



Sustainability report **2015 Bosch Turkey** 

With technology "Invented for life" we are securing our company's lasting success. At the same time, we are contributing to protecting the

# **Connected for** more sustainability policy into practice in the four follow-

natural environment for current and future generations. This report shows how we put our sustainability ing areas: environment, products,

associates, and society. It also serves as a report on our progress as a member of the United Nations Global Compact.



Smart products make our everyday lives more comfortable. Used appropriately, they also help save energy or make life safer. Bosch innovations in the area of connected mobility are just one example among many. Sensors shape the foundation of predictive driving systems that reduce fuel consumption and protect the driver from potential road hazards. More information on connected solutions can be found in the

Products section, page 10



In addition to this, we apply our extensive expertise in the area of networked, energy efficient production to reduce our own carbon footprint. Measures include the deliberate use of renewable sources of energy, as well as initiatives that aim to make our locations as energy efficient as possible. So far, the results have been very satisfying: we have reached the CO<sub>2</sub> reduction target we set for 2020 several years ahead of schedule. Find out more about this in the

Environment section, page 7



Connectivity plays a very important role in our daily work as well. We want our associates to cooperate with one another across sectoral and national boundaries. In our view, collaboration is the only way that we can take full advantage of our diverse workforce's potential and creativity. To find out why we have focused more on promoting communication between younger and older colleagues, please consult the

Associates section, page 13



At Bosch locations around the world, our associates volunteer outside working hours. In recent months, many Bosch volunteers have helped people who have fled war and persecution and sought asylum in Europe. They collected donations at many locations and cooperated with aid organizations to set up support initiatives. To find out more, please consult the Society section, page 16

# **Steven Young**

# President, Bosch Turkey and Middle East



Dear readers,

At Bosch, we have a corporate culture valuing and supporting good ideas, and using them for innovation. We embrace this culture and we nourish from it

We are taking brave initiatives for adding innovation to the lives of people, and for facilitating the life. We are much braver in one topic: Supporting the sustainable future of our world. Sustainability is the essence of our business manner at Bosch. It is also the key to our success.

We develop strategies on economical, environmental and social topics, and implement relevant policies for making our business sustainable. For us, sustainability is not only an international agreement, but also a liability.

We have made progress in 2015 bearing the traces of this understanding. For example; we have committed to reduce the emissions by 20 percent by the year 2020. Compared to our levels in 2007, we see that we already reduced our emission by approximately 30 percent. We are progressing faster than expected, thus we have redefined our targets. Now, we are aiming 30 percent reduction by the year 2020.

Through our technical solutions, we are helping in establishing the conditions required for switching to a more sustainable, low carbon economy. We are investing approximately  $\[ \le \]$  400 million annually to pave the way for e-mobility. We are also considering the synthetic fuel, produced from renewable energy resources and called e-fuel, as an interesting carbon-free alternative for the electric cars.

On the other hand, we are taking advantage of environment friendly Bosch technologies in our facilities. Within the scope of the projects we have developed for reducing the energy and water use in our factories and disposing our wastes without harming the environment, we saved approximately € 530 million from the energy costs only during the period from 2007 to 2014. I believe Bosch sets a good example to the business world in this aspect.

We show utmost sensitivity on health and occupational safety topics in order to meet the expectations of our key stakeholders - the employees - in the human aspect of sustainability. We are also launching comprehensive training programs for supporting their development.

We are pleased to share with you the second sustainability report of Bosch Turkey compiling performance of the company in 2015 related to the sustainability topics. I believe you will contribute to our future efforts with your valuable opinions and assessments.

As Bosch, we will continue contributing to nature, human, society, and economy within the scope of our sustainability policies in Turkey, as we do in the global.

Sincerely,

She G.

# Bosch Turkey<sup>1</sup>

Bosch Group had started its operations in Turkey with a representation office founded in 1910, and established its first factory in Bursa in 1972. With 16.600 employees, €3,4 billion turnover, and €2,1 billion export as of the end of 2015, Bosch Turkey operates as one of the leading technology and service suppliers of Turkey. The Middle East Region based in Dubai is added to the responsibility area of Bosch Turkey on January 1, 2015. Bosch has 5 sales offices in this region including the United Arab Emirates, Saudi Arabia, Qatar, Lebanon, and Pakistan. In 2016, Bosch Iran Organization was founded in Iran's capital city Tehran under the responsibility area of Bosch Turkey. Thus, Bosch Turkey has become the center for 17 countries.

Bosch Turkey Group consists of seven companies.

- · Bosch Sanayi ve Ticaret A.S.
- Bosch Termoteknik Isıtma ve Klima Sanayi Ticaret A.S.
- Bosch Rexroth Otomasyon Sanayi ve Ticaret A.Ş.
- Bosch Fren Sistemleri Sanayi ve Ticaret A.Ş.
- BSH Ev Aletleri Sanayi ve Ticaret A.Ş.
- Robert Bosch Middle East FZE

· Bosch Tejarat Pars

Ticaret A.Ş., Bosch Rexroth Otomasyon Sanayi ve Ticaret A.Ş., and Bosch Tejarat Pars are joint stock companies and 100% subsidiaries of Bosch Group. BSH Ev Aletleri Sanayi ve Ticaret A.Ş. has also become 100% subsidiaries of Bosch Group as of 2015. Robert Bosch Middle East FZE, a free-zone company, is also 100% subsidiaries of Bosch Group. 84,5% shares of Bosch Fren Sistemleri Sanayi ve Ticaret A.Ş. are owned by the Bosch Group, and 15,5% shares are public and traded in Borsa Istanbul (BIST).

Bosch Sanayi ve Ticaret A.Ş., Bosch Termoteknik Isıtma ve Klima Sanayi

#### Bosch Sanayi ve Ticaret A.Ş.

It is the largest company of the Bosch Group in Turkey. Company manufactures diesel systems and gasoline injection systems in its three factories in Bursa for the leading automotive manufacturers of the industry. The company also develops new technologies, including Diesel and Gasoline Injectors, through its two R&D Centers. Designing and manufacturing of assembly systems and special machinery has started in Bursa under the brand Atmo since 2009.

Bosch Sanayi ve Ticaret A.Ş. company's Automotive Original Equipment sales office operates in Bursa, as well as Bosch Turkey and Middle East Headquarters building located in Küçükyalı, Istanbul, while Automotive After Market, Power Tools, and Security Systems sales offices serve at the Bosch Turkey and Middle East Headquarters building.

#### Bosch Termoteknik Isıtma ve Klima Sanayi Ticaret A.Ş.

Wall-hung boilers and components are being manufactured in the Manisa Factory, the biggest combi boiler factory of Bosch worldwide. Factory has been operating for 25 years on an area of 109 thousand square meters, and is positioned as a center both designing and developing the products. Bosch Manisa Factory manufactures more than 500 types of products for 23 device families, and exports products as copper pipe, steel, copper and plate heat exchangers, which it uses in the manufacturing to other Thermotechnik factories. More than 500 thousand boilers have been manufactured annually in the Manisa Factory since 2011, and the factory breaks manufacturing records consecutively. Bosch Termoteknik's sales office is located in Istanbul.

#### Bosch Rexroth Otomasyon Sanayi ve Ticaret A.Ş.

Company develops innovative products in the segments of mobile applications, machinery applications and engineering, factory automation and renewable energies as well as tailored system solutions. As the leader in drive and control technologies, it offers its customers hydraulics, electric drives and controls, gear technology, and linear motion and assembly technology all from one source, and provides training and after-sales services related to these technologies as well. The sales office of the company is in Gebze, Taysad Organized Industrial Zone, and the factory in Bursa, Nilüfer Organized Industrial Zone.

