

Sustainability & Digitalisation

Esra Kent, Chief Sustainability Officer

November 10th, 2017

Milestones of a 170-year history



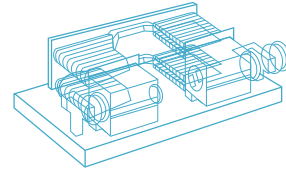
1816 – 1892

Company founder,
visionary and inventor



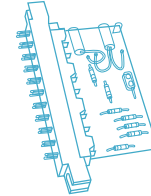
1866

The dynamo makes
electricity part of
everyday life



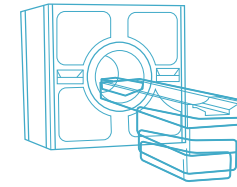
1959

SIMATIC makes
Siemens a leader in
automation technology



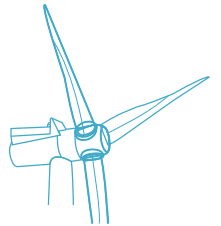
1983

First magnetic resonance
imaging scanner goes
into operation



2012

Test operation of the
world's largest rotor for
offshore wind turbines

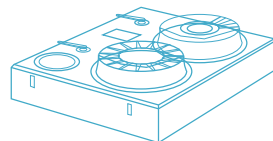


Werner von Siemens

Siemens innovations over the past 170 years

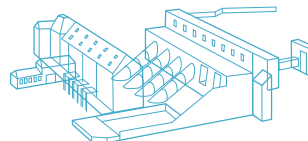
1847

Pointer telegraph
lays the foundation
of Siemens as a
global company



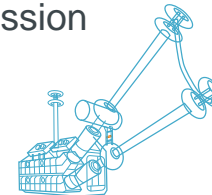
1925

Siemens electrifies
the Irish Free State
with a hydroelectric
power plant



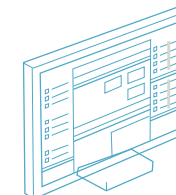
1975

Breakthrough of
high-voltage direct
current (HVDC)
transmission



2010

TIA Portal takes
automation a stage
further



2016

MindSphere
introduced as the
digitalization
platform for all
industries



Fiscal 2016 – Key figures



Key figures for Siemens: Fiscal 2016

(Continuing operations; in millions of € except where otherwise stated)

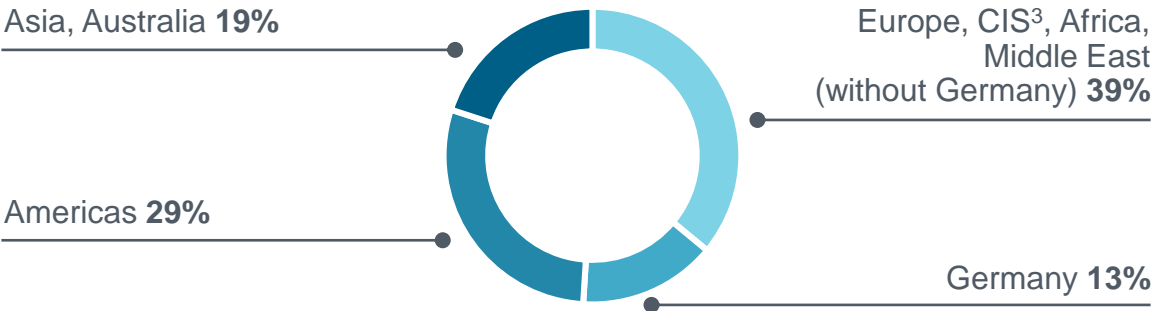
	Fiscal 2016	Fiscal 2015	Change in %
Volume			
Orders	86,480	82,340	5%
Revenue	79,644	75,636	5%
Profitability and capital efficiency			
Net income ¹	5,584	7,380	(24)%
Return on capital employed (ROCE) ¹	14.3%	21.0%	
Liquidity			
Free cash flow ¹	5,476	4,674	

Employees (in thousands)	Sept. 30, 2016	Sept. 30, 2015
Total	351	348
Germany	113	114
Outside Germany	238	234

Revenue by industrial business



Revenue by region



1 Continuing and discontinued operations

2 figures based on the former Division Wind Power and Renewables 3 Commonwealth of Independent States

Türkiye’de Siemens - 160+ yıl



- 1856 İlk telgraf ekipmanı S&H tarafından sağlandı.
- 1958 Koç ortak girişimi (**Simko**) ile ilk Siemens şirketinin kuruluşu
- 1961 **Kartal tesislerinin** kuruluşu
- 1989 Dijital elektronik anahtarlama sistemi **EWSD** üretimi Kartal’da başladı
- 1997 **Siemens Leasing** kuruluşu
- 2000 Simko’nun tamamı Siemens tarafından alındı ve faaliyetlerini 2001 itibarıyla **Siemens Sanayi ve Ticaret** olarak yürütmeye başladı.
- 2009 Siemens A.Ş. Orta-ve düşük gerilim teknolojisine yönelik olarak Türkiye’nin ilk üretim tesisi ve **LEEDGold** sertifikasıyla ödüllendirilen Gebze’deki yeni tesisinde operasyonlara başladı
- 2011 **CT Ar&Ge** Merkezi’nin kuruluşu
- 2013 Türkiye’nin ilk **H Sınıf Türbini** / **ilk Yüksek Hızlı Treni** / Hızlı yolcu taşıma servisleri için Marmaray Tüneli’nde tüm sinyalizasyon ve kontrol teknolojisi Siemens tarafından kuruldu

