



**U.S.  
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# Germany Country Commercial Guide



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## Doing Business in Germany

### Market Overview

The German economy is the fourth largest in the world and accounted for one quarter (24.9 percent) of the European Union's GDP in 2022. Germany is also the United States' largest European trading partner and the sixth-largest market for U.S. exports. 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 84.3 million, Germany is the largest consumer market in the European Union. The significance of the German marketplace goes well beyond its borders. An enormous volume of trade in Germany is conducted at some of the world's largest trade events, such as Medica, Hannover Fair, Automechanika, and the ITB Tourism Show. After being canceled or rescheduled in 2020 and 2021 due to the COVID-19 pandemic, many of these trade fairs returned as in-person events in 2022 and 2023. The volume of trade, number of consumers, and Germany's geographic location at the center of the European Union make it a cornerstone around which many U.S. firms seek to build their European and worldwide expansion strategies.

In 2020 and 2021 Germany weathered the COVID-19 pandemic's devastating economic effects better than any of its EU neighbors thanks in large part to its fiscal space, a large current account surplus (USD 278 billion [EUR 232 billion] in 2020 and USD 300 billion [EUR 266 billion] in 2021), generous economic stimulus packages, and flexible short-term work schemes that kept unemployment at only 5.7 percent in summer 2021. An easing of pandemic restrictions and rebound of the services sector led to 2.8 percent real GDP growth in 2021, but the knock-on effects of the Russian invasion of Ukraine have caused a smaller than expected GDP growth in 2022 at 1.9 percent. Demographic changes and resulting labor shortages, inflation, high energy prices due to the Russia's unprovoked war against Ukraine are factors that currently dampen Germany's near-term GDP outlook and might lead to the German economy being stuck between recession, stagnation, and slim growth for the next 2-3 years. The IMF now forecasts a slight contraction in German GDP in 2023 (-0.3 percent) but expects a return to growth in 2024 (+1.3 percent).

### Political Environment

Visit the State Department's website for background on the [country'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. Rigorous application of 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 featuring high quality and modern styling. Germans are responsive to innovative high-tech U.S. products, such as computers, computer software, electronic components, health care 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. In many cases, price is not the overriding factor for German buyers, but instead quality and reliability.

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 2021, Germany was the third largest importer and exporter of consumer oriented agricultural products 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 follow value-for-money concepts. 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 attract more and more German consumers. An increasing share of consumers view their purchasing decisions as a political or life-style statement (no GMO, only free-range eggs, vegetarian, or vegan diet). Consumers increasingly require traceability and information about production methods. Germany remains a price-focused market, but the share of consumers who is willing to pay for quality is increasing in most cities.

COVID-19 related lockdown measures resulted in a new home cooking trend. A recently published Ministry of Agriculture report indicates that 30 percent of Germans are cooking more than before the crisis. The importance of e-commerce continues to grow. Online supermarkets are flooding the market in Germany's major cities, offering food at prices that strongly compete with those of traditional supermarkets.

## Leading Sub-Sectors

### Tree Nuts

The category of tree nuts includes 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 is the largest supplier of tree nuts to Germany. The leading competitor for the United States in the German tree nut market is Turkey. 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.

Table 1: Total Market Size for Treen Nuts: 2020-2023 estimated				
in million USD	2020	2021	2022	2023 (Estimate)
Total Local Production	1,434	1,345	1,182	1,200
Total Exports	3,594	3,613	3,207	3,300
Total Imports	829	760	821	850
Imports from the US	2,160	2,268	2,025	2,100
Total Market Size	1,434	1,345	1,182	1,200

Note: Exports primarily represent tree nuts that have been imported into Germany, processed, and re-exported to neighboring countries. Source: Trade Data Monitor LLC query dated August 11, 2023

### Fishery Products

Fish and fishery products enjoy growing popularity in Germany. The German market offers lucrative opportunities for fish and seafood products. Fish consumption is growing as consumers associate fishery products with a healthy diet. The best prospects for U.S. seafood exports are Alaska pollock, salmon, caviar substitutes, hake, cod, dogfish, shrimps, crabs, cuttlefish and squid, sea urchin, catfish, lobster, and scallops. By value, the two most important U.S. fishery export products to Germany are Alaska pollock and salmon.

