





6LDBALFOUNDRIES

CORPORATE RESPONSIBILITY REPORT 2019























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COMPANY PROFILE









We are GLOBALFOUNDRIES, a leading fullservice foundry delivering truly differentiated semiconductor solutions, created ten years ago with an integral commitment to social and environmental responsibility and dedicated to ethical and responsible business practices.

GF provides a unique combination of design, development, and fabrication services for a range of high-growth markets. With a manufacturing footprint spanning three continents, GF has the flexibility and agility to meet the dynamic needs of clients across the globe. We partner with some of the world's most inspired companies to develop and produce the semiconductors that are changing the way people live today and defining what's possible for tomorrow.

While execution excellence remains our first priority, we are more than a manufacturer. We are the catalyst for growth in the industries we serve. With one of the largest populations of leading-edge scientists and technologists in the semiconductor manufacturing industry, we make possible the technologies and systems that transform industries. We are dedicated to being the best possible partner for our clients. delivering the expertise and insights to help position them as the leaders in their markets. We develop the solutions that are moving the world forward, making lives easier and creating new ways to meet the challenges of tomorrow. Our target markets include Mobility, Automotive, Communication and Data Centers, and IoT (the Internet of Things).

Today, GF operates manufacturing facilities in Dresden, Germany; Malta and East Fishkill, New York; Burlington, Vermont; and Singapore. GF's corporate offices are in Santa Clara, California (Silicon Valley) with a global network of R&D, design enablement, and customer support operations (please refer to the map "Company Locations"). GF is owned by Mubadala Investment Company, which is owned by the Government of Abu Dhabi.

2019 marks the tenth anniversary of the founding of GF. Over the past decade, the company has grown and evolved to become the world's leading specialty foundry. Today, we are in the process of streamlining our global manufacturing footprint to better address the growing demand for differentiated technologies. In January 2019 we announced

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COMPANY PROFILE









our plans to transfer ownership of Fab 3E in Tampines, Singapore to Vanguard International Semiconductor (VIS) at the end of this year, while maintaining fab operations at our campus in Woodlands, Singapore. In April 2019, we announced the launch of our strategic partnership with ON Semiconductor, through which GF will transfer ownership of our Fab 10 facility in East Fishkill, NY to ON Semiconductor at the end of 2022. As the last major element of our strategic pivot, in May 2019 we announced the planned sale of Avera Semi, our ASIC (Application-specific Integrated Circuit) business to Marvell Semiconductor. This transaction is anticipated to close in Q4 2019.

In 2018 and into early 2019, GF has been recognized for exceptional CSR (Corporate Social Responsibility) and EHS (Environmental Health and Safety) performance with the following awards:

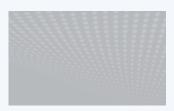
Responsible Business Alliance (RBA) VAP Audit Platinum Recognition:

- GF Fab 9 achieved the maximum score of 200 in its 2018 VAP Initial Audit;
- GF Singapore achieved the maximum score of 200 in its 2019 VAP Closure Audit.

2018 National Pollution Prevention Roundtable (NPPR) Award:

- GF Fab 8: Awarded for a project that reduced the use of a sulfuric acid and hydrogen peroxide mixture while increasing third-party reuse of the spent solution. The project eliminated over 10,000 tons of hazardous chemical use annually, and saved more than US \$16.7 Million for GF and its partners;
- GF Fab 9: Awarded for a chemical use reduction project in chemical mechanical polish (CMP). The Fab 9 team optimized the polish slurry chemistry and qualified a new polishing pad for enhanced slurry transport. These changes eliminated nearly 700 tons of hazardous waste and saved more than US \$1.1 Million per year.

COMPANY PROFILE









• 2018 Corporate Health Award Seal of Excellence

 GF Fab 1 received the Seal of Excellence for sustainable work in the area of maintaining and promoting employee health.

2018 Kimberly Clark Greenovation Award

 GF Fab 8 was awarded with a Greenovation. Award for diverting more than 2,000 kilograms of nitrile glove waste from landfills to a recycling program that turns used gloves into plastic pellets to manufacture new products.

2018 Piepenbrock Gold Seal Award

 GF Fab 1 was awarded a Gold Seal by the site's janitorial contractor for the joint efforts in implementing an ecological building cleaning concept. The program's focus is on protecting the environment and saving resources, reducing greenhouse gas emissions, protecting the health of GF and Piepenbrock employees, as well as cost savings through reduced consumption.

• 2018 Singapore Energy Efficiency National Partnership Award - Best **Practices Category**

 The award recognized development and implementation of a cold ultrapure water (UPW) chemical rinse step, replacing a process that used hot UPW. GF Singapore proved that chemical rinsing with cold UPW to be equally effective and efficient, producing savings of US \$1.3 Million and an energy reduction of 24,897 MWh per year, equivalent to 6,875 tons CO₂.

2019 Vermont Governor's Excellence Award in Worksite Wellness - Silver level

 GF Fab 9 received Vermont Governor's recognition for 2018 activities focusing on promoting the health and wellness of our employees, and our involvement with wellness in the community.

• 2019 Saxony Environmental Alliance's **Certificate of Recognition**

 GF Fab 1 was awarded a Certificate of Recognition for environmental management measures that go beyond regulatory compliance.

COMPANY LOCATIONS











CFO STATEMENT











Dr. Thomas Caulfield CHIFF EXECUTIVE OFFICER

GLOBALFOUNDRIES was founded in 2009 with a strong global commitment to social and environmental responsibility. In 2019 we are celebrating our 10th anniversary. Much has changed in our business and the broader industry over the past decade, but one thing remains the same—semiconductors are the central components of the global technology revolution. Semiconductor technology is changing the way people engage, interact, work and play-every day. Our vision is to change the industry that's changing the world.

Since March 2018, we have taken bold steps, pivoting our business to become the world's leading differentiated semiconductor foundry. We have reshaped our technology portfolio to intensify our focus on delivering truly differentiated feature-rich solutions for our clients

in high-growth markets. We are executing on our strategy to optimize our manufacturing footprint, starting with our January 2019 announcement that we will transition ownership of Fab 3E in Tampines, Singapore to Vanguard International Semiconductor. In April 2019, we also announced a strategic manufacturing and technology partnership with ON Semiconductor through which we will transfer ownership of our Fab 10 in East Fishkill, NY to ON Semiconductor by the end of 2022. Finally, in May 2019 we announced the planned sale of Avera Semi, our ASIC (Application-Specific Integrated Circuit) business-to Marvell Semiconductor by the end of 2019. These transformational transactions will allow GF to focus on our core competency providing manufacturing services to enable our customers' success through our differentiated technologies.

CFO STATEMENT









For GF to be truly relevant, our clients need a foundry partner with a sustainable business model—economically as well as socially, environmentally and ethically. We share the same dedication to upholding the highest standards of ethical business conduct as our customers—embodied by our Worldwide Standards: GLOBAL FOUNDRIES Code of Conduct.

During my tenure leading GF Fab 8 in Saratoga County, NY, and now as CEO, I have been dedicated to ensuring the safety and security of our employees on our "Journey to Zero" injuries and incidents. I have formed a Stewardship Committee which encompasses my senior leadership team to provide oversight and strategic guidance for the company's approach to corporate responsibility, including environmental health and safety, ethics, and labor practices.

Recognizing the importance of transparency to our stakeholders, I am pleased to present our approach to social and environmental responsibility in this 2019 Corporate Responsibility Report. I would like to highlight key elements of our 2019 Report:

- At GF we are committed to a respectful workplace that embraces our diversity. including gender diversity, as a competitive advantage. On International Women's Day 2019, we announced the formation of the Fab 1 chapter of GLOBALWOMEN in Dresden, Germany, expanding our internal network focused on the professional development of women at GF. With the addition of Fab 1, we now have GLOBALWOMEN chapters in all of our manufacturing sites, as well as our largest non-fab sites in Santa Clara, CA, and Bangalore, India. As the senior executive sponsor of GLOBALWOMEN, and along with my leadership team, I am committed to fostering opportunities for women to grow and advance in their GLOBALFOUNDRIES careers;
- Together with our employees, GF provided aid for Kerala and Kodagu flood relief, the Cyclone Gaja relief campaign, and California wildfire relief. In 2018, our company and employees made more than 7,000 donations totaling more than \$130,000 through GlobalGives, our corporate philanthropy and community engagement initiative;

CFO STATEMENT









- In 2018, we demonstrated strong safety performance on our "Journey to Zero" injuries, working more than 34 million hours at rates below (better than) safety benchmarks. We have made significant progress building a behavior-based safety culture. We are striving to achieve best-in-class performance by targeting zero incidents—emphasizing engagement and accountability at all levels of the company;
- We exceeded our 2016–2018 resource conservation goals, completing multiple projects across our global manufacturing sites to reduce energy use, water consumption and greenhouse gas emissions as well as lowering our use of chemicals and generation of waste. We were recognized for our environmental performance with significant external awards at several manufacturing sites;
- We maintained "Conflict-free" status across our global supply chain for materials designated as "Conflict Minerals"—Tantalum, Tungsten, Tin and Gold used in our integrated circuit wafers and semiconductor modules. We are also participating in the Responsible Minerals Initiative's due diligence program for responsible sourcing of Cobalt;
- We supported comprehensive external audits of our Corporate Social Responsibility management systems at two manufacturing sites in 2018. Our sites in Burlington, Vermont, and in Singapore have both achieved Platinum recognition from the Responsible Business Alliance (RBA), receiving full scores of 200 points in RBA VAP Audits. As a member of the RBA, we also extend its Code of Conduct to our global supply chain.

We recognize that the expectations for responsible and transparent business practices set by our key stakeholders, including our customers, employees and the communities where we operate, will always grow. As such, we are committed to strengthening our management systems to ensure that we exceed these expectations.

Dr. Thomas Caulfield CHIEF EXECUTIVE OFFICER









GLOBALFOUNDRIES is committed to upholding the highest ethical and compliance standards. Each of our employees, contractors, and consultants has the responsibility to carry out his or her duties in a manner consistent with this commitment.

GLOBALFOUNDRIES' WORLDWIDE STANDARDS: CODE OF CONDUCT

The GF Worldwide Standards: Code of Conduct (Code) is the foundation of our Ethics & Compliance program and an integral part of our Corporate Social Responsibility Management System. It sets forth the basic rules, standards, and behaviors that we must follow to achieve our business objectives while upholding our values. The Code summarizes legal and ethical standards and provides practical advice covering a wide range of issues pertinent to

ethical business practices, including human rights, discrimination, harassment, environmental responsibility, protection of intellectual property, and anti-corruption. It also explains the major elements of our compliance program and identifies where employees can seek help and support. The Code has been communicated to all employees, and employee training and/or certification on the Code is repeated annually.

GF's Code is aligned with the Responsible Business Alliance Code of Conduct (RBA Code). GF joined the RBA in May 2016, following years of incorporating its Code into our business practices. We stand committed to the RBA Code and its continuous pursuit of excellence in corporate responsibility and the extension of responsible practices throughout the supply chain.

GF established the Ethics & Compliance Office within the Legal Department to develop, coordinate, and support the compliance program and foster a culture of principled behavior and decision-making. This Office is responsible for promoting employee awareness, education, and training, as well as for creating and implementing a program to assess risks and proactively prevent and detect unlawful/unethical conduct. The Ethics & Compliance Office works closely with the Ethics Committee (including the Chief Human Resources Officer, Chief Financial Officer, SVP, Global Integrated Supply Chain, Quality & IT, Chief Audit Executive and Chief Legal Officer), which is the body charged by the Board of Directors to oversee the compliance program.









The GF Ethics First Helpline is accessible 24 hours a day, 365 days a year, enabling employees and stakeholders to inquire directly about the compliance program and report potential violations and other concerns. The Helpline is available to employees and contractors as well as customers, suppliers, and vendors globally. We promptly review all reports, and the company has a strong non-retaliation policy to protect anyone who makes a good-faith report. Investigations of complaints are overseen by the GF Ethics & Compliance Office, supported confidentially by other internal organizations such as Internal Audit and Global Security.

