

# Siemens

Siemens AG



<b>Type</b>	<a href="#">Aktiengesellschaft</a>
<b>Traded as</b>	<a href="#">FWB: SIE</a> <a href="#">DAX Component</a>
<b>ISIN</b>	<a href="#">DE0007236101</a> 
<b>Industry</b>	<a href="#">Conglomerate</a>
<b>Predecessor</b>	<a href="#">A. Reyrolle &amp; Company</a> <a href="#">Siemens-Schuckert</a> <a href="#">Siemens-Reiniger-Werke</a>
<b>Founded</b>	1 October 1847; 172 years ago <a href="#">Berlin, Kingdom of Prussia</a>
<b>Founder</b>	<a href="#">Werner von Siemens</a>
<b>Headquarters</b>	Werner-von-Siemens-Straße 1, 80333 <a href="#">Munich, Germany</a> <sup>[1]</sup>
<b>Area served</b>	Worldwide
<b>Key people</b>	<a href="#">Joe Kaeser</a> (CEO) Ralf P. Thomas (CFO) <ul style="list-style-type: none"><li>• <b>Managing Board</b><sup>[2]</sup> Joe Kaeser Roland Busch Klaus Helmrich Cedrik Neike Michael Sen</li></ul>
<b>Products</b>	<a href="#">Power generation</a> technology, industrial

	and buildings <a href="#">automation</a> , <a href="#">medical technology</a> , <a href="#">railway vehicles</a> , <a href="#">water treatment</a> systems, <a href="#">fire alarms</a> , <a href="#">PLM software</a>
<b>Services</b>	<a href="#">Business services</a> , <a href="#">financing</a> , <a href="#">project engineering</a> and <a href="#">construction</a>
<b>Revenue</b>	▲€86.849 billion (2019) <sup>[3]</sup>
<b>Operating income</b>	▼€7.518 billion (2019) <sup>[3]</sup>
<b>Net income</b>	▼€5.648 billion (2019) <sup>[3]</sup>
<b>Total assets</b>	▲€150.248 billion (2019) <sup>[3]</sup>
<b>Total equity</b>	▲€50.984 billion (2019) <sup>[3]</sup>
<b>Number of employees</b>	385,000(2019) <sup>[3]</sup>
<b>Divisions</b>	Smart Infrastructure, Power and Gas, Digital Industries, <a href="#">Healthineers</a> , <a href="#">Siemens Mobility</a> , <a href="#">Siemens Gamesa</a> , IoT Services, Next 47, <a href="#">Siemens Financial Services</a>
<b>Website</b>	<a href="http://www.siemens.com">www.siemens.com</a>

**Siemens AG** (German pronunciation: [ˈziːmɔ̃ns]<sup>[4][5][6]</sup> or [-mɛns]<sup>[6]</sup>) is a German [multinational conglomerate company](#) headquartered in [Munich](#) and the largest industrial manufacturing company in Europe with branch offices abroad.<sup>[7]</sup>

The principal divisions of the company are *Industry*, *Energy*, *Healthcare* ([Siemens Healthineers](#)), and *Infrastructure & Cities*, which represent the main activities of the company.<sup>[8][9][10]</sup> The company is a prominent maker of medical diagnostics equipment and its medical health-care division, which generates about 12 percent of the company's total sales, is its second-most profitable unit, after the industrial automation division.<sup>[11]</sup> The company is a component of the [Euro Stoxx 50 stock market index](#).<sup>[12]</sup> Siemens and its subsidiaries employ approximately 385,000 people worldwide and reported global revenue of around €87 billion in 2019 according to its earnings release.

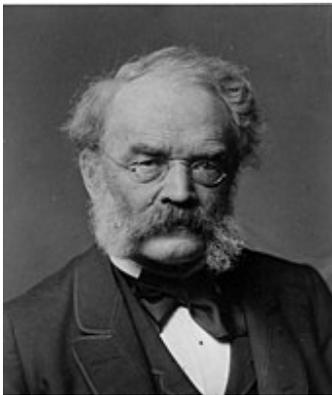


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## History

### 1847 to 1901



[Werner von Siemens](#), co-founder of [Siemens & Halske](#).

[Siemens & Halske](#) was founded by [Werner von Siemens](#) and [Johann Georg Halske](#) on 1 October 1847. Based on the [telegraph](#), their invention used a needle to point to the sequence of letters, instead of using [Morse code](#). The company, then called *Telegraphen-Bauanstalt von Siemens & Halske*, opened its first workshop on 12 October.<sup>[13]</sup>

In 1848, the company built the first long-distance telegraph line in Europe; 500 km from Berlin to [Frankfurt am Main](#). In 1850, the founder's younger brother, Carl Wilhelm Siemens, later [Sir William Siemens](#), started to represent the company in London. The [London agency](#) became a branch office in 1858. In the 1850s, the company was involved in building long distance telegraph networks in Russia. In 1855, a company branch headed by another brother, [Carl Heinrich von Siemens](#), opened in [St Petersburg](#), Russia. In 1867, Siemens completed the monumental [Indo-European telegraph](#) line stretching over 11,000 km from [London](#) to [Calcutta](#).<sup>[14]</sup>



First [electric locomotive](#), built in 1879 by company founder Werner von Siemens.