Table 2: Total Market Size for Fishery Products: 2020-2023 estimated				
in million USD	2020	2021	2022	2023 (Estimate)
Total Local Production	2,437	2,355	2,444	2,500
Total Exports	2,405	2,496	2,540	2,600
Total Imports	5,996	6,040	6,521	6,600
Imports from the US	219	227	163	200
Total Market Size	6,028	5,899	6,425	6,500

Source: Trade Data Monitor query dated August 11, 2023, Fish Trade Association

## Wine

Germany is the world's largest importer of wine by volume and third largest by value. In 2022, German wine imports were valued at more than USD 3.04 billion. Italy, France, and Spain are the leading suppliers of wine to Germany with a combined import market share of 81 percent. U.S. wines, together with other “new-world” wines, have developed an increasingly good reputation for quality in the German market. In 2022, the value of Germany's imports of U.S. wines totaled USD 73 million.

Table 3: Total Market Size for Wine: 2020-2023 estimated				
in million liters	2020	2021	2022	2023 (Estimate)
Total Local Production	869	874	935	900
Total Exports	471	489	468	450
Total Imports	1,507	1,552	1,423	1,500
Imports from the US	38	35	33	35
Total Market Size	1,905	1,937	1,890	1,950

German production data is only available on a volume basis; therefore, this table is in liters. Sources: German Office of Statistics (German production), Trade Data Monitor LLC query dated August 11, 2023

## Pet Food

Germany is one of the leading countries for pet ownership in the world. Germans are willing to pay a premium to properly feed their pets, 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.

Table 3: Total Market Size for Wine: 2020-2023 estimated				
in million USD	2020	2021	2022	2023 (Estimate)
Total Local Production	3,160	3,324	3,273	3,100
Total Exports	2,216	2,745	2,818	2,900
Total Imports	1,667	1,972	2,071	2,000
Imports from the U.S.	5	5	2	4
Total Market Size	3,709	4,097	4,020	4,000

Source: Trade Data Monitor LLC query dated August 11, 2023, German Pet Supplies Industry Association

## 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 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:

- [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 7-9, 2024
- [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 13-16, 2024
- [Interzoo](#) – The world leading pet industry exhibition. It is held every two years in Nuremberg. Next show: May 7-10, 2024
- [Prowein](#) – The leading wine show in Germany. It is held on an annual basis in Dusseldorf. Next show: March 10-12, 2024
- [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 7-11, 2023

## 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.)

Table: Total Market Size for Aerospace & Defense Market, 2020-2023 estimated				
in million USD	2020	2021	2022	2023 (Estimate)
Local Production	35,408	37,137	41,067	47,227
Total Exports	26,202	26,738	29,979	34,476
Total Imports	17,314	17,826	19,712	22,669



Total Market Size	26,520	27,807	30,800	35,420
US Imports = US Market Share	8,097	8,236	8,349	9,601
EUR-USD Exchange Rate	1.1422	1.1827	1.053	1.08 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 2022 U.S. aerospace exports to Germany amounted to USD 8.35 billion. The trade surplus was USD 5.93 billion, representing an 8.4 percent decrease from 2021 (USD 6.47 billion). These figures are in stark contrast to the European Union’s statistics stating U.S. aerospace imports worth USD 2.67 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 129.4 billion in 2023 (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 2021, some of the German safety and security companies had their best year in 2022. In the aerospace segment, the rebound after the coronavirus pandemic finally took shape. Perhaps no other industry has been harder hit overall than aviation, particularly the airline industry. In April 2023, German air traffic was down by 24.6 percent compared to April 2019 and up 17.5 percent compared to April 2022. The increase between April 2021 and April 2022 was 499.1 percent. Domestic air traffic was down 53.3 percent from 2019 and up 11.5 percent from 2022 (April 2021-22: +372.7 percent); European traffic was down 18.6 percent from 2019 and up 14.2 percent from 2022 (April 2021-22: +555.3 percent); intercontinental traffic was down 16.2 percent from 2019 and up 35.9 percent from 2022 (April 2021-22: +423.7 percent). Due to the long order cycles and a significant backlog in aircraft production, aerospace manufacturing suffered less than aviation.

