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Doing Business in Germany

Market Overview

The German economy is the third largest in the world and accounted for around one quarter (24 percent) of the European Union's GDP in 2024. Germany was also the United States' largest European trading partner and the seventh-largest market for U.S. exports in 2024. Its "social market" economy largely follows market principles, but with a considerable degree of government regulation and wide-ranging social welfare programs.

With a population of 83.6 million in 2024, Germany is the largest consumer market in the European Union. The significance of the German marketplace goes well beyond its borders. Germany is home to some of the world's largest trade shows, such as Medica, Hannover Fair, Automechanika, and the ITB tourism show, which play a significant role in facilitating trade. The volume of trade, number of consumers, and Germany's geographic location at the center of the European Union make it a key market in which many U.S. firms seek to build their European and worldwide expansion strategies.

Germany's economy is expected to stagnate in 2025 after two years of contraction, as trade tensions and global uncertainty continue to weigh on exports and investment. Private consumption should see a modest recovery, supported by lower inflation and rising real incomes, while investment remains subdued due to tight financing and weak sentiment. Growth is projected to rebound to 1.1% in 2026, driven by stronger domestic demand and a gradual recovery in investment.

Political Environment

Visit the State Department's website for background on Germany's political and economic environment

Market Challenges

German policy poses relatively few formal barriers to U.S. trade or investment, apart from barriers associated with EU law and regulations. Germany has pressed the EU Commission to reduce regulatory burdens and promote innovation to increase EU Member States' competitiveness. Germany's acceptance of the EU's Common Agricultural Policy and German restrictions on biotech agricultural products pose obstacles for key U.S. products. While not overtly discriminatory, government regulation, by virtue of its complexity, may offer a degree of protection to established local suppliers. Application of different safety and environmental standards can lead to increased bureaucratic efforts and complicate access to the market for U.S. products. American companies interested in exporting to Germany should make sure they know which standards apply to their product and obtain timely testing and certification. Compliance with German standards is especially relevant to U.S. exporters, as EU-wide standards are often based on existing German standards.

Market Opportunities

For U.S. companies, the German market – the largest in the EU – continues to be attractive in numerous sectors and remains an important element of any comprehensive export strategy to Europe. While U.S. investors must reckon with a relatively higher cost of doing business in Germany, they can count on high levels of productivity, a highly skilled labor force, quality engineering, good infrastructure, and a location in the center of Europe.

Market Entry Strategy

The most successful market entrants are those that offer innovative products with high quality and modern designs. Germans are responsive to innovative high-tech U.S. products, such as information technology, software, electronic components, healthcare and medical devices, synthetic materials, and automotive technology. While Germany possesses an above-average Internet penetration rate within the EU for private households, high-speed internet access for business is only slightly above average. Certain agricultural products represent good export prospects for U.S. producers. Price is a very important factor for German buyers, but it's not always the only factor, and is generally more a case of "value for money."

The German market is decentralized and diverse, with interests and tastes differing from one German region to another. Successful market strategies consider regional differences as part of a strong national market presence. Experienced

representation is a major asset to any market strategy, given that the primary competitors for most American products are domestic firms with established presences. U.S. firms can overcome such stiff competition by offering high-quality products and services at competitive prices and locally based after-sales support. For investors, Germany's relatively high marginal tax rates and complicated tax laws may constitute an obstacle, although deductions, allowances and write-offs help to move effective tax rates to internationally competitive levels.

Leading Sectors for U.S. Exports and Investment

Agricultural Sector

Overview

In 2024, Germany was the third largest exporter and the second largest importer of consumer oriented agricultural products by value worldwide, after China and the United States and by far the most important European market for foreign producers. The retail market's key characteristics are consolidation, market saturation, strong competition and low prices. Germany is an attractive and cost-efficient location in the center of the EU. While many consumers are very price sensitive, the market also provides many wealthy consumers who look for high quality at a fair price. These consumers are looking for premium quality products and are willing to pay higher prices. Germany still has some of the lowest food prices in Europe, and German citizens spend only about 14 percent of their income on food and beverages. Low food prices are a result of high competition between discounters and the grocery retail sale segment.

Key Market Drivers and Consumption Trends

Fair trade and organic products have become more important on the German grocery market. Germany is the second largest organic market in the world (behind the United States) and presents good prospects for exporters of organic products.

Berlin is spearheading the trend of sustainable food consumption, and other German cities are following its lead. An aging population and increased health consciousness of consumers are fueling the demand for health and wellness products, as well as functional food products. Increasingly high-paced society and the rising number of single households are driving the demand for convenient ready-to-eat meals, desserts, and baking mixes. Ethnic foods, beauty and super foods, clean label foods, "free from" products (e.g., gluten or lactose free) and locally grown products are further trends that are attracting more German consumers. Many consumers view their purchasing decisions as a political or life-style statement (no GMO, only free-range eggs, vegetarian, or vegan diet). Consumers increasingly expect traceability and information about production methods. According to a report (Ernährungsreport 2024) from the German Federal Ministry of Food and Agriculture published in September 2024, labelling is becoming more important for consumers, especially the animal welfare label, the organic label, and the sustainable fishing label.

At the same time, Germany remains a price-focused market. With the war in Ukraine raising prices for energy, feed and fertilizer (and ultimately food prices) and inflation reaching two-digit numbers, many German consumers cut back spending on higher-cost foods such as organic, fair trade, regional products and meat substitutes, but also on essential products. While food prices in 2024 only increased by around 2.2 percent compared to the previous year, consumers remain price conscious.

Whereas e-commerce sales grew during the pandemic, online food purchases have decreased by 6.8 percent in 2023. The total sales revenue of food and beverages purchased online is at about USD 4 billion. The pandemic has also accelerated the rise of on-demand grocery delivery platforms, such as Flink, which deliver groceries within minutes of ordering for a small delivery fee, also known as quick commerce. The sector has seen significant competition with several apps launching in 2021. Today, after significant consolidation, only one large-scale player remains. The Berlin-based startup Flink is owned by Rewe-Group and operates in over 60 major cities across Europe with about 10 million customers.

Leading Sub-Sectors

Tree Nuts

The category of tree nuts includes fresh or dried almonds, pistachios, pecans, hazelnuts, and walnuts. Germany does not produce significant quantities of these products, and supply therefore comes primarily from imports. The United States continues to be the largest supplier of tree nuts to Germany. The leading competitor for the United States in the German tree nut market is Spain. Many U.S. agricultural associations actively promote their products in Germany, including the Almond Board of California, California Pistachio Commission, and the California Walnut Commission. Most tree nuts are used as ingredients by the food processing sector. Almonds are the top export within this category. Further products with good sales potential include walnuts, pistachios, and pecans.

In Million USD	2022	2023	2024	2025 estimated
Total Exports	423	453	459	430
Total Imports	1,471	1,199	1,374	1,760
Imports from the US	943	762	850	1,040
Trade Surplus/Deficit	943	762	850	1,040
Exchange Rates	1.0530	1.0813	1.0824	1.075

Source: Trade Data Monitor query dated June 18, 2025

Fishery Products

Although per capita fish consumption in Germany is quite low in global comparison (13.4 kg as of 2023), the German market offers lucrative opportunities for fish and seafood products. Since Germany is a major producer of fish sticks (processed frozen battered whitefish), Alaska pollock is by far the most important U.S. seafood export by value. Other whitefish like cod or hake also have good prospects on the German market. Furthermore, smoked fish traditionally enjoys great popularity in Germany and smokehouses are for example importing salmon or dogfish (marketed as “Schillerlocke” in Germany). Other good prospects for U.S. seafood exports are caviar substitutes, flat fish, shrimps, lobster and crabs. By value, the two most important U.S. fishery export products to Germany are Alaska pollock and salmon.

In Million USD	2022	2023	2024	2025 estimated
Total Exports	2,599	2,555	2,352	2,430
Total Imports	6,606	6,497	6,208	6,440
Imports from the US	163	116	160	200
Trade Surplus/Deficit	31	28	83	120

Exchange Rates	1.0530	1.0813	1.0824	1.075

Source: Trade Data Monitor query dated June 18, 2025

Wine

Germany is the world's third largest importer of wine by volume and value. In 2024, German wine imports were valued at more than USD 2.85 billion. Italy, France, and Spain are the leading suppliers of wine to Germany with a combined import market share of 79 percent. U.S. wines, together with other “new-world” wines, have developed an increasingly good reputation for quality in the German market. In 2024, the value of Germany's imports of U.S. wines totaled USD 55 million.

In Million USD	2022	2023	2024	2025 estimated
Total Exports	1,236	1,307	1,266	1,210
Total Imports	3,069	3,070	2,847	2,860
Imports from the US	73	59	55	30
Trade Surplus/Deficit	-30	-40	-52	-60
Exchange Rates	1.0530	1.0813	1.0824	1.075

Sources: Trade Data Monitor LLC query dated June 18, 2025

Pet Food

Germany is one of the leading countries for pet ownership in the world (almost every second household owns a pet). Germans are willing to pay a premium to buy high-quality pet food, and interest in specialty health pet food products is growing rapidly. Most pet food is produced domestically, and the EU requires pet food to be derived from meat that can be used for human consumption. Despite the bureaucratic obstacles, opportunities for exporting pet food products to Germany are available given the considerable size of the market.

In Million USD	2022	2023	2024	2025 estimated
Total Exports	2,835	3,294	3,281	3,270
Total Imports	2,102	2,442	2,536	2,880
Imports from the US	8	8	6	7
Trade Surplus/Deficit	-35	-40	-50	-50

Exchange Rates	1.0530	1.0813	1.0824	1.075

Source: Trade Data Monitor LLC query dated June 20, 2025

Resources

Agricultural Attaché Reports

Attaché reports provide information on market opportunities, crop conditions, new policy developments and information about Germany's food industry. Some standard reports include Retail Market Report, Exporter Guide, Food Service Report, and market briefs on wine, seafood, and other select products. Attaché reports can be found at the Global Agricultural Information Network. In recent years, many of the German reports have been consolidated and are submitted as part of EU reports. We recommend that companies interested in the German market also review the EU reports.

U.S. Agricultural Commodity Associations Active in Germany

Several U.S. agricultural commodity and other trade associations conduct market development programs in Germany. In some cases, these associations maintain field offices in Germany, while others may have a trade representative or public relations company representing their interests. Others may cover Germany from elsewhere in Europe or from offices in the United States. The USDA-operated Market Access Program (MAP) and Foreign Market Development Program (FMD) provide a portion of the funding for these associations' market development programs. For further information about the MAP and FMD programs or to know more about which associations are active in Germany, please contact the Office of Agricultural Affairs at the U.S. Embassy in Berlin.

Trade Shows

In Germany, trade fairs play a key role in presenting new products to the trade or in finding additional buyers and importers. The major international trade fairs are:

- ANUGA – The world´s leading food fair for the retail trade and the food service and catering market. It is held every two years in Cologne. Next show: October 4-8, 2025
- AGRITECHNICA – The leading show for agricultural technology and machinery. Next show: November 9-15, 2025
- ISM – Show for the global sweets and snacks industry. Next show: February 1-4, 2026
- FRUIT LOGISTICA – The leading show for fruit and vegetables, dried fruits, and nuts. It is held on an annual basis in Berlin. Next show: February 4-6, 2026
- BIOFACH – The leading European trade show for organic food and non-food products. It is held on an annual basis in Nuremberg. Next show: February 10-13, 2026
- Interzoo – The world leading pet industry exhibition. It is held every two years in Nuremberg. Next show: May 12-15, 2026
- BrauBeviale – The world's leading exhibition for the brewing sector. Next show: November 10-12, 2026
- EuroTier – Global leading show for animal farming and livestock management. Next show: November 10-13, 2026

Aerospace/Defense/Security

Overview

Total market size = (total local production + imports) – exports

Aerospace & Defense Market in USD millions (The security market is not reflected in the table but in the written paragraph below.)

In million USD	2022	2023	2024	2025 (Estimate)
Local Production	41,067	49,740	56,285	61,914
Total Exports	29,979	33,326	37,711	41,482
Total Imports	19,712	23,875	27,017	29,719
Total Market Size	30,800	40,289	45,591	50,150
Imports from the US	8,349	9,481	3,323	3,655
EUR-USD Exchange Rate	1.053	1.0813	1.0824	1.0866 projected

U.S. aerospace and defense manufacturers produce the highest trade surplus, year after year, of all manufacturing sectors. According to TradeStats Express, a U.S. Department of Commerce-furnished database showing the latest global patterns of U.S. merchandise trade, the 2024 U.S. aerospace exports to Germany amounted to USD 3.32 billion. The trade surplus was USD 1.19 billion, representing a 39 percent decrease from 2023 (USD 1.95 billion). These figures are in stark contrast to the European Union's statistics stating U.S. aerospace imports worth USD 1.76 billion. This is due to a different approach in calculating the sale of sub-systems and components.

Aerospace and defense is complemented by safety and security, an industry spanning across 15 vertical markets with a projected global turnover of USD 154.5 billion in 2025 (according to San Francisco-based Grand View Research, Inc.). Both industries are faring rather well against the backdrop of the multiple crises of war, stagflation, refugee and migration influx, and high energy costs faced by Germany and the European Union (EU). Building on a strong performance in 2023, the German safety and security companies reported growing revenues in 2024. In the aerospace segment, the rebound continued despite geopolitical tensions and the long aftermath of the coronavirus pandemic. Perhaps no other industry has been harder hit overall than aviation, particularly the airline industry. In April 2025, total air passenger traffic in Germany amounted to 18.6 million (18,607,885), down 11.5 percent compared to April 2019 (21,028,177) and up 6.8 percent compared to April 2024 (17,423,649). The increase between April 2021 (2,286,208) and April 2024 (17,423,649) was 662 percent. Domestic air traffic (2,037,475) was down 48 percent from 2019 (3,920,123) and down 1.8 percent from 2024 (2,075,537 – April 2021-24: +495.3 percent); European traffic (12,868,197) was down 4.1 percent from 2019 (13,418,665) and up 7.9 percent from 2024 (11,930,470 – April 2021-24: +707.6 percent); intercontinental traffic (3,663,216) was up 0.8 percent from 2019 (3,635,923) and up 8.4 percent from 2024 (3,378,506 – April 2021-24: +687.1 percent). Due to the long order cycles and a significant backlog in aircraft production, aerospace manufacturing suffered less than aviation.

The following section outlines developments in aerospace manufacturing over the past four years. In April 2021, the German Aerospace Industries Association (BDLI) reported that revenues declined by 24.4 percent, from EUR 41 billion (USD 45.9 billion) in 2019 to EUR 31 billion (USD 35.4 billion) in 2020. In the first half of 2021, we saw a promising take-off and expected a year-on-year growth of approximately 15 percent. In the second half of 2021, the industry was able to initiate a trend reversal and even started to hire again. However, the impact of the coronavirus pandemic persisted. In July 2022, BDLI reported that the "aerospace industry in Germany again suffered the consequences of the coronavirus crisis in 2021." Sales remained at the same level as in 2020. In May 2023, the association announced that the German aerospace industry was on the road to recovery, with sales of EUR 39 billion (USD 41.1 billion) in 2022, marking an increase of 14.4 percent from the previous year. BDLI added that "this positive development is only partly attributable to increased deliveries of the Airbus aircraft family. The effect of an approximately 12 percent more favorable USD/EUR exchange rate was also significant."

The recovery continued throughout 2023, with sales of EUR 46 billion (USD 49.7 billion), marking another increase of 18 percent over 2022. In 2024, the German aerospace industry reported revenues of EUR 52 billion (USD 56.3 billion), crossing the 50 billion threshold for the first time and representing an increase of 13 percent over the previous year. Stipulated by the climate targets put forward by the German government, BDLI puts a strong focus on the environmental impact of civil aviation, stressing that the current conditions create a unique opportunity to advance climate-neutral flying. U.S. manufacturers should be well-positioned to benefit from the trend towards more sustainable aviation and gradual market growth in Western Europe, especially Germany.

A good way of getting market exposure in Germany—and beyond—is through trade show participation. Trade shows are significant for making first inroads into any market and Germany has plenty of them. It hosts the world's third-largest trade show for aerospace and defense (ILA Berlin), the world's largest trade show for aircraft cabin interiors (Aircraft Interiors Expo), and Europe's largest trade show for general aviation (AERO). The major safety and security shows that are relevant for the German market are held in Essen (Security Essen) and Düsseldorf (A+A), but also in London (DSEI) and Paris (Milipol). All of the above-mentioned events are ideal platforms for U.S. companies to meet with potential buyers and partners, either virtually or in person.

Leading Sub-Sectors

Aerospace and Defense Market

Germany has the third-largest aerospace and defense market in Europe, with 2024 revenues at EUR 52 billion or USD 56.3 billion, following the UK at GBP 100 billion or USD 127.8 billion (including land defense systems) and France at EUR 77.7 billion or USD 84.1 billion. Some three quarters or USD 37.7 billion of the German production are exported. In 2024, France received more than a sixth of the German exports with USD 6 billion. To a large degree, these exports are attributable to Airbus intra-company trade as part of their geographically dispersed production model with several major sites in Germany and France. Regarding the overall development, BDLI president Dr. Schöllhorn stated the following: "Germany is facing extraordinary challenges that the aerospace industry is ready to tackle, including growing security and defense requirements, the new space race, and pioneering civil aviation. It is therefore important that we establish the right framework. Our companies have made advance investments; now politics must follow suit. We are calling on the German government to proclaim a new German-European industrial policy that enables security and prosperity for our community. Our industry is an important driver of innovation that has an impact on many other areas of the economy and society." The 2024 revenues were distributed as follows: civil aviation, EUR 39 billion or USD 42.2 billion vs. EUR 33 billion or USD 35.7 billion in 2023; military aviation, EUR 10 billion or USD 10.8 billion vs. EUR 10 billion or USD 10.8 in 2023 (unchanged); space systems, EUR 3 billion or USD 3.2 billion vs. EUR 3 billion or USD 3.2 billion in 2023 (unchanged).

Security Market

The following section outlines developments in the security market. According to the Federal Association of the German Security Industry (BDSW) in Bad Homburg, the German safety and security market generated a turnover worth EUR 31.3 billion or USD 33.8 billion in 2023. The figures for 2024 were not available at the time of this writing. In last year's update, the figure reported for the same period was EUR 20.1 billion (USD 21.76 billion), resulting in a difference of more than EUR 11 billion (USD 11.91 billion). The difference arose because the BDSW has added several sub-segments to its annual report. The 2023 revenues break down as follows: security services, EUR 13.4 billion or USD 14.5 billion (42.8%); IT security, EUR 9.2 billion or USD 9.95 billion (29.4%); electronic security technology, EUR 5.3 billion or USD 5.74 billion (16.9%); locks and fittings, EUR 1.4 billion or USD 1.52 billion (4.5%); mechanical exterior security, EUR 900 million or USD 974 million (2.9%); stationary extinguishing systems, EUR 800 million or USD 865.9 million (2.6%); and safes, EUR 300 million or USD 324.7 million (1%). In 2022, the turnover was EUR 17.8 billion, for the first time exceeding the EUR 17.2 billion reported for 2017. The latter figure was published at the "Security Essen" trade show in August 2018.The ongoing rebound seems rather significant considering the strong revenue development in some of the sub-markets since the onset of the coronavirus pandemic in early 2020. It is safe to assume that the industry saw modest but steady growth until then, mostly due to ongoing upgrades of the German internal security and migration enforcement infrastructure and an increased need for security services. In 2023, the security services market accounted for almost half of the overall market and grew by 20.8 percent to EUR 13.4 billion or USD 14.5 billion, from EUR 11.1 billion or USD 11.7 billion in 2022.