### Bosch Fren Sistemleri Sanayi ve Ticaret A.Ş.

Founded in 1975, the Company is active in the field of manufacturing of hydraulic brake systems for automotive and light commercial vehicles required by the major automotive and the aftermarket. Having an effective production and sales network, Bosch Brake Systems becomes more powerful in the Turkish market each passing day. Its factory is in Bursa.

#### BSH Ev Aletleri Sanayi ve Ticaret A.Ş.

With an investment of € 1 billion since 2005, BSH Turkey is the largest foreign investment white goods company of Turkey, develops and manufactures products in Turkey with its brands Bosch, Siemens, Gaggenau and Profilo, and exports them to the entire world including the European countries. Assuming the responsibility of 87 countries and 8 manufacturing facilities of the BSH Group including Africa, Middle East, Central Asia, Ukraine, Russia, and Belarus as of 2014, BSH Turkey has the biggest manufacturing facility of the BSH Group in Çerkezköy. BSH Turkey is the first to receive R&D Center certificate in Turkey, and has increased the number of its R&D engineers by 488% during the last 10 years. Offering estimation, installation, servicing/repairing, additional warranty and accessory sales services before and after the sales of Home Appliances, BSH Service operates with 2.500 employees in 4 Regional Offices, 8 Factory Central Services, and 360 Authorized Services throughout Turkey.

#### Robert Bosch Middle East FZE

Headquartered in Dubai, Robert Bosch Middle East FZE offers various products and services of Bosch to the Middle East for 90 years. Company serves to 14 countries in the Middle East with 160 employees in the fields of Automotive Parts and Equipment, Power Tools, Drive and Control Technologies, Security Systems, and Thermotechnology. Company also has representation offices in 4 countries including Lebanon, Saudi Arabia, Qatar and Pakistan.

#### **Bosch Tejarat Pars**

Founded in January 2016 in Iran's capital city Tehran, the company operates in all fields of Bosch including Mobility Solutions, Energy and Building Technologies, Industrial Technologies, and Consumer Goods.

 $^1P lease \ visit \ the \ websites for \ detailed information on the \ products \ and \ services \ of \ the \ companies \ under \ the \ Bosch \ Turkey \ Group:$ 

Bosch Sanayi ve Ticaret A.Ş.: www.bosch.com.tr

 $Bosch Termoteknik \\ Isitma ve Klima San. Tic. A. \\ \$.: http://www.bosch-thermotechnik.de/en/tt_com/international/bosch_termoteknik_tuerkiye/homepage_information_1.html$ 

Bosch Fren Sistemleri Sanayi ve Ticaret A.Ş.: http://www.boschfren.com.tr

Bosch Rexroth Otomasyon Sanayi ve Ticaret A.Ş.: http://www.boschrexroth.com/tr

BSH Ev Aletleri Sanayi ve Ticaret A.Ş.: http://www.bsh-group.com.tr/anasayfa

Robert Bosch Middle East FZE: http://www.bosch.ae/united-arab-emirates/en/homepage/

 $Bosch\,Tejarat\,Pars:\,http://www.bosch-home.com/ir/$ 



# Goals that are changing the world

In September 2015, more than 150 heads of state conferred at United Nations headquarters in New York to come up with a new agenda for the fight against poverty and hunger. The Sustainable Development Goals (SDG), a collection of 17 global targets, were the result. Bosch's commitment to sustainable development will pay off on the road toward reaching many of these goals.

The Millennium Development Goals (MDG), the previous United Nations targets, expired in 2015. Not all of them were achieved, and many challenges remain. Hunger is still a major problem, and many people around the world are threatened by war and disease. Moreover, climate change poses a long-term risk for the balance of global ecosystems. For this reason, the SDGs were drafted as a follow-up to the MDGs. The aim is to protect the environment and ensure that all of the world's people can live a life of dignity, peace, and freedom.

The SDGs will be in force until 2030 and are more comprehensive than their predecessors. The global community has agreed on 17 goals, nine more than in 2000. Additionally, the agenda takes

environmental, social, and economic issues into account, and thus reflects all aspects of sustainability. The result: ecological concerns feature more prominently in the SDGs than they did in the MDGs. The countries that ratified the goals have commit- ted to implementing measures against climate change and to promoting sustainable consumption and production patterns. Moreover, in contrast to the MDGs, the SDGs apply to all countries, not only to the nations of the global south.

The Bosch sustainability strategy comprises four areas of action: environment, products, associates, and society. This means that the company has taken at least nine of the UN's goals into account. They are highlighted in the graphic below:

# Global sustainable development goals



This report describes what Bosch is doing to help reach the United Nations sustainability goals. The SDG symbols will help guide the readers through the following pages.



Environmen

# Protecting the environment and adding value

In 2015, Bosch achieved a major environmental target: thanks to the efforts of our locations, we successfully reduced our  $\mathrm{CO}_2$  emissions relative to value added by more than 20 percent over 2007 levels – a target that we initially intended to reach by 2020. Moreover, as a result of internal measures alone, we were able to save some 530 million euros in energy costs between 2007 and 2014. This motivates us to set the bar even higher. We now aim for a relative reduction in  $\mathrm{CO}_2$  emissions of 35 percent by 2020. To this end, we continue to work on making our production processes even more efficient, and on increasing environmental awareness among our associates. Moreover, we are stepping up our use of renewable sources of energy around the world.



### **MAKING PROCESSES MORE RESOURCE EFFICIENT**

As a manufacturing company, Bosch needs to use raw materials around the world. To reduce negative environmental impact, we continuously focus our efforts on improving our production processes.

One example of this is the treatment method that Bosch Australia has developed. At our plant in Clayton, this method has made it possible to recover copper lost in the production process from the site's wastewater. This valuable raw material is then recycled, and the wastewater is reused. With the help of this method, 40 tons of liquid manufacturing waste can be saved in Clayton each year, and 1.2 tons of copper can be recovered from the site's wastewater. Last year, Bosch Australia was awarded the Australian government's "Premier's Sustainability Award 2015" for this method.

A Bosch India project clearly illustrates how hazardous waste can be reduced and costs saved by optimizing processes. In 2015, the Jaipur manufacturing site developed a system that made it possible to recover used oil from waste material which in turns means that waste no longer has to be treated as hazardous. The process separates the oil from cooling fluids and solid waste. About three liters of oil can be recovered per hour. Each year, the method allows Bosch to recover some 2,100 liters of oil. In turn, this reduces the cost of hazardous waste disposal.



Our sustainability strategy includes systematically collecting and analyzing data on the environmental impact of our production activities around the world. Above all, we aim to

continuously minimize this impact wherever possible.

# **Increasing Energy Efficiency in Industry**

With "Chiller Condenser Waste Heat Recovery System" it has developed for energy efficiency, Bosch Termoteknik Isıtma ve Klima Sanayi Ticaret A.Ş. Manisa Factory recovered the waste heat of the new cooling system by increasing the HVAC air handling unit's suction air temperature during winter season. Annual  $\rm CO_2$  recovery of 175 metric tons has been achieved with the project launched in May 2015 and completed in December 2015. In addition to this, Manisa Factory has been nominated with this project for "Project for Increasing Energy Efficiency in Industry" (SEVAP) category in the Project for Increasing Energy Efficiency in Industry Competition organized within the scope of the Energy Efficiency Week events by the Ministry of Energy and Natural Resources on January 14-16, 2016, and has received third place award.



We are taking comprehensive measures for combating with climate change. These measures include energy efficiency, increasing the use of renewable energy resources, and reducing CO<sub>2</sub> emission.



# **ISO 50001 Energy Management System Certification**

Bosch Termoteknik Isitma ve Klima Sanayi Ticaret A.Ş. Manisa Factory attaches a great importance to energy saving, and ensures continuous improvement in this field with the contribution of its employees by making energy management a focal point for all divisions.

Our factory has received ISO 50001 Energy Management System Certificate on March 24, 2016 as a result of the energy efficiency efforts developed in 2015 with this approach. Energy Efficiency Policy was published in the beginning of the project, and participants experienced the importance of energy in life in a dark room through an application held with the motto "How would it be working in a place with no energy? Just think about it..." involving the employees.