Siemens Türkiye

Geleceğin verimli ve sorumlu üretimi

SIEMENS
Ingenuity for life

Kartal Kampüsü



- Üretim Alanı: **18.000 m²**
- Kapasite:
 - MCB: **16.000.000** parça
 - Kontaktör: **5.500.000** parça
 - Termik Röle: **700.000** parça

Gebze Kampüsü



- Üretim Alanı: **16.000 m²**
- Kapasite
 - OG Panel: **9000** takım
 - AG Panels: **2500** takım
 - VCB: **4000** takım



Gebze Factory



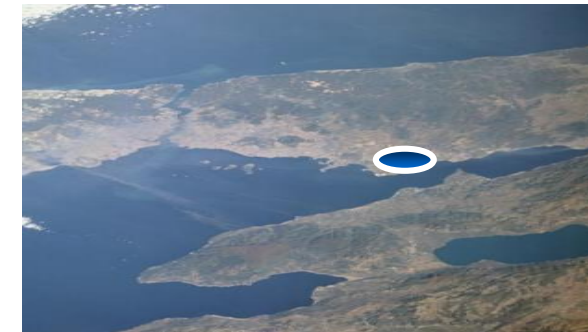
16.000 sqm



Total Production Area

173 WC

450 BC



Product Portfolio :

MV AIS Switchgear



Low Voltage Switchgear



Quality management system according to **ISO 9001** implemented worldwide;
Environmental management system according to **ISO 14001**, Information Security
Management System **ISO 27001 (ISMS)** and Industrial Health and Safety
management system according to **BS OHSAS 18001** and/or local standards with
systematic assurance by internal and external audits / customer audits .