In 1867, Werner von Siemens described a [dynamo](#) without permanent magnets.<sup>[15]</sup> A similar system was also independently invented by [Charles Wheatstone](#), but Siemens became the first company to build such devices. In 1881, a Siemens [AC Alternator](#) driven by a [watermill](#) was used to power the world's first electric street lighting in the town of [Godalming](#), United Kingdom. The company continued to grow and diversified into [electric trains](#) and [light bulbs](#). In 1887, it opened its first office in Japan.<sup>[16]</sup> In 1890, the founder retired and left the running of the company to his brother Carl and sons Arnold and Wilhelm.

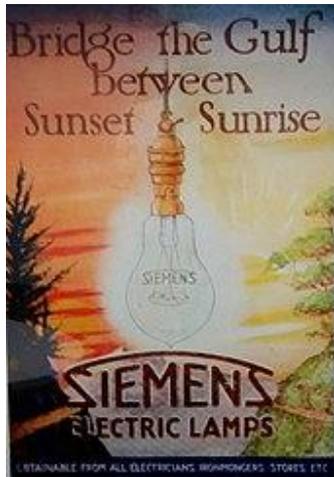
### 1901 to 1933



The company built airplanes during [World War I](#), for example this Siemens airplane in 1926.

Siemens & Halske (S & H) was incorporated in 1897, and then merged parts of its activities with Schuckert & Co., Nuremberg in 1903 to become [Siemens-Schuckert](#). In 1907, Siemens ([Siemens & Halske](#) and [Siemens-Schuckert](#)) had 34,324 employees and was the seventh-largest company in the German empire by number of employees.<sup>[17]</sup> (see [List of German companies by employees in 1907](#))

In 1919, S & H and two other companies jointly formed the [Osram lightbulb](#) company.<sup>[18]</sup>



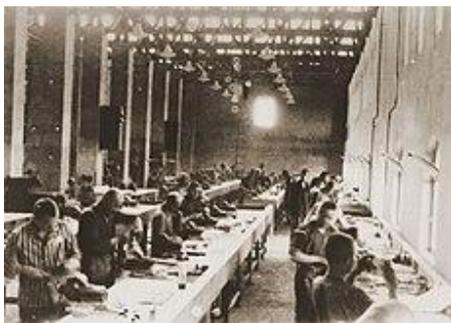
British Siemens advertisement from the 1920s era.

During the 1920s and 1930s, S & H started to manufacture [radios](#), [television sets](#), and [electron microscopes](#).<sup>[19]</sup>

In 1932, [Reiniger, Gebbert & Schall](#) (Erlangen), [Phönix AG](#) (Rudolstadt) and [Siemens-Reiniger-Veifa mbH](#) (Berlin) merged to form the [Siemens-Reiniger-Werke AG](#) (SRW), the third of the so-called parent companies that merged in 1966 to form the present-day Siemens AG.<sup>[20]</sup>

In the 1920s, Siemens constructed the [Ardnacrusha](#) Hydro Power station on the [River Shannon](#) in the then [Irish Free State](#), and it was a world first for its design. The company is remembered for its desire to raise the wages of its under-paid workers only to be overruled by the [Cumann na nGaedheal](#) government.<sup>[21]</sup>

### 1933 to 1945



Prisoners around 1944 working at a Siemens factory in KZ Bobrek, a subcamp of [Auschwitz concentration camp](#).<sup>[22]</sup>



A Siemens truck being used as a [Nazi public address](#) vehicle in 1932

Siemens (at the time: [Siemens-Schuckert](#)) exploited the forced labour of deported people in [extermination camps](#). The company owned a plant in [Auschwitz concentration camp](#).<sup>[22][23]</sup>

During the final years of [World War II](#), numerous plants and factories in Berlin and other major cities were destroyed by Allied air raids. To prevent further losses, manufacturing was therefore moved to alternative places and regions not affected by the air war. The goal was to secure continued production of important war-related and everyday goods. According to records, Siemens was operating almost 400 alternative or relocated manufacturing plants at the end of 1944 and in early 1945.

