



2018

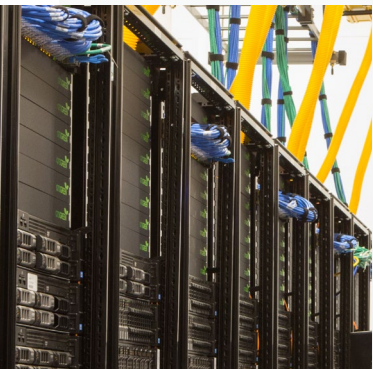
# ESG Initiatives Report

4.23.2019





Enhancing the care and improvement of human life and minimizing our carbon footprint through technology and manpower.



## Our Vision

QTS is a leading provider of data center solutions across a diverse footprint, spanning more than six million gross square feet of owned mega scale data center space throughout North America. We are differentiated through our ability to enable a broad ecosystem of cloud and connectivity partner solutions through our software-defined platform, combined with QTS' high-end security and compliance, customer service and world-class infrastructure. The flexibility of our infrastructure to support a broad array of customer profiles and demands provides us the opportunity to maximize our investments while providing transparent and responsible data center solutions that are critical to the operations of our customers.

As evidenced by our **Powered by People** approach, we believe that how we deliver our services is just as important as what is delivered. This means caring for and improving the lives of current and future employees, customers, investors and community members, and taking equal care of the environment and natural resources we all share. This helps us realize our vision of **enhancing the care and improvement of human life and minimizing our carbon footprint through technology and manpower.**

Our commitment to **environmental** sustainability, **social** accountability, and corporate **governance** rooted in sound and trusted core values has never wavered, and we will continue to demonstrate this through an increased dedication to transparency and data-backed performance.



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Chad Williams, Chairman & CEO

# Message From CEO

QTS was formed in 2013 on the premise that it is possible to build a successful company based on higher principles than just profit alone. I believed then, as I do now, that the highest performing organizations have a purpose-driven spirit and have an obligation to the communities in which they operate and to the people who do the hard work of the company every day. Most importantly, I believe that a group of people, united around a common purpose and aligned on a core set of values, can achieve great things – for the company, their communities, stockholders and themselves.

Fifteen years later, these core beliefs have not changed, and we've built a multi-billion-dollar company by staying true to values such as integrity, character and trust. I am always quick to admit that QTS is not a perfect company. And yet, I firmly believe we have a unique sense of values and purpose, and we are hard-wired to get better every day in ways both small and large.

**Our mission at QTS is to empower people and technology.**

We firmly believe we can successfully execute on this mission with a focus not only on our business results, but also equally important, on the conduct and manner in which we achieve our goals.





## QTS Volunteer Day (January 2019)

## Powered by People

Our corporate belief is that we are Powered by People – a phrase that perhaps isn't initially logical for a real estate technology company. Yet over the years, our people have proven time and time again just how vital they are to the growth, innovation and profitability of this company. Said more directly, QTS would not be what it is today without the creativity, sacrifice, service and commitment of our people doing great work across our data centers 24x7x365.

Early in my tenure as CEO, I realized that my primary responsibilities were to be an effective *steward of people and steward of capital*, and I hold these two principles among my most sacred leadership obligations. In recent years, I have been pleased to see a broader movement among CEOs and their organizations embracing similar stewardship in areas such as people, community and environment. I believe that to whom much is given, much is expected – successful, sustainable organizations must choose wisely how they will give back to their communities, their employees and their shareholders.

If profits are the engine of organizations, the fuel is the people who power the engine. So it has always seemed logical that as CEO, my duty is to treat people with dignity and respect, and to care for them as best I can. I believe organizational leaders – especially CEOs – have an obligation to care for people and communities while also pursuing growth and profit for stakeholders. I don't see these as opposing ideals; rather I see them as complementary. In fact, I believe an organization that is solely focused on profitability will not prosper in the long run. It is especially important to be surrounded by teammates who believe in a common vision and purpose, and are willing to sacrifice for the good of each other and the organization.

In an increasingly digital world, QTS' growth opportunity as a provider of critical infrastructure is immense. As we expand our platform, our potential impact on the lives of those around us also will grow and it is critical to maintain a consistent foundational framework that guides how we conduct business.

To that end, we have taken a significant step in our commitment to corporate responsibility by publishing our inaugural report which details our key Environmental, Social and Governance (ESG) initiatives. We anticipate publishing this report annually in conjunction with our annual report to provide transparency to our key stakeholders on the initiatives we have implemented and allow them to evaluate the progress we are making in delivering on our commitment to the highest ESG principles. The following pages will provide an overview of the current initiatives and goals within our broader corporate sustainability program.

## Environmental

Today, approximately 32% of our power is sourced from renewable energy sources, representing approximately 340,478 MWh of renewable power purchased since 2018. In support of our goal of achieving the highest standards in corporate sustainability, we have set a goal, based on current projections, to procure 100% of our power from renewable energy sources by 2025. This long-term goal represents a significant stake in the ground for QTS, our customers and investors. The availability of clean energy sources is rapidly growing. Capitalizing on that opportunity is the right decision, not only for the environment, but also for our customers and investors as we continue to find opportunities to procure renewable energy sources at costs comparable to nonrenewable. Data centers represent approximately 3% of global power usage and, as an industry, we have a responsibility to protect the environment through our infrastructure development and power procurement initiatives. QTS is proud to take a leadership role in that effort.



**14 MW solar field in Princeton, NJ from which QTS Princeton site purchases energy**

## Social

We believe one of the most direct ways we can impact our stakeholders is through a commitment to integrity, fostering an environment of trust and respect and embracing our employees' diverse backgrounds, talents and interests. At QTS, we celebrate our employee's individuality, encouraging them to bring their whole self to work, in support of our broader corporate goals. This has enabled QTS to become a leading innovator in the data center sector. In addition, QTS leads the data center industry in Net Promoter Scores (NPS), a key indicator of the quality of customer service and satisfaction. Our commitment to excellence in customer service is driven by a servant-leadership philosophy that permeates our corporate culture. We firmly believe in serving something greater than ourselves as we care about each other, our customers and our communities. This encourages and drives our QTS family mindset and strengthens our pursuit of excellence as we have created a culture of service, maximizing the positive impact QTS has on our surrounding communities and each other.

All QTSers are encouraged to support their local communities through a robust matching gift program and paid days off to serve charitable organizations of their choice. In 2012, we established the QTS Community Impact program designed to enrich the lives of QTS employees and members of the communities in which we serve. The focus of this program is to dedicate a portion of our **time, talent and treasure** as we provide financial support, technical resources and employees' time to benefit local programs that are important to our people and agencies that strive to enhance our communities and value human life.

**In 2018, QTS earned an industry leading Net Promoter Score for the third consecutive year.**



QTS Operations Service Center Team

## Governance

QTS' corporate governance is structured in a manner that we believe closely aligns the company's interests with those of its stockholders. QTS' Board of Directors is comprised of experienced independent directors who are committed to enhancing stockholder value by aligning with corporate governance best practices. QTS was pleased to announce the appointment of Mazen Rawashdeh in 2018 to our Board of Directors as a new independent director. Mr. Rawashdeh brings more than 25 years of experience in the technology industry, specifically in large scale data center infrastructure management and strategy, for some of the largest technology companies in the world. In 2019, Wayne Rehberger joined QTS' Board of Directors as an independent director and took our Board composition to ten total directors, nine of whom are independent. Mr. Rehberger has over 35 years of business strategy and financial experience, and formerly served as SVP and Chief Financial Officer for Engility Holdings, Inc. The addition of Mr. Rawashdeh and Mr. Rehberger brings valuable technology infrastructure and financial knowledge to our Board.



