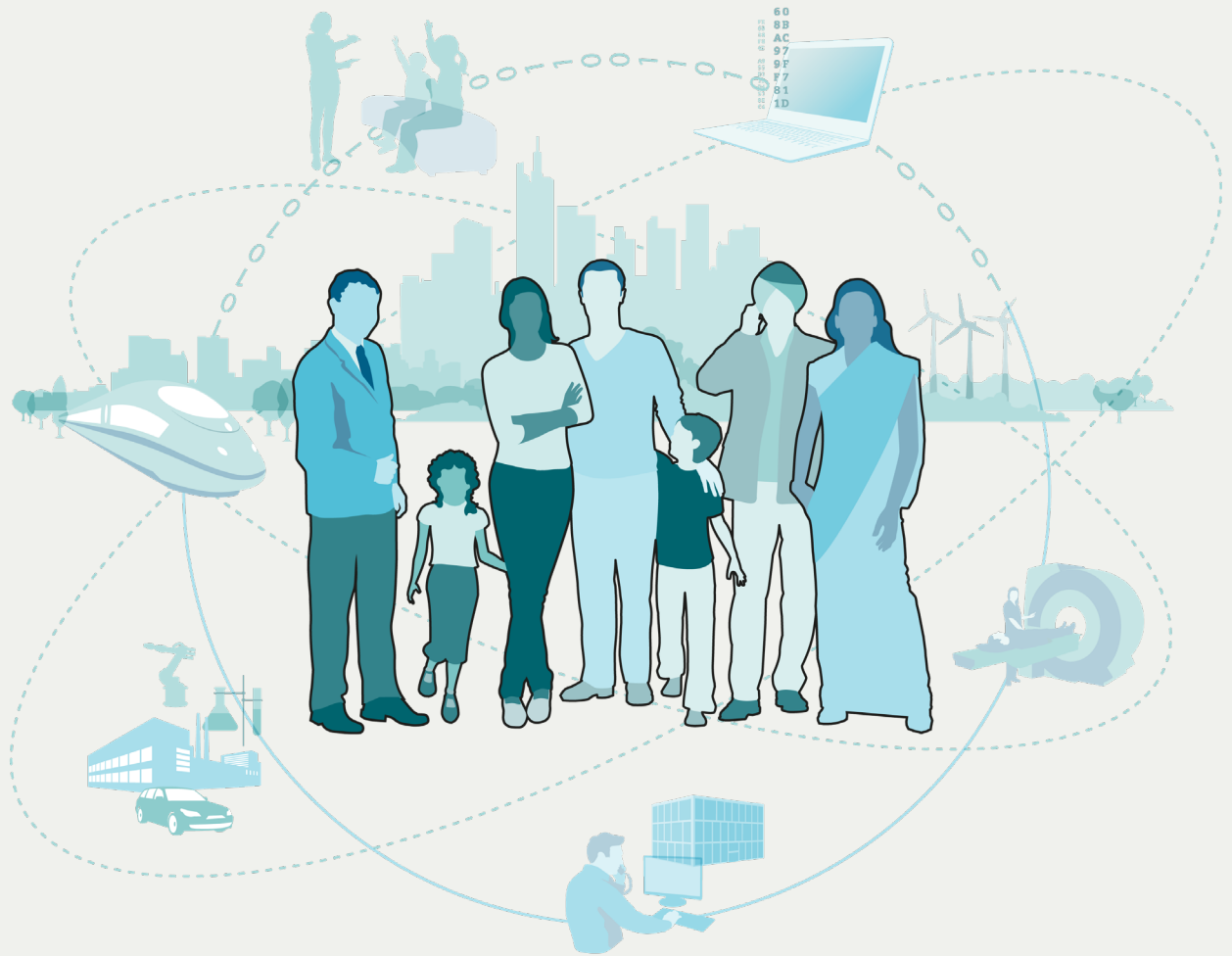


SIEMENS
Ingenuity for life



Making real what
matters to the USA
Business to Society

What does “Business to Society” mean?

Siemens was founded by an entrepreneur who believed that technology is a tool to advance the common good. Our Business to Society approach is the modern embodiment of that unique ideal.

We believe that the most competitive business strategies strive to make a difference. To us, Business to Society is about addressing some of America’s biggest challenges as part of our core business strategy.

The United States of America is Siemens’ largest market in the world. We’ve been doing business here for more than 160 years. Today, we contribute to almost every part of daily life; our 50,000 U.S. employees are making a difference by helping to close the skills gap, supporting research and development, shaping the digital transformation, reducing carbon footprint, driving breakthrough medical innovations, and advancing America’s security, infrastructure and economy.

This report is a snapshot of economic, societal and environmental impact of Siemens’ presence in the U.S. The stories and statistics exemplify how our core belief of creating lasting value for society guide our approach to business.



“A company that doesn’t provide value to society shouldn’t exist.”

Joe Kaeser, CEO, Siemens AG

What is important for the United States?



Strengthening the economy

The U.S. is the world's largest economy and has shown great resilience in the wake of the Great Recession. Unemployment has been halved since 2009 and key industries are thriving, but economic growth remains slow. In the coming years, the U.S. is facing a moment of opportunity when it can strengthen the economy by investing in Americans themselves and attract new investment.



Sustaining the environment

Technological progress, globalization and population growth present unprecedented environmental challenges – from natural resource depletion, to energy conservation, to the degradation of the environment. And yet, with America's abundant energy reserves, industrial leadership and influence in global affairs, the country has an opportunity to set a new course for environmental sustainability.



Developing jobs and skills

Among a record 6 million open jobs, millions are the well-paying jobs of the future: middle skill positions in a mix of career fields and industry, from manufacturing to power to healthcare. Companies can play a leading role in closing this gap by helping Americans gain 21st century skills.



Improving quality of life

The shrinking of America's middle class is indicative of a larger trend: key indicators – from healthcare to infrastructure to equality – show that American quality of life is lagging behind other developed nations. Siemens is in a unique position to help the U.S. tackle these challenges.



Driving innovation

The fourth industrial revolution – the convergence of software and digital technologies with the industrial world – will change the way the world does business. As companies learn how to get the most out of new technology, the United States has a major opportunity to lead this new digital economy.



