
<b>Total Audits</b>	<b>101</b>	<b>133</b>	<b>129</b>	<b>121</b>	<b>150</b>

Our supplier audits are based on EICC Code of Conduct requirements for third-party audits and internal criteria defined by Intel management. In certain circumstances, the same facility may be audited multiple times in a calendar year. We treat each individual audit for a single facility as unique in the above table.

Priority/Major Findings by Category for all Audit Types	2012	2013	2014	2015	2016
Environmental	15	38	38	27	35
Ethics	47	33	20	7	7
Labor	68	128	185	136	207
Management Systems	86	91	40	32	60
OHS	53	120	142	125	95
<b>Total Findings</b>	<b>269</b>	<b>410</b>	<b>425</b>	<b>327</b>	<b>404</b>

The largest number of priority and major findings continue to be in the categories of Labor, and Occupational Health and Safety (OHS). Findings in the Labor category increased in 2016 as we added more focus on identifying potential risk factors for forced and bonded labor.

**Supplier Report Card (SRC).** The SRC helps us grade suppliers for product availability, cost, quality, sustainability (ethics, financial sustainability, supplier diversity, and environmental and human rights performance), technology, and customer satisfaction.

**Assessments and Audits.** Supplier assessments and audits cover more than 300 environmental, safety, and human rights factors, and help us determine a supplier's risk profile. The audits, conducted by a mix of third parties and Intel personnel, follow the [Validated Assessment Process](#) and help us identify compliance gaps where immediate action is needed, and where longer-term, corrective "targeted action plans" should be put in place. Environmental, social, and governance criteria are also incorporated into Intel Quality Assessment audits to drive closer integration with other supplier management processes and achieve broader reach. We audit 100% of high-risk supplier sites, and in 2016, we began to conduct unannounced audits.

**Targeted Action Plans.** When suppliers do not make sufficient progress to address audit findings, we require that they develop and obtain Intel's approval on "get-well action plans." Our goal is to work with suppliers until all findings are satisfactorily resolved. Suppliers' progress is reviewed quarterly, and they are removed from the list only after we have verified that all significant issues have been closed, and business practices and processes have been put in place to prevent the recurrence of these issues. If satisfactory progress is not made, we are prepared to take additional action, such as not awarding new business ("conditional use" status) until issues are resolved, or ending the supplier relationship. Complete closure of all issues can take several years, and many of our suppliers have made substantial progress in addressing identified issues.



Percentage of high-risk supplier sites that we audit

Top Sub-categories of Priority/Major 2016 Audit Findings	EICC Code Element	% of 2016 Audit Findings
Freely Chosen Employment	A1	26%
Working Hours	A3	16%
Emergency Preparedness	B2	10%
Occupational Safety	B1	5%
Hazardous Substances	C3	5%
Wages and Benefits	A4	4%
Supplier Responsibility	E12	4%
Food, Sanitation, and Housing	B7	3%
Legal and Customer Requirements	E3	2%
Freedom of Association	A7	2%

These 10 sub-categories accounted for 77% of all priority and major audit findings in 2016.

To help suppliers on the targeted action plan list make progress, we engage with them in multiple ways. Our actions may include conducting additional audits and reviews, providing Intel-funded consultation for supplier senior management, and increasing the frequency of contact between Intel executives and supplier senior management. Throughout 2016, 14 suppliers were on targeted action plans. By the end of the year, 12 had made significant progress toward closing all compliance items.

### 2016 Supplier Targeted Action Plan Summary

Supplier	Area of Concern	Status
Lotes <sup>1</sup>	Occupational Health and Safety; Management Systems	On track
Amphenol/AFCI	Labor	On track

FCI renamed AFCI after 2016 Amphenol acquisition. Both companies were on Targeted Action Plans in 2016.

<sup>1</sup>Supplier under conditional use.

**Supplier Safety Performance.** Intel sets high safety training and performance expectations with our suppliers during our contracting process, including specific new contractor orientation for new suppliers. In line with our commitment to transparency and focus on the critical importance of safety, we are expanding our safety reporting to include information regarding any onsite supplier fatalities that may have occurred during the year. In 2016, a worker of one of our independent construction contractors was fatally injured while moving a large piece of equipment in our Dalian, China facility. We completed a full investigation and determined several contributing factors to this tragedy. Applicable procedures and practices have been updated and globally implemented by our construction contractors across our sites to mitigate future risk.

## Recognizing and Rewarding Performance

We provide regular feedback to suppliers on their achievements and progress, and integrate corporate responsibility considerations into our supplier awards and Supplier Continuous Quality Improvement (SCQI) Program. The SCQI Program recognizes suppliers that have demonstrated outstanding performance with either SCQI, Preferred Quality Supplier (PQS) status, or the Supplier Achievement Award. To be eligible for the awards, suppliers must meet PASS requirements related to overall sustainability compliance, transparency, and capability-building, as well as cost, quality, availability, delivery, and technology.

For more information about the awards and a list of recent SCQI and PQS winners, visit our [SCQI Program](#) page.



## 2016 AWARDS

# 26 SUPPLIERS EARN THREE LEVELS OF RECOGNITION

- Nine companies received the SCQI, Intel's most distinguished supplier recognition
- 16 companies earned the PQS award, for exceptional performance and continuous pursuit of excellence
- One company received the Supplier Achievement Award, for extraordinary results in sustainability

[READ MORE about the winners](#)

# COMBATING FORCED AND BONDED LABOR

It has many names, from modern day slavery to human trafficking, but we have worked to build a strong system to detect and address risks of forced and bonded labor in our top-tier suppliers and their labor agents. Our [Anti-Slavery and Human Trafficking Statement](#) details the set of expectations we have for ourselves and our suppliers, including no holding of worker passports and no fees charged to workers to obtain or keep their employment. Since 2014, \$3.5 million in fees have been returned to workers by suppliers in our supply chain through our requirement that suppliers not charge workers for their employment.

As we have learned more about the triggers for forced and bonded labor, we have targeted our assessments to align with likely risks. Our focus on risk triggers brought issues to light for both Intel and our affected suppliers. As a result, in 2016 we identified 116 priority and major violations of our expectations among 35 suppliers. Serious issues included excessive fees, passport holding, substandard living conditions, and contract substitution. We are working with suppliers to remedy those violations. Our goal is to ensure that suppliers are operating in a way that minimizes or eliminates the possibility of a vulnerable worker being in a forced and bonded labor situation.



## Supplier Violations Related to Risks for Forced and Bonded Labor

Violations to Expectations	Total Violations	Closed	On Track	Overdue
2012	15	15	0	0
2013	25	25	0	0
2014	52	45	0	7
2015	23	20	0	3
2016	116	73	17	26

We are proactively working to identify and work with suppliers to close findings that we believe are trigger factors for forced and bonded labor.

We believe that collaboration is key to addressing this broad and long-standing issue. In late 2016, Intel co-hosted workshops with Dell, Google, Hewlett Packard Enterprise, Marvell, and NVidia in Singapore, Taiwan, and Malaysia. Seventy-five suppliers who use foreign workers attended the workshops, which covered slavery and human trafficking, awareness and empathy building, expectation setting, best practice sharing, and action plan development.

In 2016 we presented at six webinars and external conferences to share our work and lessons learned. These forums included procurement and sustainability professionals who shared best practices for combating slavery and human trafficking in supply chains.

We recognize that many challenges exist in combating this issue. One challenge in particular is visibility into the multi-tier supply chain; another is tracing the multiple levels of labor agents who source workers. In 2017, we are requiring a number of key suppliers to map out the journeys of their foreign workers, assess those journeys for risks, and then develop action plans to mitigate any significant risks.

Refer to the [“Respecting Human Rights”](#) content within the Our Business section of this report for additional information.

# SUPPLIER ENVIRONMENTAL IMPACT

We partner with our suppliers to manage their environmental impact, which reduces our own environmental impact, lowers supply chain risk, and can reduce costs. We focus our primary efforts on lowering waste and greenhouse gas emissions associated with transportation, and include an environmental metric as part of the PASS requirements. We have a long history of publicly reporting our environmental impact and of working to assess the climate and water impact of our supply chain. We encourage our suppliers to also be transparent—including requesting that our top suppliers publish their own corporate responsibility reports.

## Reducing Waste

Our procurement and event marketing teams work with our suppliers to reduce the environmental impact of Intel events, including conferences, trade shows, and meetings. Step-by-step planning guides, training webinars, and mentorship support are available to help event planners contribute to Intel's sustainability goals.

## Our Long-Term Vision



**100%** sustainable packaging

We also work with our logistics and packaging suppliers to drive changes in the materials that we use to ship products between Intel sites and to our customers. Our long-term vision is to achieve 100% sustainable packaging for all inbound, outbound, and return shipments.

## Reducing Greenhouse Gas Emissions

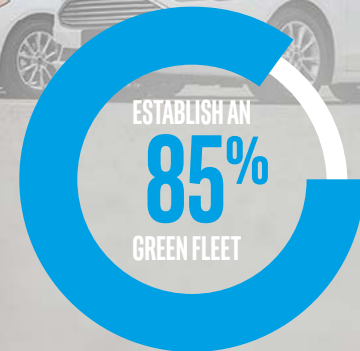
We reduce the greenhouse gas emissions related to our transportation and logistics network by using suppliers with more efficient fleets, optimizing packaging to reduce shipments or lower shipping weight, and increasing local sourcing. We also collaborate with organizations such as the [Global Logistics Emissions Council](#) to drive change through the transportation and logistics industry.

## GOAL

**Green Transportation:** Establish an 85% "green" Intel ground transportation fleet by 2016.

**Our Progress:** Ongoing

**Commentary:** Intel ended 2016 with 73% of ground transportation meeting our definition of "green" standards. We fell short of goal in hybrid use and MPG efficiency, with overall hybrid use up but short of goal, and higher MPG vehicles driven declining. Our "green" ground transportation goal will remain at 85%, with additional focus on driving the supply base to promote use of hybrids and higher MPG vehicles, and increasing awareness within the Intel population.



In 2016, we requested that 94 of our top-tier suppliers participate in the CDP Supply Chain survey and submit baseline data on their own carbon footprint. Using an existing global standard maximized the reporting benefit to Intel and our suppliers, while minimizing the reporting burden placed on suppliers who are responding to multiple customers. Read about our approach and results in the CDP report, "[The Missing link: Harnessing the power of purchasing for a sustainable future.](#)" We achieved a Leadership (A-) score for CDP's inaugural Supplier Engagement Rating. In 2017, we will expand our initiative and survey select suppliers on their water management efforts.



We achieved 96% response rate among our suppliers on the CDP climate change questionnaire

# RESPONSIBLE MINERAL SOURCING

Like many companies in the electronics industry, we use tin, tantalum, tungsten, and gold (3TG) in our manufacturing processes, or have suppliers who do so. These metals, also known as “conflict minerals<sup>1</sup>,” could be sourced within the Democratic Republic of the Congo (DRC) or adjoining countries from mines under the control of armed groups who exploit mine workers to fund violence, genocide, and other crimes against humanity.

Intel's goals are to support responsible mineral sourcing from the region and avoid directly or indirectly financing or benefiting armed groups in the DRC or adjoining countries. We have manufactured microprocessors that are conflict-free<sup>2</sup> since 2013.

## Driving Accountability in the Supply Chain

Since 2008, we have worked extensively to develop responsible 3TG sourcing options for Intel and our industry. Our leadership and participation in responsible sourcing initiatives such as the Conflict-Free Sourcing Initiative (CFSI) and the European Partnership on Responsible Minerals (EPRM) allow us to regularly collaborate with other companies, industries, governments, and civil society to address this serious issue. In addition, we believe that legislation, including the U.S. Securities and Exchange Commission conflict mineral disclosure requirements and the European Union's conflict minerals regulation, has been helpful in bringing others to the table and maintaining broad momentum on this issue.

## Due Diligence and Transparency

Our due diligence program focuses our efforts in two primary areas:

- **Identification.** Each year we conduct a supply chain survey and request identification of the smelters or refiners who process the metal contained in the products supplied to Intel.
- **Validation.** We compare the smelters and refiners identified by survey to the list of facilities that have received a “conflict-free” designation from the Conflict Free Smelter Program (CFSP) and other independent third-party audit programs.

We conduct due diligence on smelters and refiners who are not active in an audit program, with the goals of validating that products are conflict-free and encouraging and helping smelters and refiners to participate in an audit program to validate their sourcing practices. Since 2009, we have visited 107 smelters and refiners in 23 countries.

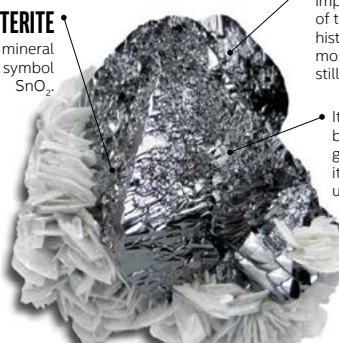
## Supporting In-Region Sourcing

To enable responsible in-region minerals trade from the DRC and adjoining countries, we support programs such as the International Tin Research Institute's Tin Supply Chain Initiative (iTSCi), the Better Sourcing Program (BSP), and the U.S. Department of State and U.S. Agency for International Development Public-Private Alliance for Responsible Minerals Trade (PPA). These programs help enable responsibly sourced minerals from the DRC and adjoining countries by assisting in the creation and implementation of due diligence programs consistent with the Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals From Conflict-Affected and High-Risk Areas.

<sup>1</sup> “Conflict minerals,” as defined by the U.S. Securities and Exchange Commission (SEC), is a broad term that means tin, tantalum, tungsten, and gold, regardless of whether these minerals finance conflict in the Democratic Republic of the Congo (DRC) or adjoining countries.

<sup>2</sup> “Conflict-free” refers to products, suppliers, supply chains, smelters, and refiners that, based on our due diligence, do not contain or source tantalum, tin, tungsten, or gold that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or adjoining countries.

### FROM THIS



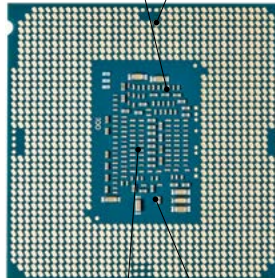
**CASSITERITE**  
Tin oxide mineral with the symbol SnO<sub>2</sub>.

It has been the most important source of tin throughout history, and is where most of today's tin still comes from.

It can also be used as a gemstone, with its beautiful and unique crystals.

50 <b>Sn</b> Tin	73 <b>Ta</b> Tantalum	74 <b>W</b> Tungsten	79 <b>Au</b> Gold
------------------------	-----------------------------	----------------------------	-------------------------

### TO THIS



**TIN**  
Often used as a replacement for lead in printed circuit boards and processors, and used to solder pieces together within devices.

**GOLD**  
Pins in processors are often made of gold, because it's conductive but not corrosive.

**TANTALUM**  
The key ingredient in tantalum capacitors, which can be used in devices that require high performance in a small amount of space, like laptops.

**TUNGSTEN**  
Because of its chemical properties, it's used to conduct electricity in integrated circuits and metallic films.



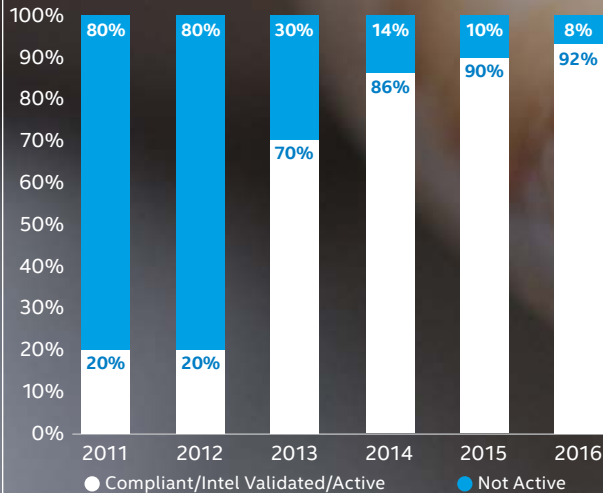
## GOAL

**Conflict Minerals<sup>1</sup>:** Validate our broader product base as conflict-free<sup>2</sup> in 2016.

**Our Progress:** Ongoing

**Commentary:** Thus far, 263 of the smelters and refiners in our supply chain, approximately 92%, have either received a conflict-free designation from an independent third party audit program, begun participating in such a program, or through our own due diligence been determined to be conflict-free (see chart below). We have made substantial progress towards the goal to validate our broader product base and will continue our pursuit of conflict-free supply-chains as we enter new markets and acquire new companies. Changing conditions deep in our supply chain and other potential risks involved in the mining and trade of minerals beyond conflict in the DRC will require ongoing vigilance. These changing conditions call for us to adopt a more comprehensive view beyond simply conflict-free products. We will continue our work to establish responsibly sourced mineral supply chains for our company as well as our industry.

