

SIEMENS

Ingenuity for life



In Turkey, for Turkey

Business to Society Report

160

Türkiye'nin
Siemens'i
160 yaşında

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Foreword

What is the actual benefit that we create? At what point do our activities generate value for the society and what kind of values are these?

Dear Readers,

We, as Siemens, are celebrating our 160th year in Turkey. Since 1856 we have not only been performing economic activities on these lands, but also contributing to the society in many different aspects. The world is moving forward with a dazzling speed and is witnessing changes that we could not even dream of before. Making possible what used to be deemed as impossible, this change requires a brand-new mindset in the business world. We are talking about a new system in which companies have a vision of growth beyond traditional parameters such as increasing production and acquiring short-term financial revenue. Today, they also take into consideration the impact they create on the society and the environment.

As corporations, our responsibility toward the society and the environment we live in is greater than ever. In concise words, we all want to see the real social contribution of our corporations to our world, our future, and our children in a measurable way, want to feel proud about it, and also want to understand where and how we can intensify our impact. Employees, customers, governments, non-governmental organizations - in short, a great number of stakeholders - expect corporate structures to cooperate with them in ensuring the development of society.

Taking this as a starting point, in our 160th year in Turkey, we wanted to measure Siemens' contribution to Turkey's

sustainable development in terms of quality and quantity. Based upon our experience and know-how, this Business to Society Turkey Report has been prepared as a concrete demonstration of the contributions that our operations in Turkey have made to the sustainable development goals and social life of our country. This report is an answer to the questions: "What is the actual benefit that we create? At what point do our activities generate value for the society? And what kind of values are these?"

Every year, when reports of the largest companies in our country are released, I ask myself if value creation, in its true sense, is only based on how many people work in a company or how much revenue they make in a year. Aspects that make long-term contribution are often ignored, but in fact they are the real sustainable values for the development of a economy. However, this report gives a detailed (and maybe the first of its kind in Turkey) insider look of how a company contributes to the development and growth of a country in all key dimensions. The key is to initiate impulses, such as quality standards or norms, which create a domino effect.

I am truly excited and delighted to write the foreword for such a valuable report. I sincerely hope you will share my excitement while reading it.

Hüseyin Gelis
CEO and President,
Siemens Turkey

Business to Society

Our methodology

At Siemens, we believe that companies can really succeed only if they fulfill the needs of the society they operate in. This means businesses have a responsibility in economic and social development and that they should add lasting value to the countries and communities they work in. Therefore, obviously we need much more than just profit rates to measure our corporate success.

We believe that, by measuring social and environmental impacts and identifying tangible benefits of operations, companies like Siemens Turkey should demonstrate that their business operations are aligned with the national development agenda and that they play an active role in economic and societal development. Being a responsible company means working in partnership with the society and being a part of its long-term development.

With this Business to Society Report, we measured the impact of Siemens Turkey on the sustainable development of the country both quantitatively and qualitatively. Siemens Turkey developed a customized methodology based on the Measuring Impact Framework of the World Business Council for Sustainable Development (WBCSD), of which Siemens is a global member, in order to objectively measure and assess its contribution to the country.

The difference we create

Companies often try to see the world through the prism of their own business activities. Yet, we, as Siemens Turkey, adopted a different approach. In the preparation phase of the report, we examined the issues that the government defined as material to the development of the country. Then, we identified and measured Siemens' contribution to what really matters to Turkey under the topics of strengthening the economy, developing local jobs and skills, driving innovation, environment and sustainability, improving quality of life, and shaping societal transformation.

This study was based upon stakeholder input, international studies Turkey's Vision 2023

strategy, and the 10th Development Plan 2014-2018. We worked with an independent consulting firm to provide external expertise in assessing Siemens' contribution to Turkey. Pricewaterhouse Coopers (PwC) supported Siemens in calculating specific economic impacts such as contribution to gross domestic product (GDP) and job creation.

When assessing our impact in specific industries like transportation, energy efficiency, renewable energy, and healthcare, we measured only where Siemens' technology plays a fundamental role or is a critical part of an industrial process. We calculated our contribution in 2015 only (unless stated otherwise), though in most cases our already installed base of technologies has been creating value for a much longer time.

The intention here is not to modify engineering calculation methodologies, which is, in fact, not possible in any way. Our goals are to understand our overall impact on issues that matter to our stakeholders with the aim of evaluating our role and purpose in the society, to improve the value we add, and to promote stakeholder dialogue.

What we have learned

This report reveals that Siemens Turkey is much more than just a company and is an important development partner for Turkey.

Demonstrating our tangible contributions to Turkey, this report will serve as a guide in future business plans. We believe this report will support Siemens Turkey in becoming even a better company. We believe that it will help us to attract and retain the best talents, improve our decision-making mechanisms, and contribute to Siemens' becoming a benchmark in local sustainability reporting.

Customized Business to Society methodology

Step 1: Focus on what matters

What sustainable development priorities of Turkey matter for Siemens?

Step 2: Measure what matters

Which metrics best reflect Siemens Turkey's positive and negative impacts and how do we measure them?

Step 3: Balance what matters

What conclusion can we draw and what are strategic improvement areas?

Step 4: Address what matters

How to make best use of the insights for stakeholder engagement and decision making?

What matters to Turkey?

Major points of development

Turkey is a developing country and to ensure a brighter future and a more affluent society, certain steps should be taken in terms of economy, employment, innovation, digitalization, environment, and life standards. These steps are included in the development plans and the goals set by the government for the year 2023, which is the 100th anniversary of the Republic. Siemens Turkey supports the development of the Turkish economy and society through its operations.



Strengthening the economy

Today, Turkey ranks as the 17th largest economy in the world. By the end of 2015, gross domestic product (GDP) was USD 719.58 billion.¹ Despite having gone through a decline on the basis of foreign currency due to the devaluation of the Turkish lira in 2015, GDP increased by 4% compared to 2014, in fixed rates.²

While the service sector and industry are the greatest contributors to the development of the national economy, agriculture also has an important share.

As a criterion for income inequality, the Gini coefficient, which indicates equality toward 0 and inequality toward 1, was calculated as 0.391 in 2014, according to Turkish Statistical Institute (TÜİK) data.³ 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 as of December 31, 2015, as announced by TÜİK. The share of 15-64 age group that is within the working age range is 67.8%.⁴ While the rate of employment was announced as 47.2% in April 2016, the rate of participation in the workforce is 52%. The share of those with higher education in the total workforce has been identified as 22.7% by the end of 2015.⁵ On the other hand, the unemployment rate was 9.3% in April 2016. The need for qualified workforce is evident especially in industry. Rather than white collar workers, there is a need for vocational high school and college graduates who are equipped with higher technical information and are willing to work in the heart of industry.



Driving innovation

The share of R&D expenditure in the GDP was 1.01% by the end of 2014. This rate more than doubled between 2003 and 2014, reaching 1.01% from 0.48%.⁶

There is a growing trend in "higher value-added manufacturing" in Turkey. The state offers special incentives for manufacturing products that will have significant impact on the budget and narrow the foreign trade deficit when exported.

In Turkey's Strategic Vision devised for 2023, the 100th anniversary of the Republic of Turkey, 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. The objective is to make USD 75 billion worth automotive exports until 2023.⁷

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- ¹ World Bank data for Turkey - www.worldbank.org/en/country/turkey
- ² TÜİK, GDP figures for the 4th quarter, October-December 2015
- ³ TÜİK, Research on Income and Living Conditions, 2014
- ⁴ TÜİK, Address-based Population Registration System, 2015

- ⁵ TÜİK, Statistics of Labor, April 2016
- ⁶ TÜİK, Research and Development Activities, 2014
- ⁷ The Tenth Development Plan 2014-2018, Ministry of Development
- ⁸ Turkish Strategic Vision 2023 Plan, Turkish Ministry of Economy
- ⁹ OECD Better Life Index



Environment and sustainability

The emphasis placed on environment and the level of awareness have made considerable progress within the last 20 years in Turkey. Many waste treatment and recycling plants have been built and the number of urban and industrial waste treatment facilities is increasing.

In combating global climate change, with the measures taken within national circumstances, 1.4 billion tons of cumulative emission were saved in the 1990-2007 period. According to 2010 data, Turkey's annual greenhouse gas emissions were 401.9 million tons of carbon dioxide equivalent, equaling an annual value of 5.51 tons carbon dioxide equivalent per capita. In the 2007-2012 period, a reduction of 50% in sulfur dioxide and 36% in particulate matter in the atmosphere were achieved. Despite these achievements, pressure on environment caused by economic growth, population growth, production and consumption patterns continues. Planning, implementing, monitoring and supervising in environmental and natural resources management should be enhanced.⁷

Also, the Turkish government has a goal to increase the share of renewable energy sources by 29% before 2023.⁸



Improving quality of life

Turkey has come a long way in improving the life quality of its citizens within the last 20 years. The Better Life Index released by the Organization for Economic Cooperation and Development (OECD) indicates that Turkey performed better than other member countries in a few areas. However, it is vital that performance in many other categories be improved.

While the rate of civic participation in Turkey is above the average, the country needs development in healthcare, social communication, education and skills, labor and benefits, life satisfaction, work-private life balance, and housing.

In general, the level of life satisfaction in Turkey is below the OECD average. When asked to rate their general satisfaction with their lives on a scale of 0-10, the average given by the individuals living in Turkey is 5.5, while the average in OECD countries is 6.5.⁹



Shaping societal transformation

Fair competition based on quality and price in global markets ensures long-term market access and the business success of Turkish companies. To stay competitive, active diversity management is needed, especially in increasing female labor participation (34.9%).⁸ Besides this social cohesion in general is a key element in fostering sustainable development with focus on, for example, decreasing overall poverty and unemployment rates, and increasing job opportunities to young and disabled people. Neighboring conflicts are in addition affecting the country. Currently more than 2.5 million refugees from Syria live in Turkey.

Furthermore, to continue mutual relations on international platforms, Turkey hosted the G-20 Summit in 2015 and the United Nation's World Humanitarian Summit in 2016.

Siemens value map

Our contribution to the sustainable development of Turkey



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 the 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, 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

The number of employees at Siemens Turkey R&D centers multiplied by 5 in 5 years and the budget reached 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.

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



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.



Environment-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 the healthcare system

Every day 200,000 people benefit from Siemens Turkey's healthcare technologies and 32.4 million people 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 Labour 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.

“Business to Society is a commitment to our shareholders, to our employees, to the society, and to our planet... Werner von Siemens said, ‘I won’t sell the future for short-term profit!’ and that’s why Siemens has existed for almost 170 years globally and for 160 years in Turkey.”

Thomas Kolbinger,
CFO and Executive Board Member, Siemens Turkey



Strengthening the economy

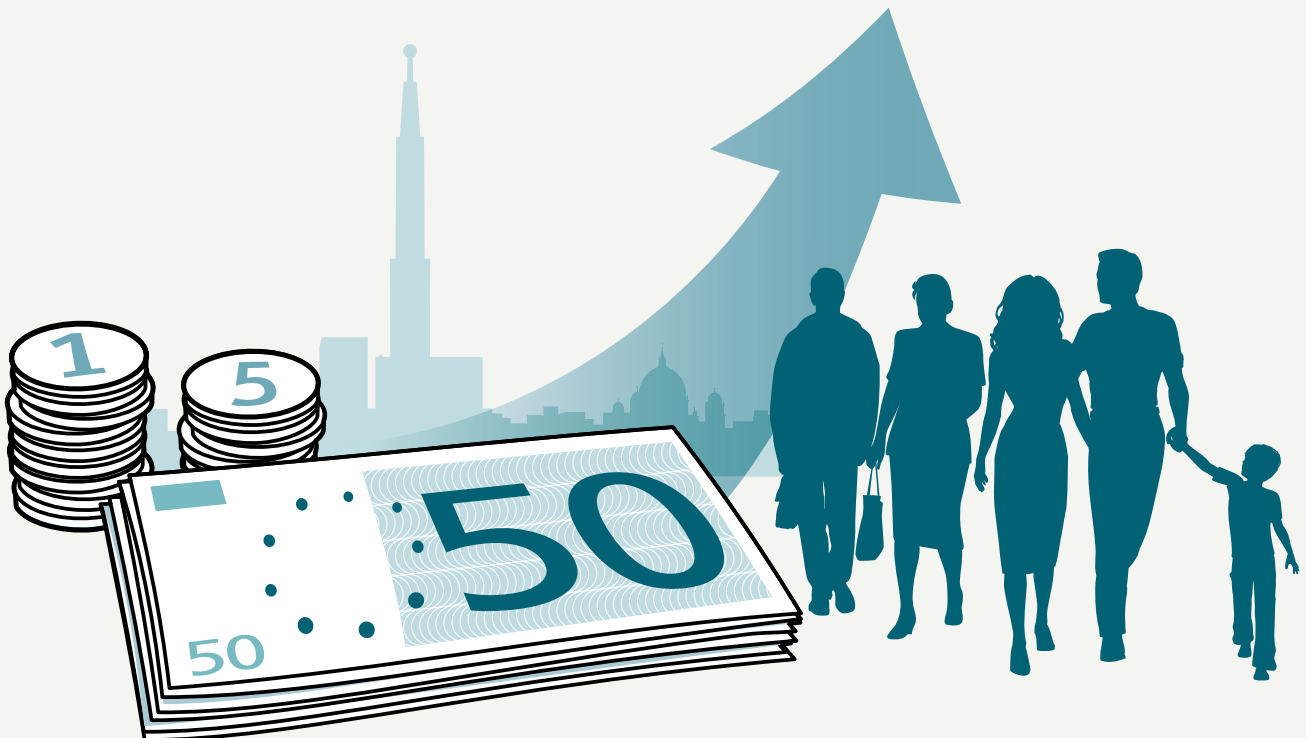


TL 3.2 billion

The value Siemens added to the Turkish economy in 2015 only

0.2%

Siemens' share of the Turkish
Gross Domestic Product in 2015



To a brighter future together with Turkey

Siemens' contribution to Turkey's gross domestic product

Economic growth is of great importance for the country's economy as well as personal and social welfare.

According to the World Bank data, Turkey is the world's 17th largest economy with a gross domestic product (GDP) of USD 799.54 billion. As a developing market, Turkey's income per capita almost tripled in less than ten years and reached USD 10,500. Between 2002 and 2012, the extreme poverty rate fell from 13% to 4.5%. Access to healthcare, education and urban services has been improved.

Despite these developments, annual economic growth since 2012 has been 2.9% on average. To achieve the goal of increasing national income to USD 2.6 trillion and income per capita to USD 25,000 as stated in Turkey's Strategic Vision 2023, this figure needs to be improved.

On the other hand, the European Union (EU) stands as Turkey's biggest economic partner. Commerce with the EU constitutes 40% of the total trade volume in Turkey. The steps Turkey takes in order to integrate into Europe also contribute to the economy in terms of imports, exports and access to financial resources. Among the key industries that contribute to Turkey's economic growth are agriculture, textile, automotive, sea vessels and other motorized vehicles, construction materials, consumer electronics, and household appliances.

Contribution to the economy for 160 years

Operating in Turkey for 160 years, Siemens positions itself as "a Turkish company with global roots." With major characteristics such as innovation, quality and reliability, Siemens contributes to the Turkish economy and society through the products and services it provides.

With offices and production sites in 6 provinces, namely İstanbul, Kocaeli, Ankara, Adana, İzmir, and Bursa, Siemens adds a gross value (direct, indirect and induced) of

TL 3.2 billion to the economy. This figure constitutes 0.2% of the Turkish GDP (PwC 2016 Report).

While TL 520 million of this amount is direct contribution, such as salaries and taxes, indirect contribution originating from procurement of products and services from suppliers is TL 1.62 billion. The contribution induced by the salaries paid to Siemens' employees and the employees of its customers is calculated as TL 1.07 billion. Siemens Turkey creates TL 1.11 billion added value directly through its customers.

Offering solutions in areas such as energy, infrastructure, building technologies, mobility, electrification, automation, digitalization, and healthcare, Siemens has been contributing to the economic and social development of Turkey for the last 160 years with the projects it realizes and the employment it provides. The company is committed to continuing this mission in the years to come as well.

Having carried its vision of continuous development, innovation and technology to Turkey 160 years ago, Siemens has become "a Turkish company with global roots."

With uncompromising trust in Turkey, Siemens continues its investments without interruption and contributes to the economy by localizing production.

2023 targets of Siemens Turkey

- To continue sustainable growth so as to contribute more to Turkey's GDP
- To increase gross value added to the economy to TL 4.3 billion



EUR 145 million

Financing provided by Siemens Financial Services for 4 Public-Private Partnership healthcare projects in Turkey in the last 3 years

Public-Private Partnership projects surpass the obstacle of financing

Siemens Financial Services

Public institutions and private sector companies frequently establish partnerships to improve competitive power and to provide low-cost, high-quality service to end-users. Also known as Public-Private Partnership (PPP), this model is preferred especially in projects that directly serve the citizens, from infrastructure and energy to transportation and healthcare. Such projects, with the aim of easing the financial burden on public institutions and distributing the risks between public and private sectors, improve the quality and efficiency of public services, while also increasing employment and prosperity, in accordance with the economic development goal.

Turkey aims to become one of the top 10 economies of the world by 2023. One of the main drivers in realizing this goal is increasing gross domestic product. Public-Private Partnership projects play a key role in this process.

The total volume of public-private partnership projects in Turkey has already reached USD 72.1 billion in 34 different projects, according to the report by the Ministry of Development. And among the major projects are the third airport in Istanbul with a budget of USD 14 billion, Gebze-İzmir Highway with USD 7.6 billion and 36 city hospitals with a total budget of USD 15 billion.

Improving Turkey's healthcare infrastructure with 36 city hospitals to be built through PPP projects is among the major goals of the government. The Ministry of Health stated in its 2013-2017 Strategic Plan, dated December 2012, that with the PPP City Hospitals Project, the number of available beds per 10,000 patients will rise to 32 from 27 by 2023.