Securing our future

As technology advances and the world becomes more interconnected, the U.S. faces evolving security challenges. In recent years, the world has seen a rise in the frequency and efficacy of terrorist attacks. As the internet has become integrated into an ever-increasing number of government services and consumer products, hackers and cyber criminals threaten to dismantle critical infrastructure and access sensitive information systems. America must remain committed to security measures that are timely, nimble and strong enough to meet the unprecedented dangers of the 21st century.

Siemens value map

Our contributions in the impact areas of economy, jobs and skills, innovation, environment, quality of life, and security



Strengthening the economy

Developing jobs and skills

Driving innovation



Contributing to GDP
Siemens' FY15 global operations were linked to about \$61.8 billion in U.S. GDP contributions



Closing the skills gap
Siemens invests more than \$50 million in U.S. education and training initiatives each year for its workforce



Investing in research and development
In 2016, Siemens invested \$1 billion in research and development in the U.S. Siemens has approximately 5,700 R&D employees in the U.S.



Investing in the U.S. and creating jobs
Over the last 15 years, Siemens has invested roughly \$40 billion in the U.S. In FY15, 800,000+ U.S. jobs were linked to Siemens' global business operations



Igniting and sustaining a STEM workforce
The Siemens Foundation has contributed over \$100 million to STEM education and training



Shaping the digital transformation
In the past 10 years, Siemens has invested approximately \$15 billion in U.S. software acquisitions. Siemens employs more than 3,300 software engineers in the U.S.



Fostering the future of American Manufacturing
With approximately 10,000 U.S. manufacturing employees and 60+ manufacturing sites, manufacturing is central to the company's success



Supporting veterans' transition to civilian workforce
Since 2011, Siemens has hired over 2,500 veterans, and will hire 300 more per year for the next 3 years



Fostering innovation
Since 1999, Siemens has invested over \$650 million into startups in the U.S. As of September 2016, the company held more than 15,000 patents and about 900 invention disclosures in the U.S.



Seizing America's energy moment
Siemens' power generation technology produces enough electricity to meet 1/3 of the country's power needs



Exporting from America to the world
Each year, Siemens in the U.S. exports approximately \$5.5 billion worth of products around the world



Sustaining the environment



Reducing Carbon footprint

Siemens has committed to cut its global carbon footprint in half by 2020 and become carbon neutral by 2030. From FY14 to FY16, Siemens cut its global CO₂ emissions by 20%



Increasing energy efficiency

Siemens Building Technologies has helped customers save more than \$2 billion in energy & operational costs



Driving competitiveness of cleaner energy

Siemens Gamesa Renewable Energy has a combined 7,600 wind turbines installed in the U.S., capable of producing clean, renewable power for more than 5 million households every day



Providing life-saving health technology

In the U.S., about 95 tests are run every second on a Siemens immunoassay, clinical chemistry or integrated system



Driving break-through medical innovations

Siemens developed a molecular assay designed to test for the presence of the Zika virus



Enabling intelligent infrastructure & software

Siemens has worked with 1,000+ energy customers in North America to help improve their operations and enhance reliability



Developing smart cities of the future

1 out of 3 light rail vehicles in the U.S. today are manufactured by Siemens



Fostering a diverse workforce

The U.S. employees come from 84 nations

Securing our future



Providing state of the art technology for the defense sector

Siemens product lifecycle management (PLM) software is used by shipyards in the design of 75% of all U.S. Navy vessels



Bolstering cybersecurity for our customers

Siemens opened a cybersecurity operation center in Ohio to increase real-time capability to detect and respond to threats

Strengthening the economy

Investing in America

Siemens has done business in the United States for more than 160 years. In just the past 15 years, Siemens has invested over \$40 billion in the United States – which serves as a major center for its manufacturing and workforce. Each year, Siemens exports more than \$5 billion worth of products from its largest market around the world. In 2015, more than 800,000 U.S. jobs were linked to Siemens’ global business operations. Siemens also partners with more than 36,000 suppliers in the U.S. – approximately 20% of which are small and medium enterprises.

From Charlotte to Cincinnati, Boston to the Bay Area, the company’s footprint spans the U.S. from coast to coast. Siemens has more than 50,000 employees in all 50 states and Puerto Rico. With approximately 10,000 manufacturing employees and 60 manufacturing sites here in the U.S., Siemens is committed to reinvigorating America’s manufacturing engine. Its technologies keep cities growing, businesses prospering and people living longer healthier lives.

These are just some of the reasons Siemens prides itself on being U.S. local, supporting good-paying jobs and strengthening American competitiveness.

Creating local value in the U.S.

Siemens recently broke ground on a major expansion of a key Siemens Healthineers manufacturing and research and development (R&D) facility for laboratory diagnostics in Walpole, Massachusetts that will create up to 700 new high-tech jobs over the next 10 years. Siemens’ \$300 million investment in Walpole exemplifies the company’s broader strategy for creating local value in the U.S.—its largest market—by furthering the company’s ability to transform customers’ healthcare operations in order to improve the lives of the patients they serve. Siemens Healthineers is uniquely positioned to solve healthcare providers’ system-wide and departmental challenges throughout the patient care journey with its medical technology that offers solutions for disease prevention through diagnosis and treatment. Siemens also expanded its low voltage circuit breaker and manufacturing plant in Grand Prairie, Texas – hiring 100 additional workers to support the expanded facility.

Siemens has more than 36,000 suppliers in the U.S. Approximately 20% of these suppliers are small and medium enterprises. Nearly 5% of these small businesses are small disadvantaged, women-owned, veteran-owned or service-disabled veteran-owned small businesses.



Siemens’ \$300 million investment in expansion of Walpole, Massachusetts facility exemplifies the company’s broader strategy for creating local value in the U.S.