### Smelters and Refiners Compliance Summary



## Pursuit of Responsible Mineral Sourcing

From the time we became aware of the link between 3TG mineral extraction and conflict in the DRC, we have responded with urgency and resolve. We have made good progress toward validating that these minerals are responsibly sourced, and believe that our activities improve the lives of the people who mine these minerals in the DRC. We also recognize that other potential social and environmental risks are involved in the mining and trade of minerals beyond conflict in the DRC. We have signed a [Declaration of Support](#) to the Responsible Raw Materials Initiative to show our continuing commitment toward advancing the responsible sourcing of minerals more globally for Intel and our industry.

More information is available on our [website](#).



<sup>1</sup> "Conflict minerals," as defined by the U.S. Securities and Exchange Commission (SEC), is a broad term that means tin, tantalum, tungsten, and gold, regardless of whether these minerals finance conflict in the Democratic Republic of the Congo (DRC) or adjoining countries.

<sup>2</sup> "Conflict-free" refers to products, suppliers, supply chains, smelters, and refiners that, based on our due diligence, do not contain or source tantalum, tin, tungsten, or gold that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or adjoining countries.



# EMBRACING

# DIVERSITY AND INCLUSION



# DIVERSITY AND INCLUSION



“Our future success depends on full representation of perspectives and creative influences. Intel is committed to fostering a culture where our employees can bring their full experiences to their work; this is how we achieve innovation and how we drive our business forward.”

—BARBARA WHYE, Vice President of Human Resources and Chief Diversity and Inclusion Officer

## GLOBAL IMPACT

### Workforce Diversity

Compared to overall private industry, the high-tech sector employed a smaller share of African Americans (14.4% compared to 7.4%), Hispanics (13.9% compared to 8%), and women (48% compared to 36%).<sup>1</sup>

### Diversity in Our Industry

**650K** NEW JOBS will be created by tech companies by 2018,<sup>2</sup> and available talent does not reflect U.S. demographics.

### Supplier Diversity

Women and underrepresented minority (URM) small-business owners are turned down for loans more often, and when they do get loans, they tend to be offered higher interest rates.<sup>3</sup>



## OUR APPROACH

### Workforce Diversity

We set a bold goal in 2015 to be the first high-tech company to reach full representation<sup>4</sup> of women and URMs in our workforce by 2020. We committed \$300 million to support this goal and accelerate diversity and inclusion both at Intel and across the technology industry.

**\$300M**  
COMMITMENT

### Diversity in Our Industry

We've invested across the value chain to improve the high-tech talent pathway, increase spending with diverse suppliers, diversify our innovative venture portfolio, and convene the industry to address shared challenges.



### Supplier Diversity

Intel believes that working with a diverse supply chain brings innovation and greater value to our business. By 2020, our goal is to spend \$1 billion with diverse-owned businesses—reflecting a meaningful increase of inclusion within our supply chain.

**\$1B**  
GOAL BY 2020

## 2016 PROGRESS

### Workforce Diversity

**45.1%** of our 2016 hires were diverse, **EXCEEDING OUR DIVERSE HIRING GOAL**

### Diversity in Our Industry

**\$25M** INVESTED in nine technology career pathway programs.

### Supplier Diversity

In 2016, we spent \$555 million in diverse-owned suppliers, surpassing our goal of spending \$400 million.

**\$555M**  
**\$400M**

## 2016 HIGHLIGHTS

**HACK HARASSMENT**

In 2016, we helped combat online harassment by bringing the Hack Harassment pledge to more than 90 hackathons and colleges.



The \$125 million Intel Capital Diversity Fund is the largest diversity-focused fund in the venture capital industry.



41% of our vice presidents appointed in January 2017 were women or URMs.

<sup>1</sup> U.S. Equal Employment Opportunity Commission, “Diversity in High Tech”.

<sup>2</sup> Wired, “5 Numbers That Explain Why STEM Diversity Matters to All of Us”.

<sup>3</sup> Townsquared, “Access to Capital: Challenge for Women and Minority Business Owners”.

<sup>4</sup> Full representation is the point at which Intel's workforce in the U.S. matches the supply of skilled talent available (market availability) for current roles at Intel.

We're far from done, we'll continue to share our progress at [www.intel.com/diversity](http://www.intel.com/diversity)

# STRATEGY AND MANAGEMENT APPROACH

Intel is evolving, and diversity and inclusion are among the most important forces driving that evolution and reinvention. Our commitment to diversity comes from our conviction that reaching a critical mass of women and underrepresented minorities (URMs) in our workforce brings benefits that extend from our business to the tech industry and the wider communities in which we operate. Inclusion means that all employees can bring their full experiences to work, offer their true and unguarded perspectives, and find a welcoming and inviting workplace. In our experience, true change comes from both diversity and inclusion.



## Walls

A key finding for us on our journey has been that retaining our diverse talent is equally or even more important than hiring, and represents a key obstacle that we must overcome to achieve full representation. We introduced two initiatives in 2016 to better support retention: a support service for U.S.-based employees offering career guidance, called WarmLine, and an internal multicultural retention and progression study to enable us to better understand the needs of our population.

## Industry

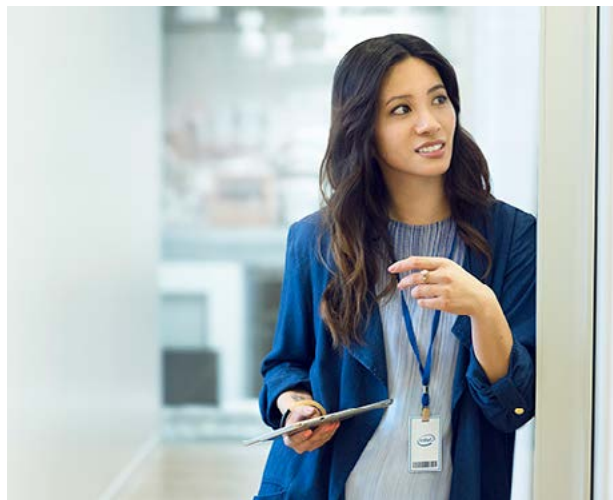
Through our actions and values, we strive to be a powerful role model in our communities and around the world. Our far-reaching diversity and inclusion efforts include Intel Capital Diversity Fund investments in start-ups led by women and URMs. Further, we believe that creating an inclusive supply chain is an important way to extend our diversity efforts to the global communities in which we operate.

## Communities

To ensure Intel's workforce reflects the demographics of our world, we're building pathways for women and URMs to enter and succeed in engineering and computer science careers. In 2016, we invested in transformative education initiatives, scholarships, and internship opportunities that offer real-world experience and technical skills. We're already seeing positive impact on our hiring projections.

## IN THIS SECTION

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Building Pathways into the Technology Industry	p70



# DIVERSITY AND INCLUSION

## Governance and Management



The scope of Intel's diversity and inclusion efforts spans the entire value chain. We demonstrate our commitment through stated goals, strategic investments, alliances, and research-based programs. Read more on our [Report Builder](#) website.

## Looking Ahead

Moving into 2017, we will continue our focus on reaching our challenging hiring, retention, and progression goals to improve the representation of URMs and women in our U.S. workforce. Once again, we will tie a portion of employees' pay to goals related to the hiring and retention of women and URMs.

Additionally, we will continue to foster a culture of inclusion. In 2017 our focus will be on the continuous improvement of our manager capability. We expect 100% of our managers to complete manager capability training this year. In addition, we will provide more support to managers in the areas of building and leading diverse and/or inclusive teams, as well as the retention and progression of our women of color.

# INTEL'S DIVERSITY STRATEGY

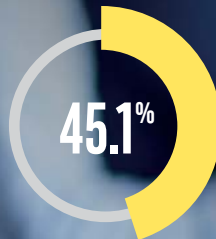
Achieve full workforce representation through focused hiring and retention



## PROGRESS TOWARD OUR GOALS

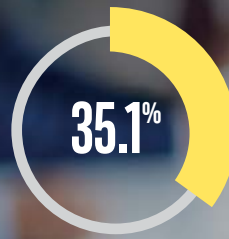
### DIVERSE HIRING

We exceeded our 2016 hiring target, and have committed to surpass this percentage in 2017



### FEMALE NEW HIRES IN 2016

In the U.S., overall representation of women at Intel has risen 2.3 points since 2014



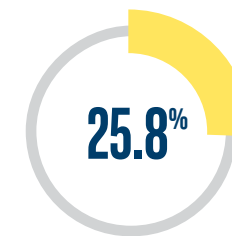
### Achieving Results

In early 2015, we set an ambitious goal to be the first high-tech company to reach full representation of women and URMs in our U.S. workforce by 2020. We committed \$300 million to support this goal and accelerate diversity and inclusion both at Intel and across the technology industry. We achieved strong results toward this goal throughout the year.

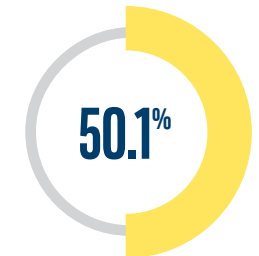
Meeting our diversity hiring and retention goals in 2016 demanded rigorous dedication. We focused on three key areas to continue driving progress toward our goals:

- We continued our work to foster a culture and environment of inclusion at Intel. As we learned through our multicultural retention and progression study, we need to make Intel a place where every employee feels respected, heard, and connected to the broader Intel community, with a particular focus on the experiences of our employees of color.
- We also continued our rigor and focus on retention and progression. We gathered data from our Warm-Line and retention case management system to design targeted and holistic retention strategies.
- Finally, we took an intentional approach to engage our male majority population. We know that we cannot drive change at the scale we need without engaging our larger population of allies in this work.

### WOMEN IN OUR WORKFORCE



U.S. and global



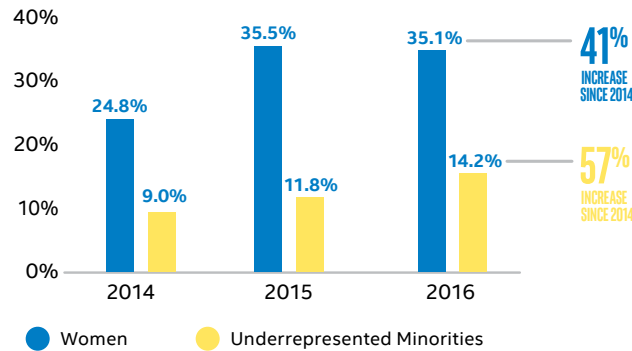
Global, non-technical only

Each of these charts represents the tangible results of our efforts to achieve real change and inclusion. However, there is still much work to be done to achieve our 2020 goal of full representation. Namely, our focus remains on increasing the number of URMs through hiring, progression, and retention strategies. Representation of URMs in Intel's U.S. workforce has increased only slightly from 2014 through 2016, leaving room for improvement in 2017 and informing our focus over the next three years.

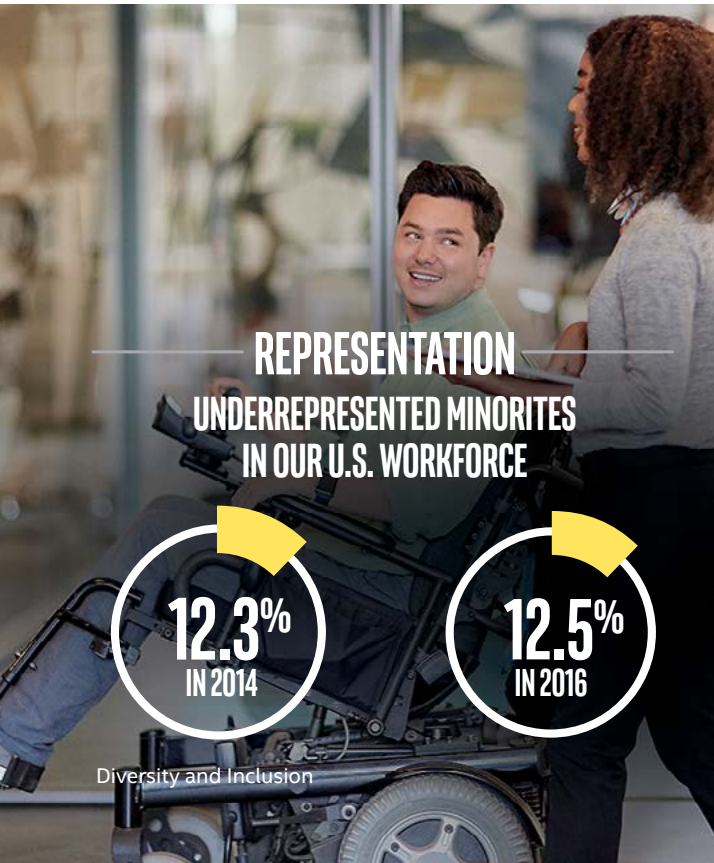
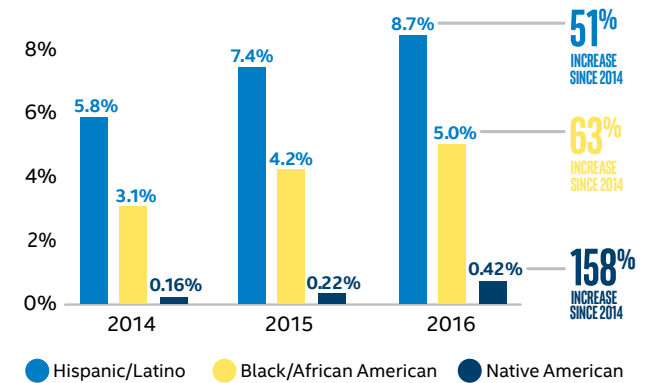
We will continue to share our challenges and successes as we make progress on our journey toward a more diverse and inclusive workforce and industry in 2017.

Access our workforce data in the [2016 Diversity and Inclusion Annual Report Addendum](#) on our [Report Builder](#) website.

### YEAR-OVER-YEAR U.S. HIRING RATE: WOMEN, URMS



### YEAR-OVER-YEAR U.S. HIRING RATE: ETHNICITY



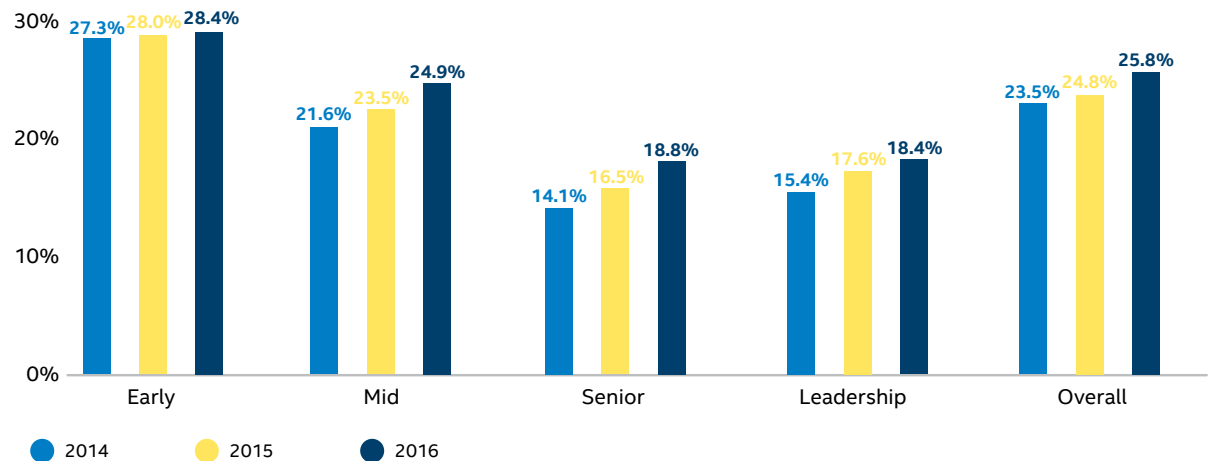
### REPRESENTATION UNDERREPRESENTED MINORITIES IN OUR U.S. WORKFORCE

12.3% IN 2014

12.5% IN 2016

Diversity and Inclusion

### U.S. REPRESENTATION OF WOMEN ACROSS CAREER LEVELS





# OUR WORKFORCE AND CULTURE: INCLUSION AND EQUITY

In 2016, we renewed our dedication to inclusive hiring practices with the introduction of innovative, research-based programs. These programs include practices that support behaviors aimed at building an inclusive work environment. We created forums so that employees feel free to voice a diverse set of perspectives, discuss tough issues, and share their experiences. And recognizing that equity and fairness contribute to making Intel an inclusive workplace, we continually monitor both promotion and pay equity for females and URM employees.