Vision 2020 is our strategy



Global trends



Digitalization



Globalization



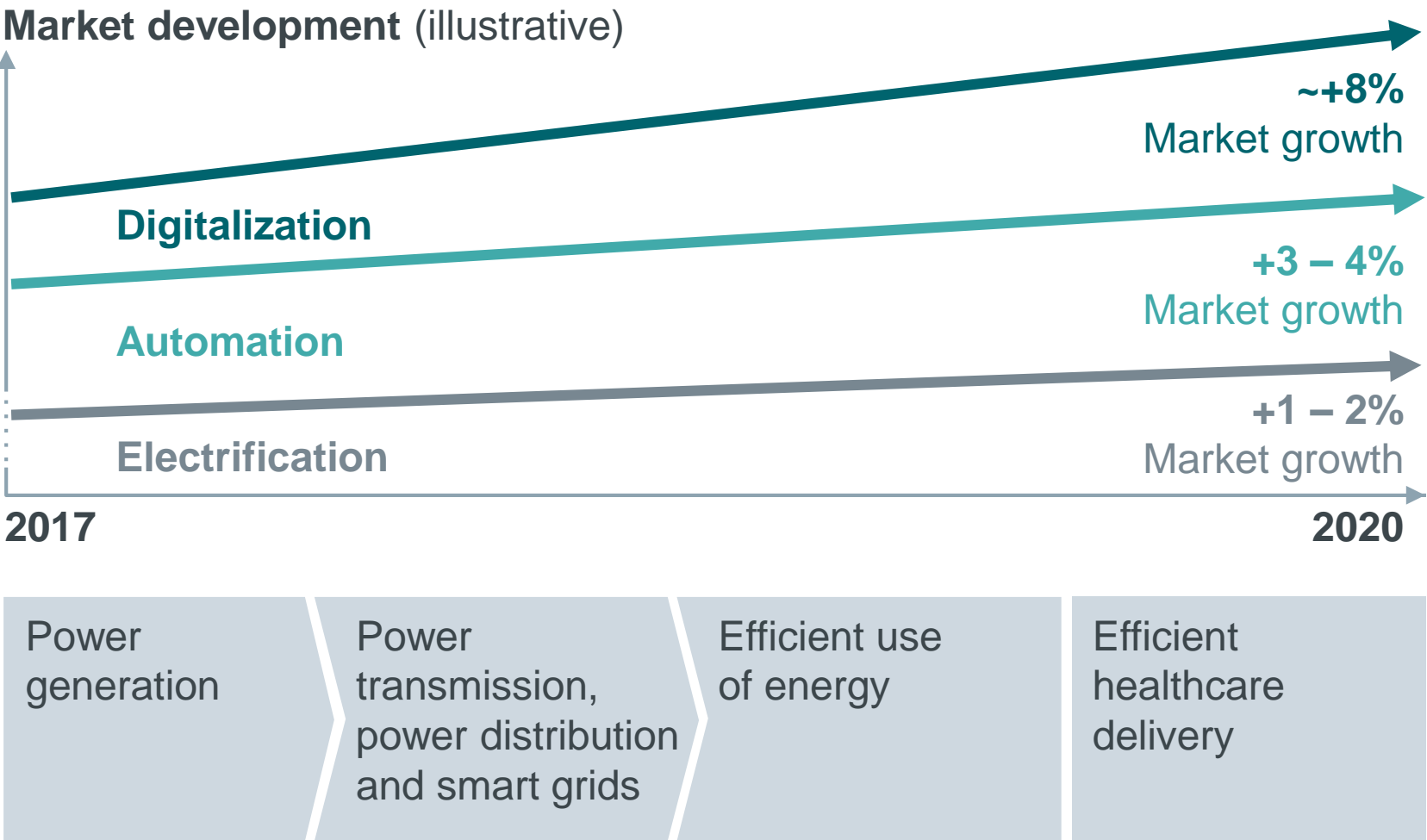
Urbanization



Demographic Change



Climate Change



Megatrends – Challenges that are transforming our world



Digitalization

In the future, we'll be living in a world that's increasingly interconnected by complex and heterogeneous systems. By 2020, the amount of data stored worldwide will have grown to 44 zettabytes. Around 8 billion devices are connected online and by 2030 one trillion.

Source: IDC, The Digital Universe of Opportunities: Rich Data and the Increasing Value of the Internet of Things, April 2014; Dave Evans (Cisco): The Internet of Things, How the Next Evolution of the Internet Is Changing Everything, April 2011

Megatrends – Challenges that are transforming our world



Globalization

Global competition is impacting productivity and production locations. In 2016 the estimated gross domestic product was approximately US\$ 75.5 trillion.

Source: World Bank National Accounts Data, 2016

Megatrends – Challenges that are transforming our world



Urbanization

In 2050, nearly 70 percent of the global population will be living in cities (up from 54 percent today). Each year, the world's cities grow by about 50 million people. As a result, metropolitan areas are increasingly investing in infrastructure.

Source: United Nations, World Urbanization Prospects. The 2014 Revision, New York, published 2015

Megatrends – Challenges that are transforming our world



Demographic change

By 2050, the global population will have grown from the current level of 7.3 billion to 9.7 billion – and needs will rise accordingly. Back in 1950, there were only 2.5 billion people on the planet.

In addition, average life expectancy will have risen from today's figure of 73 years to 83 years by 2050.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP.241; Statista: World Population, 2016