Mazen Rawashdeh



Wayne Rehberger

In addition, following extensive engagement with QTS stockholders, QTS announced a number of additional corporate governance modifications during 2018, including the rotation of Board committee chairs and members, the hiring of a new consultant for Board and Executive compensation, the introduction of a new performance-based long-term incentive compensation plan for our executives, a reduction in the company's related party transactions and the decision to opt out of the Maryland Unsolicited Takeover Act (MUTA). These modifications represent the latest examples of the QTS Board's commitment to best-in-class governance policies and position QTS to continue to deliver value for stockholders.

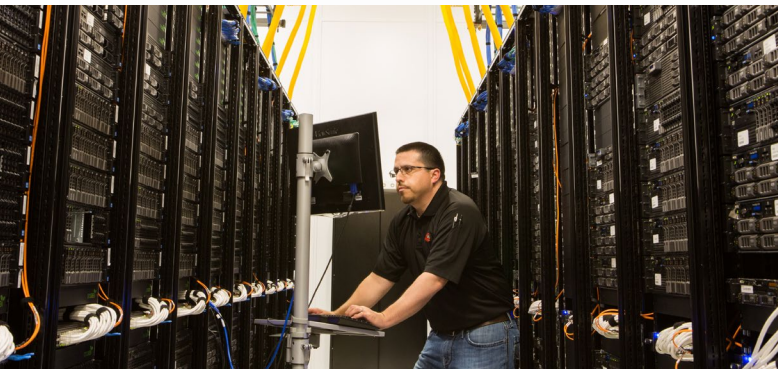


QTS Board of Directors





# About QTS



QTS Realty Trust Inc. is a publicly traded company (NYSE: QTS), formed in 2013 with a vision to create a platform of world-class, highly secure state-of-the-art data centers. Headquartered in Overland Park, Kansas, QTS operates in the United States, Canada, the Netherlands, United Kingdom and Hong Kong. QTS delivers secure, compliant infrastructure solutions, robust connectivity and premium customer service to more than 1,100 enterprises, government entities and hyperscale technology companies.



**25 Data Centers**

(14 directly owned and managed)<sup>1</sup>

**2.7 Million Square Feet**

of raised floor capacity<sup>1</sup>

**6.2 Million Gross Square Feet**

mega scale data center space<sup>1</sup>

**Over 690 MW**

of available utility power<sup>1</sup>

**14 Markets – Tier 1**

1,100+ customers | enterprises, government entities, hyperscale technology companies<sup>1</sup>

**96% of Raised Floor Area**

wholly owned<sup>1</sup> (including Santa Clara which is subject to a long-term ground lease)<sup>1</sup>



**QTS Executive Team**

## Leadership

The Board of Directors is comprised of industry experts, many whom sit on one of the following standing committees: Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee. All members of these committees are independent, as required under applicable SEC and NYSE rules. The Board provides leadership in delivering one of the industry's only software-defined data center platforms delivered across a portfolio of mega scale data center infrastructure. In addition, QTS has a Sustainability Leadership Team, tasked with leading ESG initiatives across the company. The team reports to the CEO and Board of Directors, is led by the Vice President of Energy and Sustainability and is comprised of members across many diverse departments.

<sup>1</sup>Information as of December 31, 2018.



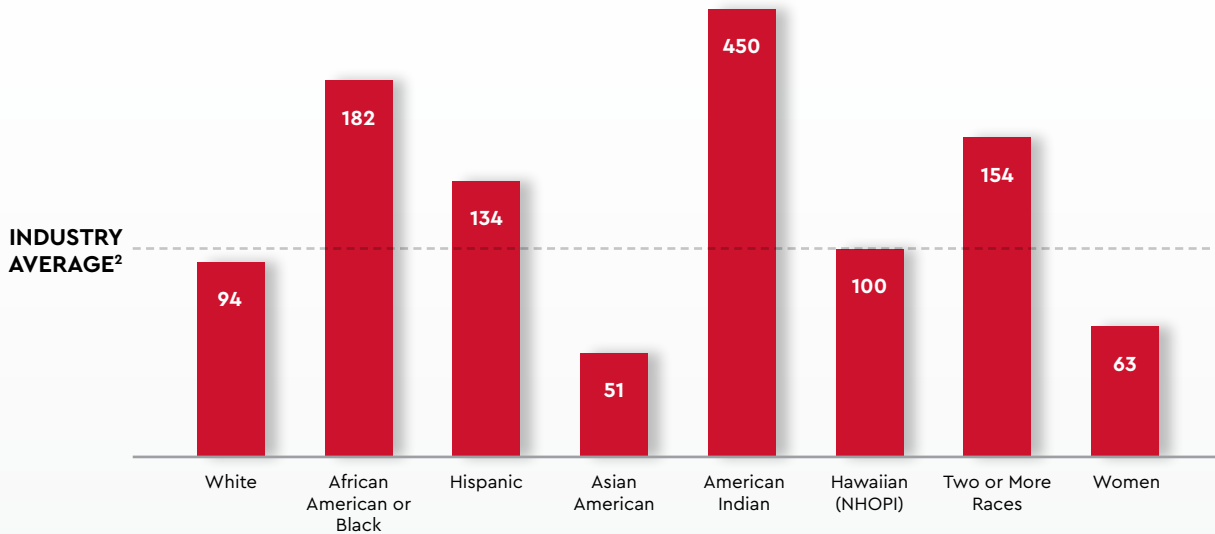
## People

QTS employs over 600 employees and hundreds of contractors based in the continental United States. We are proud to in-source all of our operations staff, as opposed to employing third-party agencies, as this creates a higher intrinsic commitment to operations and value for our customers. QTS believes that a highly productive and diverse workforce is essential to the success of the company, and thus has a high commitment to diversity and equal opportunity, providing opportunities for all employees to flourish in a supportive and non-discriminatory environment.

**1/3 of QTS employees have a tenure of 5+ years.**

**Over 10% of QTS employees are United States Veterans.<sup>1</sup>**

### QTS Compared to Industry Average (by Percent)



2018 QTS Partner Awards Ceremony

## Partners

QTS partners with like-minded technology companies focused on quality products and services, ethical operations, and a relentless focus on exceeding customer expectations. This helps us continually improve our services and contribute to the improvement of our industry by working together with other leaders in technology. We proudly partner with companies including: Nutanix, PacketFabric, Arista, Citibank, Calpine, Engie Resources, GDT, ServiceNow, Schneider Electric, Vertiv, Megaport, Amazon Web Services and other industry leaders.

<sup>1</sup>This information is self-disclosed by employees to QTS' People Services department as of 2018.