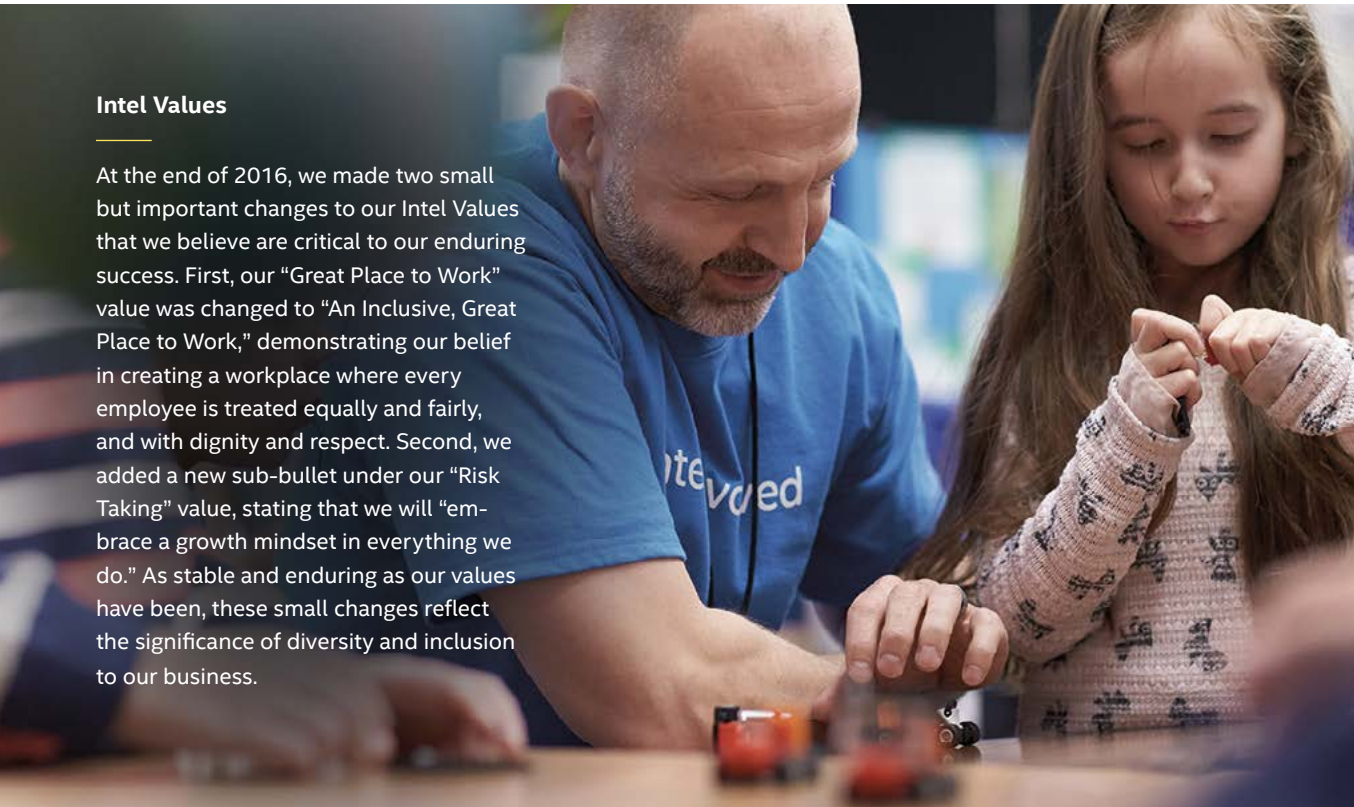
## Intern Programs Advance Diversity

Across Intel, intern programs have proven to be one of the best hiring channels for college graduates, especially for entry-level positions. On average, our employees who interned at Intel outperform their peers and have higher retention rates throughout their careers, particularly among diverse hires.

By increasing investments in our scholarship programs, guaranteeing internships, and converting successful interns into full-time employees upon graduation, we help ensure that we retain great talent.

## Intel Values

At the end of 2016, we made two small but important changes to our Intel Values that we believe are critical to our enduring success. First, our "Great Place to Work" value was changed to "An Inclusive, Great Place to Work," demonstrating our belief in creating a workplace where every employee is treated equally and fairly, and with dignity and respect. Second, we added a new sub-bullet under our "Risk Taking" value, stating that we will "embrace a growth mindset in everything we do." As stable and enduring as our values have been, these small changes reflect the significance of diversity and inclusion to our business.



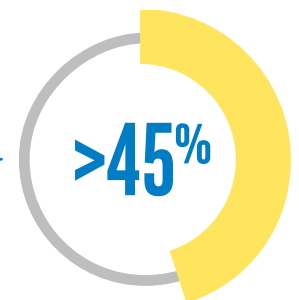
## Bringing Communities Together to Foster Inclusion

Throughout the year, our 30 Employee Resource Groups, open to all employees, support our diversity and inclusion strategy. Organized around race, national origin, religious beliefs, gender, sexual orientation, gender identity, and other common affinities, these groups build an environment of inclusion and enthusiasm for Intel as a great place to work.

The first-of-its-kind **Intel I<sup>3</sup> Leadership Symposium**, held in June 2016, focused on leadership development, business acumen, networking, and advancement. The event was designed to drive inclusion, and delivered an impactful experience for senior Intel women, senior URM employees, majority male allies, and more than 68 leaders of Intel Employee Resource Groups. The symposium's goals included:

- Inspiring and activating our leaders on Intel's growth and future direction.
- Building and strengthening professional networks and sponsorship relationships.
- Increasing understanding of business imperatives to drive leaders' progression and advancement.

PORTION OF 2016  
INTEL INTERNS WHO WERE  
FEMALE AND/OR URMS



## EMPLOYEE RESOURCE GROUPS

- [Agnostic and Atheists of Intel](#)
- [American Veterans at Intel](#)
- [Arab Intel Community](#)
- [Asian Cultural Integration](#)
- [Intel Bangladesh Association](#)
- [Intel Bible-Based Christian Network](#)
- [Intel Chinese Employee Network](#)
- [Intel Diverse Abilities Network](#)
- [Intel Filipino Employee Network](#)
- [Intel Gay, Lesbian, Bisexual, or Transgender Employees](#)
- [Intel India Employee Group](#)
- [Intel Iranian Employee Group](#)
- [Intel Doctorates Leadership Forum](#)
- [Intel Jewish Community](#)
- [Intel Korean Community](#)

# OUR WORKFORCE AND CULTURE

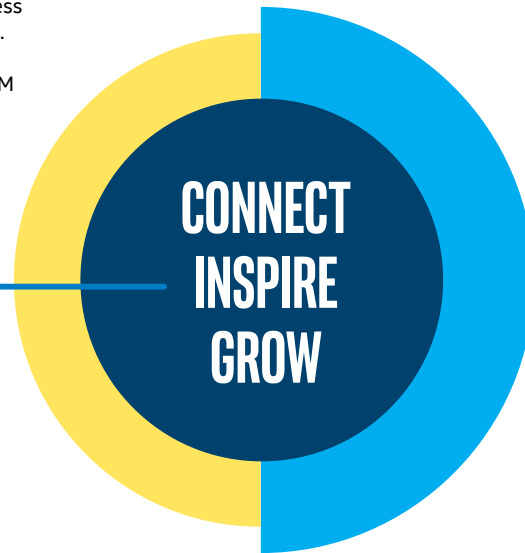
### Rapid Orientation for Accelerated Results (ROAR)

This program for senior-level employees new to Intel helps leaders build broad networks and learn about Intel's growth strategies, culture, business groups, and technologies. With a priority focus on technical women and URM men, ROAR includes a six-month program that connects new leaders with mentors from Intel's senior ranks.

### ONBOARD

#### 1st Year Touchpoint

This program connects newly hired African American and Hispanic employees with more experienced peers, providing new employees with resources and assisting them in creating their Intel network.



### Employee Resources Groups

These groups can serve as a powerful network, offering opportunities for personal and professional development, access to mentors, and volunteer activities that facilitate teamwork and build camaraderie.

### Leadership Councils

The Intel American Veterans Leadership Council, Black Leadership Council, Hispanic Leadership Council, Native American and Pacific Islander Leadership Council, Network of Executive Women, and Out & Ally Leadership Council host sponsorship programs to help advance leaders within their respective communities. Council members include the senior-most employees and allies for the various populations. They serve as leadership role models and champions for Intel's diversity and inclusion initiatives. Their overall mission is to promote the progression and growth of diverse employees at Intel and foster an inclusive culture where all employees can thrive professionally.

### Mentoring Circles

This "Lean-in circle," mentoring-based program involves the Intel Hispanic Leadership Council, Intel Black Leadership Council, Intel Native American Pacific Islander Leadership Council, and Intel Network of Executive Women. The program connects groups of 7-10 senior-level employees with one Leadership Council representative who provides group mentorship.

## EMPLOYEE RESOURCE GROUPS

- [Intel Latino Network](#)
- [Intel Muslim Employee Group](#)
- [Intel Native American Network](#)
- [Intel Pakistani Employee Group](#)
- [Intel Parents' Network](#)
- [Intel Russian Speaking Employee Group](#)
- [Intel Sikh Employee Group](#)
- [Intel Vietnamese Group](#)
- [Network of Intel African American Employees](#)
- [Next\(gen\) Professionals Network](#)
- [Turkish Employee Network at Intel](#)
- [Women at Intel Network](#)
- [Intel Eastern European Balkanika Group](#)
- [Intel Nepalese Group](#)
- [Intel Taiwan Network](#)

# 13,938

Number of hours Employee Resource Groups volunteered in 2016 in local communities



## Our Workforce and Culture: Retention

Retaining key talent is vital to a strong and high-performing work culture. We introduced two key initiatives in 2016 to better address retention and to help inform our actions in 2017 and beyond:

- **WarmLine**, launched in spring 2016, provides a support channel for U.S. employees to explore different options with a personal adviser before they consider leaving the company. Choosing to leave a company is an individual decision. We believe that offering tailored and customized support and guidance to address employees' concerns and issues helps us retain great talent.

- We undertook Intel's largest-ever study of retention and progression for our multicultural employees. This study surveyed more than 15,000 employees, using quantitative analysis and qualitative interviews. It gave us a thorough look into challenges that our employees of color face, and helped inform actions for improvement that we have since put into action.

In 2017, we are incorporating data and learnings from our multicultural retention and progression study and the WarmLine into playbooks aimed at improving diverse representation and inclusion within each of our business units. Our aim is to engage business leaders and managers in diversity and inclusion efforts more directly so that we can collectively work toward meeting hiring, retention, and progression goals.

## Pay and Promotion Equity for Females and URMs

We pay close attention to pay and promotions, and work to ensure that promotions are distributed fairly and equitably between diverse and non-diverse populations. We view promotions and pay equity as signals of the overall health of our company, as well as a means of ensuring fairness for all employees. We continually monitor pay and promotion metrics.

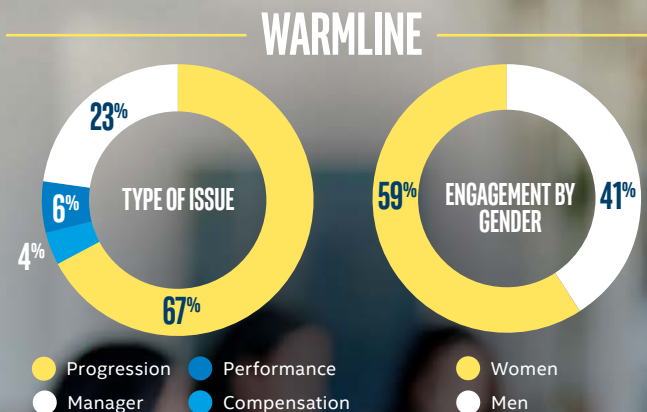
## Studying the Economic Impact of Diversity

The [Decoding Diversity report](#) commissioned by Intel presents the first-of-its-kind analysis of the economic impact of improving diversity in the technology sector. Based on diversity data from nearly 170 companies, the study shows correlations between more diverse tech company workforces and higher revenues, profits, and market value. We see this outcome as a tool that can be used to foster dialogue, discussion, and tactical strategies with key stakeholders, and hope it will lead to greater investment in strategies to improve diversity and inclusion in the technology industry.

## Progression and Leaps in Leadership

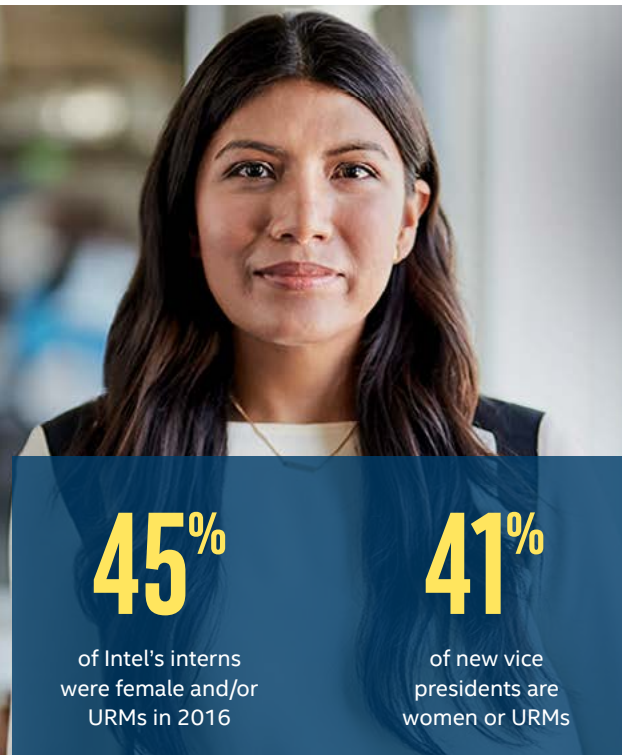
In January 2017, Intel named five women—one-third of this year's inductees—to the rank of Fellow, the highest level of technical leadership at Intel. Fellows participate in strategic technical planning, decision-making, and research and development activities and their application to Intel's technological initiatives.

At the same time, we made great strides in improving the diversity among our vice presidents. Of our recently appointed vice presidents in the U.S., 41% were women or URMs. We've seen positive trends in progression at all levels of the company, with improvements in diverse representation across early, middle, senior, and leadership levels for both gender and ethnicity.



**SINCE 2016 LAUNCH** **1,200** employees have used this service

[READ MORE intel.com/diversity](http://intel.com/diversity)



**45%** of Intel's interns were female and/or URMs in 2016

**41%** of new vice presidents are women or URMs

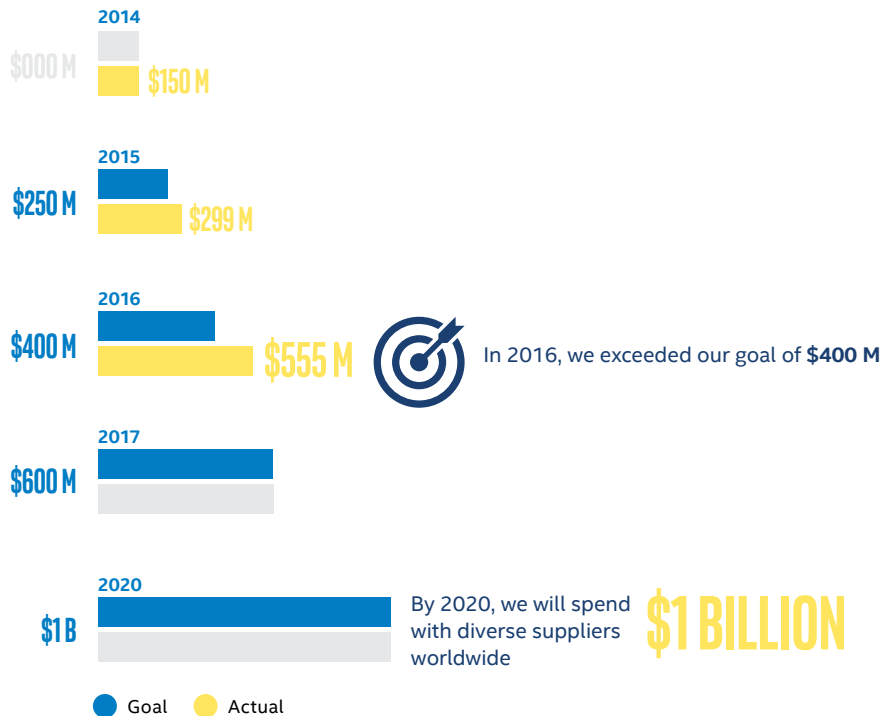
# SUPPLIER DIVERSITY AND INCLUSION

We believe that working with diverse-owned suppliers generates greater innovation within our global [supply chain](#). As such, we seek to generate more inclusive sourcing, as demonstrated by our goal to increase our annual spending with diverse-owned suppliers to \$1 billion by 2020. We also support our diverse suppliers by investing in their education and certification.