Megatrends – Challenges that are transforming our world

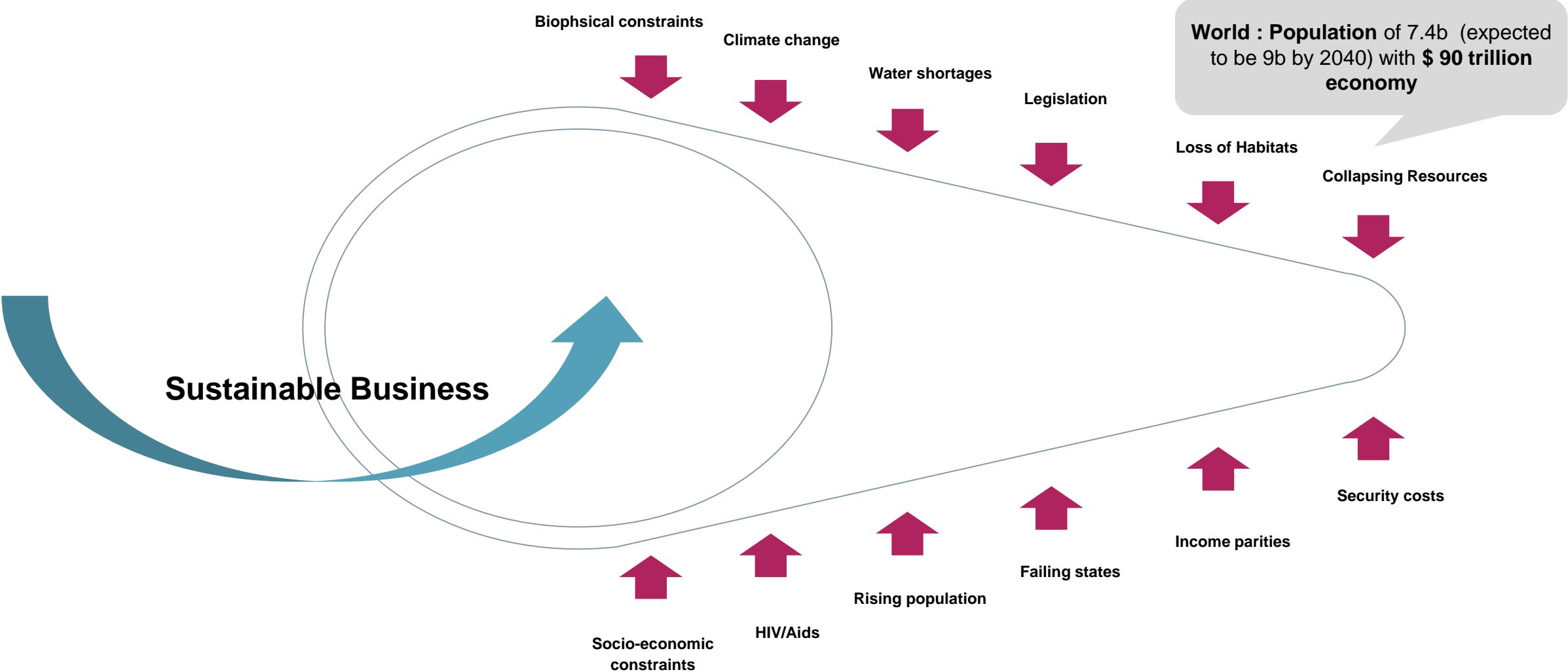


Climate change

According to scientists, in the summer of 2015, the Earth's atmosphere had the highest CO₂ concentration in 800,000 years. In 2015 the UN Climate Change Conference in Paris resolved to limit global warming made by humans to well below 2° Celsius.

Source: SCRIPPS INSTITUTE OF OCEANOGRAPHY, "The Keeling Curve", November 11, 2015

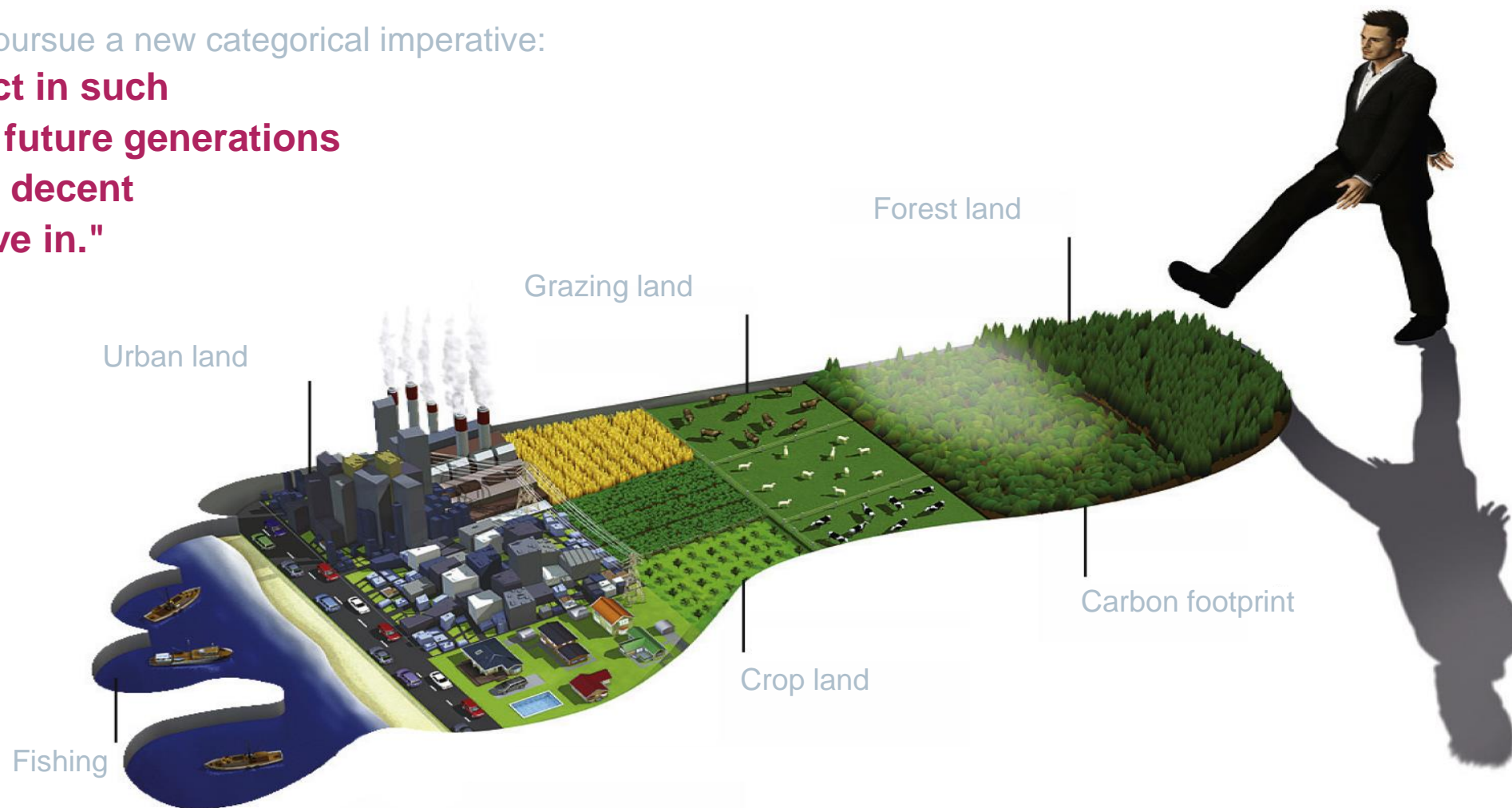
We all feel the funnel's walls closing in on us...