Through an intensive effort within the scope of the project, energy consumption in the factory was monitored, and improvements were made for reducing the electricity and natural gas consumption. In order to ensure continuity of employees' participation to the project, they were given targets within the scope of the project, and these targets were monitored on a monthly basis. Consumptions per unit device manufactured by each division were calculated for all divisions of the factory, and it was targeted to reduce this energy by 5%.

 $With ISO\,50001\,Energy\,Management\,System, a\,more\,systematic\,approach\,has\,been\,set\,in\,providing\,sustainable\,Energy\,Management\,System\,in\,the\,Manisa\,Factory.$ 

# Reducing CO, Emission

Bosch's global target for the year 2020 was to reduce  $\mathrm{CO}_2$  emission by 20% compared to the year 2007. This target had been achieved earlier than planned, and even exceeded with a reduction of 30%. This result is the success of all manufacturing facilities worldwide, and Bosch Turkey's contributions in this cannot be underestimated.

At Bosch San. Tic. A.Ş.'s Bursa Diesel and Gasoline System factories, an energy saving of more than 60.000 MWh has been achieved and more than 25.000 metric tons of CO<sub>2</sub> emission has been prevented through actions such as need based software optimization in washing machines, establishing compressor waste heat recovery system,

replacement of process oil pumps of approximately 150 machines with new generation pumps with smaller capacity, optimization of 70 bar nitrogen system, switching from classical air conditioning units into central cold water systems for electric cabinets and oil cooling, switching the lighting completely into LED, and increasing the awareness of the employees with the trainings provided at the energy efficiency school.

Bosch Termoteknik Isitma ve Klima Sanayi Ticaret A.Ş.'s Manisa Factory also reduced its CO<sub>2</sub> emission by 72% as of the end of the year 2015, compared to year 2007, to 39,41 tCO<sub>2</sub>/Mil€ levels.



# Manisa & Aegean Forests Bosch Thermotechnik Grove

Established in 2013 by Bosch
Termoteknik Isitma ve Klima Sanayi
Ticaret A.Ş., tree planting efforts still
continue at the Bosch Thermotechnik
Grove with the contributions of
volunteered blue and white collar
employees. Another grove was added in
2015 to the grove located on an area of
7.000 m2 on İzmir highway close to the
Thermotechnik Manisa Factory. Saplings
were planted on behalf of the employees
both in Istanbul and Manisa to the
Aegean Forests in Foça, and a Bosch
Thermotechnik Grove was established
on this area.

# **E-transformation Projects**

Bosch Fren Sistemleri Sanayi ve Ticaret A.Ş. both contributes to the environment and saves from mailing and archive costs by reducing paper consumption through e-transformation applications. Efforts related to this transformation were launched in June 2013; and with the implementation of all projects in April 2016, an annual saving of approximately 160.000 A4 papers is provided. In addition to this, a saving is provided from the printer, electricity and cartridge costs as the invoices are not issued from the printers anymore, from the mailing costs as the invoices are sent electronically, from

the courier cost as the need for sending original copies of the bank instructions to the banks is eliminated, and from the archiving costs as the legal obligation to keep the documents in the archive for 10 years is eliminated.

Bosch Sanayi ve Ticaret A.Ş. has also switched into e-invoice and e-archive, and saved approximately 640.000 A4 papers annually. It is planned to double this figure after switching into e-dispatch note.



Products

# "Simply.Connected." - sustainable networks

The internet of things connects people, objects, and machines with one another. When it comes to sustainability as well, connectivity opens up potential for new applications. Products are becoming safer, environmental impact can be measured more precisely, and processes are ever more efficient. Bosch is actively shaping this development, and all the company's business sectors now offer solutions for the internet of things.



# CONNECTED MEASURING TECHNOLOGY: EFFECTIVE AIR POLLUTION ALERT

Beijing in early December 2015: while delegations from around the world were at the Paris climate conference, the Chinese government issued the highest possible smog alert for the Chinese capital for the first time. Thousands of factories were forced to close temporarily in an attempt to curb particulate pollution in the city. In other Asian cities, too – including Shanghai, Mumbai, and Kuala Lumpur – air pollution is one of the most pressing environmental challenges.

With the aim of offering products that improve quality of life Bosch China invested a portion of its R&D budget in the development of technologies that can measure, analyze, and improve air quality. At the beginning of November, the company presented the "Air Monitor" control system in China. The smart innovation uses a Bosch environmental sensor to make a precise assessment of indoor air quality.

almost in real time. Not only does the sensor measure room temperature and humidity, it also measures levels of particulate pollution in the air. Every six seconds, the sensor transmits the data it has collected online to the control monitor, whose software provides an exact assessment of current air quality. This systematic monitoring of particulate matter makes sense especially for modern, energy-optimized buildings, as such buildings often have limited ventilation.



Bosch sensors monitor air quality in cities and identify critical zones. In so doing, they can help to lastingly reduce environmental pollutants in urban centers.

# CONNECTED DRIVING: FOR SAFER TRAVELS

In different markets, Bosch is pushing connected and automated driving forward. In-vehicle internet connections not only make driving more relaxed, they also contribute to greater efficiency and traffic safety. For instance, real-time data already help drivers avoid traffic iams or respond to sudden hazards effectively.

Launched in January 2016, the active gas pedal is one example of connected technology. With tapping and other noticeable vibrations, it not only enables a more energy efficient driving style, it also warns drivers of potentially dangerous situations. To do this, the pedal is connected with other functions in the vehicle, for instance with sensors that measure the distance to the vehicles ahead. If a car drives up too close to another, the pedal taps and warns the driver to stop accelerating. The pedal can also be connected to online data, for instance data that the navigation system provides. In this way, the smart driving assistant can detect sharp bends or traffic jams before the driver can see them, and suggest that the driver slows down.

Connected safety systems are also an increasingly common feature for two-wheelers. With its connectivity control unit (CCU), Bosch connects motorcycles to the Internet. This enables features such as the e-call, which the EU is making mandatory for newly registered passenger cars and light commercial vehicles from April 2018. If the motorcycle is involved in an accident, the e-call makes an automatic emergency phone call to a call center, and thus enables help to reach the scene faster. What is more, the CCU also provides motorcyclists with information on potential road hazards

# **R&D in Bosch Turkey**

We are both carrying out research and development activities and contributing to the innovation efforts of Turkey with 573 employees in our 4 R&D Centers located in Bursa, Manisa and Çerkezköy in Turkey. During the last three years, we reserved a budget of approximately €100 million Euro to these centers. Today, Bosch exports R&D from Turkey to 97 countries.

Bosch Termoteknik Isıtma ve Klima Sanayi Ticaret A.Ş.'s Manisa R&D Center exports its conventional and condensing combi boiler devices, which it designs and develops, to 34 countries in three continents. Receiving "Best R&D Center" award in the industry for three consecutive years as a result of the performance index study performed by the Ministry of Industry, the R&D expenditures of the center since 2010 has exceeded € 23 million. Manisa R&D Center makes new attempts on innovation with more than 80 experts and engineers, and has increased its targets on intellectual and industrial rights with the "Innovation Break" Committee. Center continues transferring technology to the world while continuing being a competence center on conventional combi boiler, condensed combi boiler and plate heat exchanger manufacturing, development, and development tests.

More than 200 researchers work in Diesel and Gasoline Injectors R&D Centers located in the Bursa Factory of Bosch Sanayi ve Ticaret A.Ş. consisted of Platform, Customer Projects, and Process Development divisions. Centers produce new technologies for developing new products complying with Bosch's "Eco-Friendly Technology" strategy. Working on more than 180 projects, the R&D centers focus on development and recovery of gasoline and common rail diesel injectors, as well as the development of the products manufactured for off-highway vehicles (tractors, off-road vehicle, heavy duty vehicles etc.). Primary products are the common rail injectors developed and manufactured for the European and Asian markets, and the short injectors manufactured for the off-highway vehicles.