In addition, financed by local and international financial institutions, city hospitals also contribute to attracting foreign investors to Turkey. All city hospitals are planned to become operational by 2023. Reliable consultation and the best technologies for PPP projects offering global financial solutions with more than 3,000 employees worldwide

and a portfolio of international financing institutions, Siemens Financial Services (SFS), provided a total financing of EUR 120 million (TL 393.6 million) for infrastructure and energy projects in Turkey in the last 3 years. Also providing financial consultancy services to its customers, SFS has coordinated an external bank credit of EUR 300 million (TL 984 million), guaranteed by Export Credit Agencies (ECA), for gas and wind power projects in Turkey.

To increase the quality and efficiency of the healthcare system and enhance access to healthcare facilities in Turkey in line with the country's Health Transformation Program, Siemens Financial Services (SFS), along with other international investors and financial institutions, contributed to preparation studies of PPP program and related legal regulations, supporting the Ministry of Health, in an effort to set up an internationally acceptable and bankable financial and operational structure.

With the purpose of enhancing the service quality of city hospitals to be built, Siemens Turkey participates in all PPP City Hospitals Projects. A team made up of Siemens Healthineers, Building Technologies, Financial Services, and Energy Management divisions plays an active role in PPP City Hospitals projects.

Siemens Financial Services collaborated with Islamic Development Bank for the PPP project in Konya, which is the very first PPP healthcare project that the Bank has participated in. Bilkent, another PPP project, received the Bonds & Loans Award at the Global Finance Conference (GFC) as the "Infrastructure Finance Deal of the Year" in 2015.

In addition, Adana PPP was selected the "Best Public-Private Partnership Project of Europe" by Infrastructure Journal Global.

In addition to the financial services offered to PPP City Hospitals projects, Siemens Turkey will also support these projects with its healthcare and building technologies products and solutions.

A team made up of Siemens Healthineers, Building Technologies, Financial Services, and Energy Management divisions plays an active role in PPP City Hospitals projects.

Siemens Financial Services has so far provided EUR 145 million (TL 475.6 million) of financing to four PPP City Hospitals projects with a total investment of approximately USD 2.3 billion (TL 6.6 billion).



66%

Share of local production in the total revenue from the sale of energy products by Siemens Turkey in 2015

33%

Share of turnkey energy projects and local production in the total revenue of Siemens Turkey in 2015

For an ever-growing Turkey

Reducing dependence on imports

Today, one of the greatest challenges for Turkey is reducing the dependence on imports. According to the Strategic Vision 2023, 39% of manufacturing input is imported and 63.8% of material costs are caused by importation.

The Turkish government prepared a localization plan for various industries to reduce dependence on imports and increase local added value in manufacturing.

Turkey's exportation strategy for 2023 aims to provide a modern and flexible exportation structure based on advanced technology and R&D, which are prerequisites for the commercial environment of today and the future. The major goal is to achieve 12% increase in exports per year and reach a volume of USD 500 billion by 2023. Other goals include becoming one of the top 10 economies in the world and taking a 1.5% share in global trade.

In addition, today, Turkish engineering, procurement and construction (EPC) companies have become more active not only in Turkey, but also in the region. They have concluded projects amounting to USD 205 billion in approximately 100 countries. Around 40 Turkish companies made it into the Top 250 International Contractors list of Engineering News Record (ENR).

The vision of local production and exportation

Siemens continues its efforts in line with Turkey's goal of reducing its dependence on imports by increasing local production and exportation. In 2015, the share of local production in the total revenue from the sale of energy products by Siemens Turkey reached 66%.

Siemens manufactures products in two factories in Turkey – one in Gebze and the other in Kartal. In the Gebze factory, built on an area of 150,000 m² with an indoor space of 19,424 m², Medium Voltage products for Energy Management are manufactured,

while Kartal factory, built upon 90,000 m² with an indoor area of 17,000 m², manufactures Low Voltage and Digital Factory products.

Gebze factory is the leading production site in the world of Siemens Energy Management Medium Voltage Switchboards and takes on global responsibilities, including global customer relations. 75% of the switchboards produced there (NXAir, 8BT, Sivacon S8, etc.) are exported to Western European and Middle Eastern countries. Siemens Turkey Energy Management Low Voltage Products and Digital Factory divisions have plans to invest TL 49.2 million in new products in its Gebze facilities. Half of this investment will be spent on manufacturing line machinery to be purchased from local suppliers.

Local supplier ecosystem in the new factory

The tram factory to be built in Gebze is further evidence of the importance that Siemens Turkey attaches to local production.

Exported local products and turnkey projects by the Energy Management division constitute 87% of Siemens Turkey's total exports.

With strong confidence in the country, Siemens Turkey continues its investments and contributes to the economy by localizing manufacturing.

With an investment of TL 98.4 million, the factory is planned to become operational by 2017 and to contribute significantly to exportation by exporting vehicles directly to foreign countries.

This investment will not only create employment within the factory, but also build an ecosystem of local suppliers. The factory will also manufacture vehicles for other Siemens facilities around the world. Expected manufacturing potential is 100 trams per year.

Also showing interest in the tender for 80 sets of very high-speed trains expected to be held in 2016, in accordance with the technical specifications stated, Siemens will produce these train sets with a goal of 53% localization should it win the tender.

Exports to neighboring countries

Siemens Turkey also exports materials to projects in neighboring countries either directly or through large-scale Turkish engineering, procurement and construction (EPC) contractors and distributors. Siemens Turkey earned 33% of its revenues in 2015 from exported local products and turnkey projects by the Energy Management Division. Such exports amount to 87% of Siemens Turkey's total exports.

Having founded a sales organization focused on countries such as Iraq, Jordan, the United Arab Emirates, and Qatar, Siemens Turkey Energy Management Division has assigned a sales manager to support Turkish contractors with the aim of developing low voltage products in Turkmenistan and selling them directly.

According to 2014 data of the Iraq Ministry of Electricity, Siemens Turkey Energy Management division has completed 28% of Iraq's High Voltage Grid Connection Substations since 2000. Having installed networks of vital importance in areas with security risks, Siemens Turkey Energy Management division has successfully concluded turnkey projects of extensive super networks with 3000 MVA transmission capacity in the biggest substations of Southern Iraq (Basra & Najaf AIS and Al Qurna GIS).

In addition, as seen in the Basrah substation in Iraq, Siemens Turkey has established emergency grid connections that are vital for recommissioning of important power supplies even in conflict zones.

Installing modular E-House substations in Iraq, Jordan and Georgia for its Oil & Gas and Utilities customers, Siemens Turkey Energy Management Medium Voltage Products department works operates as the center of excellence both in Turkey and neighboring markets.

In 2000, Siemens Turkey Power and Gas Division installed the electricity system of Türkmenbaşı Power Plant constructed by Çalık Holding in Turkmenistan. Then, many projects were concluded in the country, together with Polimeks (EPC), such as Ashgabat Olympic Village and Ashgabat International Airport. Having a significant share in the renewal of the city of Ashgabat by installing its power transmission system, Siemens Turkey also provides product and solution support for the Asia Indoor and Martial Arts Games (AIMAG) to be held in Ashgabat in 2017.

Following the developments in the region, Siemens Turkey continues to work there with the aim of increasing its share in local production and exports and contributing to the Turkish economy.

75% of Medium Voltage Switchboards manufactured at Siemens' Gebze facilities, including NXAir, 8BT, and Sivacon S8, are exported to Western European and Middle Eastern countries.

For a country empowered by automation in manufacturing

Supporting key industries and increasing efficiency through automation

Pioneered by Germany, Industrie 4.0 is being shaped on the axis of automation and digitalization. Countries aiming to become leaders in industrial design and manufacturing need to get the maximum benefit from automation and digitalization in the transition to innovative, environment-friendly and local manufacturing processes.

Turkey has the potential to lead the region in Industrie 4.0. According to the Turkish Statistical Institute (TÜİK) data, the share of industry in gross domestic product increased from 30.3% in 2002 to 32.9% in 2014. That of manufacturing reached 24.7% in 2015 with a 3.7% growth. 50% of this industrial manufacturing came from metal, pulp and paper, automotive, and machinery. Considering that the average growth rate of the Turkish economy is 4.3% and the share of manufacturing in the growth is only 0.2% according to TÜİK data, the value and potential of the industry in terms of national development become more evident.

The emphasis on manufacturing in the 10th Development Plan displays Turkey's commitment to a stable and comprehensive growth in the industry. The Program for Enhancing Productivity in Manufacturing goes beyond improving manufacturing processes and focuses on goals such as creating added value and manufacturing with a greater awareness.

Modernization in industrial processes

During the Republic Era, Turkey took important steps toward industrialization and increased its production capacity. There were significant developments particularly in food, textile, machinery, paper, metal, and chemical industries during the industrialization period.

Technological developments have required modernization of end-to-end installation and operation processes of industrial facilities and systems. Siemens Turkey provides such services, including modernization and integrated automation, to industrial businesses.

Today, these services continue with preparations for the infrastructure of automation and digitalization practices within the framework of Industrie 4.0.

Increasing production capacity

The fundamental goal in the modernization and digitalization processes of industrial facilities is to increase production capacity by improving manufacturing processes. Siemens improves process efficiency with its solutions and thus ensures that facilities perform higher-quality manufacturing with lower costs. Thus, businesses in the narrow sense and the national economy in the broader sense achieve important benefits.

According to country and sector data obtained from institutions such as the Central Bank of the Turkish Republic and Ministry of Economy, 46% of the total clinker production amounting to 76 million tons and 25% of the total cement production amounting to 126 million tons are made by using Siemens Automation Technologies. Siemens' automation solutions also play a key role in automotive, which is the leading industry of Turkish exportation.

For example, Fiat Egea is manufactured and exported at Tofaş Bursa factory in three different versions: Sedan, hatchback and station wagon. All versions are manufactured by using Siemens-based CARs (Control Architecture Standard) technology. With this technology, an annual manufacturing capacity of 190,000 automobiles per year is expected with high efficiency.

The CARs technology uses Siemens products at every step of the way, from design to production control. This allows both the standardization of manufacturing processes and uninterrupted production in three shifts.

Solutions customized for key industries

Automation and digitalization are important for the industry as a whole. However, since

Siemens Turkey provides services to all of the industrial sectors with hundreds of Service Maintenance Contracts for Drives, PLCs and Motors.

All service maintenance works of the engines in three refineries of Tüpraş, which has been number one at ISO500 list with its sales from product, are performed by Siemens. The fact that the total number of motors in these three refineries exceeds 7,000 proves Siemens' strength and capabilities in this area.

each production field has its own characteristics, customized solutions are required.

With its customized solutions for different industrial areas, Siemens ensures maximum efficiency by focusing on the needs and expectations.

For instance, as a key player in Turkey's industrial development, the paper industry uses Siemens' SIPAPER technology, while SICAMENT and CEMAT technologies are employed in cement production. This way, facilities benefit from environment-friendly solutions that can be commissioned rapidly and ensure efficiency increase in the shortest time possible. Siemens Turkey also provides services to all of the industries with industrial product portfolio and Service Maintenance Contracts. Siemens' Service Maintenance Contracts create a difference with service quality. Production facilities can get 24/7 service from Siemens 365 days of the year.

One of the most important references of Siemens in terms of service agreements is Tüpraş, Turkey's giant brand in the oil industry. All service maintenance works of the engines in three refineries of Tüpraş are performed by Siemens. The fact that the total number of motors in these refineries exceeds 7,000 proves Siemens' strength and capabilities in this area.

Automation brings new horizons to defense

Production capacities of countries are undoubtedly of great importance in the economic sense. However, in terms of national security and system exports, the defense industry is also critical. Siemens continues to cooperate with its expert suppliers in order to empower the defense industry in Turkey and to turn the country into a defense technologies exporter.

The fundamental goal in the modernization and digitalization processes of industrial facilities is to increase production capacity by improving manufacturing processes. Siemens improves process efficiency with its solutions and thus ensures that facilities perform higher-quality manufacturing with lower costs.

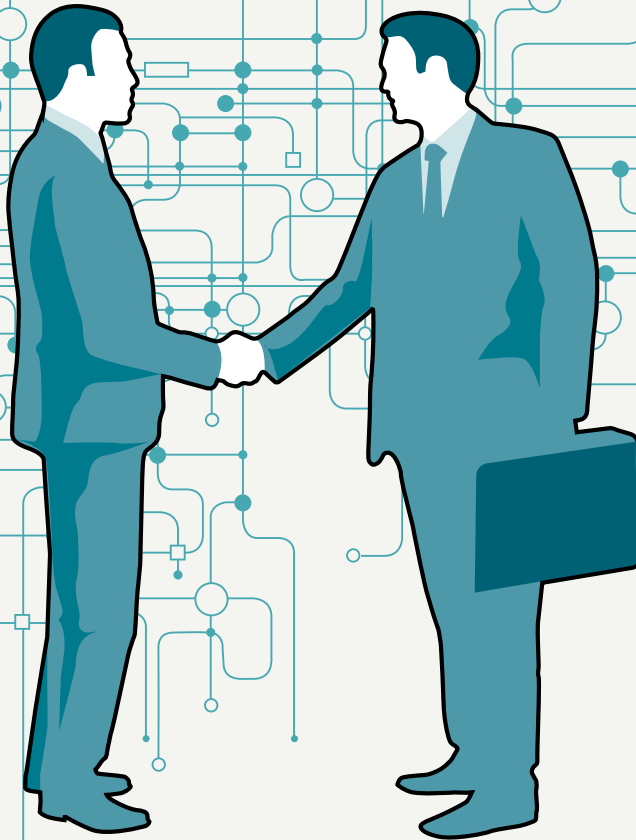


70%

Share of supplies purchased from SMEs in the total procurement volume of Siemens Turkey in 2015

TL 200 million

Value of purchases by Siemens AG from local suppliers in Turkey



Toward a more competitive Turkey

Supporting SMEs and reducing the informal economy

According to the Structural Business Statistics data of the Turkish Statistical Institute (TÜİK) and Eurostat, 99.8% of businesses in Turkey are small and medium-sized enterprises (SMEs). Every 3 people out of 4 work for SMEs and the added value provided by these enterprises to the country is 53.9%. Therefore, it is vital that the growth rates of SMEs, which constitute the backbone of the economy, are increased and their institutionalization is ensured.

The added value provided by SMEs has increased by 25% since 2009 and the employment they provide has grown by 10%. Although these figures indicate that SMEs have advanced in the last years, it is also known that they are not yet at the desired level of technology adoption and their rates of bank loan usage are low. In addition, management skills, business strategy and planning, and attracting new talents are areas to be developed in SMEs, as these will improve their competitive power.

SMEs as preferred suppliers

Siemens Turkey continues to support SMEs in many aspects. The company's total procurement from SMEs in 2015 was TL 656 million, including TL 164 million from the ones in Kartal region and TL 49.2 million from those in Gebze. This figure amounts to 70% of the total purchase volume of Siemens Turkey. On the other hand, with the initiative of Siemens Turkey, Siemens AG helped Turkish SMEs open up to global markets by purchasing TL 200 million worth of supplies from them.

In addition to financial support, Siemens Turkey also performs periodic supplier assessments to contribute to the development of SMEs. In 2015, assessments were made in the major 150 suppliers that constitute 80% of the total volume of purchase. The company plans to extend the scope of this practice. Having held 16 quality trainings on-site in 2015, Siemens Turkey brings its suppliers together at the Supplier Day every year, informing them on about the new trends and developments in the

industry. The topic in 2016 was "Sustainability in Global Companies and Industrie 4.0" and the event reached more than 1,500 people via live broadcast on the Internet.

Each Siemens Turkey supplier signs the Siemens Code of Conduct consisting of requirements such as avoiding child labor; meeting environmental, health and safety (EHS) requirements; and complying with local laws and regulations. There is also a special assessment tool for ensuring conformity to these requirements. All suppliers are expected to pass the Corporate Responsibility Self-Assessment (CRSA). Furthermore, Siemens Turkey supports its suppliers and customers with solutions offered by Siemens Financial Services.

The smart financial solutions of Siemens Financial Services' Leasing Organization in Turkey help SMEs to meet financial challenges with customized financial solutions. These solutions also offer customers the opportunity to reach the most advanced technologies while enjoying the convenience of purchasing on a single platform.

Informal economy will be reduced to less than 5%

Reducing the informal economy is a material issue for Turkey. The Ministry of Development aims to reduce it to less than 5% by 2018. This will not only ensure advances in macroeconomic factors such as economic stabilization, distribution of income and employment, but also play an important role in increasing efficiency, competitiveness and public revenues in the middle-to-long term. Siemens Turkey also works both within the corporation and with its suppliers to reduce the rate of the informal economy in Turkey. It requests tax statements from all suppliers and requires them to make social insurance payments for all of their employees. Siemens Turkey itself paid TL 147 million corporate tax between January 1, 2014, and September 30, 2015.

Aiming to support SMEs and reduce the informal economy, Siemens Turkey is cooperating with like Quality Association of Turkey (KALDER), Ethics and Reputation Society (TEİD) and Association of Supply Chain Management (TEDAR). Siemens Turkey is among the founders of these associations.

Siemens Financial Services' Leasing Organization in Turkey provided a total financing of EUR 143 million in 2015.

2023 targets of Siemens Turkey

- To purchase 80% of total supplies from SMEs



30%

Share of Siemens products,
solutions and services in the total
electricity generated in Turkey

Growth through efficient and environment-friendly energy

A stronger economy and a cleaner world with efficient energy generation

As Turkey continues to move toward becoming a regional leader with its overall economic development, it has also established itself as one of the fastest growing countries in the global energy markets. According to the data of Turkish Statistical Institute (TÜİK), annual growth rate of the installed power in Turkey reached approximately 9%. An increase in energy demand is also observed in parallel to the economic growth in Turkey. This demand is mostly met through energy imports in addition to local production. According to TÜİK data for 2015, energy imports accounted for USD 38 billion of the total imports of Turkey, which was USD 207 billion. The major reason for the decrease in energy import costs from USD 55 billion in 2014 to USD 38 billion in 2015 is the fall in oil prices.

As a priority issue for Turkey, energy generation and imports are also a part of the government's program. With the Vision 2023 program announced in 2014, the government aims to decrease energy imports by means of maximizing the utilization of local sources. It is stated in the program that the main strategy for achieving this goal is utilizing renewable sources and local coal in energy generation. Important incentives are provided particularly for biofuels to be used in energy generation.