If we continue business as usual
we would need 3 planets by 2050...

We need to pursue a new categorical imperative:

**"Always act in such
a way that future generations
will have a decent
world to live in."**



Industry Can Lead on Climate Change

By JOE KAESER SEPT. 22, 2015



The Siemens plant in Sacramento. David Paul Morris/Bloomberg

“To Beat Climate Change, Digitalize the Electrical World”



To Beat Climate Change, Digitalize the Electrical World





Environment

With Siemens' Environmental Portfolio and our own environmental programs, we make an important contribution to resource and climate protection and strengthen the competitiveness of our customers.

- › Decarbonization
- › Conservation of resources
- › Product stewardship



People & society

We put people front and center. We promote the safety, education and well-being of our employees through a multitude of programs, and we are committed to the sustainable development of society.

- › Health management
- › Safety
- › Diversity
- › Education
- › Corporate citizenship
- › Arts and culture



Responsible business practices

Our sustainable business practices are based on integrity, fairness, transparency, and responsibility. This is our aspiration.

- › Sustainable supply chain
- › Compliance
- › Human rights

UN SDG (Sustainable Development Goals)



What matters to Turkey?



Strengthening the economy

- In 2015, GDP increased by **4%** and reached to **USD 719.58 billion**.
- Turkey ranks as the 17th largest economy in the world. The goal is to become one of the top 10 economies and to take a **1.5%** share in global trade by 2023.
- Industry is one of the greatest contributors to the development of the national economy. The share of it in gross domestic product was **32.9%** in 2014.
- The added value provided by SMEs, which constitute the backbone of the economy, has increased by **25%** since 2009 and the employment they provide has grown by **10%**.
- Due to population growth, high levels of urbanization and production, and higher value-added manufacturing rates, Turkey has a great potential in terms of domestic consumption.



Developing local jobs and skills

- Turkey's population is **78,741,053**. The share of the 15-64 age group that is within the working age range is **67.8%**.
- In April 2016 the employment rate is **47.2%** and the participation rate in workforce is **52%**.
- According to April 2016 data, the unemployment rate is **9.3%**. The share of those with higher education in the total workforce is **22.7%**.
- The need for a qualified workforce is evident, especially in industry.



Driving innovation

- The share of R&D expenditure in the GDP was **1.01%** by the end of 2014. The goal is to increase the share of R&D within the Turkish GDP up to **3%**.
- Turkey plans to become the R&D and innovation center of the region. **Automotive and machinery manufacturing** are the main focal points of this goal.
- There is a growing trend in **"higher value added manufacturing"** in Turkey.
- Turkey has a competitive advantage in the **Industrie 4.0** period.



Environment and sustainability

- According to 2010 data, Turkey's annual greenhouse gas emission was **401.9 million tons**.
- Within the scope of the Paris Agreement, Turkey announced that it will reduce its greenhouse gas emissions by **21%** by 2030.
- Turkey has **5 GW** installed wind power capacity. This figure constitutes **6.6%** of the total energy base.
- The goal is to increase the share of renewable energy in the total electricity generation to **30%**, solar energy capacity to **5 GW** and wind energy capacity to **20 GW** by 2023.
- There is an energy conservation potential of **30%** in the buildings and **20%** in the industry in Turkey.



Improving quality of life

- Turkey has come a long way in improving the life quality of its citizens within the **last 20 years**.
- With the **"Healthcare Transformation Program"** initiated in 2003, improving access to healthcare services has come to be among the priorities of the Turkish government.
- With the Public-Private Partnership model **36 hospitals** are planned to be opened until 2023.
- One of the most important topics among the development goals of Turkey is **transportation**.
- Highways and bridges sector will have a value of **TL 16.8 billion** and the railway sector will reach a value of **TL 13.8 billion** in 2022.



Shaping societal transformation

- To stay competitive, active diversity management is needed. The aim of Turkey is to **increase female and disabled labor participation**.
- Turkey's goal is to increase female labor participation to **34.9%** by 2018.
- Turkey is under an increasing immigration wave. Currently more than **2.5 million** refugees from Syria live in Turkey.
- Companies have big responsibilities in shaping societal transformation.

How Siemens contributes to national priorities?

Siemens Value Map



Strengthening the economy



Economic output
Siemens adds a gross value (direct, indirect and induced) of TL 3.2 billion to the economy.