Intel's supplier diversity program started in 1998, and took a bold step forward when our CEO, Brian Krzanich, announced Intel's new diversity and inclusion goals in early 2015. At that time, we were spending \$150 million with diverse-owned suppliers. By the end of 2015, we had doubled that figure, and in 2016, we spent \$555 million with diverse suppliers.

## A MORE INCLUSIVE SUPPLY CHAIN

Year after year, we are making our global supply chain **more diverse and inclusive**



DIVERSE ABILITIES-OWNED



LESBIAN, GAY, BISEXUAL, TRANSGENDER-OWNED



WOMEN-OWNED



MINORITY-OWNED

DRIVING DIVERSITY THROUGH OUR SUPPLY CHAIN

51%

OWNED AND OPERATED BY...



U.S. VETERAN/SERVICE DISABLED-OWNED



Increase in the number of top-tier suppliers reporting their spending with diverse suppliers



We ask our top-tier suppliers to complete work for Intel with diverse-owned businesses



Countries with active supplier diversity programs where Intel operates

### Inclusion

Many of our largest suppliers are public companies (which cannot be classified as diverse due to the “owned and operated” diversity requirement) or private non-diverse businesses. Still, they are important to our program. Through several webinars in 2016, we asked them to begin assessing their own supply chains for diversity and inclusion. We also asked that they begin reporting diverse spending on the Intel Supplier Report Card (SRC) that we use to grade supplier performance. By the end of 2016, we had increased the number of top-tier suppliers reporting their spending with diverse suppliers by 31.

At the end 2016, we made diverse spending compulsory on the SRC, and our supply chain organization set a target for 2020 that 10% of each top-tier supplier’s spending for work on behalf of Intel will be with diverse-owned businesses.

One of the largest challenges we face in countries outside the U.S. is a lack of programs to certify that companies are diversely owned. By enlisting the support of in-country champions in our global procurement organization and working with governments and certifying organizations like [WEConnect International](#), we have established certification programs for businesses in 16 countries.

We also continue to work with our peers to increase diversity and inclusion across the high-tech and adjacent industries. We remain engaged with the [Technology Industry Group](#) for supplier diversity and continue to work with our industry peers to establish best practices, program benchmarking, and areas for collaboration.

### Opportunity

To connect with potential diverse suppliers, our procurement professionals attend conferences held by certifying bodies, such as the [National Gay and Lesbian Chamber of Commerce](#), [Women’s Business Enterprise National Council](#), [National Minority Supplier Development Council](#) (NMSDC), and [WEConnect International](#). Representatives



from Intel Capital, which has the largest diversity investment fund in the industry, also attend innovation sessions and competitions at select events.

Additionally, our executives and team members attend events where they speak about the importance and value of diversity and inclusion in the supply chain. Throughout 2016, we hosted 20 events in countries outside the U.S., focused on helping diverse entrepreneurs thrive. Experts from organizations across Intel, such as the Internet of Things Group, spoke about new technologies and trends.

To actively engage with national and global certification organizations, we also hold board seats with [WEConnect International](#) and [NMSDC](#). As board members, we collaborate with these organizations to support supplier diversity beyond the direct impact to Intel.

### Intel Included on the 2017 NBIC Best of the Best Corporations for Inclusion

“The Best-of-the-Best designation is the top corporate honor bestowed for commitments to America’s diverse employees and business owners...,” said NGLCC President Justin Nelson

### Spotlight on India

We first expanded our supplier diversity program to India in 2013. Women-owned businesses can now be certified in the country, and certification programs for other categories of diverse companies are being established.

In 2015, when Intel set its aggressive diversity and inclusion goals, we were spending \$4.3 million (U.S.) with suppliers in India certified or classified as diverse. The company set a goal to achieve \$10 million in spending with diverse suppliers in India by 2020. By the end of 2016, we had already surpassed that goal, with annual diverse spending of \$13 million in India.

This progression was due to a variety of strategies that included integrating diversity into the supplier selection process, sponsoring 10 classified diverse suppliers to become certified, and hosting four development workshops and several other procurement events specifically for women entrepreneurs.

The most notable achievement may have been the supplier diversity team's engagement with the Bangalore government to explain the value that women-owned businesses bring to industry. As a result, the government sponsored several women entrepreneurs to attend a business development program. In other parts of India, Intel sponsored women entrepreneurs to attend similar programs.

### Spotlight on Germany

Intel was the first company to launch a supplier diversity program in Germany. Intel's European supplier diversity team identified VdU, a local association for women businesses, and connected it with WEConnect International, which certifies women-owned businesses around the world. Working with these organizations and the government, Intel helped launch a comprehensive certification program in Germany in early 2017.

### Spotlight on South Africa

South Africa has legislated a government program to reverse the inequalities created by the apartheid era. Broad-Based Black Economic Empowerment (B-BBEE) gives disadvantaged groups of South African citizens privileges previously not available to them.

In the supply chain, we support the inclusion of disadvantaged/minority groups as part of our supplier diversity strategy, which helps us adhere to the government program as part of doing business in South Africa. Preferential procurement is one of the key elements of the program and carries a 20% weighting against a scorecard system that validates our inclusion of diverse-owned companies. We also receive bonus points for offering early payment terms that enable small, disadvantaged organizations to avoid carrying the burden of long-term debts on our behalf. These efforts have improved our B-BBEE rating in Procurement by increasing our score from 57% to over 98% in the past two years, thereby validating our support of diverse businesses while also improving Intel's own standing as a supplier to the government and other organizations in South Africa.

To enable greater impact, we led an advisory council with other multinationals committed to improving the inclusion of diverse groups. We hosted a round table event that brought 15 certified women-owned businesses together with representatives from other large corporations to discuss the challenges facing diverse businesses in South Africa. Insights gained from the event will inform the advisory council's efforts to remove barriers. We also engaged with WEConnect International to support its annual Solutions 4 Africa conference.

## INVESTING IN SUPPLIER DIVERSITY



We have significantly expanded our global supply chain diversity activities over the past four years.



# INVESTING IN A DIVERSE TECHNOLOGY ECOSYSTEM

The Intel Capital Diversity Fund is the world's largest venture capital fund focused on diverse entrepreneurs. The fund launched in 2015, with initial plans to invest \$125 million over five years in a broad spectrum of women- and minority-led companies.

In 2016, in accordance with our far-reaching diversity and inclusion goals, Intel Capital announced it would expand the Diversity Fund to also include start-ups led by people with disabilities, U.S. military veterans, and members of the LGBTQ community. Intel Capital President Wendell Brooks also announced the expectation that all members of his investment team bring forward diverse start-ups for investment consideration.

The fund helps ensure that diverse entrepreneurs enjoy access to the business development programs, global network, technology expertise, and brand capital that their talents deserve. The fund also enables Intel to chart a new approach to diversity in technology, expand the market for Intel® products and services, and help sustain the long-term strength of the U.S. economy.



Diversity and Inclusion

## Assisting Our Diverse Suppliers

We understand that many diverse-owned suppliers are small businesses that may face a demand for fast growth in order to supply a large corporation. To provide assistance, in 2016 we sponsored 11 diverse entrepreneurs from our supply chain to attend customized programs developed by certifying organizations and schools such as Northwestern University, the University of Washington, Dartmouth University's Tuck School of Business, and INSEAD. The programs are aimed at helping CEOs improve their risk management, long-term strategic planning, financial analysis, marketing, and more to achieve and sustain accelerated growth.

Certification validates that a diverse owner maintains a qualifying share of the company and has a prominent role in operations. We also know that certification is a new process in many countries. To help several of our existing suppliers who are diverse become certified, we covered their certification costs. Doing so helped their standing with other corporations who may ask them to provide certification, while ensuring data integrity for our supplier diversity program.

## DIVERSE-OWNED START-UP SPOTLIGHT

A few of the entrepreneurial ventures supported by the Intel Capital Diversity Fund:

### Two-Bit Circus

The motto of this experiential entertainment company is "Let's play!" Spectacular Two-Bit Circus productions combine inspired content with technology to engage, enrich, and entertain people with novel interactive games, virtual reality, and much more.

### Goldbely Inc.

This online marketplace connects curious eaters with some of America's greatest gourmet food purveyors. Customers can order the likes of blue crab pie, lobster mac and cheese, or pulled pork pierogis—all carefully packed and shipped to preserve freshness.

### CareCloud

CareCloud's flexible and powerful cloud-based software helps physicians maximize the efficiency and effectiveness of their medical practices. Products include apps for practice management, electronic health records, billing, revenue management, and patient communications.

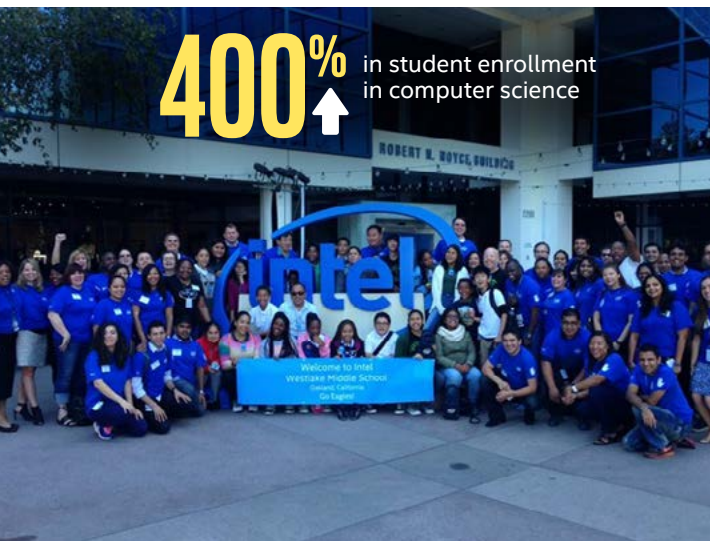
# BUILDING PATHWAYS INTO THE TECHNOLOGY INDUSTRY

Intel has long been committed to improving education and preparing youth for the jobs of tomorrow. Read the [Social Impact](#) section of this report to learn more about how we are equipping young people with the skills they need to become creators of technology in our increasingly smart, connected world.

## Oakland Schools Partnership Yields Impressive Results

In 2015, Intel announced plans to invest \$5 million over five years in the Oakland Unified School District to implement a comprehensive, education transformation solution that will create a computer science and engineering pathway for more than 2,400 students. Results to date in the district have included:

- A 400% increase in student enrollment in computer science.
- An increase from 14% to 100% in the percentage of teachers at two sponsored Oakland schools who believe their students have a future at Intel and in the tech industry.
- A jump from 33 to 361 in the number of students in the district who took an Advanced Placement computer science course.



## Expanding Access to STEM for Native American Students

Intel has committed \$1.32 million to the American Indian Science and Engineering Society's (AISES) "Growing the Legacy" scholarship program for Native American undergraduate and graduate students. Intel and AISES are also collaborating on a culturally relevant computer science curriculum for Native American high school students.

“When we have these conversations with the people who are leading the industry, it is so exciting. ...The opportunities are boundless.”

—JACQUELINE PATA, Executive Director of National Congress of American Indians

## Intel Scholars Internship Program

This program gives students an immersive experience and opportunities to contribute to valuable work assignments at an Intel campus. In the summer of 2016, a variety of Intel business units hosted more than 55 students with the goal of helping to prepare them for hire and full-time employment at Intel. These scholars brought a wealth of knowledge, and came to us as a result of diversity in technology investments we've made with partners such as the National GEM Consortium, Georgia Institute of Technology, CODE2040, and the Semiconductor Research Corporation.



## A Year of Hacking Harassment

In 2015, we introduced [Hack Harassment](#), a collective initiative seeking to promote a safer, more inclusive Internet for everyone. In 2016, we helped promote positive behavior change by bringing the Hack Harassment pledge to more than 90 hackathons and college communities across the nation. The goal is to empower college students to create solutions to combat online harassment.

In December 2016, we welcomed Olympic gold medalist Gabby Douglas to Hack Harassment as our first-ever Change Ambassador, following her personal experience with online harassment during the Rio Olympic Games. We encourage others to join us by signing the [Hack Harassment Pledge](#).

# HACK HARASSMENT



# EMPOWERING SOCIAL IMPACT



# SOCIAL IMPACT



“Our initiatives support the changing relationship between young people and technology, providing them with the tools and training to use technology to make their lives better.”

—ROSALIND HUDNELL, Vice President, Human Resources Director, Corporate Affairs and President, Intel Foundation

## GLOBAL IMPACT

### Youth Employability

In five years, more than a third of the skills considered important in today's workforce will have changed.<sup>1</sup>



### Girls' and Women's Empowerment

**2X** Doubling the number of women online would contribute an estimated \$13 - 18 billion (U.S.) to annual GDP across 144 countries.<sup>2</sup>  
**WOMEN ONLINE**

### Employee Impact

Each year, workplace giving campaigns in the U.S. generate over \$4 billion, much of which is unrestricted, sustainable support that enables charitable organizations to serve communities.<sup>3</sup>

**\$4 B**  
**EACH YEAR**  
**IN GIVING**

## OUR APPROACH

### Youth Employability

We are evolving Intel's social impact focus to address the youth skills gap and ensure that technology remains a force for good in young people's lives.



### Girls' and Women's Empowerment

We are fully committed to empowering girls and women around the world. Our investments and the passion of our employees enable and encourage more girls and women to access, use, and create technology.



### Employee Impact

Deeply embedded in Intel's culture is a dedication to improving lives everywhere. Around the world, our employees generously give their time, money, and skills to make our communities better places to live, work, and play.



## 2016 PROGRESS

### Youth Employability

Our newest initiative, Intel® Innovation Generation, is preparing youth with skills for the evolving jobs of tomorrow.

### Girls' and Women's Empowerment

Number of women in Africa who have gained technology skills through the Intel® She Will Connect program.

**1.39 M**

### Employee Impact

**1.2M** Number of hours volunteered by Intel employees to improve their communities, with 38% of our workforce involved.  
**NUMBER OF HOURS**

## 2016 HIGHLIGHTS



We've invested \$2 billion since 1999 in higher education programs, working with more than 500 universities.



Employees and the Intel Foundation donated \$29 million in one week in celebration of human rights and our values.



Over the past five years, charitable giving by Intel and the Intel Foundation totaled \$530 million.

<sup>1</sup> World Economic Forum report.

<sup>2</sup> Women and the Web Report.

<sup>3</sup> America's Charities.

Follow our progress at  
[www.intel.com/innovate](http://www.intel.com/innovate)



# STRATEGY AND MANAGEMENT APPROACH

Intel was founded by inventors, and the company's continued existence depends on innovation and entrepreneurship. We recognize that the health of local economies—including those where our employees live and work—is improved by access to technology and quality education that prepares individuals for the jobs of the future.