In 1972, Siemens sued German satirist F.C. Delius for his satirical history of the company, *Unsere Siemenswelt*, and it was determined much of the book contained false claims although the trial itself publicized Siemens' history in Nazi Germany.<sup>[24]</sup> The company supplied electrical parts to [Nazi concentration camps](#) and [death camps](#). The factories had poor working conditions, where malnutrition and death were common. Also, the scholarship has shown that the camp factories were created, run, and supplied by the [SS](#), in conjunction with company officials, sometimes high-level officials.<sup>[25][26][27][28]</sup>

Siemens businessman and [Nazi Party](#) member [John Rabe](#) is, however, credited with saving many Chinese lives during the infamous [Nanking Massacre](#). He later toured Germany lecturing on the atrocities committed by Japanese forces in Nanking.<sup>[29]</sup>

### 1945 to 2001

In the 1950s, and from their new base in [Bavaria](#), S&H started to manufacture [computers](#), [semiconductor devices](#), [washing machines](#), and [pacemakers](#).<sup>[citation needed]</sup> In 1966, [Siemens & Halske](#) (S&H, founded in 1847), [Siemens-Schuckertwerke](#) (SSW, founded in 1903) and [Siemens-Reiniger-Werke](#) (SRW, founded in 1932) merged to form Siemens AG.<sup>[30]</sup> In 1969, Siemens formed Kraftwerk Union with [AEG](#) by pooling their nuclear power businesses.<sup>[31]</sup>



A 1973 Siemens [electron microscope](#) on display at the [Musée des Arts et Métiers](#) in Paris.

The company's first digital telephone exchange was produced in 1980. In 1988, Siemens and [GEC](#) acquired the UK defence and technology company [Plessey](#). Plessey's holdings were split, and Siemens took over the [avionics](#), [radar](#) and traffic control businesses—as [Siemens Plessey](#).<sup>[32]</sup>

In 1985, Siemens bought [Allis-Chalmers](#)' interest in the partnership company [Siemens-Allis](#) (formed 1978) which supplied electrical control equipment. It was incorporated into Siemens' Energy and Automation division.<sup>[33]</sup>

In 1987, Siemens reintegrated Kraftwerk Union, the unit overseeing nuclear power business.<sup>[31]</sup>

In 1989, Siemens bought the solar photovoltaic business, including 3 solar module manufacturing plants, from industry pioneer ARCO Solar, owned by oil firm [ARCO](#).<sup>[34]</sup>

In 1991, Siemens acquired [Nixdorf Computer AG](#) and renamed it [Siemens Nixdorf Informationssysteme AG](#), in order to produce [personal computers](#).<sup>[35]</sup>

In October 1991, Siemens acquired the Industrial Systems Division of [Texas Instruments](#), Inc, based in [Johnson City, Tennessee](#). This division was organized as Siemens Industrial Automation, Inc.,<sup>[36]</sup> and was later absorbed by Siemens Energy and Automation, Inc.

In 1992, Siemens bought out [IBM](#)'s half of [ROLM](#) (Siemens had bought into ROLM five years earlier), thus creating SiemensROLM Communications; eventually dropping ROLM from the name later in the 1990s.<sup>[37]</sup>

In 1993-1994, [Siemens C651](#) electric trains for Singapore's [Mass Rapid Transit \(MRT\) system](#) were built in Austria.<sup>[citation needed]</sup>

In 1997, Siemens agreed to sell the defence arm of [Siemens Plessey](#) to [British Aerospace](#) (BAe) and a German aerospace company, [DaimlerChrysler Aerospace](#). BAe and DASA acquired the British and German divisions of the operation respectively.<sup>[38]</sup>

In October 1997, [Siemens Financial Services](#) (SFS) was founded to act as competence center for financing issues and as a manager of financial risks within Siemens.

In 1998, Siemens acquired [Westinghouse Power Generation](#) for more than \$1.5 billion from the [CBS Corporation](#) and moving Siemens from third to second in the world power generation market.<sup>[39]</sup>

In 1999, Siemens' semiconductor operations were spun off into a new company called [Infineon Technologies](#). In the same year, Siemens Nixdorf Informationssysteme AG became part of [Fujitsu Siemens Computers](#) AG, with its [retail banking](#) technology group becoming [Wincor Nixdorf](#).<sup>[35]</sup>

In 2000, Shared Medical Systems Corporation<sup>[40]</sup> was acquired by the Siemens' Medical Engineering Group,<sup>[41]</sup> eventually becoming part of [Siemens Medical Solutions](#).