GOVERNANCE FRAMEWORK

Corporate governance addresses the way in which companies are directed, controlled, and managed. Our governance framework is focused on four pillars: responsibility, fairness, transparency, and accountability.

Board of Directors

The Board of Directors (the Board) is the body charged with the ultimate responsibility for ensuring appropriate governance across the organization, and establishes the "tone at the top."

The Board reviews and determines the company's strategy, monitors and assesses the company's corporate and financial performance, establishes and monitors effective compliance systems and policies, and oversees the performance of GF's executive

management. The Board is composed of our CEO, Dr. Thomas Caulfield; representatives of Mubadala Investment Company, our shareholder; and other senior industry leaders. The Board draws on a great depth of experience that spans the semiconductor and equipment industries, international finance, energy, aerospace, and business development. The Chairman of the Board is not an executive officer of the company.

Board Committees

Two committees support the Board in carrying out its governance responsibilities: Audit, Risk & Compliance; and People & Compensation (see below).

The Audit, Risk & Compliance Committee (ARCC) is mandated by the Board to oversee the integrity of financial statements; compliance with legal and regulatory requirements; the effectiveness of internal systems and controls (including the









company's internal audit function); the risk management function; and the independence, qualifications, and performance of the company's external auditors.

The People & Compensation Committee assists the Board in fulfilling its responsibilities concerning the hiring and compensation of our executives and in providing guidance to GF's management on personnel and compensation issues.

GF Chief Executive Officer

GF's Chief Executive Officer is responsible for managing the company's business and is accountable to the Board. The primary responsibilities of our CEO and senior management broadly cover the management of the dayto-day operations of the business, strategic planning, budgeting, financial reporting, risk management, and compliance.

Support for the Board and its Committees

With the ARCC, the Legal Department and the Internal Controls Department are mandated by the CEO to oversee corporate governance at GF. Together, the Legal Department and the Internal Controls Department ensure that the organization adheres to the company's corporate governance framework and associated policies and procedures, provide guidance, and ensure training sessions are conducted on a regular basis.

Internal and external auditors play crucial roles in assisting the Board and management. External auditors are responsible for auditing the financial statements of the company. The Internal Audit organization plays an important role in providing the Board and senior management with objective assurance support for the business and consulting services. Internal Audit evaluates the effectiveness of risk management, internal controls, and governance processes, and makes recommendations for improvement. Internal Audit also acts as a bridge between the Board and management, and reports to the ARCC Committee.

In addition, the Compliance Network promotes our culture of principled behavior and decision making. The Compliance Network consists of a group of influential employees who serve as Ethics & Compliance representatives to help identify key compliance risks, drive engagement, and ensure that training and communications are tailored to the needs of the individual sites.

Environmental Health & Safety scorecards are provided to the ARCC.









Delegation of Authority

GF is an integral part of the Mubadala Group. An important mechanism in maintaining a strong relationship with our sole shareholder is the shareholder-approved Delegation of Authority (DOA). The DOA allows the shareholder to exercise control and oversight over the authority levels within the company.

The DOA is a critical component of our corporate governance structure. In accordance with the GF DOA, the Board has delegated certain of its powers to the Board Committees, the CEO, and management. The Board, management, employees, contractors, agents, and anyone acting on behalf of GF are responsible for

ensuring that they operate in accordance with the DOA. On an ongoing basis, management in coordination with the ARCC ensures that the DOA is appropriate for the nature of the business and that it is reviewed on an annual basis.

Stewardship Committee

In addition to the oversight provided by the Board and its committees, the GF Stewardship Committee is responsible for setting strategic direction, conducting management review, and providing approval for risk management and business continuity, global Environmental, Health & Safety (EHS) and Corporate Social Responsibility (CSR) matters. Our Stewardship Committee is led by the CEO and includes key members of the Senior Leadership Team.

Self Assessments and Audits

GF is strongly committed to protecting the fundamental rights of all people. We strive to maintain a fair and open workplace based on a culture of respect, dignity, and integrity for all. As outlined in our Worldwide Standards: GF Code of Conduct, the company strictly forbids all forms of child labor and forced, compulsory, or trafficked labor in the operation of our business and in our supply chain.

We respect the rights of employees to associate freely and have a zero-tolerance policy against harassment, including sexual harassment, or discrimination based on age, ancestry, color, marital status, medical condition, mental or physical disability, national origin, race, religion, political and/or third party affiliation, sex, sexual orientation, gender identity, or veteran status.

GOVERNANCE









We assess our own conformance with the RBA Code using the RBA's annual self-assessment questionnaires (SAQs) for each of our manufacturing sites. To date, our SAQ results are rated as "low risk" for non-conformance with the RBA Code. At selected sites, we are participating in the RBA's VAP (Validated Assessment Program), an independent third-party onsite conformance audit, SAQ and VAP audit results are shared with our customers within the RBA-Online tool. GF's SAQ scores, risk ratings and VAP scores are listed in TABLE 1.

TABLE 1: GF's SAQ Scores, SAQ Risk Rating and VAP Scores

| | 2019 SAQ | | VAP Audit | | |
|---|--------------------------------|--------------------------------|---|---------------------------------|--|
| | Score (100 points possible) | Risk Rating >85% = Low Risk | Score (200 points possible) | Date and Type of Audit | |
| GF (Corporate) | 92.4 | Low | | | |
| GF Fab 1, Dresden, Germany | 91 | Low | | | |
| GF Singapore (Fabs 2, 3, 5, 7 & 3E) | 89 | Low | 200 (RBA VAP Platinum Level Recognition) | May 2019, Closure Audit | |
| GF Fab 8, Malta, New York, U.S.A. | 90.2 | Low | | | |
| GF Fab 9, Burlington, Vermont, U.S.A. | 88 | Low 200 (RBA Level Re | | December 2018, Initial Audit | |
| GF Fab 10, East Fishkill, New York, U.S.A. | 90.7 | Low | | | |









Risk Management

GF manages risk at the enterprise, business function, and manufacturing site levels in order to meet our commitments to customers. the community and employees. Our structured approach of credible risk assessment, disciplined mitigation, comprehensive threat awareness and practiced crisis management enables us to identify critical risks and target mitigation programs at the appropriate level to avoid loss, disruption, or interruption of mission-critical activities and systems. Management and maintenance of risk mitigation and business continuity plans is an on-going task, but, in addition, each year our manufacturing sites and critical business functions identify the potential operational and natural disaster risks that present business continuity challenges. Executive management conducts an

annual review of prioritized risks and our related mitigation strategies, projects, and goals, and we back all these programs and activities with responsible risk financing.

Security Management

Protection of information, data and assets is the foundation of GF's partnerships with customers and suppliers. We adhere to strict policies and procedures at all times to ensure the security of company confidential information and the confidential information of our customers and suppliers. We pursue certification of our Security Management Systems according to international standard ISO 15408 (Information Technology — Security Techniques) where it adds additional value to our existing management systems and clients. Our Enterprise Security Council brings together expertise in information and

cybersecurity, physical and product security, trade compliance, logistics, and government security programs to provide a comprehensive, globally integrated approach to security, which extends to each employee and their individual responsibilities. Annually, we conduct integrated Confidentiality and Security training for all employees.

STAKEHOLDER ENGAGEMENT









Our key stakeholders have a significant interest in our business and help shape our company and the solutions we provide. We regularly engage with our employees, customers, communities, suppliers, and industry peers, sharing perspectives and gaining valuable insight relevant to our business and operations.

CUSTOMERS

GLOBAL FOUNDRIES solutions and manufacturing scale give customers the power to shape their market. We work closely with industry leaders and entrants to identify the right opportunities and deliver the right solutions across established and emerging applications in our customers' respective segments (mobility, automotive, communications networks and data centers and IoT). We created our Customer Experience program to continually improve the value of our customers' partnership with GF. The program is geared to drive improvements by listening to our customers and feeding their voice back into our business processes. We track internal, customer-facing key performance indices that closely align to our customers' Quality, Business, Technology, Fulfillment and Responsiveness targets to quickly adjust when needed. We conduct third-party customer relationship surveys to enable a deeper assessment of our performance. We manage customer issues in our Action Management and Escalation system to ensure responsive follow-through to our commitments. We meet with our customers on a regular basis to review our performance. Improvement projects are prioritized based on customer feedback. The relationships we maintain through ongoing dialogue and collaboration ensure that we understand our customers' expectations, including our shared commitment to social and environmental responsibility.

STAKEHOLDER ENGAGEMENT









EMPLOYEES

At GF we embrace the diversity of our teams as a competitive advantage. Our values of Create, Partner, Embrace and Deliver describe "what we do" as a company (Create & Deliver) and "how we work together" (Partner & Embrace) to enable a culture allowing each individual to bring their whole self with all their talent and distinctive qualities to GF. We take great pride in the dedication and commitment of our global workforce to our success and work to further engage employees at both the global and local level. We nurture a performance-based culture in an environment that encourages individual development, collaboration and new ideas. We also feature employees' professional and personal success stories in our Employees' Spotlight section on GlobalConnect (our company intranet) as an inspiration to all fellow employees.

Employees stay current on corporate and local site information through communication channels including quarterly all hands events, the internal bi-weekly global News Digest, GlobalConnect, the Global Community internal social platform, and ongoing corporate and employee communications, all of which include opportunities to ask questions and provide feedback. GF also provides the opportunity for more in-depth and confidential feedback via dedicated and third party administered employee surveys. In 2018, we conducted our second ONEGF survey to understand employee perspectives on the changes initiated in response to the initial 2017 ONEGF survey results, regarding what is working well at GF and what still needs to be improved upon to drive employee engagement and organizational success.

COMMUNITIES

Along with our global footprint comes a responsibility to the communities in which we operate. Through our worldwide GlobalGives program, we provide employees at all of our sites with the opportunity to make a positive impact in their local communities in the areas of education, philanthropy, and the environment. Each of our fab locations has well-established programs and teams dedicated to enriching the lives of local citizens, and we take great pride in their long history of community involvement.

SUPPLIERS

Our relationships with our suppliers of goods and services are built on a foundation of trust and integrity. We strive to establish long-term working relationships through mutual performance expectations and measures, performance feedback, and continuous improvement

STAKEHOLDER ENGAGEMENT









plans. We engage with our suppliers through periodic business reviews and our Total Supplier Rating (TSR) process. The TSR determines supplier performance with regard to technology, quality, cost, flexibility, and service including Environmental, Health & Safety (EHS) and Corporate Social Responsibility (CSR). EHS and CSR expectations are established early in supplier relationships to improve efficiency and reduce risks throughout the supply chain. We extend our commitment to responsible business practices to our suppliers, requiring them to comply with the RBA Code as well.

INDUSTRY COLLABORATION

Through our participation—and leadership—in semiconductor industry trade associations, we gain valuable insight into the economic, social, and environmental trends that affect our business. These groups include the Semiconductor Industry Association (SIA), the European

Semiconductor Industry Association (ESIA), the World Semiconductor Council (WSC), the Global Semiconductor Alliance (GSA), Semiconductor Equipment and Materials International (SEMI), and ZVEI (a leading German electronics trade association).

These associations are engaged in a wide variety of public policy matters ranging from technology, trade, tax, and environmental policy to promoting STEM (Science, Technology, Engineering, and Mathematics) education and the adoption of energy-efficient technologies. SIA, ESIA, the WSC, and SEMI all have active EHS committees.

THE MATERIALITY ANALYSIS

This CSR Report and metrics focus on certain Corporate Responsibility topics that we consider "material" to our business. We periodically conduct a Materiality Analysis by engaging a

team representing diverse perspectives on GF's business, to provide insights into the expectations and perceptions of internal and external stakeholders. The Materiality Analysis Team is composed of senior representatives from Communications; Customer Engineering; Ethics & Compliance; Global EHS & CSR; Global Supply Management; Human Resources; Global Sales and Business Development: and Risk Management. The team identified a broad range of issues of concern which were prioritized with regard to their economic, environmental, and social impacts to GF, as well as their perceived importance to internal and external stakeholders. The resulting materiality map (FIGURE 1), which determines the scope and content of this report, was reviewed and approved in 2017. The GF Stewardship Committee confirmed it remained valid as of year-end 2018.