Let’s take a look at the development on the manufacturing side over the last three years. In April 2021, the German Aerospace Industries Association (BDLI) reported that revenues declined by 24.4 percent, from EUR 41 billion (USD 45,900 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. It’s noteworthy, however, that some 8,200 aerospace manufacturing jobs were lost until April 2021 as a consequence of COVID-19. 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. With sales of EUR 31.4 billion (USD 37.1 billion) in the past year, the industry remained at the previous year’s low level.” In May 2023, the association announced that the German aerospace industry is on the road to recovery, with sales of EUR 39 billion (USD 41.1 billion) in 2022, representing a growth of 14.4 percent over 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.” 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 2022 revenues at EUR 39 billion or USD 41.1 billion, following the UK at GBP 82 billion or USD 101.4 billion (including land defense systems) and France at EUR 62.7 billion or USD 66 billion. Some three quarters or USD 30 billion of the German production are exported. France received an eighth of the exports with USD 3.7 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 pointed out that “aerospace is among the few industries in which Germany and Europe currently are world leaders and primed for the future. We intend to further strengthen this innovative capacity with the help of technological quantum leaps such as the planned ZEROe aircraft and the Future Combat Air System (FCAS), but also the European Service Module (ESM) as a core element of the Artemis mission, which is taking mankind to the moon again after many years—this time to stay.” The 2022 revenues were distributed as follows: civil aviation, EUR 28 billion or USD 29.5 billion vs. EUR 22 billion in 2021; military aviation, EUR 8.4 billion or USD 8.8 billion vs. EUR 7 billion in 2021; space systems, EUR 2.6 billion or USD 2.7 billion vs. EUR 2.4 billion in 2021.

### **Security Market**

Let’s take a look at the security market. According to the Federal Association of the German Security Industry (BDSW) in Bad Homburg and the Federal Association for Security Technology (BHE) in Brücken, the German safety and security market amounted to EUR 17.8 billion or USD 18.8 billion in 2022, 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 five-year 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. Last year, the security services market made up more than half of the overall market and grew by 7.8 percent to EUR 11.1 billion or USD 11.7 billion from EUR 10.3 or USD 12.2 billion in 2021.

### *Policy Objectives and Challenges*

Let’s also take a look at the strategic considerations of the German government. Aerospace stands out in this aspect. The Federal Ministry of Economic Affairs and Climate Action (BMWK) 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 BMWK’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 new three-party coalition government of 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. Moreover, the BMWK has updated the Aerospace Research Program (LuFo) - a grant program for aerospace research and technology projects—and issued another call for applications in April 2022. LuFo is currently in its sixth phase which ends next year (LuFo VI, 2020-2024). In the future, there will be an even bigger emphasis on climate-neutral aviation.

This is laid out in a joint paper on “Climate-neutral Aviation” that was published by German government in June 2022, stating that Germany “aims to be CO<sub>2</sub>-neutral by 2045” and defining that the “aerospace industry must contribute to reducing CO<sub>2</sub> emissions and to enabling climate-neutral flying.” Federal Minister for Economic Affairs 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.

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 was repaid and the undrawn remaining part of Silent Participation I of EUR 3 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 the wide majority of 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 2022, IATA elaborated in its “Global Outlook for Air Transport” that despite the strong headwinds “2022 testified to the resilience of the air transport industry. After the largest shock in aviation’s history, recovery is well underway. Traffic is forecasted to grow at a record rate in 2022 and will continue to grow at a slower pace in 2023 and beyond.”

As mentioned above, aerospace manufacturing is less affected by health and humanitarian crises than aviation and continues to adapt to the compounded challenges quite well, but ultimately it relies on the return of global air transport industry to stable levels. In May 2023, Lufthansa reported strong bookings for the first quarter of 2023 and predicted another travel boom in the summer. Group revenue increased by 40 percent to EUR 7 billion or USD 7.6 billion. The number of passengers increased significantly to 22 million. The average yield was 19 percent above the 2019 level. Lufthansa’s Q2 result is expected to exceed the 2019 level. The outlook for the full year was confirmed. For the full year, Lufthansa expects an average passenger airline capacity of 85 to 90 percent compared to 2019. Lufthansa’s CEO Carsten Spohr commented that “Lufthansa Group is well positioned to further strengthen its position among the top five airline groups in global competition.”