Renewable sources are among the most important items in the government's agenda not just for energy efficiency but also in terms of environment-friendly practices. According to the National Renewable Energy Action Plan 2014 by the Ministry of Energy and Natural Resources, the aim is to increase installed solar energy capacity in Turkey to 5 GW and wind energy capacity to 20 GW by 2023.

Natural gas has the largest share in energy imports

The largest share in energy imports of Turkey belongs to natural gas. According to

TÜİK data, 99% of the demand for natural gas is met by means of exportation and an important portion of this gas is again utilized in energy generation.

As of the end of 2015, 50 billion cubic meters of imported natural gas had a 48% share in the total energy generation. However, today, as a result of the fall in electricity prices and increase in natural gas prices, the share of natural gas in energy generation is 32%. Methods and systems of efficient utilization should be developed in order to benefit maximally from natural gas, which is such an expensive energy source. On the other hand, modernization practices are applied in previously state-owned, then privatized power, which use approximately 50% of their capacities.

As a result of such practices, these plants are expected to operate more efficiently in the next three to four years.

Superior efficiency with H-class turbines

Siemens holds the record in the efficiency of the turbines used in natural gas combined cycle plants in Turkey. The company used its H-class gas turbines for the first time in Turkey at the 600 MW Samsun Combined Cycle Plant owned by Cengiz Energy and thus achieved an efficiency level of 61%. This facility, which had the highest performance in the world by the time it was commissioned, saves EUR 30 million worth of natural gas per year, compared to a same-scale facility with similar gas turbines. When compared to the turbines with legacy technologies, the saving exceeds EUR 100 million.

H-class turbines will be activated in four power plants with a total installed base of 2.4 GW (including Samsun) by the end of 2017. When all of these plants are commissioned, more than 25% of the total natural gas installed base in Turkey (approximately 24 GW), which amounts to a capacity of 6.4 GW, will be provided by Siemens turbines.

16% of the installed base in Turkey gets professional service support from Siemens.

Siemens aims to increase its market share in Turkey, which can become one of the biggest wind energy manufacturers in Europe, to 30%.

Efficiency increase with privatization

Modernization of privatized power plants is of great importance for energy efficiency and energy generation. With the rehabilitation and refurbishment services it offers, Siemens provides solutions that can increase the total capacity by up to 80%. According to private market analyses in 2015, increase of efficiency by a minimum of 80% equals the energy to be generated by a new thermal plant of 3,000 MW installed base.

Siemens will realize the first of such projects in Hamitabat. With the 2 H-class turbines provided in the refurbishment process of the facility and other power island components, Hamitabat Power Plant will reach a capacity of 1.2 GW.

Particularly where the construction or privatization of coal-fired power plants is concerned, CO₂ emissions are the most fundamental concern. Turkey has undertaken to reduce its emissions within the framework of the agreement it signed at the Paris Conference. In order to realize this goal, coal-fired power plants should be operated in the most sustainable manner possible. Siemens provides solutions for thermal plants to be operated in a sustainable, efficient and safe manner throughout their lifecycles.

Important steps toward renewable energy

One of the areas in which Turkey is pursuing breakthroughs is the utilization of renewable energy. The multitude of renewable energy sources in Turkey is emphasized in the government's Vision 2023. There are plans to achieve maximum benefits from these sources, which will contribute to the Turkish energy industry in general.

Siemens contributes to Turkey especially in achieving 2023 goals with special solutions for hydroelectricity and geothermal power plants. 3 GW of the 6 GW installed base of

the river type hydroelectricity power plants is currently generated by Siemens' products and solutions. By contrast, Siemens solutions contribute 90 MW to the 695 MW capacity of geothermal power plants.

Another important renewable energy source is wind, which has great potential in Turkey. As of September 2016, Siemens has a share of 450 MW in the wind power plants that have a total installed base of 4.6 GW. By 2020, Siemens aims to increase its market share to 30% in Turkey, which has the potential to become one of the major wind energy manufacturers in Europe.

Comprehensive portfolio, from product to service

Construction or modernization of power plants means investments on a large scale. For the purpose of increasing energy efficiency, maintenance of power plants is as important as their installation. To bring stability and sustainability to energy generation in Turkey, Siemens offers 24/7 maintenance support to power plants.

The scale of long-term service agreements that Siemens provides to its customers for rotating equipment amounts to a total capacity of 12 GW. In other words, 16% of the installed base in Turkey gets professional service support from Siemens.

Siemens holds the record in the efficiency of the turbines used in natural gas combined cycle plants in Turkey. The company used its H-class gas turbines for the first time in Turkey at the 600 MW Samsun Combined Cycle Plant owned by Cengiz Energy and thus achieved an efficiency level of 61%.

“Siemens Turkey combines its expertise in digitalization and automation with its flawless and compact production philosophy at the production facility in Gebze. Thus, we will not only play a major role in the development of Turkey with new products, but also will contribute significantly to increasing local production capacity and volume of exports.”

Oğuz Tezel,
Country Division Lead of Energy Management and Executive Board Member,
Siemens Turkey



Developing local jobs and skills



40,000

Siemens creates direct, indirect and induced employment for more than 40,000 people in Turkey.



Contribution to national prosperity through new business areas

Increasing employment

High-level and qualified employment is one of the vital conditions for economic prosperity. It is the foundation for a stable society that is capable of adapting to changes and overcoming challenges.

Reducing the rate of unemployment, increasing the share of skilled workforce and improving the efficiency of workforce are among the major goals of Turkey. Today the salaried employee rate among the age group 15-64 is 50% in the country. This rate is 65% on average in OECD countries.

According to the April 2016 data of Turkish Statistical Institute (TÜİK), the rate of unemployment in Turkey is 9.3% and the rate of unemployed youth ages 15-24 is 16%. In addition, there is a need for a skilled workforce in companies. This problem will gain more importance as the required qualifications keep changing in today's world of digitalization and automation.

Furthermore, there is a huge gap between male-female population in employment. The rate of salaried male employees is 69%, while that of females is around 30%.

According to the Progress Report on Turkey, by the European Commission in 2015, rates of membership in trade unions increased from 9.5% to 11.2% in the private sector. However, the rate of employees covered by collective labor agreements is not as high as expected. In addition, given the fact that the rate of unregistered employees increased to 34% in 2015, such informal employment also constitutes an important problem for Turkey. The problem of child labor persists, especially in agriculture.

Direct and indirect impact on employment

Known as "a Turkish company with global roots" for a long time, Siemens makes considerable contributions to employment in Turkey. It provides employment to

40,000 people, 3,007 of them through direct employment at offices located in 6 cities (Istanbul, Ankara, İzmir, Adana, Bursa, and Kocaeli), 2 production facilities in Kartal and Gebze, and 13 project sites in different locations. 94.6% of 2,084 white-collar employees have graduate, master's or PhD degrees, while 75.6% of 923 blue-collar workers are graduates of vocational schools. 35.5% of Siemens Turkey employees are under the age of 35 and 18% of all employees have more than 15 years of experience in the company.

Siemens Turkey also makes a significant indirect contribution to employment. Through local procurement, expenditures for employees and offering technologies that provide added value to customers, Siemens Turkey creates indirect employment for 21,000 people and induced employment for another 16,000. Thus, employment provided by Siemens Turkey reaches 0.2% of the total employment, according to 2015 data.

Siemens Turkey creates 0.2% of employment in Turkey.

Placing emphasis on local investments and creating new business opportunities, Siemens Turkey will create employment for 800 people in its new tram factory in Gebze.

As Siemens Turkey is strict about compliance with laws, all employees are registered in the Social Security Institution. Furthermore, Siemens Turkey requires that all employees of its suppliers are registered in the Institution and all suppliers avoid child labor and work in conformity with ethical standards.

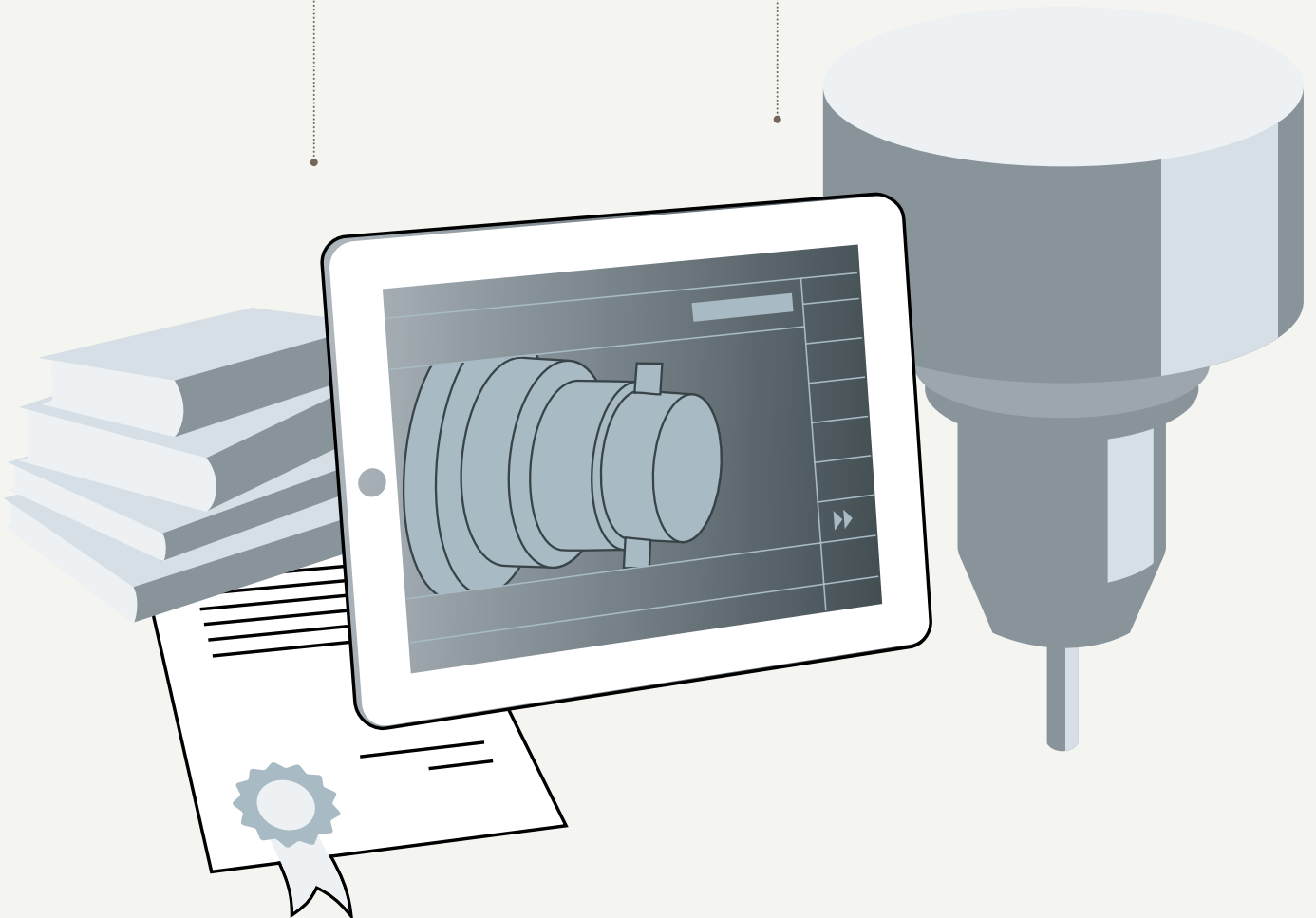


TL 7.2 million

Budget allocated to employee trainings at Siemens Turkey between January 2015 and May 2016

4,500

Number of participants in trainings organized by Siemens Turkey between January 2015 and May 2016



Education for a bright future

Developing occupational skills

The importance of and need for a skilled workforce is gradually growing as such workforce affects the economic growth of countries and increases the level of affluence. In addition to public education, company trainings are also crucial in creating a workforce of expected qualities. As a country with a considerable young population, it is very important for Turkey to increase employee skills. Occupational skill development programs are important for employee motivation and loyalty as well.

Among other important issues are increasing the rate of female participation in employment, improving severance payments and subcontracting systems, ensuring more efficient methods for flexible work models, and developing more efficient social support systems.

Needs analyses for an active workforce and planning of occupational training programs according to the market needs are within the scope of the 10th National Development Plan. The plan also aims to devise alternative financing models for education, open private educational institutions and promote active administrative and financial participation of the private sector and occupational organizations in occupational training processes.

Although the rate of young people not in employment, education or training (NEET rates) decreased in the last few years, Turkey ranked high in NEET among members of OECD with a rate of 28.4% in 2014. In Turkey, individuals receive 16.9 years of education between the ages of 5 and 39, whereas this figure is 17.5 years in OECD countries.

Social skills and occupational knowledge

Siemens Turkey places much emphasis on continuous training of its employees and providing each employee with access to training regardless of their qualifications. The company also attaches importance to social skills as well as technical trainings. Focusing on digitalization and its effects on

our daily lives to be able to follow the latest technological trends, Siemens Turkey not only offers special training for a Digital Enterprise Team, which is responsible for strengthening digital cultural change, but also organizes trainings for all employees. Placing emphasis on developing local occupational skills as well, Siemens Turkey provided 4,500 participants with an average of 3.2 days of training between January 2015 and May 2016 and invested TL 7.2 million in these trainings. The rate of satisfaction was 3.7 over 4. A training investment of TL 1,600 per employee is a sign of the company's commitment to creating a highly skilled workforce.

New opportunities through horizontal career development

With the Expert Career Program, supporting horizontal career development, 188 people received certification in their own expertise areas in 2016. Employees who successfully complete Commercial, Field Services, Engineering, Research and Development, Project Management, Sales and Marketing Expert Career Programs become a part of the Expert Career Compensation and Benefits plan. In addition to the opportunity of purchasing shares from Siemens, they can also benefit from such opportunities as detailed check-up programs, benefit car, and so on.

Siemens Turkey also offers a mentoring program, to its employees. Since 2007, 221 employees have benefited from the program which develops their leadership skills and provides them with new skills. 56 rotations were made within the company in 2015 to maintain occupational development. Attaching importance to international work experience, Siemens Turkey supports outbound delegation (14 employees) and on-the-job training in another country (3 employees). With 75.6% of its blue-collar employees being vocational school graduates and 94.6% of white-collar workers with graduate and higher degrees, Siemens Turkey employs 1,267 people with engineering degrees and 589 of them are working as active engineers.

Siemens Turkey offers trainings to its customers and suppliers as well. In 2015, 1,650 people were given 27,768 hours of training.

Training investment of TL 1,600 per employee is a sign of the company's consistency in creating a highly skilled workforce.

2023 targets of Siemens Turkey

- To increase number of training days per employee from 3.2 to 4



TL 14 million

Investment by Siemens in the education of high school and university students

57,000

Number of primary school students that had access to the book *The Wind and The Fisherman* (Turkish, English, German, Danish)



Turkey's future is in the hands of the youth at the age of education

Supporting education

Education and training make it possible for individuals to make their own contributions to the society and economy by helping them gain the knowledge, skills and qualifications they need. Therefore, they play an important role for the social and economic affluence of a country.

In Turkey, the unemployment rate among the young population is 16% as of April 2016 and it is possible to reduce this rate only through technology- and industry-oriented education systems. Therefore, cooperation of the industry and education sectors is of utmost importance for the development of the workforce market.

Our financial and moral contribution to education

In full awareness of this fact, Siemens Turkey places an emphasis on supporting education in high schools and universities. Within this scope, 18 high schools and universities were visited and more than 120 hours of time was devoted to students in 2016. During these visits, students were informed about the trends in the market and Siemens was introduced to them.

Investing a total of TL 14 million in high school and university students, Siemens Turkey has so far provided 386 university students with scholarships and spared a budget of TL 12.5 million for this program since 2000. The company also gives scholarship students the opportunity to work either part-time or full-time at Siemens. While 24 students continue to work part-time at Siemens Turkey, the total number of students who have been given the opportunity so far is 81. In addition, 86 students have attended the 1-year-long mentorship program.

Within the scope of the Career Days event organized five times by Siemens Turkey since 2011, 2,500 students have visited Siemens and had the opportunity to get information on Siemens' areas of operation

directly from employees. The number of students hosted on the Siemens campus has been 700 this year.

Department-based trainings

Siemens Turkey also implements various department-based education collaborations and programs. For instance, the Oil and Gas Department designed a Power Generation Business Management training program for the freshmen of the Department of Electrical Engineering at Bahçeşehir University.

The Wind and Renewable Energy Department reached 57,000 primary school students with the story book *The Wind and The Fisherman* which is about the operation principles of wind turbines. The book has also been translated into English, German and Danish. An audio book version has been released for the hearing impaired. This children's book series will be continued with the cooperation of other departments. Also cooper-

Every year 250 university students and 200 high school students work at Siemens Turkey as interns.

ating with the Turkish-German University, Siemens Turkey will keep on offering new opportunities for high school and university students and designing programs to help them develop local skills.

2023 targets of Siemens Turkey

- To increase internship rates of high school and university students by 10%

“With approximately 300 Turkish researchers and engineers, we develop future technologies at our R&D centers.”