Investment and financing
A total of EUR 265 million financing was provided, with EUR 145 million on Public-Private Partnership projects and EUR 120 million on infrastructure and energy projects in the last three years.



Localization and exports
In 2015, in energy industry local production constituted 66% of Siemens Turkey's total sales, while revenues from exported products and projects reached 33% of total revenues.



Supporting key industries
50% of automobile production, 46% of clinker, and 25% of cement manufacturing capacity, and 67% of high-quality metal forming machinery of Turkey use Siemens Automation Technology.



Supporting SMEs
70% of Siemens Turkey's procurement in 2015 were made from SMEs.



Energy independence
Siemens products and solutions play a role in 30% of total electricity generation and 16% of the installed base in Turkey.



Developing local jobs and skills



Job creation
Siemens creates employment for 40,000 people in Turkey, 3,007 of whom are directly employed.



Skill enhancement
Siemens Turkey spent TL 7.2 million on employee trainings in 2015. While average training per employee has been 3.2 days, Siemens Turkey also offered various trainings to 1,650 customers and suppliers throughout the year.



Supporting education
Since 2000 Siemens Turkey has invested approximately TL 14 million in the education of high school and university students.



Driving innovation



R&D investments
Number of employees at Siemens Turkey R&D centers multiplied by 5 in 5 years and the budget reached to TL 60 million.



Industrie 4.0
With awareness raising practices on Industrie 4.0, Siemens Turkey reached more than 10,000 people. 6,000 copies of the book "Industrie 4.0" (in Turkish) were distributed. The Industrie 4.0 platform (endustri40.com) sponsored by Siemens is visited by 1,500 people every day.



Digital transformation
Siemens' devices generate more than 93 TB of data per year in industry and healthcare in Turkey.



Digital grid
43% of power distribution companies use Siemens' solutions.



Environment and sustainability



Toward being a carbon-neutral company
Planning to become carbon-neutral by 2023, Siemens Turkey's largest production facility is the country's first production center with LEED Gold certification.



Environmentally friendly product portfolio
Siemens' environment-friendly product portfolio reduces CO₂ emissions in Turkey by 1.7%. This is equivalent to CO₂ emissions of 3.3 million automobiles. Siemens Turkey's share in renewable energy generation is 10%.



Contribution to energy efficiency
Through approximately 100 energy efficiency projects, Siemens Turkey's contribution to the environment is equivalent to planting more than 125,600 trees. Return on investment in these projects is 1.5 years.



Environment, Health and Safety vision
Siemens Turkey received "Healthy@Siemens" certification with its sustainable health management. Siemens Turkey's Lost Time Injury Frequency Rate (LTIFR) is half of the average rate of Metal Industrialists Union's.



Improving quality of life



Contribution to healthcare system
Every day 200,000 people benefit from Siemens Turkey's healthcare technologies and 32.4 million person have access to medical imaging equipment provided by Siemens.



Contribution to transportation
Siemens Velaro, Turkey's first very high-speed train, reduces commuting time by 40% for 871,000 passengers.



Contribution to safety and security
Every year, safety of 28 million people at Sabiha Gökçen Airport and 64.8 million passengers at Marmaray is ensured by Siemens Turkey's systems.



Supporting social security
Siemens Turkey paid a total premium of TL 75.5 million for the social security and healthcare insurance of its employees.



Favorable work environment
According to Universum's report, Siemens Turkey outperformed all competitors in the list of companies that students want to work for.



Shaping societal transformation



Corporate governance and compliance
In three years, Siemens Turkey will provide a total of USD 1.76 million (TL 5.06 million) support for the Turkish Integrity Center of Excellence (TICE) project launched by the Ethics and Reputation Society (TEID).



CSR projects
Siemens Turkey has been implementing corporate social responsibility projects in education and technology since the day it started its operations in Turkey.



Equal opportunity
Siemens Turkey received the "Certificate of Equal Opportunity" from KAGİDER in 2012 and the "Award for Gender Equality in Business Life" from the Ministry of Labor in 2013.



Long-term commitment
Having started its operations in Turkey 160 years ago with the first telegraph system in 1856, Siemens is one of the most deep-rooted industrial companies in the country.

Unless indicated otherwise, 1 dollar = TL 2.88, 1 euro = TL 3.28

Strengthening the Economy



Economic Output

Siemens Turkey added a gross value of **TL 3.2 billion to the economy.**

Investment and Financing

A total of **EUR 265 million financing** was provided in the last three years on PPPs and infrastructure and energy projects.

Localization and Exports

In 2015, in the energy industry **local production constituted 66% of Siemens Turkey's total sales.**

Supporting Key Industries

50% of automobile production and 67% of high-quality metal forming machinery of Turkey use Siemens Automation Technology.

Supporting SMEs

70% of Siemens Turkey's procurement in 2015 were made from SMEs.