Also in 2000, Atecs-Mannesman was acquired by Siemens,<sup>[42]</sup> The sale was finalised in April 2001 with 50% of the shares acquired, acquisition, *Mannesmann VDO AG* merged into Siemens Automotive forming Siemens VDO Automotive AG, *Atecs Mannesmann Dematic Systems* merged into Siemens Production and Logistics forming Siemens Dematic AG, *Mannesmann Demag Delaval* merged into the Power Generation division of Siemens AG.<sup>[43]</sup> Other parts of the company were acquired by [Robert Bosch GmbH](#) at the same time.<sup>[44]</sup> Also, Moore Products Co. of Spring House, PA USA was acquired by Siemens Energy & Automation, Inc.<sup>[45]</sup>

## 2001 to 2005



A [Siemens Velaro](#) high speed train in service on the [Köln–Frankfurt high-speed rail line](#)

In 2001, Chemtech Group of Brazil was incorporated into the Siemens Group,<sup>[46]</sup> it provides industrial process optimisation, consultancy and other engineering services.<sup>[47]</sup>

Also in 2001, Siemens formed joint venture [Framatome](#) with [Areva SA](#) of France by merging much of the companies' nuclear businesses.<sup>[31]</sup>

In 2002, Siemens sold some of its business activities to [Kohlberg Kravis Roberts & Co.](#) L.P. (KKR), with its metering business included in the sale package.<sup>[48]</sup>

In 2002, Siemens abandoned the solar photovoltaic industry by selling its participation in a joint-venture company, established in 2001 with [Shell](#) and [E.ON](#), to Shell.<sup>[49]</sup>

In 2003, Siemens acquired the flow division of [Danfoss](#) and incorporated it into the Automation and Drives division.<sup>[50]</sup> Also in 2003 Siemens acquired IndX software (realtime data organisation and presentation).<sup>[51][52]</sup> The same year in an unrelated development Siemens reopened its office in [Kabul](#).<sup>[53]</sup> Also in 2003 agreed to buy Alstom Industrial Turbines; a manufacturer of small, medium and industrial gas turbines for €1.1 billion.<sup>[54][55]</sup> On 11 February 2003, Siemens planned to shorten phones' shelf life by bringing out annual Xelibri lines, with new devices launched as spring -summer and autumn-winter collections.<sup>[56]</sup> On 6 March 2003, the company opened an office in San Jose.<sup>[57]</sup> On 7 March 2003, the company announced that it planned to gain 10 per cent of the mainland China market for handsets.<sup>[58]</sup> On 18 March 2003, the company unveiled the latest in its series of Xelibri fashion phones.<sup>[59]</sup>

In 2004, the wind energy company Bonus Energy in [Brande](#), Denmark was acquired,<sup>[60][61]</sup> forming [Siemens Wind Power](#) division.<sup>[62]</sup> Also in 2004 Siemens invested in Dasan Networks (South Korea, broadband network equipment) acquiring ~40% of the shares,<sup>[63]</sup> [Nokia Siemens](#) disinvested itself of the shares in 2008.<sup>[64]</sup> The same year Siemens acquired Photo-Scan (UK, [CCTV](#) systems),<sup>[65]</sup> US Filter Corporation (water and Waste Water Treatment Technologies/ Solutions, acquired from [Veolia](#)),<sup>[66]</sup> Hunstville Electronics Corporation (automobile electronics, acquired from [Chrysler](#)),<sup>[67]</sup> and Chantry Networks ([WLAN](#) equipment).<sup>[68]</sup>

In 2005, Siemens sold the [Siemens mobile](#) manufacturing business to [BenQ](#), forming the [BenQ-Siemens](#) division. Also in 2005 Siemens acquired Flender Holding GmbH ([Bocholt](#), Germany, gears/industrial drives),<sup>[69]</sup> Bewator AB (building security systems),<sup>[70]</sup> Wheelabrator Air Pollution Control, Inc. (Industrial and power station dust control systems),<sup>[71]</sup> AN Windenergie GmbH. (Wind energy),<sup>[72]</sup> Power Technologies Inc. ([Schenectady](#), USA, energy industry software and training),<sup>[73]</sup> CTI Molecular Imaging ([Positron emission tomography](#) and [molecular imaging](#) systems),<sup>[74][75]</sup> Myrio ([IPTV](#) systems),<sup>[76]</sup> Shaw Power Technologies International Ltd (UK/USA, electrical engineering consulting, acquired from [Shaw Group](#)),<sup>[77][78]</sup> and Transmitton ([Ashby de la Zouch](#) UK, rail and other industry control and asset management).<sup>[79]</sup>

## 2005 and continuing: worldwide bribery scandal

In 2005 Germany opened investigations into Siemens business practices worldwide, prompted by requests from prosecutors in Italy, Liechtenstein and Switzerland; US investigators joined in 2006 and the US investigators addressed violations only since 2001, when Siemens started selling shares in a US stock exchange.<sup>[80]</sup> The investigators found that bribing officials to win contracts was [standard operating procedure](#).<sup>[80][81]</sup> Over that time period the company paid around \$1.3 billion in bribes in many countries and kept separate books to hide them.<sup>[81]</sup>

Fines were anticipated to be as high as \$5 billion as the investigation unfolded.<sup>[82]</sup> Settlement negotiations took place through most of 2008 and when they were announced in December they were far less, driven in part by Siemens' cooperation, in part by the imminent change in US administrations (the [Obama administration](#) was about to take over from the [Bush administration](#)), and in part by the dependence of the US military on Siemens as a contractor.<sup>[80][82][81]</sup>