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 Defence 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 a number of tenders before 2022, the Bundeswehr and several 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 delayed economic recovery. The German economy stagnated in the second quarter of 2023 due to a cocktail of weak purchasing power, high energy costs, rising ECB interest rates, low order books, and a lagging rebound of the key trading partner China.

The Federal Statistical Office reported flat economic output from April to June, following a decline of 0.1 percent from January to March and 0.4 percent in the last three months of 2022. A detailed analysis of the underlying reasons would exceed the scope of this report. Fundamental adjustments to Germany's basic economic model are required to put the economy back on track.

### **Opportunities**

Opportunities include medium transport helicopters for the German Federal Police (currently there is only one bidder, Airbus Helicopters offering the H225); attack helicopters for the German Air Force; ISR pods for Eurofighter/Typhoons; future maritime mine countermeasures for the German Navy; the Tactical Edge Networking (TEN) / Digitization of Land-based Operations (D-LBO) radio program for the German MOD; Explosives Trace Detectors (ETDs) for the German Federal Police (BPOL). The biggest opportunity is the EUR 100 billion (USD 111 billion) Bundeswehr special fund, announced by Chancellor Scholz in February 22 and approved by the German parliament in June 2022.

The announcement 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 and EUR 50.1 billion (USD 54.3 billion) in 2023, 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, summarized under the term "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 is already being debated if EUR 100 billion will suffice to upgrade the German armed forces or if additional funding is needed to ensure long-term readiness and fulfill assigned missions and tasks. In April 2022, Munich-based 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 2022 and it will do so again in 2023. Without raising defense spending to adequate levels—between EUR 60 and 70 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.

### **Resources**

#### *Trade Events*

- [Aviation Forum](#) – general aviation industry, Munich, December 5-6, 2023
- [Security Essen](#) – security industry, Essen, September 17-20, 2024
- [AERO](#) – general aviation, Friedrichshafen, April 19-22, 2024
- [Aircraft Interiors Expo](#) – airline interior cabins, Hamburg, May 28-30, 2024

- [DSEI](#) – defense and security, London, September 9-12, 2025
- [inter airport Europe](#) – airport equipment, technology, design and services, Munich, October 10-13, 2023
- [A+A](#) – safety and security solutions, Düsseldorf, October 24-27, 2023
- [ILA Berlin](#), – aerospace, Berlin, June 5-9, 2024

#### *Other Web Resources*

[German Aerospace Industries Association](#) (BDLI)

[German Airport Technology & Equipment](#) (GATE Alliance)

[HANSE-AEROSPACE e.V.](#) (Largest independent association of aerospace suppliers and service providers in Germany)

ALROUND (Association of aerospace-oriented SMEs in Germany);

([http://www.asdsource.com/source\\_detail/8304/alround\\_ev,\\_association\\_of\\_aerospace\\_oriented\\_sme\\_in\\_germany.htm](http://www.asdsource.com/source_detail/8304/alround_ev,_association_of_aerospace_oriented_sme_in_germany.htm))

German Helicopter Association (DHV) at <http://www.dhv-org.de/>

[Federal Association of the Security Industry](#) (BDSW)

## **Advanced Manufacturing**

### **Overview**

Advanced Manufacturing (AM) is the convergence of information and communications technologies with manufacturing processes to drive real-time control of energy, productivity, costs and information across factories and companies. In 2011, it was identified as one of the highest-priority manufacturing technology areas by the Federal German government.

The OPC Foundation (Open Platform Communications) cooperates with the German Mechanical Engineering Industry Association (VDMA). In June 2016, these two parties signed an MOU to build an international standards regime utilizing the OPC UA Machine Vision Companion Specification. This machine protocol has been developed to help all automation companies implement Industry 4.0/IoT with robotics, automation, and machine vision software language with their products. For the interfaces UMATI (universal machine technology interface) has been set up. Both OPC UA and UMATI enable higher-level data processing in a standardized and more secure manner.

### ***Policy Objectives and Challenges***

A major challenge for industry and government is the definition of reference architecture and frameworks necessary for interoperability. They are also challenged with how to build confidence around new and innovative approaches to security. In April 2016, the two major international players, the International Internet Consortium (IIC) and the German-led Industry 4.0, agreed to collaborate for the benefit of interoperability of systems from these different domains. Major German trade associations such as the [ZVEI](#) (The German Association for Electrical & Electronic Industry), [VDMA](#) (German Engineering Association), [Bitkom](#) (Federal Association for Information Technology, Telecommunications and New Media) are driving these discussions.