Policy Objectives and Challenges

The following section also outlines the strategic considerations of the German government. Aerospace stands out in this aspect. With the formation of the new German coalition government between the center-right Christian Democrats (CDU/CSU) and the center-left Social Democrats (SPD) in May 2025, the Federal Ministry of Economic Affairs and Climate Action (BMWK) has been renamed into the Federal Ministry of Economic Affairs and Energy (BMWE). It is likely that the BMWE will retain the responsibility for aerospace. The space segment now falls under the umbrella of the newly established Federal Ministry of Research, Technology and Space (BMFTR). Both ministries are currently being reorganized. The new org charts are not available yet. Organizational changes may occur well into third quarter of 2025. The BMWE is led by Federal Minister Katherina Reiche (CDU/CSU). The BMFTR is led by Federal Minister Dorothee Bär (CDU/CSU). The BMWE lists aerospace as a key industry with high growth rates and a strong industrial core in Germany. The revised and updated "2020 Technology Strategy of the German Aerospace Industry" builds on BMWE's earlier "Aerospace Strategy", underlining the particular importance of the aerospace sector for Germany as an industrial country both technologically and economically. It was adopted by Germany's former three-party coalition government between the Social Democrats, the Greens, and the Free Democrats in December 2021. Besides aiming at increased competitiveness, the aerospace sector promises to make significant contributions to overarching societal goals, mainly with regards to the aspirational target of achieving climate neutrality by 2050, developing sustainable aviation fuels (SAFs), reducing the noise footprint, and improving the environmental record of aircraft. During the last legislative period, the BMWE/BMWK updated the Aerospace Research Program (LuFo)—a grant program for aerospace research and technology projects—and issued another call for applications in April 2022. The sixth phase of LuFo (LuFo VI) ended in April 2024. LuFo Climate VII-1 was launched on April 19, 2024, marking the start of the seventh phase which includes a total of three funding calls for innovative technology projects in Germany until 2030. The budget for LuFo is earmarked at EUR 300 or roughly USD 324 million per year, making it the central funding program for industry-led civil research and development projects in Germany. Compared to previous funding periods, LuFo VII again places a strong focus on reducing the overall energy demand and the environmental impact of aviation as well as on reducing non-carbon effects. The BMWE/BMWK stressed that in the future, there will be an even bigger emphasis on climate-neutral aviation.

Thes announcements were in line with the joint paper on "Climate-neutral Aviation" that was published by German government in June 2022, stating that Germany "aims to be CO2-neutral by 2045" and defining that the "aerospace industry must contribute to reducing CO2 emissions and to enabling climate-neutral flying." Federal Minister Reiche's predecessor Robert Habeck commented: "We must set the course for climate neutrality in aviation now. Development cycles in aviation are long. That's why we must switch gear now. We are therefore deliberately accelerating the ramp-up of sustainable aviation fuels and directing the aviation research program more strongly towards the target of climate-neutral flying. Overall, it is clear that climate-neutral aviation is a difficult task, and we can only make progress together." It remains to be seen to what extent these goals can be achieved or reconciled with the economic and technological realities of commercial aviation. The new German government may change the goals and the direction of the aerospace policy substantially.

With regards to airline subsidies, it's noteworthy that German flag carrier Lufthansa fully paid back the EUR 9 billion (USD 10.3 billion) in loans and silent participations it received in June 2020 through the German government's Economic Stabilization Fund (ESF). In September 2021, the German government informed Lufthansa that ESF's remaining interest in the company had been sold. In November 2021, ESF's Silent Participation II of EUR 1.0 billion (USD 1.18 billion) was repaid and the undrawn remaining part of Silent Participation I of EUR 3 (USD 3.54) billion was terminated. Similar measures were taken in France (Air France, KLM), Ireland, Spain, and the UK (IAG: Aer Lingus, British Airways, Iberia, Level, Vueling). These measures mainly helped to stabilize the European air transport industry. While European aviation has been especially hard hit by the coronavirus pandemic in 2020 and 2021, it is demonstrating impressive resilience since 2022. According to CAPA, "the continent's capacity recovery has more or less absorbed both the Omicron variant and the war in Ukraine." So far, the impact on aviation could be contained because most European economies are not significantly exposed to Russia and Ukraine. IATA reported in March 2022, that the closure of Ukrainian airspace has put a halt to the "movements by air of roughly 3.3 percent of total air passenger traffic in Europe, and to 0.8 percent of total traffic globally, as per 2021." In December 2023, IATA elaborated in its "Global Outlook for Air Transport" that "2023 has been a year when air transportation very nearly

returned to its pre-pandemic pace of activity, and a year of renewed financial profitability for the industry. In many ways, 2023 is likely to be a local sweet spot for the industry, as the same pace of growth and financial recovery is unlikely to be matched in 2024 and beyond." In December 2024, IATA expected that "airlines will benefit from lower crude oil prices as long as jet fuel prices decline in parallel." Due to the recent developments in the Middle East, oil prices are rising again, and airlines may have to adjust with fuel costs representing 30 percent of their total costs. In the second half of 2024, Lufthansa's share price increased at least partly due to favorable changes in fuel prices. In 2024, Lufthansa's fuel expenses decreased by roughly 2 percent to EUR 7.8 billion or USD 8.4 billion (from EUR 7.9 billion or USD 8.5 billion in the previous year). This year, the airline may see an increase again.

In April 2025, Lufthansa reported strong bookings for the first quarter of 2025 and predicted robust demand for the summer. Group revenue increased by 10 percent to EUR 10.1 billion or USD 10.97 billion, from EUR 7.4 billion or USD 8 billion in Q1 2024. The number of passengers saw a slight decline from 24.4 million in Q1 2024 to 24.3 million in Q1 2025. Yields rose by 0.4 percent on average year-on-year driven by consistently high demand. Unit costs (CASK) excluding fuel and emissions expenses rose by 3.1 percent due to general cost increases. Unit revenues (RASK) were 2.7 percent higher than in 2024, partly due to significantly lower compensation payments to passengers compared to the strike-hit first quarter of the previous year. Correspondingly, Lufthansa Group posted an operating loss (adjusted EBIT) of EUR 722 million or USD 784 million, describing it as a significant improvement compared to a loss of EUR 849 million or USD 919 million in Q1 2024. For the full year, Lufthansa expects the global demand for air travel to stay strong. Lufthansa's CEO Carsten Spohr commented: "Global demand for air travel continues to grow. Despite all the geopolitical uncertainties, we therefore remain on course for growth, are optimistic about the summer, and are sticking to our positive outlook for 2025." Nevertheless, Lufthansa's outlook states that macroeconomic uncertainties are making it difficult to forecast the coming quarters accurately.

Best prospects for U.S. aerospace and defense manufacturers with interest in the German market exist in the following segments: commercial aircraft, business jets, turboprops, helicopters, UAVs, structures, propulsion systems, subsystems for aerospace vehicles; military aircraft, air defense systems; spacecraft, launch systems, communications systems; access control, identity management, integrated systems, security services. The main vertical markets for safety and security are airport security, smart borders, telecommunications and critical infrastructure, and police modernization.

U.S. companies should be aware of the EAR and ITAR regulatory provisions and the respective provisions on the European side, both on the EU and on the national level. The U.S. Commercial Service closely monitors any regulatory changes and supports U.S. companies by conducting frequent and active outreach to the relevant authorities in Germany, such as the Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) in Koblenz, Rhineland-Palatinate. We also follow the latest aerospace, defense and security-related policy developments and discussions in Germany. On an international level, we gain insights from organizations like the Aerospace, Security and Defense Industries Association of Europe (ASD), the Aerospace Industries Association (AIA), and Homeland Security Research (HSR) to understand their positions on transatlantic trade issues and communicate U.S. objectives.

In several tenders before 2022, the Bundeswehr and state police forces imposed non-ITAR/EAR/PESCO clauses on prospective bidders, asking them to attest that their products do not fall under the respective regimes. This excluded many U.S.-designed and U.S.-made defense goods but hasn't happened lately.

Another factor that has an impact on domestic and foreign firms in almost every sector is Germany's weak economic rebound. The German economy recovered slightly in the first quarter of 2025 against the backdrop of geopolitical tensions, revived consumer spending, and high but stable energy costs. According to the Federal Statistical Office (DESTATIS), Germany's Q1 2025 GDP of EUR 1,086.9 billion or USD 1,181 billion grew by 0.4 percent compared to Q4 2024—price, seasonally and calendar adjusted—after decreasing by 0.2 percent from Q3 to Q4 2024. DESTATIS' President Ruth Brand attributed the growth to the "surprisingly good economic development in March." She added that "in particular, the manufacturing sector and exports developed better than initially expected." A detailed analysis of the underlying reasons would exceed the scope of this report.

Opportunities

Opportunities include fighter aircraft targeting pods for the German Air Force to fill an operational capability gap on the Eurofighter Typhoon; the Digitization of Land-based Operations (D-LBO) radio program for the German MOD; UASs/UAVs; integrated command and control system upgrades; as well as radars to detect, track, and engage sophisticated ballistic missiles for the next-generation F-127 anti-air warfare frigate fleet program. Earlier this decade, the Bundeswehr's EUR 100 billion (USD 108.2 billion) special fund promised to be the biggest opportunity. The special fund was announced by then-Chancellor Scholz in February 2022 and approved by the German parliament in June 2022.

The announcement of the special fund was triggered by Russia's invasion of Ukraine, which led Germany to reassess the state of its armed forces. It comes on top of record defense budgets of EUR 50.4 billion (USD 55.9 billion) in 2022, EUR 50.1 billion (USD 54.3 billion) in 2023, EUR 52 billion (USD 56.2 billion) in 2024, and will be spent until 2026, bringing Germany closer to NATO's 2 percent GDP spending target. The lion's share is designated for air force procurements, collectively known as "Dimension Air", with approximately EUR 33.4 billion (USD 36.2 billion) slated for the procurement of H-47 Chinook heavy transport helicopters, jointly offered by Boeing and Airbus Helicopters, and F-35 Lightning II fighter jets offered by Lockheed Martin. The F-35s will allow Germany to continue in the NATO nuclear deterrence mission without a gap when the Tornados reach the end of their service life in 2030. They are already in service with the UK, the Netherlands, Italy, and others, and thus provide unique potential for cooperation with NATO allies. The German MOD plans to develop a Eurofighter variant to fulfill the electronic warfare role. The Future Combat Air System (FCAS), jointly developed by France, Germany and Spain, will replace the Eurofighter from 2040. The second-largest position, some EUR 20.7 billion (USD 22.4 billion) are earmarked for investments in the "Dimension Command Capability and Digitalization"; followed by EUR 16.6 billion (USD 18 billion) for land defense systems or "Dimension Land", e.g., the Puma infantry fighting vehicle (IFV); followed by EUR 8.8 billion (USD 9.5 billion) for naval systems or "Dimension Sea", e.g., K130 corvettes, F126 frigates, and HDW Class 212CD submarines.

Despite the seemingly large amount, it quickly became clear that the special fund will not suffice to upgrade the German armed forces or in the long term. In April 2022, ifo researcher Florian Dorn argued that "this one-time special fund will by no means be sufficient to completely make up for the funding shortfall of recent years, to eliminate all deficiencies in the short term, and to sustainably reorganize the Bundeswehr. In addition, more efficient structures would have to be put in place for using those funds." Before the 2023 NATO Summit in Vilnius, Lithuania, he added that only little more than half of the special fund can be used for buying new equipment, while 33 percent compensate for savings in the core defense budget, and 8 percent are spent on interest. This assessment may seem exaggerated, but it is accurate. After deducting inflation, the German defense budget has decreased in 2023, and it will do so again in 2024. Without raising defense spending to adequate levels—up to EUR 80 billion or roughly USD 86 billion annually—Germany risks putting the 2 percent target in jeopardy. Initially, the special fund received scrutiny from members of the Social Democratic Party (SPD), who argued that some of the money should be used on civil projects, reviving the idea of a "peace dividend". In light of the ongoing war in Ukraine, such criticism has subsided quickly, but it may resume in the future.

In January 2024, the Bonn-based defense publication European Security & Defense (ESD) noted in a well-informed article (The Bundeswehr special fund – a year and a half later) that only a few projects in the special fund are genuinely new while the majority are transfers from Section 14 of the core defense budget. The article highlighted that the armaments investment part of the budget has declined continuously since 2022 and that the special fund is playing an increasingly important role in achieving NATO's 2 percent target. In 2024, some EUR 19.8 billion (USD 21.4 billion) from the special fund were added to the defense budget, bringing the overall defense expenditures to EUR 71.8 billion (USD 77.7 billion). Under the 2025 budget draft that was proposed on July 5, 2024, Germany's coalition government agreed to keep German defense spending above the NATO 2 percent target, with an additional EUR 30 billion (USD 32.6 billion) to finance a massive military overhaul. The mid-term financial planning foresees a total of EUR 80 billion (USD 87 billion at current exchange rates) by 2028. Leading up to the decision, Federal Minster of Defense Boris Pistorius complained that his ministry will receive "significantly less" in 2025 budget funding than he had sought for plans to boost annual defense spending by EUR 6.7 billion (USD 7.25 billion).

As of mid-June 2025, Germany's federal budget for 2025 has yet to be firmed up and approved. The new German government aims for a speedy adoption at the end of the month. Federal Minister of Defense, Boris Pistorius (SPD), plans to spend up to EUR 60 billion (USD 65.2 billion) on defense, considerably more than in the 2025 draft budgetary plan from September 2024. On June 17, 2025, Federal Minister of Finance, Lars Klingbeil (SPD), signaled that he is willing to spend up to 3.5 percent of the GDP on defense in the coming years. This comes on top of a remark by Federal Minister of Foreign Affairs, Johann Wadephul (CDU/CSU), at the informal meeting of NATO foreign ministers in Antalya, Turkey, on May 15, 2025, that he accepts in principle the demand that NATO member states increase defense spending to 5 percent of GDP. With the combined expenditures from defense budget and the special fund, Germany currently spends just over 2 percent on defense. Each additional percentage point would mean further annual expenditure of EUR 45 billion (USD 48.9 billion).

Germany's renewed commitment to defense was preceded by a landmark constitutional reform in March 2025, which was passed with a two-thirds majority in the old Bundestag with support from the CDU/CSU and the SPD. It includes a special fund of EUR 500 billion (USD 543 billion at current exchange rates) for the modernization of infrastructure and stipulates that defense spending above 1 percent of the GDP will not be subject to the national fiscal rule, the 'debt brake', restricting annual structural deficits to 0.35% of GDP. The proposed fund has a duration of 12 years and is intended to boost investment in Germany's critical sectors such as transport, hospitals, energy, education, and digital infrastructure. The U.S. Commercial Service will keep track of the developments with regards to defense and infrastructure spending.

Resources

Trade Events

Space Tech Expo Europe – Bremen, November 18-20, 2025 (Space)

15th Aviation Forum – Hamburg, December 10-11, 2025 (Civil Aviation)

DSEI – London, September 9-12, 2025 (Defense)

inter airport Europe – Munich, October 7-9, 2025 (Airport Equipment)

A+A – Düsseldorf, November 4-7, 2025 (Safety & Security)

Milipol – Paris, November 18-21, 2025 (Defense)

Aircraft Interiors Expo – Hamburg, April 14-16, 2026 (Aircraft Interiors)

AERO – Friedrichshafen, April 22-25, 2026 (General Aviation, Business Aviation)

ILA Berlin – Berlin, June 10-14, 2026 (Aerospace & Defense)

Security Essen – Essen, September 22-25, 2026 (Safety & Security)

Other Web Resources

German Aerospace Industries Association (BDLI)

Federal Association of the Security Industry (BDSW)

European Association for Unmanned Aviation (UAV DACH)

German Airport Technology & Equipment (GATE Alliance)

Bavarian Aerospace Cluster (bavAIRia)

German Helicopter Association (DHV)

Advanced Manufacturing

Overview

Advanced Manufacturing in USD millions (defined as HS-2 codes: 28, 29, 38, 73, 74, 76, 81, 82, 84, 85, 87, 90)

In million USD	2022	2023	2024
Total Exports	955,316	1,026,836	991,050
Total Imports	753,557	764,300	721,621
Imports from the U.S.*	35,978	38,998	36,753
Trade Surplus/Deficit	201,759	262,536	269,429
EUR-USD Exchange Rate	1.053	1.0813	1.0824

* Data from TradeStats Express, Eurostat statistics indicate a higher level of U.S. imports.

While there is not one clear universal definition, advanced manufacturing is often very broadly defined as the innovation of improved methods for manufacturing existing products, and the production of new products enabled by advanced technologies. The German government views Advanced Manufacturing as one of the highest-priority technology areas. The country is a leader in this field with a strong focus on Industry 4.0, machine building, precision engineering and control systems.

Advanced Manufacturing is not a standalone category in statistics; rather, it encompasses a combination of industries, making it difficult to measure. For the market data table above, information from the automotive, chemical, medical equipment, metalworking, machinery, and electrical engineering sectors has been aggregated. While goods are included, services such as consulting on production automation are not reflected in the data. Over the last few years, German global exports have shown modest growth with some fluctuations. They rose from an USD 955 billion in 2022 to over USD 1 trillion in 2023, before contracting slightly to around USD 991 billion in 2024. According to TradeStats Express, a U.S. Department of Commerce-furnished database showing the latest global patterns of U.S. merchandise trade, the 2024 U.S. Advanced Manufacturing exports to Germany amounted to USD 37 billion. In contrast, the European Union's statistics indicate the value of U.S. exports to Germany to be approximately USD 43 billion. This difference is explained by alternate measures of determining what does and does not fall into the category of Advanced Manufacturing. Germany's total imports are substantially smaller than its exports amounting to USD 722 billion in 2024 based on the above HS-2 code definitions. There is no agreed upon definition of Advanced Manufacturing, as such results naturally vary depending on the one chosen by the source.

Germany hosts numerous international trade shows, and the business environment in Advanced Manufacturing is defined by a complex network of associations. The largest among these associations is the machinery and equipment manufacturers association VDMA, which has over 3,600 member companies and splits into around 35 trade associations representing specific industry segments. The association ZVEI focuses on the electrical and digital industry and currently counts more than 1,100 member companies. The association Bitkom, which encompasses the entire digital economy and is not limited to manufacturing, currently has over 2,200 member companies. These associations have different foci but also overlap in areas such as Industry 4.0. Additionally, there are many other highly specialized niche associations for almost every aspect of Advanced Manufacturing. For U.S. companies entering Germany, the network of industry associations can be challenging to navigate, but it serves as a highly valuable resource for understanding and accessing the advanced manufacturing market.