STAKEHOLDER ENGAGEMENT

FIGURE 1. GLOBALFOUNDRIES' Materiality Map











SUPPLIER RESPONSIBILITY









GLOBALFOUNDRIES requires that our suppliers follow ethical and responsible business practices. Our manufacturing supply chain consists primarily of suppliers of highly specialized semiconductor manufacturing equipment and materials. We also work with suppliers of specialized business services ranging from fab design and construction to IT consulting. The majority of our manufacturing suppliers operate in the United States, Japan, Singapore, Germany and other EU countries, and Taiwan. There is also a small, but growing number of suppliers from the People's Republic of China.

GF is a member of the Responsible Business
Alliance (RBA) and is committed to the RBA
Code of Conduct and its continuous pursuit
of excellence in corporate responsibility and
extension of responsible practices throughout
the supply chain. Our requirement that suppliers
conform with the RBA Code is included in our

standard contract templates, Purchase Order
Terms and Conditions, Global Supplier and
Subcontractor Management Policy, and Material
Qualification Procedure.

Furthermore, we have implemented a supplier RBA Code conformity assessment and verification process directed at GF "major" suppliers. The composition of the major supplier list is based on documented criteria that are related to supplier spend, supplier facility location, and nature of supplier business. In 2018 close to 60 suppliers were designated as major suppliers. The list was comprised of manufacturing tool suppliers, silicon wafer and specialty chemical suppliers, outsourced manufacturing - mostly outsourced test and assembly (OSAT) suppliers, labor recruitment agencies, and on-site service suppliers, such as janitorial, security and canteen services.

Annually, we ask the designated major suppliers to provide a signed certification acknowledging their understanding of the RBA Code and our requirement to be in conformity. along with self-assessment information using RBA questionnaires and tools (such as RBA-Online, RBA's supply chain risk assessment platform) or equivalent methods. GF applies a risk-based approach for selected major suppliers to provide evidence of RBA Code conformity, through VAP (Validated Assessment Program) reports or targeted document reviews performed by GF staff. Where corrective actions are identified, either in RBA VAP audits or from GF targeted document review, we work closely with our suppliers to implement them in order to improve their business practices.







SUPPLIER RESPONSIBILITY

TABLE 2. GF Supplier RBA Code Conformity Assessment and Verification - 2018 Program Overview by Supplier Category

| | | Outsourced Manufacturing | Manufacturing Tools | Materials (Wafers and Chemicals) | On-Site Services | Recruitment Agencies | All Supplier Categories |
|-------------------|---|-----------------------------|------------------------|-------------------------------------|---------------------|-------------------------|----------------------------|
| Self-Assessments | RBA Site SAQs | 20 | 23 | 58 | 1 | 0 | 102 |
| | RBA SAQ Equivalent Information | 0 | 0 | 0 | 11 | 5 | 16 |
| Audits and | RBA VAP Audits | 11 | 0 | 1 | 1 | 0 | 13 |
| Document Reviews | GF RBA Targeted Document Review | 0 | 0 | 0 | 8 | 2 | 10 |
| | Suppliers / Sites with Corrective Action from RBA VAP Audit | 7 | 0 | 0 | 0 | 0 | 7 |
| Corrective Action | Suppliers / Sites with Corrective Action from GF RBA Targeted Document Review | 0 | 0 | 0 | 8 | 2 | 10 |
| | Corrective Action Closed | 3 | 0 | 0 | 5 | 2 | 10 |
| | | | | | | | |

Within the 2018 program cycle, more than 110 self-assessment responses were obtained from major suppliers. GF reviewed all self-assessment information and followed up with targeted document review or a request for VAP audit information where the self-assessment indicated a higher potential risk of non-conformity to the RBA Code.

GF conducted targeted document review for eight onsite service suppliers and for two labor recruitment agencies. Several corrective actions were identified related to labor practices.

RBA VAP audits were conducted at 13 major supplier sites, mostly at OSAT suppliers, resulting in the identification of corrective action for seven major supplier sites. In total, as of June 2019, ten major supplier sites have completed corrective actions identified in the 2018 review, while seven major supplier sites currently are working towards closure, respectively preparing for VAP closure audits (a formal on-site verification conducted by 3rd-party auditors).

To ensure that our supplier requirements are well understood, supplier leads within GF Global Supply Management department receive training regarding the RBA Code, focused specifically on its escalation into the supply chain and the results of our Code verification process. Where applicable, the annual results of RBA Code conformity assessment and verification process are included in our Global Supplier Ratings.

SUPPLIER RESPONSIBILITY









Responsible Minerals Sourcing: Conflict Minerals—Achieving a DRC Conflict-Free Supply Chain

GF requires all materials to be sourced responsibly—this applies specifically to materials potentially sourced from conflict-affected and high risk areas. GF's Conflict Minerals policy establishes due diligence expectations for sourcing of minerals and metals, such as tantalum, tin, tungsten and gold ("3TG") as well as cobalt. The policy specifically prohibits sourcing of 3TG metals that contributes to financing armed conflict and human rights abuses in the conflict regions of the Democratic Republic of Congo (DRC) and adjoining countries..

In the complex, multi-step silicon wafer manufacturing process, tantalum, tungsten - and in some cases, cobalt - are added to achieve the desired functionalities of integrated circuits.

The commodities we purchase that contain tantalum, tungsten or cobalt include high-purity targets used in physical vapor deposition (PVD) and process gases and chemicals, all of which are used to deposit ultra-thin metal films onto the wafer surface. Tin and gold are used in post-wafer fab process steps, such as in interconnect materials in wafer bump or wafer packaging, and in components used for semiconductor module assembly.

GF's goal is to maintain our 3TG "DRC Conflict-Free" supply chain—a status that we initially achieved in January 2016. DRC Conflict-Free sourcing is defined by sourcing 3TG metals only from smelters listed as compliant by the Responsible Minerals Initiative's (RMI) Responsible Minerals Assurance Process (RMAP). To support our customers' needs for reporting under the United States Securities and Exchange Commission's (SEC) Conflict Minerals Rule, we routinely provide due diligence information using the RMAP's industry-standard reporting tools and processes.

To maintain our DRC Conflict-Free supply chain status, we manage our supply base to control all commodities containing 3TG metals. We partner with our suppliers to identify all smelters in our extended supply chain and ensure they maintain RMAP conformance. Any new commodities including 3TG metals must be sourced only from RMAP-compliant smelters. For cobalt, we have implemented due diligence processes aligned with the RMI's Cobalt Initiative. Our conflict minerals program and progress are reviewed periodically by the Stewardship Committee.

OUR PEOPLE AND WORKPLACE









GLOBALFOUNDRIES relies upon our people to deliver on our vision and mission. Our strength lies in the talent and diversity of our employees. who bring a range of capabilities, experiences, and qualifications that give us a competitive advantage in our global markets. GF strives to create a respectful workplace for our approximately 16,500 employees, valuing diversity and enabling employees to learn, grow, and develop their talents. We have a zero-tolerance policy against harassment, including sexual harassment, and discrimination based on age, ancestry, color, marital status, medical condition, mental or physical disability, national origin, race, religion, political and/or third party affiliation, sex, sexual orientation, gender identity, or veteran status. We respect the rights of employees to associate freely.

While we naturally have an international workforce due to the span of our global locations. GF is also proud to employ a highly diverse workforce within our sites. For example, our workforce at Fab 8 in New York is drawn from local talent as well as experienced professionals from across the United States and the globe representing more than 50 nationalities. Similarly, while the majority of our workforce at Fab 1 in Dresden, Germany, is hired locally, the fab is home to employees from 39 nations. Our Singapore employees represent 22 nations.

Established in 2013, our GLOBALWOMEN (GW) initiative seeks to have a positive impact on GF's business through the enrichment of its female employees. Each major GF site has an active GLOBALWOMEN chapter: Austin, TX; Santa Clara, CA; Burlington, VT; and Malta, NY, and East Fishkill, NY, all U.S.; Bangalore, India, Singapore and Dresden, Germany (the youngest chapter—inaugurated on 2019 International Women's Day).

GW's mission is to create a sustainable framework for the professional development of women through meaningful network connections, leadership activities, speaking events, publications, conferences, mentoring, community outreach and much more. Comprised of both women and men, GW boasts over 1,400 members and is championed by executive sponsors CEO Tom Caulfield, Emily Reilly (Senior VP Chief Human Resources Officer), Laurie Kelly (VP Global Communications), and Mike Cadigan (Senior VP, Customer Design Enablement) along with site executives.

GLOBALWOMEN is also closely aligned with the Society of Women Engineers (SWE) and in October sent 25 women to represent GF at WE18 in Minneapolis, MN. Hosted annually, WE is the largest conference for women in engineering and technology. GF had a strong presence including a keynote by SVP & Chief Human Resources Officer, Emily Reilly at the annual award dinner as well as plenary presentations from seven other GF women.







OUR PEOPLE AND WORKPLACE

TABLE 3: GF Workforce Composition by Region, Gender, Employment Type and Contract (as of December 31, 2018)*

| Total | Female | Male | Employee | | | | |
|-------|------------------------|-----------------|------------|------------|--|--|--|
| ıls | e / Percentage of Subt | Category | Region | | | | |
| 44% | 20% | 80% | Total | | | | |
| 98% | 98% | 99% | Permanent | U.S** - | | | |
| 1% | 2% | 1% | Temporary | | | | |
| 98% | 98% | 99% | Full time | | | | |
| 1% | 2% | 0% | Contingent | | | | |
| 0% | 0% | 0% | Other | | | | |
| 37% | 33% | 67% | Total | | | | |
| 99% | 99% | 99% | Permanent | | | | |
| 1% | 1% | 1% | Temporary | Acia Doo | | | |
| 100% | 100% | 100% | Full time | Asia Pac – | | | |
| 0% | 0% | 0% | Contingent | | | | |
| 1% | 1% | 0% | Other | | | | |
| 19% | 17% | 83% | Total | | | | |
| 97% | 96% | 97% | Permanent | | | | |
| 3% | 4% | 3% | Temporary | EMEA — | | | |
| 93% | 74% | Temporary 3% 4% | Full time | EIVIEA — | | | |
| 0% | 0% | | | | | | |
| 3% | 4% | 3% | Other | | | | |
| 100% | 24% | 76% | Total | | | | |
| 98% | 98% | 99% | Permanent | | | | |
| 1% | 2% | 1% | Temporary | Total | | | |
| 98% | 96% | 99% | Full time | Total – | | | |
| 0% | 1% | 0% | Contingent | | | | |
| 1% | 1% | 1% | Other | | | | |
| | 1% | 0% | Contingent | _ | | | |

WORKFORCE COMPOSITION

The composition of our global workforce by region, gender, employment type (permanent / temporary) and nature of contract (percentage of full time contracts) is presented in TABLE 3, while TABLE 4 provides an overview of the composition of our global workforce by employee category, gender, and age.

TABLE 4: GF Workforce Composition by Gender, Employee Category and Age (as of December 31, 2018)**

| | Employee Category | All Employees | All Managers | Directors and above | Vice Presidents and above | Senior Leadership Team | Board of Directors*** |
|-----------------|-------------------|---------------|--------------|---------------------|------------------------------|---------------------------|-----------------------|
| | Male (Totals) | 76% | 81% | 85% | 86% | 88% | 91% |
| 84-1- | under 30 | 14% | 2% | 0% | 0% | | |
| Male (Age) | 30-50 | 59% | 66% | 45% | 37% | | |
| (Agc) | over 50 | 26% | 33% | 55% | 63% | | |
| ı | Female (Totals) | 24% | 19% | 15% | 14% | 12% | 9% |
| Female (Age) | under 30 | 18% | 4% | 0% | 0% | | |
| | 30-50 | 62% | 71% | 53% | 50% | | |
| | over 50 | 21% | 25% | 47% | 50% | | |

^{*}Numbers in Table 3 include contingent workers and other employees (such as interns, students and apprentices), which both represent a share of less than one percent.

^{**0.9} percent of U.S. employees (equals 0.4 percent of total) have not self-identified their gender.

^{***}The information regarding the composition of GF Board of Directors is as of June 18, 2019.