### ***Leading Sub-Sectors***

Over the next several years, Advanced Manufacturing is expected to provide excellent export potential for industries such as machine tools/general industrial equipment, robotics, information and communication technology, process control instrumentation as well as electronics industry production equipment, additive manufacturing, advanced materials, and industrial IT. By 2025, 84 percent of German manufacturers plan to invest EUR 10 billion (USD 10.52 billion) annually into smart manufacturing technologies, including the automotive industry at approx. 1.2 billion per

year, machinery & equipment and plant engineering and construction at 1.5 billion, electronics and microelectronics industry at approximately 817 million per year, and the metal working industry at 424 million per year. Today, 75 percent of the German companies in most industries have implemented digital solutions, and 15 million employees are directly and indirectly involved in advanced manufacturing industries in Germany.

### **Robotics and Automation**

Germany is the fifth largest robot market in the world with about 26,000 installations of robots utilized in various industries, accounting for 5 percent of the global robot installations in 2022. The Robotics + Automation Association represents three industry segments with their 370 members: Robotics, machine vision and integrated assembly solutions. In 2022 the combined estimated annual turnover of these industry segments hit EUR 14.4 billion (USD 15.55 billion). For 2023 an increase of 9 % to about EUR 15.7 billion (USD 16.96 billion) is expected according to the association.

Installations of industrial robots in selected German industries in 2021 were: motor vehicles with 6,206 installations, metal and machinery (3376), automotive parts (2,740), plastics and chemical (1,490), electrical and electronics (1,154), pharma/cosmetics (485), food (424), logistics, medical and other industries. In 2022 the automotive installations went up to 4,400 installations, and the chemicals and plastics industry increased to 2,200 installations. The fastest growing segment is the electronic industry, which surpassed the automotive industry with new installations in the last two years. Please note that this data includes the industrial/commercial use of robotics only.

In terms of robot density (robots' utilization per 10,000 workers), Germany ranks 4<sup>th</sup> in the world with 397 in 2021, behind South Korea (1000), Singapore (670), and Japan (399). The USA ranks 9<sup>th</sup> with 274, recently surpassed by China which ranks 8<sup>th</sup> (276).

Future trends in this sector are the reshoring of production, securing the supply chains, low cost options for new industry segments, new distribution channels, the utilization of artificial intelligence, human-robot collaboration, digital transformation from order to delivery, service robotics in the commercial and health industry, collaborative robots/cobots, and mobile platforms, e.g., AGV's, robot leasing like Robot as a Service – RaaS, not to mention components that make the robot more precise like soft actuators for the gripping technology. This and many more current and future trends are accompanied by sustainability, i.e., reducing energy and the carbon footprint.

The service robots' markets mentioned with future trends are: Medical, logistics, hospitality, transportation and logistics, field, inspection and maintenance and agriculture robots. According to the World Robotic Association, the United States of America has the most service robot suppliers in the world with 223 companies, followed by China with 103 companies, and Germany with 91 suppliers.

Although American and European countries will face a lack of skilled workers, the long-term perspectives remain excellent with predicted growth rates of 7 to 10 percent.

### **Additive Manufacturing and Advanced Materials**

The actual size of the additive manufacturing (AM) market in Europe and Germany is difficult to measure due to varying definitions and the lack of statistics. It is clear, however, that the European AM market is growing. Depending on the European region, the AM market is experiencing 15-20 percent growth annually. Growth expectations in European countries with few AM players are generally higher than in those markets with a well-established AM industry.

Germany is Europe's largest AM market with growth rates of up to 15 percent. A recent study by the European Patent Office reveals that nearly 50 percent of all AM patents registered in Europe originate in Germany. Germany has the largest and most active additive manufacturing market in the EU. About four years ago, only a small number of local firms used AM - mostly for prototyping. Since then, the number of AM users in Germany has nearly doubled. Local companies with AM production prefer in-house AM facilities over external AM services. They use AM for prototyping and proof-of-concept, for the manufacture of small volumes or to make spare parts, or special items for customers. Some companies print single items with unique features, which either cannot be produced otherwise,

would be more time-intensive or too costly when produced with traditional methods such as certain forged parts. Moreover, like in the United States, AM has proven to be a problem solver in Germany during the pandemic, overcoming medical production gaps and bridging broken supply chains.