<sup>2</sup>[Diversity in High Tech: U.S. Equal Employment Opportunity Commission](#)



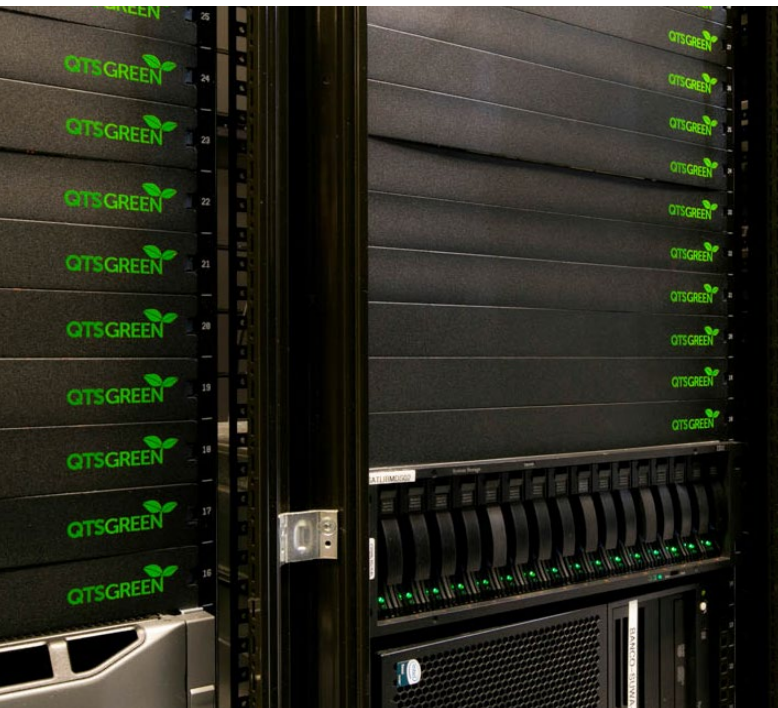
QTS Piscataway Solar Panels

# About this Report

This report was produced by the QTS Sustainability Leadership Team in conjunction with a third-party ESG consultant. This document reports on the highest priority ESG data and initiatives for the 2018 calendar year, including projects that were initiated before the reporting period but continued into 2018, as well as forward-thinking goals developed in 2018 for projects that are yet to commence. The ESG topics covered in this report are those that we believe are highly important to QTS stakeholders, as well as highly impactful to QTS' business (as determined by the QTS Sustainability Leadership Team). These topics include: environment, corporate policy, health and well-being, stakeholder engagement, management, data and performance indicators, and recognition.







QTS Blanking Panels

# Environmental

Great strides in technology allow us to be more freely connected than ever before. With global data traffic doubling every four years, data center growth is expected to remain significant. Today, approximately \$20B is spent globally on data center construction, and once built, the largest data centers can span more than one million square feet.<sup>3,4</sup>

The servers and IT equipment that power our digital lives require a highly controlled environment to ensure the safety and security of the businesses that rely on them. Electricity and water are utilized to maintain an optimal indoor environment and uninterrupted power to the equipment.

<sup>3</sup> [Double Digit Growth Expected in Data Center Industry \(Forbes, 2017\)](#)

<sup>4</sup> [Energy Hogs: Can World's Huge Data Centers Be Made More Efficient? \(YaleEnvironment360, 2018\)](#)

As a large energy consumer, we believe it is our responsibility to reduce our impact and help mitigate the larger problem, but we also know that it makes good business sense. More sustainable companies typically outperform their less sustainable counterparts, and using less electricity has a direct impact on our bottom line. More than that, our core values were established to improve the lives affected by our business, and reducing our environmental impact helps current and future generations of employees, customers and communities. That's why we have set measurable, relevant and timely targets that will reduce our carbon footprint and support the clean energy industry, improve the lives of our stakeholders, and increase our financial returns.<sup>5</sup>

**Based on current projections, our environmental goals include:**

- **Procure** 100% of our power from renewable energy sources by 2025
- **Pursue** LEED certification in 90% of QTS facilities by 2025
- **Conserve** at least 10 million gallons of water per year
- **Install** EV charging stations at 30% of QTS facilities by 2025
- **Recycle** 600 million pounds of material by 2025
- **Join** RE 100, GRESB in 2019

**QTSGREEN**  **by the numbers:**

Total Data Center Recycled Weight

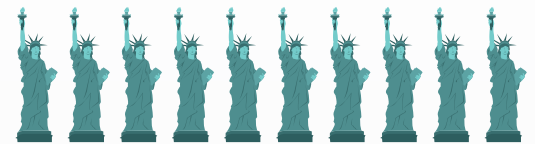
**550,651,366 lbs** =

Since 2012

AS MANY AS



**10** STATUE OF LIBERTIES



Total Recycled Water

**68,103,999 gal**

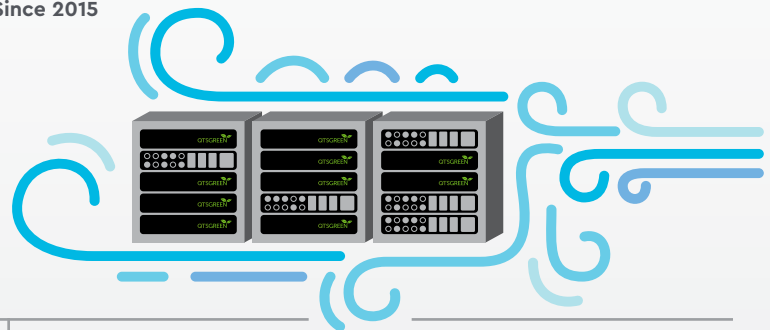
Since 2015



Total Number of Blanking Panels

**160,963**

Since 2015



Carbon Footprint Saved

**63,436 tons**

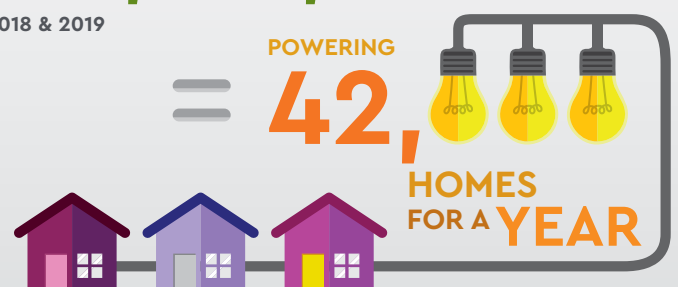
Since 2015



Annual Green Power Usage

**465,000,000 kWh**

2018 & 2019



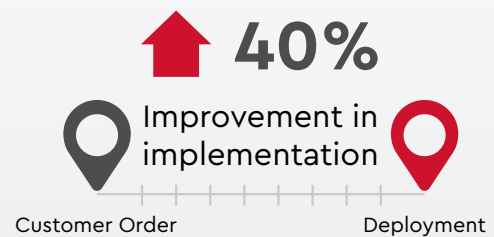
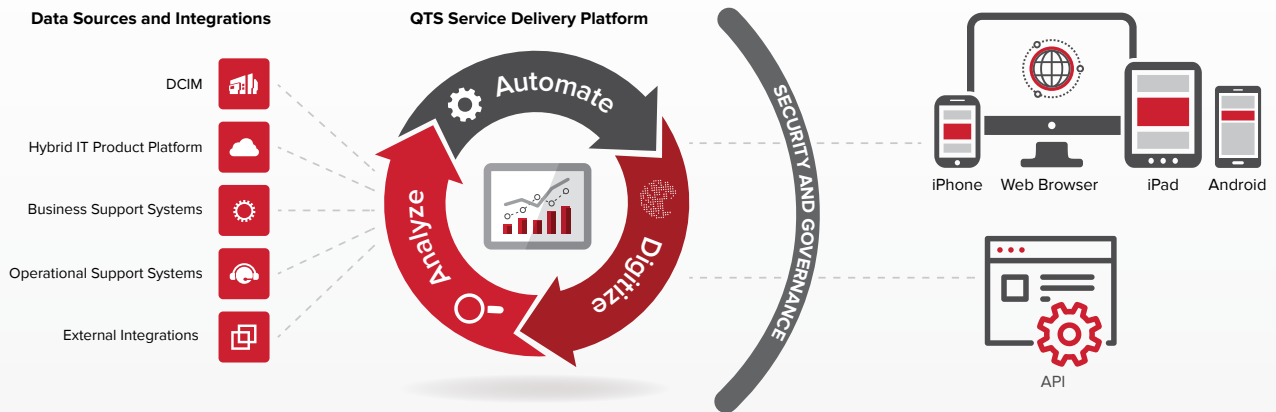
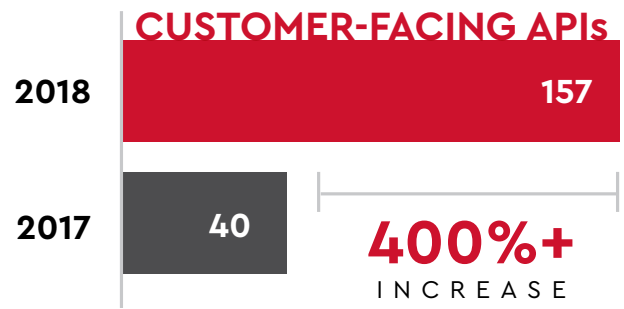
<sup>5</sup> [The Remarkable Rise of ESG \(Forbes, 2018\)](#)