Erdem Alptekin,
Director of Corporate Technology, Siemens Turkey



Driving innovation



TL 60 million

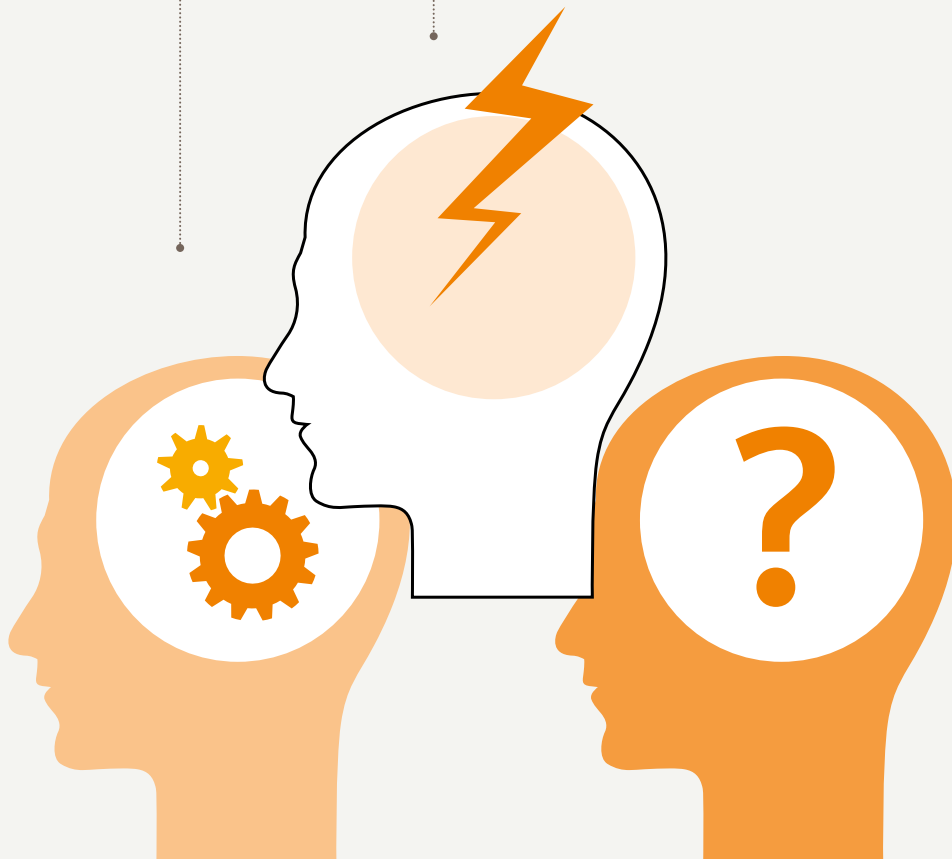
Siemens Turkey's R&D budget for 2015

10%

Share of R&D employees in the total workforce of Siemens Turkey

x5

Number of employees in the R&D centers has multiplied by 5 in 5 years



Innovation for the sake of sustainable development

R&D investments

R&D is of great importance in order for Turkey to achieve sustainable development, to ensure growth in employment and economy, and to create an economic structure developing through innovative technologies.

According to the data published by the Ministry of Science, Industry and Technology in June 2016, there are 266 R&D centers in Turkey with a total of 27,558 employees.

R&D needs to be improved to attain Turkey's primary aims, which are structuring the national economy so as to have international competitive power, cutting production costs, and increasing efficiency by improving product quality. Therefore, the 10th Development Plan of Turkey includes the goals of training qualified researchers and increasing their employment in the private sector; ensuring the proliferation of the number of research, incubator, accelerator, technology and innovation centers; and increasing the number of researchers holding a PhD degree.

In addition, R&D centers of companies are bestowed certain tax exemptions and a 15% price advantage is offered to local applicants in accordance with the Public Procurement Law, as outlined in the 10th Development Plan.

However, public purchases are expected to contribute more to technology transfer or industrial development. Therefore, the 10th Development Plan includes the goal to increase R&D expenditure by way of a public procurement system. In addition, the Supreme Council for Science and Technology (BTYK) announced goals to increase the number of PhD scientists working in the field of R&D and to strengthen the cooperation between researchers and industry with the goal of improving the efficiency of national science and technology governance.

Continuing R&D investments in full pace

Siemens Turkey received its R&D Center certification in 2011. Having positioned its Teknopark İstanbul Office as an R&D Center, Siemens Turkey created an attractive research environment for qualified employees. While there were 56 employees in 2011, today the Center has 264 employees, with 46 holding master's and 3 holding PhD degrees. This figure is twice the average for R&D centers in Turkey. The rate of female employees at Siemens Turkey's R&D centers is approximately 25%.

In full awareness of the fact that not only infrastructure works and qualified employees but also sustainable support are crucial, Siemens allocated approximately TL 60 million to R&D in 2015. Based upon 2008 data of the Ministry of Science, Industry and Technology, the average budget of R&D centers in Turkey is calculated as TL 35.8 million. This means Siemens Turkey's budget is almost twice the country average.

Siemens Turkey R&D Center invested TL 1 million 312 thousand in the technical and social skills training of employees between 2015 and 2016.

R&D investment of Siemens Turkey is 1.6 times higher than the average in Turkey.

Aiming to increase the number of software architects, technology leaders and project managers in its R&D Center, Siemens Turkey offers the "Expert Career for R&D Employees" program to create employment opportunities for researchers and qualified workforce. Based upon four levels, namely Engineer, Experienced Engineer, Expert Engineer, and Lead Engineer, the program aims to make the R&D Center more attractive for employees. In order to develop new technical specialty areas in the R&D Center, to be more innovative and to enrich Siemens' Digitalization Portfolio, nine task forces have been developed within Siemens

2023 targets of Siemens Turkey

- To allocate TL 2.8 million to the training of R&D employees

Turkey: Service Oriented Architecture (SOA) in Industrial Automation, Internet of Things (IoT) and Security in IoT, Data Analysis for Industry, Cloud Technologies for Industrial Automation and Industrie 4.0, Industrial Communication Technologies, Time Sensitive Networks (TSN) and Applications, Software Quality, Test Automation, Test Quality and Methodology, and Embedded Linux on Simatic HMI Panels. The goal of these task forces is to encourage employees to work in these research areas and develop new ideas.

Siemens Turkey also organizes activities to encourage young people to think innovatively. One such activity is the Siemens Innovation Contest for students and new graduates. Owners of the selected eight projects are given the opportunity to participate in Siemens Innovation Camp and produce prototypes of their ideas.

Continuous development

Carrying on its R&D work with these activities and initiatives, Siemens Turkey keeps improving itself. Focused mainly on developing innovative products for industrial and energy automation, the R&D Center's new aim is to improve its expertise in fundamental and applied research areas and thus to become a global center of excellence.

“We handle Industrie 4.0 within the framework of ‘Digital Factories’ and focus on digitalizing both our own manufacturing processes and those of all industrial corporations in the world. We, as Siemens, believe we guide Industrie 4.0 not only in the world, but also in Turkey.”

Ali Rıza Ersoy,
Committee Member, Deputy General Manager and Digital Factory Country Lead,
Siemens Turkey



**Siemens inspires
Turkey in its
journey toward
Industrie 4.0**

The road to fully digitalized manufacturing

Industrie 4.0

Turkey has a logistics advantage thanks to its geographical location and a capacity for low cost production due to cheap labor. According to the Global Manufacturing Cost Index of Boston Consulting Group (BCG), while manufacturing costs in Turkey are 98 units, those of the USA and Germany are 100 and 121 units, respectively. Therefore, Turkey's manufacturing cost is 2% lower than that of the USA and 23% lower than Germany. These figures indicate that Turkey has a competitive advantage in the global economy. This can be very advantageous in the Industrie 4.0 period, which can be defined as the digitalization of all production systems.

Manufacturing for life, technology for the future

As the leading company in the digital transformation of the Turkish industry, Siemens Turkey interprets Industrie 4.0 within the framework of "manufacturing for life, technology for the future" and focuses on improving the processes of all industrial institutions worldwide along with its own manufacturing processes.

A certain level of experience in Industry 3.0 is a prerequisite for transition to Industrie 4.0. With Siemens Automation Technology used in 50% of the total automobile production in Turkey, Siemens Turkey is in a perfect position to lead the transition.

Siemens offers NX manufacturing simulation solutions to companies. With this simulation, in addition to design modeling, 3D plans can be analyzed on an advanced level as well. Furthermore, the Teamcenter platform provided by Siemens helps its partners in standardizing the whole manufacturing process, including planning, designing, production, and service.

Tofaş is one of the customers that use NX and Teamcenter. By using both of them, Tofaş makes it easier for engineers worldwide to cooperate.

Offering Durmazlar Makine A.Ş. comprehensive R&D services, from design to testing and data services, Siemens Turkey has provided support for the production of the first Industrie 4.0 compatible machinery. The new machinery enables flexible manufacturing with low costs and higher energy efficiency. The laser cut machine produced by Durmazlar is being exported all over the world.

Siemens Turkey guides Industrie 4.0

Along with all of these technological solutions it offers, Siemens Turkey also aims to guide the country in comprehending and widely adopting the concept of Industrie 4.0. So far, it has organized 50 seminars and given detailed information on the subject to 13,000 people. It has also reached an even larger audience by preparing the first Industrie 4.0 booklet in Turkey. Furthermore, Siemens is the main sponsor of the first Industrie 4.0 platform in Turkey (www.endustri40.com), which gathers all segments related to

Siemens Turkey interprets Industrie 4.0 within the framework of "manufacturing for life, technology for the future."

With its technological solutions and awareness-raising efforts, Siemens Turkey supports the acceleration of an adaptation process for Industrie 4.0.

industry, from academia and professionals to decision-makers and students under a single roof. This platform is visited by 1,500 people daily.

2023 targets of Siemens Turkey

- To introduce Industrie 4.0 to at least 100 industrial enterprises by 2023



93 TB

Amount of data generated by Siemens' devices in the energy and healthcare industries of Turkey

2,500

Number of Siemens devices connected to the Internet of Things in Turkey



Value created from data is on the rise

Ensuring digitalization

Data do not mean much on their own. We need to benefit from technology and digitalization to translate such data into meaningful information. Smart processing of data and the combination of data with engineering technologies enable flexibility and endurance in manufacturing throughout the world, while also offering more predictable and efficient maintenance. The Internet of Things has special importance in digitalization. Having set off with machine-to-machine communication and finally evolving to a point where “everything” communicates, this concept makes it possible to develop disruptive performance in energy generation, energy distribution, healthcare, transportation management, and industrial manufacturing.

Flexible production and increase in efficiency

As a leading company in digital transformation, Siemens plays an important role in data generation and analysis. In Turkey, Siemens has more than 2,500 connected devices in energy and healthcare industries. The company generates 93 TB of data every year with these devices. Through its efforts in Industrie 4.0, Siemens plans to increase the data traffic it generates even more in the future.

Siemens’ digital services are described as “intelligent information systems.” These services combine Siemens’ most advanced algorithms, data analytics, and machine-learning technology with the company’s extensive industry expertise and more than 20 years of experience in collecting and analyzing data. With such digital services, Siemens enables its customers to go far beyond conventional routine maintenance and upgrades to boost their performance. This can be achieved by, for instance, operating power plants more flexibly, improving system and plant performance, and performing condition-based maintenance based on data-driven analyses. Thanks to Siemens’ data analysis and professional

experience, customers can know when and how they can operate their plant at above and beyond normal operating conditions.

Optimizing plant performance is another advantage offered by digitalization. Siemens renders a detailed thermodynamic simulation of an entire combined cycle plant. This enables the customers to understand how they can run their plant more efficiently and helps them perform benchmark analyses. Thus, they achieve not only higher gas turbine performance, but also higher plant efficiency and revenue.

Siemens Turkey, itself, is implementing digitalization. Using this concept in its own wind energy projects, it provides remote maintenance services to 128 wind turbines. Thanks to this technology, 58% of alarms can be resolved without having to visit the turbine. This means a higher level of availability and better efficiency in operations.

Siemens is also working on transforming the generated data into more valuable informa-

Industrie 4.0 will sustainably increase the data traffic within Siemens’ Internet of Things structure.

tion for its customers. To this end, it combines data integration and analysis, connectivity and all the technological components required for cyber security with Sinalytics, which is a connected-technology-based technology. Sinalytics analyzes the data from over 300,000 machines and devices connected to the global system, compares them to the information gathered from other data sources, and integrates them. Even weather information can be included in the analysis to enhance insights. Sinalytics is currently used in 50 projects around the world, and Siemens Turkey aims to add more value to its customers by using this platform.

2023 targets of Siemens Turkey

- To become the impetus in digitalization of the Turkish economy



43%

Siemens is the leader of the industry with 43% of power distribution companies using its digital grid solutions.

5.6%

Average annual increase in electricity consumption in Turkey between 2007 and 2012



More efficient energy generation and transmission

Siemens Digital Grid

Being one of the fastest growing energy markets today, Turkey has been witnessing a rapid increase in demand in all segments of the energy sector for years. According to the report of the Ministry of Foreign Affairs on Turkey's Energy Profile and Strategy, Turkey has become the second largest economy after China in terms of increase in electricity and natural gas demand since 2002.

As stated in the 10th Development Plan by the Ministry of Development, Turkey's primary energy consumption increased 2.8% on average per year between 2007 and 2011, and electricity consumption reached an average annual increase of 5.6% between 2007 and 2012. This trend became even more visible after the effects of the economic crisis started to fade in 2009. With the Energy Efficiency Strategy document published in 2012, it is aimed to reduce energy intensity at least by 20% by 2023.

Staying competitive in the energy market requires focusing on renewable energy. The 10th Development Plan includes goals to make the investments required for integrating renewable energy generation operations into the grid without jeopardizing system security, to reduce losses in the generation and transmission of power to 15%, and to minimize illegal use of electricity.

Comprehensive product, solution, system and service portfolio

As one of the major suppliers in electricity generation/transmission/distribution, oil and gas, industry, and infrastructure, Siemens has a comprehensive portfolio of products, solutions, systems, and services that optimize the whole product and lifecycle of energy companies – from efficient product designs and flexible management to maintenance of energy systems.

43% of energy distribution companies benefit from the digital grid solutions provided by Siemens Turkey and this takes Siemens to the leading position in the industry. Through these distribution companies, Siemens Digital Grid products, solutions, systems, and services reach 46% of their customers. According to the data published in 2014, while the energy loss of 21 power distribution companies in Turkey is 14% on average, this rate is reduced to 7% in companies that employ Siemens Digital Grid. Aiming to become the energy hub of the region, Siemens Turkey plans two additional back-to-back (BTB) connections in Iran, while the High Voltage Direct Current (HVDC) connection is still in execution phase. And digitalization in the bridge technologies is also promising for the national grid of Turkey.

Today, there is aggressive local and global competition in digitalization.

Turkish Electricity Transmission Company (TEİAŞ), the only transmission system operator in Turkey, uses Siemens Digital Grid solutions.

“The increase in installed wind power capacity of Turkey means reducing dependence on imported energy and increasing employment and know-how in the industry. We believe that, as an infinite source of energy, the wind will attract more and more investments.”

Hakan Yıldırım,
Country Division Lead of Wind Power & Renewables, Siemens Turkey



Environment and sustainability



1.7%

Siemens' contribution to reducing Turkey's CO₂ emissions per year, with its environment-friendly product portfolio

40%

Share of environment-friendly product portfolio in the total revenue of Siemens Turkey.



Siemens works hard to mitigate the impact of climate change

Reducing CO₂ emissions

Climate change is among the greatest problems that humanity faces in the 21st century. Being a potential cause for severe socio-economic consequences due to its negative effects, threatening human health, ecosystems, and even the existence of the human race, climate change has become a material concern in the international agenda.

Just as in the whole world, Turkey also faces threats such as the rise in sea levels, floods in river and shore areas, sudden changes in temperatures, loss of agricultural and hydro-electricity production potential, and loss in biodiversity.

In full awareness of such environmental and socioeconomic effects of the climate change, Turkey takes important steps. At the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change held in 2015, an agreement was signed to call the whole world to take action together to combat climate change. Known as the Paris Agreement, this document was accepted unanimously by the delegates of 195 countries, including Turkey. The agreement's goal is to limit the global average temperature increase to 1.5-2 degrees until the end of the century. Turkey announced that it will reduce its greenhouse gas emissions by 21% by 2030 within this scope. In addition, Turkey's Climate Change Strategy 2010-2023 includes the goal to increase the share of renewable energy in the total electricity generation to 30%.

Siemens reduces its carbon footprint

As one of the world's largest industrial groups, Siemens is aware of its environmental responsibilities and contributes to the reduction of CO₂ emissions and mitigation of climate change both with the regulations it implements internally and with its environment-friendly product portfolio that increases energy efficiency. Siemens aims to reduce its carbon footprint by 50% until 2020 and become carbon-neutral by 2030.

Measures taken by Siemens Turkey

Siemens Turkey's carbon footprint resulting directly from its own operations was calculated as 19,000 tons in 2015. This equals the carbon footprint of 43,000 households. Adopting Siemens' global goal to become carbon-neutral by 2023, Siemens Turkey focuses on areas such as employee awareness, energy efficiency, LEED certificated buildings and factories, efficient fleet management, and forestation.

Acknowledged for its environmental efforts, Siemens Turkey won the first prize in the "Green Fleet Management of the Year" category of "2014 Fleet Managers of the Year Awards" of fleet rental company LeasePlan and the *Ekonomist* magazine as well as the second prize in the "Fleet Management of the Year" category. The awards were given to Siemens Turkey as 96% of its fleet is diesel vehicles and electrical vehicles are also used for short distance transportations. Current CO₂ emission rate of the fleet is 120 g/km.

Siemens Turkey's largest production facility in Gebze has obtained the country's first LEED certification.

Siemens Turkey aims to become carbon-neutral by 2023.

Environment-friendly product portfolio

In addition to internal efforts, Siemens also contributes to the environmental sustainability with the products and services it provides. Acquiring 40% of its revenues from its environment-friendly product portfolio, Siemens enables 1.7% reduction (7.7 million tons) in the CO₂ emissions of Turkey per year. This is equivalent to the CO₂ emissions of 3.3 million automobiles. The efficient gas and wind turbines of Siemens have an especially great influence on reducing the emissions.

2023 targets of Siemens Turkey

- To become carbon-neutral



10%

Siemens Turkey's share in the electricity generated through renewable energy sources



Renewable energy for a sustainable environment and economy

Siemens creates a difference in wind power

Renewable energy sources constitute one of the most important components of energy diversification strategy of the Turkish government. Among the main goals of the government are meeting 30% of the energy demand of the country from renewable energy sources by 2023 (International Energy Agency –IEA, Energy Supply Security 2014) and minimizing the dependence on oil and gas exports from the Russian Federation and Iran (10th Development Plan). Therefore, the energy infrastructure of Turkey will be improved in parallel with the dramatic increase in renewable energy capacity and such investments should increase.

According to Turkey's Installed Electricity Capacity 2014 report by the Energy Institute, dated July 31, 2016, Turkey has 5 GW installed wind power capacity. This figure constitutes 6.6% of the total energy base, which is 77 GW.