Policy Objectives and Challenges

The German government actively supports advanced manufacturing through various initiatives and programs aimed at fostering innovation and technological advancement. One of the key frameworks is the initiative Plattform Industrie 4.0 led by the German Ministry for Economic Affairs and Energy and the Ministry of Research, Technology and Space. This initiative focuses on the integration of cyber-physical systems, the Internet of Things (IoT), and cloud computing into manufacturing processes. By promoting smart factories where machines are interconnected and can communicate with each other, Industrie 4.0 aims to enhance productivity, efficiency, and flexibility in manufacturing.

The government provides funding for research and development, supports pilot projects, and facilitates collaboration between industry, academia, and research institutions to drive the adoption of these advanced technologies.

Another significant initiative is Manufacturing-X, which builds on the principles of Industrie 4.0. Manufacturing-X aims to create a standardized and secure data infrastructure that allows companies to share data seamlessly while maintaining control over their proprietary information. The German government supports Manufacturing-X through strategic investments, regulatory frameworks, and partnerships with industry leaders to ensure that the manufacturing sector remains competitive on a global scale. Together with 9 other nations (Austria, Canada, France, Italy, Japan, Korea, Spain, the Netherlands and the United States), Germany forms part of the International Manufacturing-X Council (IM-X).

Interoperability of systems remains a challenge. The Universal Machine Technology Interface (umati) initiative aims to standardize communication between machinery and IT systems using OPC UA specifications. This industry initiative, supported by the VDMA and the Machine Tool Builders' Association VDW in collaboration with the OPC Foundation, facilitates seamless data exchange and integration across various manufacturing technologies. By promoting open, standardized interfaces, umati aims to become the global language of production.

Leading Sub-Sectors

Over the next several years, Advanced Manufacturing is expected to provide export potential for industries such as machine tools/general industrial equipment, robotics, information and communication technology, process control instrumentation as well as additive manufacturing and advanced materials. Most German manufacturing companies implemented a digital strategy and strategic investments to prepare for smart manufacturing. More than half of German manufacturing companies have already invested in Enterprise Resource Planning (ERP), Manufacturing Execution Systems (MES), cloud-based systems and cybersecurity. By 2026, 64 percent of German companies plan to further invest in ERP, 75 percent in MES, 72 percent in cloud-based systems, and 70 percent in cybersecurity.

Robotics and Automation

Germany is one of the top five adopters worldwide with about 28,400 installations of industrial robots, accounting for around 5 percent of the global installations in 2023. Within Europe, Germany holds a market share in these segments of 31 percent. The VDMA's Robotics + Automation trade association represents three industry segments: robotics, machine vision, and integrated assembly solutions. The association continues to grow and had over 415 members as of the second quarter of 2025. The combined estimated annual turnover of these industry segments is forecasted to reach EUR 14.5 billion (USD 15.6 billion) in 2025. The robotics and automation market struggled in 2024, closing with a turnover of minus 1 percent. The market totaled EUR 16.0 billion (USD 17.3 billion) in 2024. VDMA forecasts a minus of 10 percent in revenue for 2025

In terms of robot density (robots per 10,000 employees), Germany ranks 4th in the world with 429 in 2023, behind South Korea (1012), Singapore (770), and China (470). The United States of America ranks 10th with 295 robots per 10,000 employees in 2023. Germany and the United States maintained similar ranking positions compared to 2022 (Germany: -1, United States: no change). According to the VDMA Robotics + Automation, China is setting its sights on Europe. China's adoption of robotics has accelerated quickly, entering the global top 10 for robot density only in 2019. Since then, its ranking has surged from 5th highest globally in 2022 to 3rd in 2023. Therefore, competition for the German robotics and automation industry is likely to intensify in the future due to the increased number of Chinese competitors.

New installations of industrial robots

Industry	Automotive	Metal & Machinery	Plastic & Chemical Products	Electrical Components & Electronics
2021	9,167	3,522	1,832	1,746

2022	7,120	4,234	2,072	1,543
2023	9,190	4,916	2,057	1,377

New installations in the automotive sector rebounded rapidly in 2023, recovering from a decline in 2022 and returning to the levels seen in 2021. Other segments, especially metal and machinery, show continued growth. Overall, new installations of industrial robots in Germany increased by 7 percent in 2023, after a growth of 1 percent in 2022.

The convergence of technological trends such as cloud computing, 5G mobile networks, and machine vision are allowing for new business models by enabling fully digitalized production with optimized performance. Machine vision simplifies programming, facilitating the detection of shapes and guiding grippers in complex environments, while artificial intelligence is making automation smarter, faster, more efficient, and more accessible. This technological evolution not only enhances maintenance processes and accelerates programming through learning by experience but also supports sustainability efforts. In the broader market, labor scarcity in developed economies is driving increased demand for automation. Small and medium-sized enterprises (SMEs) are increasingly seeking easy access to automation, fueling the trend of "democratizing" robotics by lowering the barriers to robotization, thus making advanced technologies more available to all. According to the International Federation of Robotics (IFR) the five most relevant automation trends in 2025 are Artificial Intelligence, Humanoids, sustainability, (Robot-as-a-Service (RaaS), and robots addressing labor shortages. Humanoid robots, or robots in the shape of human bodies have a broad range of potential uses, especially in filling labor shortages in historically non-automated tasks; however, most industrial manufacturers are focusing on humanoids for single-purpose tasks only, especially in the automotive sector. It remains to be seen whether these robots can provide a cost-effective and scalable solution to increasing labor needs in the short and medium term.

Data sovereignty and strict privacy regulations are key challenges for SMEs entering the German market. Large cloud providers in Germany offer solutions with local data centers. Many companies prefer on-premises solutions for their manufacturing sites.

Additive Manufacturing

Germany is Europe’s lead market for additive manufacturing (AM). In addition to hosting most of Europe’s AM manufacturers and users, it also achieves the largest volume of sales in Europe. About 70% of German AM firms sell mostly within Europe; some export to the United States and other countries. Their strongest competitors come from China and the United States. A recent survey by a local association reveals that 77% of German AM companies expect growth in the AM domestic market over the next 24 months. Despite some consolidation, the German AM market players are generally optimistic, expecting healthy sales increases over the next years. Moreover, local companies are willing to invest more into AM. Current key AM market challenges in Germany are bureaucracy, lack of recognition of AM as an enabler, and insufficient coverage of AM topics in research. The local industry is working on reducing unit costs and on enhancing process stability. AM is continuing to enter new applications. In Germany, AM products from the United States are well known for their good quality and competitive edge. Hence, the German market is highly receptive to them. Market prospects for AM materials and innovative AM machinery are good to excellent.

Advanced Materials

Germany is Europe’s largest market for advanced materials. Composites and lightweight materials are of particular importance. Demand for innovative materials is strong despite a currently stagnating overall German economy. Sustainability and recycling are of growing importance. Materials for the following applications are expected to see the highest growth rates over 2025-2026: Aerospace, transportation and wind energy. The German automotive industry, traditionally a strong user of advanced materials, is still facing challenges.

Demand for advanced materials, in general, is expected to grow significantly over the next several years. They considered as essential for the future development of new products in aerospace; transportation; energy; sports, and others. The German market is highly receptive to innovative materials from the United States. Market prospects for

innovative U.S. composites and other materials are good to excellent. Of particular interest are: Lightweight materials, materials with special characteristics, materials designed for additive manufacturing, green chemistry, automated production technology and recycling solutions.

Machine Tool and Precision Tool Market

The association VDW, the German Machine Tool Builders' Association, represents the machine tools and manufacturing systems sector within the VDMA. According to the VDW, the demand for machine tools, which declined in 2024, is expected to continue to decline. Orders received by the German machine tool industry in the first quarter of 2025 were down by 10 percent compared to the same period the previous year. Domestic orders fell by 30 percent compared to the previous year, while orders from abroad remained stable, following a 24 percent drop in export orders the year before. In 2024, German manufacturers saw a 19 percent increase in orders from the U.S. The trend has continued into 2025, however at a slower pace. VDW expects the market to stabilize due to general improvement in economic conditions, however a further decrease in orders is expected.

VDW's forecasting partner Oxford Economics predicts a continued decrease in demand for machine tools in 2025, forecasting a 10 percent drop in production to USD 14.3 billion. Uncertainty due to trade policy remains high, particularly regarding large global key markets. However, the German government's recent announcement of large-scale infrastructure investments and an economic stimulus package including accelerated depreciation incentives could help lift demand.

The precision tool market is represented by VDMA's section Precision Tools with around 170 member companies. The market for precision tooling saw a nominal production decrease of 9 percent in 2024 to EUR 9 billion euros (USD 9.7 billion), and the VDMA anticipates weak performance in 2025. Global crises and unfavorable political and economic conditions in Germany are the VDMA's main concern. Many challenges, including trade policy, tax burdens, and increased bureaucracy, are eroding profits. The production value of precision tools of EUR 9 billion euros (USD 10,5 billion) was below the forecasted 9.7 billion euros (USD 10.4 billion). The overall situation remains challenging for many companies. According to the VDMA, Germany is facing a split development with sectors such as electric mobility, wind power, medical technology, aerospace, and defense seeing consistent growth, while standard machinery businesses are not performing as well.

The industry is embracing innovative solutions to create more sustainable and efficient production processes in response to growing environmental and energy challenges. A key focus is on developing standardized methods to calculate the carbon footprint of tools, enabling easier comparison and driving reductions in emissions. Recycling initiatives, particularly for valuable materials like tungsten carbide and plastic packaging, are making significant strides in minimizing waste and reliance on raw material imports. Additionally, advancements in extending the lifespan of carbide tools through reconditioning can extend their lifespan, making them a more sustainable and cost-effective option for manufacturers. These efforts reflect Germany's strong commitment to sustainable and efficient manufacturing.

Despite negative forecasts and difficulties encountered by the German machine tool and precision tool industry in 2024 and 2025, there remain significant opportunities arising from structural changes and growth in emerging sectors. It is also common practice for German industry associations, in representing the interests of their members, to adopt a realistic and cautious approach in their sector outlooks and forecasts. The German industry continues to emphasize the importance of improvements to the overall business environment, including the reduction of bureaucratic hurdles, as a key factor for future growth.

Sensors and Measuring Technology

Several German industry associations cover sensor and measuring technology. The VDMA's Measuring and Testing Technology currently comprises around 200 member companies. ZVEI's automation sector division Measurement Technology and Process Automation counts around 100 member companies, and AMA Association for Sensors and

Measurement (AMA) has around 450 member organizations including private corporations as well as research institutions. AMA reported a 4 percent revenue decline in the last quarter of 2024 when compared to the previous quarter. When compared to the fourth quarter of 2023, revenues fell 8 percent. Members anticipate a modest revenue growth of 3% in 2025.

Sensors and measurement technology are essential in Advanced Manufacturing for reducing costs, improving quality control, and enhancing sustainability. By providing real-time data, these technologies enable precise monitoring and control of processes, which helps prevent defective production, reduce waste, and optimize energy use. Accurate measurements also facilitate efficient maintenance, minimizing downtime and extending the life of equipment. Recent advancements in computer vision and AI/machine learning have enabled a variety of novel business models in fields such as pattern recognition and predictive analytics. Thus, integrating advanced sensor and measurement technologies supports both economic and ecological goals, driving continuous improvement across various industrial sectors.

Opportunities

The Advanced Manufacturing sector in Germany is far from uniform While some industries are facing a stagnation in demand, other areas, such as automation and future technologies, show growth potential. With its many industry associations combined with its hundreds of international trade shows, Germany provides an excellent environment for companies that are new to the market to network with experts in the field and learn more about market specifics. The number of potentially relevant trade shows is extremely high, especially in manufacturing. In addition to the large shows, there are hundreds of highly specialized trade fairs that focus on small market segments or very specific technologies and materials.

The same level of differentiation and specialization can be seen in the associations in Germany. The large associations VDMA, ZVEI, and Bitkom have complex structures of departments or working groups that deal with specific advanced manufacturing topics, such as Industry 4.0 interoperability. Apart from these large players, there are many highly specialized smaller associations and cross-organizational working groups. In general, advanced manufacturing companies that enter the German market typically need in-country partners. These partners could be agents and distributors selling to original equipment manufacturers (OEMs) as end users, or OEMs as distributors for an exclusively manufactured component. Systems integrators are often the ideal partner for automation and IoT products and services. An in-country presence and membership in a German association is highly recommended.

Germany maintains a highly open and transparent business environment, and there are few formal market access barriers. Probably the greatest challenge to entering the German market is conforming with German electro-technical standards and conformity assessment procedures, which differ markedly from those in the United States. For most electrical components such as plugs and cables, U.S. and European standards are mostly nonaligned. In practice, this means that for most U.S. machinery makers, the additional labor required to assemble machinery for the German market will affect pricing by inflating the price paid by the customer while decreasing the cost competitiveness compared with domestic and other European-made machines. As part of the European Commission's Machinery Directive, machinery sold throughout the EU is required to obtain a CE marking whenever the product is covered by specific product legislation. CE stands for "Conformité Européenne" and is intended to demonstrate compliance with European safety and environmental standards. Europe, particularly Germany, undoubtedly presents challenges in areas such as regulations, certification, as well as data protection, privacy, and data sovereignty. The German business mindset can be cautious when adopting new technologies, but there is also a strong openness to innovation, particularly in improving production, reducing costs, moving towards a net-zero future, and implementing technologies that enhance, rather than replace, human work. Successfully navigating the German market can serve as a valuable foundation for expanding your operations across Europe.

With the new German government's focus on infrastructure investments and the recently announced stimulus package, there are promising signs of potential growth and opportunity for the Advanced Manufacturing sectors. The Federal Ministry of Finance announced in June 2025 that the cabinet has approved a new law introducing accelerated depreciation of 30% for investments in machinery and equipment made between July 2025 and the end of 2027. This measure aims to provide strong incentives for businesses to invest and offers greater planning certainty. Additionally,

a gradual reduction of corporate taxes starting in 2028 is expected to further support economic growth. Together, these steps could help strengthen the foundation for innovation and competitiveness in German Advanced Manufacturing. Overall, these developments may contribute to a more favorable environment for investment and innovation in Advanced Manufacturing in Germany.

Trade Events
formnext – International exhibition for additive manufacturing technologies and tool making, Frankfurt, November 18 - 21, 2025
Hannover Messe – World-leading trade fair for industrial transformation, Hanover. April 20 - April 24, 2026
SENSOR+TEST – The leading international trade fair for sensor, measuring, and testing technology, Nuremberg, June 9-11, 2026
automatica – The leading exhibitions for smart automation and robotics, Munich, June 25-27, 2027
EMO – One of the world's premier trade shows for the metalworking sector, Hannover, September 22-26, 2025
SPS – Smart Production Solutions – Nuremberg, November 25-27, 2025
VISION – The world's leading trade fair for machine vision, Stuttgart, every two years, October 2026

Healthcare and Medical Technology

Overview

Note: Further and more detailed information on the German healthcare market is available in the Commerce's Global Markets Healthcare Team's annual Healthcare Technologies Resource Guide.

Germany boasts an exceptional healthcare industry: it allocates the highest share of GDP to healthcare in Europe, ranks in the top ten countries worldwide in healthcare spending per capita, and employs approximately 6.1 million people. Claiming the third-largest medical technology market in the world after the United States and Japan, Germany is by far the largest European market and significantly outperforms continent competitors including the United Kingdom, France and Italy. The German medical device market is one of the largest worldwide, accounting for roughly USD 44 billion (EUR 38 billion) in revenue annually, making up 26.5 percent of the European market.

Germany has a robust healthcare system, especially with respect to infrastructure, hospital beds and trained staff. One out of six jobs in Germany is linked to the healthcare sector, which generates an annual economic footprint of USD 838 billion (EUR 775 billion), or roughly 12.8 percent of Germany's GDP. In 2024, the gross value added of the healthcare industry was USD 496 billion (EUR 435 billion). This corresponds to 11.5 percent of the gross value added of the overall German economy. With USD 172 billion (EUR 159.4 billion) generated through foreign sales, healthcare contributed 8.1 percent to Germany's total exports in 2023. In the same year, healthcare imports were at USD 188.5 billion (EUR 162.7 billion).

Compared to the EU average, Germany has a relatively high number of physicians and nurses. However, 50 percent of physicians are over the age of 50, and the demand for nursing professionals is rising exponentially. Projections indicate that approximately 1.9 million nurses will be needed by 2040, which represents an increase of 300,000 professionals over the current workforce within 15 years. As of April 2025, there was already a shortage of 100,000 nurses.

The medical equipment sector continues to be a pivotal area of trade between the US and Germany. For instance, Siemens Healthineers' photon-counting CT scanner, the Naeotom Alpha, developed in Germany's 'Medical Valley', has been widely adopted in the U.S., accounting for 40 percent of its exports. In 2023, Germany imported approximately USD 3.17 billion (EUR 2.73 billion) worth of medical instruments and appliances from the United States. This represented approximately 2.09 percent of the global total in this category. At the same time, the value of imports from the U.S. to Germany of the broader category of 'optical, photo, technical, and medical apparatus' totaled USD 9.82 billion (EUR 8.4 billion).

The Healthcare/Life Sciences (HCT) industry remains a priority for both the EU and Germany, as reflected in the European Regional Development Fund (ERDF - or EFRE, in German) and the 2021–2027 cohesion policy, as well as through German Länder implementation and tendering of HCT programs. The "Horizon Europe" program, which entered into force in 2021, continues to support health-related R&D with new 2025 calls focused on cancer treatment using generative AI, smart health, aging, and digital models of care. Recent initiatives such as the USD 8.9 million (EUR 7.7 million) EU4MEDTECH project aim to streamline regulatory pathways and boost MedTech innovation. In Germany, major reforms are underway including the 2025 Hospital Reform, the new Medical Research Act introducing confidential drug pricing, and increased federal funding for innovative care models targeting digital health, AI, and underserved health areas. These developments are creating opportunities for U.S. suppliers to participate in healthcare infrastructure and hospital projects and to partner with German and EU firms.

Market Challenges

Despite progress, due to its decentralized and self-governing structure, the German healthcare system is complex and slow to adapt to new trends. German health ministry officials are committed to modernizing the German healthcare system and have updated the regulatory framework with several laws to drive progress. A significant milestone that is driving digital adoption is the Hospital Future Act, which mandates that hospitals upgrade their information systems by 2027. This deadline prompts healthcare institutions to replace outdated systems with new technologies. The deadline fosters a sense of urgency and provides a clear roadmap for modernization, incentivizing investment in digital solutions that streamline operations, improve patient care, and boost efficiency. This will offer excellent export and partnering opportunities for innovative U.S. healthcare solutions providers throughout the healthcare technologies supply chain.

Overview of EU Regulatory Framework

The German market for medical devices is regulated by a combination of German and EU directives, standards, and safety regulations. On May 26, 2021, the EU Medical Device Regulation (MDR) replaced the earlier Medical Device Directive (MDD), significantly increasing the requirements for testing, certification, and post-market surveillance. Its complementary regulation, the In Vitro Diagnostic Medical Devices Regulation (IVDR), took effect on May 26, 2022. Unlike EU directives, these regulations are directly applicable in all member states, including Germany. To address concerns about potential shortages and bottlenecks in certification processes, the European Commission introduced key amendments to the MDR and IVDR in 2023 and 2024. These amendments extend transition periods for "legacy devices" i.e., those certified under the older directives (MDD and IVDD), provided they meet specific conditions, such as maintaining an appropriate quality management system and securing agreements with notified bodies. Additionally, since January 10, 2025, manufacturers are obligated to inform national competent authorities of anticipated disruptions or discontinuations in the supply of devices that could impact public health. Notifications must be made at least six months in advance to allow healthcare providers and regulatory agencies sufficient time to plan accordingly.