OUR PEOPLE AND WORKPLACE









COMPENSATION & BENEFITS

GF's Global Compensation & Benefits Strategy is to provide compliant programs which are considered competitive against current geographical and skill market norms. Our goal is to gain a balance between global standardization and local customization, while offering our employees protection and flexibility with their benefit offerings. We recognize that benefit environments vary by country, and therefore the types of benefit plans we offer reflect the prevailing local market practices. Benefits under this strategy include healthcare, parental leave, risk benefits such as personal insurance, retirement savings, time off, educational assistance, and other location-specific benefits. For example, GF's approach to parental leave for employees for the birth or adoption of a child is based on a combination of national and local leave entitlements implemented through our regional leave policies.

EMPLOYEE EDUCATION & TRAINING

GF's company culture leverages the power of our people by recognizing the importance of teamwork and collaboration, increased employee engagement and empowerment.

We provide our employees resources and courses that develop job and career skills and help people manage change. Through our global and regional development resources our employees own their professional development, ranging from communication and leadership skills to project management and technical skill growth. We offer instructor-led courses, on-thejob-training, and e-learning, including through access to an extensive third party online training platform. In 2018, the average number of training hours per employee was 50.5. We also

support our employees' development through mentoring, coaching, professional certifications. and partnerships with outside organizations.

Our performance management process reflects our employees' professional development—it is designed to help employees and managers find directions through joint goal and development planning, to ultimately deliver results not only for our company, but as well as for our employees themselves.

OUR PEOPLE AND WORKPLACE









HEALTH & SAFETY

Protecting the health, safety, and well-being of our employees, visitors, and communities is our greatest responsibility, one that we embrace proactively and systematically. We strive to continuously reduce occupational injuries and illnesses in all of our operations, with an ultimate goal of zero incidents. The GF Journey to Zero incorporates our commitment to accountability for each other and for the company. The journey emphasizes that no injury is inevitable, and together we can create a culture where zero injuries and incidents is the norm.

Our Global EHS Policy and Standards are the foundation of health and safety management systems at each manufacturing location. The Standards provide a consistent standard of care, and set performance expectations that apply globally throughout the company. They cover a wide range of health and safety aspects, including injury and illness prevention, electrical safety, chemical safety, and industrial hygiene monitoring programs.

Our OHSAS 18001 certified occupational health and safety management system is based on these Standards, and in 2017 we transitioned to an enterprise-wide certification which covers all of our manufacturing locations. Our global OHSAS 18001 certificate is available here.

At each fab site, GF's health and safety professionals, management, and employees share responsibility for implementing the Standards through local programs and operating procedures. Health and safety professionals engage with operational personnel to analyze potential process hazards and mitigate them according to the following hierarchy of controls:

- Elimination (such as eliminating the use of a material);
- Substitution (such as replacing a hazardous process or material with a less hazardous one);
- Engineering controls (including ventilation, equipment interlocks, enclosure, segregation, etc.);
- · Administrative procedures (developing procedures, implementing training, etc.);
- Personal protective equipment (to manage any residual risks, after all other controls have been implemented).

OUR PEOPLE AND WORKPLACE









The Journey to Zero is built on a foundation of Behavior-Based Safety (BBS), a collaborative approach that recognizes and facilitates individual safety awareness and behaviors, with collective results. The Journey to Zero emphasizes communications, engagement, and training to encourage safe behaviors. We provide a wide range of general and job-specific health and safety training to our employees and contractors.

Our EHS & Risk Management organization provides a unique platform for collaboration and integration across the disciplines of Safety. Environmental, Industrial Hygiene, Health, Security, Real Estate, and Risk Management united in the pursuit of operational excellence and the mitigation of risks to our people, communities, and assets. The EHS & Risk Management Centers of Excellence (COEs) program provides opportunities for staff from

different sites to drive global integration and to identify and implement best practices. In the areas related to occupational health and safety. the COEs have focused on workplace monitoring and confirming the effectiveness of engineering and administrative controls that limit potential exposures, and sharing best practices related to emergency response and pre-purchase evaluation of semiconductor manufacturing equipment.

Safety Performance in the Workplace

We measure progress on the Journey to Zero with a range of metrics—both leading and lagging indicators. We evaluate all occupational injuries and illness cases to identify their root causes and determine appropriate preventive measures and corrective actions. At the highest level, Total Recordable Injury Rate (TRIR: measuring the number of recordable injuries), Lost Time Injury Rate (LTIR: measuring the number

of injuries that result in employees missing one or more work days after the day of injury) and Severity Rate (SR: measuring the average number of days employees were unable to work following an occupational injury or illness) provide an aligned view of safety performance across the company:

FIGURE 2 shows GF's corporate rates from 2016 through 2018 in comparison to our 2018 goals and the 2017 U.S. Bureau of Labor Statistics rates for the semiconductor industry (with data for 2017 being the most recent year for which these governmental statistics are available).

OUR PEOPLE AND WORKPLACE



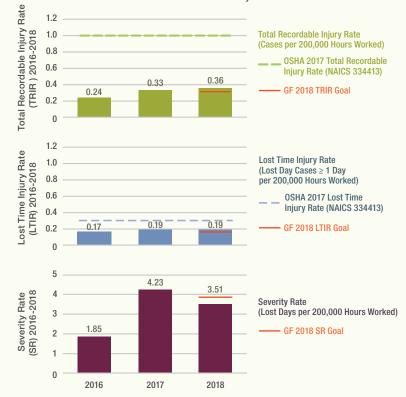






Our Total Recordable Injury Rate increased from 0.24 in 2016 to 0.36 in 2018. The comparable 2017 U.S. Total Recordable Injury Rate for the semiconductor industry was 1.0. At the same time, our Lost Time Injury Rate was 0.17 in 2016 and 0.19 in both 2017 and 2018. For comparison, the 2017 U.S. Lost Time Injury Rate was 0.3 for the semiconductor industry. Our Severity Rate was 1.85 in 2016, and increased to 4.2 in 2017 due to a relatively small number of incidents with more lost days. It decreased by 17 percent from 2017 (4.23) to 2018 (3.51). There is no benchmark rate available for the severity rate from the U.S. Bureau of Labor Statistics, GF established 2018 goals to reduce the Injury Rates (LTIR, TRIR) and the Severity Rate (SR) by 10% below the 2017 values. As described above. TRIR increased by 8% over 2017, while LTIR remained flat, missing the 10% reduction goal. However, the 2018 SR was 17 percent lower than 2017, exceeding the 10% reduction goal.

FIGURE 2: GF Corporate Total Recordable Injury Rate, Lost Time Injury Rate, and Severity Rate (2016-2018), as Compared to 2017 U.S. Bureau of Labor Statistics Rates for the Semiconductor Industry and GF 2018 Goals



OUR PEOPLE AND WORKPLACE









While GF occupational injury and incident rates remained to be better than benchmark through 2018, we continue to pursue our Journey to Zero occupational injuries and incidents. For 2019 we are applying the same goal setting method as in 2018: To reduce the Injury Rates (LTIR, TRIR) and the Severity Rate (SR) by 10% below the 2018 value.

Managing Chemicals Safely

Semiconductor manufacturing takes place in a highly controlled cleanroom environment. Equipment and chemical/gas distribution systems are completely enclosed, providing an ultra-clean manufacturing space and safe working conditions. Stringent material handling procedures include automated chemical delivery systems and sophisticated manufacturing equipment that incorporates multiple engineering controls to minimize the risk of

chemical exposure for employees working in the cleanroom and chemical distribution areas. GF thoroughly reviews all new chemicals before their introduction to our sites, and ensures that proper safeguards and material handling procedures are in place. Our chemical management systems at each site provide employees with ready access to Safety Data Sheets (SDS) and identification of appropriate personal protective equipment when necessary.

Promoting Health and Well-Being

We place great value on our employees' overall health and wellness. Each of our manufacturing facilities has an on-site clinic and medical professionals who administer health and wellness programs in collaboration with Human Resources. Our health professionals engage globally in the Center of Excellence for Occupational Health and Employee Well-Being

to share knowledge and drive continuous improvement. We encourage employees to live healthy, active lives, and provide support through services such as vaccinations, health screenings and surveillance, dietary consulting, on-site fitness facilities, first aid training, and safety tips for travelers. Annually, our facilities across the globe hold a themed "Health Day" for all employees with information campaigns and activities to further promote a healthy lifestyle.

In addition, GF's Employee Assistance Program (EAP) provides all U.S. employees and their families with confidential access to resources to help with life management issues. The Employee Assistance Program resources include shortterm counseling sessions, legal and financial services, childcare, eldercare, and adoption references.

COMMUNITY ENGAGEMENT









Our company has a global footprint and with it a responsibility to the communities in which we have a presence. Globally, our community programs focus on education outreach STEAM, philanthropy and the environment.

Each of our fab locations has well-established programs and teams dedicated to enriching the lives of local citizens, and we take great pride in their long history of community involvement. Through the GlobalGives program, we are building upon these grassroots efforts, embracing them as integral to our company identity, and connecting employees and teams to a larger international effort.

EDUCATION OUTREACH

GLOBALFOUNDRIES strives to promote, develop, and support educational programs inside and outside the classroom, as well as in our homes and local communities. Our many activities include developing, supporting, and expanding upon educational programs in the STEM (Science, Technology, Engineering, and Mathematics) fields at all of our sites. Through our global STEM initiative, we provide experiential learning opportunities for students and teachers, facilitate curriculum development and mentoring support for early college high school programs, drive programming to encourage girls to pursue education and career paths in STEM, and offer internships, job shadowing, and employment opportunities in advanced manufacturing, among others.

Some of the specific programs we have created or supported include:

- GLOBALGirls, a summer STEM camp for middle school girls launched in 2017 to inspire our next generation of female science and technology leaders and address the gender gap in manufacturing. In July 2018, 33 girls in seventh-through ninth-grade, were hosted at GF Fab 9 in Essex Junction, VT, combining the traditional summer camp experience with an introduction to the fields of STEM (Malta, NY, and Burlington, VT);
- FIRST® (For Inspiration and Recognition of Science and Technology) Robotics programs, designed to motivate young people to pursue education and career opportunities in STEM, while building self-confidence, knowledge, and life skills (Malta, NY, East Fishkill, NY and Burlington, VT)—Together with its consortium of business partners, GF has collectively pledged more than \$1 million to support STEM programming along the U.S. Northeast Tech Corridor over six years (2015-2020);

COMMUNITY ENGAGEMENT









- Since 2005 GF Dresden has supported "Jugend Forscht" ("Youth in Science") including the junior segment "Schüler Experimentieren" ("Students Experiment") Saxony, a regional competition that encourages young people with scientific and creative talents to put their ideas into practice (Dresden, Germany);
- GF partnered with the Museum of Innovation and Science ("miSci") in Schenectady, New York, to provide exemplary STEM-related education to historically-underserved communities in the Capital Region of New York State. GF made it possible for more than 300 schoolaged students from four regional Boys and Girls Clubs and one YMCA to experience the immersive science programs and interactive galleries at miSci during their recent school break (Malta, NY,);
- Volunteers from GF Bangalore regularly engage on STEM subjects with local schools as well as with institutions for underprivileged children, examples include hosting a STEM "Science Fest" at GF Bangalore

- site, hosting a STEM field trip for girls from a support home, donating STEM teaching aids and science kits to a local school, as well as holding a workshop on alternative energy sources, or giving other local school "show and tell" events about semiconductors in general and GF (Bangalore, India);
- GF Santa Clara has been supporting the local school district since 2016, including "STEAM" (Science, Technology, Engineering, the Arts and Mathematics) initiatives.

PHILANTHROPY

We believe the success of our company is directly related to the health of the communities and regions we call home.

In 2018, GF launched several worldwide campaigns through our GlobalGives giving platform in response to natural disasters that had resulted in extensive damage and devastation.

Together with employees, GF provided aid to the Kerala and Kodagu flood relief campaign, the Cyclone Gaja relief campaign, and the California wildfire relief campaign.

At each of our sites, GF and its employees make a difference by generously volunteering their time, donating goods and donating money through GlobalGives to support a wide variety of philanthropic causes, helping to improve the quality of life in our communities. In 2018 our employees and company made more than 7,000 donations through GlobalGives, totaling more than US \$136,000.