# **Bosch Turkey Industry 4.0 Projects**

Bosch Turkey continues Industry 4.0 and the organizational efforts it has initiated in 2014 related to this with international projects today. First, projects were selected for preparing the factories to Industry 4.0. While making these selections, compliance to Bosch Digital Transformation Strategy, QCD (Quality - Cost - Delivery), and technological leadership were prioritized. Possibilities including cycle time tracking for early intervention in the manufacturing area, predictive maintenance with smart tablet support in the maintenance area, robot usage in logistics area, product line part monitoring with RFID in the finance area, and data collection in all areas of the factory with smart sensor were taken into account.

Industry 4.0 applications can be applied for not only the manufacturing machinery, but also for all divisions of the factory. Projects in manufacturing machinery directly provide efficiency increase, thus the delivery quantities are maximized. The project at the maintenance area aims eliminating unexpected stops and reducing the specific maintenance costs.

In addition to this, the robot, which a pilot operation was held, timely delivers the required material to the required place. In the coming period, these robots will know which material is needed where, when, and how much, and they will deliver the materials to the required place. The waiting period arising from parts is aimed to be eliminated to none in this way.

It will be possible to collect data in all areas of the factory. For example, if a machine at the manufacturing area does not have an Ethernet output, then it will be possible to collect data through the help of a sensor, which can be easily installed and which is developed by Bosch, even from very old machinery. These sensors, called Industrial Sensor Solutions, provide a significant support in predictive maintenance and identifying the remaining service lives

# **Awareness for Traffic Safety**

Bosch carries out some efforts for increasing awareness on the impact of its on-vehicle active security systems and driver assistance systems, as well as on the importance of using safety belt in line with its "Zero Accident" vision. Activities were held in Bosch Turkey and Middle East Headquarters building and at three production facilities in Bursa for increasing the awareness of the employees through video displays, posters, journals, and statements.

In addition to these events, Bosch Turkey has attended to the 6th Highway Traffic Safety Symposium and Exhibition held in Ankara in November 2015. Participants were briefed on how it is possible to reduce or eliminate the potential traffic accidents with driver assistance systems and active security systems through a presentation on these systems required for safe driving in the traffic. As a company operating in the automotive industry, Bosch will continue with its awareness raising efforts on safe driving.

of the parts. In addition to this, they prevent and identify transfer damages by identifying the ambient (environmental) conditions. It will even be possible to collect data from the machinery that are not "14.0 Ready" with this technology in near future.

Using the standard software solutions developed by Bosch for all manufacturing factories, Bosch Sanayi ve Ticaret A.Ş. Diesel and Gasoline Systems Bursa Factory is also informed about the other factories using such software. We are capable of accessing and processing from a single location to all data produced in Bosch's Bursa Factory. On the other hand, it transmits correct data to the correct person at the right time, and creates an opportunity for early intervention. As the decrease in the fields such as cost of error, as well as the efficiency and delivery increase will directly increase the factory performance, manufacturing in the factory by using Big Data and data mining stand out as the points that would ensure an increase in the investment to Bursa and Turkey.

Bosch is taking quick steps in becoming a company both using and producing technology with its bilateral strategy in Industry 4.0. Industry 4.0 applications are developed and used in our Bursa Factory simultaneously with the headquarters by putting human into the center of it.





"Stop the Crash" supports the United Nations'

aim of halving the number of deaths resulting from traffic accidents by 2020. The figure currently stands at 1.25 million people per year.

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Associates

# Networked across generations

At Bosch, different generations – from young apprentices to retired senior experts – are cooperating with one another. This type of diversity is a source of potential. While up-and-coming executives advise more experienced associates on the use of new software, for instance, they benefit from the management and specialist expertise of their older colleagues. With our diversity initiative, we have thus focused on intergenerational learning models and promoted an active exchange between young and old.



## PEOPLE@INDUSTRY 4.0

Under this heading, last year the Bosch plant in Blaichach actively addressed the changing working conditions that are emerging as a result of connected production. Associates there and at China's Suzhou production location already use tablets and analysis software to control high-tech facilities. Initial fears have now given way to a sense of pride among a majority of associates, as they feel they are contributing to shaping the future of work. Since the very beginning, cooperation and mutual learning have played an important role in the interdisciplinary, multigenerational team.



As a leading provider and a leading user of Industry 4.0 solutions, Bosch is actively driving the transformation of the working world, and thus also promoting sustainable industrialization.

## AN ACCIDENT-FREE FUTURE

In 2015, we also set ourselves the goal of supporting the further training of associates who have been on board for many years, with the aim of maintaining their level of performance. With this in mind, the "Erfahrung hat Zukunft" ("Experience is the future") initiative was launched in Germany. It aims to sensitize executives to demographic change, and to raise awareness about how important older associates' knowledge and motivation are for Bosch's success. Demographic change means that Europe's workforce is aging. What is more, a growing share of our customers is over the age of 50. This means that companies like Bosch need associates who understand the needs of this group of customers, whose purchasing power is high.

One of the new initiative's main focal points is to expand educational programs for mixed-aged groups. With the support of our 50plus@Bosch associate network, the Generation Tandem initiative was recently launched. By way of random selection, two associates with an age difference of at least ten years are paired up. This type of networking gives colleagues the opportunity to share knowledge and experience, and to support each other in their daily work. After the initial sixmonth pilot project was launched at the Bosch site in Schwieberdingen, Germany, Bosch asked all of the tandem participants to share their views on their experience. 84 percent of respondents said they believed that Bosch would benefit from greater knowledge sharing between age groups. They listed positive effects such as knowledge transfer, a greater sensitivity to differences, and an increase in crossgenerational cooperation. On the heels of this success story, Generation Tandem will now be rolled out at different locations around the world to promote more networking between young and old.



In line with the wishes of our company founder, Bosch promotes equal access to education and lifelong learning – within and beyond the walls of the company.

# **Reverse Mentoring**

Discovering the talents of young workers and understanding their point of view related to the world is very valuable for Bosch. Within this scope, Bosch Turkey has launched Reverse Mentoring positioned as a part of the leadership and competence program. Generally senior and mid level executives share their experiences, expertise, and opinions with the young employees. In Reverse Mentoring, regardless of the hierarchy, the young employees provide mentoring to more experienced employees on a given topic.

This program can be applied in several fields, and a Reverse Mentoring program was launched in Turkey in 2013 based on the current trends where young employees experienced and active particularly in social media and internet use mentored the executives. Content of the program is established together with the mentor according to the field of interest and need of the executive. Number of sessions in the program, which continues for approximately one year, is also determined according to the need of the executive. While 25 senior and mid level executives benefited from the Reverse Mentoring in 2015, number of senior and mid level executives involved in this practice has reached to 43.

# Equal Opportunities at the Workplace

Guaranteeing equal opportunities for female employees remains as one of the priorities of Bosch in its global agenda. In global, Bosch carries out efforts for providing equal opportunities in employment to the female employees, and aims increasing the rate of female executives to 20 percent by the year 2020. In addition to this, care is taken for providing equal opportunities in the recruitment of female employees, particularly in the technical fields. As Bosch Turkey, we are carrying out several practices on equal opportunities for female employees in all of our companies. Bosch Sanayi ve Ticaret A.Ş.'s Bursa Factories are among the locations working hard on this matter.

Mentoring programs, trainings, and experience sharing meetings with female leaders are organized in Bosch Sanayi ve Ticaret A.Ş.'s Bursa Factories for improving the talents of the female employees. Female leaders meet with the senior management at the round-table meetings, and discuss the obstacles encountered by the female employees, who are less in number, as well as the solutions. Pregnant and breastfeeding female employees benefit from the rest rooms within the factory, as well as the opportunities such as part time or home working after giving a birth. Flexible working models offer solutions balancing the work and personal life both for female and male employees.