The company paid a total of about \$1.6 billion, around \$800 million in each of the US and Germany. This was the largest bribery fine in history, at the time. The money paid to Germany

included a \$270 million fine paid the year before (related to bribes in Nigeria<sup>[83]</sup>). The US payment included \$450 million in fines and penalties and a forfeiture of \$350 million in profits.<sup>[81]</sup> The company was also obligated to spend \$1 billion on setting up and funding new internal compliance regimens.<sup>[80]</sup> Siemens pleaded guilty to violating accounting provisions of the [Foreign Corrupt Practices Act](#); the parent company did not plead guilty to paying bribes (although its Bangladesh and Venezuela subsidiaries did<sup>[81]</sup>); such a guilty plea would have barred Siemens from contracting for the US government.<sup>[80]</sup> As the scandal had started breaking, Siemens had fired its chairman and CEO [Heinrich von Pierer](#), and had hired its first non-German CEO, Peter Löscher; it also had appointed a US lawyer, Peter Solmsen as an [independent director](#) to its board, in charge of compliance, and had accepted oversight of [Theo Waigel](#), a former German finance minister, as a "compliance monitor".<sup>[82]</sup> The compliance overhaul eventually entailed hiring around 500 full-time compliance personnel worldwide. Siemens also enacted a series of new anti-corruption compliance policies, including a new anti-corruption handbook, web-based tools for due diligence and compliance, a confidential communications channel for employees to report irregular business practices, and a corporate disciplinary committee to impose appropriate disciplinary measures for substantiated misconduct.<sup>[84]</sup>

The culture of bribery was old in Siemens, and led to the 1914 [scandal in Japan](#) over bribes paid by both Siemens and [Vickers](#) to Japanese naval authorities to win shipbuilding contracts.<sup>[85]</sup>

The culture of bribery had further had grown up inside Siemens after World War II as Siemens attempted to rebuild its business by competing in the developing world, where bribery is common. Until 1999 in Germany, bribes were a tax-deductible business expense, and there were no penalties for bribing foreign officials. In 1999 the [OECD Anti-Bribery Convention](#) came into effect, to which Germany was a party, and Siemens started to use off-shore accounts and other means of hiding its bribery.

As the investigation opened a midlevel executive in the telecommunications unit, Reinhard Slekaczek, was identified as a key player; Slekaczek quit Siemens in 2005 after the company required him to sign a document saying he had followed law and company policy, and turned state's evidence and led investigators to documents he had saved and to other documents. He had controlled an annual global bribery budget of \$40 to \$50 million. The usual method of bribery was to pay a local insider as a "contractor" who would in turn pass money to government officials; as part of the settlement Siemens disclosed that it had 2,700 such contractors worldwide. Bribes were generally around 5% of a contract's value but in very corrupt countries they could be as high as 40%. It paid the highest bribes in Argentina, Israel, Venezuela, China, Nigeria, and Russia.<sup>[80]</sup>

Examples of bribery the investigation found included:<sup>[80]</sup>

- \$40 million in bribes in Argentina to win a \$1 billion contract to make national identity cards.
- \$20 million in Israel for a contract to build power plants
- \$16 million in Venezuela for urban rail lines.
- \$14 million In China for medical equipment
- \$12.7 million in payments in Nigeria
- \$5 million in Bangladesh for mobile phones
- \$1.7 million in Iraq to Saddam Hussein and others.

The investigation led directly to several prosecutions while it was unfolding, and led to settlements with other governments and prosecution of Siemens employees and bribe recipients in various countries.

In May 2007 a German court convicted two former executives of paying about €6 million in bribes from 1999 to 2002 to help Siemens win [natural gas turbine](#) supply contracts with [Enel](#), an Italian energy company. The contracts were valued at about €450 million. Siemens was fined €38 million.<sup>[86]</sup>

In July 2009, Siemens settled allegations of fraud by a Russian affiliate in a [World Bank](#)-funded mass transit project in Moscow by agreeing to not bid on World Bank projects for two years, not allowing the Russian affiliate to do any World Bank funded work for four years, and setting up a \$100 million fund at the World Bank to fund anti-corruption activities over 15 years, over which the World Bank had veto and audit rights; this fund became the "Siemens Integrity Initiative".<sup>[87][88]</sup> The first payments were made out of the funds in 2010 in a tranche of \$40 million.<sup>[89]</sup> A second set of projects was funded in 2014 totaling \$30 million.<sup>[90]</sup>

Siemens paid N7 billion to the Nigerian government in 2010.<sup>[91]</sup>

In 2012, the Greek government settled the [Greek bribery scandal](#) for 330 million euros.<sup>[92]</sup> The trial of the persons accused of involvement in the scandal began on 24 February 2017. A total of 64 individuals are accused, both Greek and German nationals.<sup>[93]</sup> The central figure of the scandal however, ex-Siemens chief executive in Greece Michael Christoforakos, against whom European arrest warrants are pending<sup>[94][95]</sup> will likely be absent, as Germany refuses his extradition to this day. Initially arrested in Germany in 2009, the accusations against him by German courts have been dropped, and he since lives free in this country.<sup>[96][97]</sup> Greece has been demanding his extradition since 2009, and considers him a fugitive from justice.