Some of the many local programs we have supported across the company include:

· Hair for Hope, which promotes awareness of childhood cancer. A total of 48 GF Singapore employees had their heads shaved in 2018. raising more than US\$ 61,300 (Singapore);

COMMUNITY ENGAGEMENT









- Food Drives to help fight hunger in local communities (Burlington, VT, Malta, NY, Santa Clara, CA, Austin, TX):
- Operation Holiday Happiness, which provides gifts for needy families in the East Fishkill, NY community, Toys for Tots in Malta, NY; and Louisenstift gGmbH in Dresden, a charity for children from disadvantaged families, many of whom are not able to celebrate Christmas with their families;
- GF Bangalore donated an HPV (Human Papillomavirus) treatment machine to the Kidwai Memorial Institute of Oncology, a regional center for cancer research and treatment which provides services to lower-income patients;

 Together with the towns of Malta and Stillwater, GF established and funded two charitable foundations, specifically designed to benefit the communities located near our Malta, NY site.
 These foundations fund and support a wide variety of local community programs, notfor-profit organizations, and other charitable causes that have been benefiting the towns of Malta and Stillwater since the first grants in 2012. With the 2018 awards, the foundations have exceeded US \$ 1.5 million in total grants invested in the communities and continue to retain healthy endowments for sustained, future giving.

ENVIRONMENT

GF strives to provide our employees with opportunities to make a positive impact on the environment, both through volunteer programs and various onsite activities.

Some of the activities we support include:

- Dresden's "Ride your bike to work" campaign, running every year from April to September.
 In 2018 a total of 503 participants travelled 481,000 km to work by bicycle between April and September. As a result of the bike to work campaign, more than 67 tons of CO₂ emissions that would have been emitted due to car use were avoided:
- Biannual Adopt-a-Road Cleanup Days in Malta, NY, bringing employees together to clean a section of local road.

COMMUNITY ENGAGEMENT









The annual celebration of Earth Day at GF worldwide sites marks a highlight that serves to raise awareness for environmental protection. Some of the specific events that took place on Earth Day 2018 include:

- Local clean up events at the Elbe river shore (Dresden employees) and the Don Edwards San Francisco Bay National Wildlife Refuge (Santa Clara employees):
- In Malta, Fab 8 started Earth Day-related activities with a week of "Clean and Green Sweep" during which employees cleaned their desk/work areas and recycled paper, cardboard, electronics and other items no longer needed to be recycled. Employees learned about nitrile glove recycling, the do's and don'ts of recycling onsite, the Fab 8 Commute Program, Fab 8 walking trails, eyeglasses donations, and more. In Burlington, Earth Day is combined with Take

Our Children to Work Day, delivering environmental conservation messages in unique and fun ways to employees and their children. The Environmental Health and Safety teams also invited local environmental organizations onsite to celebrate Earth Day. The event was a great success, with close to the 350 kids and 150 adults in attendance:

- . In East Fishkill, the site held an Earth Day offering event tables with information on less wasteful eating portions, help on how to "recycle, reduce, and reuse" at work and at home, and proper medication disposal. As an additional give-away, packs of wildflower seeds and reusable water bottles were handed out to employees:
- In Singapore, employees of each fab challenged themselves with a fab wide goal pledge, for example our SGP 300mm fab (Fab 7 and 7G) pledged to collect 500 kilograms of recyclable waste and educate at least 100 employees on sustainable living. The pledge was achieved with 1.1 tons of recyclables collected and 232 employees trained.

SUSTAINABLE MANUFACTURING









GLOBALFOUNDRIES is committed to ecoefficiency in our manufacturing operations. We define eco-efficiency as optimizing the utilization of resources to yield products meeting stringent performance and quality criteria.

ENVIRONMENTAL, HEALTH & SAFETY MANAGEMENT SYSTEMS

Our Global EHS Policy and Standards are the foundation of an integrated EHS Management System. GLOBALFOUNDRIES has achieved an enterprise-wide certification to both the ISO 14001 environmental management systems standard and the OHSAS 18001 occupational health and safety management systems standard that covers all of our manufacturing locations. In addition, our fabs have either been certified under the Sony Green Partner program or maintain equivalent controls to ensure

product compliance. Fab 1 (Dresden, Germany) has established an ISO 50001-certified energy management system. Our certificates are available here.

Fab 8, in Malta, New York, was designed as a "green fab." The fab and associated administrative and support buildings include many energy and water efficiency features. We applied the "LEED® green building program" design criteria. Admin 1 and Admin 2 office buildings are LEED Gold® and the Fab 8.1 fabrication facility is LEED Silver®.

ECO-EFFICIENCY: OUR GOALS

We measure our operational EHS performance using key environmental performance indicators (KEPIs), reflecting resource consumption, environmental emissions, waste generation,

and regulatory compliance. We normalize data from operations using an industry standard Manufacturing Index (MI). The MI is derived from the number of wafers manufactured, the number of masking steps in our fabrication processes (reflecting process complexity), and the total area of wafers produced. The normalized rate of a KEPI thus reflects our eco-efficiency.

In 2016, we re-set our resource conservation baseline and goals to address our acquisition of IBM's Microelectronic Division in 2015; including two manufacturing facilities now known as Fab 9 in Burlington, VT, and Fab 10 in East Fishkill, NY. We established a new baseline defined as the first 12 months of our combined operations following the acquisition (from July 2015 through June 2016).

SUSTAINABLE MANUFACTURING

Our goal setting approach identifies potential resource conservation opportunities across our

manufacturing sites. We focus on projects that will drive savings and improve our normalized

performance rates, using our manufacturing index to compare across technologies. Our goals





 Achieve savings in annual electricity use of 48 gigawatt hours (GWh);

for the 2016-2018 period were:

 18 percent reduction of normalized electricity consumption*



- Achieve savings in annual water use of 3.7 Million cubic meters (m³);
- 32 percent reduction of normalized water consumption*

Greenhouse Gas Emissions:

- Achieve savings in annual GHG emissions of 14,600 metric tons carbon equivalents (MTCE);
- 20 percent reduction of normalized greenhouse gas emissions*

Chemical Use:

- Achieve savings in annual chemical use and waste generation of a combined 11,000 tons.
- Recycle and reuse at least 55 percent of hazardous waste generated across the company for our 2017 and 2018 operations.

Performance against GLOBALFOUNDRIES 2016-2018 Resource Conservation Goals

We are measuring our performance against our 2016-2018 goals in percentage of completion of the initially chartered 2016-2018 resource conservation projects (<u>FIGURE 3</u>).

We have exceeded all of these resource conservation goals. The vast majority of our initially planned resource conservation projects have been completed, specifically for water conservation and the reduction of chemical use and waste generation. Additional projects were identified and implemented from 2016 to 2018. These also contributed to achieving our goals, particularly with regard to reducing energy consumption and emissions of greenhouse gases.

Cal.

^{*} As compared to our baseline: the first 12 months of our combined operations (July 2015 to June 2016)

SUSTAINABLE MANUFACTURING









GF has established new resource conservation goals, following the same methodology to extend this progress over the 2019-21 period:

Electricity:

- Achieve savings in annual electricity use of 86 gigawatt hours (GWh);
- 15 percent reduction of normalized electricity consumption*

Water:

- Achieve savings in annual water use of 340,000 cubic meters (m³);
- 10 percent reduction of normalized water consumption*

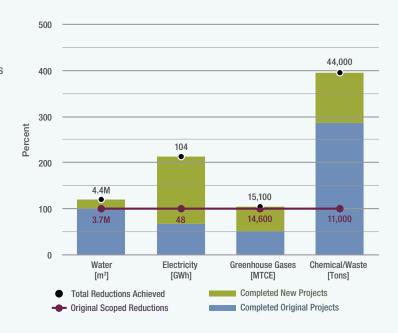
Greenhouse Gas Emissions:

- Achieve savings in annual GHG emissions of 11,900 metric tons carbon equivalents (MTCE);
- 18 percent reduction of normalized greenhouse gas emissions*

Chemical Use:

- Achieve savings in annual chemical use and waste generation of a combined 7,100 tons.
- Recycle and reuse at least 60 percent of hazardous waste generated across the company for our 2019 operations.

FIGURE 3. Performance against our 2016-2018 Resource Conservation Goals



^{*} As compared to 2018 baseline normalized rates.

SUSTAINABLE MANUFACTURING





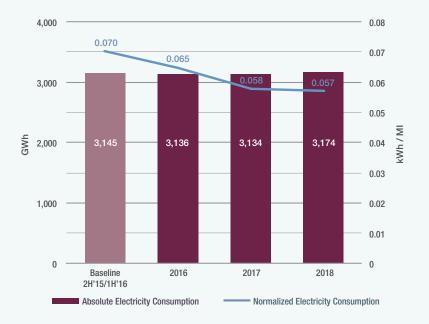




ENERGY CONSUMPTION

FIGURE 4 shows absolute and normalized electricity consumption at our manufacturing facilities from the baseline to 2018. Absolute consumption of electricity in 2018 increased less than one percent from the baseline value. At the same time, normalized electricity usage decreased 19 percent in 2018 compared to the baseline level, exceeding our forecasted reduction of 18 percent by the end of 2018.

FIGURE 4. Absolute And Normalized Electricity Usage – Baseline to 2018



SUSTAINABLE MANUFACTURING







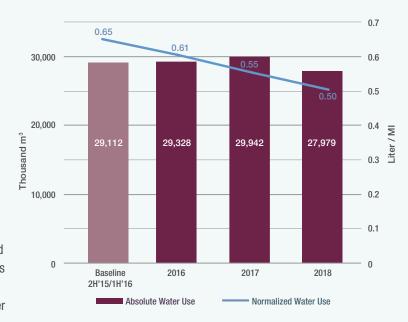


WATER USE

FIGURE 5 shows absolute and normalized water consumption at our manufacturing facilities from the baseline through 2018. In 2018, absolute water consumption decreased nearly four percent compared to the baseline value. Comparing the 2018 normalized water consumption rate to our baseline shows a decrease (improvement) of 23 percent which is below our forecasted reduction of 32 percent by the end of 2018.

We have extensive water reuse and recycling programs in place at our manufacturing facilities. In 2018, we achieved a combined corporate water reclaim rate of 62 percent relative to incoming water supply, a 14 percent increase over our reclaim rate at our baseline. "Reclaim" includes both water recycling and reuse. Some reclaimed water is used as a high-quality raw water supply to our ultra-pure water (UPW) plants (defined as "recycling") as well as for facility operations such as cooling towers and scrubbers, which can accommodate lower-quality water sources (defined as "reuse"). In 2018, the average water recycling rate across our fab sites was 41 percent compared to incoming water, a six percent improvement over our baseline recycling rate.

FIGURE 5. Absolute and Normalized Water Use – Baseline to 2018



SUSTAINABLE MANUFACTURING









GREENHOUSE GAS EMISSIONS

Climate change is a critically important challenge impacting our global environment, human society and the global economy. GLOBALFOUNDRIES monitors our energy consumption and greenhouse gas (GHG) emissions to understand our climate impacts. We manage our climate-related business risks by conserving energy, implementing emission controls, and participating in initiatives to drive industry-wide improvements.

The potential business risks associated with climate change are complex, ranging from regulatory initiatives affecting energy and process materials to severe weather events such as droughts, flooding, and extreme temperatures. Climate-related risks, including supply or operational disruptions due to severe weather events, are evaluated as part of our risk management process. We track the development of proposed climate legislation around the world and have implemented proactive measures that go well

beyond regulatory requirements, including the World Semiconductor Council's (WSC) 2020 goal to implement best practices in all new semiconductor fabs. Our newest operating fab, Fab 8 in New York, was built to meet the WSC Best Practices commitment.

SUSTAINABLE MANUFACTURING









FIGURE 6 shows absolute and normalized direct (Scope 1) and indirect (Scope 2) GHG emissions at our baseline, and through 20183. Absolute total GHG emissions were more than five percent lower in 2018 relative to the baseline value, with an almost seven percent reduction in Scope 1 emissions and a close to three percent reduction for indirect Scope 2 emissions. Compared to our baseline, normalized 2018 GHG emissions were nearly 24 percent lower, exceeding our forecasted reduction of normalized GHG emissions by 20 percent by the end of 2018.