\$61.8 billion

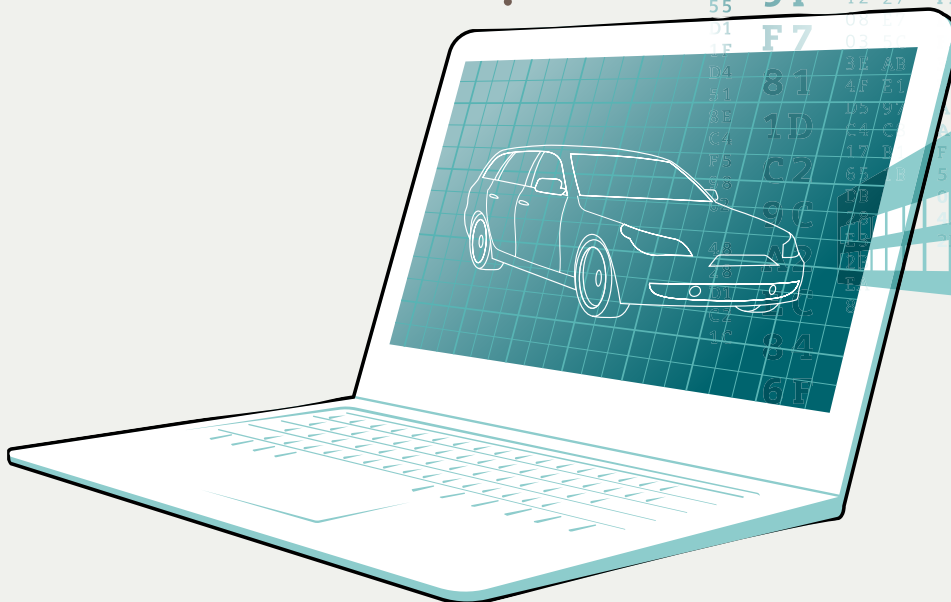
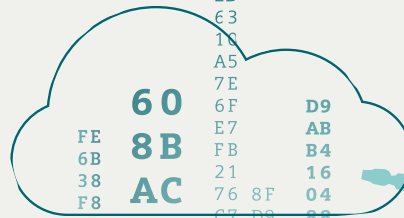
Siemens' contribution to the U.S. gross domestic product in 2015 (direct, indirect, induced)

\$5.5 billion

Worth of products, exported each year by Siemens in the U.S.

800,000+

Number of the U.S. jobs in 2015 that were linked to Siemens' global business operations



Developing jobs and skills

Generating a skilled workforce

Siemens believes in investing in current and future workers. And in the U.S., Siemens' holistic approach to industrial re-skilling is focused on five areas:

- **Employee training:** Investing approximately \$50 million annually to provide training and continuing education for employees
- **Science, technology, engineering, and math (STEM):** Shining a spotlight through the Siemens Foundation on the opportunities for young adults in STEM middle-skills careers – and on training models that work. The Foundation has invested more than \$100 million in the U.S. to advance workforce development and education initiatives in STEM
- **Colleges & universities:** Helping students gain classroom experience working with both the software and hardware they'll encounter in advanced

industry. Siemens product lifecycle management (PLM) Software's Global Opportunities in PLM (GO PLM) provides PLM software to more than one million students yearly at more than 3,000 global institutions, where it is used at every academic level – from grade schools to graduate engineering research programs. Siemens has committed to grant an additional \$2 billion worth of industrial software to educators

- **Apprenticeships:** Expanding a U.S. apprenticeship program based on the successful German model by doubling the total number of participants in its apprenticeship programs
- **Veterans:** Hiring more than 2,500 veterans in the last 5 years and committing to hire 300 U.S. veterans per year for the next three years, and training them on the technical skills they need

Since 2011, Siemens has hired over 2,500 veterans, and will hire 300 more per year for the next 3 years.



Siemens employees lead a STEM@SIEMENS Energy 101 workshop in an elementary school in Orlando, Florida