Pilot practices towards increasing the number of female employees, particularly in the technical field where they are less in number, is particularly important in the Bosch Diesel and Gasoline Systems Bursa Factory. In addition to supporting gender equality in student programs and recruitment, "Being A Woman In Technical Field" program developed by Bosch paves the way for the women to work in technical field. For all these practices, the factory is awarded with "Equal Opportunity Model Certificate" in 2015 within the scope of the project launched by KAGIDER with the support of the World Bank, and has been the first company entitled to this certificate in Bursa, as well as the first company in the Turkish metal industry.

Factory also received "Social Gender Equality in Work Life Award" from the Ministry of Social Security in the same year. Bosch was deemed worthy to this award as a result of the assessment made over the criteria including commitment, training opportunities, anti-discrimination mechanisms, recruitment, career planning, promotion process, and equal pay for equal work.



Bosch has devoted itself to supporting women for working in technical field, and to create equal opportunities for women to take place in executive position.



# **Healthy Life Events**

Several events took place throughout 2015 at the Bosch Turkey and Middle East Headquarters building for increasing the awareness of the employees on healthy life.

Prof. Dr. Osman Müftüoğlu met with the employees and gave them tips on healthy life. A diet clinic visited the headquarters building once a week for two months and provided dietician service, and also provided trainings on nutrition and weight management. "Art of staying fit on your seat" brochures were placed on the desks in order our employees to do some stretching movements on their seats.

All of our employees had medical screening on three different days. Within the scope of medical screening, our employees received eye examination, lung film, and hemogram examination. Traffic Awareness Raising seminar was held with the attendance of traffic polices. A Smoking Cessation Seminar was held, and trees were planted with the revenue of the seminar. Chinese exercise sessions on Yi Jin Jing, which gives a high level of energy to the body, were organized under the leadership of our executive Mustafa Ayhan.

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Society

# **Promoting social responsibility**

The company founder Robert Bosch's efforts to help others went beyond the boundaries of the company. By promoting social responsibility, we are continuing his legacy. We support charitable projects and encourage our associates to volunteer. In challenging situations, one person's help can make a huge difference.

#### **INTEGRATION IN PRACTICE**

Millions of people are fleeing their homelands to escape war, persecution, and poverty. On arrival in their host countries, refugees face a range of new challenges, including a lack of basic necessities and the difficulty of coming to terms with an unfamiliar language and culture.

Associates at Bosch in Vienna launched an initiative in autumn 2015 to help refugees. Under the initiative entitled "Support vor Ort – Bosch-Mitarbeiter helfen" ("Local support – Bosch associates lend a hand"), 32 associates have agreed to sponsor 25 refugees from Syria and Afghanistan for a period of 18 months. Helping them with administrative procedures is one example of the quasi-daily support they provide, which aims to help the newcomers eventually live an independent life in Austria. The initiative is part of the "Connecting People" project, an association of various non-profit organizations.

In Germany, too, Bosch is committed to supporting the integration of refugees and facilitating their access to the labor market. To this end, we will create around 400 internships around Germany for refugees, ranging from short internships to several months of introductory job training. The internships are generally held in workshops and are designed to prepare the refugees for the German job market.

In November, four young refugees from Togo, Somalia, Iran, and Pakistan began their "Bosch training year". The training program, which is run at the Feuerbach location in Stuttgart, aims to help school leavers that have yet to finish their education land a job in the metalworking and electrical fields. They also receive professional education and are accompanied by social workers throughout. In this way, they gain practical experience at a company and both get to know people and Germany's work culture. At the end of the program, they have the possibility of joining Bosch as skilled workers.

The commitment of Bosch associates to the refugee cause is also strong. Two appeals for donations in December 2015 and January 2016 garnered over 400,000 euros, which Bosch increased to 820,000 euros. The money will be used for selected projects that lead to lasting improvements in refugees' living conditions.



One of Bosch's stated objectives is to promote peaceful, integrated societies where the rule of law is upheld, as a basis for sustainable development.



## **Women Build the Future**

Within the scope of the Women Build the Future event, female engineering students from the universities have gathered together at Bosch locations in Istanbul and Bursa. Total 40 students attended to the event organized for supporting female recruitment. In addition to the case studies, interviews and career talks, students also had the opportunity to build a network with female executives of Bosch. With the Women Build the Future event planned to be held regularly in the future, it is aimed to provide job opportunities to the students close to their graduation, and to place students to the candidate pool for part time and full time positions.

It's being planned to organize Women Build the Future event, where female executives from the Human Resources and other departments have attended and held for the first time, in Manisa in the future, and to meet with female engineering students studying at the cities where Bosch facilities are available.

## **Formula Student**

Operating under Bosch San. Tic. A.Ş., Mobility Solutions Initial Installation Sales Unit supports the universities representing our country in various platforms. The Yıldız Technical University is one of these universities, and the YTU Racing team established in the university attends to Formula Student races since 2011 with the cars they have designed. YTU Racing, which Bosch is the main sponsor of, used the donated Bosch components in the car they designed for the races, and ranked 34th in general classification by finishing all the stages in the Formula Student UK 2016 where 111 Class-1 teams have attended worldwide. And for the first time a car produced in Turkey raced in a Formula 1 track and represented our country.

While preparing for the race, students had the opportunity to carry out calibration works on the car with Eberhard Haberkern from Bosch Motorsport, who works on engine calibration at races such as Formula 1, WRC, and Le Mans. Bosch will continue supporting the Yıldız Technical University in Formula Student races to take place in the coming years, including the Formula Student race in Germany in 2016.

## **Volunteer Teams**



Bosch Turkey employees attach importance to volunteer efforts, and carries out activities on various fields at all locations.

Bosch Termoteknik Isitma ve Klima Sanayi Ticaret A.Ş. has established its own volunteer teams for making the social responsibility projects, held within the scope of both Manisa factory and Istanbul Küçükyalı headquarters sales office, sustainable. Workshops were organized in 2015 for determining the projects on education, environment, products, and employees, and events such as planting trees to the Manisa Bosch Grove and booth work for LÖSEV were held. Volunteer teams at the headquarters sales office have coordinated an article box campaign, "Donate If You Do Not Wear", with Maltepe Municipality.

Employees of Bosch Sanayi Ticaret A.Ş. Bursa Factory are organizing various events within the scope of Bosch Volunteer Clubs since 1996. They supported the people in need with seminars, events, and supplies and clothing aids in 2015. Holiday clothes were donated to 150 children within this scope. Employees sent the clothes, which they packed themselves, together with a letter they wrote with their children.

A moral event was held for 120 children receiving cancer treatment. During this event, cookies were cooked with the children, and it was ensured that the children had an entertaining day with gifts, magicians, and Bosch folklore group's shows. Several other volunteer projects like these were launched together with the employees.

# **YASED Cooperation**

In order to contribute to the development of our country, Bosch continues cooperating with YASED, which endeavors for increasing the efficiency of international companies in Turkey and for increasing the investment attractiveness of the country, as in the previous years. Through this nongovernmental organization, where Steven Young, President of Bosch Turkey and Middle East, acts as the Board Vice Chairman, we cooperated with projects such as Koza and "Practices and Recommendations for Increasing the Representation of Women in Senior Management" and we have attended to the working groups.

Koza Project was launched as a "Social Responsibility Project" in the field of education by YASED's Employment and Education Working Group, and offers internship opportunity to the university students at YASED member international companies. Within this context, students from universities in different cities of Turkey had the opportunity to do their internship in Bosch.

Bosch has contributed to the preparation of the report on "Practices and Recommendations for Increasing the Representation of Women in Senior Management", which provides recommendations of the senior executives for bringing best practice examples of YASED member international companies to Turkey.