The goal of increasing solar energy capacity to 5 GW and wind to 20 GW by 2023 is stated clearly in the National Renewable Energy Action Plan 2014 by the Ministry of Energy and Natural Resources. In line with this goal, The Energy Market Regulatory Authority (EPDK) will hold a tender for 3 GW wind power generation capacity this year. The project is planned to be completed by 2020 (Turkish Wind Energy Association, Press Release, February 2016).

World leader in wind power

Siemens distinguishes itself especially with its products and services in the field of wind power. Siemens has become the world leader in on-shore and off-shore wind power generation as the result of its recent agreement with the Spanish company Gamesa in June 2016.

Siemens Turkey continues to generate wind power in low-wind and high-wind areas. In addition, it operates in the geothermal and solar markets with its electricity and

automation solutions. Siemens products and solutions have so far contributed to 3,300 MW installed power generated from renewable sources in Turkey. The amount of energy that Turkey has generated from such sources is 33,000 MW. Thus, Siemens has a 10% share in energy generated from renewable sources.

With a source-based breakdown, the share of Siemens in Turkey is 10% in wind power, 10% in hydroelectricity and 9% in geothermal energy. Especially in wind power Siemens attracts attention with its Direct Drive technology. This technology reduces maintenance needs of wind turbines and cuts service costs.

With the projects to be completed by the end of 2016, wind power plants built with the support of Siemens will be generating approximately 580 MW of energy. Thus, as well as providing energy to 819,843 households, Siemens will also have prevented 2,148,300 tons of CO₂ emission.

Siemens Turkey contributes to the government's goal of increasing the share of renewable-based energy to 30% by 2023.

2023 targets of Siemens Turkey

- To increase total share in yearly installed wind energy to over 30%

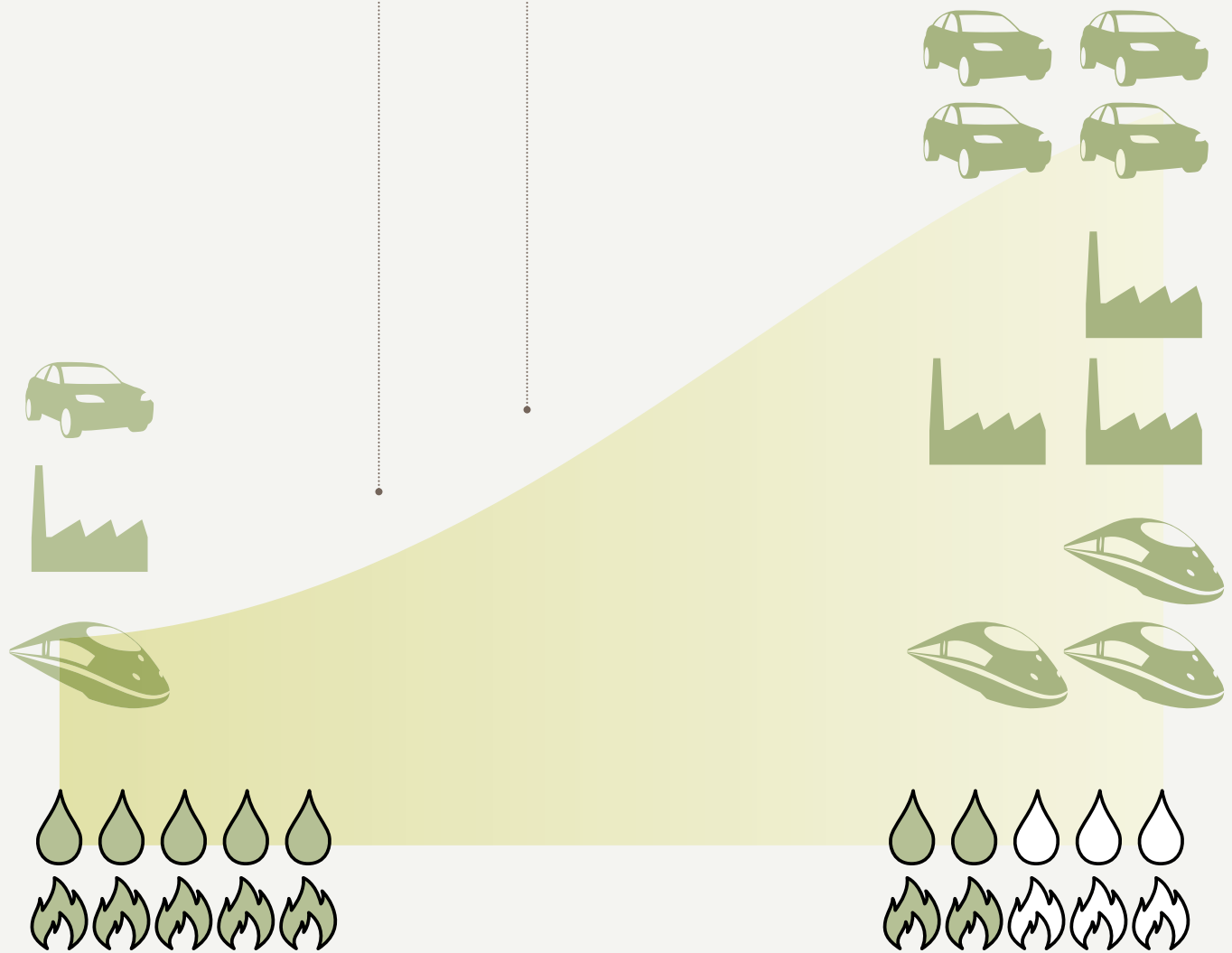


>125,600

In about 100 energy-efficiency projects by Siemens, the contribution made to the environment has been equivalent to planting more than 125,600 trees.

1.5 years

Return on investment in Siemens' energy efficiency projects



Siemens cuts energy costs and protects the environment

Energy efficiency solutions in facilities and buildings

According to the Energy Information Administration (EIA) report, Turkey is one of the most energy-consuming economies compared to other developed countries.

Goals stated in the Action Plan for Improving Energy Efficiency by the Ministry of Energy and Natural Resources of Turkey include reducing Turkey's primary energy intensity, which was 0.2646 TOE (tons of oil equivalent)/USD 1,000 in 2011 to less than 0.243 TOE/USD 1,000 by the end of 2018. The Plan also mentions the objective of reducing energy consumption in public buildings by 10% until 2018, compared to 2012, through increasing efficiency.

The 10th Development Plan also includes objectives such as minimizing the dependence of Turkey on energy imports, making energy costs sustainable and protecting the environment. According to the Energy Efficiency Association (ENVER), there is an energy conservation potential of 30% in the buildings and 20% in the industry.

High levels of energy savings with Siemens

In line with these goals, Siemens offers energy efficiency services by taking into account the electricity consumption of production facilities and all processes that consume energy.

In addition to offering energy efficiency consultation services with 10 certified employees, 9 of whom hold Energy Management Certificates and 1 is LEED AP (Green Building Expert) – all approved by the Ministry of Energy and Natural Resources – Siemens Turkey also offers ISO 50001 Energy Efficiency Management services.

Having conducted 80 energy health checks until May 2016, Siemens Turkey has offered its customers around some 1,200 projects to increase energy efficiency, 61 of which have been implemented.

In these projects, the return on investment was calculated as 1.5 years. TL 80 million (5,000 TOE) worth of energy was saved through these projects. Thus, CO₂ emission was cut by 33,000 tons per year and 49 million kWh energy was saved. These figures are equivalent to planting 100,000 trees.

Siemens Turkey Building Technologies division puts its signature under important energy efficiency as well. Energy consumption of a building corresponds to 40% of its lifecycle cost. With the efforts of Siemens Building Technologies, it is possible to save 26% energy at hospitals, 41% at hotels, 27% at residences, 52% at offices, 41% at schools, and 49% at shopping malls.

With Building Technologies, Siemens ensured energy saving of 44 million kWh in three years, which equals planting more than 25,600 trees. Despite these successful projects, energy efficiency projects are not as widespread as

Up to 20% energy savings will be achieved in the manufacturing processes at a tram factory in Turkey with the help of a new ventilation system, an efficient isolation system, use of daylight, low LED lighting, and a suitable heating system.

Building Technologies make energy savings possible in all buildings and all lines of business thanks to the Energy Efficiency product and service portfolio.

expected, due to reluctance of senior executives to perform energy efficiency projects and especially Energy Savings Performance Contracts (ESPC), high costs of ESPC, and lack of incentive schemes for buildings. Making Energy Identity Certifications obligatory for buildings by the end of 2017 will help accelerate projects in this field.

2023 targets of Siemens Turkey

- To increase market share of Building Technologies products and solutions to 40%



11%

In 2015, Siemens Turkey reduced its water consumption by 11% in comparison to 2012

Siemens protects natural resources

Protection of the environment and water supplies

The General Directorate of State Hydraulic Works (DSİ) positions Turkey as a country facing a water shortage, based on the annual quantity of water per person. In our country, average annual quantity of water per person is approximately 1,519 m³.

According to the estimates of Turkish Statistical Institute (TÜİK), Turkey's population in 2030 will reach 100 million and DSİ estimates that the quantity of available water per person by then will be 1,120 m³/year. It should be noted that these estimates can be valid only if the existing supplies are maintained, without any harm, within 14 years. Therefore, water supplies must be protected and used reasonably in order for Turkey to ensure healthy and adequate water sources for future generations.

Efficient use of water

As a company well aware of its responsibilities, Siemens Turkey optimized its business processes to preserve natural resources. In 2015, the company reduced its water consumption resulting from operations at Gebze and Kartal facilities by 11%, compared to 2012, to 98,000 m³.

Although Siemens does not consume much water due to the nature of its operations, it is a reliable electricity and industrial engineering solutions supplier to international water network infrastructure projects with long years of experience. It also helps customers to use water resources more efficiently. Siemens Turkey also offers customized and integrated high-quality solutions for water supplies and wastewater discharge to ensure more efficient use of water.

LEED Gold certified facility

Siemens Turkey continues to work not only on the protection of water supplies, but also on reducing CO₂ emissions and waste management. For instance, the company saved TL 5.7 million in 2015 by recycling 3,595 tons of waste.

One of the best examples of the importance Siemens attaches to the environment is the Siemens Gebze Facilities. Located on an area of 150,000 m², with 19,424 m² indoor area, this is one of the most modern facilities in Europe. Siemens Gebze Facilities has become the first in Turkey to receive LEED (Leadership in Energy and Environmental Design) Gold certification.

Even at the planning phase, the aim was to ensure that Gebze Facilities sets an example, is designed with an environment-oriented perspective and has a sustainable structure. Benefiting extensively from Siemens' building technologies and automation systems, it managed to receive the first LEED Gold certification in Turkey by using automation technologies and natural resources efficiently, from lighting and ventilation to air-conditioning and water treatment. This facility attracts attention with its use of natural sources of energy, cost-efficient structure and healthy work environment. LEED Gold Certificate granted to the Gebze Facilities created a domino effect in manufac-

Although Siemens does not consume much water due to the nature of its operations, it is a reliable electricity and industrial engineering solutions supplier to international water network infrastructure projects with long years of experience. It also helps customers to use water resources more efficiently.

turing. After Siemens Turkey built the first factory compliant with LEED Gold standards, more than 40 projects followed. This is definitely a way of creating value.



17%

Reduction in Siemens Turkey's lost time injury frequency rate (LTIFR) in 2015. Siemens Turkey's LTIFR is below the Turkish Metal Industrialists Union's (MESS) average rate.

Safe work environment for successful projects

Environment, Health and Safety (EHS) strategy

Work conditions at companies are of great importance in terms of the health and safety of employees and achieving the desired efficiency level. The work environment may positively or negatively affect the morale, efficiency and loyalty of employees as well as their physical and psychological health. Accordingly, legal regulations are included in the 10th Development Plan, concerning the improvement of occupational health and safety conditions as well as freedom of unions and collective labor agreements.

On the other hand, the Ministry of Labor and Social Security also aims to eliminate the risks in occupational fields, ensure occupational health and safety, strengthen business relationships, recognize employee and employers' rights to information, protect people in special conditions due to their age, sex or social positions, create a mindset of social responsibility, and increase safety measures in occupational areas through audits.

According to the data provided by the Ministry, the number of occupational health and safety experts, which is 7,000 in 2016, is planned to be increased to 9,000 in 2018.

Same level of awareness at every rank

Owning ISO14001 certification in all production areas, Siemens Turkey creates an environment where everyone, from the lowest rank to the highest, is committed to protecting the environment, creating a zero-harm culture and improving health conditions.

One of the examples of this is the Safety Walk and Talk (SWAT) activity organized by the Environment, Health and Safety (EHS) unit, in which managers visit the site and communicate the importance of safety to the employees on site. SWAT has been organized 31 times in 2015, with the participation of 12 managers and approximately 250 employees.

The goal of SWAT is to ensure that projects are performed safely, without injuries. With the aim of reducing lost time injury frequency rate (LTIFR) by 15% in 2016, Siemens Turkey holds an EHS meeting at the launch of each project. In addition, EHS experts are given regular trainings. 144 EHS trainings were organized in 2015 with the participation of 2,986 employees and 600 subcontractors.

The Safety Director of Siemens Turkey also ensures that the security warnings are strictly complied with in risky project areas and informs the employees and subcontractors concerning personal safety and health.

A search and rescue team was formed for emergencies. Sixty volunteers from Siemens Turkey participated in rescue efforts in different provinces of Turkey, as witnessed during the earthquake in Van and the mining accident in Soma. In addition, volunteers organize disaster trainings for primary school, middle school and high school students.

A mindset of certified safety management

Siemens Turkey, which provides sports facilities as well as medical doctor and treatment assistance during work hours to its employees, obtained "Healthy@Siemens" certification from Siemens AG for its sustainable health management practices.

In 2015, a 2-week health program was made for 20 male employees in the city of Afyonkarahisar. This initiative of Siemens Turkey was the first of its kind in Turkey. In October 2016 another 2-week program will be made for 20 female employees.

In addition to 1,699 basic check-up packages and 6,617 polyclinic examinations in 2015, Siemens Turkey also provided a support line for employees and their families, which they can use to consult about social and legal matters. This hotline was used 1,407 times in 2015.

Siemens Turkey aims to reduce its Lost Time Injury Frequency Rate (LTIFR) by 15% in 2016.

Siemens Turkey received "Healthy@Siemens" certification from Siemens AG for its sustainable health management practices.

2023 targets of Siemens Turkey

- To strive for zero-harm by implementing a safety culture model

“In addition to identities as ‘employees,’ we should respect and support other identities of our employees, such as ‘mother, father, son/daughter, friend.’ Self-developing, happy individuals are contented employees. This is how sustainability in business life can be achieved.”

Nurer Yüksel,
Director of Human Resources and Executive Board Member, Siemens Turkey



Improving quality of life

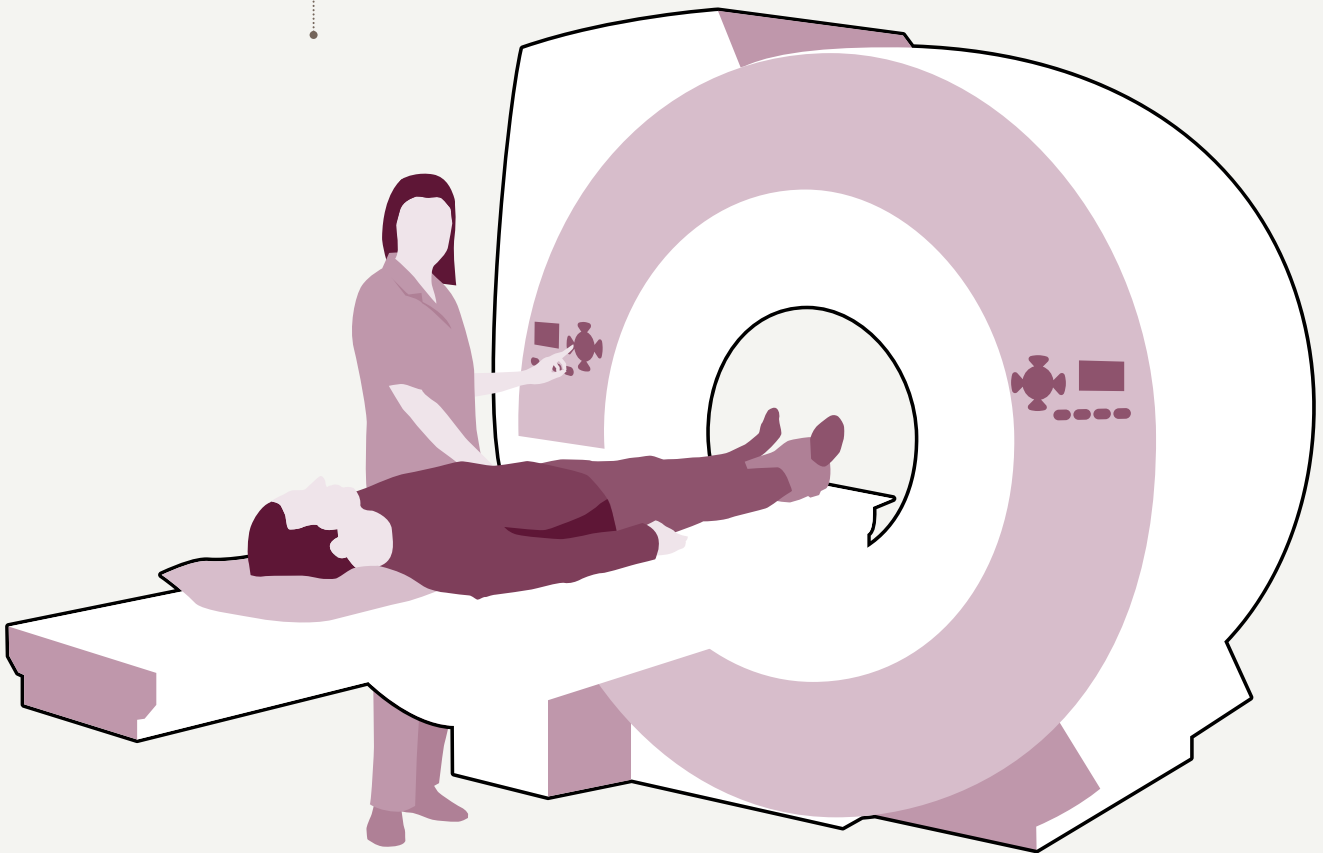


200,000

Number of people who benefit from Siemens Healthineers' medical imaging devices and laboratory tests every day in Turkey

32.4 million

Number of patients in Turkey with access to imaging devices provided by Siemens



Easier access to healthcare services

Full support to transformation in healthcare

The healthcare industry has a direct influence on human life and therefore is one of the prioritized focus areas in the development plans of all countries. Turkey is no exception – with the Healthcare Transformation Program initiated in 2003, improving access to healthcare services has become among the priorities of the government. Strategic Plan 2013-2017 of the Ministry of Health aims to increase the satisfaction rate from healthcare services from 76% to 85%, the number of doctors per 10,000 people from 169 to 237, and inpatient bed capacity from 26 to 32 by 2023.