In 2014 a former Siemens executive Andres Truppel pleaded guilty to funneling nearly \$100 million in bribes to Argentine government officials to win the ID card project for Siemens.<sup>[98]</sup>

In 2014 Israeli prosecutors decreed that Siemens should pay US\$42.7 million penalty and appoint an external inspector to supervise its business in Israel in exchange for state prosecutors dropping charges of securities fraud. According to the indictment, "Siemens systematically paid bribes to Israel Electric Corporation executives so they would utilize their positions in order to favor and advance the interests of Siemens".<sup>[98]</sup>

## 2006 to 2011

In 2006, Siemens announced the purchase of Bayer Diagnostics, which was incorporated into the Medical Solutions Diagnostics division on 1 January 2007,<sup>[99]</sup> also in 2006 Siemens acquired Controlotron (New York) (ultrasonic flow meters)<sup>[100][101]</sup> Also in 2006 Siemens acquired Diagnostic Products Corp., Kadon Electro Mechanical Services Ltd. (now TurboCare Canada Ltd.), Kühnle, Kopp, & Kausch AG, Opto Control, and VistaScape Security Systems<sup>[102]</sup>

In January 2007, Siemens was fined €396 million by the [European Commission](#) for [price fixing](#) in EU electricity markets through a [cartel](#) involving 11 companies, including [ABB](#), [Alstom](#), [Fuji Electric](#), [Hitachi Japan](#), AE Power Systems, [Mitsubishi Electric Corp](#), [Schneider](#), [Areva](#), [Toshiba](#) and [VA Tech](#).<sup>[103]</sup> According to the Commission, "between 1988 and 2004, the companies rigged bids for procurement contracts, fixed prices, allocated projects to each other, shared markets and exchanged commercially important and confidential information."<sup>[103]</sup> Siemens was given the highest fine of €396 million, more than half of the total, for its alleged leadership role in the activity.



Siemens power generating wind turbine towers

In March 2007, a Siemens board member was temporarily arrested and accused of illegally financing a business-friendly labour association which competes against the union [IG Metall](#). He has been released on bail. Offices of the labour union and of Siemens have been searched. Siemens denies any wrongdoing.<sup>[104]</sup> In April the Fixed Networks, Mobile Networks and Carrier Services divisions of Siemens merged with [Nokia's](#) Network Business Group in a 50/50 joint venture, creating a fixed and mobile network company called [Nokia Siemens Networks](#). Nokia delayed the merger<sup>[105]</sup> due to bribery investigations against Siemens.<sup>[106]</sup> In October 2007, a court in Munich found that the company had bribed public officials in Libya, Russia, and Nigeria in return for the awarding of contracts; four former Nigerian Ministers of Communications were among those named as recipients of the payments. The company admitted to having paid the bribes and agreed to pay a fine of 201 million euros. In December 2007, the Nigerian government cancelled a contract with Siemens due to the bribery findings.<sup>[107][108]</sup>

Also in 2007, Siemens acquired Vai Ingdesi Automation (Argentina, Industrial Automation), [UGS Corp.](#), Dade Behring, Sidelco ([Quebec](#), Canada), S/D Engineers Inc., and Gesellschaft für Systemforschung und Dienstleistungen im Gesundheitswesen mbH (GSD) (Germany).<sup>[109]</sup>

In July 2008, Siemens AG announced a joint venture of the [Enterprise Communications](#) business with [the Gores Group](#), renamed [Unify](#) in 2013. The Gores Group holding a majority interest of 51% stake, with Siemens AG holding a minority interest of 49%.<sup>[110]</sup>

In August 2008, Siemens Project Ventures invested \$15 million in the [Arava Power Company](#). In a press release published that month, [Peter Löscher](#), President and CEO of Siemens AG said: "This investment is another consequential step in further strengthening our green and sustainable technologies". Siemens now holds a 40% stake in the company.<sup>[111]</sup>

In January 2009, Siemens announced to sell its 34% stake in Framatome, complaining limited managerial influence. In March, it announced to form an alliance with [Rosatom](#) of Russia to engage in nuclear-power activities.<sup>[31]</sup>

In April 2009, [Fujitsu Siemens Computers](#) became [Fujitsu Technology Solutions](#) as a result of Fujitsu buying out Siemens' share of the company.