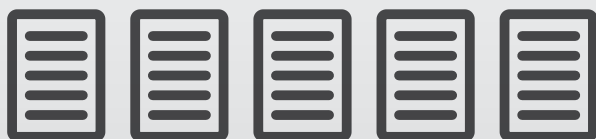
## Performance Indicators

We believe the best way to make informed decisions about our energy use, water use and waste generation is through rigorous and continuous data collection and analysis. Our energy, water and waste data is collected every month through a third-party data consultant for every property owned and managed by QTS. This allows us to view high-level trends and identify areas of improvement, which when implemented, reduces costs for our customers, improves our bottom line, and allows us to make important calculations regarding our carbon footprint.

Our commitment to data and transparency also extends to our customers. Our Service Delivery Platform (SDP) allows on-demand access to real-time data analytics, giving customers visibility, access and control of various metrics across their IT deployment. This helps them identify areas for improved efficiency and innovation. We've made this tool easy to use and accessible, even making it available for use on mobile devices.



**10%** of cross connect orders automated through SDP



New power upgrades representing



**\$700k+ Annualized Revenue**

## Energy

In the U.S., 76% of greenhouse gas emissions are created by burning fossil fuels like coal and natural gas to produce electricity. While significant and continuous power supply is critical to the daily operations of a data center, there are many ways to reduce emissions and cut costs.<sup>6</sup>

**For a typical data center, power supply is responsible for approximately 40% of annual operating expenditures.<sup>7</sup>**

The most significant environmental impact we can have is switching from conventional energy sources to carbon-free, renewable energy. This is why based on current projections, **QTS has a goal of procuring 100% renewable energy by 2025.** To reach this goal, we have a comprehensive plan for all QTS data centers to transition to purchasing all of their energy from renewable sources over the next several years. Today, we procure 32% of our energy from renewable sources, including on-site solar photovoltaic generation at our Piscataway and Princeton sites.

**Nearly 30,000 MWh of electricity per year is generated in the solar fields at our New Jersey facilities.**



Switching to renewable energy is the most impactful change we can make, but there is still more we can do. While the cost of renewable energy has come down significantly over the last decade (and is expected to be cheaper than nonrenewable sources by 2020), high usage means electricity always will be a significant cost, and we always are seeking ways to improve our bottom line for our stakeholders. This means following efficiency best practices and creating innovative solutions that reduce our energy demand as much as possible.<sup>8,9</sup>

Some of our energy efficiency measures include utilizing the following technologies and processes:

- Water cooling and pumped refrigerant systems as opposed to conventional air-conditioning cooling system
- Water economizers that remove heat from a water loop via a heat exchange process with outdoor air
- Free cooling, a method of using outside air to cool our data centers without the use of mechanical refrigeration systems
- Hot aisle/cold aisle airflow management at all sites, a layout design for computing equipment that maximizes heating/cooling efficiency
- Variable frequency drives that adjust the amount of energy delivered to equipment based on how much is needed, rather than supplying a continuous supply when the equipment is not in heavy use
- Automated lighting controls
- ENERGY STAR appliances

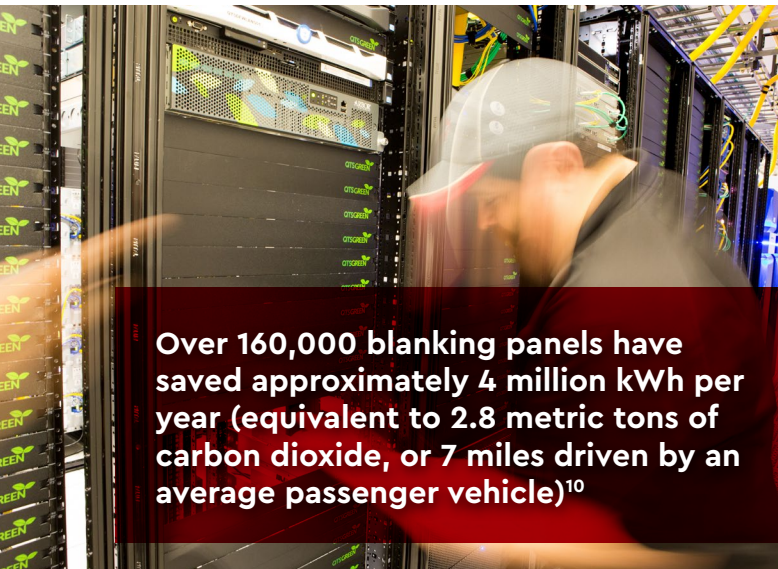
<sup>6</sup> [Energy and the Environment Explained – Where Greenhouse Gasses Come From \(EIA\)](#)

<sup>7</sup> [Data Centers –Jobs and Opportunities in Communities Nationwide \(U.S. Chamber of Commerce, 2017\)](#)

<sup>8</sup> [Consistently Cheaper than Fossil Fuels by 2020, Report Claims \(Forbes, 2018\)](#)

<sup>9</sup> [Renewable Power Generation Costs \(IRENA, 2017\)](#)





Over 160,000 blanking panels have saved approximately 4 million kWh per year (equivalent to 2.8 metric tons of carbon dioxide, or 7 miles driven by an average passenger vehicle)<sup>10</sup>

Mitigating server temperatures is a top priority to keep data and equipment safe and effective. This is why so much of the energy used goes toward indoor air temperature control, and which is why QTS puts so much care into this. One easy and inexpensive way to reduce energy needed for temperature control is to install blanking panels (spacers that maintain proper airflow in server racks). QTS proudly offers blanking panels to customers at no cost to increase our energy efficiency. This is a small expense for us that has a high impact on energy costs and environmental impact.

We look at energy use across the board, not just in operations. For example, Electric Vehicles (EVs) produce no tailpipe emissions and overall less carbon emissions than gasoline cars, even when charged from nonrenewable energy sources. We have made EV charging stations available to employees and customers at our QTS Suwanee and Atlanta sites and at our Corporate Headquarters in Overland Park, KS, with more planned at other sites in the near future.<sup>11</sup>



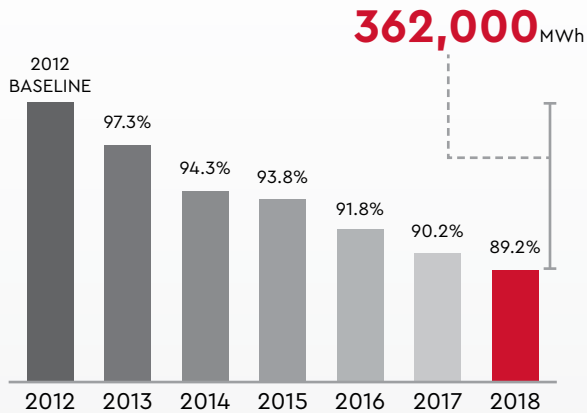
<sup>10</sup> [Greenhouse Gas Equivalencies Calculator \(EPA\)](#)

<sup>11</sup> [Explaining Electric & Plug-In Hybrid Electric Vehicles \(EPA\)](#)

As we continue to grow, we have expanded our physical footprint and also have become more efficient with the space we already have. We have added nearly 90,000 square feet of total raised floor space in the last year, while also expanding services at existing data centers to use our space more efficiently. Even with a significant increase in floor space and utilization of existing floor space, our energy usage and usage per square foot has remained fairly consistent, while our space efficiency has steadily grown.