The Healthcare Transformation Program laid the foundations for the much needed infrastructure improvements such as consolidation and large scale investments. Consolidation in particular became a trend for both the public and the private sector. With the restructuring of the public sector, economy of scale started to yield considerable benefits. Meanwhile, in the private sector, large-scale hospital chains were built by means of mergers and acquisitions and thus, large-scale projects were realized.

One of the major tasks concerning the goals identified for 2023 by the Ministry of Health is undertaken by the Public-Private Partnership (PPP) City Hospitals.

With 36 hospitals to be opened until before 2023 with the PPP model, the goal to increase the number of inpatient beds will be reached.

The trendsetting company in healthcare technologies

Siemens has globally put its signature under many firsts in the area of healthcare, such as the first X-ray tube, real-time ultrasound scanner, dual source CT, and integrated PET-MR systems. In Turkey, Siemens' history in the healthcare sector goes back to the first years of the Republic of Turkey.

One of the first X-ray devices of the Republic was supplied to the Vakıf Gureba Hospital in

1924 by Siemens, and Ghazi Mustafa Kemal signed the Cabinet decree for the procurement.

Today, with medical imaging equipment and laboratory tests used in the examination of approximately 200,000 patients per day in Turkey, Siemens Healthineers is among the leading healthcare technologies provider of the country. Siemens' computed tomography devices serve approximately 32 million people and play a key role in ensuring access to high-quality healthcare services.

Innovation in healthcare

Among the recent innovations that Siemens has provided to Turkey are computed tomography, MR, mammography, PET-CT devices and innovative laboratory systems.

The Siemens computed tomography device, which uses 50% less radiation compared to the tomography systems today, was first installed in Turkey in 2013.

Access to healthcare services is increased with Siemens Turkey's scanning devices that serve more than 32 million patients.

A quiet MR feature introduced in 2014 allows for up to 99%* noise reduction. Similarly, innovations in the PET-CT technology ensures a 50% reduction in the radiation doses.

On the other hand, innovative mammography systems by Siemens offer 43% higher detection rates for breast cancer, according to the Malmö Breast Tomosynthesis Imaging Tests published in European Radiology.

Using both MR and molecular imaging, PET-MR is a hybrid imaging technology

One of the first X-ray devices in the Republic of Turkey was supplied to the Vakıf Gureba Hospital in 1924 by Siemens. Images acquired on Siemens devices in November 2014. Data on file. Results may vary.

2023 targets of Siemens Turkey

- Increase the number of patients benefiting from Siemens medical imaging devices and laboratory tests to 300,000 people per day

* Decibel measurements and images acquired on Siemens equipment in November 2014. Data on file. Results may vary.

mainly used in Neurology, Oncology, Cardiology and Pediatrics. The first PET-MR system in Turkey was installed by Siemens in 2015. The high-tech lab automation system, which will serve 1.8 million patients in three years, was also installed by Siemens Turkey. Using medium-high volume, automation-ready analyzers that support more than 800 clinical tests in the portfolio of Siemens Healthineers, the system will increase the efficiency of laboratories.

As a company that created many “firsts” since the day it was founded, Siemens also participates actively in all of the Public Private Partnership (PPP) City Hospitals projects to be conducted in accordance with the 2023 goals of Turkey and thus aims to increase the service quality at hospitals.

Siemens Healthcare Academy

Siemens Healthcare Academy, which has provided trainings for more than 1,000 healthcare professionals since 2004, has been meeting the training requirements of the healthcare sector with its expanding portfolio and expertise of the trainers.

As a company that created many “firsts” since the day it was founded, Siemens also participates actively in all of the Public Private Partnership (PPP) City Hospitals projects to be conducted in accordance with the 2023 goals of Turkey and thus aims to increase the service quality at hospitals.

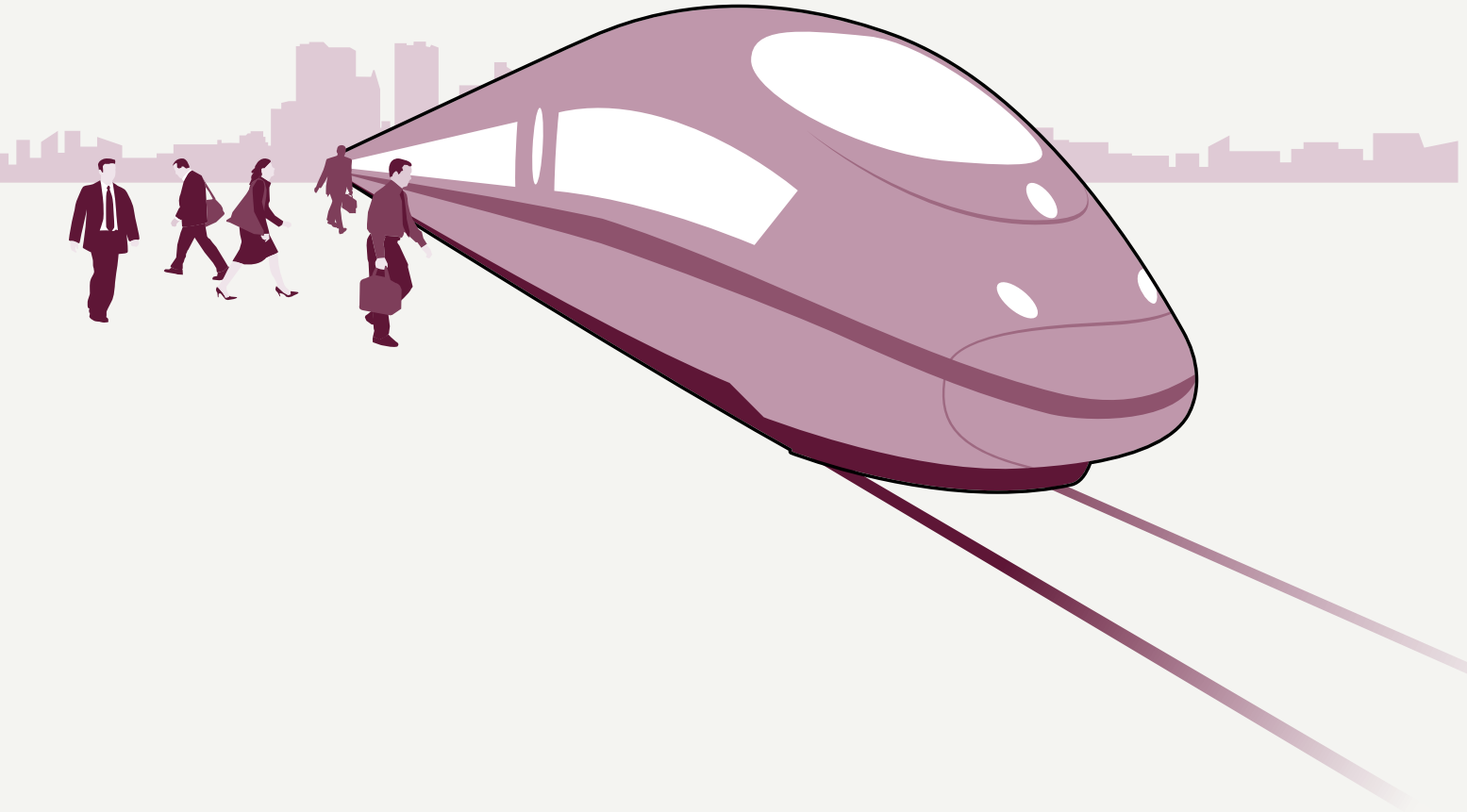


40%

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

21%

Share of highway tunnels using Siemens technology in the total number of tunnels in Turkey



Quality and experience in all areas of transportation

Fast, safe and environment-friendly transportation

One of the most important topics among the development goals of Turkey is transportation. According to the data of the Investment Support and Promotion Agency of the Prime Ministry, a budget of TL 46 billion, corresponding to 30% of the total budget in 2013, has been allocated for the transportation sector. The value of the infrastructure investment industry covering highways, bridges, railways, airports, harbors and seaways is also expected to triple to reach TL 36.6 billion from TL 10.9 billion, with a 12% increase per year between 2011 and 2022.

According to the Logistics and Transportation Report of the Investment Support and Promotion Agency in 2013, the 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. Such increase in value should, of course, be supported with new investments. Within the framework of Turkey's 10th Development Plan, one of the plans for the year 2023 is to increase the total railways to 25,000 kilometers. The Ministry of Transport, Maritime Affairs and Communications will make investments in 200 sets of very high-speed trains, 10,000 kilometers of new high-speed train rails, 4,000 kilometers of standard rails, 5,000 new subway cars and the repair of 11,000 kilometers of standard railways.

Turkey also has great potential in airways in terms of both geographical location and capacity. İstanbul is one of the cities with the fastest growing airports in the world and the total number of airline passengers in the city quadrupled to reach 150 million. The National Science and Technology Policies 2003-2023 Strategy Document prepared by the Scientific and Technological Research Council of Turkey (TÜBİTAK) indicates that aviation growth rate, which is 14% in Turkey, is much greater than the world average of 5%. In addition to the third airport, which is expected to facilitate air travel significantly, the other large-scale projects for urban and inter-city transportation are listed as Marmaray, Kanal İstanbul and Yavuz Sultan Selim Bridge, according to

the 10th Development Plan. Turkey, which ranks 30th as of 2014 in the Logistics Performance Index as stated in the report by the Investment Support and Promotion Agency, attaches importance to logistics in its exportation, growth and sustainable development goals. The Transportation and Logistics Report announces that Turkey aims to rank among the first 15 in the Logistics Performance Index. Therefore, it is worth mentioning that three of the 18 logistics centers to be built by the Turkish State Railways (TCDD) have become operational and the first phase of the construction of four centers has been completed.

Safe travels with the comfort offered by Siemens

Siemens Turkey not only contributes to traveling comfort by shortening commuting times, but also takes ecological balance into consideration. Turkey's first very high-speed train Siemens Velaro, which was designed and manufactured by Siemens, is an attractive investment. Having reached a traveling range

Improvement suggestions made by Siemens Turkey for logistics have been granted the "Global Category Logistics Award 2016" by Siemens AG.

Siemens Turkey not only contributes to traveling comfort by shortening commuting times, but also takes ecological balance into consideration.

of 600,000 kilometers as of June 2016, Velaro travels between Ankara and Konya. Although having the capacity to reach 320 km/h, Velaro travels with the maximum speed of 250 kilometers per hour as permitted by law and saves time for its passengers with a faster journey that takes 1 hour 40 minutes. In addition, high-speed train transportation reduces environmental impacts such as CO₂ emissions. Compared to an automobile traveling at the same speed, Velaro prevents approximately 7 tons of CO₂ emissions per journey.

Siemens adds value to transportation not only with very high-speed trains, but also with signaling solutions. Siemens equipment and solutions are used in the signaling system of the high-speed line between Ankara and Konya.

Catenary systems on the first high-speed train line between Ankara and Eskişehir were produced and designed by Siemens Turkey. Reducing the commuting time to 1.5 hours, the trains travel with a maximum speed of 250 km/h, and 40% time saving is ensured compared to traveling by highway.

Siemens' signature on Marmaray

Siemens Turkey, which performs electrification services of projects such as İstanbul Subway as well as signaling and electromechanics of bridges and tunnels, also worked at the Marmaray Tunnel projects with Siemens Signaling, Telecom and SCADA systems. In addition to this tunnel constructed under the Bosphorus, modernization works for the current suburban line starting from Halkalı on the European side and ending at Gebze on the Anatolian side were also performed by Siemens Turkey. The first 12 kilometers of the line was opened in October 2013. According to the January 2016 data announced by the Ministry of Transportation, Maritime and Communications, 114 million passengers, corresponding to eight times the total population of İstanbul, have been transported via Marmaray. Also, thanks to this underwater rail system that transports approximately 200,000 people per day, the vehicle traffic on the July 15 Martyrs' Bridge (Bosphorus) and the Fatih Sultan Mehmet Bridge were reduced by 6% (despite the increasing number of vehicles).

Siemens to manufacture trams in Turkey

One of the important breakthroughs of Siemens Turkey will be the new tram factory constructed with an investment of EUR 30 million. The factory is planned to

start manufacturing by the end of 2017. Such localization of railway vehicles will make many contributions to the economic growth of Turkey. In addition to a workforce of approximately 800 people, including local suppliers and factory workers, EUR 250 million worth of exports income is expected from the 100 wagons to be manufactured each year.

In addition, 22 four-unit subway trains have been ordered by Bangkok Mass Transit System Public Company (BTSC) from a consortium of Siemens and Turkish public transportation vehicles manufacturer Bozankaya. Service and maintenance of these trains will also be undertaken by Siemens for 16 years. If Siemens wins the tender for 80 sets of very high-speed trains, these trains will be delivered with a minimum localization scale of 53% as stated in the specifications.

Tunnel automation and safety

Siemens Turkey, which increases efficiency and safety in transportation with its Intelligent Traffic Control system, installed automation systems for 21% of the total highway tunnels in Turkey within the scope of the turnkey projects it has been continuing for 15 years.

Awarded in logistics

The volume of Siemens Turkey in the field of logistics reached EUR 21 million in the 2015 fiscal year and EUR 19 million of this contributed to local companies as gross income. In addition to the Ministry of Transport, Maritime Affairs and Ministry of Communications and Customs and Commerce, Siemens Turkey also participated as an International Investors Association (YASED) member to the meetings held by the European Union Commission within the scope of the 10th Development Plan. Probable solutions for logistics problems were discussed in these meetings.

Of note, Siemens Turkey's suggestions for improvements in logistics industry were rewarded with the "Global Category Logistics Award 2016" by Siemens AG.

Siemens Turkey, which performs electrification services of projects such as İstanbul Subway as well as signaling and electromechanics of bridges and tunnels, also worked at the Marmaray Tunnel projects with Siemens Signalization, Telecom and SCADA systems.



28 million

Number of passengers protected every year with Siemens Safety and Security systems and services at Sabiha Gökçen Airport.

5.4 million

Number of passengers whose safety is ensured per month at Marmaray with Siemens Safety and Security systems and services



Security of the biggest projects entrusted to Siemens Turkey

Security systems

Feeling secure is of great importance for the happiness of society and the quality of social life. Siemens Turkey serves the safety, comfort and content of society with the systems and solutions it provides for transportation and buildings. The systems and solutions that Siemens provides are used in the largest projects in Turkey. Siemens Security Systems and Solutions at the Sabiha Gökçen Airport ensure the safety and comfort of 28 million people per year. The security of Marmaray, one of the biggest transportation projects in the world, is also ensured by Siemens. With the signaling and control systems of Siemens Turkey, the trains can work safely at a frequency of 2 minutes.

In addition, the system at Marmaray ensures that sensors give alarms in cases of earthquake or water leakage and protect the passengers with safety precautions. In such cases, trains stop before entering the 1.4 km long area below the seabed and the system closes all doors at both exits of this section. Since the train control system also knows whether there are trains in this section, exits are closed after the trains leave the critical areas.

Safety of 40,000 vehicles ensured daily

Siemens also performed the development, assembly and commissioning works of the traffic control systems and electrical and electromechanical systems of the Osmangazi Bridge, at the İzmit Gulf. With a capacity of 40,000 vehicles per day, the bridge is part of a large-scale highway project that will connect İstanbul and İzmir. Siemens equipped the bridge with approximately 390 sensors that constantly monitor the bridge and inform about incidents such as quakes, fires, and so forth. The sensors and the CCTV camera systems at the towers ensure efficient remote controls. The high-pressure fire extinguishing systems make it possible for automatic interventions to a fire at the transformer units.

Siemens Turkey ensures the security of Koç University since 2000 as well. Responsible for the safety of 6,200 students 24/7 with Facility Management, Siemens also provides building automation services for Koç University Hospital with an inpatient bed capacity of 192.

70 km-long tunnel

Tunnel automation systems are also a part of Siemens' comprehensive portfolio. Siemens has so far provided maximum security for 70 km of tunnels in Turkey with its tunnel automation systems. Espiye-Sarp Highway Tunnel Automation Project commissioned by Siemens Turkey, one of Siemens' global competence centers in Tunnel Automation solutions, is recognized as one of the most modern tunnel automation projects in the world.

Siemens technology was also used in the three-line Samanlı Tunnel on the İzmit-İstanbul highway, which was opened

Osmangazi Bridge is constantly monitored with 390 sensors installed by Siemens Turkey.

Siemens Turkey serves the safety, comfort and happiness of society with the systems and solutions it provides for transportation and buildings.

together with the Osmangazi Bridge. The 3.7 km-long Samanlı Tunnel is the longest highway tunnel in Turkey.



TL 75.5 million

Social security and private healthcare insurance premium paid by Siemens Turkey on behalf of its employees in 2015

TL 11.2 million

Private healthcare insurance premium that Siemens Turkey paid on behalf of its employees and their families in 2015



Full assurance for employee rights at Siemens

Social security policy

The Constitution of the Republic of Turkey defines the right to social security as a human right that covers every human being and regards it as a fundamental responsibility of the state. According to Article 60 of the Constitution, everyone has the right to social security. The state takes necessary measures to provide this security and establishes the required organization.

Within the framework of this constitutional right, certain social security reforms are made concerning the duties of the state and other parties. Thus, the quality and sustainability of social security services is improved and each individual is included in the system. Social security expenditures reached 13.8% of GDP in 2013 and the rate of health-care expenditures increased to 5.4% for the first time in the same year.

On the other hand, higher rates of female employment and lower rates of unregistered labor are required to create a sustainable pension system. In addition, effective policies are needed to handle the increase in the elderly population and the rates of elderly dependence.