Bosch also attends to 10 working commissions including Strategy for 2023 Working Group, HeERO Working Group, and Employment and Education Working Group.

# **Bosch Turkey Generation Z Meetings**

As a strong and successful employer brand, Bosch attaches importance to establishing effective communication with young talents, and understanding their expectations and demands. Bosch endeavors for introducing the company culture and work life, and for being a source of inspiration to both young talents and professionals in their career choices. In this era where different generations work together, three different generations are able to work in the same office. Understanding these generations and gathering all of them under common values is one of the characteristics that make Bosch successful. As a dynamic employer open to innovations, Bosch is aware that generation Z will join the work life during the next decade, and is preparing itself for a change by trying to know them in advance.

Bosch Turkey thinks that it is important to have an existence at the high schools in order to touch the generation Z who are still in high school age, to expand their perspectives, and to raise their awareness while they still did not choose a profession. In line with this idea, the company has started to organize pilot high school events in 2015 in order to make the students know themselves, and to increase their awareness. Prepared by targeting the introduction of profession and industry, contents of the presentations were supported with self-consciousness, self-discovery methods, and company introduction. 350 high school students had the opportunity to familiarize with Bosch through various sessions and talks at three high schools in Istanbul. In 2016, engineering competitions prioritizing teamwork and practical experience are being organized by expanding the scope of high school events. During these events held in eight high schools, company had the opportunity to personally meet with 840 students for a month and to support them in getting an idea about their future career alternatives through company presentations and awareness studies.

# **Manisa Factory İŞKUR Program**

Bosch Termoteknik Isitma ve Klima Sanayi Ticaret A.Ş.'s Manisa Factory cooperates with İŞKUR since 2011. Primary aim of this cooperation is to offer a support for the employment of the people, who do not have any professional experience or work experience, by providing these to them. Another aim of the program is to allow the employers, who have hard time in finding qualified labor, having detailed information about the people they will recruit by observing and training them for a while, and giving an effective decision in their recruitment.

There are trainees in manufacturing and logistics fields within the scope of the program at the Bosch Thermotechnik Manisa Factory. Approximately 250 trainees were employed since 2011, and the total number of people employed through the program has reached to 130.

# Social Solidarity Committee (SBE) Scholarship

Employees of Bosch Termoteknik Isitma ve Klima Sanayi Ticaret A.Ş.'s Manisa Factory create a fund for elementary school, secondary school, and high school students with the given amount of deduction from their salaries. Success of the students supported with this fund, called Social Solidarity Committee (SBE) scholarship, is closely monitored and they are encouraged for increasing their grade point averages.

Total 44 students were supported during the academic year of 2015-2016 within the scope of the scholarship supporting the students for nine months when the schools are open.

# A Short Glance at 2015

## **February**

#### Combating unemployment

Bosch Turkey has signed the core principles of the Global Apprenticeship Network (GAN), the first concrete output of B20 Employment Task Force, established for encouraging the business world to improve the skills and employment of youth through on-the-job training.

## June

#### Supporting technical education



20 students were graduated in 2015 as the second graduates of the Bosch Car Service Training Center, which has started education in 2012 at Şişli Technical and Industrial Vocational High School with an investment of € 90.000 by Bosch. Materials required for the renewal of the Training Center, as well as for the teachers and students are provided by Bosch. This Center aims educating the students in the best manner and providing them experience related to work life, as well as meeting the qualified labor need of the automotive industry.

## **October**

#### Developing sustainable products

Bosch Thermotechnik R&D Center located in Manisa was elected the most successful R&D Center of the industry, third time consecutively, at the 4th Private Sector R&D Centers Summit organized by the Ministry of Science, Industry and Technology. Bosch Thermotechnik Manisa Factory R&D Center Director Saim Kırgız received the award from the Science, Industry and Technology Minister Fikri Işık during the ceremony held.

## **November**

# Supporting a business climate that provides growth and employment opportunities

Within the scope of Turkey's G20/B20 Presidency, Steven Young, President of Bosch Turkey and Middle East, acted as the Co-Chair of Employment Task Force. Steven Young has attended to the meetings where how the employment will change in the future and how the private sector should adapt to these changes are discussed. Policy recommendations, prepared by the task force as a result of these meetings held at different locations of the world, are submitted to the G20 leaders and the presidents of international organizations in November 2015.

## March

#### Supporting female employment



Supporting the increase in female employment and adopting a strategy for increasing the number of female executives, Bosch came on board with the companies signing the Women's Empowerment Principles of the United Nations.

## **April**

#### Supporting the Turkish economy

Bosch Thermotechnik has received "Highest Exporting Company" award during the "Successful Exporters Award Ceremony organized by the Turkish HVAC-R Exporters' Union (ISIB). During the ceremony held at Ankara ISIB Center and attended by the Economy Minister Mustafa Elitaş, Tax, Credit and Risk, Import and Export Director Raşit Özkan received the award on behalf of Bosch Thermotechnik.

## **June**

#### Supporting the Turkish economy

Bosch Thermotechnik Turkey, one of the important export bases of the Bosch Group, has received "2015 Biggest HVAC-R Exporter" award from the Turkish Exporters Assembly (TİM). With an export figure of € 256 million to 34 countries from Europe to Middle East, Gulf Region to Latin America in 2015, award of Thermotechnik was presented by the Economy Minister Nihat Zeybekçi, Development Minister Lütfi Elvan, and TİM President Mehmet Büyükekşi.

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# **Activities – an overview**

Robert Bosch GmbH has been a member of the United Nations Global Compact since 2004, and is committed to this initiative's ten global principles in the areas of human rights, working standards, environmental protection, and the fight against corruption. The following table provides an overview of the progress made in the 2015 reporting period in relation to these ten principles of responsible corporate governance.

PRINCIPLE	BASIS/GOALS	ACTIONS	RESULTS
PRINCIPLE	BASIS/GUALS	ACTIONS	RESULIS
Human rights  • Principle 1: Support and respect human rights  • Principle 2: No complicity in human rights abuses  Working standards	Corporate objective: 1,000 supplier audits by the end of 2020 Code of Business Conduct Basic principles of social responsibility at Bosch Bosch purchasing guidelines "We are Bosch" corporate guidelines  Corporate objective:	Supply chains: Conducting environmental and occupational safety audits and auditing supplier portfolios  Bosch Global Supplier Award: Acknowledging the best suppliers  Purchasing guidelines: Sanctioning suppliers  "Chefsache" initiative:	471 audits conducted since 2010.     Bi-annual award; in 2015, 58 suppliers from 11 countries were honored. Some of the companies have received the award before.     Suppliers have made improvements where needed. Until now, sustainability-related sanctions have not been necessary.  Bosch Turkey Performance     Bosch Sanayi ve Ticaret A.Ş. has signed the UNGC principles on November 5, 2014.  Bosch is committed to social change and has experience in
Principle 3: Uphold freedom of association Principle 4: Elimination of all forms of forced and compulsory labor Principle 5: Abolition of child labor Principle 6: Elimination of discrimination	Women to fill 20 percent of management positions by 2020  Bosch Human Resources System (BHS)  Guidelines for a flexible and family-friendly work culture  "We are Bosch" corporate guidelines	Cooperation with other major German companies and organizations, Bosch is a founding member of the "Chefsache" initiative, which promotes equal opportunities for men and women.  Diversity management: Group-wide programs to promote diversity and attract the best staff have been continued and expanded.  women@bosch: For 20 years, the associate network has been committed to strengthening the position of women at Bosch.  Senior experts program: Former Bosch associates support the company as expert advisors after they retire, and thus continue to feel valued on a professional level.  Cultural consultants: Bosch associates advise colleagues who are going abroad for Bosch and act as experts for intercultural cooperation.  Committed associates: Bosch associates founded Primavera e.V. in 1990. The aid organization aims to promote education for disadvantaged children in developing countries around the world.  Refugee integration: With a number of initiatives, Bosch is committed to supporting refugees. Among other things, the company is part of the "Wir zusammen" ("We are together") economic initiative that was launched in 2015 and aims to promote the integration of refugees.	<ul> <li>Dialog events with senior executives are offered, as are mentoring programs and seminars.</li> <li>In 2015, the share of female executives stood at 13.6 percent*.</li> <li>In Germany, about one in four apprentices is female.</li> <li>Second international "Bosch Diversity Day" in 2015 at more than 200 participating locations.</li> <li>About 7,400 associates on short or long-term foreign assignment.</li> <li>The network has about 3,000 members in 30 countries around the world.</li> <li>Senior experts work around 50,000 days per year.</li> <li>Number of retirees who work as senior experts: 1,700.</li> <li>Countries that provide senior experts: Brazil, Germany, the UK, India, Japan, and the United States.</li> <li>There are currently 200 active cultural consultants at Bosch.</li> <li>Primavera celebrated its 25th anniversary in 2015.</li> <li>In 2015: 900 members, a donation volume of more than 600,000 euros, and 30 projects in 12 developing and emerging countries.</li> <li>More than nine million euros in donations since the initiative was established.</li> <li>Bosch associates donated more than 400,000 euros to help refugees, and Bosch doubled this sum to 820,000 euros, and invited associates to make suggestions on how the money should be used.</li> <li>Around 400 internship spots for refugees at about 30 locations in Germany in cooperation with public institutions.</li> <li>Over the course of the "local support" initiative, 32 Bosch associates in Austria now sponsor refugees.</li> </ul>