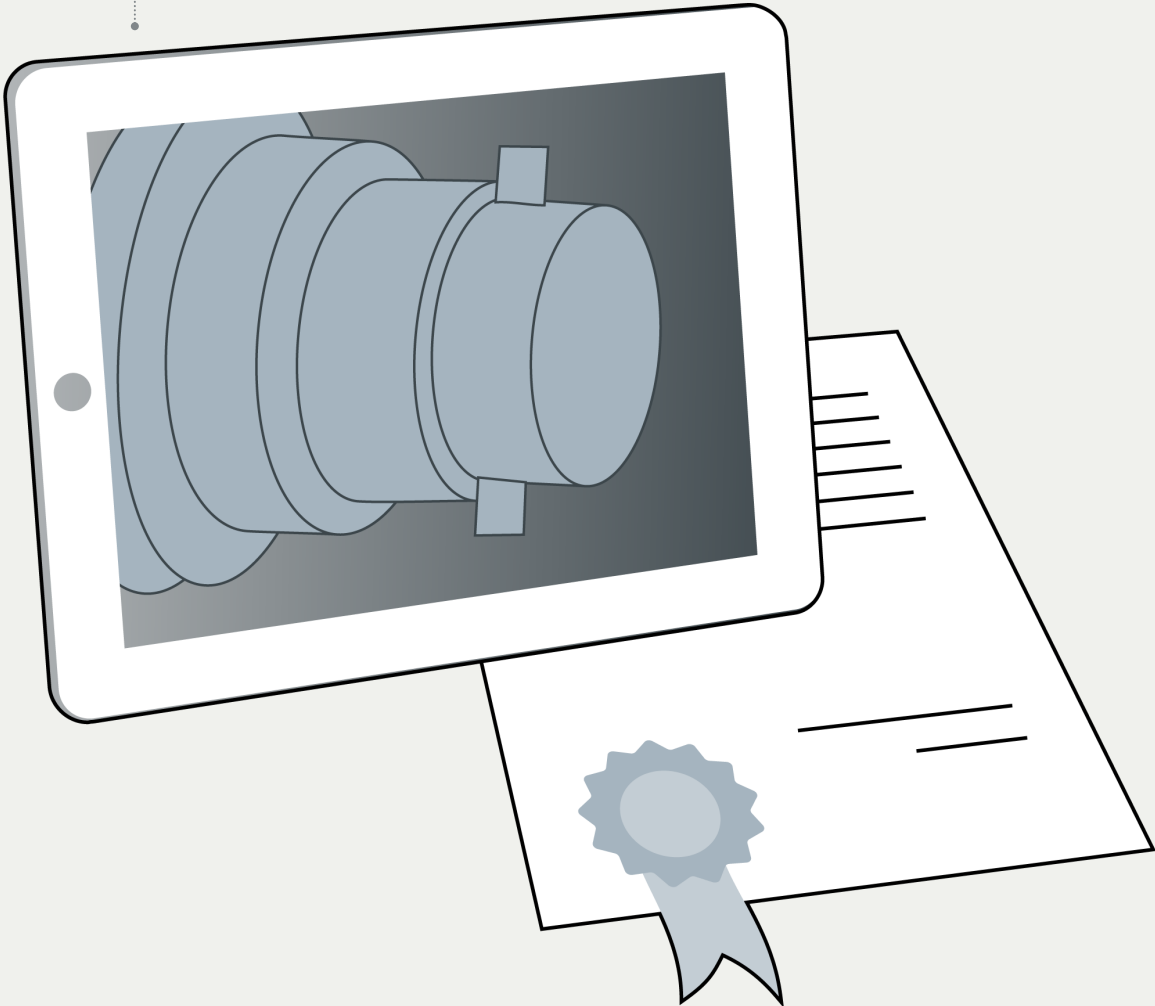


\$50 billion+

Siemens' annual investment in USA education and training initiatives for its workforce

\$100 million+

Contribution made by Siemens foundation to science, technology, engineering, and math (STEM) education and training





Siemens provides on-the-job training while designing curriculum in partnership with community college partners to train workers in modern manufacturing skills.

Partnership to build a 21st century workforce

What many Americans traditionally think of as blue-collar jobs now go by different names – technical or middle-skills. While many STEM jobs require a bachelor’s degree, a large percentage of these positions, half by some counts, are obtainable by earning an associate’s degree, completing an apprenticeship program or completing training programs at community colleges. This can be done inexpensively without adding to the \$1.3 trillion in student debt now shared by 42 million Americans.

In order to help advance opportunities for young adults in STEM middle-skill careers, the Siemens Foundation launched a workforce development program, the STEM Middle-Skill Initiative in 2015, to leverage the experience and expertise of Siemens as an industry leader and pioneer in workforce development. The Initiative addresses three clear objectives – elevating the economic opportunity available in STEM technical careers in the national dialogue; re-branding the image of these jobs and educational pathways to one of prestige; and accelerating training models that work.

An important part of what both the Siemens Foundation and Siemens’ businesses are trying to achieve is to generate a new sense of national pride in middle skills, STEM education and careers in industry. In the United States, pursuing alternatives to four-year universities such as an apprenticeship program is still too often seen as an inferior pathway. Even as middle skill and STEM positions grow rapidly, enrollment in technical training programs remains flat.

To shine a light on exemplary young adults in STEM programs at top community colleges and promote the real story of opportunity available in STEM middle-skill careers, the Siemens Foundation created the Siemens Technical Scholars project in partnership with the Aspen Institute’s College Excellence Program. The Siemens Foundation is also a proud supporter of the Aspen Prize for Community College Excellence.

The Siemens Foundation also works with the National Governors Association’s (NGA) Center for Best Practices on scaling work-based learning in states to expand the use of effective training models for young adults in STEM fields. Through this partnership, Siemens and the NGA are working with Indiana, Iowa, Montana, New Hampshire, Utah and Washington to make effective work-based learning models for STEM an integrated part of their education and

training systems.

The Siemens Foundation is eager to continue to work with public and private partners across government, economic development organizations, schools and others to continue building a 21st century workforce and enhancing opportunities in America.

Apprenticeships: a model that works

Today, 70 percent of U.S. high school graduates go straight to college, but only 50 percent of these students graduate and do so with an average \$30,000 in student debt. Siemens’ U.S. apprenticeships provide students a different pathway to the workforce via middle skills, which represent half of all job openings nationwide anticipated through 2022. Middle skills positions require more than a high school education yet less than a four-year degree with a strong technical skill set.

Siemens started its apprenticeship program in Charlotte, North Carolina. Since then, the company has more than doubled the reach of its apprenticeship program to 9 U.S. states. Graduates earn an international industry certification, an associate’s degree and an apprenticeship completion certificate. They graduate with no debt and with a guaranteed job at Siemens, with a starting salary of around \$55,000 a year.

Siemens provides on-the-job training while designing curriculums in partnership with community college partners to train workers in modern manufacturing skills. This is helping to both close the skills gap and inspire young people to pursue opportunities in advanced manufacturing.

Siemens also wanted to encourage other companies to replicate these efforts nationwide. So the company worked with Alcoa,

Siemens is a national leader in the effort to close America’s training gap.

Dow, the National Association of Manufacturers, and the Department of Labor to develop a playbook for other manufacturers seeking to launch similar programs.



Driving innovation

Fostering innovation to drive economic success

Imagine an internet of things that, every day, adds five million more devices. Imagine a world where the cost of energy, transportation, goods, services and communication continues to drop, and where big data is smart. Imagine a world where artificial intelligence drives the next generation of automation and developments like synthetic biology push health and quality of life to new heights. This world isn't coming in the future. It's already here.

Having grown from an entrepreneur's vision into an industrial innovator with lines of business that impact nearly every facet of people's lives, Siemens has an important role to play in helping to shape the fourth industrial revolution and positioning the United States as a leader.

To drive innovation, Siemens is focusing on three key areas: Leveraging partnerships to expand investment in R&D, helping the United States regain its global leadership role in manufacturing by leading the digital transformation, and fostering the growth of entrepreneurship.

Next47: Harnessing entrepreneurial spirit

Like many plucky startups today, Siemens came from humble beginnings. The company was launched in a backyard in Berlin in 1847. That entrepreneurial spirit made Siemens into what it is today and it's the reason we are compelled to foster future generations of world-changing innovations. That vision for entrepreneurship is why Siemens created an independent innovation unit within the company, Next47, to pursue partnerships with startups to rapidly commercialize emerging technology.

With a billion dollar in support over the next five years, Next47 combines the raw digital talent of startups with Siemens' industrial domain knowledge. Part of the goal is to incentivize more and more tech resources to focus on new challenges that will drive social value: from the care you receive at the hospital, to the competitiveness of U.S. manufacturing, to the way we ship goods or drive to work, to how to add more renewable energy to the power grid.

As of September 2016, the company held more than 15,000 patents and about 900 invention disclosures in the U.S.