Starting in July 2025, official notices in the EU's Official Journal (OJEU) will trigger six-month transition periods for each module. The first three modules, (1) actor registration, (2) Unique Device Interpretation (UDI)/device registration, and (3) notified bodies/certificates, are expected to become mandatory by early 2026, with the remaining modules to follow after their audits. Manufacturers must register new devices before market entry post-UDI activation, and legacy devices must be registered within 12 months of the relevant OJEU notice. Notified bodies have 18 months to upload certificates for devices already certified under MDR/IVDR. These changes will require data standardization, early preparation, and close coordination, especially for non-EU manufacturers working with EU representatives.

Market Opportunities

Entry strategies to be considered are top-down or bottom-up marketing, picking the right partners and ensuring patient- and customer-centric system solutions and support. Most medical equipment imported into Germany is either sold directly through a local subsidiary with a field sales force, through medical distributors with an established distribution

network (often on a regional/territorial basis), or through appointed agents or manufacturer representatives. Local representation or market presence is essential when considering differing standards and certifications, warehousing costs, maintenance, accessibility, and local marketing, sales preferences, and discussions. An agency agreement is often a cost-effective mechanism to enter the market, but under German law, even if the agent's performance is not satisfactory, it can be difficult and costly to terminate an exclusive arrangement. A representation or distributorship agreement may be more difficult to arrange, but the German associate will purchase the product and therefore share some market risk. Licensing, partnering with large corporate partners, or buying a local firm provide alternatives in times where traditional distributors are bought up by corporates and the market increasingly consolidates.

Market Entry Strategy

The German healthcare system is divided into two segments: primary and secondary. The primary market, also known as the SHI market, is funded through statutory health insurance (SHI) and private health insurance (PHI). It is governed by the German Social Security Code, Book V (SGB V). This regulated sector encompasses all essential medical services, long-term care, and rehabilitation. In contrast, the secondary healthcare market is a more liberal, consumer-driven segment. It encompasses privately financed health-related products and services, such as over-the-counter medications, fitness and wellness programs, health tourism, and self-paid individual health services. In contrast to the SHI market, this segment is largely unregulated and shaped by supply and demand.

To gain entry to the primary healthcare market, companies and innovators must adhere to a stringent set of regulatory and legal requirements. Compliance with data protection laws, including the General Data Protection Regulation (GDPR), the German Social Security Code (SGB), and the Federal Data Protection Act (BDSG), is mandatory. Furthermore, medical products and services must demonstrate clinical efficacy and benefit through robust, evidence-based studies. This proof must align with the standards of evidence-based medicine (EBM). Moreover, Conformité Européenne (CE) marking is mandatory for all medical devices, as determined by the product's risk classification under EU regulations.

For innovations not seeking reimbursement through SHI, the secondary healthcare market offers a more flexible entry point. In this sector, services and products such as wellness apps, fitness programs, and non-prescription treatments can be marketed directly to consumers, with fewer legal constraints but higher demands for market credibility and consumer trust.

Surgical Equipment Market

Overview

The German surgical equipment market is experiencing steady growth, with a projected compound annual growth rate (CAGR) of 0.85 percent from 2023 to 2030. This growth is largely driven by advancements in robotic and power-assisted systems, as well as other cutting-edge electronic technologies. Surgical instruments, which are designed to cut, remove, or manipulate tissue, have been refined over many years to support surgeons in performing complex procedures. The market is highly competitive, featuring both global and local players. Global companies hold a significant share, while local firms remain active competitors. Germany's well-developed medical device industry continues to attract international companies seeking expansion opportunities. Key players in the German surgical equipment market include B. Braun SE, Boston Scientific Corporation, Cadence Inc., Conmed Corporation, and Integer Holdings Corporation.

Leading sub-sectors

The surgical equipment market is driven by several leading subsectors, each of which contributes significantly to its growth. In terms of products, surgical sutures and staplers have the highest revenue, while electrosurgical devices and powered handheld instruments, such as drills and staplers, are experiencing the fastest growth due to their use in minimally invasive and orthopedic procedures. Application-based subsectors such as obstetrics and gynecology and plastic surgery are demonstrating robust growth, with neurosurgery and orthopedics also gaining traction. Specialty segments such as operating-room (OR) equipment, including tables and lighting, and surgical robot accessories are experiencing significant growth, particularly in Germany. The market is further fueled by trends in robotic-assisted

surgery, AI integration, and the shift toward minimally invasive techniques. Europe's surgical equipment market is expected to grow at a CAGR of 8.7 percent through 2030.

Opportunities

Germany's surgical equipment market offers significant opportunities, largely driven by its strong focus on quality, patient safety, and world-class research and development. The country's rigorous quality standards, enforced by bodies like the Joint Federal Committee (G-BA) and the German Institute for Medical Documentation and Information (DIMDI), ensure widespread adoption of advanced, high-precision surgical technologies that meet EU safety requirements, including the mandatory CE certification. This regulatory focus, while strict, also positions Germany as a global benchmark for medical device quality. The company's robust R&D ecosystem, supported by renowned academic institutions and government entities such as the Federal Ministry of Research, Technology and Space (BMBF), which funds advancements in surgical techniques, materials, and robotic-assisted systems, is a key driver of its growth potential. These strategic partnerships drive ongoing innovation, leading to the development of advanced technologies that improve surgical precision and patient outcomes. While regulatory compliance under the EU MDR presents challenges, the robust R&D foundation and institutional collaboration offer substantial long-term opportunities for innovation, investment, and market expansion in the German surgical equipment sector.

Single-Use Medical Devices

Overview

The single-use medical devices sector in Germany is a rapidly expanding segment within the broader healthcare market. This growth is driven by the increasing demand for infection control, convenience, and efficiency in clinical settings. This category includes disposable products such as syringes, catheters, gloves, gowns, and sterile procedural tools. These products are essential for minimizing healthcare-associated infections and streamlining medical procedures. In 2023, the German market for medical disposables was valued at approximately USD 18.6 billion (EUR 16 billion) and is projected to grow significantly, reaching USD 53.4 billion (EUR 46 billion) by 2030, with a strong CAGR of 16.3 percent. Key sub-segments, such as disposable and prefilled syringes, are also experiencing double-digit growth, reflecting increasing number of medical procedures and demand for ready-to-use solutions. Germany's well-developed healthcare infrastructure and aging population will help drive ongoing demand for these devices. While the market remains attractive, it is also influenced by evolving regulatory frameworks under the EU MDR, including provisions for the reprocessing of certain single-use items. Furthermore, environmental concerns are prompting the industry to adopt more sustainable and eco-friendly disposable solutions. Germany offers a highly favorable environment for innovation and investment in single-use medical technologies.

Leading sub-sectors

As mentioned, Germany's single-use medical device market is led by disposable syringes, which generated USD 432.4 million (EUR 372 million) in 2023 and are projected to reach USD 1 billion (EUR 861.4 million) by 2030, with a CAGR of 13.2 percent. Prefilled syringes also play a key role, with revenues of USD 480.8 million (EUR 414.1 million) in 2024, expected to climb to USD 1.04 billion (EUR 895.8 million) by 2030 (CAGR 14.1 percent). Disposable catheters, particularly cardiovascular models, generated USD 2.96 billion (EUR 2.55 billion) in 2022 and are projected to reach USD billion 4.86 (EUR 4.2 billion) by 2030 (CAGR 6.4 percent), while suction catheters increased from USD million 23.8 in 2022 to a forecasted USD 52.7 million (EUR 45.4 million) by 2030 (CAGR 10.5 percent). Beyond these items, medical gloves, surgical masks, gowns, drapes, IV tubing, infusion sets, laboratory and diagnostic disposables, and pre-packaged surgical procedure kits play essential roles. These items are sustained by Germany's strict infection control standards, robust hospital infrastructure, and growing procedural volumes.

Opportunities

Germany presents strong and diverse opportunities for U.S. companies entering the single-use medical device market. These opportunities are supported by Germany's reputation for high-quality healthcare, strong R&D focus, and a well-

established regulatory system. Demand is driven by the need for infection control, operational efficiency, and hygienic care across hospitals, outpatient facilities, and home healthcare. U.S. firms can benefit from Germany's broad market segments, including sterilization supplies, disposable drug delivery products (e.g., pre-filled syringes, inhalers), non-woven disposables, wound care items, and incontinence products. The market is experiencing growth due to the aging population, rising healthcare costs, and increasing procedural volumes. Additionally, Germany's rigorous yet transparent regulatory framework, overseen by the Federal Institute for Drugs and Medical Devices (BfArM) and Paul Ehrlich Institute (PEI), ensures consistent quality and safety standards, creating a competitive yet accessible pathway for compliant U.S. exports. Key advantages include opportunities to supply specialized materials (such as high-grade plastics, rubbers, and non-wovens), meet growing demand in home care, and align with emerging sustainability trends by offering eco-friendly, single-use innovations.

Electromechanical Medical Devices

Overview

Electromechanical medical devices combine mechanical systems with electronic controls to perform critical diagnostic, monitoring or therapeutic functions. There are many applications for electromechanical medical devices in the healthcare industry, for example as precise drug delivery systems. German giants including Fresenius SE & Co. KGaA, Draegerwerk AG & Co. KGaA and Paul Hartmann AG produce cutting edge medical technology ranging from dialysis machines to blood pressure monitors. Close collaboration between manufacturers and university hospitals, a strong pool of engineers and an innovative MedTech industry have benefited the sector.

Leading Sub-Sectors

Leading electromechanical medical device sub-sectors include diagnostic imaging equipment such as MRI, CT or X-ray scans, electrosurgical and monitoring devices such as EKGs, active implantable devices such as pacemakers, respiratory systems including ventilators and anesthesia machines and surgical robotics such as robotic arms.

Opportunities

Opportunities to break into the German electromechanical medical device market are plentiful. For one, the country's aging population means there is increasing demand for active implantable and monitoring devices. Moreover, there has been a significant push to embrace digital health reforms, financially supported by federal government stipends. Finally, in line with the EU MDR regulations, innovative, compliant electrotechnical devices are in high demand.

Market Challenges

The electromechanical medical device market in Germany is highly advanced but faces various sorts of challenges ranging from strict regulatory compliance under the EU Medical Device Regulation (MDR, 2017/745) to pressures from hospitals operating within a growing staffing deficit. Particularly Small and Medium Sized Enterprises (SMEs) are especially affected by bureaucracy, facing exorbitant cost and time increases in putting their goods on the market. Compliance with EU 'notified bodies' presents another time-consuming obstacle.

Diagnostic Devices

Overview

Germany is Europe's largest medical device market and a global leader in clinical diagnostics. The diagnostic devices sector is growing rapidly, with particular strength in the areas of in vitro diagnostics (IVD), point-of-care (POC) testing, and laboratory instruments. In 2024, the IVD market alone was valued at approximately USD 8 billion (EUR 7 billion) and is projected to exceed USD 11.5 billion (EUR 10.06 billion) by 2030. Germany's aging population, rising chronic disease rates, robust healthcare infrastructure, and increasing adoption of digital and personalized

medicine are driving this growth. A well-developed network of clinical laboratories established reimbursement systems, and regulatory alignment with EU standards (under IVDR) further support sector expansion.

Leading Sub-Sectors

The IVD segment is the dominant player in the market, with infectious disease diagnostics, immunochemistry, and clinical chemistry representing the largest revenue categories. POC diagnostics are gaining significant traction, particularly for chronic conditions and in decentralized care settings. Germany now accounts for around 15 percent of the Europe, Middle East, and Africa (EMEA) POC market. Laboratory instruments are also in high demand, driven by the need for automation, digitization, and high-throughput systems. The country is home to major global players such as Roche Diagnostics, Siemens Healthineers, and Abbott, as well as innovative SMEs specializing in instruments, software, and reagents.

Opportunities

U.S. companies have a strong opportunity to enter or expand in Germany's diagnostic sector, especially with high-quality, FDA- and CE-marked products. There is robust demand for AI-enabled diagnostic tools, molecular and genetic testing platforms, rapid POC solutions, and integrated lab automation systems. The country's emphasis on precision, innovation, and compliance aligns well with the strengths of U.S. firms. Success in this market will depend on regulatory readiness (particularly IVDR), local distribution or integration partnerships, and visibility at trade events like MEDICA. With the right strategy, Germany can serve as both a lucrative market and a launchpad into the broader EU diagnostics landscape.

Medical Technologies

Overview

Medical Technologies are the key sector of the healthcare industry. After the European Union, the United States ranks second as Germany's largest import source for medical devices. Germany has demonstrated leadership in innovation, with 1,380 MedTech patents registered in 2023 and investments exceeding USD 3.4 billion (EUR 3 billion) in R&D. The German medical technology industry is a significant player in the global economy, with 13,500 manufacturers and over 265,000 employees contributing to a total revenue of USD 63.8 billion (EUR 55 billion). Exports play a vital role, with over two-thirds of revenues from larger firms earned internationally, primarily within Europe, though the U.S. and China remain key markets.

Market challenges

Germany's reputation for extensive and expanding regulatory requirements applies to the medical technology industry as well. The German Act on Corporate Due Diligence Obligations in Supply Chains and the EU's new Health Technology Assessment Regulation, for example, introduce additional administrative and cost burdens. Moreover, the proposed broad restriction of perfluorinated and polyfluorinated alkyl substances (PFAS) by the European Chemicals Agency could disrupt critical chemical supply chains that support MedTech manufacturing in Germany.

Digital Trade Opportunities

Germany's medical technology industry offers significant growth prospects across multiple key sectors. The medical aids sector, which includes devices such as prostheses, wheelchairs, and hearing aids, experienced a 7.4 percent increase in spending, reaching USD 26.6 billion (EUR 23.2 billion) in 2023. This growth can be attributed to an aging, and thus increasingly care-dependent, population, which is projected to exceed 5.5 million by 2050. In the field of digital health, Germany's Digital Care Act has facilitated the widespread adoption of reimbursable digital health applications, referred to as "DiGAs." As of 2023, the act has approved 56 such applications, generating over USD 86 million (EUR 75 million) in revenue, with a particular focus on addressing psychological and metabolic conditions. Meanwhile, the in vitro diagnostics (IVD) market, the fourth largest globally and accounting for 30.3 percent of the European market, is set to grow by 3.2 percent annually through 2029, fueled by demographic changes, chronic disease prevalence, and advancements in digitization, AI, and robotics that are transforming diagnostics and personalized care.

The German Medical Equipment Market 2022 – 2025 (USD Billions)

Estimates = (e)	2022	2023	2024	2025 estimated
Total Exports	27.1	30	31	36,43
Total Imports	24.0	25.3 (e)	26.0	27.5 (e)
Imports from the US	5.2	5.6 (e)	6.0	6.4 (e)
Trade Surplus/Deficit	-2.24	-0.73	-6.0 (e)	-6.0 (e)
Exchange Rates	1.0530	1.0813	1.0824	1.075

Additional Resources

Trade Events (in chronological order)

Analytica, Munich, March 24-27, 2026

International Dental Show (IDS), Cologne, March 25-29, 2026

DMEA (Digital Health), Berlin, April 21-23, 2026

American Hospital Association Leadership Summit, Nashville, TN, July 12-14, 2026

American Assoc. for Clinical Chemistry: AACC Annual Meeting, Chicago, July 26-30, 2026

Expopharm, Munich, September 16-18, 2025

Rehacare, Düsseldorf, September 17-20, 2025

Medica, Düsseldorf, November 16-17, 2026

Compamed, Düsseldorf, November 16-17, 2026 (held in tandem with Medica at Messe Düsseldorf)

Local Medical Industry Associations

BVMED

ZVEI Health Pages

Spectaris

DKGEV

BVITG

Government Links

Federal Ministry of Health

Federal Ministry of Education and Research

Federal Institute for Drugs and Medical Devices (Competent Authority)

Healthcare Procurement and Tenders (Federal Portal)

Government Health Plans

International Federation of Health Plans

Association of Public Health Plan Providers

Information, Communication & Technology (ICT)

Overview

Germany ICT Market

In Billion USD	2022	2023	2024	2025 (YTD in May)
Total Exports	185.8	198.5	187.8	69.5
Total Imports	213.5	229.8	212.6	78.6
Imports from the U.S.	5.5	6.0	5.6	2.3
Trade Surplus/Deficit	-27.7	-31.3	-24.8	-9.1

Source of data: U.S. Department of Commerce, Bureau of Census (Defined as HS-2 Codes: 85, 95)

Overview

Germany has one of the largest ICT markets in the world and remains the single largest software market in Europe with nearly 100,000 IT companies employing approximately 1.189 million people. In 2024, the German ICT market had a turnover of USD 240.9 billion (EUR 222.6 billion), and this figure is projected to reach USD 252 billion (EUR 232.8 billion) in 2025. There is significant, unquenched demand for U.S. products and services across all segments with major players such as Adobe, Apple, IBM, Microsoft, NVIDIA and Oracle enjoying a large market share.

The United States is one of Germany's leading non-European foreign direct investors (FDI), having invested USD 8.71 billion in the country's IT sector in 2022. Recent substantial U.S. investments included a USD 3.4 billion Microsoft investment in AI infrastructure and a USD 1.1 billion investment by Apple in a chip design center. Despite these developments, total American investment in Germany has decreased by 27% in 2024, likely due to steep taxes, labyrinthine bureaucracy, a stagnating economy, and high electricity costs.

In 2024, the German ICT sector generated USD 253.2 billion (EUR 224.8 billion) in revenue. Of this, the IT segment accounted for USD 168.6 billion (EUR 149.7 billion), while telecommunications contributed USD 82.2 billion (EUR 73 billion). The German ICT industry grew by 3.3 percent, an increase of USD 10.2 billion (EUR 9.2 billion) in revenue. Looking ahead, the sector is expected to continue its upward trajectory, with total revenues projected to reach USD 265.1 billion (EUR 235.4 billion) in 2025.

Germany hosts several key ICT trade shows, making it a premier marketplace for U.S. companies to reach global partners and buyers. U.S. exhibitors have frequently found buyers from Europe, Middle East, Africa, Asia and Latin America at the Hannover Messe, IFA Berlin, Tech Show Frankfurt, Gamescom, it-sa, GITEX EUROPE or even at newer AI conferences and digital summits.

Policy Objectives and Challenges

ICT is a priority sector for the German government. Germany's policies, including economic and innovation strategies, have been outlined in the coalition agreement in early 2025. The second chapter "Effective relief, stable finances, efficient state" dedicates an entire section to addressing digitalization. Core focuses are emerging, particularly in

digital infrastructure, the digital economy, digital workplaces, innovative governance, and digital environments within society, education, research, science, media, and security.