## Technology for Opportunity

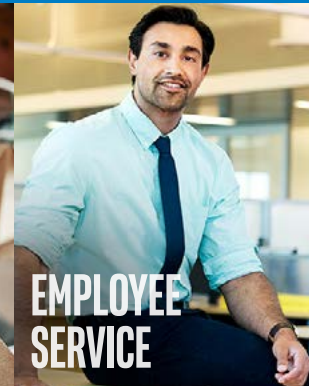
From investing in education and promoting broad economic development initiatives, to working hand-in-hand with neighbors in our local communities around the world, Intel has long been committed to applying technology and the talents of our employees to broaden access to opportunities and inspire the next generation of innovators. The [Intel Foundation](#), established in 1988, has championed learning across disciplines and communities, and actively supports Intel employees' direct investment of time, talent, and monetary donations in communities and schools through financial matching of their charitable contributions and hours of volunteer service. The Intel Foundation is governed by the Foundation Board of Directors and Officers.

Our Corporate Affairs Group leads Intel's social impact initiatives in partnership with internal groups, such as Human Resources, Public Affairs, and the Intel Labs. We also collaborate with external organizations, including the United States Agency for International Development, the World Bank, the United Nations, other corporations, and nonprofit organizations.

We share our expertise and provide both financial and in-kind support to our partners to enable governments, non-governmental organizations (NGOs), and educators to

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## Vested Interest in Our Connected Future

- New business models are emerging and the pace of innovation is increasing.
- The skills needed to become an innovator are increasingly complex; millions of individuals will be left behind if they aren't prepared.
- We are evolving Intel's social impact focus to address the youth skills gap and ensure that technology remains a force for good.

[READ MORE](#)  
[Stories of Social Impact](#)



reach their goals more effectively. The net result is shared social value that ranges from expanding technology access for students in emerging markets to helping local non-profit organizations serve more people through better use of technology. While many of these initiatives are focused on regions where we have a large operational presence, we also work to maximize impact in other parts of the world where our technology and programs can catalyze the greatest positive change.

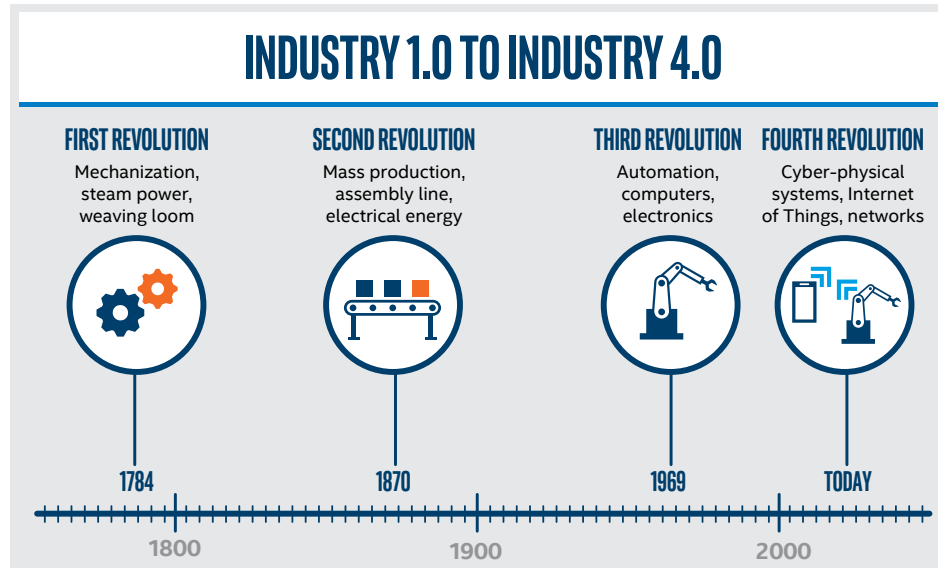
## Creating Shared Value

Our investments and engagements in social impact generate significant value for Intel and our stakeholders. As we create technology that is advancing opportunity, we see our responsibility to ensure this opportunity is inclusive. Proving the value of our technology toward solving global challenges while ensuring more of the world's minds are able to contribute can build our business and brand, while improving lives everywhere.

# INTEL® INNOVATION GENERATION

Our new initiative focuses on underserved youth, helping ensure the next generation of innovators is diverse, inclusive, and empowered. Intel is catalyzing an ecosystem of partners—from governments and NGOs to our own Intel Employee Service Corps volunteer program—to bring together the best ideas, innovative practices, and action-oriented leaders to inspire young people and expand their access to opportunities that will help them succeed and innovate using the power of technology.

Technological innovation is reshaping entire industries and profoundly impacting how we live, work, and play. The Fourth Industrial Revolution (4IR) builds on the Digital Revolution, representing new ways in which technology becomes embedded within societies.<sup>1</sup> The 4IR is marked by emerging technology breakthroughs in a number of fields, including robotics, artificial intelligence, nanotechnology, biotechnology, the Internet of Things, 3D printing, and autonomous vehicles. While 4IR is providing significant opportunities for progress, increased access, and new business models that will transform societies, it also is widening the skills gap globally, particularly for youth already facing inequalities.



<sup>1</sup> "What is the fourth industrial revolution?" World Economic Forum.

<sup>2</sup> "The Future of Jobs" World Economic Forum.



Intel has a long history of investing in education to empower people and improve their lives through technology. We are now building on our education experience to tackle one of the most pressing challenges of our time: ensuring that the next generation of innovators is broadly diverse in terms of ethnicity, gender, and geography, and has the skills needed to succeed in our rapidly changing digital world.

Intel is dedicated to collaborating across sectors, communities, and organizations and working with the urgency that rapid transformation demands. Intel Innovation Generation programs focus on the positive role of technology, preparing youth to participate in the new opportunities created by Intel's virtuous cycle of growth. Equipping more young people with the skills they need to become creators of technology in our increasingly smart, connected world will create long-term benefits for both society and our business.



**WATCH**  
What it means

Video Credit: World Economic Forum

## Technological Drivers of Change

Top Skills for the Future Workforce<sup>2</sup>

1. Sense-making
2. Social intelligence
3. Novel and adaptive thinking
4. Cross-cultural competency
5. Computational thinking
6. New-media literacy
7. Transdisciplinarity
8. Design mindset
9. Cognitive load management
10. Virtual collaboration



### Redefining What It Means to be an Innovator

Technology has the potential to be a great equalizer, but—while education access and quality have improved over the last two decades—millions of young people still lack access to the technology and skills they need to reach their full potential. Today, nearly 300 million youth are not in school, not employed, and lack the fundamental skills they need to gain meaningful employment in the future.<sup>1</sup> Every day that innovation and technology progress, their skills and opportunities fall further behind. Without urgent intervention, youth will be left behind to face a widening participation gap as new industries are created and many of today's jobs become obsolete.

Given Intel's role as the creator and driver of future technologies and innovation, we believe that we have a responsibility to address this global challenge, and that we are in a unique position to help others understand what technology skills today's youth will need to succeed in the future.

Our evolving social impact focus supports youth wherever they are in their journey—in a formal school system, working with a community partner to develop employable skills, or bringing their ideas to reality in a tinkering lab or maker space. Our programs give young people the breadth of opportunity to learn both technology basics and develop skills for new and emerging industries, and help them apply technology to solve problems they and others face in their communities.

<sup>1</sup> ["The Future of Jobs"](#) World Economic Forum.



**WATCH**  
Caroline's video

“We're changing Kenya, giving patients and their families another chance at life because everyone deserves that.”

—**CAROLINE WAMBUI**, student, coder, inventor

## INTEL® INNOVATION GENERATION



### Make Tomorrow

Inspiring more young people to become innovators, creators, and problem solvers by connecting them to technology-focused maker experiences and a global online social community of other youth innovators.



### Future Skills

Collaborating to close critical gaps and transform today's workforce development and youth empowerment programs through the infusion of technology curricula, hands-on innovation experiences, and employability skills training.

### Higher Education

Working with higher education institutions to integrate technology across academic disciplines to ensure a broader range of students can apply technology to make a difference in their communities and around the world.



### She Will Connect

Accelerating closure of gender gaps in technology access and career paths by empowering more girls and women to use technology so they are connected to economic and social opportunities and inspired to become future innovators.



## Intel® Innovation Generation: Make Tomorrow

Intel is committed to ensuring that all youth, especially those facing inequalities, are inspired by technology and have access to the resources they need to develop innovation skills for future success. One of our strategies is to help youth build skills through the maker movement, a community of people who are involved in a variety of projects and have a “do-it-yourself” mindset. Intel believes that technology-focused maker activities combined with appropriate training enable young people to create things that are important to them or address problems they are trying to solve.

To reach youth where they are, we work with local organizations to create maker experiences in accessible community spaces. Participants can develop critical skills—such as computational thinking, collaboration, and design thinking—that they need for future employability and economic opportunities. Completed maker projects provide participants with a portfolio of accomplishments to demonstrate their technology skills and abilities.

We also are collaborating with other organizations to create a new, first-of-its-kind global online social maker community to be launched in 2017. The online community will provide ongoing inspiration and support to aspiring young makers, and give them the opportunity to share their ideas and projects with others.



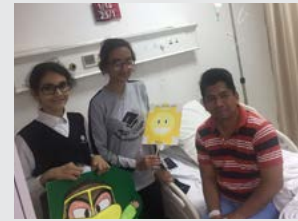
## INTEL® MAKE TOMORROW

Our goal is to inspire young people to become creators and problem-solvers, by engaging them in technology-focused maker activities that build their innovation skills.

- 1 Addresses a wide range of ages, capabilities, and interests
- 2 Introduces different facets of technology
- 3 Crosses disciplines
- 4 Provides opportunity for rich interaction

## Youth Innovations

During 2016, youth engaged in Intel-hosted events around the world, building skills and improving lives. Below are a few examples of the many projects that young makers tackled.



### Happy Plants

**Problem:** Hospital patients need to maintain positive outlooks.

**Solution:** Young makers in the United Arab Emirates spread happiness at a local hospital by connecting the real and digital worlds. They encouraged patients to go online and chat with 44 animated plants that they created using Intel® development boards. The “happy and intelligent” plants delivered messages for a swift recovery.



### Human Safety

**Problem:** Gases like methane, hydrogen sulphide, and carbon monoxide trapped in water tanks cause the death of sanitation workers in India.

**Solution:** A student team used sensors to measure the concentration of the gases. The sensor sends a signal to an Intel® board that turns on an LED light to alert workers about the presence of the gases.



### Magic Shoes

**Problem:** After injuring his own foot and observing his cousin with cerebral palsy, 16-year-old Hen Sheng realized how difficult it is for people with foot issues to maintain correct walking posture.

**Solution:** He used an Intel Genuino 101\* board to make “Magic Shoes” that collect gait data to help people correct walking posture, maintain balance, and shorten rehabilitation time after illness or injury.

“Making” builds innovation skills in an engaging, self-directed way.

## Intel® Innovation Generation: Future Skills

Millions of young people are unable to find full-time job opportunities that match their skills. Unless we significantly transform workforce development, the rapid pace of technology change will only increase the gap between people's skill levels and the jobs of the future. To address inequalities that may result during this radical shift in work, we are drawing on Intel's deep expertise in education and community partnerships to help transform how workforce development programs provide job skills training. Future Skills is designed to expose youth to technology and raise their awareness of jobs of the future.

Intel® Future Skills aims to help youth build their confidence and skills by enabling them to:

- Create a new tech innovation that responds to a community, government, or personal challenge.
- Find an internship, entry-level, or co-op position.
- Get more education through vocational training, junior college, or a four-year program.
- Become an entrepreneur.



## New Strategic Approaches

In November 2016, Intel launched a Future Skills prototype in North Las Vegas, in collaboration with Nevada Partners, Inc., a community-based workforce development nonprofit. The 14-week program was designed to equip out-of-school, unemployed, underemployed, or low-skilled young people (ages 18-24) with the skills and exploratory mindset required for the evolving jobs of tomorrow. Topics covered ranged from coding to leadership and resiliency. Participants gained hands-on experience and training with emerging technologies that are driving the 21st-century economy, such as next-generation fabrication technology and unmanned aerial systems (drones) for use in business and industrial applications. They will be assigned work experiences and encouraged to pursue employment, entrepreneurial, or educational opportunities in the Las Vegas community. We intend to evaluate and then expand this model to other cities in 2017, adding training on other emerging technologies.

Also in 2016, Intel and [NITI Aayog](#) signed a two-year statement of intent to set up Tinkering Labs in India, with the mission to foster curiosity, creativity, and imagination among young innovators. Part of the Indian government's flagship Atal Innovation Mission (AIM), the collaboration includes building laboratories at schools to encourage skills development in areas such as computational thinking, adaptive learning, physical computing, and adopting a design mindset. The first 10 labs aim to reach 250,000 young people across 500 communities and schools. Plans call for building an additional 490 labs based on learnings gained from the first 10. As part of the initiative, Intel will facilitate ideation, design thinking, and prototyping workshops.

## YOUTH UNEMPLOYMENT GAP

**71 M** **YOUTH** are unemployed worldwide  
**156 M** **YOUNG WORKERS** are living in poverty<sup>1</sup>

**>13%** **YOUTH** are unemployed globally<sup>2</sup>

**53.9%** Labor force participation rates worldwide for young men and young women<sup>3</sup>

**37.3%**

<sup>1</sup> [International Labor Organization](#).

<sup>2</sup> [Economist](#).

<sup>3</sup> [United Nations Global Youth Unemployment report](#).



### Intel® Innovation Generation: Higher Education

Universities and colleges play a critical role in addressing today's global challenges by preparing tomorrow's workforce and supporting cutting-edge research. Intel has a 40-year history of pioneering advances in collaboration with top research institutes and supporting programs that drive academic excellence across a broad number of institutions. Intel and the Intel Foundation support programs that advance research and education in micro-processor technology, high-volume manufacturing, computer science, artificial intelligence, security, connectivity, and other disciplines critical to creating quality jobs in our industry and to applying technology to solve global challenges.

Our support of universities includes grants, curriculum, equipment donations, faculty development, student contests, hackathons, fellowships, scholarships, and internships. We also provide funding for large-scale joint university research efforts, such as Intel Science and Technology Centers. Learn more on our [Higher Education](#) website.

>\$2B  
INVESTED

in higher education  
since 1999

500+  
UNIVERSITIES

### Preparing Tomorrow's Innovators

We help develop both the future engineers and computer scientists who will create the next wave of technological innovations and empower a broader range of students across disciplines who will use technology to accomplish their career goals and make the world a better place.

### Powering Tomorrow's Technology

Intel resources help professors and learners keep pace with emerging trends, such as:

#### Autonomous Technologies



[LEARN MORE](#)

#### Artificial Intelligence



[LEARN MORE](#)

#### Cyber-Physical Systems



[LEARN MORE](#)

#### Programmable Solutions

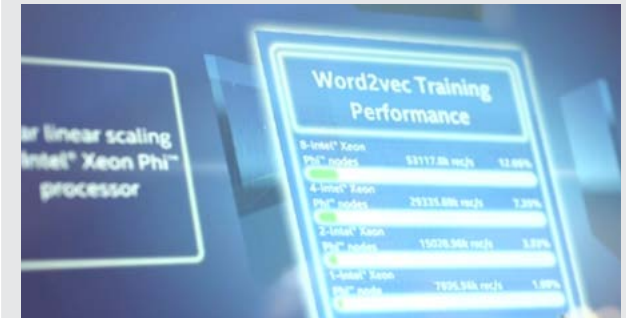


[LEARN MORE](#)

### Student Innovations

See how some of tomorrow's most promising technologies are already being explored and refined by today's students.

#### Kyoto University Drug Discovery

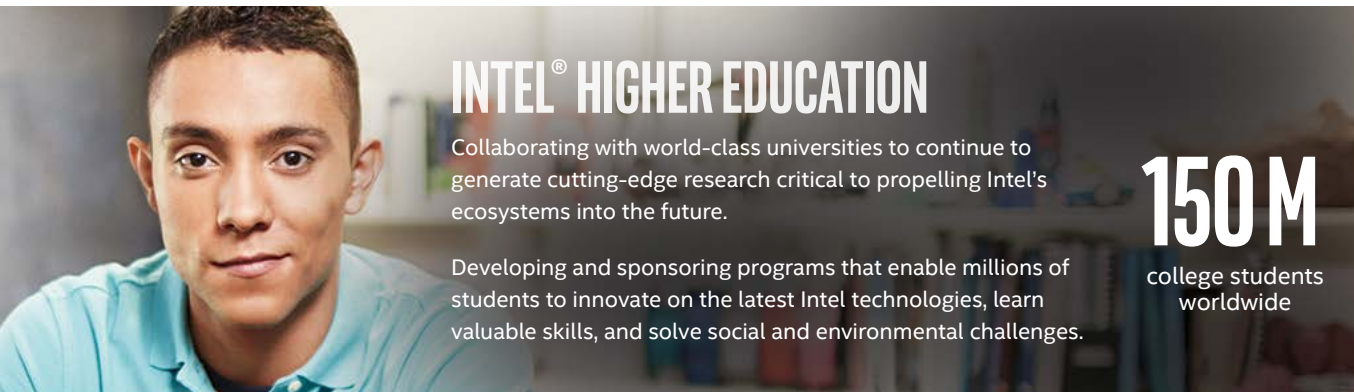


Utilizing machine learning with the Intel® Scalable System Framework, drug discovery screening results can be ready in four hours, instead of the usual four years.