Robotics lab at Siemens Corporate Technology's Princeton, New Jersey campus





\$650 million+

Siemens's investment into startups in the U.S. Since 1999

\$1 billion

Siemens' investment in R&D in the U.S. in 2016





Digitalization enables the cities to rise to the challenges they are facing: population growth, traffic congestion, and power outages. Siemens is moving full speed ahead in shaping the digital transformation.

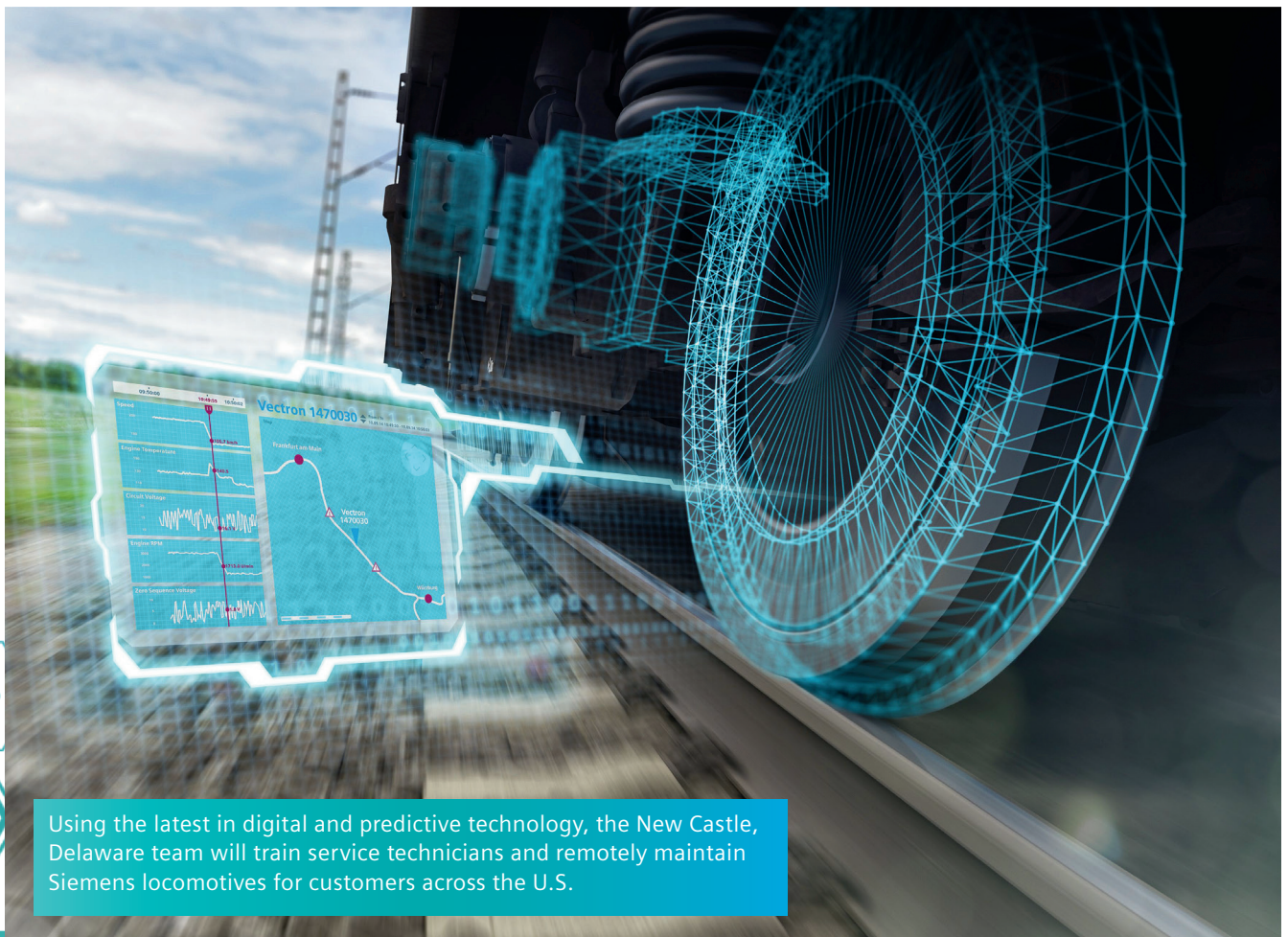
How digitalization is making virtual, real

Digitalization is transforming industrial service, just as it has consumer industries. For example, in its power generation service business, Siemens is now using DAQRI augmented reality (AR) helmet technology in gas turbine training and field service operations. Through AR, technicians can utilize more accessible, intuitive training instructions. The smart helmet technology helps workers increase speed, efficiency and accuracy – maximizing the availability and productivity of assets. This is just one of several new digital tools that support Siemens' push to develop data-driven digital services to help customers be more productive.

Siemens also recently launched Digital Rail Services in the U.S., a new business that will use intelligent sensors and advanced software platforms to put intelligence behind billions of data points created on the country's rail systems. This insight will help rail operators across the U.S. improve their operations and create an "internet of Trains"

to bring infrastructure and vehicles into the digital era. Powered by software tools, the Digital Service business will help rail operators reduce unplanned downtime, improve operational efficiency, enable improved business planning and performance, as well as generate energy and cost savings.

To support this new business, Siemens opened a new locomotive service facility in New Castle where technicians and engineers will monitor locomotive data and apply both digital analytics and extensive industry knowledge to move rail further into the digital age. New Castle also will serve as a training facility for digital skills. In fact, before Siemens' field technicians go to customer sites, they'll go to New Castle to train using virtual reality equipment. Goggles will take them inside each customer's locomotives. Handheld controls will enable them to work on switches, components and panels.



Using the latest in digital and predictive technology, the New Castle, Delaware team will train service technicians and remotely maintain Siemens locomotives for customers across the U.S.

Sustaining the environment

Developing solutions to minimize impact on the environment

Technological progress, globalization and population growth present unprecedented sustainability challenges – from natural resource depletion, to energy conservation, to the degradation of the environment. And yet, with America’s abundant energy reserves, industrial leadership and influence in global affairs, the country has an opportunity to set a new course for sustainability.

Siemens has been privileged to work closely with customers around the world in offering attainable solutions and meaningful partnerships as we all work toward the vitally important goal of reducing emissions and fighting climate change.