Following the establishment of a new Federal Ministry for Digital and State Modernization, the German government has reiterated its proactive approach to generating technological innovation and ensuring digital literacy. The Ministry aims to publish important digital resources, delegate clear responsibilities within government and oversee the federal government's IT and has already distinguished itself as a reliable industry partner. Nonetheless, some companies have voiced frustration about the timelines and aggressive renewable requirements imposed by the German Energy Efficiency Act.

Over the past few years, Artificial Intelligence (AI) has established and continually reaffirmed its importance in virtually all domains. Such groundbreaking innovation and convenience come at a cost, though. In Germany, two theories compete in explaining the country's stance: on the one hand, Germany has a rich history of championing technological progress, on the other hand, strict regulations and consumer wariness mean the country only lethargically adapts to change. For example, Germany ranks 9th worldwide for most newly funded AI startups from 2013 to 2023 and 66% of Germans claim they consult AI for work, school and leisure matters. However, 39% of Germans maintain associated drawbacks outweigh the benefits of AI and only 45% feel able to evaluate AI applications appropriately or use them correctly. In an attempt to close the AI regulatory gap, the European Commission proposed the EU AI Act in April 2021, the first portion of which went into effect on August 1, 2024. Although the AI Act will be implemented gradually through August 2026, early challenges have already emerged following the initial rollout. Concerns about inconsistent requirements and a lack of uniformity are reportedly disadvantaging certain industries (Bertelsmann Stiftung). Nonetheless, the European Commission maintains that the AI Act "aims to foster responsible artificial intelligence development and deployment in the EU." As the first comprehensive legislation of its kind, the Act is a revolutionary step in terms of global AI governance.

The U.S. Commercial Service continues to monitor policy developments and works with associations and multipliers such as the Federal Ministry for Economic Affairs and Climate Action of Germany (BMWK), Bitkom (Association for Information Technology), BDI (Federation of German Industries), GTAI (Germany Trade and Investment) and AmCham (American Chamber of Commerce) to unearth opportunities and flag policy concerns.

Leading Sub-Sectors

Key segments and topics of interest include cybersecurity, quantum computing, internet of things (IoT), big data, health IT, cloud computing, business IT: ERP, data centers, smart social business platforms, integrated systems, virtual & augmented reality, and digital factory. Specific national focus has been given to AI research and adoption, guided by Germany's National AI Strategy (updated 2022).

Opportunities

- The cybersecurity market is the 2nd largest in Europe and has had strong market growth.
- 89% of Germans support healthcare digitization. Developments include e-prescriptions, video consultations, and electronic patient records (ePA) from January 2025.
- 46% of German companies are currently using cloud computing technology for their business processes, while an additional 11% are planning to.
- Germany's cybersecurity spending reached more than USD 10 billion in 2024 for the first time. The cybersecurity market in Germany is growing faster than in the rest of Europe and the rest of the world.
- 53% of German companies want to increase investments in AI in 2025, 55% of them by 40% or more
- Big Data, such as hardware, infrastructure, services, database and analytics technologies, are all key drivers for a fast digitalization of the German economy.
- Enterprise Resource Planning (industry-specific ERP solutions)
- Smart Social Business Platforms

Resources

Trade Events

it-sa – Europe's biggest IT security exhibition, Nuremberg, October 7-9, 2025

Hannover Messe – Industrial: “Largest industrial trade show in the world. Of interest for U.S. producers of industrial IT solutions”, Hannover, April 20-24, 2026

Rise of AI Conference – Artificial Intelligence, Berlin and Virtual, May 5-6, 2026

European AI and Cloud Summit – Artificial Intelligence, OpenAI, Microsoft Azure and Cloud Computing, Düsseldorf, May 5-7, 2026

Tech Show Frankfurt – Cloud Expo Europe, Cloud & Cyber Security Expo, Big Data & AI World and Data Center World, Frankfurt, May 6-7, 2026

GITEX EUROPE – Europe’s #1 tech and startup event, Berlin June 24-25, 2026

Gamescom – Interactive games and entertainment, Cologne, August TBD, 2026

IFA Berlin – Consumer electronics and home appliances, Berlin, September TBD, 2026

Trade Associations

Bitkom, Federal Association for Information Technology, Telecommunication and New Media

Bitmi, Federal Association for Medium-Sized IT Businesses

Teletrust, IT Security Association Germany

ECO, Association of the Internet Industry

German Games Industry Association, Organization that represents the German computer and video games industry

VATM, Association of Telecommunication and Value-Added Service Providers

Government Entities

Federal Office for Information Security, National cyber security authority in Germany

Federal Network Agency, Ensures compliance with the Telecommunications Act (TKG), Postal Act (PostG) and Energy Act (EnWG) and their respective ordinances

Energy

Overview

Germany is the largest energy consumer in the European Union followed by France and Italy. High energy prices have been a challenge for industry and private consumers in recent years. Production in energy-intensive industrial branches has been declining almost continuously since the beginning of 2022, with industrial output for energy-intensive goods in 2025 remaining roughly 17 percent lower than pre-2022 levels.

The energy transition, in Germany known as the "Energiewende," is the country's planned transition from an energy mix dominated by hydrocarbons and nuclear, to a low-carbon and nuclear-free economy based on the utilization of renewable sources.

Germany has a target for 80 percent of its electricity supply to come from renewables by 2030 and achieved 59 percent in 2024. Germany plans to reduce its greenhouse gas emissions by 65 percent from 1990 levels by 2030 as part of its goal to achieve carbon neutrality by 2045. Driven by increased domestic renewable energy production, imported electricity and a decline in energy-intensive industries, Germany's carbon dioxide emissions fell to their lowest level in 2024 since the 1950s. Germany has the sixth most carbon-intensive electricity in Europe at 381 gCO_2/kWh compared to just 56 gCO_2/kWh in France in 2023.

Investments in offshore wind, photovoltaics, grid expansion, and energy storage projects will be necessary in addition to the implementation of a new, smart energy infrastructure that can balance the fluctuating supply of renewable sources. Furthermore, energy efficiency will play a key role in Germany's energy transition by reducing the overall demand for energy and consequently enabling a quicker transition to renewable sources.

Despite progress with renewables, Germany has maintained a high degree of dependence on oil and natural gas to maintain energy supply, with Germany's supply of non-coal fossil fuels being almost exclusively imported. These dependencies have generated two potential sources of instability. First, global price changes strongly affect German energy importers and end users. Second, market developments depend heavily on Germany's relations with certain countries. The nuclear phase out in 2023 and planned coal phase-outs in 2038 are set to increase the country's reliance on natural gas, making it increasingly important to continue efforts to diversify gas supply options, including liquefied natural gas imports.

Although the share of electricity produced from renewable sources fed into the grid has been constantly increasing, there have been no remarkable incidents of power interruptions thus far. Germany still has one of the lowest power interruption rates worldwide.

Energy consumption and generation

Energy consumption

In 2024, primary energy consumption in Germany amounted to 10,478 Petajoules, with more than 77 percent coming from fossil sources and with 20 percent from renewables. Energy consumption is still noticeably lower than before the outbreak of COVID-19 in 2020. Germany shut down its last remaining nuclear power plants in April 2023. The phase-out of nuclear energy and the continued promotion of renewable energies have caused changes in the 2024 energy mix. Oil remained the most important source of energy with a share of 36.1 percent, followed by natural gas with 25.9 percent. Hard Coal accounted for 7.3 percent and lignite for 7.6 percent. The phase-out of coal is legally mandated by 2038, with this deadline being supported in the new coalition agreement. Of the 20 percent renewable energy production, on- and off-shore wind accounted for 48.8 percent. The output of hydroelectric power stations increased by 11.6 percent year-over-year, driven by a high precipitation, making up 4.5 percent of all gross electricity generation. Power generation from wind energy accounted for 27.9 percent of electricity generation and for PV systems 14.9 percent, a year-over-year increase of 16.1 percent due to a significant installation of new solar plants.

Energy production

Germany is a large energy importer, with net imports making up roughly 70 percent of total energy supply in 2023. The most important domestic energy sources are biofuels and recovered waste energy with a share of 39.1 percent of domestic energy production, a decrease of 2.1 percent in comparison to 2022. Coal follows with 26.9 percent, a considerable year-over-year decline of 21.8 percent when compared to 2022. Renewables are the third largest domestic source of energy in Germany making up 22.5 percent of domestic energy production, with this source continuing to grow quickly. Renewables grew 8 percent from 2022 to 2023, and preliminary data from 2024 shows their share continuing to grow quickly, due to the installation of new photovoltaic capacity. The shares of other energy sources amount only to the low single digits.

Electricity generation

German electrical generation decreased by 4.2 percent year-over-year in 2024 and totaled to 431.7TWh. A major part of electricity produced and fed into the grid in Germany in 2024 came from renewable energy sources and accounted for 59 percent of total electricity production, an increase from 56 percent in 2023. Generation from hard coal fell 31.2 percent year-over-year and production from lignite dropped 8.8 percent. Gas-fired power plant's share of electricity generation grew 8.9 percent to 56.9 TWh. Electricity from wind power amounted to about 137.6 TWh and with a share of 31.8 percent of total generation, wind was again the most important source of electricity. German photovoltaic systems generated about 63.3 TWh electricity, a 13.6 percent increase from 2023. Biomass generated 36.0 TWh and hydropower accounted for the vast majority of the remaining 17.2 TWh contributed by renewable sources. In total, renewable energy sources produced about 254.7 TWh in 2024.

Energy costs

Energy costs decreased in Germany in 2024, stabilizing from higher in prices in 2023 as Germany replaced Russian-supplied natural gas and stabilized its energy imports. Energy prices for German households (electricity, gas, gasoline) have decreased in 2024 but often remain above pre-2022 levels, before Russia's invasion of Ukraine. German electricity prices for industrial businesses were around 0.19 USD/kWh in 2024 compared to just 0.08 USD/kWh in the United States in March 2024. The German government revealed plans to set aside around USD 11.3 billion by 2030 to subsidize electricity prices for energy-intensive industries to shield businesses from high electricity prices, especially energy-intensive companies.

Energy imports

Natural Gas

The total volume of natural gas imported into Germany in 2024 fell to 865 TWh. The largest volumes came from Norway (48 percent) and the Netherlands (25 percent). Overall, Germany's natural gas imports were down 11 percent in 2024. Industrial gas consumption remains high at almost 514 TWh, which is 61 percent of total consumption. Although many industrial processes are to be converted to electricity or hydrogen in the long term, natural gas will continue to be relevant.

Crude Oil

Germany's crude oil imports increased from 73 to 78.4 million tons in 2024, a 7 percent year-over-year increase.

Liquified Natural Gas (LNG)

In 2024, Germany imported 69TWh of LNG, accounting for about 8 percent of total German gas imports in 2024. U.S. LNG now accounts for approximately 90 percent of German LNG imports, the highest share of any European country's imports. After the Russian invasion of Ukraine and the ensuing energy crisis, Germany quickly diversified its gas supply and installed LNG terminals on its coasts to compensate for lost Russian gas supplies. As of May 2025, there are four active temporary LNG terminals supplying between 5-12 percent of gas consumed in Germany. U.S. LNG exporters have greater volumes of LNG available for spot market purchases than other major exporters, and additional U.S. export capacity will come online.

Energy policy

The Federal Ministry for Economic Affairs and Energy (BMWE) oversees the country's energy policy and supervises the energy sector. The Federal Ministry for the Environment, Climate Action, Nature Conservation, and Nuclear Safety (BMUKN) is responsible for environmental protection, nature conservation and climate action.

Key to Germany's energy policies and politics is the "Energiewende", meaning "energy transition". The most important tools for Germany to reach its targets on emission reduction are the expansion of renewable energies, the reduction of energy consumption, and the cessation of fossil fuels in all sectors of the economy. The policy also includes phasing out nuclear power, coal, and lignite. As of April 2023, Germany is no longer producing any electricity from nuclear power plants. The phase-out of coal and lignite is planned by 2038 the latest.

The two pillars of the "Energiewende" are renewable energy sources and energy efficiency. Key legal provisions are the Renewable Energy Source Act (EEG), which regulates the renewable electricity sector, and the Renewable Energies Heat Act (EEWärmeG), which promotes the increase of heat generated from renewable energy in new buildings. The share of wind or solar power and other renewables should reach 80 percent of electricity production by 2030. By then, Germany's onshore wind energy capacity is planned to double to up to 110 GW, offshore wind energy should reach 30 GW - the capacity of 10 nuclear plants - and solar energy is planned to triple to 200 GW.

Germany relies heavily on imports of fossil fuels as its domestic resources are largely depleted, or their extraction is not desired or too costly. Rising European energy prices and the Russia-Ukraine war have led to a permanent shift in Germany's energy and foreign policy. Germany, being Europe's leading economy, is no longer importing any Russian gas directly, but its plans to phase out coal-fired power plants by 2038 and the shutdown of the last nuclear power plants in 2023 have left the country with few options. Accelerated capacity expansion for renewable energy and investments in LNG and hydrogen infrastructure will be the key elements to supply the high energy consuming economy.

The European Climate Law sets a legally binding target of net zero greenhouse gas emissions by 2050, but Germany wants to achieve climate neutrality five years earlier by 2045. EU Institutions and member states are bound to take the necessary measures at EU and national level to meet the target.

To support the energy transition, Germany adopted its first hydrogen strategy in 2020, which was updated in July 2023. Hydrogen is considered key to the country's clean energy future with the two main goals being the decarbonization of energy intensive industries like steel, cement, and chemicals to reduce emissions, and to provide backup energy generation capacity for the growing share of renewables.

The updated hydrogen strategy also includes subsidies for the use, though not the production, of blue hydrogen. The focus will remain on green hydrogen produced from renewables. Hydrogen demand is expected to be driven primarily by the steel industry, basic materials, petrochemicals, mobility, logistics, and the power sector. However, several large energy intensive companies have significantly reduced their production in Germany. By 2045, the Ministry of Economy expects hydrogen demand to reach between 360 and 500 TWh, with an additional 200 TWh for hydrogen derivatives. To support the rapid development of the hydrogen market, "low-carbon" blue hydrogen is planned to be included to help meet this demand.

Germany has a well-developed natural gas pipeline grid and is connected to terminals in neighboring countries, especially in Belgium and the Netherlands. The Russian invasion triggered a lasting change in Germany’s energy policy. To replace Russian gas and strengthen energy security, the German government moved quickly and at significant cost to expand LNG import capacity. As of 2025, Germany operates four active temporary LNG terminals using Floating Storage and Regasification Units (FSRUs).

The German terminals have a capacity to cover around 17 percent of Germany's gas needs. Land-based terminals with larger capacities than the floating LNG terminals are planned for 2028. With the additional planned LNG terminals, the Federal Ministry of Economy and Energy expects to cover about half of Russia's gas imports in 2021. These terminals will be ‘hydrogen-ready’ facilities and capable of switching from LNG imports to (liquid) hydrogen and ammonia in the future. The previous government also started plans to build a core hydrogen network that would modify half of the existing 9700 km gas pipelines into a hydrogen network.

Opportunities

Germany is Europe's largest electricity market with an annual power generation of about 430 TWh and a capacity of about 270 GW. More than one thousand market participants are active in the fully liberalized market, with new market actors – who do not own power plants or supplier networks - successfully entering the domestic electricity market. The "Federal Network Agency" (Bundesnetzagentur) is the regulatory office for electricity, gas, telecommunications, post, and railway markets. The agency is also responsible for ensuring non-discriminatory third-party access to the power network.

Germany’s shift away from Russian gas has created significant opportunities for LNG expansion, driven by the urgent need for energy security and diversification. The government’s rapid construction of floating LNG terminals—such as those in Wilhelmshaven, Brunsbüttel, and Mukran—has provided essential infrastructure to import gas from global markets. With all landing slots at key terminals already booked for 2025, demand for LNG remains robust, especially as gas storages require refilling and industry seeks stable supply. However, the market faces challenges, including lower-than-expected utilization at some terminals due to fluctuating demand and local opposition. Despite this, the continued need for backup power as Germany phases out coal and nuclear, and the commitment to build up to 20 GW of new gas-fired power plants by 2030, will sustain demand for LNG in the medium term. The government views LNG as a critical bridge fuel, ensuring flexibility and grid stability while renewables scale up. Efforts are underway to secure long-term LNG contracts and expand terminal capacity further, reducing reliance on volatile spot markets and supporting industrial competitiveness. Overall, while the economic and environmental costs are notable, LNG remains central to Germany’s strategy for energy security and a stable transition to a low-carbon future.

Energy infrastructure

Germany’s power grid ranks among the most reliable in the world, despite an increasing share of fluctuating renewable energy sources. The German energy transition is creating new challenges for the transport of electricity because of its changing power generation structure. Increasingly, electricity is being generated by wind and solar installations that are distributed throughout the country, some of them located far away from consumers. Furthermore, electricity generated by wind turbines and new conventional power stations in the north of Germany must be transported to the major power consumption regions in the west and south.

Hence, major investments in the expansion of the transmission and distribution networks are planned because of renewable energy integration and the growing consolidation of Europe’s energy markets. New technologies in the energy grid sector – for example superconductors, high-temperature lines and local power transformers – are being tested in pilot projects. Alongside battery storage with solar systems, large-scale storage solutions are playing a growing role in the balancing energy market. Hydrogen is expected to play an important role due to the linking of the energy, heat and mobility sectors.

Intelligent networks or "smart grids" allow fluctuating renewable energy power generation and consumption to be optimally managed by allowing a shift from "consumption-oriented generation" to "generation-optimized consumption."

Information and Communication Technology (ICT) will play a central role in connecting the different parts of the energy systems. Intelligent ICT solutions will allow smart grids to efficiently manage power generation, consumption and storage in tandem with so-called "smart meters."

Investment in High Voltage Lines and Grid Expansion

The total length of Germany’s transmission grid is about 37,000 kilometers. It transmits power with a maximum voltage of 220 kilovolts (kV) or 380 kV. Most of the power lines use alternating current, but the new transmission lines between northern and southern Germany, planned to be completed by 2027, will use more efficient high-voltage direct current (HVDC) technology. According to the Federal Network Agency, around 14,000 km of new power lines are needed to successfully implement the energy transition. As of early 2025, about 2,200 km of new transmission lines have been approved, of which 1,800 km have been constructed. 1,700 km of lines are expected to be approved in 2025.

In order to meet 80 percent of its electricity consumption from renewables by 2030, Germany faces an estimated USD 737 billion cost to expand its power grids by 2045. More solar and wind systems must be integrated into the network, and charging infrastructure for e-mobility, as well as heat pumps and electricity storage systems will need to be expanded.

Transmission system operators (TSOs) keep control power available to maintain stable and reliable supply. Demand for control energy is created when the sum of power generated varies from the actual load. There are four transmission grid operators in Germany: 50 Hertz Transmission, Amprion, TenneT TSO, and TransnetBW.