#### **PRINCIPLE** BASIS/GOALS RESULTS **ACTIONS** Working standards Corporate objective Women to fill 20 percent Foundations around the world: • In 2015, the Bosch Group donated a total of 16.9 million euros. The national companies are • Bosch has some 7,350 apprentices around the world of which • Principle 3: Uphold freedom of management positions committed to social well-being in the about 2 450 are outside of Germany of association by 2020 regions, and there are four international Bosch Group · Over 100 work-time models across hierarchical levels, Bosch Human · Principle 4: Elimination of all foundations in Brazil, China, India, including part-time work, telecommuting, and job-sharing. forms of forced and Resources System (BHS) and the U.S. compulsory labor Global guidelines for a flexible and family-oriented working Guidelines for a flexible and Dual training: Principle 5: Abolition of family-friendly work culture The Bosch training model has been child labor • Standardized rules with regard to telecommuting, as well as to established in more than 20 countries "We are Bosch" corporate personal use of e-mail, telephones, and Internet at work • Principle 6: Elimination of around the world. discrimination · Bosch won the German XING social network's Flexible working culture: New Work Award 2016 for forward-looking work concepts. A greater focus is being placed on results rather than on physical · Bosch is especially committed to maintaining and promoting presence with benefits for families the mental health of its associates with young children. • The new corporate agreement entered into force at all German locations on August 1, 2015. Corporate health management: In cooperation with employe An occupational safety management system based on OSHSAS 18001 was implemented at all manufacturing representatives, a corporate agreement was implemented to promote associates' mental health. locations, 122 are already externally certified. • In 2015, the number of reportable work accidents per million hours worked decreased to 3.2 (a 53 percent decrease over Occupational safety: An occupational safety management system was introduced that is based on the global OHSAS 18001. • Girls' Days are organized each year. They provide around 1,000 schoolgirls insights into the global supplier of technology and Supporting schoolchildren: Initiatives to spark children's interest in technology. • The "Building Mercury" competition in the Czech Republic New training positions: helps make pupils familiar with technical topics Bosch helps to combat youth • As part of the Wissensfabrik initiative, Bosch participates in unemployment in southern Europe. some 280 educational partnerships. Specialist training program: Bosch Italy is engaged in the "Allenarsi per il Futuro" ("Train for the future") program, which aims to improve job opportunities Bosch provides training for associates without university degrees to qualify for young people. them for commercial tasks within the company that would normally be reserved for graduates. Bosch Spain is part of the "Alianza para la FP Dual", a joint initiative of politics and business that promotes the introduction of cooperative education in Spain. Promoting innovative strength: Bosch provides platforms for good · Since 1999, 750 associates have completed the training ideas with its internal suggestion scheme and the "Jugend forscht" annual competition in Baden-• The program lasts two years and comprises 50 training days. Württemberg, Germany, which the • In 2016, Bosch has pledged to spend an additional 247 million company organizes. euros on programs for further training • In total, about 22,000 associates submitted suggestions for improvement in Germany, which were rewarded with a total of 7.7 million euros. • Some 120 girls and boys took part in the "Jugend forscht" state competition in Stuttgart. 60 of 666 projects made it into the final. **Bosch Turkey Performance** Bosch Turkey's employees are entitled for organizing and collective labor agreement within the scope of the relevant law and regulations At Bosch Turkey, overtime works are only carried out voluntarily, and compliance with legal working hours is regularly audited. · Relevant risks are being managed through the required audit mechanisms in all domains related to child labor • Bosch Turkey is against any kind of discrimination. Diversity is recognized as a richness, and is encouraged at all levels. Bosch Turkey organizes "Diversity Day" event since 2014 within the scope of this strategy. Bosch Diesel and Gasoline Systems Bursa Factory has received "Equal Opportunity Model Certificate" within the scope of the project of KAGİDER in cooperation with the World Bank for its sensitivity to female-male equality in work life and the opportunities it provides to its female employees. • Bosch Turkey offers part time work and home working etc. work models in order to support flexible work culture · Bosch Turkey carries out events for female university students to support female recruitment

PRINCIPLE	BASIS/GOALS	ACTIONS	RESULTS
Environmental protection  Principle 7: Precautionary environmental protection  Principle 8: Initiatives to promote greater environmental responsibility  Principle 9: Development and distribution of environmentally-friendly technologies	Corporate objective: Cut relative CO, emissions by 35 percent by 2020 over 2007 levels Guidelines for occupational safety and environmental protection Bosch Product Engineering System (BES) Bosch Production System (BPS) Design for Environment (DfE) "We are Bosch" corporate guidelines	Co <sub>2</sub> reduction: Targeted reduction of relative CO <sub>2</sub> emissions at production locations around the world.  Sustainable products: Continuous investment in the further development of products that conserve resources and protect the environment.  ISO 14001: Bosch locations certified with this international environmental management system standard.  Climate-friendly locations: Many locations have made progress with regard to climate protection thanks to energy-efficient technology.  eXchange: Used starters and generators are refurbished and made as good as new.  BIK initiative: Development aid for greater energy efficiency, a joint project of Bosch Corporate Logistics, the International Trade Centre, and the Karlsruhe Institute of Technology.  Two environmental awards: Associates developed an innovative gasoline pump and wrote a specialist article about the impact of dual fuel technology on global warming.  Expanding the environmental portfolio: A new Bosch Thermotechnology R&D center is being built in Aveiro, Portugal.	<ul> <li>Relative CO<sub>2</sub> emissions have been reduced by 29,7 percent over 2007.</li> <li>Some 5,422 patents filed around the world.</li> <li>In 2015, 53 percent of Group-wide R&amp;D expenditure went toward sustainable products*.</li> <li>Environmental/Safety portfolio accounts for about 40 percent of Group sales*.</li> <li>Until now, all Bosch production locations have introduced the management system; 235, or 80 percent of locations, have received external certification.</li> <li>Schwieberdingen: energy required for heating was reduced by 40 percent, and CO2 emissions by 21 percent – and this despite a 15 percent increase in surface area.</li> <li>By recovering copper from industrial waste, Bosch Australia was able to reduce the amount of waste generated monthly by 31 percent. In October 2015, the company won the Premier's Sustainability Award.</li> <li>Raw materials consumption reduced by almost 90 percent, an CO<sub>2</sub> savings of more than 50 percent compared with new products.</li> <li>As a result of eXchange, more than two million diesel injection pumps have been refurbished at Bosch's Jihlava plant in the Czech Republic since 1996.</li> <li>The BIK initiative teaches lean management methods to small and mid-sized companies in Africa.</li> <li>Participating companies increased their productivity by as much as 100 percent.</li> <li>With the pump's help, fuel consumption can be reduced by up to 7.0 percent.</li> <li>Two Bosch teams in Brazil received the AEA Environment award for the pump's development and the specialist article.</li> <li>In 2015, the foundation stone was laid for the research center which will focus on connectivity, low emissions, and energy efficiency.</li> <li>Bosch Turkey Performance</li> <li>Energy Efficiency School established at Bosch Sanayi ve Ticar A. Ş.'s Diesel and Gasoline Systems Factory provides educatic for raising awareness on energy efficiency, and collecting the recommendations on energy improvement that would be applied by raising the awareness level of the employees.</li> <li>Die</li></ul>
	ManharafTananana		Bosch Thermotechnik Manisa Factory has received ISO 5000: Energy Management System certificate with its projects launched in July 2015 and completed in February 2016.
ighting corruption  rinciple 10: Work against prruption  Member of Transparency International e.V. (since 1995)  Member of the Forum for Compliance & Integrity (since 2007)  Code of Business Conduct  "We are Bosch" corporate guidelines		Whistleblower portal: A portal in which all parties can report breaches of compliance (observance of legal and internal regulations in business activities).  Compliance training: Active promotion of knowledge.	Associates (including interns and PhD students), external service providers, business parties, business partners (e.g. suppliers, customers, or cooperation partners) and third parties can report breaches of compliance.      Mandatory compliance training includes lessons on business ethics, product liability, anti-trust laws, and export controls.      Bosch Turkey Performance     Bosch has put the rules, which it had set as fundamental values, into writing as Ethical Code of Conduct in 2008. Ethica Code of Conduct covers 9 fundamental issues including