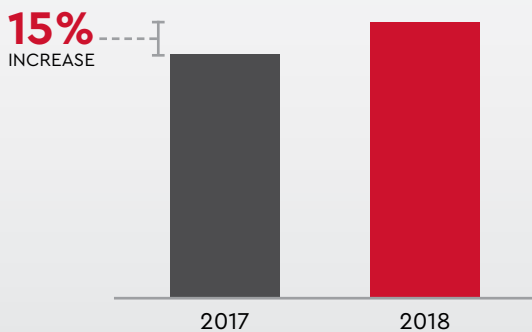
To measure our efficiency, we monitor critical energy metrics including our Power Utilization Effectiveness (PUE), the ratio of total energy used to the energy delivered to computing equipment, as well as our watts per square foot. Our PUE has steadily improved over the last six years, and as we continue to expand our business and make better use of our space, we are proud that our energy density has grown. We strive to continue these trends, and we believe continuous monitoring of these metrics will help us do so.

### Portfolio Wide PUE Reduction



### Portfolio Wide Energy Density

Watts/SF



## Water

Similar to energy, data centers rely on water to help maintain indoor environments for optimal equipment effectiveness. For a traditional data center, water typically is consumed at two key points of operation:

1. During the generation of electricity that the data center ends up using (indirect, responsible for about 80% of total water use)
2. For use in cooling tower-based chillers that improve energy efficiency (direct, responsible for about 20% of total water use)

Given the associated environmental impact and costs, QTS is committed to reducing our water usage.<sup>12</sup>



QTS Sacramento

**Cooling towers use water evaporation to discard heat from the data center, as opposed to the more standard energy-intensive air conditioning.**

Switching to renewable energy will almost entirely eliminate our indirect water usage (historically, renewable sources like wind and solar use little to no water to produce energy), and we have employed several innovative solutions to help reduce direct water usage, including rooftop water collection and reclaimed water use in cooling towers and low-flow water fixtures installed at all sites.<sup>13</sup>

<sup>12</sup> [United States Data Center Energy Usage Report \(Ernest Orlando Lawrence Berkeley National Laboratory\)](#) p.27-28

<sup>13</sup> [Consumptive Water Use for U.S. Power Production \(National Renewable Energy Laboratory\)](#) p.9



We devoted 4.5 acres of roof space on our Atlanta-Metro site for rain water capture to be used for cooling, allowing us to collect 5,400,000 gallons of water every year for cooling, or about 4% of the site's total annual usage.

**68,000,000+**  
GALLONS SAVED



2015

2018

## Waste

Waste generation and diversion rates also are critical metrics to track. While data centers do not generate waste that is harmful to the environment, and employees generate a fairly small amount of trash, we are still focused on the importance of recycling to limit our impact on the environment.

We have recycling available at all sites, but reducing waste encompasses what is produced on site as well as the construction of our sites themselves. Given the size and physical requirements of data centers, it is more cost effective and more environmentally friendly to reuse buildings rather than build entirely new structures. By capitalizing on existing infrastructure-rich facilities and transforming them to meet our needs, we reduce the cost and time associated with building new.

Because we believe that constant data collection and analysis is the key to constant improvement, we also track our Material Utilization Effectiveness (MUE), or the ratio of the total amount of waste we generate to the total amount we recycle, and are among the first in the industry to monitor and prioritize this metric.

**"Purple water," otherwise known as black water or waste water, while not potable, can be used in cooling towers. Because this is a closed-loop system, there is no potential for contamination.**

We are proud to say our water reduction measures have been paying off. Despite adding nearly 90,000 square feet of property since 2017, our water usage has remained fairly consistent, signaling an increase in water efficiency. In 2018, our average water use dropped from an average of approximately 330 gallons per MWh to approximately 300 gallons per MWh, a ~10% increase in efficiency.

Lastly, similar to Power Utilization Effectiveness, we also monitor our Water Utilization Effectiveness (WUE), or the ratio of our annual site water usage to total IT energy use (including cooling, heating and electricity). This helps us continuously monitor areas for improvement in onsite, direct water consumption. We are proud to say our WUE has decreased over the last year, demonstrating an improvement in water efficiency and representing over 68 million gallons of water saved.



QTS has reduced or recycled **550 Million pounds** of industrial material to date by recycling building structures.



Our MUE was 1.35 in 2018, representing a **75% recycling rate.**



## Brownfield/Urban Redevelopment

As a leader in brownfield development, QTS has focused on converting underutilized, infrastructure-rich properties into cutting-edge facilities. Not only are we looking to be good stewards of the environment through operational recycling of depreciated assets, we also want to positively impact the communities and local economies that QTS enters. To date, the company has successfully redeveloped several brownfield sites in Atlanta, GA, Irving, TX, Richmond, VA and Chicago, IL.



The presses had been stopped for five years at the former Chicago Sun-Times printing plant, prior to QTS' acquisition. The company purchased the empty building in 2014 and has since revitalized the iconic facility into a state-of-the-art, highly connected, mega data center serving the Midwest. Taking a tour is a special experience – the local team can point out some of the history in this building.

***"This data center restored an iconic building and gave it a 21st-century purpose," said a City of Chicago Representative in a statement issued for the grand opening. "Chicago is a global hub for innovation and technology, and this QTS data center will help the city build on that reputation for years to come."***



With an established presence in Atlanta and demand increasing for secure and robust data center space, QTS acquired its first brownfield property in 2006. Built in 1954 by Sears as the company's southeast distribution center, QTS saw the potential of the huge building. This building featured large rooms now converted into data halls tailored to large enterprises. Traditional firewalls separated the rooms to protect stored merchandise, which are now incorporated into the current design. QTS converted the 990,000 square foot building into one of the largest multi-tenant data centers in the world.



The former semiconductor plant was an ideal property to redevelop into a state-of-the-art data center campus, as it was large and equipped with significant power and cooling equipment. By purchasing an infrastructure-rich facility, QTS significantly reduced overhead costs associated with creating a new site, as well as the need for building materials that would be required to construct a new structure. In addition to the 65 million pounds of steel recycled at the site, sustainability is a highlight of this property with LEED certification, solar panels and a rainwater collection system in place.

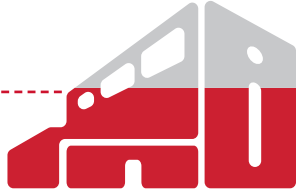


QTS transformed the 700,000 square foot former semiconductor manufacturing facility, with a keen focus on sustainable issues including water reduction, the use of low-emitting materials like environmentally friendly paints, sealants and flooring, improving energy performance for lighting, HVAC and other equipment and appliances. QTS recovered more than 4.7 million pounds of materials during construction and used recycled and regional materials where possible.

# Recognition

While we believe that corporate responsibility is more about the actions we take to improve the lives of those that affect and are affected by our business than receiving awards, we are proud to have been recognized for a variety of achievements.

Nearly **60%** of QTS sites are **LEED certified**, with a goal of pursuing LEED certification at **90%** of properties by **2025**.