Siemens’ commitment is not contingent on international treaties or regulations. The company does this because it is important to the planet, the country, to communities and to families. The products Siemens creates, the technologies invented, and the challenges solved will not only lay the path to environmental preservation, but to energy independence and economic security as well. This pursuit will develop new markets, inspire new products, create new jobs, and foster new career opportunities.

In practical terms, Siemens’ environmental sustainability mission is broken down into three key areas: reducing harmful emissions, using energy efficiency to conserve resources, and preserving America’s precious and limited natural resources.

Siemens’ goal is to be the first major industrial company in the world to achieve a net zero carbon footprint by 2030. The company is working to get halfway to that goal just three years from now, in 2020. This is an extraordinarily ambitious task considering Siemens has more than 60 manufacturing sites in the U.S. alone.

In order to cut our carbon emissions in half by 2020, Siemens plans to drive energy efficiency programs, leverage distributed energy systems, reduce fleet emissions and purchase renewable energy.

Here in the U.S., the company is installing distributed and renewable-energy systems at a number of its facilities. As a model, the

company looks to its rail manufacturing plant in Sacramento, which is powered in part by solar energy.

The cleanest energy is energy that isn’t needed. Large buildings are the biggest users of energy across our communities. Thus, the quickest, most cost-effective way to use less energy and extend the country’s energy supply is to make those facilities more energy-efficient. Siemens’ Building Technologies has already helped customers save more than \$2 billion in energy and operational costs. In Massachusetts, UMass Memorial Health Care (UMass Memorial) has entered the second phase of its 10-year performance contract with Siemens to implement a master energy plan and ensure long-term sustainability. New building technologies and capital improvements at the facility are designed to reduce energy use and save energy and operational costs.

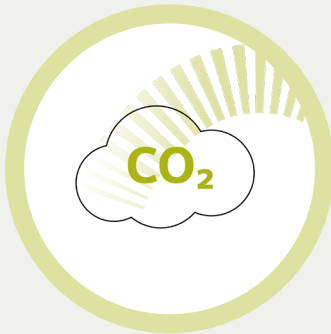
Siemens has committed to cut its global carbon footprint in half by 2020, and become carbon neutral by 2030.

The products Siemens creates, the technologies invented, and the challenges solved will not only lay the path for the U.S. to environmental preservation, but to energy independence and economic security as well.

The combined project phases and other sustainability efforts are expected to result in more than \$24 million in energy and operational cost savings over the next 10 years. In Charlotte, Siemens built a certified manufacturing facility to Leadership in Energy and Environmental Design (LEED) standards to cut both costs and emissions during construction and operation. Looking forward, these are the kinds of activities the company looks to scale.

Fighting climate change and sustaining the environment is the right thing to do. And, Siemens has the right people to do it.





20%

Reduction in Siemens' global Carbon footprint, from FY14 to FY16

\$2 billion+

Energy and operational cost savings achieved by our customers in the U.S. with the help of Siemens' building technologies





The 200 megawatts Los Vientos wind farm in Willacy County, Texas consists of 87 SWT-2.3-108 wind turbines and generates electricity sufficient to power approximately 60,000 homes.

Giving customers more choices, increased resiliency

The expectations for how the grid should work and what it should be capable of are as high as they've ever been. But consumers aren't willing to wait for the larger grid to become smarter, an effort that will take time—decades—to complete. Whether their concern is climate change, resiliency, or cost, they're eager to reap the benefits of a digital grid today. There is, however, an alternative to waiting. The solution is to put customers back in power. Siemens enables customers to stay connected to the grid while also having the capability of generating and managing power themselves using the latest technologies and software. Customers can now have more control over how they manage their energy supply, how they use it, and how much they pay for it.

And critically, they are shielded from damaging storms and severe weather. That's why Siemens is working on:

- Creating renewable energy solutions and combined heat and power systems that are as much as 90 percent more efficient versus traditional power generation
- Developing software and automated controls for assets such as micro-grids that intelligently manage power supplies, increase reliability and reduce carbon footprints
- Providing storage technology to help customers reliably deploy renewable energy sources.

Powering the Blue Lake Rancheria Native American micro-grid

Blue Lake Rancheria, a 100-year-old Native American reservation in Northern California, has launched its low-carbon community micro-grid to help power government offices, economic enterprises, and critical Red Cross safety shelter-in-place facilities across 100 acres. The micro-grid allows the reservation to operate independently of the power grid in coordination with local utility Pacific Gas & Electric. The project integrates the largest solar array in Humboldt County, California and is estimated to save the Tribe over \$200,000 in annual energy costs and reduce at least 150 tons of carbon per year. The micro-grid will provide energy savings for the Tribe through peak shaving and demand response during business-as-usual situations and emergency power for critical facilities for months if necessary in climate change-induced or other emergency situations.

The deployment of this technology is made feasible by the introduction of intelligent software to manage and control a vast array of energy resources. With Siemens' intelligent micro-grid management software, Blue Lake Rancheria is able to rely on a complex mix of generation and storage to work together to deliver efficient, reliable and cleaner power. The software is able to accurately predict the reservation's power load needs and dynamically manage and control its distributed power generation through integrated weather data and load forecasting, and use case and load shed scenarios. The Reservation will use this detailed power usage insight to provide its residents and businesses with reliable, high quality power without fear of outages or power interruption.

Blue Lake Rancheria's micro-grid deployment and its success is a direct result of an industry-leading collaborative approach between tribal, federal, state, and local entities, university partners, technology providers, and electric utilities. This public and private partnership can provide a model for micro-grid deployments.



Blue Lake Rancheria in California uses Siemens micro-grid solutions to distributed and control on site power generation.

Improving quality of life

Technology to help American communities

A recent index from U.S. News and World report ranked America 18th in Quality of Life. Among America's domestic challenges, the country now spends significantly more on healthcare than every other high-income nation but has lower life expectancy and worse overall health. Additionally, infrastructure needed to support growing, high-density population centers isn't keeping pace with demand. The return of Americans to cities is creating a variety of challenges, including traffic congestion, lack of energy productivity, and environmental problems.

To develop the smart cities of the future, Siemens is pioneering intelligent infrastructure. To improve healthcare, Siemens is focused on providing lifesaving health technology and driving breakthrough medical innovations.