Main drivers in the German AM market are aerospace, medical, transportation and automotive. Over the past few years, the German AM has expanded into new applications, including consumer goods and jewelry. While it is still difficult for company newcomers to find the appropriate AM solution for their company-specific business model, the number of companies in Germany using AM has continued to grow. The increased use of AM during the pandemic drew the attention of non-AM users. While local firms hold back on investments due to the stagnating German economy, demand for AM is expected to grow. The German government forecasts that the local economy will reach pre-pandemic levels by 2023.

With its high-tech market structure, Germany offers a ready playing field for innovative AM. The German AM market hosts mostly small to medium-sized AM companies. The United States is considered a global AM market leader in Germany. Therefore, the German market is highly receptive to U.S. AM technology and materials.

### **German Machine Tool and Precision Tool Market**

The ongoing demand in almost all user industries worldwide has already driven production output of the German machine tool industry to more than EUR 14.1 billion in 2022 (USD 15.22 billion), however the order intake in the second quarter of 2023 decreased by 3 % compared to the same period in 2022. The order backlog compensates for this short decrease in all machine tool segments. Imports from the U.S. have been about EUR 118.7 million (USD 128.2 million) for machines and equipment in 2022. Capacity utilization stood at about 88 percent in 2022 according to the German machine tool association. German domestic consumption was about EUR 7.6 billion (USD 8.2 billion). Based on the domestic consumption Germany has an import quota of 47 %, and an export quota of 75%.

Germany's best prospect import segments within the machine tool industry are laser, 3D printers; machine centers; lathes; drilling machines; grinding, honing and lapping machines; gear cutting machines; sawing, cutting-off machines; bending, folding, and straightening machines (incl. presses).

The major industries consuming machine tools and precision tools are automotive industry and component suppliers, mechanical engineering, metal and metal products, aerospace, electrical industry, e-mobility, and the defense industry.

Figures for the German precision tools industry allow an estimated increase of 8 percent in 2023 to EUR 10.9 billion (USD 11.76 billion), compared to EUR 9.9 billion (USD 10.69 billion) in 2022.

Current trends include high-performance processes, Industry 4.0, micro processing, direct drives, energy and resource efficiency, composite technology, additive manufacturing, laser beam sources, complete machining and shortening of process chains, industrial software, and others. Challenges in the future could include the shortage of labor, the costs of labor, and supply chain disruptions, according to Stefan Zecha, Chairman of the precision Tools Association. Positive signals are coming from the striving renewable energy production and their need for mechanical components, resulting in growing orders for cutting tools. Increasing order intakes are also seen for turning and milling machine tooling.

### **Sensors and Measuring Technology**

Sensors and measurement technology are another growth subsector. In 2022, the annual turnover of all market players was estimated at EUR 35 billion (USD 37.8 billion). 2,500 companies and institutes employed about 250,000 people. In the first quarter of 2023 we have seen a growth rate of 7 percent, compared to the previous year. The export quota rose by 15% to 65 percent. Major markets are the following industries: advanced technologies, robotics, automation, automotive, electronics, consumer electronics, security, machinery & equipment, and others. Major competitors include SICK AG, Siemens Sensor Systems, Bosch Sensortec, ifm, and Beckhoff Automation.

## Opportunities

Germany's advanced manufacturing companies usually require in-country partners. These partners could be agents and distributors selling to OEMs as final consumers or OEMs as distributors for an exclusively built component. An in-country facility and a membership in one of the German associations is recommended, and system integrators are often the ideal partner for automation and internet of things products and services. Advanced technologies require more IT / OT solutions, platforms that handle the data traffic, and software companies who are specialized in industries to collect all necessary data, visualize the data and save costs in product development and design, reduce energy consumption, assist customers with predictive maintenance and more.

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 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.