Energy Storage

The German energy storage market has experienced a massive boost in recent years. Germany is a global leader in energy storage technology for renewable energy systems. While the demand for energy storage is growing across Europe, Germany remains the European lead target market and the first choice for companies seeking to enter this fast-developing industry. The country stands out as a unique market, development platform and export hub. Total energy storage capacity installations jumped to 17.7 GWh in 2023, reflecting a 39 percent increase from the previous year. Particularly noteworthy was the growth in battery storage, which reached 12.1 GWh, a 40 percent increase, accounting for 30 percent of the total installed capacity. Energy storage systems are planned to play a fundamental role in integrating renewable energy into the energy infrastructure and help maintain grid security by compensating for the enormous increase of fluctuating renewable energies. Germany’s geography limits the development of new pumped storage capacity. Hence, new storage technologies and smart grids are needed.

The total number of photovoltaic systems in the country reached 4.8 million and Germany's cumulative solar photovoltaic capacity reached approximately 100 gigawatts in 2024, a year-over-year increase of 15.5 gigawatts. Half

of the newly installed solar power capacity in 2023 came from the residential segment, marking a 135 percent increase compared to 2022. In 2023, every second newly installed residential PV-system is combined with an energy storage system to increase the amount of own-consumed PV electricity. Retrofit storage installations are expected to be a major driver for improving energy self-sufficiency in private households and commercial operations. Only 8 percent of rooftop PV systems in Germany are equipped with a battery today – by 2030 it could be well over 80 percent.

To integrate the large amounts of wind and solar energy safely into the existing grid, large battery systems will play an import role in Germany's future energy infrastructure to stabilize grid frequency. At present, several demonstration and commercial projects have been put in operation or are being planned. For example, there are plans to build the country's largest battery park in Eastern Germany's historic lignite mining belt. The 1.000 MWh project involves building a USD USD 220 million facility to store electricity that will gradually replace the sprawling coal pits of the Lusatia region.

Hydrogen

There are opportunities for exports of hydrogen and hydrogen technology solutions to Germany. The government advisory board, The National Hydrogen Council, expects that around 94 to 125 TWh of hydrogen will be needed by 2030. The German government estimates that 50 percent to 70 percent of the required supply will be imported. And there is an even wider range of forecasts for 2050 for Germany, between 400 TWh and 800 TWh. According to these estimates, Germany's hydrogen imports will account for up-to two-thirds of its consumption. It will mainly be imported by land via pipelines, and by sea from other continents. Prior to importing hydrogen, Germany needs to build new pipelines and upgrade and convert its natural gas pipelines as well as building hydrogen underground storage facilities.

The government plans to import green hydrogen from other EU member states, particularly those states that generate hydrogen from offshore wind in the North and Baltic Sea, or PV in southern Europe. Furthermore, Germany is in contact with potential international suppliers of hydrogen, including Canada, the UAE, Australia, and the United States.

In January 2022, the European Commission granted state aid approval to the German government to allow the funding of the hydrogen import program H2Global. Initially, H2Global aimed to promote the development of green hydrogen production plants in sunny non-EU countries. The H2Global Foundation will purchase green hydrogen abroad via auctions under long-term contracts. In May 2023, Germany agreed to link its H2Global foundation to the European Hydrogen Bank, opening the funding model to all EU member states to support international hydrogen imports. Between 2027 and 2033, the Federal Ministry of Economics expects Germany to import at least 259,000 tons of green ammonia through the H2Global Foundation program.

Resources

Trade Events

E-world energy and water – energy and water industry, Essen, February 10-12, 2026

Hannover Messe – industrial, Hannover, April 20 - April 24, 2026

The Smarter E Europe and Intersolar – energy transition, Munich, June 23-25, 2026

Hydrogen Technology Expo – hydrogen technology, Hamburg, October 21-23, 2025

Enlit Europe – power and energy, Bilbao, November 18-20, 2025

Government Resources

BMWE - Federal Ministry for Economic Affairs and Energy

DENA - German Energy Agency

BNetzA - Federal Network Agency

Digital Economy

Overview

Germany is one of the United States' most significant trading partners and its digital economy is of fundamental importance to U.S. tech companies. Germany's digital economy has seen significant and stable growth over the past years, not being impacted by the economic slowdown found in other sectors. It has grown to be worth over USD 250 billion in 2024, up from USD 239 billion in 2023.

In the coalition agreement for its 2025-2029 mandate, the new federal government has stressed the importance of the digital economy including by creating a stand-alone digital ministry (Federal Ministry for Digital Affairs and State Modernization) led by a former private-sector executive. Key goals for the government are to increase investments in numerous aspects of the digital economy, including in artificial intelligence (AI) and quantum computing (QC). More specifically, per the coalition agreement, Germany seeks to improve the digitalization of the public administration ("state modernization"), expand and modernize digital infrastructure such as fiber optic and 5G networks, and promote the digital economy, while also improving data usage and data sharing to boost innovation. A central concept at both national and European level is digital sovereignty, with a focus on becoming less dependent on digital technologies from the United States and China. This presents U.S. companies opportunities and challenges in navigating local content, compliance, and potentially exclusions.

U.S.-Germany cooperation is particularly advanced in emerging technologies. The 2024 Joint Statement on Cooperation in Quantum Information Science and Technology (QIST), reaffirmed a shared commitment to deepening transatlantic quantum partnerships. Quantum hardware vendors and cloud-based platforms are expanding their presence in Germany's growing ecosystem.

According to a 2024 European Union (EU) report (Digital Decade 2024: Country Reports), Germany is below the EU average in digitalization of public services both for citizens (score 75.8 versus the EU average of 79.4) and businesses (78.6 versus 85.4). However, the report notes the significant investment the federal government is making to improve its digital economy. A 2024 KfW Study found that Germany is lagging behind other large economies in terms of number of academic publications and patents relating to digital technologies with the trend currently showing no signs of changing.

EU law takes supremacy over national laws and as such most regulations for its digital economy are set at the EU level rather than in Germany.

Market Challenges

Most laws related to the digital economy are set at the EU level. The Digital Economy Chapter of our Country Commercial Guide for the European Union provides a more comprehensive overview.

In addition, some legislation is still set at Germany's national level, including:

- Online Access Act: Enacted in 2017 and amended in 2024, this Act expands the digital services provided by Germany's public administration. Services for companies should be completely online by 2029.
- NIS2-Umsetzungs- und Cybersicherheitsstärkungsgesetz: Proposed legislation, to translate the EU's NIS-2 directive into German law. Will require companies with 50+ employees identified as "essential or important entities" to invest in cybersecurity measures and report on incidents.

In Germany data privacy is taken very seriously and overseen both at the state and federal level. Each state has its own data protection agency, which has jurisdiction over companies and public authorities within the state. At the national level, the Federal Commissioner for Data Protection and Freedom of Information oversees federal public authorities and the telecommunications and postal sector. Overall, EU data privacy is regulated by the EU's General Data Protection Regulation (GDPR).

A 2024 report by Deutsche Bundesbank, found that 51 percent of all payments in Germany were still conducted with physical currency. This is a high proportion compared to other major economies. However, card payments are on the

rise. One effort the new Digital Ministry is undertaking is with respect to a Digital Euro or Digital Wallet for German citizens.

The German government views investment in AI as an essential component to maintain its national security, boost innovation and economic growth, and maintain its place in the global economy. One of its goals is to enable AI to be "Made in Germany" through innovation-friendly regulation. The new coalition government has committed to building at least one European "AI gigafactory" in Germany. The government also plans massive investment in AI and cloud technologies to create a domestic technology stack; however, the specific aspects of that plan are unclear. AI in Germany is regulated by the EU's AI Act.

Digital sovereignty is a key concept propagated by the new German government as well as other EU member states and the European Commission. Whether digital sovereignty will be included in EU-led projects such as Gaia-X and the EU Cybersecurity Certification Scheme for Cloud Services (EUCS) remains open.

While 96 percent of the country does have fast internet coverage, this is primarily by very high-capacity network (VHCN) and not fiberoptic cables. A notable urban-rural divide still exists when it comes to internet speed.

The United States Trade Representative's 2024 National Trade Estimate Report on Foreign Trade Barriers outlines additional barriers to U.S. goods and services in Germany, including in areas related to its digital economy.

Opportunities

Germany's 2022 gigabit strategy calls for more investments in Germany's fiberoptic networks. It aims to have 50 percent of the country connected by Fiber to the Premises (FTTP) by 2025 and 100 percent by 2030. As of 2024, FTTP was at 29.8% in Germany. The strategy includes USD 12.6 billion in government subsidies and estimates private sector investments by telecommunication companies at USD 52.6 billion. Communication equipment across the rail network will also be updated as part of the strategy. The new German government continues to prioritize the quick rollout of digital infrastructure. In June 2025, the governing coalition passed legislation in the Bundestag which attributes a "preeminent public interest" to fiber and mobile broadband expansion until the end of 2030, facilitating quicker approval and planning procedures.

Microsoft and Apple announced substantial investments in Germany's digital economy. The former intends to allocate USD 3.4 billion until 2026 primarily to build out its data center infrastructure.

Cross-Sector Enabling Technologies

In 2024, Germany forged an agreement with the mobile network operators (MNOs) to remove Huawei and ZTE equipment from its most critical communications infrastructure. German MNOs are required to remove these components from their core 5G networks by 2026. In addition, Germany is among the world leaders in adopting Open Radio Access Network (Open RAN) technology, which increases competition due the interoperability of equipment. Deutsche Telekom, O2 Germany (Telefonica), and Vodafone have all already started to deploy Open RAN. A fourth operator, 1&1 (United Internet), is currently building out a new network based solely on Open RAN technology.

In January 2025, the federal government updated its "Research and Innovation for Technical Sovereignty 2030" (FITS2020) strategy. The program allocates USD 1.7 billion annually to strengthen Germany's position in digital and industrial technologies. Although the program focuses on supporting domestic technology, it acknowledges the need to cooperate with companies outside of Germany.

Despite concerns about sovereignty, U.S. companies remain active in Germany's quantum computing sector. In 2024, IBM inaugurated its first European Quantum Data Center in Ehningen, Germany, housing advanced chips and offering industrial-scale quantum processing. (However, the platform and data will remain housed in the United States).

Specific Industry Sub-sectors

AI

Germany's AI scene is growing quickly. In 2024, the market for developing, training and operating AI platforms increased by 43% to USD 2.5 billion. Bitkom, Germany's digital industry association, reported that 42% of German

industrial companies use AI as part of the production process. A further 35% of industrial companies plan to use AI in the future.

Cloud Computing

Germany's market for cloud computing is expected to grow by 17% and total USD 21.5 billion in 2025. According to a 2025 Bitkom report, 90% of German companies already use cloud computing, with the rest of firms planning to use cloud services. Typically, these services are used for bookkeeping/financial planning, office software, email, and data storage. 77% of German firms are using cloud-based AI services or have indicated desire to do so. 100% of companies signaled they would prefer German providers for cloud services, while only 6% prefer a U.S. based company. However, 65% of companies are only willing to use German providers if they are on par with U.S. and international competitors. Multi-cloud infrastructure, i.e. relying on multiple cloud service providers to avoid service failures, is used by 41% of German companies. Virtually all companies view IT security, data protection and compliance as the most important must-have from a cloud provider. This is followed closely by performance and stability and the potential for data encryption.

Cybersecurity

Cybersecurity remains a key issue for German companies and continues to be a fast-growing market segment. In 2024, revenues for security software rose 11% to USD 5.5 billion. Seven out of ten companies feel strongly threatened by analogue and digital attacks. Over 80% of companies were hit with an attack in 2024 resulting in USD 312 billion in damages – an almost 30 percent increase in damages from the previous year. The most recent update to the nation's cybersecurity policy came in 2021 and extends through 2026. The plan has three action areas including focusing on citizens and society, government and private industry working together, and a strong and sustainable cyber security architecture for every level of government.

Digital Economy-related trade events

- Hannover Messe (industrial applications)
- DMEA (digital marketing)
- GITEX Europe trade show (software and tech)
- IFA Berlin (consumer electronics)
- it-sa (cybersecurity)

Helpful Resources

- U.S. Department of Commerce, International Trade Administration, Industry & Analysis Office of Digital and Emerging Technology Service (DETS)
- National Trade Estimates Report – Digital Trade Barriers

Customs, Regulations and Standards

Trade Barriers

Germany's regulations and bureaucratic procedures can be a difficult hurdle for companies wishing to enter the market and require close attention by U.S. exporters. Complex safety standards, not normally discriminatory but sometimes rigorously applied, complicate access to the market for many U.S. products. U.S. suppliers should thoroughly research and comply with all applicable product standards, including timely testing and certification.

For information on existing trade barriers, please see the National Trade Estimate Report on Foreign Trade Barriers published by the U.S. Trade Representative. Additional resources are SBA's Office of Manufacturing and Trade and Trade and Development Agency. The Foreign Agricultural Service provides information on agricultural trade barriers. Contact the Trade Compliance Center to report existing or new trade barriers and get assistance in removing them. For information on EU retaliatory tariffs on U.S. goods see the list on the Department of Commerce website.

Import Tariffs

When products enter the EU, they need to be declared to customs according to their classification in the Combined Nomenclature (CN). The CN document is updated and published every year, and the latest version can be found on the European Commission's website.

U.S. exporters should consult "The Integrated Tariff of the Community," referred to as TARIC (Tarif Intégré de la Communauté), to identify the various rules that apply to specific products being imported into the customs territory of the EU. To determine if a license is required for a particular product, check the TARIC.

The TARIC can be searched by country of origin, Harmonized System (HS) Code, and product description on the interactive website of the Directorate-General for Taxation and the Customs Union. The online TARIC is updated daily.

Key Link: TARIC

Key Link: German Customs import information

Import Requirements and Documentation

Please refer to our European Union Country Commercial Guide article on EU import requirements and documentation.

Labeling and Marking Requirements

Please refer to our European Union Country Commercial Guide article on EU labeling requirements.

U.S. Export Controls

The United States imposes export controls to protect national security interests and promote foreign policy objectives related to dual-use items and less-sensitive military items through the Export Administration Regulations (EAR) (15 CFR Parts 730 – 774). The Bureau of Industry and Security (BIS) is responsible for regulating, implementing, and enforcing export controls for such dual-use items and less sensitive military items. Within BIS, Export Administration (EA) is responsible for processing license applications, counselling exporters, and drafting and publishing changes to the EAR; and Export Enforcement (EE) is responsible for compliance monitoring and enforcement of the EAR. BIS works closely with U.S. embassies, foreign governments, industry, and trade associations to ensure that the export, reexport and transfer (in-country) of items subject to the EAR, as well as specific activities of U.S. persons related to certain weapons of mass destruction and military-intelligence end uses and end users is accomplished in compliance with the regulations.

Enforcement

BIS officials conduct site visits, known as End-Use Checks (EUCs), globally with end-users, consignees, and/or other parties related to transactions involving items subject to the EAR and shipped under a license, another form of BIS authorization, or as "no license required." An EUC is an on-site verification of a non-U.S. party to a transaction, conducted as part of BIS's licensing process as well as its compliance program, to determine whether the party is a reliable recipient of items subject to the EAR and is in compliance with the EAR and the conditions of a license or other authorization, if applicable. Specifically, an EUC verifies the bona fides of transactions subject to the EAR, including confirming the legitimacy and reliability of the end use and end-user; monitoring compliance with license conditions; and ensuring items are exported, reexported or transferred (in-country) in accordance with the EAR. These checks might be completed prior to the export of items pursuant to a BIS export license in the form of a Pre-License Check (PLC) or following an export during a Post-Shipment Verification (PSV), regardless of whether a BIS license is required.

BIS officials rely on EUCs to safeguard items subject to the EAR from diversion to unauthorized end uses/users and destinations. The verification of a foreign party's reliability facilitates future trade, including during BIS license reviews. If BIS is unable to verify the reliability of the company or is prevented from accomplishing an EUC, the company may receive, for example, more regulatory scrutiny during license application reviews or be designated on BIS's Unverified List or Entity List, as applicable.

Guidance and Training

BIS has developed a list of "red flags", or warning signs, and compiled "Know Your Customer" guidance intended to aid exporters in identifying possible violations of the EAR. Both resources are publicly available, and their dissemination to industry members is highly encouraged to help promote EAR compliance.

BIS also provides a variety of training sessions for exporters throughout the year. These sessions range from one to two-day seminars that focus on the basics of exporting to coverage of more advanced, industry-specific topics. Interested parties can check a list of upcoming seminars and webinars or reference BIS's online training site. BIS's Export Control Officers (ECOs) located at U.S. embassies and consulates in seven overseas locations also conduct outreach to raise awareness of reexport and transfer (in-country) requirements with foreign business communities.

Commerce Control List

The EAR regulate transactions involving the export, reexport, or transfer (in-country) of "dual-use" commodities, software, and technology, collectively, "items" (i.e., those with both civilian and military applications) and less sensitive military items, as well as certain U.S. person activities. Items subject to BIS's jurisdiction include items listed on the Commerce Control List (supplement no. 1 to part 774 of the EAR) (CCL); items on the CCL are listed under individual entry by Export Control Classification Number (ECCN). The EAR also regulates items designated as 'EAR99' (a broad category of items generally consisting of low-technology consumer goods not listed under an ECCN on the CCL but subject to BIS's jurisdiction). For regulatory requirements on items under the export control jurisdiction of other U.S. Government agencies, exporters should consult those U.S. Government agencies. For example, the U.S. Department of State's Directorate of Defense Trade Controls has authority over defense articles and defense services pursuant to the International Traffic in Arms Regulations (ITAR) (22 CFR pasts 120-130). A list of other agencies involved in export controls can be found on the BIS website and in Supplement No. 3 to Part 730 of the EAR.

The EAR is available on the e-CFR (Electronic Code of Federal Regulations) and is updated as needed.

Consolidated Screening List

The Consolidated Screening List (CSL), available on the International Trade Administration's Trade.gov website, is a list of parties for which the United States Government maintains restrictions or prohibitions on certain exports, reexports or in-country transfers of items. The CSL consolidates export screening lists implemented by the Departments of Commerce, State, and the Treasury into a single data feed as an aid to industry in conducting electronic screening of parties to regulated transactions. Exporters should determine the export requirements specific to their proposed transaction by classifying their items prior to export and reviewing the EAR's requirements specific to the item(s), the destination, and the proposed end use and end user, as well as consulting the CSL to determine if any parties to the transaction may be subject to specific license requirements.

Assistance is available from BIS by calling one of the following numbers:

(202) 482-4811 – Outreach and Educational Services Division (located in Washington, DC – open Monday-Friday, 8:30 am-5:00 pm ET);

(949) 660-0144 – Western Regional Office (located in Irvine, CA – open Monday-Friday, 8:00 am-5:00 pm PT); or

(408) 998-8806 – Northern California branch (located in San Jose, CA – open Monday-Friday, 8:00 am-5:00 pm PT).

You may also e-mail your inquiry to the Export Counseling Division of the Office of Exporter Services at ECDOEXS@bis.doc.gov.

Contact information for BIS's overseas ECOs can be found at: Office of Enforcement Analysis (OEA) | Bureau of Industry and Security.