#### University of Michigan Solar Car



Seventy students spent two years focused on the future of driving, building a fast solar car enabled by Intel® technology. With every wheel rotation came reams of real-time data that allowed the team to make decisions that they could relay to the driver. [Learn more.](#)



## INTEL® HIGHER EDUCATION

Collaborating with world-class universities to continue to generate cutting-edge research critical to propelling Intel's ecosystems into the future.

Developing and sponsoring programs that enable millions of students to innovate on the latest Intel technologies, learn valuable skills, and solve social and environmental challenges.

150 M  
college students  
worldwide

## Intel® Innovation Generation: She Will Connect

We are collaborating with others to accelerate closure of the gender gaps in technology access and career paths by empowering more girls and women to use technology, connecting them to economic and social opportunities, and inspiring them to become future innovators.

In the U.S., we're connecting middle school girls to new technology skills and maker experiences to spark their interest in technology, engineering, and computer science. We aim to inspire them to become future technology creators and innovators.

In Africa, [Intel® She Will Connect](#) uses an innovative combination of digital literacy training, an online peer network, strategic partnerships, and gender-relevant content to help young women acquire or improve digital literacy skills. The goal is to expand women's understanding and use of technology so that they can connect to health, government, and educational information, as well as new economic and entrepreneurship opportunities.



**WATCH HOW**  
Nancy gained new skills in our mobile learning caravan

Social Impact



**LISTEN TO**  
Jessica share her learning and plans for the future

### Committed to Connecting Women

Intel launched She Will Connect in Africa in 2013, in response to the [Women and the Web Report](#), which found that on average, nearly 25% fewer women than men had access to or used the Internet in developing countries. In Sub-Saharan Africa, that gap was the greatest, at 43%.

Critical to the program's success have been collaborations with a broad range of organizations, including [USAID](#), [NetHope](#), [World Pulse](#), [World Vision](#), [UN Women](#), [Joyful Women Organization](#), [Paradigm Initiative in Nigeria](#), [African Centre for Women in ICT](#), [Siyafunda CTC](#), [University of Limpopo Co Labs](#), and many others.

We incorporated Internet.org's FreeBasics platform into our training, which has provided an opportunity for minimally connected women to start accessing free information online, removing cost as a barrier.

To reach more women and share the value of connecting online, we have engaged ambassadors—remarkable, accomplished women to whom our participants can relate—to share their experiences through events, radio shows, and blogs. Meet [Titilope Sonuga](#) and [Adelle Onyango](#).

We're also exploring men's expressed interest in advocacy roles, to encourage and support the women in their communities.

# INTEL® SHE WILL CONNECT

Giving women confidence and skills to use technology to improve their lives, overcoming the gender access gap.<sup>1</sup>

Outcomes we track include:

- Gained employment
- Started or expanded a business
- Received a microloan
- Continued education or skills training
- Volunteered to practice and expand skills

**GOAL** Through the Intel® She Will Connect Program, reach 5 million women in Sub-Saharan Africa by 2020.

**Our Progress:** On track

**Commentary:** In 2016, we made progress toward our goal of reaching 5 million women in Africa by 2020, and began tracking outcome indicators to evaluate meaningful impact. We've reached 1,390,000 women through the program. As we assess results, we continue to look for creative new ways to connect with women. For example, we launched a mobile learning caravan that delivers technology lessons to women near their homes, rather than requiring them to travel into a city.

<sup>1</sup> Women and the Web [report](#).

# INTEL FOUNDATION

The Intel Foundation's approach to inspiring invention, creativity, and innovation is consistent with Intel's own roots and provides significant opportunity for impact at the local and community levels.

Established in 1989, the Intel Foundation<sup>1</sup> has a strong history of championing learning across disciplines and communities, with the passion and problem-solving that is inherent in Intel's culture. The Intel Foundation supports strategic funding of evidence-based, data-driven collaborative solutions that advance the inclusion of socially marginalized and disadvantaged groups, creating pathways toward a more just society with opportunities for all.

## Championing Inclusive Opportunities

Working with the boldest and brightest in academia, non-profits and NGOs, and governments, the Intel Foundation catalyzes multi-sector partnerships to ensure that the next generation of innovators is more diverse by gender, race, ethnicity, geography, ability, and social class. The Foundation's shared strategies include:

- Support for a diverse community of innovators using technology to solve global problems.
- Programs that inspire girls and women to pursue tech fields, and help to close the technology gender gap.
- Development of competitive workforce skills for disenfranchised youth.

# \$70M

Total matching grants for volunteer service through the Intel Involved Program since 2010

# \$530M

Total charitable giving by Intel and the Intel Foundation over the past five years

## Amplifying Employee Giving

In alignment with our dedication to inclusion, Intel employees are a critical part of our philanthropy efforts. The Intel Foundation amplifies Intel employees' generosity and passion for volunteerism by matching grants for service, community giving, and disaster relief to help strengthen communities around the world.

### Foundation and Corporate Charitable Giving Corporate Giving 2016 Contributions (in millions)

	U.S.	International	Total
Corporate Cash	\$60.6	\$15.4	\$76
Foundation Cash	\$30.4	\$15.1	\$45.5
In-Kind Giving	\$1.2	\$0.01	\$1.21
<b>Total</b>	<b>\$92.2</b>	<b>\$30.5</b>	<b>\$122.7</b>
<b>Total Giving as a Percentage of Pre-Tax Net Income</b>			<b>1%</b>



## What's Next?

In January 2017, the Intel Foundation announced a request for proposal to gather bold ideas to encourage U.S. middle school girls' full participation in technology, engineering, and computer science. We look forward to seeing how the proposals receiving grants will help more girls become tomorrow's innovators.



<sup>1</sup> The Intel Foundation is funded solely with Intel Corporation donations. For more information, visit the [Intel Foundation](https://intel.com/foundation) website.



## Intel Foundation—2016 Involvement and Impact

The world is growing more connected every day, and the Intel Foundation is invested in empowering people to generate new ways to solve global challenges.

### Disaster Relief

Hurricane Matthew, which ravaged the Caribbean and Southeastern U.S. in the fall of 2016, was classified as one of the worst storms in the region in the last half century. In Haiti alone, the estimated death toll exceeded 1,000. To provide immediate relief for the survivors, the Intel Foundation Board of Directors approved a \$500,000 contribution to Care USA for clean water, food, hygiene, and supplies in all countries affected.

### Intel International Science and Engineering Fair (Intel ISEF)<sup>1</sup>

At the world's largest pre-college science competition, 1,750 young innovators represented the best of more than 7 million high school students who participated in science fairs around the globe. For many of these students, their week in Arizona was a life-changing event. We are extremely proud of Intel's nearly two-decade partnership with Society for Science & the Public and the millions of amazing young scientists and technologists who have participated in Intel ISEF and inspired us through their talents and passion for changing the world. We are committed to sponsor Intel ISEF through 2019, as part of our focus on supporting tomorrow's innovators.

### Matching Gifts Program

In 2016, Intel began offering a new year-round charitable matching program for U.S. employees and retirees. When employees give money to an eligible nonprofit organization or school, the Intel Foundation will match the gift dollar-for-dollar, up to \$10,000 annually for each employee or retiree. With more than 40,000 charitable organizations and schools registered in the Matching Gifts portal, we view this approach as an effective

<sup>1</sup> The Intel International Science and Engineering Fair is a program of Society for Science & the Public.

way to flow funds into communities and support our employees' generosity.

### Intel Employee Service Corps

The Intel Employee Service Corps (IESC) program harnesses our employees' enthusiasm for volunteerism while advancing Intel's commitment to empowering people through technology solutions in education, health, agriculture, and other fields. Employee volunteers train for at least a month, and then travel to rural, underserved communities in the U.S. and developing countries to help deploy Intel-based technology, train end users, support ecosystems, and bring back insights from the field. In the process, they help government ministries, customers, and partners build capacity to solve local problems with technology. Funded by Intel Corporation, IESC also connects employees with Intel Foundation programs, such as the following:

#### Unlocking Potential in Oakland

IESC and other Intel volunteers support a comprehensive education transformation program that we are implementing with the Oakland Unified School District in California. In 2015, Intel announced an investment of \$5 million over five years in the program, aimed at enabling several hundred primarily African-American and Latino high school students to become college- and career-ready in STEM fields. Committed Intel employees are working with the students to help deepen their interest in computer science and engineering programs. [Learn more.](#)

#### Women in Science

At the 2016 Intel Foundation-supported [WiSci camp](#) in Peru, IESC volunteers shared technology skills with teachers and female students to spark interest in technology creation. Delivering workshop-style experiences, the volunteers introduced participants to technology concepts and helped them create innovative projects focused on improving their communities. Personal mentoring sessions with Intel team members also gave the girls opportunities to ask about their mentors' own life paths.



WATCH NOW  
WiSci Girls in Tech

# EMPLOYEES CHANGING THE WORLD

Our employees generously donated their skills, technology expertise, and over 6.2 million hours of service over the past five years to tackle environmental challenges, improve education, and help meet other community needs. [Read more](#) about our employees' volunteer efforts around the world.

## Intel Involved and Skills-Based Volunteering

Through Intel Involved, our global corporate volunteer program, we identify service opportunities for individual volunteers and organize team projects. The Intel Involved Matching Grant Program, funded by the Intel Foundation, extends the impact of volunteerism by donating cash to qualified nonprofits and schools where Intel employees and retirees donate at least 20 hours of service in a year.

In recent years, our employees have increasingly found opportunities to donate the skills that they have honed at Intel—providing legal, human resources, marketing, finance, and IT expertise to schools, nonprofits, and NGOs. During 2016, employees logged an estimated 167,000 hours of skills-based volunteerism. We believe that the impact of these hours is particularly significant, in part because the services provided are those for which schools and nonprofits would have to pay higher rates in the marketplace. Our Legal team, for example, donated over 4,700 hours in 2016, estimated to be valued at nearly \$1 million.<sup>1</sup>

Intel Mentoring & Planning Services (MAPS). This unique skills-based volunteer program was created by our Corporate Quality Network. Intel employees share their fine-tuned professional skills in process improvement, strategic planning, marketing, Lean principles, and risk management to help nonprofits and government agencies achieve operational excellence. The projects have been as diverse as the requesting organizations. Recent examples include helping a women's shelter with

grant writing, a school with customer service, and a police department with strategic planning. In 2016, two employees working with a child abuse prevention center created online training products that will be accessible to AmeriCorps members in California.

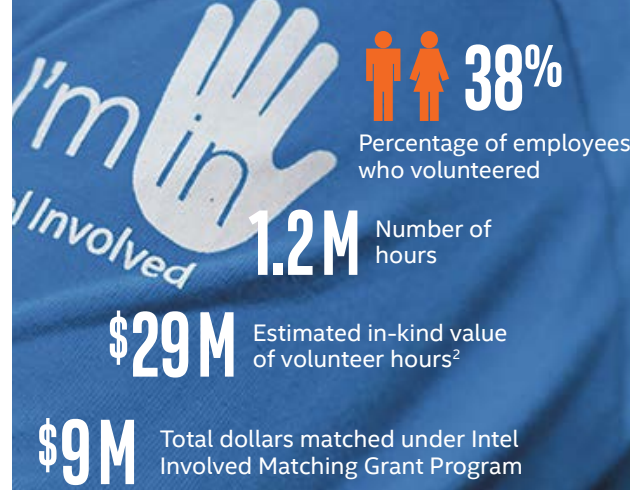
**Intel Encore Career Fellowships** match Intel U.S. employees who are retiring and wish to transition to a new stage of work with local nonprofit organizations, where they help the organization build capacity, operate more efficiently, and, ultimately, have a broader impact on their communities. [Read](#) about the value to employees and local non-profits they support. [Listen](#) to an interview on NPR.

“It’s really exciting to be part of something that’s ... bigger than ourselves.”

—JINNY MEAD, Intel Retiree, Encore Fellow

## INVESTED AND INVOLVED

2016 Volunteerism by the Numbers



## Our Values In Action

The Intel Foundation offered 2-to-1 matching of employee donations for one week in December 2016, to help mark Human Rights Day and celebrate Intel's values. Employees chose to donate to a wide variety of causes, including many organizations that advocate for equal rights and access to quality education.

“I am proud of Intel employees' generosity in giving back to the causes of their choice. The number of employees all over the world who participated in the Intel Foundation's first-ever 2X match program reflects our commitment to putting our values into action.”

—BRIAN KRZANICH, Intel Chief Executive Officer

[Read more](#) about our commitment to human rights advocacy.

<sup>1</sup> Based on a senior legal professional per-hour rate from the Taproot Foundation.

<sup>2</sup> Based on the 2015 Value of Volunteer Time rate of \$24.14 per hour published by Independent Sector.

## Global Volunteerism, Local Impact

Our employees share their expertise and skills with schools and organizations around the world, helping to drive innovation and solve global and local problems. Read about some of the ways they are working to improve lives around the world:

**Intel Involved Matching Seed Grants.** The Intel Foundation awards grants of up to \$5,000 to underwrite selected employee-initiated community service projects. Projects are selected based on their originality, potential impact, and expected outcomes. Since 2010, the Intel Foundation has awarded more than \$550,000 to underwrite 137 employee-initiated projects through this program. With this funding, volunteers have been able to implement their great ideas and change lives while helping schools and communities all over the world. The following are summaries of a few projects for which employees were recently awarded Intel Involved Matching Seed Grants:

- **Inspiring Students.** Intel volunteers in Oregon are creating a challenging course and lab work to teach local children about programming, hardware, and best design practices. Young students will use their newly acquired skills to create apps, and build 3-D models and Internet of Things devices aimed at solving a particular problem. The project grant is being used to purchase educational materials, software, and hardware.
- **Solar Power for Sports.** Employees in Ireland are increasing community awareness of the benefits of renewable energy by installing a photo-voltaic system to light fields used for community recreational activities. An Intel Involved Matching Seed Grant is being used to purchase materials to construct the solar-powered light poles.

## Global Intel Involved Hero

Lin Huan Ang has a strong passion for helping children. She dedicates most of her free time to helping teachers develop plans to implement early literacy intervention programs at the BOLD Association for Children with Special Needs in Penang, Malaysia. Ang also volunteers at a rural school, where she has engaged volunteer teams to build an impressive sustainable garden and organized workshops on gardening, composting, enzyme making, and food safety. In addition, she has organized skills-based workshops, and donations of surplus laptops, used furniture, and IT maintenance activities in the computer labs.

In 2016, Ang was the winner of the Global Intel Involved Hero Award, which shines a spotlight on extraordinary employee volunteers who have made a significant and lasting impact by working with nonprofit organizations or schools to address community needs or enhance the organization's capacity to meet its mission. Finalists for the honor each receive an award from the Intel Foundation for \$2,500 for the nonprofit of their choice. The winner of the Global Intel Involved Hero Award receives an additional \$7,500 grant from the Intel Foundation.



**Lin Huan Ang**, 2016  
Global Intel Involved  
Hero Award Recipient

- **A Playground for All.** Intel volunteers are helping to design and build an accessible playground for children with disabilities in Siem Reap, Cambodia. They are providing project management expertise and technical writing skills to aid in the development of procedures and policies that will be needed to operate and maintain the playground safely. Grant funding is being used to purchase construction materials and handicap-accessible playground equipment.
- **Building Safety Awareness.** Employees in China are working to increase safety awareness and share Intel's safety culture by delivering training to more than 1,500 primary school students and their teachers. Training covers earthquake drills, as well as traffic, fire, and electrical safety. An Intel Foundation seed grant is funding the purchase of emergency bags for rural schools.
- **Desert Gardening.** In Arizona, Intel volunteers are constructing a greenhouse garden to serve as a learning laboratory for a students while providing produce for the school's national, award-winning organic hot lunch program. Intel Foundation grant monies are being used for the watering system and materials needed to build the greenhouse to sustain the growth of plants and produce in extreme desert conditions.
- **Sustainable Agriculture.** Intel volunteers are providing program management, technical training, and mentoring to 30 farmers in Vietnam. Intel grant funding will provide planting materials, tools, and training to support these farmers as they learn about sustainable farming and work to achieve economic self-sufficiency.