Building the city of the future

By 2050, two-thirds of the world's population will live in cities. With current U.S. infrastructure earning a D+ grade by the American Society of Civil Engineers, the U.S. needs to improve its infrastructure with smart solutions to ensure the economic success and longevity of cities across America.

Siemens has developed new, intelligent technology and software that improves and modernizes U.S. infrastructure to support a growing population. With these technologies, the U.S. is well on its way to building The Smartest City.

In Seattle, Siemens is integrating traffic management systems across the city's urban areas, enhancing real-time traffic alert and control. Using software, Seattle will be able to link traffic planning and control systems in order to take better advantage of its existing road infrastructure, lessen the impact of major traffic incidents, better manage traffic around large events such as football games and reduce congestion.

In New York, Siemens is in the process of upgrading Positive Train Control technologies for the two largest commuter lines in the U.S., NY MTA's Metro-North and Long Island Rail Road. The improvements will

increase efficiency and safety on 700 miles of track that serves 800 million passengers per year. Beyond mobility, Siemens is partnering with Con Edison, the utility that powers New York City, to install technology that will help keep Con Edison customers in sections of Lower Manhattan in service during severe flooding. With its distribution feeder automation project, Con Edison will ensure that unexpected weather events and flooding will no longer impact their entire power system, making them more resilient and prepared for the future. Technologies and solutions like these strengthen infrastructure for the millions of people who rely on it to work safely every day.



City performance tool

The Siemens City Performance Tool (CyPT) is helping cities around the world calculate the environmental and economic impacts of building, transport and energy technologies – leveraging smarter use of data to help city officials prioritize infrastructure investments. In Charlotte, North Carolina, Siemens worked with the city's Sustainability Office to review potential impacts of investing in technologies that could contribute to a smart, sustainable future in the city. The tool determined 16 building and transportation technologies that could help the city of Charlotte reduce greenhouse gas emissions by 20% as they create upwards of 100,000 jobs by 2050.

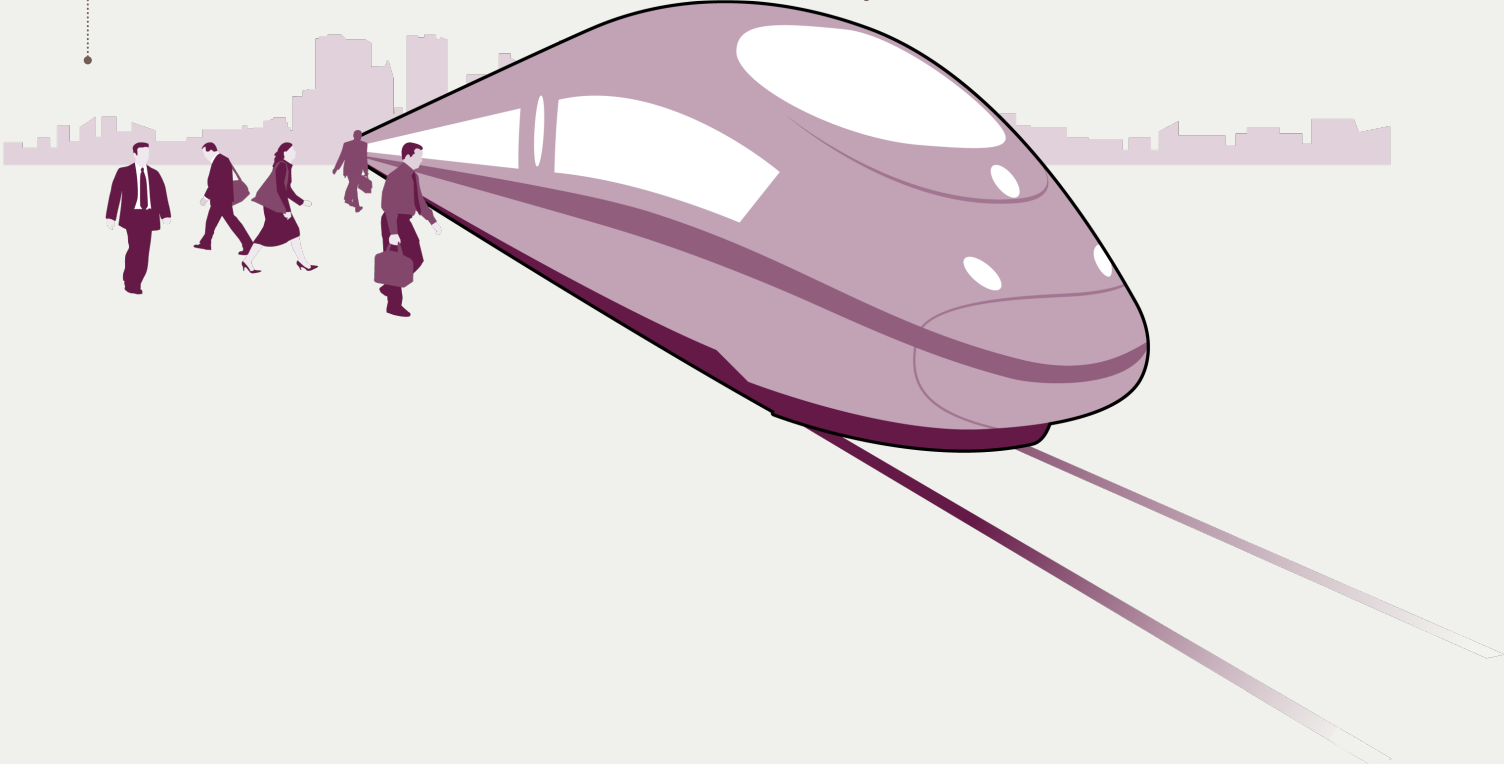


1 out of 3

light rail vehicles in the U.S. today are manufactured by Siemens

Up to **20%** increase in line capacity,

using Siemens' communication based traffic control system. The technology has been installed on some NYC metropolitan transit authority lines





We have worked with more than 1,000 energy customers in North America to help improve their operations, enhance reliability and keep the power on for millions.