BIS Export Control Office Germany

Tel: (+49) 69-7535 3120

Germany Specific Export Control Information

Germany participates in all four multilateral export control regimes (i.e., the Australia Group, the Missile Technology Control Regime, the Nuclear Suppliers Group, and the Wassenaar Arrangement). All items listed by those regimes are subject to export control in Germany. Germany implements the European Union (EU) Dual-Use Export Control Regulation and Control List. The EU Dual-Use Regulation 428/2009 has been superseded, effective September 9, 2021, by EU Regulation 2021/821, which, among other amendments, enhances controls for cyber-surveillance items, creates a framework for member states to review emerging technologies, and expands the scope of brokering controls. The new regulation also creates additional general export authorizations for intra-EU exports of certain commodities and technology, as well as for certain encryption items. Regulation 2021/821 is available here: https://eur-lex.europa.eu/legal-content/EN/. With the exception of certain defense articles falling under the licensing jurisdiction of the Federal Ministry for Economic Affairs and Energy (BMWi), Germany's Export Licensing Authority is the Federal Office for Economics and Export Control (BAFA).

More information about BAFA and Germany's export control system is available here:

https://www.bafa.de/DE/Aussenwirtschaft/Ausfuhrkontrolle/ausfuhrkontrolle_node.html.

BAFA's Export Licensing System (ELAN-K2) is accessible here:

https://www.bafa.de/DE/Aussenwirtschaft/Ausfuhrkontrolle/Antragsstellung/ELAN-K2/elan-k2_node.html

In September 2024, BIS introduced new worldwide controls on certain items, including additive manufacturing equipment, quantum computers, advanced semiconductor manufacturing equipment, and related software and technology. A license exception is available for certain countries that have implemented comparable controls on such items. Accordingly, some such items may be eligible for export to Germany under license exception Implemented Export Controls (IEC). To confirm eligibility, visit the eligibility table on the BIS website.

Temporary Entry

Please refer to our European Union Country Commercial Guide article on temporary entry.

Prohibited and Restricted Imports

Please refer to our European Union Country Commercial Guide article on prohibited and restricted imports.

Customs Laws and Regulations

Please refer to our European Union Country Commercial Guide article on customs regulations.

Non-Tariff Barriers to Trade

Please review the EU Country Commercial Guide.

Standards and Technical Regulations

Please refer to our European Union Country Commercial Guide article on EU legislation and CE Marking.

Contact Information

Please see the contact info for the Standards Attaché to the EU.

Testing, Inspection and Certification

Germany follows the EU's approach to product testing and certification, centered on conformity assessment procedures. Most products sold in the EU require the CE marking, which indicates that a product has been assessed and meets EU safety, health, and environmental protection requirements. The CE marking is mandatory for specific product groups and must be affixed by the manufacturer after conducting the appropriate conformity assessment procedure.

The conformity assessment process varies depending on the product type and applicable directives. It can range from self-certification by manufacturers for lower-risk products to requiring involvement of a notified body for higher-risk products. In Germany, the German Accreditation Body (DAkkS) is the only authority responsible nationwide for accrediting conformity assessment bodies according to EU regulations. Other testing and certification organizations like TÜV play a significant role in Germany's conformity assessment infrastructure

Publication of Technical Regulations

In Germany, new or revised technical regulations are primarily published in the Federal Law Gazette (Bundesgesetzblatt). Since January 1, 2023, the electronic version of the Federal Law Gazette has been the sole legally binding format for publicizing federal laws and statutory instruments. The Federal Law Gazette is divided into two parts:

- Part I contains federal laws, ordinances, and administrative regulations.
- Part II publishes international treaties and agreements.

Proposed technical regulations that fall under the scope of the World Trade Organization's (WTO) Technical Barriers to Trade (TBT) Agreement are notified through Germany's National TBT Enquiry Point, operated jointly by DIN (German Institute for Standardization) and DAkkS (German Accreditation Body). These drafts are also published on the EU's TBT notification portal.

Use ePing to review proposed technical regulations and conformity assessment procedures.

The ePing SPS&TBT platform (https://epingalert.org/), or "ePing", provides access to notifications made by Members of the World Trade Organization (WTO) under the Agreements on Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT), distributed by the WTO from January 16, 1995 to present. ePing is available to all stakeholders free of charge and is a versatile tool that can be used to:

- Follow and review current and past notifications concerning regulatory actions on products, packaging, labeling, food safety and animal and plant health measures in markets of interest,
- Receive customized e-mail alerts when new notifications are distributed,
- Find information on trade concerns discussed in the WTO SPS and TBT Committees.

Per obligation under the TBT Agreement, each WTO Member operates an Enquiry Point. National TBT Enquiry Points are authorized to accept comments and official communications from other national TBT Enquiry Points, which are NOT part of the WTO or the WTO Secretariat. All comment submissions from U.S. stakeholders, including businesses, trade associations, U.S domiciled standards development organizations and conformity assessment bodies, consumers, or U.S. government agencies on notifications to the WTO TBT Committee should be sent directly to the USA WTO TBT Enquiry Point. Refer to the comment guidance at https://www.nist.gov/notifyus/commenting for further information. This guidance is provided to assist U.S. stakeholders in the preparation and submission of comments in response to notifications of proposed foreign technical regulations and conformity assessment procedures. `

Please refer to the ITA's CE Marking guide for specific details on EU requirements.

Trade Agreements

For a list of trade agreements between the European Union and other countries in the world, as well as concise explanations of these agreements, please consult EU Trade Agreements. The EU and U.S. do not have a trade agreement in place, but for a summary of the overall trade relationship, please consult EU trade relations with the United States.

For information on FTA partner countries, including how to take advantage of an FTA, please link to the FTA Help Center.

Licensing Requirements for Professional Services

Please refer to our European Union Country Commercial Guide article on EU licensing requirements for professional services.

Selling U.S. Products and Services

Distribution & Sales Channels

Using an Agent or Distributor

Please refer to our European Union Country Commercial Guide article on using an agent or distributor.

Establishing an Office

Anyone can open an office in Germany – irrespective of nationality or place of residence. There is no specific investment legislation in Germany, nor is there a minimum percentage of German shareholdings required for foreigners. Investors can choose the most suitable legal form, i.e., a corporation, a partnership or conduct business via a German branch office.

Foreign companies with a head office and registered business operations outside of Germany can establish a German branch office. This business form is suitable for a foreign company wishing to establish a presence in Germany for the purpose of initiating business and maintaining contacts with business partners.

For more details see information from Germany Trade and Invest: Establishing a Company.

For the latest Investment Climate Statement (ICS) which includes information on investment and business environments in foreign economies pertinent to establishing and operating an office and to hiring employees, visit the U.S. Department of Department of State's Investment Climate Statements website.

Franchising

U.S. businesses looking to franchise within the European Union will likely find that the market remains robust and generally favorable to franchise systems. Although there are EU-wide regulations that impact business operations, specific franchising laws vary by country. Only a few EU member states have dedicated franchise legislation, with Germany being one of the more regulated markets. However, these regulations typically do not hinder the competitive position of U.S. companies. Prospective franchisors should assess both EU-level regulations and national laws relevant to franchising. More detailed legislative information can be found through the European Franchise Federation.

German Franchising Market

Germany continues to be a strong market for franchising, with consistent year-over-year growth:

- Market Size (2023): USD 159.4 billion USD
- Employment: Approximately 830,000 people
- Franchise Outlets: 190,000 active units
- Franchise Systems: 910 operating in 2023

Sector Breakdown (2023):

- Services: 48%
- Retail: 19%
- Food & Beverage: 19%
- Skilled Trades: 14%

Key to a successful market entry remains finding the right partner with which to develop the market. While multi-brand franchising is still gaining traction in Germany, it is becoming more relevant. Collaborating with experienced franchisees, consultants, or brokers is often essential to ensure smooth entry and build brand awareness.

German investors prefer to engage directly with decision-makers (often the company owner) rather than intermediaries, and they typically look for concepts already proven to work locally. As a result, U.S. franchisors are still encouraged to first establish a corporate pilot with a German partner before initiating broader franchise expansion.

Germany's decentralized population and business hubs necessitate a regional market approach. Successful franchisors typically divide the country into multiple territories and appoint area developers to manage and grow local franchise networks. Regional tailoring of business strategies is crucial for national success.

Emerging Trends in 2025:

- Increased adoption of AI and automation tools in franchise operations
- Growth in multi-unit and multi-brand franchise ownership
- Rising interest among younger franchisees
- Demand for wellness, sustainability, and eco-conscious concepts
- Preference for proven business models with localized adaptations

Franchise Advertising and Marketing Channels in Germany:

Magazines:

- FRANCHISEConnect
- franchiseErfolge

Online Platforms:

- Deutsche Unternehmerbörse (DUB) – platform showcasing business and franchise opportunities
- FranchisePORTAL – German-language virtual franchise fair

Franchise Trade Events in Germany:

- Franchise Expo Germany – Frankfurt, November 6–8, 2025
  Germany's largest franchise trade show, ideal for U.S. franchisors to network, showcase concepts, and connect with German investors.
- EXPO REAL – Munich, October 6–8, 2025
  Europe's largest real estate and investment fair, often attended by franchise-related investors and retail developers.

Direct Marketing

Direct marketing is widely adopted by German businesses, primarily through email campaigns, online advertising, telephone outreach, and traditional mail. However, companies must navigate Germany's strict regulatory environment when implementing these strategies. The country enforces rigorous data protection and privacy regulations (GDPR), alongside comprehensive consumer protection and advertising standards. Legal consultation is essential before collecting, storing, or processing any customer data. Additionally, businesses must comply with laws governing fair competition practices and promotional offers to avoid potential legal complications.

Joint Ventures/Licensing

Dealing with joint ventures is challenging under German competition law. In Germany, joint venture legislation falls under the purview of the Federal Cartel Office (Bundeskartellamt). The law requires that a joint venture must exercise "genuine entrepreneurial" activities. Under German law, this means:

- Organizations which merely carry out auxiliary functions such as purchasing or distribution on behalf of the parents are not considered joint ventures; and
- JVs must have at their disposal sufficient assets and personnel to carry out their activities.

The Federal Cartel Office is required to prohibit a merger if it is "expected to create or strengthen a dominant position." Market dominance is defined as an undertaking which either has no competitors or is not exposed to any substantial competition or has a paramount market position in relation to its competitors.

Licensing

German antitrust law does not, in the absence of a dominant market position, restrict the owner's freedom to use her/his industrial property rights, including the exploitation of a patented innovation.

Express Delivery

Most international express delivery companies are active in Germany. Large players include DHL and Hermes (both headquartered in Germany), FedEx and UPS. These companies ship domestically and internationally, provide a wide range of delivery options and prices and have grown significantly because of e-commerce. An increasing number of companies including Amazon, Flink and Decathlon (sporting goods retailer) offer same-day deliveries in large metropolitan areas.

Due Diligence

Product safety testing and certification is mandatory for the EU market. U.S. manufacturers and sellers of goods must perform due diligence in accordance with mandatory EU legislation prior to exporting.

Companies interested in taking over German firms should always conduct their own due diligence before entering business ventures. One of the U.S. Commercial Service's programs, the International Company Profile (ICP), has been designed to support due diligence processes. All major consulting companies offer due diligence services, and most large U.S. accounting or consulting firms have subsidiaries in Germany.

eCommerce

Germany has one of the largest e-commerce markets in Europe. The number of e-commerce consumers, internet penetration and average amount spent per year is above the European average. In 2024, total revenue was estimated at USD 100.6 billion, which translates to 3.8 percent growth compared to 2023. It is expected that the number of users of eCommerce in Germany will increase from 47.68 million in 2025 to 51.77 million by 2029. In 2025, e-commerce had a penetration rate of around 66 percent in Germany. In a 2023 survey, key reasons for consumers to shop online included home delivery (67 percent), cheaper prices (58 percent), and all-day access (55 percent). German consumers are rather risk-averse and expect high quality products. Websites and online stores are expected to be in German language. Smartphone penetration in Germany lies at 97 percent, with a social media penetration of 82.9 percent. The role of social media platforms such as Facebook, YouTube or Instagram continues to be of high importance.

Challenges

Most laws related to ecommerce and the digital economy are set at the EU level. The Digital Economy Chapter of our Country Commercial Guide for the European Union provides a more comprehensive overview.

In Germany data privacy is taken very seriously and overseen both at the state and federal level. Each state has its own data protection agency, which has jurisdiction over companies and public authorities within the state. At the national level, the Federal Commissioner for Data Protection and Freedom of Information oversees federal public authorities and the telecommunications and postal sector. Overall, EU data privacy is regulated by the EU's General Data Protection Regulation (GDPR).

Popular e-Commerce Sites
In 2024, the most popular online retailers in Germany by net sales were amazon.de (USD 15.76 billion), otto.de (USD 4.54 billion), zalando.de (USD 2.71 billion), mediamarkt.de (USD 1.89 billion), and ikea.com (USD 1.50 billion).

Product Categories
As of June 2024, the most popular products purchased online include clothing (64 percent of online shoppers), shoes (51 percent), drugstore & healthcare products (43 percent), and books, movies and music (37 percent). German consumers, faced with higher inflation, have begun to shift their preferences towards essential items, such as groceries, home care and beverages. They have made the biggest cuts in apparel, home appliances, and luxury fashion, which make up larger shares of e-commerce business. Despite this, the German e-commerce market is expected grow 7,13% annually from 2025-29, reaching a market volume of USD 142 billion by 2029.

Online Payment
When it comes to payment, the most common methods are purchase on invoice, PayPal, mobile wallets like Apple Pay and Google Pay, direct debit and credit cards. Many websites accept bank transfers or invoice/buy now, pay later. Online customers have the right to cancel orders and return goods or services within 14 days, for any reason and with no justification. As a result, Germany is known for its high return rate, particularly in the fashion industry, where it is estimated that 15.3 percent of products purchased were returned in 2023.

Mobile e-Commerce
The strong e-commerce market in Germany can be attributed to the considerable proportion of the population who owns smartphones (97 percent). In 2023, 64 percent of online purchases were made via smartphone. This growth is likely to continue as retailers improve their mobile websites and provide more convenient ways of shopping on mobile devices.

Selling Factors & Techniques

Overview

Success in the German market—as in other international markets—requires a real, long-term commitment to developing the business and backing it up with strong sales support. U.S. companies need to overcome the disadvantage of being far from their customers, especially when competing with European rivals. Sometimes, Germans see U.S. suppliers as being more focused on their home market, or as likely to bypass local distributors to deal directly with buyers. Because of this, some German business owners may doubt whether U.S. firms are truly committed to the market or willing to provide good after-sales service. Nowadays, most U.S. companies entering Germany know what it takes to succeed and are ready to build a reliable support network. Even so, it’s important for them to be prepared to address any concerns or doubts that German clients or partners might have about their long-term commitment.

Trade Promotion and Advertising

Trade Fairs

Germany is home to major world-class trade fairs in nearly every industry, drawing buyers and exhibitors from across the globe. U.S. companies exhibiting at these events should be ready to make the most of the business opportunities available. Not only can U.S. exhibitors and visitors close deals on the spot, but all attendees benefit from the chance to conduct market research and observe global competitors.

The combination of large crowds and international reach makes German trade fairs an especially effective venue for American companies seeking maximum exposure for their marketing investment. These events also offer U.S. businesses a valuable opportunity to thoroughly research the German market and assess their product’s potential before making any major commitments.

Advertising

In addition to exhibiting at major German trade fairs, advertising plays a central role in most companies' broad-based marketing programs. Regulation of advertising in Germany is a mix between basic rules and voluntary guidelines developed by the major industry associations. The "Law Against Unfair Competition" established legal rules at the beginning of the 20th Century. Although it has been modified over time, this law continues to be valid today. The law allows legal action to be taken against advertisers who "violate accepted mores."

Many advertising practices that are common in the United States, such as offering premiums, are not allowed in Germany. Any planned advertising campaigns should be discussed with a potential business partner or an advertising agency in Germany.

General EU Legislation

Please refer to our European Union Country Commercial Guide article on selling factors and techniques.

Pricing

German customers are often very price sensitive. Consequently, price is an important competitive factor, but quality, timely delivery and service remain equally important, especially in Business-to-Business relationships.

Sales Service/Customer Support

Germany

The German commercial customer expects to reach out to his or her dealer and have replacement parts or service work immediately available. American exporters should avoid appointing distributors with impossibly large geographic areas, without firm commitments regarding parts inventories or service capabilities, and without agreements on dealer mark-ups.

EU Legislation

Please refer to our European Union Country Commercial Guide article on consumer issues.

Local Professional Services

Business service providers active in Germany can be viewed on the website maintained by the Commercial Service at the U.S. Embassy in Germany.

Major German Business Associations

Bundesverband der Deutschen Industrie (BDI)
(Federation of German Industries)

Deutscher Industrie und Handelskammertag (DIHK)
(Federation of German Chambers of Industry and Commerce)

Bundesverband Großhandel, Außenhandel, Dienstleistungen (BGA)
(Federation of German Wholesale, Foreign Trade and Services)

Verband Deutscher Maschinen- und Anlagenbau (VDMA)
(German Association of Machinery and Plant Manufacturers)

Centralvereinigung Deutscher Wirtschaftsverbände für Handelsvermittlung und Vertrieb (CDH)
(National Association of German Commercial Agencies and Distributors)

For industry-specific business associations, please visit our leading sectors section, which lists key contacts and resources by industry sector.

Limitations on Selling U.S. Products and Services

We are not aware of any limitations on manufacturing or service sectors that prohibit non-Germans from owning or selling these businesses in Germany.

Trade Financing

Methods of Payment

Most import transactions by German customers, especially those involving large German distributors, take place under seller-buyer terms, such as the common 30/60/90-day accounts, or payment against documents. Electronic funds transfers (such as SWIFT, SEPA, ACH, or wire transfers) are popular payment mechanisms by which German importers remit payment to their U.S. suppliers. Current technology makes online transfers reasonably cheap, secure, and transparent.

The letter of credit is still used in some industry sectors but now covers a fraction of total imports, largely due to its cost and time requirements as well as the ease in obtaining credit ratings in Germany, which increases transparency and transactional safety. L/C's for payments under USD 5,000 are almost unknown in Germany. U.S. exporters may also encounter Bills of Exchange (Wechsel), usually payable within two or three months, however this is an antiquated payment mechanism. Cash-in-advance is also rare in German import payment.

Both private and public credit insurance (both known as Hermesdeckung) are available in Germany. Allianz Trade (German), Coface (French) and Atradius (Dutch) are among the private providers (which also offer ranking and scoring services). The main public insurance program is administered by Allianz Trade and is used to cover German exports to countries with high political and country risk.

Overall, German firms continue to enjoy a relatively good reputation for their payment practices and management of credit. However, default risks in Germany vary from region to region and industry to industry. The U.S. Commercial Service Germany offers the International Company Profile as a tool to help evaluate the creditworthiness of potential customers or partners and recommends that U.S. exporters consider normal, prudent credit practices in Germany in all transactions.

The Export-Import Bank of the United States (Ex-Im Bank) is the official export credit agency of the United States. The Ex-Im Bank's mission is to assist in financing exports of U.S. goods and services to international markets. The Ex-Im Bank enables U.S. companies – large and small – to turn export opportunities into real sales that help to maintain and create U.S. jobs and contribute to a stronger national economy. The Ex-Im Bank does not compete with private-sector lenders but instead provides export-financing products that fill gaps in trade financing. The bank assumes credit and country risks the private sector is unable or unwilling to accept and helps level the playing field for U.S. firms by matching the financing that other governments provide to their exporters. The Ex-Im Bank provides working capital guarantees (pre-export financing), export credit insurance, loan guarantees, and direct loans (buyer financing), primarily focusing on developing markets worldwide.