In June 2009 news broke that [Nokia Siemens](#) had supplied telecommunications equipment to the Iranian telecom company that included the ability to intercept and monitor telecommunications, a facility known as "[lawful intercept](#)". The equipment was believed to have been used in the suppression of the [2009 Iranian election protests](#), leading to criticism of the company, including by the [European Parliament](#). Nokia-Siemens later divested its call monitoring business, and reduced its activities in Iran.<sup>[112][113][114][115][116][117]</sup>

In October 2009, Siemens signed a \$418 million contract to buy [Solel Solar Systems](#) an Israeli company in the solar thermal power business.<sup>[118]</sup>

In December 2010, Siemens agreed to sell its IT Solutions and Services subsidiary for €850 million to [Atos](#). As part of the deal, Siemens agreed to take a 15% stake in the enlarged Atos, to be held for a minimum of five years. In addition, Siemens concluded a seven-year outsourcing contract worth around €5.5 billion, under which Atos will provide managed services and systems integration to Siemens.

## 2011 to present

In March 2011, it was decided to list [Osram](#) on the stock market in the autumn, but CEO Peter Löscher said Siemens intended to retain a long-term interest in the company, which was already independent from the technological and managerial viewpoints.

In September 2011, Siemens, which had been responsible for constructing all 17 of Germany's existing nuclear power plants, announced that it would exit the [nuclear sector](#) following the [Fukushima disaster](#) and the subsequent changes to German energy policy. Chief executive Peter Löscher has supported the German government's planned [Energiewende](#), its transition to renewable energy technologies, calling it a "project of the century" and saying Berlin's target of reaching 35% renewable energy sources by 2020 was feasible.<sup>[119]</sup>

In November 2012, Siemens acquired the Rail division of [Invensys](#) for £1.7 billion. In the same month, Siemens made the announcement of acquiring a [privately held company](#), LMS International NV.<sup>[120]</sup>

In August 2013, Nokia acquired 100% of the company Nokia Siemens Networks, with a buy-out of Siemens AG, ending Siemens role in telecommunication.<sup>[121]</sup>

In August 2013, Siemens won a \$966.8 million order for power plant components from oil firm [Saudi Aramco](#), the largest bid it has ever received from the Saudi company.<sup>[122]</sup>

In 2014, Siemens plans to build a \$264 million facility for making offshore wind turbines in Paull, England, as Britain's wind power rapidly expands. Siemens chose the Hull area on the east coast of England because it is close to other large offshore projects planned in coming years. The new plant is expected to begin producing turbine rotor blades in 2016. The plant and the associated service center, in [Green Port Hull](#) nearby, will employ about 1,000 workers. The facilities will serve the UK market, where the electricity that major power producers generate from wind grew by about 38 percent in 2013, representing about 6 percent of total electricity, according to government figures. There are also plans to increase Britain's wind-generating capacity at least threefold by 2020, to 14 gigawatts.<sup>[123]</sup>

In May 2014, [Rolls-Royce](#) agreed to sell its gas turbine and compressor energy business to Siemens for £1 billion.<sup>[124]</sup>

In June 2014, Siemens and [Mitsubishi Heavy Industries](#) announced their formation of joint ventures to bid for [Alstom](#)'s troubled energy and transportation businesses (in locomotives, steam turbines, and aircraft engines). A rival bid by [General Electric](#) (GE) has been criticized by French government sources, who consider Alstom's operations as a "vital national interest" at a moment when the French unemployment level stands above 10% and some voters are turning towards the far-right.<sup>[125]</sup>

In 2015, Siemens acquired U.S. oilfield equipment maker [Dresser-Rand Group](#) Inc for \$7.6 billion.<sup>[126][127]</sup>

In November 2016, Siemens announced the acquisition of [EDA](#) company [Mentor Graphics](#) for \$4.5 billion.<sup>[128]</sup>

In November 2017, the U.S. [Department of Justice](#) charged three Chinese employees of Guangzhou Bo Yu Information Technology Company Limited with [hacking](#) into corporate entities, including Siemens AG.<sup>[129]</sup>

In December 2017, Siemens announced the acquisition of medical technology company [Fast Track Diagnostics](#) for an undisclosed amount.<sup>[130]</sup>

In August 2018, Siemens announced the acquisition of [rapid application development](#) company [Mendix](#) for €0.6 billion in cash.<sup>[131]</sup>

In September 2019, Siemens and Orascom Construction signed an agreement with the Iraqi government to rebuild two power plants, which is believed to setup the company for future deals in the country.<sup>[132]</sup>

In 2019-2020, Siemens was identified as a key engineering company supporting the controversial<sup>[133]</sup> [Adani Carmichael coal mine](#) in [Queensland \(Australia\)](#).<sup>[134]</sup>