Public assistance programs for disabled individuals became more widespread and most of these programs are implemented by public and semi-public care centers. Thanks to the Social Security Reform outlined in the 10th Development Plan, important steps have been taken toward creating coherence in rules and standards, the scope of the social security system has been expanded and significant progress has been made for high-quality services as well as for financial sustainability.

Social security is a prerequisite for sustainability

Adopting the principle of valuing its employees greatly, Siemens Turkey not only maintains legal compliance with social security, but also shapes its payment policy in accordance with the benchmarks of the industry. Female employees of Siemens are allowed maternal

leave of 16 weeks in total – 8 weeks before and 8 weeks after delivery. Blue-collar employees are rewarded with overtime payment when they exceed 270 work hours in a year.

Siemens Turkey has had a pension support organization (Siemens Foundation) for its employees since 1971, long before the launch of the Private Pension System supported by the Turkish government in March 2011. This organization has 1,376 members, including the employees of former companies of Siemens Turkey, such as Atos and Nokia Siemens Networks. There are 650 active members in this organization and 566 members have retired since it was founded. Through the Private Pension System, which has been in effect since 2011, Siemens makes premium payment contribution for 1,570 employees.

Allocating TL 70.2 million insurance premiums per year for its employees, Siemens Turkey also offers an extra private healthcare insurance, which includes check-up support and special health check programs. At the end of a two-month trial period, all blue- and white-collar employees of Siemens are covered by standard limited healthcare insurance. Within this scope, Siemens made a total payment of TL 5.1 million TL in fiscal year 2015. Siemens employees can include their family members in their private health insurance and choose between various coverage options. In 2015, 5,553 individuals, including family members of Siemens employees, were insured and a TL 11.2 million premium was paid.

Siemens Turkey also implements the Fronted Captive Program, which is run by Siemens AG. With this program, all employees who started working after January 1, 2013, and completed the two-month trial period are considered to have an unlimited agreement with Siemens Turkey and earn the right to benefit from this program. Siemens Turkey has made a premium payment of TL 257,662 in 2015 within the scope of the program that covers 2,335 employees.

Female employees of Siemens are allowed maternal leave of 16 weeks in total - 8 weeks before and 8 weeks after delivery.

Siemens Turkey assures the rights of its subcontractors' employees as well as the social security of its own employees.



>80%

Loyalty rate of Siemens Turkey employees

18%

Percentage of employees with more than 15 years of service at Siemens Turkey



Content employees for an efficient company

Creating a favorable work environment

The development of companies and countries depends on human resources. More contented, more comfortable and healthier employees perform more efficiently and contribute more to the economy and their companies.

This is also taken into consideration in the 10th Development Plan of Turkey, which includes appropriate work environments in its growth strategies. The plan indicates that appropriate work conditions will directly contribute to attracting high-quality professionals to our country and thus to growth. It will also be an important input in the areas of technology development capability and corporate quality. Particularly, inclusion of younger generations and women in the labor force; mitigation of unemployment, unregistered employment, work accidents, and vulnerable employment; and increasing skills of the labor force are among the most important issues in ensuring the development of Turkey. Accordingly, the Ministry of Labor and Social Security performs certain audits and projects.

Flexible work conditions

With the awareness that its most important resource is its employees, Siemens Turkey works to continuously increase the quality of its work environment. Believing that success is a result of contented, healthy and loyal human resources, the company increases the efficiency and loyalty of its employees by providing alternatives such as flexible work hours, unpaid leaves and home-office systems to its employees.

White-collar employees, who work 45 hours weekly and are expected to be in the office between 10.00 and 16.00, can organize their work hours according to their responsibilities. 15% of white-collars prefer to work in a home-office. Even though a right to unpaid leave is not common in Turkey, Siemens Turkey allows this practice. 32 employees in 2015 and 12 employees in 2016 so far benefited from the unpaid leave right until July, mostly in post-maternal periods.

Proud employees

All of these benefits help to increase the loyalty of employees. According to the Global Engagement Survey conducted by Siemens, the loyalty rate of the employees in Turkey is more than 80% and the percentage of those "proud to be a part of Siemens" is 84%.

Globally, the employee loyalty rate at Siemens is 86%. In addition, the share of those who have been working at Siemens for more than 15 years is 18%. In 2015, the Turnover Rate was 3.8. All these figures reveal that employee satisfaction and loyalty is high at Siemens Turkey.

Ownership culture

As a part of its ownership culture and strategy to award employee loyalty, Siemens Turkey encourages its employees to become shareholders at Siemens. Currently, 400 employees are included in "Siemens Share Program," which is open to every employee.

An extra payment of TL 960 per child is made to female employees. More than 100 female employees benefit from this opportunity and

According to the report of Universum, which lists companies that 34,465 students and 7,672 professionals in 7 cities and 31 universities admire, Siemens Turkey has proven that it is a company where 2,265 engineering students want to work, outperforming major competitors in energy and industry.

As a result of the favorable work environment, Siemens Turkey has low employee turnover rates and a high level of employee loyalty.

the budget Siemens Turkey allocates for this has reached TL 2.1 million per year.

Always supporting its employees and trying to make life easier for them, Siemens Turkey provides service buses for commuting, cafeteria, lunch, gym and a social club. Shuttle services for employees who want to attend the funerals of family members of their co-workers are among the opportunities that Siemens Turkey provides. Every day, 190 employees use the service buses provided for commuting between the European and Asian sides of İstanbul.

Life insurance is provided for all Siemens employees who have passed the two-month trial period and acquired an unlimited contract. Those who become members of the Siemens Foundation are insured by Anadolu Hayat.

The right balance between work and private life should be established for the happiness of individuals. Siemens Turkey, which participates in Garanti Emeklilik Hobby Clubs, allocated TL 40,200 for clubs this year. 530 employees in İstanbul, Ankara and İzmir benefited from hobby courses such as photography and sailing.

Knowing that sports is the best activity to encourage people to form bonds, Siemens Turkey has been organizing bowling, volleyball, basketball and soccer tournaments at the Kartal campus since 2001 within the scope of the Sports Festival. 1,818 people participated in the tournaments in 2016. Winning teams also have the opportunity to compete with the teams of other companies.

Each and every employee's opinion counts

Siemens Turkey attaches great importance to the opinions of its employees. Therefore, it receives suggestions from its employees through Siemens Turkey 3i system. An average of 0.7 suggestions are made per person and 0.18 suggestions per person are carried into action. The benefit acquired from these suggestions (EBIT) is identified as EUR 1.48 million.

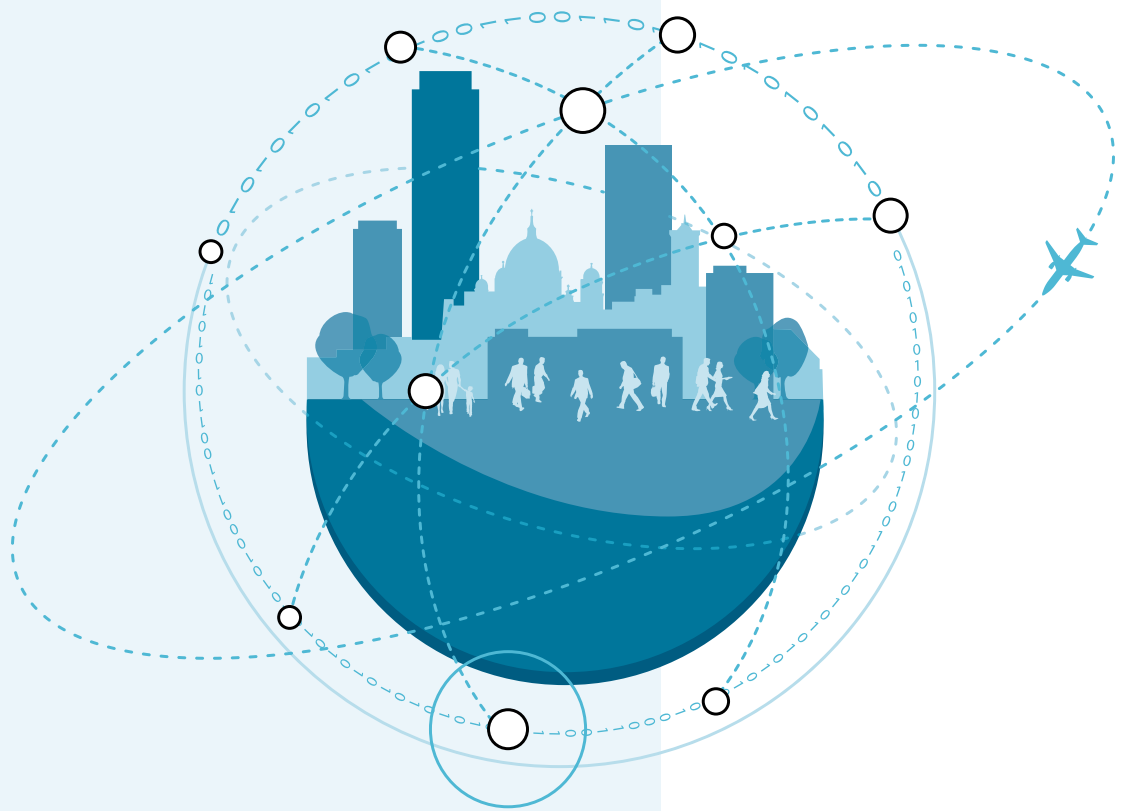
Based upon the notion that employee communication is vital, Siemens established the Siemens Social Network. 2,733 of the 3,007 employees at Siemens Turkey use the Network and 1,622 of these are active users.

Siemens Turkey, which has been working to improve the life quality of its employees and the physical and behavioral quality of the work environment, will continue to design and implement new activities and programs to provide a satisfactory work environment and to contribute to the well-being of individuals.

As a part of its ownership culture and strategy to award employee loyalty, Siemens Turkey encourages its employees to become Siemens shareholders. Currently, 400 employees are included in this program, which is open to every employee.

“In line with the country’s 2023 Vision, Siemens Turkey supports this transformation with its products and services and also with its Corporate Governance programs, corporate social responsibility (CSR) activities, and equal employment opportunities for women and disabled employees. Siemens has believed in Turkey for 160 years and will continue its commitment to the economy and people of our country.”

Yusuf Bulut,
Director of Communications and Government Affairs, Siemens Turkey



Shaping societal transformation

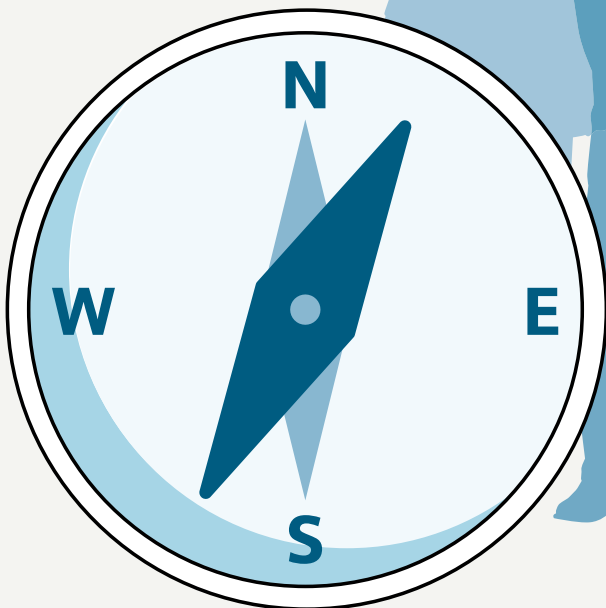


TL 5.06 million

Siemens Integrity Initiative will contribute USD 1.76 million (TL 5.06 million) to the Turkish Integrity Center of Excellence (TICE) project launched by the Ethics and Reputation Society (TEİD) for three years.

TL 780,000

Support provided to Koç University Corporate Governance Forum in 2014-2016



Concrete support for practices on ethics and legal compliance

A more fair competition in Turkey and in the world

It is only through a fair, quality- and price-based competitive environment that companies operating in Turkey may maintain their presence in the market for a long time and reach their business goals. Research conducted by academia and independent agencies shows that companies seldom have the expertise to execute the international principles and standards developed against corruption. Such research reveals that, due to the lack of consistent data concerning the socio-economic effects of anti-ethical practices in the leading sectors of the Turkish economy, it is almost impossible to evaluate the improvements in this area objectively. Although many institutions have their own ethical standards, there is no conformity program for adapting these standards to the corporate culture or to the principles that would effectively manage such risks. Business ethics remains a social skill level rather than being a measurable, reportable and manageable value for many family businesses and SMEs.

Standing against unethical practices

Siemens works with many different industries all over the world and has developed a Compliance System with the purpose of full compliance with both its own Business Conduct Principles and the laws. In order to provide protection against compliance risks companywide, the Compliance system is built upon three pillars: Prevent, Detect and Respond.

Continuously improving its Compliance system, Siemens Turkey thus adapts better to the ever-changing needs in global business processes. All Siemens employees are required to attend web-based compliance trainings. All staff is regularly trained on compliance-related topics.

Supporting organizations and projects through collective actions and trainings on Business Ethics and Compliance, Siemens launched a global program – Siemens

Integrity Initiative. Having signed a 15-year agreement with the World Bank and the European Investment Bank, Siemens Integrity Initiative plans to invest a total of more than USD 100 million in compliance issues. This initiative focuses especially on supporting projects that have a direct impact on the business environment, can demonstrate objective and measurable results, and are scalable and adaptable to various areas.

One of the major projects supported by Siemens Integrity Initiative in Turkey is the Integrity Center of Excellence (TICE) launched by the Ethics and Reputation Society (TEİD). In 3 years, Siemens will provide a total of USD 1.76 million (TL 5.06 million) support to the project that aims to strengthen fair competition environment in the country. The project will identify and implement the required actions to manage compliance risks in Turkey effectively. It will also fight against compliance violations in the private

With the purpose of ensuring full compliance with its own Business Conduct Guidelines and local laws during all operations, Siemens has developed a Compliance System.

The Integrity Initiative will identify and implement the required actions to manage compliance risks in Turkey effectively. It will also fight against compliance violations in the private sector.

sector. Thus, the chances of implementing international ethical standards in Turkey will be increased.

In addition, since 2014, Siemens Turkey has been sponsoring the Koç University Corporate Governance Forum that reaches 600 people every year. The support given to the Forum was TL 780 thousand between 2014 and 2016.



160 years

Siemens Turkey operates with full responsibility toward the society since its first day in Turkey.

TL 330,000

Total value of scholarships and rewards Siemens Turkey grants to more than 100 young artists each year

8,000 hours

Total time that Siemens Turkey employees spent on voluntary activities in 2015



A society empowered with sustainable benefits

Corporate social responsibility activities

Ensuring nationwide social solidarity requires improvements in many different indicators. Among the basic goals of the 10th Development Plan are to reduce unemployment rates, increase occupational trainings, improve employment of women, increase gross domestic income per person, and reduce poverty rates. In addition there are goals related to encouraging urbanization, increasing job opportunities for the disabled, and enhancing participation in non-governmental organizations. However, to achieve social solidarity, not only governments, but also private sector companies, should take responsibility.

Even though corporate social responsibility (CSR) activities do not ensure 100% social cooperation, companies contribute to both themselves and the society with these projects. In his article in Forbes magazine, James Epstein-Reeves describes this as “a win-win situation both for the government and the private sector.” Today, even the value and perception of a company in the eyes of shareholders is shaped by CSR and sustainability activities. Boston Consulting Group, in the report entitled “Investing for a Sustainable Future,” states that almost 60% of board members of investment companies choose to end their investments in companies with weak sustainability statistics. Another study made by Kenexa High Performance Institute in 2015 reveals that companies that display true loyalty in terms of corporate social responsibility achieve greater success compared to those that ignore it. According to this study, the companies that focus on CSR display a performance up to 19 times greater compared to the others in terms of return on assets.

In a global market in which many multinational and local companies operate, it is not possible to think of institutions separately from the societies. Therefore, contribution of companies to the society is not just limited to the financial scale but is also enriched by corporate financial responsibility efforts.

Having adopted the principle of sustainable contributions to the society in the areas it focuses on in accordance with its authorities and resources, Siemens Turkey has been uninterruptedly continuing its CSR activities in Turkey for the last 160 years, contributing to the society with practices such as the donation of an X-ray device during World War I. Siemens Turkey builds its CSR strategy on three pillars: Access to Technology, Access to Education, and Sustaining Communities.

Corporate support to social development

Siemens Turkey Opera Contest, organized for nearly twenty years in order to grant scholarships and awards to young talents that do not have access to music training in global standards, comes to the forefront as one of the reflections of Siemens Turkey’s Sustaining Communities principle. Siemens Turkey has so far granted scholarships and awards of TL 330,000 per year to more than 100 young talents.

The company has also supported modern art since 2004. Exhibiting modern works of art at its gallery, Siemens Turkey granted TL 130,000 to the gallery per year between 2004 and 2013.

Adopting the strategy to support the society with initiatives to solve social problems, Siemens Turkey has started focusing on the refugee issue, which is currently one of the most important problems of the country. According to the information announced on March 10, 2016, there are 2,733,784 Syrian refugees in Turkey. Harsh life conditions, dramatic effects of immigration and not knowing the language hinder the education of refugee children. Siemens Turkey came together with the Mother Child Education Foundation (AÇEV), an NGO with expertise in the education of children and adults, to find a solution to this problem and launched the “Summer Pre-School for Syrian Refugee Children Program.” This program prepared 60 children and their mothers for the new

The total income of the 135 companies that are TEİD members, among which Siemens Turkey is also a founding member, constitute 14% of Turkey’s GDP, with USD 145 billion. In line with the social responsibility activities, Siemens is also a founding member to several associations, including International Investors Association (YASED), Supply Chain Management Association (TEDAR), and Quality Association of Turkey (KALDER).

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academic year with a 10-week-long schedule throughout the summer.

Believing in the power of collective efforts, Siemens Turkey cooperates with associations as well. More than 250 corporations with a total income of over USD 200 billion signed the collective action declaration of Ethics and Reputation Society (TEİD) founded by Siemens Turkey. TEİD also organized compliance workshops, reaching 1,500 university students and 1,000 family businesses.