**QTS is the first existing data center to receive the UL 3223 certification, a program that helps mitigate risk for data center owners and operators by providing a set of criteria to increase end-user transparency, provider accountability and proper data center documentation.<sup>14</sup>**



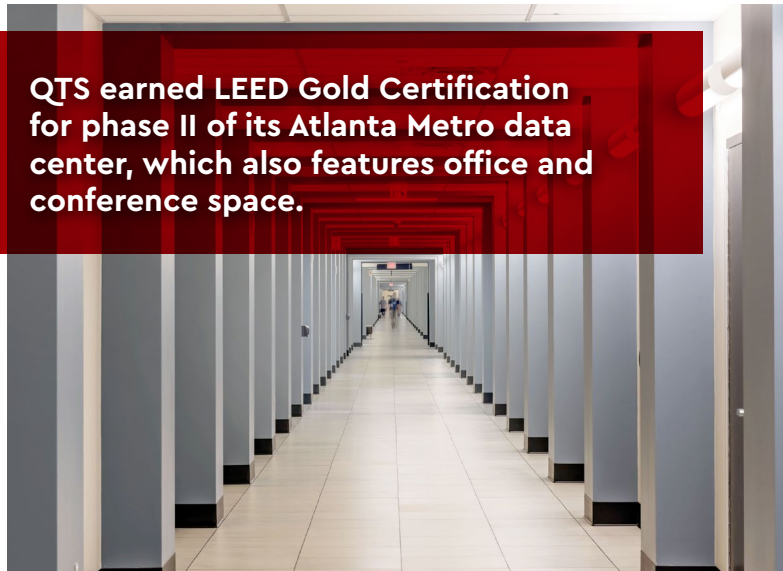
<sup>14</sup> [UL Cloud Certification for Colo-Hyperscale \(UL\)](#)





QTS Atlanta-Metro

**QTS earned LEED Gold Certification for phase II of its Atlanta Metro data center, which also features office and conference space.**



Most recently, we were awarded the EPA Green Power Partner award for leadership in renewable power. This means we are among the EPA's national top 100 list of green power users and ranked 12th in the Tech & Telecom sector. The Green Power Partnership is a voluntary program that helps increase green power use among U.S. organizations to advance the American market for green power and development of those sources as a way to reduce air pollution and other environmental impacts associated with electricity use.



QTS is a proud EPA Green Power Partner and was ranked



**in Tech & Telecom**

The Partnership currently has more than 1,500 partners voluntarily using nearly 53 billion kilowatt-hours of green power annually. Partners include a wide variety of leading organizations such as Fortune 500® companies; small and medium-sized businesses; local, state and federal governments; and colleges and universities. By making the choice to use green power, we reduce our emissions footprint, while also hoping to send a message to others across the United States that using green power is smart business.

We also strive to contribute to the industry through our partnerships and thought leadership. We regularly attend speaking and networking events, produce publications for websites like GreenBiz and Data Center Frontier, and author blog posts to share information on sustainable data center topics such as water conservation and energy efficiency.

**EUCI Event (2019)**





QTS Chicago Family

# Social

While we are firmly rooted in the technology industry where processes are increasingly automated every day, it will always take a strong, healthy and talented workforce to ensure the highest level of quality in the complex business of operating data centers. At QTS, we are proudly Powered by People and therefore have a high level of commitment to those who affect and are affected by our business.

We understand that our employees, customers, vendors and other stakeholders have a life to live; a life to share with family, friends and communities. While work is important, we believe it should just be one aspect of a well-lived life, and we support the desire for fulfillment both on the job and during non-working hours. We strive to satisfy and improve the lives of our employees and communities. For these reasons, volunteerism and community are listed among our core values, and we have robust programs in place to help improve the health and well-being of our employees and local communities.



## Management

We continue to strive to improve and believe that in order to do so, we must have clearly defined goals to work towards and reliable processes in place to measure our progress. This is why every department is responsible for setting, tracking and achieving quarterly and annual goals that support the improvement of their roles and as a result, the company. We also have company-wide targets, including ESG goals and initiatives managed by the QTS Sustainability Leadership Team.

The Sustainability Leadership Team is led by the Vice President of Energy and Sustainability and its members have expertise in sustainability, product management, marketing and communications. The interdepartmental commitment and executive sponsorship of this team and its initiatives demonstrates the high level of dedication QTS has to environmental, governance and social responsibility and ensures the critical projects it initiates are given the resources necessary to advance and succeed.

We take great pride in the strong and dedicated workforce that allows us to set and achieve aggressive targets, lead task forces, and deliver the highest quality of service to our customers. As an organization that is Powered by People, we believe our employees are our primary driver of success, which is why we take great care in our recruitment and retention efforts. Our various benefits programs are industry-leading, and we take great pride in providing a wide variety of health and wellness programs for our employees. For example, we offer a generous stock purchase plan for qualifying employees, as well as referral bonuses when employees help us expand our workforce. We value diverse views and have an appreciation for people of all types of backgrounds, including the men and women who serve our country, and proudly partner with military specific recruiting firms. To show our appreciation for QTS veterans, we also offer a generous and comprehensive military leave policy, including up to 12 weeks of job-protected leave for any qualifying exigency. We proudly employ many United States veterans, accounting for about 10% of our workforce.

### QTS Sustainability Leadership Team



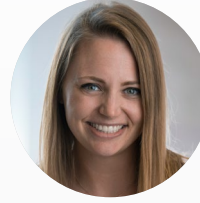
Chad Williams



Travis Wright



Megan Hofmeyer



Kelly Michael



Stephen Douglas



### INVESTING IN OUR PEOPLE:

A **\$1,000 referral bonus** is available for each employee hired for an open position referred by an existing QTS employee.

A generous Employee Stock Purchase Plan allows eligible employees to purchase QTS stock with a **10% discount**.

A competitive, need-based scholarship program is available for children of QTS employees seeking college education. Scholarships of up to **\$5,000 per year** for up to four years are awarded to selected applicants to cover higher education expenses including tuition, room and board, and other institutional expenses related to receiving a degree.

## Community

Our goal of improving the lives of those affected by our business does not stop with employees and customers – we proudly extend this mission to the communities in which we do business. Our Community Impact program was created in 2012 to provide financial support, technical resources and employees' time to benefit local programs and agencies that strive to enhance our communities. To help support this program, we created the QTS 1/1/1 goal to commit 1% of our *Time, Talent and Treasure* to help those in need.

We believe that great things can happen when individuals use their time and talents to help others within their communities, which is why we encourage and facilitate employees serving their communities. Every QTS employee is allocated three full work-days per year of volunteer time at QTS' expense. The goal is to provide the necessary manpower to assist charitable organizations to fulfill their missions within our communities, while at the same time developing happier, more engaged and more productive employees as they positively impact their communities as ambassadors of QTS.


To further support community at QTS, we also encourage each of our sites to sponsor volunteerism projects and host family events, where employees in all disciplines can take time to celebrate and get to know one another.




Ashburn QTSers Donate BIG for Turkey Day! In 2018, the QTS Dulles Team hosted their third consecutive Thanksgiving Day food drive. The team donated and built 100 "Turkey Side" bags for our local food bank, Loudoun County Hunger Relief, providing their neighbors with all the traditional sides for Thanksgiving, as well as a gift certificate for a free turkey.

## QTS Community Impact Program Since 2012

 **10,978** Total Volunteer Hours

 **168** Total Number of Charitable Organizations Served by QTSers Doing Volunteerism

 **176** Total Number of Charitable Organizations Receiving Contributions

**QTS contributes to charitable organizations across the country supporting organizations like Big Brothers and Big Sisters, Children's Advocacy Groups, Habitat for Humanity, local food depositories and other charities that support the needs of children, veterans, emergency services personnel, the hungry and homeless. QTS will also match employee charitable donations for eligible organizations for up to \$250 per year. Since 2012, QTS has contributed over \$2 million and supported over 150 charitable organizations across the United States and abroad.**



## Commitment to Veterans

A hallmark of the QTS Culture is a deep commitment to the U.S. military, law enforcement and first responders. We are proud that over 10% of our workforce has served our country, and we actively recruit veterans, reservists and members of the National Guard to join our team. At QTS, we are continuously inspired by our veterans and want to do our part to ensure their mission continues after leaving active duty.