RESULTS

PRINCIPLE

BASIS/GOALS

ACTIONS

Further key principles for sustainable activities in the Bosch Group: In 2010, an office, expert committee, and steering committee were founded. These bodies have since been  $responsible for the \ efficient \ implementation \ of \ all \ of \ the \ Group's \ sustainability-related \ activities.$ 

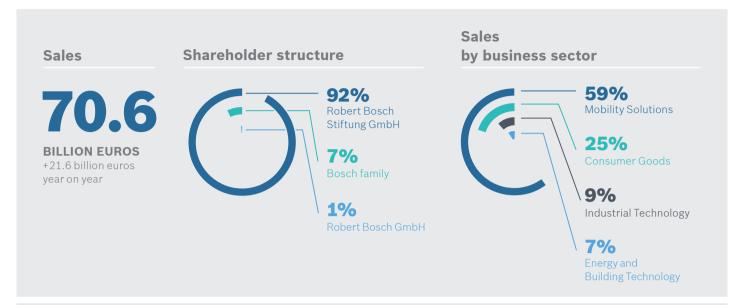
Scope of reporting: The scope of the information is indicated in the texts, key figures, and targets. This report presents a summary of the Bosch Group's current sustainability-related activities across sectors and divisions. Following their acquisition, these now also include BSH Bosch und Siemens Hausgeräte GmbH (now BSH Hausgeräte GmbH) and ZF Lenksysteme GmbH (now Robert Bosch Automotive Steering GmbH), both of which were previously joint ventures. It therefore serves as a progress report as part of the group's membership of the UN Global Compact.

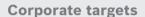
Reporting period: The reporting period covers January 2015 to spring 2016. The cut-off date for key figures is December 31, 2015. The editorial deadline was April 1, 2016. Memberships (examples): B.A.U.M. (1990), Transparency International (1995), econsense (2000, founding member), United Nations Global Compact (2004), Global Reporting Initiative (2006, organizational stakeholder), Forum Compliance & Integrity (2007)

Other sustainability reports: WIN-Charta Baden-Württemberg (2014), German Sustainability Code (2015)

# Key figures 2015

Following the acquisition of the remaining shares in BSH Hausgeräte and Robert Bosch Automotive Steering (AS), the companies were fully consolidated. In 2014, both companies were still joint ventures, and shares were consolidated at equity.

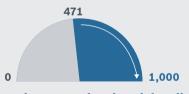






35% reduction of CO<sub>2</sub> emissions (relative)

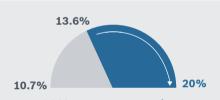
by 2020 over 2007 levels **Status 2015:** -29.7%



1,000 environmental and social audits of suppliers

by 2020 over 2010 levels

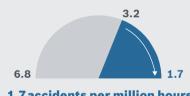
**Status 2015:** 471



20% women executives

by 2020 over 2011 levels

Status 2015: 13.6% (excluding BSH and AS)



1.7 accidents per million hours worked

by 2020 over 2007 levels

**Status 2015:** 3.2

R&D cost

**6.4** 

**BILLION EUROS** 

+1.4 billion euros year on year Earnings after tax

3.5
BILLION EUROS

+0.9 billion euros year on year

**Capital expenditure** 

**4.1**BILLION EUROS

+1.5 billion euros year on year Personnel expenses

20.4

BILLION EUROS

+5.1 billion euros year on year

# Key figures 2015

Following the acquisition of the remaining shares in BSH Hausgeräte and Robert Bosch Automotive Steering (AS), the companies were fully consolidated. In 2014, both companies were still joint ventures, and shares were consolidated at equity.

## **Environment**

Note: as a result of the above-mentioned change in the consolidated group, Bosch emissions, energy, and waste figures increased. However, these values should be considered in relation to sales volumes, which increased 70 percent in the same time period, based on comparable data.

CO<sub>2</sub> emissions absolute

2.6 million metric tons

+15.4% 3.0 million metric tons

Energy consumption

6,707 gigawatt hours

+11.1% 7,451 gigawatt hours

Waste volume

520,000 metric tons

+29.8% 675,000 metric tons

Water consumption

17.3 million cubic meters

+11.6% 19.3 million cubic meters

Ongoing environmental protection costs

Environmental protection investments

21.1 million euros

+135.1% 49.6 million euros

Products

**Environmental/Safety portfolio\*** 

41%

Share of Group sales

53%

Share of R&D cost

#### **Associates**

**NUMBER OF ASSOCIATES** 

375,000

+38.2% versus 2007

**VOLUNTARY RESIGNATION\*** 

5.7%

+21.3% versus 2007

**NUMBER OF ACCIDENTS** 

2,126

-28.2% versus 2007

DAYS LOST

34,437

-10 4% versus 2007

2007 2015

**Training days** +32.8% **773,000 days** 

Training participants +24.9% 516,000 participants

Training expenditure +12.3% 247 million euros

\* excluding BSH Hausgeräte and AS

### **Society**

BOSCH GROUP DONATIONS TO CHARITABLE CAUSES

16.9

MILLION EUROS

#### **REGIONAL COMMITMENT**

Bosch Community Fund

(Farmington Hills, USA) 3.1 million euros

Bosch China Charity Center

(Shanghai, China) **2.0 million euros** 

Instituto Robert Bosch

(Campinas, Brazil)

1.0 million euros

Bosch India Foundation

(Bangalore, India)

0.6 million euros

SPONSORSHIP VOLUME OF ROBERT BOSCH STIFTUNG GMBH

**76.7** 

642

MILLION EUROS for

**PROJECTS** 

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## Project team

Esra Koç Gül Altuntaç

#### Realization

Ketchum Pleon GmbH, Düsseldorf

# Additional information on the company and sustainability at Bosch is available here:

bosch.com bosch.com.tr csr.bosch.com sustainabilityblog.bosch.com