Voluntary works

The total time allocated by Siemens Turkey employees to voluntary works reached 8,000 hours in 2015. Such voluntary works include engineering support to the Robotic Club at Darüßsafaka High School and lectures at universities by Siemens Turkey executives on topics such as Industrie 4.0 and sustainability.

Another voluntary project within Siemens Turkey is Siemens Search and Rescue Team (SAKE). The team has been supporting search and rescue work during natural disasters experienced in Turkey since 2001, such as the earthquake in Van and the flood in İstanbul.

The number of Siemens employees donating blood reached 393 since 2012. We have also supported Down Café via Diversity Club and organized the "Stronger Women Seminar."

More than 95% of the donations made by Siemens Turkey are focused on education. The 2015 fiscal year, Siemens equipment and PAC energy analyzers, the total value of which exceeds TL 1,200 million, were donated to universities.

Siemens Turkey was also among the 2015 sponsors of the "Science Tunnel" that communicates the effect of science and technology on education, environment and production and particularly targets children and youth.

“Sustainability is in the core business principles of Siemens and here at Siemens we call it 3Ps: People, Planet and Profit. This Business to Society report is a great way of showing our contribution to society in these three pillars.”

Esra Kent,
Chief Sustainability Officer, Siemens Turkey



35

Average age of Siemens Turkey employee

1/5

1 out of every 5 managers is female at Siemens Turkey

23.8%

Share of female employees in the workforce of Siemens Turkey



Equal opportunities for everyone

A more diverse business culture

Creating equal opportunities for everyone is a must for sustainable development. According to the 10th Development Plan, this is possible through easier access to public services, increased employment and combatting poverty.

Although certain improvement has been achieved, a social inclusion policy that will serve as a basis in the fields of social policies, social support and preventing poverty is needed. Furthermore, it is crucial to shape social policies in a way that ensures equal opportunities for everyone.

A critical issue in equal opportunities is avoiding gender discrimination. Some steps have been taken toward equality in terms of opportunities, through increasing the inclusion of women in the workforce. However, according to the Commission Staff Working Document Turkey 2015 Report of the European Commission, these steps have not yet reached a sufficient level.

Diversity brings success

Siemens Turkey believes that equal opportunities offer employees the chance to fulfill their responsibilities in a decent work environment that is free from discrimination and harassment. The number of female employees amounts to 23.8% of the workforce of Siemens Turkey.

In the report published by the International Labour Organization (ILO) in 2015, the rate of women in management positions was 12.2% and one out of every five managers in Siemens Turkey is female. While 13.21% of blue-collar workers are women, this rate increases to 18.94% in engineering teams.

In support of positive discrimination for women and disabled individuals, the company prefers females over males when choosing from a group of candidates applying for the same position, provided that the skills are the same.

Siemens Turkey's goal is to increase the rate of women in the workforce and the number of female engineers in the coming years.

This approach of Siemens Turkey is rewarded by various institutions and NGOs. As a result of the internal audit conducted by PwC, Siemens Turkey became the first company that was entitled to receive the "Certificate of Equal Opportunity" from KAGİDER (The Women Entrepreneurs Association of Turkey) in 2012 and received the "Award for Gender Equality in Business Life" from the Ministry of Labour and Social Security in 2013.

In reflection of the young population of Turkey, Siemens Turkey also has a young and dynamic labor force, with 52% of employees under the age 35 and 23% between the age of 25 and 30. A 13% increase has been observed in the number of younger employees since 2011. In addition to these data

Diversity Club of Siemens Turkey aims to create a favorable work environment especially for women and the disabled.

20 languages are spoken by people from 13 different nationalities at Siemens Turkey. Discrimination is prohibited as stated in the "Business Conduct Guideline."

demonstrating the support given to young employees, the average employee age in Siemens Turkey is 35.

Siemens Diversity Council and Club

As one of the most important initiatives of Siemens Turkey on diversity, Siemens Diversity Council has been raising awareness among employees since 2011. In addition, the number of members of Diversity Club, which was founded within the company for this purpose, exceeded 215.

2023 targets of Siemens Turkey

- To increase share of female executives from 21% to 25%

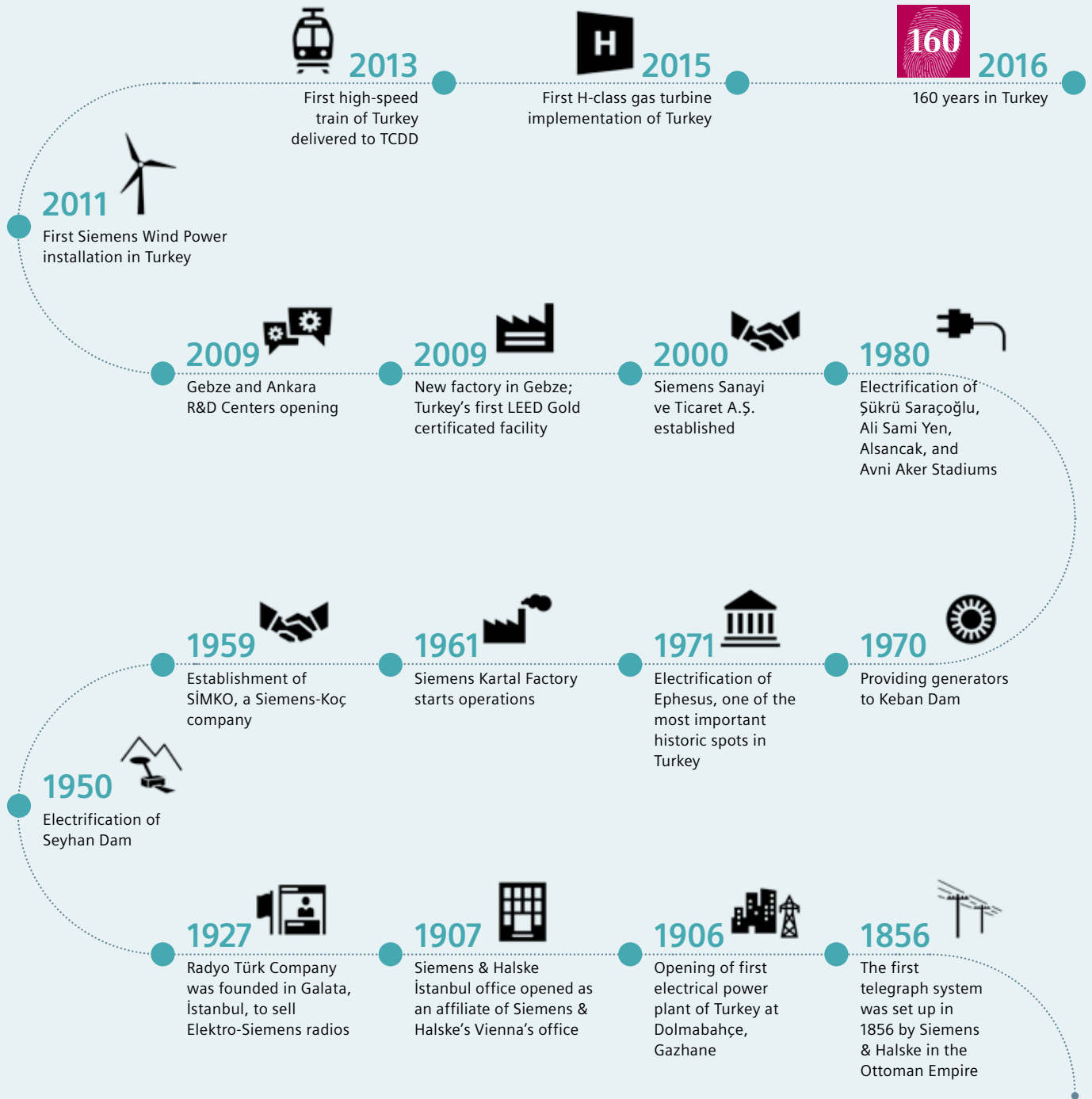
Such organizations aim to increase awareness on diversity and to create a decent work environment that is free from all kinds of discrimination, including gender, cultural background, generation, opinions and physical disabilities, for all employees. Diversity Club played an important role in improving our campus in many ways, such as creating special parking lots for pregnant employees, building mother rooms for new mothers, and modifying ATMs for the disabled.

Among other practices of Diversity Club are providing financial support for mothers and widowed fathers for the daycare of their children and improving working conditions for disabled employees. By changing the vacancy announcements in a way that makes it possible for everyone, handicapped or not, to apply for any position, the Club reminded once again that we are all equal at Siemens Turkey.

Diversity Club visited Down Café, where individuals with Down syndrome work, and Dialogue in the Dark exhibition. Another step taken by the Club was to cooperate with authorities to reach talented disabled individuals at universities.

All new employees are required to sign the Business Conduct Guideline. In article A2 of this guideline, all kinds of discrimination is prohibited. With this guideline, Siemens Turkey guarantees that it respects the personality, privacy and fundamental rights of each individual and that it will not tolerate any kind of discrimination.

Siemens Turkey received the “Certificate of Equal Opportunity” from KAGİDER (The Women Entrepreneurs Association of Turkey) in 2012 and the “Award for Gender Equality in Business Life” from the Ministry of Labour and Social Security in 2013 for the emphasis it places on gender equality and its in-house policies on this issue.



160 years

Siemens' journey – from the Ottoman Empire to the Republic of Turkey

Growing with Turkey and for Turkey

A journey of 160 years with solutions touching every aspect of life

All start-ups begin the journey with big dreams and goals: to grow and develop in time and even to reach different regions or countries. However, the way to reach these goals is not only dreaming and working hard, but also growing sustainably. One has to focus on the future with a good vision, as well as making good use of the current situation. Companies that manage to do this go beyond just staying alive and grow constantly, leaving centuries behind them.

On the other hand, not only individuals or societies, but also governments need the support and contributions of reliable businesses. The Republic of Turkey needs stable and reliable business partners to reach its Vision 2023 objectives, because the best means to improve the infrastructure of our country and reach the national development goals is cooperation between the private and the public sectors. Just as Siemens has been doing for 160 years...

In support of Turkey for 160 years

Know-how, experience, well-educated young generations, and R&D efforts are as important as technology and infrastructure services in the development of countries. Serving Turkey for 160 years with its know-how and expertise, Siemens grows together with the country itself.

Established by Werner von Siemens in 1847 in Germany, Siemens arrived in the Anatolian lands only 9 years after its foundation. Within the scope of the modernization efforts observed especially in Tanzimat and Islahat (reformation) periods in the Ottoman Empire, Siemens built Turkey's first telegraph system (1856) and first phone line (1881). Later, the company introduced products and solutions such as steam engines, dynamos and X-ray devices first to the Empire and then to the young Turkish Republic.

Siemens also built the first power plant on these lands (1906, Dolmabahçe Gazhane) as well as various railway lines, iron-steel facilities and illumination systems. Being the first company to invest in many projects in the areas of communication, transportation and energy between 1856 and 1923, Siemens' relationship with the Ottoman Empire was based upon trust.

The brand also trusted by the Young Republic: Siemens

Offering uninterrupted services even during the harshest times that the Ottoman Empire faced, Siemens also witnessed the birth of the Republic of Turkey that sprouted on the same lands. Siemens supported the Turkish War of Independence with solutions such as X-ray devices and dynamos and became one of the brands most trusted by the newly founded Republic as well. A Cabinet Decree dated 1924 and bearing the signature of Ghazi Mustafa Kemal, the founder and first president of the Republic of Turkey, presents the most tangible example of this trust: X-ray devices required by İstanbul Vakıf Gureba Hospital would be purchased from Siemens.

Cooperation going beyond centuries

Siemens' contribution to modern Turkey has continued in an uninterrupted manner since the foundation of the Republic. For example, Radyo Türk company was founded in 1927 to sell Elektro-Siemens radios, electrification of Seyhan Dam was made in 1950, ancient the city of Ephesus was illuminated by Siemens in 1971, and the generators of Keban Dam were provided again by Siemens in 1972.

One of the most important developments in this process was the foundation of Simko in partnership with Koç Group, one of the leading conglomerates of Turkey, in 1959. In 1961, Simko's first factory at Kartal was commissioned. Simko executed

Established by Werner von Siemens in 1847 in Germany, Siemens arrived in the Anatolian lands only 9 years after its foundation.

many successful projects from mobile networks to transportation and underwent a transformation in 2000, giving birth to Siemens Turkey.

A new name, and never-changing trust: Siemens Turkey

Following the dissolution of Simko, the official trade name of Siemens Turkey became Siemens Sanayi ve Ticaret A.Ş. and the company continued its works with the same pace and commitment.

In 2009, it opened Turkey's first LEED Gold (Green Building) certified production facility with an investment of EUR 100 million. In the same year, Siemens Turkey opened its R&D centers both in this facility and in Ankara. Mahmudiye Wind Power Plant, the first wind power plant in which Siemens turbines were used, was opened in 2011. The first high-speed train of Turkey was again delivered by Siemens to the Turkish State Railways (TCDD) in 2013 and started operating on the Konya-Ankara line. H-class turbines, which are still the most efficient natural gas turbines of the world, were also used for the first time in Turkey by Siemens in 2015 at Cengiz Enerji Samsun Natural Gas Combined Cycle Power Plant.

Believing in the power of cooperation, Siemens Turkey is a member of institutions such as Turkish Industry and Business Association (TÜSİAD), Foreign Economic Relations Board (DEİK), and German and Turkish Chamber of Industry and Commerce (AHK).

In addition Siemens Turkey is a founding member of associations such as Ethics and Reputation Society (TEİD), International Investors Association (YASED), Supply Chain Management Association (TEDAR), and Turkish Quality Association (KALDER). Together with nationwide projects that make us proud, Siemens Turkey also focuses on social investments. Siemens

directly touches the lives of people through many corporate projects, from Siemens Opera Contest to Darüşşafaka Robotics Club, Siemens Art's Borders and Orbits Contest, scholarships to university students, excavations at Troy, a project carried out together with the Mother Child Education Foundation (AÇEV) for the education of Syrian refugee children.

Believing in the power of cooperation, Siemens Turkey is a member of institutions such as Turkish Industry and Business Association (TÜSİAD), Foreign Economic Relations Board (DEİK), and German and Turkish Chamber of Industry and Commerce (AHK). In addition, Siemens Turkey is a founding member of associations such as Ethics and Reputation Society (TEİD), International Investors Association (YASED), Supply Chain Management Association (TEDAR), and Turkish Quality Association (KALDER).

Conclusion

Toward a brighter future

This Business to Society report has been prepared to measure and reveal the support that Siemens has been giving to the sustainable development of Turkey for the last 160 years. While preparing the report, a methodology for Siemens Turkey has been devised, based on the Measuring Impact Framework of the World Business Council for Sustainable Development. The purpose of using this methodology is to assess the progress within the company and to inform the stakeholders outside the company. This assessment reveals Siemens Turkey's strengths as well as areas to be developed.



Strengthening the economy

In addition to concrete contribution to the GDP of Turkey, Siemens supports the development of the country's economy and improvement of social welfare through creating new business areas, contributing to employment, supporting the productivity of all industries with the technologies and efficiency systems it provides, and helping Turkey reduce its dependence on energy imports. Known as "a Turkish company with global roots" that has been in Turkey for 160 years, Siemens Turkey will continue to contribute to the economy by supporting localization and exports with its new investments, facilitating technological development of SMEs and providing new financing opportunities.

Developing local jobs and skills

Siemens Turkey contributes to Turkey's labor force by providing direct, indirect and induced employment for 40,000 people. Also focusing on the development of new skills required particularly in digitalization, Siemens Turkey provides financial and moral support to students, knowing that our future lies in the hands of high school and university students. Siemens Turkey will continue its support to students and its commitment to the localization of more occupations.

Driving innovation

Siemens Turkey pioneers many innovations with the importance it attaches to R&D. Siemens' technologies provide significant contribution to the development and efficiency of many industries. In addition, concentrating its R&D projects particularly on industry and energy automation, Siemens Turkey continues to put more emphasis on areas such as research and healthcare, in full awareness that it is necessary to create more diverse projects.

Siemens Turkey works hard to ensure that Turkey benefits from the advantages of Industrie 4.0 and will continue its efforts to create awareness and new projects in this area.



Environment and sustainability

Contributing to environmental sustainability with its environment-friendly and energy-efficient products and services, Siemens Turkey also minimizes its own impact on the environment with practices such as CO₂ emissions and water consumption. While Siemens AG aims to become carbon-neutral by 2030, Siemens Turkey continues efforts to become carbon-neutral even earlier, in parallel with the country's 2023 vision. The company also contributes to the goal of increasing renewables-based energy to 30% by increasing Turkey's wind power with the new turbine systems it has developed for low wind areas.

Siemens Turkey, which owns the first LEED certified factory in Turkey, will continue to protect the environment by seeking the condition of minimizing environmental impact in its investments.



Improving quality of life

Operating to increase quality of life in areas such as healthcare, transportation and security with the technologies and services it provides to large-scale projects in Turkey, Siemens Turkey is also positioned as a company of integrity that observes the rights and interests of its employees. With a high level of employee loyalty, the company will always continue its projects and policies that improve the work environment, positively affect the lives and happiness of employees, and protect employee rights. Meanwhile, it will also continue to develop new technologies that contribute to the comfort and security of the society.



Shaping societal transformation

Siemens Turkey contributes to the socio-economic transformation of the country with corporate governance and compliance works as well as its CSR projects. Remaining in the spotlight with its support to areas such as education, healthcare and art, Siemens also develops new projects in cooperation with nongovernmental organizations in order to help mitigate the refugee problem, one of the most important challenges currently faced by the country.

Siemens Turkey aims to continue its support for ethics and compliance with new projects and investments and also to strengthen its collective efforts with other companies in this matter.

Adopting the concept of equal opportunities as a corporate policy, Siemens Turkey has been rewarded for its commitment and practices in this area. The company aims to further increase the percentage of female and disabled employees. Growing with Turkey for the last 160 years and always maintaining its faith in the country, Siemens Turkey will continue its support, investment and projects.

“A company must contribute to the welfare and progress of society – not just in the short term, but in a sustainable way, for the sake of future generations. That’s what we call Business to Society.”

Joe Kaeser,
CEO and President, Siemens AG