Siemens also collaborated closely with the San Francisco Department of Environment and nine other agencies to conduct an analysis of the City's infrastructure, defined as its entire built environment and transport system. The team used the CyPT model to test technology pathway for achieving San Francisco's "80x50" target (reducing CO₂eq emissions 80% by 2050 against a 1990 baseline) within the context of the local 0-50-100-Roots framework, as well as the State of California's policy leadership. The analysis showed that infrastructure technologies including thermal electrification, electric vehicles, building automation, and public transit expansion could improve environment and boost local economy. In addition, over a 34-year time period, 36 technologies identified could generate 420,000 jobs.

Providing life-saving health technology

Siemens is committed to becoming the trusted partner of healthcare providers worldwide, enabling them to improve patient outcomes with greater efficiencies. Driven by our long legacy of engineering excellence and our pioneering approach to developing the latest advancements, we are

a global leader in medical imaging, laboratory diagnostics, clinical IT, and services.

Eight out of ten hospitals in the U.S. depend on Siemens' solutions, including all the hospitals on the U.S. News & World Report's 2015-16 Best Hospitals Honor Roll. Our products are vitally important in diagnosis and treatment of diseases. In the U.S. alone, approximately 95 tests are run every second on a Siemens immunoassay, clinical chemistry or integrated system.

Detecting Zika – early and accurately

Siemens Healthineers' Molecular Diagnostics team is advancing innovation in the world of molecular testing – including the fight against the Zika virus. Zika has been linked to a number of harmful impacts – even birth defects such as microcephaly. Siemens invested in research and development to innovate Zika detection technology, supporting physicians in their efforts to innovate an assay for the qualitative detection of the Zika virus in RNA (ribonucleic acid). Last year its new molecular testing kit for the Zika virus was granted an Emergency Use Authorization (EUA) by the U.S. Food and Drug Administration (FDA).*



During 2016, combined, we shipped greater than 3.2 billion tests for chemistry and immunoassay within the U.S.

In the U.S., approximately 95 tests are run every second on a Siemens immunoassay, clinical chemistry or integrated system.



*The VERSANT® Zika RNA 1.0 Assay (kPCR) Kit has been authorized by FDA under an EUA for use by authorized Laboratories only for the detection of RNA from Zika virus and diagnosis of Zika virus infection, not for any other viruses or pathogens. This test has not been FDA cleared or approved. This test is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of in vitro diagnostic tests for detection of Zika virus and/or diagnosis of Zika virus infection under section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the authorization is terminated or revoked sooner.

Securing our future

Protecting American communities

As technology advances and the world becomes more interconnected, the U.S. faces evolving security challenges, both natural and man-made. In recent years, the world has seen a rise in both the frequency and efficacy of terrorist attacks. As the internet has become integrated into an ever-increasing number of government services and consumer products, hackers and cyber criminals threaten to dismantle critical infrastructure and access sensitive information systems. America must remain committed to security measures that are timely, nimble and strong enough to meet the unprecedented dangers of the 21st century.

Amid a climate of increasing turmoil, Siemens has taken an increasingly central role in working with U.S. leaders to secure the nation's infrastructure and contribute to the strength and security of the nation's military. Siemens is applying its commercial technologies to assist the U.S. and to meet the global security challenges that confront society.

It's clear that U.S. infrastructure is increasingly vulnerable to cyber attacks both from an information and operational technology perspective. Siemens is committed to doing its part to protect America's infrastructure from attacks from both criminal elements and political adversaries.

Siemens has incorporated cybersecurity into all aspects of its technology development and production. This "secure-by-design" approach integrates security into everything from automation software to smart grid technology.

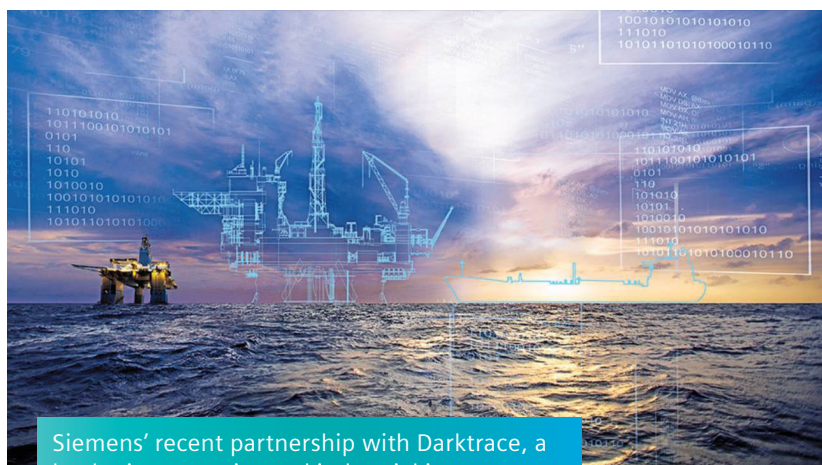
Siemens' work with energy production facilities provides a substantial opportunity to help assist in securing the nation's "soft targets." As energy providers move to digitize their own infrastructures, the need to increase security technology is critical, and Siemens is an active participant in the development of secure technology.

Secure-by-design approaches can only go so far. It's essential that industry develop ways to identify and react quickly to inevitable

cyber attacks. That's why Siemens opened its Cyber Security Operations Center (CSOC) in Milford, Ohio. The CSOC joins with Siemens' two other centers in Lisbon and Munich to monitor industrial facilities across the globe, warn companies in the event of an attack, and assist in tactical responses to attacks. Siemens is also building out an extensive cybersecurity ecosystem, establishing partnerships with many of the world's top cyber firms and associations, including Darktrace, PAS Global, Tenable,

Siemens is applying its commercial technologies to assist the U.S. and to meet the global security challenges that confront society.

Inc. and the International Society of Automation (ISA). Each partnership is designed to further protect our customer's people, processes and plants, across energy, industry and critical infrastructure.



Siemens' recent partnership with Darktrace, a leader in enterprise and industrial immune system technology, will bring cutting-edge cyber defense for operational technology to utilities and the oil and gas industry.



1 out of 3

Siemens' global cyber security operations centers is located in the U.S. The Milford, OH center joins with the other two centers in Portugal and Germany to increase the real-time capability to detect and respond to threats

75%

of all the U.S. Navy vessels are designed with the help of Siemens PLM software