Energy Independence

Siemens products and solutions play role in **30% of total electricity generation in Turkey.**

Developing Local Jobs and Skills



Job Creation

Siemens Turkey creates employment for **40,000 people** (3.007 directly)

Skill Enhancement

In 2015, Siemens Turkey spent TL 7.2 million on employee trainings

Supporting Education

Since 2000, Siemens Turkey invested app. **TL 14 million to the education** of high-school and university students





R&D Investments

Siemens Turkey increased the number of the R&D employees by 5 in 5 years and our **R&D budget reached to TL 60 million**

Industrie 4.0

Siemens Turkey is the pioneer to raise awareness about **Industrie 4.0**. We reached more than **20.000 people** during this journey

Digital Transformation

Siemens' devices generate more than **93 TB of data per year** in industry and healthcare in Turkey

Digital Grid

43% of power distribution companies use Siemens' solutions.

Toward Being a Carbon-Neutral Company

Siemens Turkey is planning to be **carbon-neutral by 2023**

Environment Friendly Product Portfolio

Siemens' environment-friendly product portfolio **reduces CO2 emissions in Turkey by 1.7%**, which is **equal to CO2 emissions of 3.3 million automobiles**

Contribution to Energy Efficiency

With the help of app. 100 energy efficiency projects, Siemens Turkey's contribution to the environment is equal to **planting more than 125.600 trees**

Environment, Health & Safety

Siemens Turkey received **Healthy@Siemens Label** with its sustainable health management.



Improving Quality of Life



Contribution to Healthcare System

Every day 200,000 people benefit from Siemens Turkey' s healthcare technologies

Contribution to Transportation

Siemens Velaro, Turkey' s first very high-speed train, reducing commuting time by 40%

Contribution to Safety & Security

Every year, **safety of 28 million people** at Sabiha Gökçen Airport is ensured by Siemens Turkey' s systems

Supporting Social Security

Siemens Turkey paid **TL 75.5 million** for the social security and health insurance of its employees

Favorable Work Environment

According to Universum Ranking, **Siemens Turkey outperformed** all key competitors in the list that students wants to work for



Shaping Societal Transformation



Corporate Governance and Compliance

In three years, Siemens Turkey will provide a total of USD 1.76 million support for the Turkish Integrity Center of Excellence project launched by the **Ethics and Reputation Society (TEID)**

CSR Projects

Siemens Turkey has been contributing to Turkey for 160 years and will continue to do so
e.g: Siemens Turkey supports Robotic Club at **Darüşşafaka** High School.

Create Equal Opportunities

Siemens Turkey received “**Award for Gender Equality in Business Life**” from Ministry of Labor in 2013

Long-Term Commitment

Siemens is one of the **most deep-rooted** industrial companies in the country.

Thank you...



Back -up



Strengthen portfolio: We're sharpening our business focus in electrification, automation and digitalization



Digitalization

- Added value for our customers increasingly lies in software solutions and digital services and platforms
- We want to exploit the opportunities offered by digitalization even better

Automation

- In automation we've already captured leading market positions worldwide
- We've been successfully automating customer processes for years
- We intend to maintain and expand these positions

Electrification

- Our roots are in electrification. We're a leader in this field
- We're well positioned along the value chain of electrification
- We're capitalizing on a growing installed base and creating customer value through profitable service business

Sustainability is a key enabler of Vision 2020



We make real what matters by enhancing **responsible business practices**, preserving the **environment** and developing **people and society**.

<http://www.siemens.com/global/en/home/company/sustainability.html>



Environment

- Resource conservation
- Product stewardship
- Decarbonization



Decarbonization

- Environmental Portfolio helped our customers to reduce their CO2-footprint by 521 million tons in FY16
- Siemens aims to become carbon neutral by 2030



Responsible Business Practices

- Sustainable Supply Chain
- Human Rights
- Compliance



Compliance System

- Effective prevention, detection, and response to compliance violations (Zero tolerance principle)
- The >100 Mio. US\$ Siemens Integrity Initiative supports clean business worldwide



People and Society

- Diversity
- Education
- Corporate Citizenship
- Business to Society
- Health & Safety