### *Trade Events*

- [EMO](#) – One of the world's premier trade shows for the metalworking sector, Hannover, September 18-23, 2023
- [formnext](#) – International exhibition for additive manufacturing technologies and tool making, Frankfurt, November 7-10, 2023
- [Hannover Messe](#) – The world's leading trade fair for industrial transformation, Hanover. April 22- 26, 2024
- [SENSOR+TEST](#) – The leading international trade fair for sensor, measuring, and testing technology, Nuremberg, June 11-13, 2024
- [automatica](#) – The leading exhibitions for smart automation and robotics Venue: Munich, June 24-27, 2025
- [Schweissen & Schneiden](#) – One of the world's premier trade shows for the welding sector, Essen, September 15-19, 2025

## Healthcare and Medical Technology

### Overview

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

Germany claims the third-largest medical technology market in the world after the United States and Japan and is by far the largest European market, twice the size of the French market and three times as large as those of Italy, the United Kingdom and Spain. The German medical device market is one of the most lucrative healthcare markets worldwide, accounting for roughly USD 42 billion annually, or 25 percent of the European market total.

Germany has a strong healthcare system, especially with regards to infrastructure, hospital beds and trained staff. One out of six jobs in Germany are linked to the healthcare sector, which generates an economic footprint of EUR 775 billion (USD 883 billion), or roughly 12 percent of Germany's GDP. In 2022, the gross value added of the healthcare industry was EUR 439.6 billion. This corresponds to 12.7 percent of the gross value added of the overall German economy. In 2022, almost 8.1 million people were employed in the healthcare industry, or 17.7 percent of the total workforce in Germany. Since 2013, the number of people employed in the healthcare industry has risen by 1.4 million.



With EUR 186 billion (USD 202 billion) generated through foreign sales, HC contributes 9.8 percent to Germany's total exports in 2022 (source: Federal Economics Ministry, BMWK). HC imports were at EUR 154 billion (USD 167). According to estimates by Fitch Solutions, the expected CAGR of the German medical equipment market for 2020-2025 is 5.1 percent in Euro-terms and 6.8 percent in USD-terms. Growth factors include the digitalization of the health economy and tackling the double-digit investment backlog in the hospital market with the funds allocated by the Hospital Future Act. This law was enacted in October 2020 providing EUR 3 billion (USD 3.5 billion) of federal funding and additional EUR 1.3 billion (USD 1.4 billion) of state funding to modernize and digitalize the German hospital system.

The Healthcare/Life Sciences (HCT) industry is a priority for both the EU and Germany as reflected in the [European Regional Development Fund](#) (ERDF – or EFRE, in German) program and [cohesion policy 2021-2027](#), as well as the German Länder implementation and tendering of this program. “[Horizon Europe](#)”, a European Incentive Program for Research and Innovation agreed upon by the EU Council and Parliament and retroactively entered into force on January 1, 2021, after final adoption in April 2021, also focuses on health and health-sector-related R&D and innovation. Projects target conquering cancer, smart health, aging, and digital models of care. All of this aims to increase opportunities for U.S. suppliers to participate in healthcare infrastructure, hospital development projects and to partner with German and EU firms. However, the German healthcare system, because of its decentralized and self-governing structure, is complex and slow in adapting new trends. German health ministry officials are determined to move the German health system into the digital age and have amended the regulatory environment with several laws to mandate progress. This will offer excellent export and partnering opportunities for innovative U.S. health solution providers throughout the health technologies supply chain.

The German market for medical devices is regulated by German and EU directives, standards, and safety regulations. After a one-year delay of the start date of the EU Medical Device Regulation (MDR), which introduced increased testing, certification and compliance requirements, this regulatory framework came into full effect on May 26, 2021. The complementary In Vitro Diagnostic Regulation came into effect on May 26, 2022. Unlike EU directives, regulations do not need to be transposed into national law. The MDR and the IVDR will therefore limit interpretation discrepancies across the EU market. U.S. exporters are well-advised to become informed about MDR and obtain public or private sector counseling and assistance of the possible impact of their market entry plans into Germany. Companies seeking market entry should also carefully map their distribution strategy depending on their target group(s). CE marking is mandatory for selling into Europe.

### **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/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, in fact, purchase the product to be sold, thus sharing the 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.

### **Leading Sub-Sectors**

Key sub-sectors include medical technologies (MED), health IT, diagnostic products, biopharmaceuticals, and dental products.

- Medical Technologies (MED) is the key sector of the healthcare industry. U.S. medical device exporters continue to hold a 30 percent share of the German import market. U.S. exporters with innovative and cost-competitive medical devices and products will find good opportunities.