In 2018, QTS signed a Statement of Support for the Guard and Reserve – committing to fully recognize, honor and comply with the Uniformed Service Employment and Reemployment Rights Act (USERRA). With this commitment we pledge to provide our managers and supervisors with the tools they need to effectively manage those employees who serve in the Guard and Reserve.



**"As an IMA member of the USAFR, my reserve duty can be cumbersome. As a leader at QTS, this kind of absence could be discouraged if it weren't for my manager's exceptional support. He and I proactively plan for my drill periods and annual tour, allowing me to focus on my reserve commitment while ensuring my responsibilities at QTS are not neglected."**

Also in 2018, QTS Jersey City Site Director, Mike Gialloreto, earned a **Patriot Award** for his support of citizen warriors before, during and after deployment and annual training commitments.

To further our commitment to continuous improvement in policies related to the treatment of veterans, reservists and members of the National Guard, we are enhancing our benefits in 2019. These changes will allow members of the Reserves and National Guard to serve with fewer financial burdens and more QTS support during their deployments.

- Enhance paid leave policy to up to one month of full pay for all employees to fulfill training commitments.
- Addition of \$500/mo deployment allowance for employees to use toward child or home care.
- Provide one week of paid time off for every six months of deployment to allow employees to decompress and transition.



QTS Atlanta Data Center

## Health & Well-Being

QTS recognizes the critical importance of health benefits to our employees and their families, which is why we offer a comprehensive and competitive benefits program. Full-time employees working 30 hours or more per week are eligible for medical, dental and vision insurance on the first of the month following the date of hire. QTS also provides group life insurance for full-time employees, as well as short- and long-term disability, a 401(k) plan and workers compensation. We also offer an Employee Assistance Program, a resource designed to provide confidential and experienced help for employees dealing with issues that affect their lives and job performance.

A strong benefits package is the foundation for a healthy and happy workforce, but should not be the only component. There is a significant amount of research available today regarding productive and healthy workplaces, which our People Services team utilizes in managing our Health & Wellness program. For example, we know that being seated for long periods of time can have adverse health impacts, and because it can be hard to find time to be active during a busy workweek, we have fitness facilities available at our major facilities at no cost to customers or employees. And because health insurance can be complicated and it can be hard to find time to receive routine medical care, we offer individualized insurance consulting and financial incentives for receiving annual physicals.

Given that we spend about a third of our lives at work, we also believe that the smaller details can be just as important as big incentives. This is why we instituted Wellness Wednesdays, a weekly communications campaign to increase awareness about daily health and wellness, and have equipped many of our offices with ergonomic design features including standing desks and water bottle refill stations to create a comfortable environment. We believe staying active and informed is the foundation to a happy and healthy workforce, and our health and wellness program is constantly being improved through research and new initiatives.<sup>15</sup>

<sup>15</sup> [Global strategy on occupational health for all: The way to health at work \(World Health Organization\)](#)

## Stakeholder Engagement

We define stakeholders as anyone who affects or is affected by our business. To us, that includes current and future customers, employees, investors and communities, in no particular order – everyone is a critical piece of the puzzle. We believe that engaging our stakeholders through education, transparency and soliciting feedback is critical to continuing the strong relationships we have with the people who we impact and who are also critical to our success.

### Employees

Because we are Powered by People, investing in the well-being and growth of our employees is one of the best investments we can make. QTS has made a commitment to employee development and can confirm firsthand the countless studies that show professional development is a critical component of a company's success. We believe that through effective employee development, employees become more capable and confident, resulting in increased productivity for the company and greater well-being for each employee.



QTS Duluth Training Center

**iLEAD** is our common definition and shared understanding that everyone is a leader. By embracing this commitment, we bring out the best in ourselves and position QTS for more growth for years to come.

We have made significant investments in our overall learning and development strategy over the past few years, and believe our employee development capability is among the highest in the industry. We built a state-of-the-art learning center in suburban Atlanta, and have adopted a new leadership competency framework by which all learning programs are aligned. This framework provides consistency to our structured training and development across the organization, and the competencies are woven into the performance management system and the 360-degree assessments by which employees are assessed.

**QTS CEO Chad Williams addresses employees at the new QTS learning center in Atlanta, GA**



As part of our commitment to ongoing training, QTS provides employees with easy access to best-in-class functional, technical, and sales development courses. We also have custom development programs for specific groups of QTS employees, including a program for people leaders to further support those who are trusted with leading other employees, as well as a curriculum track for QTS women that we hope will have a broader impact on women in technology, in an effort to help close the gender gap in our industry.



The QTS Women Inspiring Leadership (W.I.L.) group seeks to support and foster women at QTS and women in the technology industry through discussion, education and networking.



# All QTS employees COMPLETED

# 100%

of the compliance  
courses, including  
**Security Awareness,  
Active Shooter and  
Workplace Harassment**



In addition to investing in the growth and well-being of our employees, we also believe it's important to show gratitude and recognize the numerous ways in which employees go above and beyond. Some of our recognition programs include:

- **Eagle Club:** Employees who demonstrate exceptional contributions within their role are nominated by a manager, director, VP or C-level executive; about 25 employees are selected each year for induction into the Eagle Club and are rewarded with an all-expenses paid annual retreat with a spouse/significant other and receive an engraved statue to commemorate their selection.
- **The Wingman Award:** A way for an employee to recognize a co-worker for a job well done. These can be given to any QTSer, no matter the level or department. Each winner is given a write-up in QTS' weekly newsletter and an Amazon gift card.
- **Elevate:** QTS places great importance on customer service. We measure it in several ways, including providing regular Net Promoter Score surveys to all of our customers. Each QTS site takes great pride in its NPS score, and to recognize the employees that help achieve high scores, QTS employees who are mentioned by name in survey responses receive an Amazon gift card.

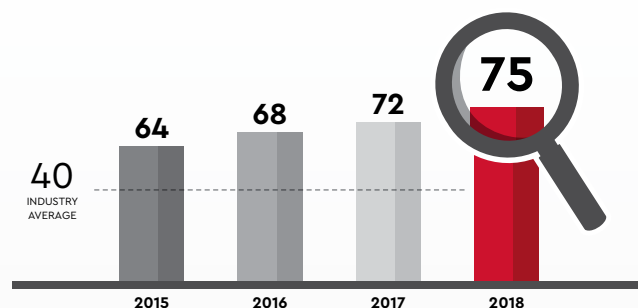


2018 QTS Eagle Club Inductees

## Customers

We know we would not be in business without our customers, which is why we have a strong commitment to delivering the highest quality service. We have comprehensive processes in place to ensure this, but there's no better measure of customer satisfaction than asking them. To do this, we employ the Net Promoter Score Survey, an independently administered survey that measures customer satisfaction and brand perception. We are proud to say that in 2018, QTS received an industry-leading NPS score for the third consecutive year. In our most recent survey, customers rated QTS highly in a range of service areas, including customer service, physical facilities, processes, responsiveness, service of onsite staff, and the 24-hour Operations Service Center.

## Industry Leading Net Promoter Score



## Investors

Investors are the key to our growth and longevity as a company. The best way we can productively engage with investors is through transparency – into our financial and stock details, corporate governance and corporate sustainability. To achieve this, we make resources publicly available on our website for investors to view at any time, including financial reports, stock information, news updates, corporate governance details and additional sustainability data. To further demonstrate our commitment to transparency, we are participating in GRESB – an investor-driven assessment on sustainability performance of portfolios and assets – beginning in 2019.