[About This Report](#)

[Independent Accountant's Review Report](#)

[Intel's Support of the UN Sustainable Development Goals](#)

[Intel 2016 Water Use by Location](#)

[2016 Environmental, Health, and Safety Violations](#)

[Top 100 Manufacturing, Logistics, and Services Suppliers](#)

[United Nations Global Compact—Communication on Progress 2016](#)

# APPENDIX

## AWARDS AND RECOGNITION

Third-party recognition gives us valuable feedback on our programs and practices, and helps drive continuous improvement over time. Below is a selection of the corporate responsibility awards and recognitions that Intel received in 2016.

### 2016 Selected Awards and Recognitions

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*Barron's*. World's Most Respected Companies

Center for Political Accountability. Top 5 Ranking in CPA-Zicklin Index

*Corporate Knights*. Global 100 Most Sustainable Corporations

*Corporate Responsibility* magazine. 100 Best Corporate Citizens

*Diversity MBA* magazine. 50 Out Front Best Places for Women & Diverse Managers to Work

Dow Jones Sustainability Indices. North America Index

*Ethisphere*. 2016 World's Most Ethical Companies\*

*Forbes*. World's Most Reputable Companies & Most Valuable Brand

*Fortune* magazine. Change the World List & World's Most Admired Companies

FTSE Group. Listed on the FTSE4Good Index

Gartner. Top 25 Supply Chains

Human Rights Campaign. Corporate Equality Index

MSCI, Inc. MSCI Global Sustainability Index

*Newsweek*. 2016 Top 500 Green Companies in America and the World

U.S. EPA. EPA Green Power Partner Awards, Excellence in Green Power Use

*Working Mother* magazine. 100 Best Companies for Working Mothers



# ABOUT THIS REPORT

We prepared this report using the [Global Reporting Initiative](#)\* (GRI) Sustainability Reporting Guidelines, and self-declare the report to be prepared in accordance with the GRI Standards: Comprehensive option.<sup>1</sup> A GRI Content Index is provided on our [Report Builder](#) website.

We continue to integrate sustainability information into our Annual Report and 10-K and other investor communications. The [Our Business](#) section of this report covers content recommended by the [International Integrated Reporting Council](#) for inclusion in “integrated reports,” and can be downloaded as a standalone document or read as an interactive part of our full 2016 Corporate Responsibility (CSR) Report.

Additional information about Intel's operations and financial statements is available in our [2016 Annual Report and Form 10-K](#). References to “Intel” throughout this document pertain to Intel Corporation. The Intel Foundation is a separate entity. Financial data is presented in U.S. dollars.

For a high-level overview of Intel's Corporate Responsibility, supporting documents and data, past reports, and to customize a report with the sections you choose, visit our [Corporate Responsibility](#) and [Report Builder](#) websites. A printed executive summary of the report is available by request. Send questions, comments, or feedback to Suzanne Fallender, Director of Corporate Responsibility, Intel Corporation, 5000 W. Chandler Blvd., CH6-356, Chandler, AZ 85226 USA. You can also use our web-based [feedback form](#) or the [CSR@Intel blog](#) to contact our Corporate Responsibility team.

For best viewing results on a PC or tablet, we recommend using [Adobe Acrobat\\* DC](#) or above, and [QuickTime\\*](#). For best printing results, use letter-size paper.

## Report Scope and Profile

With the Intel 2016 Corporate Responsibility Report, we aim to provide stakeholders with a balanced view of our corporate responsibility strategy and performance for Intel's worldwide operations during fiscal year 2016 (ended December 31, 2016). Our previous report was published in May 2016 and updated in July 2016.

Our CSR Report does not include performance information for Intel's joint ventures or firms included in the investment portfolio of Intel Capital, Intel's global investment organization, unless specified.

<sup>1</sup> Unless stated otherwise, 2016 data is considered final based on information received by May 1, 2017.

References to “Intel” throughout this document pertain to Intel Corporation. The Intel Foundation is a separate entity. [Appendix](#)

This year's report does not reflect any significant changes in reporting scope compared to our previous report. Principles and policies apply to all officers and employees of Intel and its subsidiaries, unless otherwise noted. Environmental, health, and safety data includes widely accepted parameters and units. Key performance indicators cover our global manufacturing operations, including our wafer manufacturing and assembly and test facilities.

We report our key environmental performance indicators in both absolute terms and on a normalized, or “per unit” basis. Our Normalized Production Index (NPI) is derived from our worldwide wafer production data. The NPI is indexed to a baseline year of 2010. One important limitation of the NPI is that it does not take into account the number of additional manufacturing steps used in the newer process technologies.

## Approach to Report Assurance

The information in this CSR Report is subject to internal reviews and, for selected content, external reviews. On a regular basis, we validate the management systems and processes used to collect the data. We have maintained a multi-site ISO 14001 certification for our manufacturing locations since 2001, which requires independent third-party audits at many of our sites each year. Five of our sites meet the ISO 50001 Energy Management System standard. Intel Ireland is also accredited to the IS 393 Energy Management Standard certification. Our operations in Ireland are covered by the European Union Emissions Trading Scheme. Since 2010, Intel has maintained certification for OHSAS 18001, the internationally recognized standard for occupational safety and health management systems.

For a number of years, we have obtained third-party verification for our greenhouse gas (GHG) emissions. Based on stakeholder input and trends in assurance and external verification measures, since 2012 we have engaged Ernst & Young LLP to conduct an independent review of selected indicators contained in our CSR Report in accordance with AT 101, Statements on Standards for Attestation Engagements, of the American Institute of Certified Public Accountants (AICPA).

For the 2016 CSR Report, we again engaged Ernst & Young to review our GHG emissions, water withdrawals, and selected supply chain responsibility data. Ernst & Young's review report is included in this Appendix.

This 2016 Corporate Responsibility Report contains forward-looking statements, and actual results could differ materially. Risk factors that could cause actual results to differ are set forth in the “Risk Factors” section and throughout our 2016 Form 10-K, which is included in our Annual Report. These risk factors are subject to update by our future filings and submissions with the U.S. Securities and Exchange Commission and earnings releases.

# INDEPENDENT ACCOUNTANTS' REVIEW REPORT

## Board of Directors of Intel Corporation

We have reviewed selected quantitative performance indicators (the "Subject Matter") included in Exhibit A and as presented in Intel Corporation's ("Intel") 2016 Corporate Responsibility Report (the "Report") for the year ended December 31, 2016 in accordance with the criteria also set forth in Exhibit A (the "Criteria"). We did not review all information included in the Report. We did not review the narrative sections of the Report, except where they incorporated the Subject Matter. Intel's management is responsible for the Subject Matter included in Exhibit A and as also presented in the Report, in accordance with the Criteria. Our responsibility is to express a conclusion on the Subject Matter based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform our review to obtain limited assurance about whether any material modifications should be made to the Subject Matter in order for it to be in accordance with the Criteria. A review consists principally of applying analytical procedures, making inquiries of persons responsible for the subject matter, obtaining an understanding of the data management systems and processes used to generate, aggregate, and report the Subject Matter and performing such other procedures as we considered necessary in the circumstances. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether the Subject Matter, in all material respects, is in accordance with the Criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. A review also does not provide assurance that we became aware of all significant matters that would be disclosed in an examination. We believe that our review provides a reasonable basis for our conclusion.

As described in Exhibit A, the Subject Matter is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Based on our review, we are not aware of any material modifications that should be made to the selected quantitative performance indicators for the year ended December 31, 2016, in order for it to be in accordance with the Criteria.

May 17, 2017  
San Jose, California



### Exhibit A: Intel Schedule of Selected Performance Indicators

Indicator Name	Scope	Unit	2016 Value <sup>1</sup>	Criteria
Scope 1 Greenhouse Gas (GHG) Emissions <sup>2</sup>	Global	Tonnes Carbon Dioxide Equivalent (tCO <sub>2</sub> e)	976,000	Global Reporting Initiative ("GRI") 305-1 (reporting requirements a, b, e, f, and g), the World Resources Institute ("WRI") / World Business Council for Sustainable Development's ("WBCSD") The Greenhouse Gas ("GHG") Protocol: A Corporate Accounting and Reporting Standard and internal criteria defined by Intel management. <sup>3</sup>
Scope 2 GHG Emissions <sup>2</sup>	Global	tCO <sub>2</sub> e	647,000	GRI 305-2 (reporting requirements b, e, f and g), the WRI/WBCSD GHG Protocol (market-based-method) and internal criteria defined by Intel management. <sup>4</sup>
Scope 3 GHG Emissions, Business travel	Global	tCO <sub>2</sub> e	147,000	GRI 305-3 (reporting requirements d, f and g), the WRI/WBCSD GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and internal criteria defined by Intel management. <sup>5</sup>
Energy Use <sup>2</sup>	Global	Billion kWh	6.5	GRI 302-1 (reporting requirements c, f, and g), the WRI/WBCSD GHG Protocol and internal criteria defined by Intel management. <sup>6</sup>
Water Withdrawals for Operations Use	United States	Billion gallons	6.1	GRI 303-1 (reporting requirement b) and internal criteria defined by Intel management. <sup>7</sup>
Suppliers undergoing third-party VAP audits for human rights	Global	EICC VAP audits reviewed by Intel management	57	EICC Code of Conduct requirements for third-party audits and internal criteria defined by Intel management. <sup>8</sup>
	Global	Priority/major findings by EICC category	Ethics: 5 Labor: 77 Occupational Health and Safety: 61 Environmental: 28 Management Systems: 28	

**Note 1:** Non-financial information is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

<sup>1</sup> All figures for the year-ended December 31, 2016. Values rounded where appropriate.

<sup>2</sup> For all Intel-operated buildings over 40,000 square feet. The majority of Intel's natural gas and electricity consumption data is provided by Intel's third-party utility management company. Sites that are not tracked by the third-party and are under Intel's operational control are gathered manually once a year by Intel's corporate team.

<sup>3</sup> Scope 1 includes emissions primarily from perfluorinated compounds (PFCs), natural gas, and heat transfer fluids (HTFs). Emissions from hydrofluorocarbons (HFCs), nitrogen trifluoride (NF3) and sulfur hexafluoride (SF6) are included in Intel's calculation of PFC emissions. Smaller emissions sources include emissions from Intel's air shuttle fleet, on-site security vehicles, refrigerant leaks, volatile organic compounds (VOCs), nitrous oxide (N2O), diesel, and liquefied petroleum gas (LPG) consumption. PFC and HTF emissions are calculated using Global Warming Potentials (GWP) from the EPA's Subpart A of Part 98: Mandatory Greenhouse Gas Reporting. PFC calculations include reductions from PFC abatement systems which are determined using the equipment's Destruction or Removal Efficiency (DRE) value. Natural gas emissions are calculated using factors from the EPA's Emission Factors for Greenhouse Gas Inventories report dated November 19, 2015, and Global Warming Potential (GWP) rates from the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report. Emissions from Intel's shuttle fleet are estimated based on a corporate flight schedule and not actual flight data.

<sup>4</sup> Intel purchases renewable energy credits (RECs) or directly purchases renewable energy for all locations in the United States and Europe. Electricity purchases under these contracts are considered to have zero emissions for Scope 2 market-based-method reporting. In alignment with the GHG Protocol, where RECs or other contractual instruments were not purchased, and supplier specific emission factors and residual mix factors are not available, Intel calculates emissions using the appropriate location-based emissions factors. For purchased electricity at Intel's international locations, Intel reports only CO<sub>2</sub> using the 2014 global average CO<sub>2</sub> electricity specific emission factors purchased from the International Energy Agency (IEA).

<sup>5</sup> Scope 3 is limited to employee business travel, Category 6 per the GHG Protocol. Business travel includes emissions from car rentals, air travel and hotel stays. Emissions from car rentals and air travel are calculated using mobile combustion factors and business travel factors from the EPA's Emission Factors for Greenhouse Gas Inventories report dated November 19, 2015. Intel uses the IPCC's Fourth Assessment Report for Global Warming Potential factors. Emissions from hotel stays are calculated using emission factors for economy, midscale and upscale hotel rooms from the Cornell Hotel Sustainability Benchmarking (CHSB) Index 2016. Intel management applies the United States region CHSB factors for all hotel stays.

<sup>6</sup> Energy use includes consumption of natural gas, LPG, diesel and electricity. Conversion factors from the Climate Registry's General Reporting Protocol dated January 2016 are used to calculate energy consumption. Intel applies an 80% boiler efficiency assumption when calculating energy use from natural gas.

<sup>7</sup> Intel defines the water withdrawals indicator as total gallons of potable water (i.e., drinking water) used for operations within the United States. "Operations" includes all manufacturing and non-manufacturing sites with 500 or more employees. In previous reporting periods, "operations" included all sites that used more than 35 gallons of water per person, per day. This change led to an additional 6 U.S. sites being included in the boundary in the current year. Water consumption data for U.S. sites is provided by a third-party utility management company, aside from the Hudson site which reports its water consumption directly to Intel's corporate team. The New Mexico site additionally reports well water consumption to Intel's corporate team, which is not tracked by the third-party utility management company.

<sup>8</sup> The total Electronic Industry Citizenship Coalition (EICC) Validated Assessment Process (VAP) audits include the number of reviews performed by Intel management of third-party EICC VAP audits completed during 2016. Intel completed formal reviews of all audit results in 2016.

# INTEL'S SUPPORT OF THE UN SUSTAINABLE DEVELOPMENT GOALS

The [United Nations Sustainable Development Goals \(SDGs\)](#) are aimed at stimulating action in areas of critical importance for humanity and the planet. We believe that the achievement of the SDGs will be critical to creating a life of dignity and opportunity for all, and we believe technology will play a key role in achieving the SDGs. We support many of these goals through our corporate responsibility and sustainability strategies. In particular, we use the goals below to inform the ongoing development of our strategies, initiatives, and long-term goals. We also believe that information communications technology (ICT) can play an enabling role in the implementation of all of the SDGs. Intel, Nethope, and the UN Foundation developed an [SDG ICT Playbook](#) that outlines technology trends, opportunities, and innovative case studies that global leaders can reference as they develop their strategies and actions to address the SDGs.



## Environmental Responsibility



**SDG 6:** Ensure access to water and sanitation for all  
**SDG 12:** Ensure sustainable consumption and production patterns  
**SDG 13:** Take urgent action to combat climate change and its impacts

We have made significant investments and set aggressive goals to reduce the environmental footprint of our global manufacturing operations, including goals and policies on climate change and water conservation. We continue to work toward our 2020 sustainability goals, and to invest in conservation projects, alternative energy, and product energy efficiency. We collaborate with governments, leading companies, and nonprofits on innovative environmental projects, and proactively invest in our technology “handprint” to empower others to use Intel® technology to reduce their environmental footprints and support sustainable consumption and production.

## Supply Chain Responsibility



**SDG 8:** Promote inclusive and sustainable economic growth, employment, and decent work for all  
**SDG 12:** Ensure sustainable consumption and production patterns

With our purchasing power and policies, we help our suppliers contribute to the achievement of these two goals in particular. Our efforts are designed to protect vulnerable workers throughout the global supply chain, and include setting clear supplier expectations; investing in assessments, audits, and capability-building programs; and collectively addressing issues through our leadership in the Electronic Industry Citizenship Coalition (EICC). Since 2013, we have manufactured micro-processors that are conflict-free for tantalum, tin, tungsten, and gold. We continue our work to establish responsible mineral supply chains for our company as well as our industry.

## Diversity and Inclusion



**SDG 5:** Achieve gender equality and empower women and girls  
**SDG 10:** Reduce inequality within and among countries

In 2015, we set a bold hiring and retention goal to achieve full representation of women and underrepresented minorities in Intel's U.S. workforce by 2020. We committed \$300 million to support this goal and accelerate diversity and inclusion both at Intel and across the technology industry. We also set a goal to increase our annual spending with certified diverse-owned suppliers to \$1 billion by 2020.