FIGURE 6. Absolute and Normalized Direct (Scope 1) and Indirect (Scope 2) GHG Emissions – Baseline to 2018



^{3*} GLOBALFOUNDRIES quantifies GHG emissions using the following methods:

^{• &}quot;The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)":

[•] GWPs used are from IPCC Fourth Assessment Report (AR4 - 100 year);

For semiconductor process related PFC emissions specifically GLOBALFOUNDRIES uses Tier 2 methods of IPCC Guideline for GHG Inventories V3 Chapt6 Electronics Industries and U.S. EPA reporting methods under Subpart I of the GHG Mandatory Reporting Rule (MRR):

[.] GLOBALFOUNDRIES is using the market-based method to quantify Scope 2 GHG emissions from the "GHG Protocol Scope 2 Guidance". The market-based method reflects emissions from the electricity that a company purchases, which in some cases may be different from the electricity that is generated locally and distributed via the local grid.

SUSTAINABLE MANUFACTURING

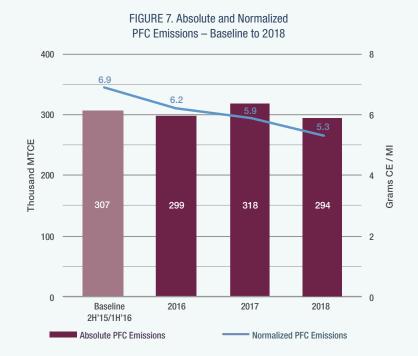








FIGURE 7 shows absolute and normalized total PFC (perfluorocompound) emissions at our baseline and through 2018. PFC gases are used in semiconductor wafer etching and Chemical Vapor Deposition (CVD) chamber cleaning. Absolute PFC emissions decreased by more than four percent in 2018 compared to our baseline, while normalized PFC emissions decreased by more than 23 percent. Our 300mm fabs in Dresden (Fab 1) and New York (Fabs 8 and 10) were designed to produce extremely low emissions of PFCs by using low-emission gases in CVD chamber cleaning, coupled with near-universal use of point-of-use abatement equipment for PFC-using processes.



SUSTAINABLE MANUFACTURING





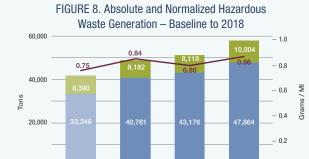




HAZARDOUS WASTE*4

FIGURE 8 shows the absolute and normalized hazardous waste generation at our baseline and through 2018. Absolute hazardous waste generation increased by 43 percent in 2018 compared to the baseline. During the same time, the normalized rate of hazardous waste generation increased by 15 percent. The rise in absolute and normalized hazardous waste generation correlates with the continued growth of the number of wafer cleaning steps in advanced processes. These cleaning steps require increased use of UPW and cleaning chemicals such as sulfuric acid. We are actively investigating ways to reduce water and chemical use to ultimately reduce hazardous waste and have piloted projects in late 2018 that are expected to drive improvements and reverse the trend.

FIGURE 9 shows a breakdown of the disposal methods for hazardous waste (including byproducts beneficially recycled and reused) generated in 2018. We exceeded our 2018 goal to recycle and reuse at least 55 percent, as more than 63 percent of total hazardous waste was recycled or reused. In 2018, two percent of total hazardous waste was sent to landfill.



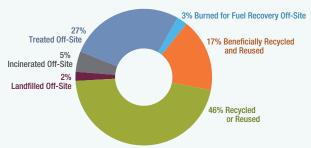
2H'15/1H'16 Beneficially Recycled / Reused Byproducts Absolute Hazardous Waste Generation (U.S Fabs only - Category is excluded from Normalized Hazardous Waste Generation U.S. definition of hazardous waste)

2017

2018

2016

FIGURE 9. 2018 Disposal Methods for Hazardous Waste and Beneficially Recycled and Reused Byproducts⁵

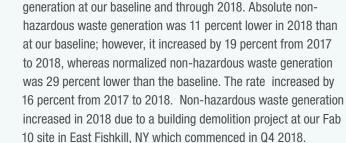


⁵ We also include the category "byproducts beneficially recycled and reused", which is applicable only to our U.S. sites because reclaimed material is excluded from the U.S. EPA definition of hazardous waste.

⁴ The classification of waste as "hazardous" is determined by the respective regulations that apply to our manufacturing sites.

SUSTAINABLE MANUFACTURING





recycled or reused.

NON-HAZARDOUS WASTE GENERATION





FIGURE 11 shows the breakdown of the disposal methods for non-hazardous waste generated in 2018. 65 percent of nonhazardous waste generated by GLOBALFOUNDRIES in 2018 was

FIGURE 10 shows absolute and normalized non-hazardous waste

FIGURE 10. Absolute and Normalized Non-Hazardous Waste Generation - Baseline* to 2018

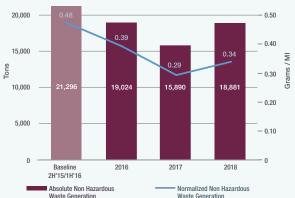
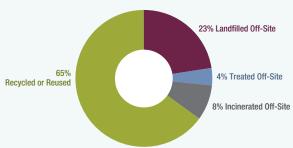


FIGURE 11. 2018 Disposal Methods for Non-Hazardous Waste



SUSTAINABLE MANUFACTURING









AIR EMISSIONS

All of our manufacturing facilities operate within air quality conditions permitted by local regulatory agencies. The primary air emissions from our facilities include corrosives (acids and bases) and volatile organic compounds (VOCs).

We employ wet scrubbers to neutralize corrosive emissions and treat the scrubber water in on-site wastewater treatment systems prior to discharge. For VOC emissions reduction, most sites use thermal oxidation or carbon bed adsorbers. Fab 1 in Dresden, Fab 8 in Malta,

NY, and Fab 10 in East Fishkill, NY, have control technology that utilizes rotary concentrators followed by thermal oxidation. In 2018 our Fab 7 facility in Singapore commenced a project to install a rotary concentrator. This technology uses highly adsorbent zeolite materials to capture VOCs, which are subsequently desorbed, producing a low-volume exhaust stream with a higher concentration of VOCs. This more concentrated exhaust stream is then treated with greater efficiency through a combustion process that destroys as much as 98 percent of the VOCs.

EHS COMPLIANCE

We are committed to a "Beyond Compliance" approach, seeking to exceed the requirements of applicable regulations. We implement consistent and rigorous EHS standards, management systems, metrics, external reporting, and compliance assurance programs. Our manufacturing sites perform internal reviews as part of their EHS Management Systems and are routinely inspected by regulatory authorities.

In 2018, inspections and regular compliance reporting across our global locations resulted in two notices of violation (NOVs). All issues are being corrected in communication with the respective regulatory authorities. No financial penalties were assessed for NOVs received in 2018. In 2018 GLOBALFOUNDRIES Singapore paid penalties of approximately US \$4,800 related to two January 2016 wastewater discharge violations.6

⁶This is a restatement to our 2018 Corporate Responsibility report that reported a penalty of approximately US \$1,900 related to one January 2016 wastewater discharge violation

PRODUCT STEWARDSHIP









We enable our customers' success with our broad range of solutions and our manufacturing expertise, supported by our Quality Management Systems, while at the same time keeping a focus on opportunities to reduce their environmental footprint. We take action to reduce the potential health, safety, environmental, and social impacts of the product life-cycle stages under our control.

OUALITY MANAGEMENT SYSTEMS

GLOBALFOUNDRIES' Quality Management System is in place to ensure that our products meet or exceed customer specifications on quality and reliability for all industries and markets. We are dedicated to a "zero excursion, zero defect" mission in all aspects of our product realization and business processes.

All GF manufacturing facilities worldwide obtain certification to international quality standards that validate the effectiveness of the quality management system in support of market segments. These include ISO 9000, and extend as needed upon our regular review to market-specific standards for automotive (IATF-16949) and aerospace (AS9100) products. Our advanced quality system builds upon these internationally recognized standards, codifying the requirements to ensure product quality, including robustness of the management system and infrastructure.

In the guest to continually improve our customers' experience when partnering with GF, we listen to our customers and feed their voice back into our business processes and systems. We manage customer issues in our Action Escalation system to ensure responsive follow-through with our commitments. We track internal, customer-facing key performance indices that are closely aligned to our customers' Quality, Business, Technology, Fulfillment, and Responsiveness targets. Finally, we conduct third-party customer relationship surveys every year to ensure our customers notice the improvements we're making. Our quality management system is described further here, including copies of third-party certification certificates.

PRODUCT STEWARDSHIP









ENABLING ENERGY EFFICIENCY

GF's solutions provide energy-efficient technologies for high-performance applications as well as those that depend on long battery times. GF's 14/12nm FinFET solution enables energy efficiency for performance-hungry applications (servers, CPUs, GPUs, and others), driving system performance within a given power envelope (i.e. increasing system performance within given power requirements).

Another approach focuses on minimizing power consumption for a given set of performance requirements. GF's FDX technologies are designed to span a wide range of applications where power and energy efficiency matters most.

FD-SOI Technology—22FDX® and 12FDX™ Technologies

FD-SOI technologies (Fully Depleted Silicon on Insulator technologies) employ an ultrathin oxide insulator placed on top of the base silicon. On top of this oxide insulator a very thin silicon layer creates the transistor channel. Due to the thinness of this layer, no channel doping is required, making the transistor "fully depleted". The FD-SOI structure results in much better transistor characteristics compared to traditional bulk CMOS technology, reducing leakage current and parasitic capacitance, thus making the transistor more energy-efficient.

Making intelligent use of the generic FD-SOI features, GF's 22FDX® and 12FDX™ technologies feature significant low power, low cost and power efficiency advantages for designing differentiated solutions for mobile application processors, wireless networking, Internet of Things (IoT) and automotive markets. 22FDX® has been designed as a low-capacitance technology that allows a designer to take advantage of ultra-low operating voltages as well as of dynamic power consumption control: A unique FDX feature enables the chip to dynamically switch back and forth between high-performance and low-power operation, boosting performance in the moment it is needed while reducing the static leakage to a minimum when the performance is not needed.

PRODUCT STEWARDSHIP









Additionally, the FDX technology platform is designed to integrate a multitude of functionsalities into a single system-on-chip. The result being that customers can thus easily integrate digital, analog, and RF (radio frequency) functions onto a single chip for intelligent, power efficient and fully integrated system solutions. The 12FDX platform extends our FD-SOI offering further, offer full node-onnode scaling and performance improvements to enable new applications and architectures.

Additional Energy-efficient Technologies

Our focus on technologies that enable energy efficiency extends beyond advanced technology nodes. We also offer solutions for power-management integrated circuits (PMICs) and power converters. Our growing portfolio is continuously expanding for higher voltages.

GF's Analog and Power processes include highly competitive DMOS Power FETs that enable maximum power conversion efficiency to aid in extending battery operating time. For example, GF BCDlite[™] and BCD technologies are developed for efficient power conversion and battery management in applications like electric vehicles and portable devices. The ability to control, monitor and optimize battery performance for long life and safety enables widespread adoption of non-polluting transportation and lifestyle products.

Advanced Packaging

Along with energy-efficient silicon technologies, advanced packaging helps reduce power consumption, improve energy efficiency and shrink footprint of the final product.

GLOBALFOUNDRIES' advanced packaging enables an integrated chip set where multiple chips of different functionalities and technology nodes are closely integrated into one package, either horizontally (2.5D) or vertically (3D). This approach allows for optimizing performance, energy efficiency and manufacturing cost both at the system level and for each functional unit. Our 2.5D interposer technology offers superior flatness and fine lines with high reliability reducing the replacement need. Higher density of integration with energy-efficient benefit can be achieved in 3D die stacking offered by our direct wafer-to-wafer bonding technology. To further improve energy

PRODUCT STEWARDSHIP









efficiency of power delivery in the system, GF developed deep-trench capacitor which plays a vital role for in-proximity voltage regulating of the computing unit.