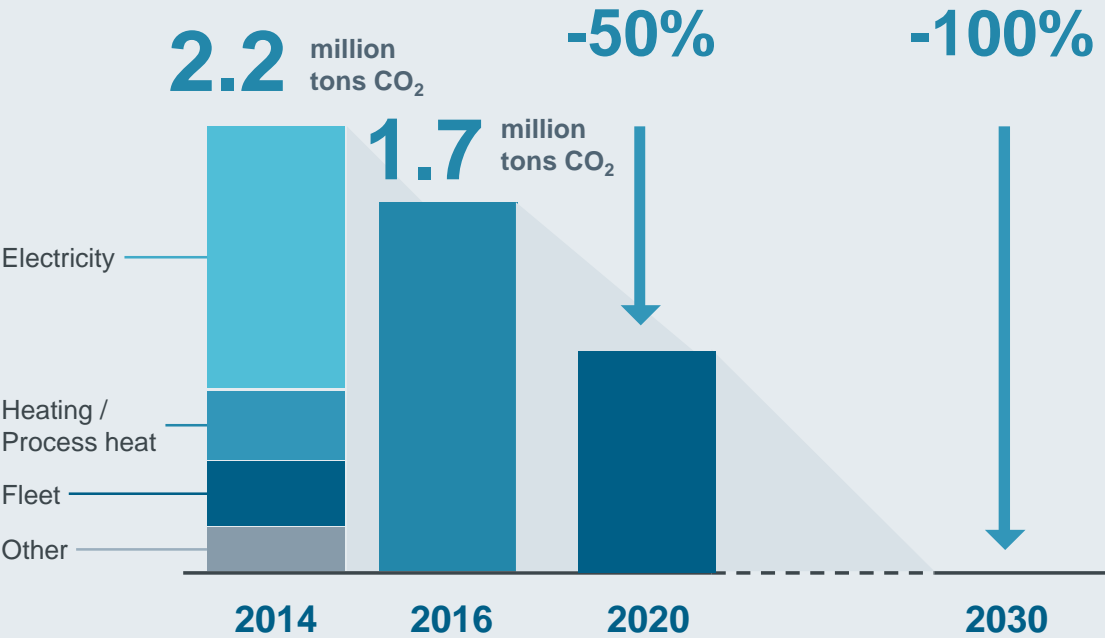
Health & Safety

- Our goal: Every employee should rely on an intact and safe working environment to return healthily and safely to their family and friends
- Programs: Healthy@Siemens and Zero Harm Culture

Sustainability – Siemens aims to be net-carbon-neutral by 2030



We are investing over €100 million in measures to reduce our carbon footprint



Drive energy-efficiency program

Increase energy efficiency in factories, employ sustainable technologies in new buildings



Leverage distributed energy systems

Reduce energy costs and CO₂ emissions



Reduce fleet emissions

Utilize potential of low-emission cars in fleet, including electromobility



Purchase green energy

Move toward a significantly cleaner power mix with a strong focus on renewable energy and highly efficient gas

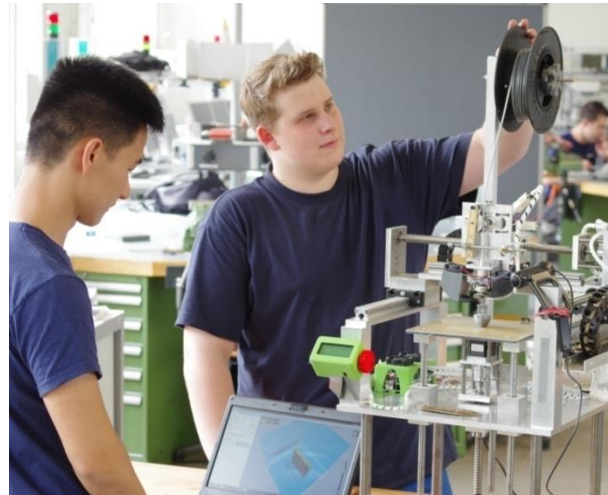
Independent auditors will monitor and report on progress of implementation

Sustainability – Corporate Citizenship: Embracing our responsibility to society



Our **social commitment** takes many forms, including donations, foundations, disaster relief, employee volunteering activities, sponsorships and educational programs.

www.siemens.com/global/en/home/company/sustainability/corporatecitizenship.html



Since 2008, we have reserved 10 percent of our apprenticeships in Germany for **disadvantaged young people**. Vocational training and integration are key enablers for overcoming social exclusion. About 90 percent of these trainees complete their courses successfully.



Supporting refugees is part of our responsibility to society. For example, we offer professional orientation through internships, provide accommodations, make donations and hold preparatory classes for young refugees.



We train employees locally. In India, for example, we plan to train 108 apprentices a year. In Egypt, we are building a training center for employees and customers. In South Africa, we built and equipped the Mandela School of Science & Technology.

Vision 2020 – Five elements create Ownership culture

Equity

Supports a sense of long-term, output and profit orientation

People orientation

- Empowerment and trust
- Honesty, openness and collaboration



Values – Our foundation

- Responsible
- Excellent
- Innovative

Behaviors

- Respect
- Focus
- Initiative and execution

Leadership

- Be bold, decisive and courageous
- Exemplify “Siemens matters”
- Motivate and engage

Our business – Digital Factory



Helping the global manufacturing industry go digital as companies move toward Industrie 4.0

The Digital Factory Division offers a comprehensive portfolio of seamlessly integrated hardware, software and technology-based services to support manufacturing companies worldwide in enhancing the flexibility and efficiency of their production processes and in reducing the time to market of their products.

The ultimate goal is the complete integration and digital representation of the physical value chain. The platform for this is called Digital Enterprise.

www.siemens.com/about/digital-factory

	FY 2016	FY 2015
Orders in millions of €	10,332	10,036
Revenue in millions of €	10,172	9,988
Employees ¹	45,000	43,500

¹ as of September 30, 2016