For more information about the methods of payment or other trade finance options, please read the Trade Finance Guide.

Banking Systems

Germany has a non-discriminatory, well-developed financial services infrastructure. Although corporate financing via capital markets is on the rise, Germany's financial system remains mostly bank-based, with bank loans serving as the predominant form of funding for firms, particularly Germany's small- and medium-sized enterprises (Mittelstand).

Germany's universal banking system allows the country's more than 1,400 banks and savings banks and total network of 19,500 branches to take deposits and make loans to customers as well as to trade in securities. There are no reports of a shortage of credit in the German economy. Credit is available at market-determined rates to both domestic and foreign investors, and a variety of credit instruments are available. The traditional German system of cross-shareholding among banks and industry, as well as a high rate of bank borrowing relative to equity financing, allowed German banks to exert substantial influence on industry in the past.

Key Link: The German Bankers' Association
Key Link: Federal Financial Supervisory Authority

Germany has a modern banking sector, but it is considered “over-banked,” as evidenced by ongoing consolidation and low profit margins. The country’s so-called “three-pillar" banking system is made up of private commercial banks, cooperative banks, and public banks (savings banks or Sparkassen, and the regional state-owned banks, or Landesbanken). German banks’ profitability has increased recently, but high-cost structures, growing competition from FinTechs, and increasing compliance costs as a result of regulation and supervision remain.

Private banks control roughly 40 percent of the market, while publicly owned savings banks partially linked to state and local governments account for 48 percent of banking transactions, and cooperative banks make up the balance. All three types of banks offer a full range of services to their customers. A state-owned bank, KfW, provides special credit services, including the financing of homeowner mortgages, guarantees to small- and medium-sized businesses, financing for projects in disadvantaged regions in Germany, and export financing for projects in developing countries.

The private bank sector is dominated by the universal banks Deutsche Bank (Germany’s largest bank by balance sheet total) and DZ Bank (second-largest bank), with balance sheets of EUR 1.3 trillion and EUR 644.6 billion respectively (2024 figures). The second largest of the top ten German banks is DZ Bank, the central institution of the German Cooperative Finance Group (after its merger with WGZ Bank in July 2016), followed by Commerzbank, LBBW, and BayernLB. The outlook for German banking is stable, with strong liquidity and funding, but structural risks remain from a slowing economy and exposure to small and midsize enterprises which may face creditworthiness risks if growth economic continues to slow.

Most major U.S. banks are represented in the German market, principally but not exclusively in the city of Frankfurt am Main, Germany’s main financial center. Following the UK’s exit from the EU, many U.S. banks chose Frankfurt as their EU headquarters. Many German banks, including some of the partially state-owned regional banks, similarly maintain subsidiaries, branches, and/or representative offices in the United States.

Practices regarding finance, availability of capital, and schedules of payment are comparable to those that prevail in the United States. There are no restrictions or barriers on the movement of capital, foreign exchange earnings, or dividends.

To learn more about German financing system, access Department of State Investment Climate Statement website.

Foreign Exchange Controls

The German government imposes no forms of controls on the purchase or sale of foreign currencies.

U.S. Banks and Local Correspondent Banks:

Bank of America
Taunusanlage 9-10, 60329 Frankfurt am Main, Germany
Phone: +49 69 5899100

BNY Mellon
Messe Turm, Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main, Germany
Phone: +49 69 12014 1025

Citigroup Global Markets Germany
Boersenplatz 9, 60313 Frankfurt am Main, Germany
Phone: +49 69 1366 0

JP Morgan AG
TaunusTurm, Taunustor 1, 60310 Frankfurt am Main, Germany
Phone: +49 69 7124 1601

Goldman Sachs
Taunusanlage 9-10, 603329, Frankfurt am Main, Germany
Phone: +49 69 7532 1000

Morgan Stanley
Grosse Gallusstrasse 18, 60312, Frankfurt am Main, Germany
Phone: +49 69 2166 0

State Street Bank International GmbH
One Brüsseler Straße 1-3, 60327 Frankfurt am Main, Germany
Phone: +49 –69 6677 4500 0

Wells Fargo
Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main, Germany
Phone: +49 69 2980 2700

Protecting Intellectual Property

In any foreign market, companies should consider several general principles for effective protection of their intellectual property. For background, please refer to our resources on Protecting Intellectual Property and Stopfakes.gov.

Several general principles are important for effective protection of intellectual property ("IP") rights in Germany. First, it is important to have an overall strategy to protect your IP. Second, IP may be protected differently in Germany than in the United States. Third, rights must be registered and enforced in Germany under local laws. For example, your United States trademark registrations, design or utility patent titles will not protect you in Germany without further administrative procedures in the corresponding regional (EU) or local levels.

Most copyrighted works created in the United States will be automatically protected in Germany from the moment of creation or publication according to international agreements. However, the extension of protection will vary according to the laws of Germany and of the EU. Protection against unauthorized use will vary depending on the national laws of each country.

Obtaining a utility patent in EU Member States is based on a first-to-file system, i.e. the first person or entity to register the patent becomes the title holder. Similarly, most trademark and design rights – similar to a design patent – are based on a first-to-file registration system. So, you should consider how to obtain patent, design, or trademark protection before introducing your products or services into the German market. Better yet, you should consider having an IP strategy for the whole world even before making your intellectual property public in any country, to ensure that you do not lose the right outside the United States.

Further, keep in mind that trademark and design titles can be obtained for the whole of the EU, at the European Union Intellectual Property Office – EUIPO. Individual titles for Germany can also be obtained at the corresponding IP office. Similarly, a bundle of patent titles can be obtained for various countries through a simplified process at the European Patent Office; an individual patent title can be directly obtained from the German Patent and Trade Mark Office. There are also other international registration systems like the Patent Cooperation Treaty for patents or the Madrid Protocol for trademarks, that could be useful to facilitate the protection of your IP in many countries of the world, including Germany.

For more information on EU-wide matters regarding IP, please refer to European Union Country Commercial Guide article on protecting intellectual property.

The IP Attaché for Germany is Rachel Bae, whose contact information can be found here.

For more information, contact ITA's Office of Standards and Intellectual Property Rights (OSIP) Director, Stevan Mitchell at Stevan.Mitchell@trade.gov.

To access Germany's Investment Climate Statement, which includes information on the protection and enforcement of intellectual property rights, visit the U.S. Department of State Investment Climate Statements website.

Selling to the Public Sector

Selling to the Government

Selling to German government entities is not an easy process. German government procurement is formally non-discriminatory and compliant with the WTO Government Procurement Agreement (GPA) and EU-wide legislation under the EU Public Procurement Directives. That said, it is a major challenge to compete head-to-head with major German or other EU suppliers who have established long-term ties with purchasing entities. For information on EU procurement, please refer to the article on in the Country Commercial Guide for the European Union – Selling to the Public Sector.

U.S. companies bidding on foreign government tenders may also qualify for U.S. Government advocacy. Within the U.S. Commerce Department's International Trade Administration, the Advocacy Center coordinates U.S. Government interagency advocacy efforts on behalf of U.S. exporters in competition with foreign firms in foreign government projects or procurement opportunities. The Advocacy Center works closely with our network of the U.S. Commercial Service worldwide and inter-agency partners to ensure that exporters of U.S. products and services have the best possible chance of winning government contracts. Advocacy assistance can take many forms but often involves the U.S. Embassy or other U.S. Government agency officials expressing support for the U.S. exporters directly to the foreign government. Consult the Advocacy Center's program web page on trade.gov for additional information.

Financing of Projects

Germany possesses the financial framework and institutions to support the development of large infrastructure projects. However, the volume of project finance operations has been relatively modest in Germany in comparison to that of other EU countries. Inhibiting factors are Germany's complex juridical and federal frameworks, which make project-financed works harder to structure than in other countries. Low interest rates and returns on savings have contributed to an improved investment climate. One area that has attracted project finance, including that involving a few U.S. developers and investors, is alternative energy production. Clean and renewable energy projects have gained prominence in Germany, particularly since the phase-out of nuclear energy, the decision to end coal power generation by 2038, and pressure to reduce reliance on Russian energy following the invasion of Ukraine.

The principal German institutions active in facilitating project finance deals are the state-owned KfW Bank Group (which plays a major role in most industries), commercial banks such as Commerzbank, and several of the publicly-owned savings banks controlled by state and local governments and state development banks ("Förderbanken", in German), such as WIBank in Hesse, NRW.BANK in North Rhine-Westphalia, LFA Förderbank Bayern, Investitionsbank Berlin (IBB), among others. The KfW Group includes KfW IPEX-Bank, which supports a consortium with German members to design and finance infrastructure projects in Germany and overseas, and KfW Capital, launched in October 2018 to develop the VC and VD funding landscape in Germany and Europe. Another group member, KfW Development Bank, helps municipalities finance infrastructure. German insurers are pressing for regulatory changes to enable them to finance infrastructure projects.

Key Link: European Bank for Reconstruction and Development (EBRD)
Key Link: U.S. Commercial Service Liaison Office to the EBRD

Business Travel

Business Customs

Appointments are made for most business meetings. The usual times for business appointments are between 9:00am - 12:00pm or between 2:00pm - 5:00pm. You should avoid scheduling on Friday afternoons as some offices might already be closed during that time.

Punctuality is an important part of German business culture. The norm is to arrive about five minutes early to an appointment. If you show up more than five minutes after the appointed time, you will be perceived as late, and more than fifteen minutes is considered impolite. However, if there is a delay, you can always call ahead and explain the situation.

Germans generally act and communicate in a direct and structured way; they want things to be done as efficiently as possible. It is not about being rude, but this behavior can include honest and constructive criticism. It also means to them that they value your time as much as theirs.

Addressing people: We advise clients to respect formal introductions and the use of official titles, for example: Dr., Prof., Ing.. Your professionalism will be highly valued. In general, acting in a formal way is important, particularly at first, but following the examples of others is a good rule. After several meetings, your German counterparts might prefer a more informal interaction, but this varies depending on the people and the company so, it is polite to remain formal in tone until they invite you to do otherwise.

Business attire is generally formal and conservative. This means suits (not necessarily with a tie) for men and suits or conservative dresses for women.

First approach: A greeting usually consists of a smile and a firm handshake. Do not greet with a hug nor a kiss on the cheek, as in other European cultures. Allowing for adequate personal space is important throughout the meeting. The question “Wie geht es Ihnen?” [“How are you?”] is used as a literal question and a literal answer is appropriate. The common English usage of it simply as a formality or greeting feels strange to most Germans. Not replying in the expected way or moving on without waiting for an answer could therefore be considered superficial and impolite.

Giving compliments is not common and can cause embarrassment. The same can be said about giving gifts, which may even be viewed as inappropriate. Only after negotiations or agreements, a small gift may be acceptable. The gift should not be overly expensive, but of good quality.

Travel Advisory

The State Department has advised exercising increased caution in Germany due to terrorism, both local and foreign. In the past years, the risk of terror incidents in European countries has increased. Germany’s open borders with its European neighbors allow for the possibility of terrorist groups entering and exiting the country with anonymity.

For the latest security information, Americans traveling abroad should regularly monitor the State Department’s website, where the current Worldwide Caution Public Announcement, Travel Warnings and Public Announcements can be found.

Up-to-date information on security can also be obtained by calling +1-888-407-4747 toll-free in the United States, or, for callers outside the United States and Canada, a regular toll line at +1-317-472-2328. These numbers are available 8:00am - 8:00pm; Eastern Time, Monday through Friday (except U.S. federal holidays).

Read the:

State Department consular information sheet for Germany

Department of State: Travel to Germany

CDC on Germany

Visa Requirements

According to the German Embassy in Washington, DC, a "U.S citizen does not require a visa for tourist or business stays up to 90 days within any 180-day period and given no economic activity is being pursued within the Schengen Group of countries, including Germany. The time of the visit should not exceed 90 days and the visitor must leave the country after this period. A passport that is valid for at least three months beyond the stay is required."

Further information on entry visa and passport requirements may be obtained from the German Embassy at 4645 Reservoir Road N.W., Washington, D.C. 20007, telephone +1-202-298-4000, or the German Consulates General in Atlanta, Boston, Chicago, Houston, Los Angeles, Miami, New York, or San Francisco and on the Internet.

For inquiries outside the United States, see the list of German Embassies and Consulates on the Federal Foreign Office's website: Bilateral Relations and German Missions.

The European Travel Information and Authorization System (ETIAS), an electronic document that's required for visa-exempt travelers to enter 30 European countries, is expected to begin operating in late-2026. For more information, please visit this link.

Currency

In Germany and other countries within the Eurozone, the Euro [EUR/€] is the used currency.

Exchange rate from EUR to USD (as of January 1st)

Year	2020	2021	2022	2023	2024	2025
EXR	1.1093	1.2136	1.1374	1.0683	1.0956	1.0321

See the Euro foreign exchange reference rates for continuously updated exchange rates.

- Because of high currency-exchange fees, travelers should consider converting their currency before traveling.
- Banks, credit unions, online financial institutions and currency converters provide convenient and often inexpensive currency exchange services.
- When in Germany, the best means to convert currency is to use a foreign ATM or identify if your bank has ATMs or banking affiliates nearby.

Some credit and debit card issuers including Discover, Capital One and Chase allow users to make purchases abroad with no fees. However, many other major issuers charge approximately 3% on foreign transactions. Check ahead of time and budget accordingly.

Unlike in the United States, many restaurants and vendors in Germany do not accept credit card payment, so remember to always carry some cash. In addition, some credit cards, such as American Express, may not be accepted at certain shops.

Purchases through online payment providers, such as PayPal, Apple Pay and in general contactless payments by phone, smart watch or credit card in Germany have experienced a boost due to Covid-19 and are now widespread.

Telecommunications/Electronics

Mobile phones are based on GSM 800 and 1600 MHz standards. UMTS/IMT 2000 frequencies are 1900 to 2170 MHz.

Cell or mobile phones ["Handy", in German] are commonly used. Germany and most of Europe use GSM networks, which some U.S. carriers also use. Most U.S. carriers have international travel packages that include texting, calling and data for better rates rather than roaming without a plan.

Internet is widely accessible in Germany, Wi-Fi is available in most hotels, some public spaces, restaurants, cafes, etc.

Power sockets are Type F, also known as "Schuko", and Type C. These sockets are used in most of Europe and parts of Africa, Asia, and South America. The standard voltage is 230V with a standard frequency of 50Hz, while most American appliances operate on 110 volts and 60 cycles-per-second. You will need a voltage adapter or transformer to use your appliances with American voltage/plugs in German electrical outlets.

Transportation and Accommodation

Travel by plane, train, bus or car meets international standards, but prices exceed U.S. averages. The number of in-country flights has been picking up and the train stations around the country provide sufficient access to nearly all cities. Nevertheless, cars are a very popular means of transportation, and Germany's famous highway system is extensive.

Geographic distances are relatively short when compared to the United States, but as Germany is much more densely populated than its European neighbors, it may take a little longer to travel the same distance in Germany than it would take in France or Scandinavia.

Within cities, public transportation as well as private cars, taxis, e-scooters, shared bikes and services like Uber are used (although not available in every city and at every hour). The public transit system, including trains, trams and buses, is generally very reliable and most locations have extensive connections and routes. The Deutsche Bahn website or DB Navigator App are the easiest ways to navigate means of public transit as well as long distance trains. Google Maps, and other such search engine maps, often offer public transit options when searching for directions and show where the closest stops/stations are.

To book accommodation, CHECK24, Trivago, Booking.com, HRS and Airbnb tend to offer reasonably priced options throughout Germany. Bear in mind that room rates sometimes exclude VAT (Mehrwertsteuer), only reflecting the 5-7% increase upon checkout. Many European hotels do not have AC, so, if this is a priority, check specifically for "Klimaanlage". Hotel booking sites, including Booking.com, allow users to filter for business amenities including WiFi, desks and conference rooms. Finally, proximity to public transport cannot be understated. In German cities including Berlin, Frankfurt and Cologne with reliable public transportation systems but limited parking options, staying near an U-Bahn, S-Bahn or Hauptbahnhof is often more convenient than renting a car.

Language

German is the official language. In larger towns and cities, many people can communicate in English, particularly in business settings. Germany is considered to have the 10th highest English proficiency rate of non-English speaking countries worldwide according to the EF English Proficiency Index (EF EPI) with 56% of the population being able to speak English. German is also an official language in the neighboring countries of Austria and Switzerland.

Good medical care is widely available. Doctors and hospitals may expect immediate payment in cash or by wire transfer for health services from tourists and persons with no permanent address in Germany. Most doctors, hospitals and pharmacies do not accept credit cards.

The Department of State strongly urges Americans to consult with their medical insurance company prior to traveling abroad to confirm whether their policy applies overseas and if it will cover emergency expenses, such as a medical evacuation. U.S. medical insurance plans seldom cover health costs incurred outside the United States unless supplemental coverage is purchased. Therefore, the State Department recommends supplemental insurance to cover any medical issues including evacuation.

The State Department recommends being up to date on all vaccinations recommended by the U.S. Center for Disease Control and Prevention.

If traveling with prescription medication, check with German government regulations if the medication is legal in Germany, as it could cause issues in German customs. Information concerning entry with prescription medication can be found at this page.

Local time, business hours, and holidays

Central European Time (CET):	UTC/GMT +1 hour
Central European Summer Time (CEST):	UTC/GMT +2 hours

There are many national holidays, some of which fall on different days depending on the year. German school holidays vary by state and year.

Business hours vary but generally begin around **8am - 9am** and end around **4pm - 5pm**. Most businesses are closed on Sundays including most supermarkets and pharmacies.

Temporary Entry of Materials and Personal Belongings
When bringing professional equipment such as product samples, electronic goods, cameras, and musical instruments into Germany, we strongly recommend that you first contact the German consulate or embassy in your area for customs information. You might also want to consider purchasing an ATA Carnet. The ATA Carnet, which allows for the temporary, duty-free entry of goods into over 50 countries, is issued by the United States Council for International Business by appointment of the U.S. Customs Service.
More details on entry and exit restrictions of goods for individuals and businesses can be found on the website of the German customs office.

In Case of Emergency
For life-or-death emergencies, dial 112 for immediate medical assistance.

In the case of an emergency involving a U.S. citizen in Germany, please call the embassy or consulate nearest you. Someone will respond to your call 24 hours a day. For more information, please visit our website here.

Investment Climate Statement (ICS)

The U.S. Department of State's Investment Climate Statements provide information on the business climates of more than 170 economies and are prepared by economic officers stationed in embassies and posts around the world. They analyze a variety of economies that are or could be markets for U.S. businesses. The Investment Climate Statements are also references for working with partner governments to create enabling business environments that are not only economically sound, but address issues of labor, human rights, responsible business conduct, and steps taken to combat corruption. The reports cover topics including Openness to Investment, Legal and Regulatory Systems, Protection of Real and Intellectual Property Rights, Financial Sector, State-Owned Enterprises, Responsible Business Conduct, and Corruption.

Investment Climate Statements website.