## Risks & Resilience

As a data center service provider, security is incredibly important to the success of our customers and our business. We proudly host a variety of customers whose needs vary, with the common need being the highest level of security and resilience possible. Due to the nature of our business, losing power or allowing unknown personnel into the data center could result in costly and unfortunate consequences, and therefore is not an option.

Our integrated approach to security is built on advanced infrastructure, dedicated expert support and 24x7x365 monitoring by on-site staff. All of our data centers have not only physical security measures (including fencing, video monitoring and security guards), but also employ biometrics entry systems, dual-factor authentication to access data and VPN, and a specialized Very Early Warning Smoke Detector (VESDA) fire protection system.

QTS also works with customers in a variety of industries to support their specific compliance management strategies. We enact controls and processes designed to ensure compliance and avoid penalties, and are steadfast in



QTS sites have  
**24x7x365**  
monitoring by  
**on-site staff**

protecting confidential business data as those needs grow and change in the future. We work with customers to support any specific compliance management strategies and provide a flexible, integrated approach to IT compliance and regulatory needs (such as Payment Card Industry Data Security Standard or HIPAA regulations).

To ensure our business is conducted in the safest, most resilient locations, we also take great care in selecting sites for future QTS data centers. Before moving forward with any new potential site, we evaluate not only feasibility of cost and timing, but hundreds of other issues regarding internal and external diligence, land zoning and entitlements, power sources, water and other utilities, construction and master planning, and connectivity. Each question with regard to the topics above are given a score, and only sites with the highest scores across all categories are pursued.

## QTS Compliance Matrix

	SOC 1	SOC 2	PCI	ISO 27001	FISMA	HITRUST
QTS ASHBURN-BRODERICK	Implementing in 2019	Implementing in 2019	Implementing in 2019	Implementing in 2019	Yes	Implementing in 2019
QTS ATLANTA-METRO	Yes	Yes*	Yes	Yes	Yes	Yes
QTS ATLANTA-SUWANEE	Yes	Yes*	Yes	Yes		Yes
QTS CHICAGO	Yes	Yes*	Yes	Yes	Yes	Yes
QTS ASHBURN-MORAN	Yes	Yes*	Yes	Yes	Yes	Yes
QTS FORT WORTH	Yes	Yes*	Yes	Yes		Yes
QTS IRVING	Yes	Yes*	Yes	Yes	Yes	Yes
QTS MIAMI	Yes	Yes*	Yes	Yes		Yes
QTS OVERLAND PARK	Yes	Yes*	Yes	Yes		Yes
QTS PISCATAWAY	Yes	Yes*	Yes	Yes		Yes
QTS RICHMOND	Yes	Yes*	Yes	Yes	Yes	Yes
QTS SACRAMENTO	Yes	Yes*	Yes	Yes		Yes
QTS SANTA CLARA	Yes	Yes*	Yes	Yes	Yes	Yes

\* Includes Security, Availability & Confidentiality Trust Services Criteria





QTS 5<sup>th</sup> Anniversary as Public Company NYSE Closing Bell Ceremony (10.9.2018)

# Governance

QTS' corporate governance is structured in a manner that we believe closely aligns the company's interests with those of its stockholders. We have a ten-person board, nine of whom have been determined to be independent for purposes of the NYSE's listing standards. All of the members of our three standing committees, Audit, Compensation and Nominating and Corporate Governance, are independent. Our stock ownership guidelines require our directors to own securities of the company equal to at least five times their annual base cash retainer. Our CEO is required to own at least five times his base salary and our other executive officers are required to own at least three times his or her base salary. Executive compensation is tied to business outcomes and stockholder value creation through the use of equity that vests based on the achievement of specified Operating Funds from Operations and relative TSR targets. We believe that these rules help to ensure that our Board and executives are aligned with the interests of all of our stockholders, which includes many of our employees.

## **QTS Core Values:**

**Integrity, Character, Trust**

**Action, Innovation and  
Accountability**

**Team Oriented**

**Respect our Customers**

**Support of Family, Faith and  
Community Volunteerism**

Our Board is not staggered, with each of our directors subject to re-election annually. Our stockholders may amend our bylaws by a majority vote. We have elected to opt out of the Maryland Unsolicited Takeover Act (MUTA), have opted out of the control share acquisition statutes and we do not have a stockholders rights plan. There are no family relationships among our executive officers and directors.

One of the key functions of our Board is informed oversight of our risk management process. Our Board administers this oversight function directly, with support from its three standing committees, each of which addresses risks specific to their respective areas of oversight. The Audit Committee has the responsibility to consider and discuss our major financial risk exposures, including cybersecurity risk exposures, and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements and oversees the performance of our internal audit function.

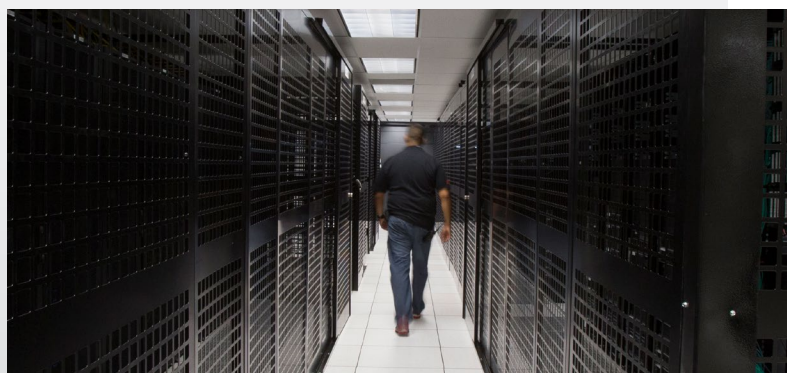
The Compensation Committee assesses and monitors compensation policies to ensure that such practices are designed to balance risk and reward in relation to the company's overall business strategy and do not encourage excessive risk-taking. The Nominating and Corporate Governance Committee monitors the general operations of the Board and the effectiveness of our Corporate Governance Guidelines, including whether we are successful in preventing illegal or improper liability-creating conduct.

The company has adopted a set of governance guidelines, the QTS Realty Trust, Inc. Corporate Governance Guidelines. A copy of our Corporate Governance Guidelines is available on our website at [www.qtsdatacenters.com](http://www.qtsdatacenters.com).

We also have a Code of Business Conduct and Ethics, which applies to directors, officers and employees. Among other matters, the code is intended to deter wrongdoing and promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; full fair, accurate, timely and understandable disclosure in our SEC reports and other public communications; compliance with applicable governmental laws, rules and regulations; prompt internal reporting of violations of the code to appropriate persons identified in the code; and accountability for adherence to the code. A copy of our Code of Business Conduct and Ethics is available on our website at [www.qtsdatacenters.com](http://www.qtsdatacenters.com).

All of these structures, procedures and policies are important to the functioning of an ethical organization. However, the most important thing we do is to create an environment that starts at the top and filters throughout the entire organization requiring the conduct of every business activity and transaction be made with the highest level of integrity and ethical standards. Obeying the law both in letter and in spirit is the foundation on which the company's ethical standards are built. Each employee is required to conduct himself or herself accordingly and to seek to avoid even the appearance of wrongdoing or improper behavior. This makes for a healthy, happy and respectful place to work.

**QTS employs a Director of Audit to ensure all policies are properly adhered to in order to reduce risk and ensure compliance across all QTS operations.**



QTS Jersey City



**INTEGRITY,  
CHARACTER, TRUST**



Powered by People

**ACTION, INNOVATION,  
ACCOUNTABILITY**

**TEAM ORIENTED**

**RESPECT OUR  
CUSTOMERS**

**SUPPORT OF FAMILY,  
FAITH & COMMUNITY  
VOLUNTEERISM**

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