Even more energy can be saved in cloud data centers by our Silicon Photonics solution which enables faster optical connectivity solutions at high integration, easy assembly and low cost. These differentiated technologies were generated with the state-of-the-art tooling and processes in GF's Packaging Differentiation Line which also allow developing tailored solutions for customer request and bringing it to volume production.

Materials Management and Product Compliance

All GF sites have chemical review and approval systems in place to ensure that only approved materials are used in wafer fabrication. Our material qualification process assesses materials relative to our specification for Banned, Restricted, and Declarable Materials Management, which includes both regulatory and customer-driven requirements. We extend these requirements to our manufacturing partners that provide semiconductor foundry, assembly and test services. Applicable regulatory requirements include the EU Directive on restricted use of certain hazardous substances in electrical and electronic equipment (RoHS Directive), its sister directives in other

jurisdictions, such as China RoHS, and other legislation that regulates substances contained in products (also called "articles"). This includes the EU Regulation on Registration, Evaluation, and Authorization of Chemicals (REACH) provisions on the presence of designated Substances of Very High Concern (SVHCs). Our specifications also require packing material suppliers to meet applicable substance restrictions.

GF has programs in place to obtain analytical evidence of product compliance (such as RoHS and halogen-free requirements). We make these reports and other product compliance documentation available to customers on GlobalFoundryView, our customer portal.









SITE PROFILES: FAB 1 - Dresden, Germany

Wafer Size: 300mm Technology: 55nm, 45nm, 28nm, 22nm

Groundbreaking for Fab 1 in Dresden took place in October 1996. The grand opening of the first production clean room followed in 1999, and the Dresden site has continued to expand ever since. In 2009, the Dresden site became the first GLOBALFOUNDRIES fab when the company was divested from Advanced Micro Devices, Inc. (AMD). With more than 52,000 square meters of cleanroom, Fab 1 is the largest semiconductor manufacturing site in Europe.

GF Dresden significantly contributes to the advancement of leading-edge semiconductor industry in Europe, Germany, and specifically the high-tech cluster in Saxony. The region currently counts approximately 2,300 high-tech companies with more than 60,000 employees.

Management System Certifications: ISO 9001, IATF 16949, ISO 14001, OHSAS 18001, ISO 50001, Sony Green Partner

COMMUNITY RELATIONS

Located literally fence to fence with its neighbors in the 800-year-old villages of Wilschdorf and Boxdorf, the Dresden site participated in its first local town hall meetings back in 1996 and continues to do so today. GF Dresden supports various neighborhood associations and activities such as local heritage societies, volunteer fire brigades and choirs.

The Dresden site's Community Affairs Program has a strong focus on educational youth projects. As a leading tech company, the Dresden site is driving a considerable number of educational projects focused on STFM activities with K-12 students. Jointly with other long-term partners, GF Dresden is a sponsor of the renowned youth tech competition "Jugend forscht" ("Young Scientists").

SUSTAINABILITY FEATURE:

Low Greenhouse Gas Emissions

Fab 1 was designed for extremely low emissions of PFCs, which is accomplished by utilizing low-emission gases in CVD chamber cleaning, coupled with near-universal use of point-of-use abatement equipment for PFC-using processes. Highly efficient natural gas powered trigeneration plants power Fab 1, along with a small fraction of electricity from the Dresden public grid.

Awards:

- 2018 Piepenbrock Gold Seal Award for implementation of an ecological building cleaning system;
- 2018 Corporate Health Award Seal of Excellence for sustainable work in the area of maintaining and promoting employee health;
- 2019 Saxony Environmental Alliance's Certificate of Recognition for environmental management measures that go beyond regulatory compliance.









SITE PROFILES: Singapore

Wafer Size: 300mm / 200mm Technology:180nm-40nm

GLOBALFOUNDRIES Singapore stretches across two campuses. The main Woodlands campus is home to one 200mm "GIGA fab" (Fabs 2, 3 and 5) and one 300mm fab (Fab 7). The second campus houses one 200mm fab (Fab 3E) in Tampines, 30 minutes away from the main campus. These facilities comprise nearly 11 soccer fields of cleanroom space. The history of our GIGA fab goes back to 1995 when Fab 2 first started production. Our 300mm Fab 7 commenced operation in 2005, and has evolved ever since, with the last significant extension during 2016, when our former 200mm Fab 6 was converted to 300mm technology and merged into Fab 7. The GF Singapore fabs were previously owned by Chartered Semiconductor Manufacturing and were acquired by GF in 2010. In January 2019 we announced our plans to transfer ownership of Fab 3E in Tampines to Vanguard International Semiconductor (VIS) at the end of this year.

Management System Certifications: ISO 9001, TS 16949, ISO 14001, OHSAS 18001, Sony Green Partner; Fab 7 and Fab 3E: ISO 15408 (Common Criteria).

COMMUNITY RELATIONS

Since 2006, the GF Singapore site has held an annual Hair for Hope fundraising event benefiting the Children's Cancer Foundation (CCF). GF donated a total of S\$84,483 (US \$61,385) to the program in 2018 and altogether has raised more than S\$1M over the last 12 years. This signature event serves to raise funds and promote awareness of childhood cancer. GF Singapore also supports regional STEM (Science, Technology, Engineering and Mathematics) activities such as providing insights into high-end technology to students from a number of universities.

SUSTAINABILITY FEATURE: **Resource Efficiency**

Resource efficiency is a priority for the Singapore site team—energy and water conservation programs are continually pursued. For example, our Singapore fabs have extensive state-of-the-art

water recycling capabilities in place and achieved a 72 percent recycling rate in 2018 as compared to incoming water.1

Furthermore, more than 95 percent of the water consumed at GF Singapore is NEWater, which is reclaimed and treated wastewater supplied by the Singapore Public Utilities Board. Using NEWater supports Singapore's water conservation strategy to reserve high-quality potable water for domestic consumption.

Awards

- 2019 Responsible Business Alliance (RBA) VAP Audit Platinum Recognition for achieving the maximum score of 200 following closure of action items from its September 2018 VAP Audit:
- 2018 Singapore Energy Efficiency National Partnership Award - Category Best Practices for replacing a hot UPW rinse process with a cold UPW rinse.







SITE PROFILES: FAB 8 - Malta, New York, USA

Wafer Size: 300mm Technology: 14nm-12nm

In 2009, GLOBALFOUNDRIES broke ground for construction of our Fab 8 300mm wafer manufacturing facility in Malta, New York. Total capital investment for the Fab 8 campus now exceeds \$15 billion. The majority of this investment has been directed towards our advanced 14/12nm technologies. With 40,875 square meters of cleanroom space and continued expansion, GF's Fab 8 is one of the leaders in advanced manufacturing in the U.S. Fab 8 is a cornerstone of upstate New York's "Tech Valley" region and is the largest public-private sector industrial investment in New York state's history.

COMMUNITY RELATIONS:

Along with donations to those in need within the local community, the site's community relations program supports local education through numerous initiatives. Jointly with the GF Fabs in East Fishkill, NY and Burlington, VT, Fab 8 supports FIRST® (For Inspiration and Recognition of Science and Technology) robotics programs, designed to motivate young people to pursue

Management System Certifications: ISO 9001, ISO 14001, OHSAS 18001.

education and career opportunities in STEM, while building self-confidence, knowledge, and life skills. Together with its consortium of business partners, GF has collectively pledged more than \$1.5 million to support STEM programming and community, civic, athletic and non-profit organization funding, along the Northeast Tech Corridor over six years (2015-2020) with an additional \$1.1 million in site development and construction of an athletic fields complex for public use in Saratoga County (Malta/ Stillwater).

SUSTAINABILITY FEATURE: **Green Building Design:**

The Fab 8 campus integrated green building principles and practices as part of the site design, construction and operation. This includes

· High-efficiency motors, chillers, boilers, fan filters for the cleanroom, and vacuum pumps;

- An innovative system that uses heat recovery chillers to meet the fab's year-round base cooling load and recover the heat for site needs instead of removing it with cooling towers. The system meets 40 percent of the site's heating load with recovered heat;
- A fab-wide "Green Mode" strategy for point of-use abatement systems and for a significant portion of the installed base of vacuum pumps.

Awards:

- 2018 Kimberly Clark Greenovation Award for Nitrile glove recycling;
- 2018 National Pollution Prevention Roundtable MVP2 (Most Valuable Pollution Prevention) Award
- Partnering for Best Practices in Sustainable Semiconductor Manufacturing (Sulfuric Acid Use and Waste Reduction);
- Admin 1 and Admin 2 office buildings are LEED Gold®. Fab 8.1 fabrication facility is LEED Silver®.









SITE PROFILES: FAB 9 - Burlington, Vermont, USA

Wafer Size: 200mm Technology: 350nm-90nm

IBM broke ground on its Vermont facility located on the banks of the Winooski River near Burlington in 1957. Since then, the campus has grown and evolved into a major semiconductor manufacturing site. GLOBALFOUNDRIES acquired the site as part of the IBM Microelectronics business in 2015. GF's Fab 9 is the largest private for-profit employer in the state of Vermont.

COMMUNITY RELATIONS:

The site has an extensive history of community involvement and is well known for its dedication and passion to the community, whether through charitable contributions or volunteering during its "Days of Caring". In addition, the "Bridge the Gap" and Calendars for Charity programs helped provide local charities with valuable contributions. Burlington employees are very passionate about K-12 outreach, taking part in FIRST® (For Inspiration and Recognition of Science and Technology) Robotics activities jointly with Fabs 8 and 10 in New York.

Management System Certifications: ISO 9001, TS 16949, ISO 14001, OHSAS 18001, Sony Green Partner

SUSTAINABILITY FEATURE:

Legacy of environmental excellence

Noted for its long-term environmental excellence, the Burlington site has received extensive recognition, including numerous national, regional and state awards for its pollution prevention and energy management results and initiatives. In 2018 Fab 9 received the Governor's Award for Environmental Excellence for the 25th consecutive year. In 2016, Fab 9 transferred unused land to Green Mountain Power to develop a 4.7 MW solar power generation facility, the state's largest at that time, providing benefits to local communities, GF and the environment.

Awards:

- 2019 Responsible Business Alliance (RBA) VAP Audit Platinum Recognition for achieving the maximum score of 200 in its 2018 VAP Audit:
- 2019 Vermont Governor's Excellence Award in Worksite Wellness - Silver level:
- 2019 Seven Seals Award presented in recognition of Employer Support of the National Guard & Reserve:
- 2018 National Pollution Prevention Roundtable's MVP2 (Most Valuable Pollution Prevention) Award (Chemical Use Reduction in Chemical Mechanical Polish);
- 2018 Vermont Governor's Environmental Excellence Award (Elimination of Legacy Wet Chromium Etch Processing In Photomask Manufacturing).

1()









SITE PROFILES: FAB 10 - East Fishkill, New York, USA

Wafer Size: 300mm Technology: 90nm-22nm

Originally developed by IBM in 1962, the site grew and evolved into a major R&D and manufacturing center. The East Fishkill site joined GLOBALFOUNDRIES as part of the acquisition of IBM's microelectronics business acquisition in 2015 and is now known as GF Fab 10. In April 2019, we announced the launch of our strategic partnership with ON Semiconductor, through which GF will transfer ownership of our Fab 10 facility in East Fishkill. NY to ON at the end of 2022. Management System Certifications: ISO 9001, AS 9100C, ISO 14001, OHSAS 18001, Sony Green Partner

COMMUNITY RELATIONS:

East Fishkill employees have always prided themselves on being good neighbors, giving generously to the local community through charitable donations and volunteering, such as collecting toys for less fortunate children and collecting and donating food to local food banks. East Fishkill employees also support a Treat the Troops program and the GF Calendars for Charity campaign.

The site also participates in a number of STEM (Science, Technology, Engineering and Mathematics) activities, including FIRST Robotics, along with Fab 8 in Malta, NY and Fab 9 in Burlington, VT.

SUSTAINABILITY FEATURE:

Recycle and Reuse

Fab 10 produces two commercial chemical products for reutilization from the wastewaters generated by its 300mm manufacturing operations: A sulfuric acid wastewater is segregated to produce a spent sulfuric acid product and ammonia wastewater is distilled to produce an ammonium hydroxide solution for reuse in off-site catalytic air emission abatement systems.