## **Products, services and contribution**



[Siemens C651](#) trains for the [Singapore MRT](#) at [Ulu Pandan Depot](#)

Siemens offers a wide range of electrical engineering- and electronics-related products and services. <sup>[135]</sup> Its products can be broadly divided into the following categories: buildings-related products; drives, automation and industrial plant-related products; energy-related products; lighting; medical products; and transportation and logistics-related products. <sup>[135]</sup>

Siemens buildings-related products include building-automation equipment and systems; building-operations equipment and systems; building fire-safety equipment and systems; building-security equipment and systems; and low-voltage switchgear including circuit protection and distribution products. <sup>[135]</sup>

Siemens drives, automation and industrial plant-related products include motors and drives for conveyor belts; pumps and compressors; heavy duty motors and drives for rolling steel mills; compressors for oil and gas pipelines; mechanical components including gears for wind turbines and cement mills; automation equipment and systems and controls for production machinery and machine tools; and industrial plant for water processing and raw material processing. <sup>[135]</sup>

Siemens energy-related products include gas and steam turbines; generators; compressors; on- and offshore wind turbines; high-voltage transmission products; power transformers; high-voltage switching products and systems; alternating and direct current transmission systems; medium-voltage components and systems; and power automation products. <sup>[135]</sup>

Siemens is a player in the renewable energy industry, the company provides a comprehensive portfolio of products, solutions, and services to help build and operate microgrids of any size. Siemens provide generation and distribution of electrical energy as well as monitoring and controlling of microgrids. <sup>[136]</sup> By using primarily renewable energy, microgrids reduce carbon-dioxide emissions, which is often required by government regulations. That makes Siemens especially attractive for campuses, utilities, and islands. Ventotene Island in Italy demonstrates the benefits of a microgrid in terms of sustainability. The Italian energy utility Enel Produzione SPA had a clear goal for the island of Ventotene: a stable power supply system that would operate more sustainably, economically, and reliably. And Siemens had the complete solution: The SIESTORAGE storage system, optimally combined with the Microgrid Controller. This approach included the integration of renewable energy sources to reduce the supply of diesel and to create greater sustainability. An additional goal was to perfectly coordinate all existing and

new power components and, even more important, to respond quickly and reliably to grid fluctuations, ultimately guaranteeing a stable network.<sup>[136]</sup>

Siemens [OSRAM](#) subsidiary produces lighting products including incandescent, halogen, compact fluorescent, fluorescent, high-intensity discharge and Xenon lamps; opto-electronic semiconductor light sources such as light emitting diodes (LEDs), organic LEDs, high power laser diodes, LED systems and LED luminaires; electronic equipment including electronic ballasts; lighting control and management systems; and related precision components.<sup>[135]</sup>

Siemens medical products include clinical information technology systems; hearing instruments; in-vitro diagnostics equipment; imaging equipment including angiography, computed tomography, fluoroscopy, magnetic resonance, mammography, molecular imaging ultrasound, and x-ray equipment; and radiation oncology and particle therapy equipment.<sup>[135]</sup> As of 2015, Siemens finalized the sale of its hearing-aid (hearing instruments) business to [Sivantos](#).<sup>[137][138]</sup>

Siemens transportation and logistics-related products include equipment and systems for rail transportation including rail vehicles for mass transit, regional and long-distance transportation, locomotives, equipment and systems for rail electrification, central control systems, interlockings, and automated train controls; equipment and systems for road traffic including traffic detection, information and guidance; equipment and systems for airport logistics including cargo tracking and baggage handling; and equipment and systems for postal automation including letter parcel sorting.<sup>[135]</sup>

Siemens also completed a world record in 2012 for the most electricity generated by bicycles in an hour. Generating 4,630 watts in an hour in Melbourne, Australia, on 11 December 2012<sup>[139]</sup>



A Siemens high-voltage transformer



A Siemens SPECT/CT scanner in operation



A Siemens wind power generator



A Siemens steam turbine rotor



A Siemens train in operation



[Bangkok Skytrain](#) built by Siemens

## Operations

Siemens is incorporated in Germany and has its corporate headquarters in Munich.<sup>[140]</sup> It has operations in around 190 countries and approximately 285 production and manufacturing facilities.<sup>[140]</sup> Siemens had around 360,000 employees as of 30 September 2011.<sup>[140]</sup>

Electrification, automation and digitalization are the long-term growth fields of Siemens. In order to take full advantage of the market potential in these fields, Siemens businesses are bundled into nine divisions and healthcare as a separately managed business.

- Power and Gas
- [Siemens Gamesa Renewable Energy](#)
- Power Generation Services
- Energy Management
- Building Technologies
- [Mobility](#)
- Process Industries and Drives
- [Financial Services](#)
- [Healthineers](#)
- Automation and drive system for steel Mills
- Software