## Social Impact



**SDG 4:** Ensure inclusive and quality education for all and promote lifelong learning  
**SDG 5:** Achieve gender equality and empower women and girls  
**SDG 10:** Reduce inequality within and among countries

Intel has a long history of investing in education to empower people and improve their lives through technology. Our new Intel® Innovation Generation initiative directly responds to these goals and is focused on expanding access to technology skills and experiences to prepare youth for the jobs of tomorrow and ensure that the next generation of innovators is diverse in terms of geography, economic status, ethnicity, and gender. The Intel Foundation supports strategic funding of evidence-based, data-driven collaborative solutions that advance the inclusion of socially marginalized and disadvantaged groups, creating pathways toward a more just society with opportunities for all.



# INTEL 2016 WATER USE BY LOCATION

The following table details our water use and sources for our larger sites around the world. Our water withdrawals in the U.S. totaled 6.1 billion gallons in 2016. To increase our transparency in reporting, we changed our threshold from “all manufacturing sites and non-manufacturing sites > 35 gal/day/person” to include “all manufacturing sites and non-manufacturing sites with > 500 employees.” Due to an additional 15 sites reported, our water usage appears to have increased, however comparing only to the sites included last year, our 2016 usage remained flat on a normalized basis. Approximately 80% of the water used at our sites is sent back to municipal treatment operations, where it is treated so that it can be used for other purposes. In 2016, we increased our volume of water recycled and reused as a percent of water withdrawn to 50% (total conservation divided by water withdrawals). For additional information, see [“Water Management”](#) in the Environmental Sustainability section of this report.

(Millions of Gallons)

Location <sup>1</sup>	Water Usage		Water Discharge	Water Conserved	Evaporation Loss	Primary Water Source <sup>2</sup>	
	Purchased Re-Claim Water	Freshwater Withdrawn		TOTAL (Recycle + Reclaim + Reduce)			
China	Chengdu, China	0	106	85	2	21	Fuhe River
	Dalian, China	0	451	371	266	79	Biliu and Yingna Rivers
	Global Trade Center (GTC) Beijing	0	0.1	0.1	0	0	Groundwater (Beijing aquifer), Surface water (Chaobai River)
	Shanghai – Zizhu	0	20	2	7	19	Huangpu River, Changjiang and Shanghai Aquifers
Costa Rica	San Jose	0	51	25	0	26	Colima Superior Aquifer
India	Bangalore – BGA	0	3	3	0	0.08	Kabini River
	Bangalore – SRR	0	22	0	0.2	22	
Ireland	Leixlip	0	1,526	1,335	407	191	River Liffey
Israel	Jerusalem	0	22	11	0	11	Lake Kinneret, Coast Aquifer, Mountain Aquifer (Yarkon-Tininim), and local desalination plant
	Qiryat Gat	0	481	447	533	35	
	Haifa	0	35	15	4	20	
Malaysia	Kulim	0	200	32	18	168	Muda River
	Penang	0	208	10	1	198	
Mexico	Guadalajara	0	12	12	0	0	Lake Chapala
Poland	Gdansk	0	2	2	0	0	Saur Neptun Gdansk – Groundwater Osowa water station
Russia	Nizhny Novgorod (TGV)	0	7	7	0	0	Volga River
Singapore	Singapore	0	0	0	0	0	Water reservoir
Taiwan	Nangang Station (NGS) Taipei	0	9	8	0	1	Office building water tower

## Intel 2016 Water Use by Location, continued

(Millions of Gallons)

Location <sup>1</sup>		Water Usage		Water Discharge	Water Conserved	Evaporation Loss	Primary Water Source <sup>2</sup>
		Purchased Reclaim Water	Freshwater Withdrawn		TOTAL (Recycle + Reclaim + Reduce)		
United Kingdom	Swindon	0	2	2	0	0	Thames River and Thames Valley Aquifer
Vietnam	Ho Chi Minh City	—	58	13	20	45	Dong Nai River
United States	Chandler, AZ	0	414	297	147	117	Salt and Verde Rivers, local aquifer
	Ocotillo, AZ	1,113	2,115	2,791	2,026	437	
	Folsom, CA	0	99	29	0	71	American River
	Santa Clara, CA	0	48	28	10	20	Tuolumne River
	Hudson, MA	0	23	21	0	2	Gates Pond Reservoir
	Rio Rancho, NM	0	791	661	384	130	Santa Fe Aquifer
	Aloha, OR	0	261	195	0	67	Tualatin River
	Ronler Acres, OR	0	2,162	1,844	781	163	
	Jones Farm, OR	0	149	143	0	6	
	Santa Clara, CA	6	46	36	8	16	Tuolumne River
	Austin, TX	0	14	10	0	4	Colorado River and Lake Austin
	Hawthorn Farm, OR	0	15	13	0	2	Tualatin River
	McAfee, CA	0	1	1	0	0	Tuolumne River
	McAfee, TX	0	7	7	0	0	Lavon Lake, Lake Texoma, Jim Chapman Lake, Lake Tawakoni, and Lake Bonham

To prepare our global water inventory we follow established internal procedures for collecting, reviewing, and reporting water data. Internal data collection and reporting practices are outlined within corporate standards and guidance documents developed by Intel. After a corporate-wide inventory is prepared, it is peer reviewed internally and our U.S. water withdrawals are assured by Ernst & Young (see the Independent Accountants' Review Report in the appendix of our 2016 CSR Report).

<sup>1</sup>In 2016, we added 15 new sites (all office buildings) to the Water Use by Location table. To increase transparency and the comprehensiveness of our reporting, we changed our threshold for inclusion from "all manufacturing sites and non-manufacturing sites > 35 gal/day/person" to "all manufacturing sites and non-manufacturing sites with > 500 employees." Due to the additional sites reported, our water usage appears to have increased; however, comparing only to the sites included last year, our 2016 usage declined.

<sup>2</sup>Our 2016 water use did not exceed 5% of any given source. All water sources are provided by municipal water providers, except at our New Mexico facility, which uses on-site well water. Rainwater collected and stored in some locations represents < 0.1% of our total withdrawals.

# 2016 ENVIRONMENTAL, HEALTH, AND SAFETY VIOLATIONS

In 2016, officials made 115 visits (including audits and inspections) to Intel sites across the globe (51 health and safety agency and 64 environmental inspections). Intel received 6 environmental Notices of Violation (NOV) and 2 health and safety-related NOV's in 2016. Details on notices of violation (NOV) and our subsequent corrective actions are provided in the table below.

Location	Violation	Fine	Intel's Corrective Action
Chandler, Arizona	Exceeded permit daily limit for copper discharged.	None	Failed resin trap at outlet of vessel was identified as root cause and was repaired.
Hillsboro, Oregon	Hazardous waste containers stored without a date on the bottles and waste accumulation did not have labeling correct on container.	None	Bottles and containers were correctly re-labeled immediately upon inspection completion.
Santa Clara, California	Non-timely payment of annual fee.	None	Inadequate management of change system identified as root cause, payment reminders put in place.
Leixlip, Ireland	Non-compliance for an elevated emission on one sample of the acid scrubber system.	None	A thorough investigation was carried out and related investigations are ongoing. Six subsequent test runs indicated levels well below license limits.
Heredia, Costa Rica	Identification of administrative compliance gaps related to site Environmental Impact Assessment permit.	None	Analysis of EIA permit paperwork completed and corrective plan was implemented within 30 days with the Costa Rica Environmental Agency (SETENA).
Chandler, Arizona	Six notices of opportunity to correct deficiencies noted during records review of hazardous waste program.	None	All corrective actions were completed. Formal notification from the inspecting agency confirmed that all follow-up documentation requests and concerns had been met.
Chandler, Arizona	During site inspection, laser protective eyewear inspection log could not be verified and laser power output was not included on Laser Controlled Area signs.	None	All corrective actions were completed and laser safety program owner ensured compliance with regulatory requirements.
San Jose, California	Fire system maintenance and testing not completed in timely manner in accordance with requirements.	None	Newly acquired site's staff was informed of expectations regarding EHS notification for compliance issues and agency inspections.

Our definition of an NOV includes any written notice from an agency stating Intel is not in compliance with a regulation or other legal requirement, including administrative items.

# TOP 100 MANUFACTURING, LOGISTICS, AND SERVICES SUPPLIERS

Advanced Semiconductor Engineering, Inc. (ASE)	Daifuku Co., LTD.	IBIDEN Co., LTD. <sup>3</sup>	Nuflare Technology, Inc.
Advantest America Inc.	Dainippon Screen MGF Co., LTD.	JE Dunn Construction	OMD
AEM Holdings LTD.	DB Schenker	Jabil Circuit, Inc.	Oracle Corp.
Air Liquide Electronics U.S. OP	Dell, Inc.	JLL <sup>3</sup>	Pegatron Corporation
Air Products and Chemicals, Inc.	Delta Design	JSR Corporation <sup>3</sup>	Powertech Technology Inc. <sup>4</sup>
AMEX GBT	Dentsu McGarry Bowen, LLC	JX Nippon Mining and Metals Corporation	Praxair Electronics
Amkor Technology, Inc.	DHL Global Forwarding	Kelly Services	Quanta Computer Inc.
Anthem Blue Cross	EBARA Corporation	Keysight Technologies	Quantum Global Technologies
Applied Materials Inc. <sup>1</sup>	Elitegroup Computer Systems Co., LTD.	KLA-Tencor Corporation	Rinchem Company Inc.
Aricent Technologies Mauritius LTD.	Entegris, Inc.	KMG Electronics Chemicals	Rohde & Schwarz GmbH & Co KG
Asahi Glass Company, Limited (AGC)	Federal Express	Lam Research Corporation <sup>1</sup>	Samsung Electro-Mechanics Co., LTD.
ASM International N.V.	FEI Company	Lenovo	Shin Etsu Chemical Co., LTD. <sup>1</sup>
ASML <sup>1</sup>	Flextronics International LTD.	Linde	Shinko Electric Industries Co. LTD. <sup>3</sup>
AT&S Austria Technologie & Systemtechnik Aktiengesellschaft	Formfactor, Inc.	Mentor Graphics Corp.	Siltronic AG <sup>1</sup>
Atlas Copco Compressors, LLC	FUJIFILM Electronic Materials <sup>1</sup>	Micron Technology, Inc.	SK Hynix Inc.
Avago Technologies	Gemtek Technology Co., LTD.	Microsoft	Skanska USA Bldg.
Avantor Performance Materials International, Inc.	GLOBALFOUNDRIES	M+W Group GmbH	SUMCO Corporation <sup>3</sup>
Azurewave Technologies	Harder Mechanical Contractors	Mitac Holdings Corporation	Synopsys Inc.
BE Semiconductor Industries N.V.	HCL America Inc.	Mitsubishi Gas Chemical Company, Inc. <sup>3</sup>	Tokyo Electron Limited <sup>1</sup>
Burson-Marsteller/WPP Network <sup>2</sup>	Hensel Phelps	Moses Lake Industries	Tokyo Ohka Kogyo Co., LTD.
Cadence Design Systems, Inc.	Hewlett Packard Enterprise	Murata Machinery, LTD. <sup>1</sup>	TSMC
Carl Zeiss	Hitachi High Technologies Corporation	Nan Ya Plastics Corporation	Unimicron Technology Corp.
Charter Mechanical Contractors, Inc.	Hitachi Kokusai Electric Inc. <sup>1</sup>	Nanometrics Inc.	United Microelectronics Corp.
Cigna	Honeywell Electronics MTLS	NetApp	Verizon Business Network Services, Inc.
Cisco Systems Inc.	HP Inc.	Nikon Corporation	VWR <sup>1</sup>

<sup>1</sup> Suppliers that received a 2016 Preferred Quality Supplier (PQS) award.

<sup>2</sup> Coordination among 18 companies of the WPP Group collectively represent one of our top suppliers: North of Nine/Burson-Marsteller, Ogilvy PR, Millward Brown, OgilvyOne, Grey, H+K Strategies, J. Walter Thompson, TNS, Ogilvy & Mather, Kantar Retail, MRB India, Mirum, Wunderman, Rockfish, Cohn & Wolfe, Kantar Media, and Geometry.

<sup>3</sup> Suppliers that received a 2016 Supplier Continuous Quality Improvement (SCQI) award.

<sup>4</sup> Supplier that received a 2016 Supplier Achievement (SAA) award for extraordinary results in sustainability.

# UNITED NATIONS GLOBAL COMPACT – COMMUNICATION ON PROGRESS 2016

In June 2009, Intel became a member of the United Nations Global Compact (UNGC), a platform for encouraging and promoting good corporate principles and learning experiences in the areas of human rights, labor, environment, and anti-corruption. The UNGC principles have been ingrained in our approach to corporate responsibility and business practices for many years. As stated in the [Letter From Our CEO](#), we are committed to continuous improvement in our own practices and collaboration with other organizations to advance best practices in corporate responsibility worldwide. Our 2016 Corporate Responsibility Report provides detailed information on our corporate responsibility strategy and performance for fiscal year 2016 and covers the UNGC Communication on Progress requirements.

## UNGC Communication on Progress

### Human Rights

Principle 1	Support and respect the protection of internationally proclaimed human rights.	Intel's commitment to respect human rights is embodied in the Intel Code of Conduct, Intel Human Rights Principles, and Intel Water Policy, the latter of which covers our respect for the human right to water. All of these policies are available on our <a href="#">Corporate Responsibility</a> website. In addition, the topic of human rights is covered in the <a href="#">Electronic Industry Code of Conduct</a> , adopted by Intel in 2004. For a discussion of our approach to respecting human rights and the steps we have taken during 2016, including completion of a third-party human rights impact assessment, see " <a href="#">Respecting Human Rights</a> " in the Our Business section of this report.
Principle 2	Make sure that business is not complicit in human rights abuses.	

### Labor

Principle 3	Uphold freedom of association and the effective recognition of the right to collective bargaining.	Intel's Human Rights Principles and Statement on Slavery and Human Trafficking incorporate references to the key labor issues identified in the UNGC, including prohibition of child labor (Intel has established a minimum age of 16), forced labor, human trafficking, and discrimination. Intel recognizes that in many locations where we operate, employees have the right to freely associate or not associate with third-party labor organizations, along with the right to bargain or not bargain collectively in accordance with local laws. Intel respects those rights and is committed to creating an environment of open communication where employees can speak with their managers about their ideas, concerns, or problems, and team together to address workplace issues. For more information, see " <a href="#">Respecting Human Rights</a> " in the Our Business section of this report.
Principle 4	Support elimination of all forms of forced and compulsory labor.	
Principle 5	Support effective abolition of child labor.	
Principle 6	Elimination of discrimination in respect of employment and occupation.	

### Environment

Principle 7	Businesses are asked to support a precautionary approach to environmental challenges.	We incorporate environmental performance goals throughout our operations and regularly report on our progress, seeking continuous improvement in energy efficiency, emissions reductions, resource conservation, and waste reduction. We strive to minimize the environmental impact of our products—from design through disposal—and we collaborate with others to develop innovative ways that technology can help address long-term sustainability challenges. For more information, see the <a href="#">Environmental Sustainability</a> section of this report.
Principle 8	Undertake initiatives to promote greater environmental responsibility.	
Principle 9	Encourage the development and diffusion of environmentally friendly technologies.	

### Anti-corruption

Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Intel has set clear standards and policies, and has put in place training to ensure employee compliance on these topics, including a reference in the Intel Code of Conduct. We have a comprehensive <a href="#">Ethics and Compliance program</a> , which is described in detail in the Our Business section of this report. Certain employees are assigned more in-depth ethics and compliance training courses, including those covering anti-corruption. For more information, see the <a href="#">Our Business</a> section of this report.
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Intel invents at the boundaries of technology to make amazing experiences possible for business and society, and for every person on Earth. Our innovations are bringing sight, touch, depth perception, and the ability to communicate to devices, objects, and spaces to make them smart and connected. We harness the capability of the cloud and the Internet of Things to disrupt industries and solve global challenges—such as those in healthcare, agriculture, and commerce. We also lead in environmental sustainability, supply chain responsibility, diversity and inclusion, and social impact.

This Report was prepared using the Global Reporting Initiative\* (GRI) Sustainability Reporting Standards.

To view or download the full report, visit [intel.com/responsibility](https://www.intel.com/responsibility).