Groundwater treated through IBM groundwater remediation activities (approximately 25 percent of site water usage) is also reused in the production of ultra-pure water.

ABOUT THIS REPORT



The GLOBALFOUNDRIES 2019 Corporate Responsibility Report is our fifth comprehensive corporate social responsibility and sustainability report. The last report was published in 2018 and covered 2017 data.



We use the Global Reporting Initiative (GRI) G4 Sustainability Reporting Standards and self-declare that this report has been prepared in accordance with the GRI Standards: Core option.

Data presented in this report reflect calendar year 2018. The data were compiled from facilities owned or operated by GF during the reporting period and validated using our internal processes. No significant change in material topics as relevant to this report occurred during 2018.

We value and encourage your feedback on this report. Please send comments or questions to CSR@globalfoundries.com.





GRI CONTENT INDEX









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|---|-----------------------------------|---|----------------------------|--|----------|
| | | GENERAL D | ISCLOSURES | | |
| | 102-1 | Name of the organization | Company Profile | | Full |
| | 102-10 | Significant changes to the organization and its supply chain | - | Throughout 2018 GF took numerous steps to pivot our business to become the world's leading differentiated semiconductor foundry. None of these changes affected the company's ownership, the location of manufacturing facilities, or the nature of our supply chain during the reporting year | Full |
| | 102-11 | Precautionary Principle or approach | Sustainable Manufacturing | | Full |
| | 102-12 | External initiatives | Stakeholder Engagement | | Full |
| | 102-13 | Membership of associations | Stakeholder Engagement | | Full |
| GRI 102: General Disclosures 2016 | 102-14 | Statement from senior decision-maker | CEO Statement | | Full |
| | 102-16 | Values, principles, standards, and norms of behavior | Governance | | Full |
| | 102-17 | Mechanisms for advice and concerns about ethics | Governance | | Full |
| | 102-18 | Governance structure | Governance | | Full |
| | 102-19 | Delegating authority | Governance | | Full |
| | 102-20 | Executive-level responsibility for economic, environmental, and social topics | Governance | | Full |
| | 102-22 | Composition of the highest gover- nance body and its committees | - | GF Board of Directors Members are disclosed at https://www.globalfoundries. com/about-us/leadership/board-directors | Partly |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|---|-----------------------------------|--|----------------------------|---|---------------|
| | 102-23 | Chair of the highest governance body | - | Information on GF Board of Directors Members, including information on the Chair, is disclosed at https:// www.globalfoundries.com/about-us/ leadership/board-directors | Full |
| | 102-2 | Activities, brands, products, and services | Company Profile | | Full |
| | 102-3 | Location of headquarters | Company Profile | | Full |
| | 102-4 | Location of operations | Company Profile | | Full |
| | 102-40 | List of stakeholder groups | Stakeholder Engagement | | Full |
| | 102-41 | Collective bargaining agreements | - | None | Full |
| | 102-42 | Identifying and selecting stakeholders | Stakeholder Engagement | | Full |
| GRI 102: General | 102-43 | Approach to stakeholder engagement | Stakeholder Engagement | | Full |
| Disclosures 2016 | 102-44 | Key topics and concerns raised | Stakeholder Engagement | | Full |
| | 102-45 | Entities included in the consolidated financial statements | - | GLOBALFOUNDRIES is a privately held company and does not publish financial statements. | Not Disclosed |
| | 102-46 | Defining report content and topic Boundaries | Stakeholder Engagement | | Full |
| | 102-47 | List of material topics | Stakeholder Engagement | | Full |
| | 102-48 | Restatements of information | Sustainable Manufacturing | Please see restatement for GRI 307-1 (Environmental Compliance) in Section Sustainable Manufacturing. | Full |
| | 102-49 | Changes in reporting | Stakeholder Engagement | No changes as compared to previous reporting period. | Full |
| | 102-5 | Ownership and legal form | Company Profile | | Full |
| | 102-50 | Reporting period | About this Report | | Full |
| | 102-51 | Date of most recent report | About this Report | | Full |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|---|-----------------------------------|--|----------------------------|---|---------------|
| | 102-52 | Reporting cycle | About this Report | | Full |
| | 102-53 | Contact point for questions regarding the report | About this Report | | Full |
| | 102-54 | Claims of reporting in accordance with the GRI Standards | About this Report | | Full |
| | 102-55 | GRI content index | GRI Content Index | | Full |
| GRI 102: General Disclosures 2016 | 102-56 | External assurance | _ | At this time, GLOBALFOUNDRIES is not seeking external assurance for this report | Full |
| | 102-6 | Markets served | Company Profile | | Full |
| | 102-7 | Scale of the organization | Company Profile | | Full |
| | 102-8 | Information on employees and other workers | Our People and Workplace | We report the break down by category as percentage. | Full |
| | 102-9 | Supply chain | Supplier Responsibility | | Full |
| | | MANAGEMEI | NT APPROACH | | |
| | 103-1 | Explanation of the material topic and its Boundary | Stakeholder Engagement | In subsection The Materiality Analysis | Full |
| GRI 103: Management Approach 2016 | 103-2 | The management approach and its components | _ | Covered in topic related report sections. | Full |
| | 103-3 | Evaluation of the man- agement approach | _ | Covered in topic related report sections. | Full |
| | | MATERIA | AL TOPICS | | |
| Economic | | | | | |
| GRI 201: Economic Performance 2016 | 201-1 | Direct economic value generated and distributed | - | While this is a material topic, GLOBALFOUNDRIES as a privately held company, does not disclose any financial details | Not disclosed |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|--|-----------------------------------|--|--|---|----------|
| Governance and Ethical Bus | iness | | | | |
| GRI 205: Anti- corruption 2016 | 205-1 | Operations assessed for risks related to corruption | - | In 2018, the company's Ethics & Compliance team conducted an enterprise risk assessment. No significant risks related to corruption were identified. | Full |
| GRI 205: Anti- corruption 2016 | 205-2 | Communication and training about anti-corruption policies and procedures | Governance | | Full |
| GRI 412: Human Rights Assessment 2016 | 412-1 | Operations that have been subject to human rights reviews or impact assessments | Governance | | Full |
| GRI 412: Human Rights Assessment 2016 | 412-2 | Employee training on human rights policies or procedures | Governance | | Full |
| GRI 407: Freedom of Association and Collective Bargaining 2016 | 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | Governance; Supplier Responsibility | | Full |
| GRI 408: Child Labor 2016 | 408-1 | Operations and suppliers at significant risk for incidents of child labor | Governance; Supplier Responsibility | | Full |
| GRI 409: Forced or Compulsory Labor 2016 | 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labor | Governance; Supplier Responsibility | | Full |
| GRI 308: Supplier Environmental Assessment 2016 | 308-1 | New suppliers that were screened using environmental criteria | Supplier Responsibility | | Full |
| GRI 414: Supplier Social Assessment 2016 | 414-1 | New suppliers that were screened using social criteria | Supplier Responsibility | | Full |
| GRI 414: Supplier Social Assessment 2016 | 414-2 | Negative social impacts in the supply chain and actions taken | Supplier Responsibility | | Partly |
| GRI 419: Socioeconomic Compliance 2016 | 419-1 | Non-compliance with laws and regulations in the social and economic area | - | In 2018, GLOBALFOUNDRIES was not assessed any significant fines or non-monetary sanctions. | Full |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|---|-----------------------------------|---|----------------------------|---|----------|
| | | ENVIRO | NMENTAL | | |
| Energy | | | | | |
| GRI 302: Energy 2016 | 302-1 | Energy consumption within the organization | Sustainable Manufacturing | | Full |
| GRI 302: Energy 2016 | 302-3 | Energy intensity | Sustainable Manufacturing | | Full |
| GRI 302: Energy 2016 | 302-4 | Reduction of energy consumption | Sustainable Manufacturing | Overall savings achieved by energy conservation projects underlying to 2016 - 2018 corporate goals are reported. | Partly |
| GRI 302: Energy 2016 | 302-5 | Reductions in energy require- ments of products and services | Product Stewardship | Examples are reported for new and existing energy-efficient technologies that enable our customers to design energy-efficient products. | Partly |
| Water | | | | | |
| GRI 303: Water 2016 | 303-1 | Water withdrawal by source | Sustainable Manufacturing | GLOBALFOUNDRIES uses water from municipal sources at all of our manufacturing facilities. In 2018, a portion equivalent to 6 percent of GLOBALFOUNDRIES total water use was withdrawn from groundwater sources. | Full |
| GRI 303: Water 2016 | 303-3 | Water recycled and reused | Sustainable Manufacturing | | Full |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|---|-----------------------------------|--|----------------------------|--|----------|
| Climate Change, GHG Emiss | ions | | | | |
| GRI 305: Emissions 2016 | 305-1 | Direct (Scope 1) GHG emissions | Sustainable Manufacturing | GLOBALFOUNDRIES quantifies Scope 1 GHG emissions using the following methods: - "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)"; - For semiconductor process related PFC emissions specifically, GLOBALFOUNDRIES uses Tier 2 methods of IPCC Guideline for GHG Inventories V3_Chapt6 Electronics Industries and U.S. EPA reporting methods under Subpart I of the GHG Mandatory Reporting Rule (MRR); - GWPs used are from IPCC Fourth Assessment Report (AR4 – 100 year) | Full |
| | 305-2 | Energy indirect (Scope 2) GHG emissions | Sustainable Manufacturing | GLOBALFOUNDRIES quantifies Scope 2 GHG emissions using the following methods: - "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)"; - "The Greenhouse Gas Protocol: Scope 2 Guidance"; - GF is using the market-based method to quantify Scope 2 GHG emissions | Full |
| | 305-4 | GHG emissions intensity | Sustainable Manufacturing | | Full |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|--|-----------------------------------|---|----------------------------|--|----------|
| Emissions, Waste, and Effluents | | | | | |
| GRI 305: Emissions 2016 | 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions | Sustainable Manufacturing | Our 2018 fabs' combined corrosive emissions were approximately 84,900 kg (this value is based on air emission measurements conducted at each fab). | Partly |
| GRI 306: Effluents and Waste 2016 | 306-1 | Water discharge by quality and destination | Sustainable Manufacturing | We operate permitted wastewater treatment systems at each of our manufacturing sites to manage effluent from production areas. These facilities treat the wastewater to meet regulatory requirements prior to discharge. GF facilities discharge wastewater to municipal treatment facilities, or directly to surface waters in the case of Fabs 9 and 10. The direct discharges follow a rigorous combination of industrial and biological treatment processes. In total, in 2018, we discharged 23.7 million cubic meters of treated wastewater from all manufacturing operations combined, of which 31% (7.3 million cubic meters) was discharged to surface water. | Full |
| | 306-2 | Waste by type and disposal method | Sustainable Manufacturing | | Full |
| | 306-3 | Significant spills | _ | No significant spills occurred in 2018 | Full |
| GRI: 307: Environmental Compliance 2016 | 307-1 | Non-compliance with environ- mental laws and regulations | Sustainable Manufacturing | | Full |









| GRI Standard Title and Publication Year | GRI Standard Disclosure Number | Disclosure Title | CSR Report 2019 Section | Explanatory Comment / Direct Information | Coverage |
|--|-----------------------------------|---|--|--|----------|
| | | SOCIAL / EI | MPLOYMENT | | |
| GRI 401: Employment 2016 | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | Our People and Workplace | | Full |
| GRI 403: Occupational Health and Safety 2016 | 403-2 | Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities | Our People and Workplace | We do not disclose by gender and region | Partly |
| GRI 404: Training and Education 2016 | 404-1 | Average hours of training per year per employee | Our People and Workplace | We do not disclose by gender and employee category | Partly |
| | 404-2 | Programs for upgrading employee skills and transition assistance programs | Our People and Workplace | | Full |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-1 | Diversity of governance bodies and employees | Our People and Workplace | | Full |
| | | COMN | MUNITY | | |
| GRI 203: Indirect Economic Impacts 2016 | 203-2 | Significant indirect economic impacts | Site Profiles | | Full |
| GRI 413: Local Communities 2016 | 413-1 | Operations with local community engagement, impact assessments, and development programs | Community Engagement; Site Profiles | | Full |