- Key sub-segments include cardiac monitoring; diagnostics products, including genomic health solutions and products/applications for the aging German society; Oncology; and POC products.
- Health IT products and services have experienced strong growth in recent years, with opportunities particularly in artificial intelligence, cybersecurity, patient monitoring, medical apps, and digitalization solutions for hospitals/other healthcare institutions.

## Resources

### *Trade Events*

- [Medica](#) – Dusseldorf, November 13-16, 2023
- [Greater New York Dental Meeting](#) – New York, November 24-29, 2023
- [DMEA](#) – Berlin, April 9-11, 2024
- [HIMSS24 Global Health Conference & Exhibition](#) – Chicago, March 11-15, 2024
- [Analytica](#) – Munich, April 9-12, 2024
- [American Hospital Association Leadership Summit](#) – San Diego, July 21-23, 2024
- [American Association for Clinical Chemistry: AACC Annual Meeting](#) – Chicago, July 28-August 1, 2024
- [Rehacare](#) – Dusseldorf, September 25-28, 2024
- [The MEDTECH Conference](#) – Anaheim, October 9-11, 2023
- [International Dental Show \(IDS\)](#) – Cologne, March 25-29, 2025

### **Government Links**

- [Federal Institute for Drugs and Medical Devices](#) (Competent Authority)
- [Federal Ministry of Health \(BMG\)](#)
- [Healthcare Procurement and Tenders](#)
- [Medical Device Regulation \(MDR\)](#)

## Information, Communication & Technology (ICT)

### Overview

Figure 1. IT Revenue in Germany

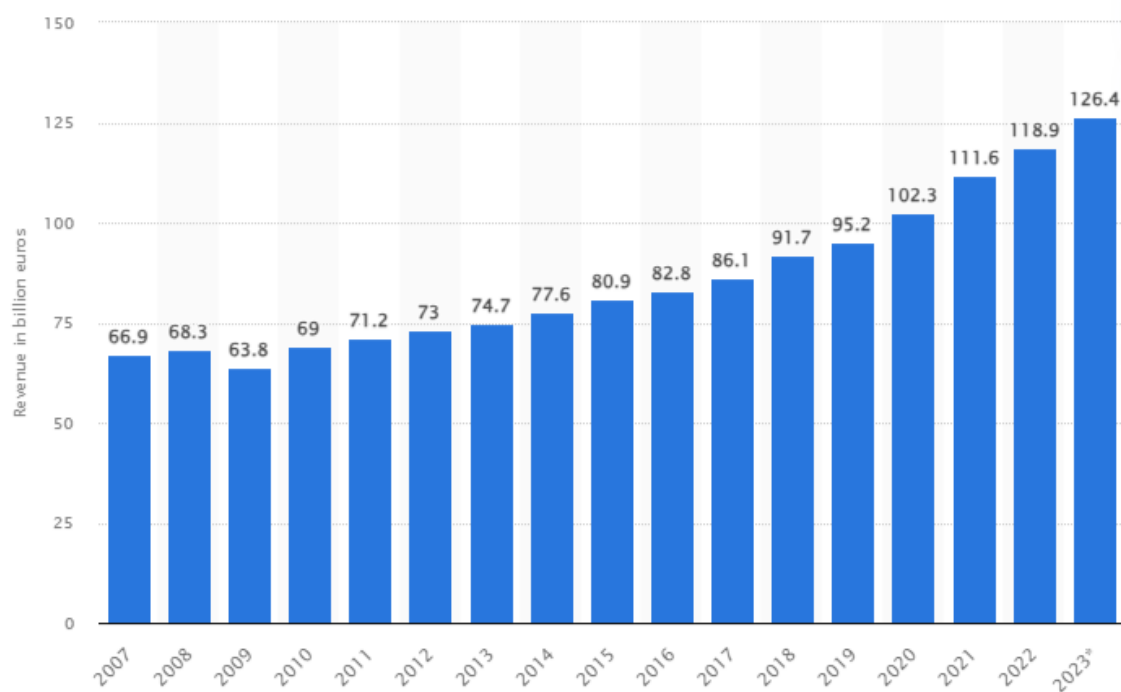


Image Source: Statista [Germany IT Revenue 2023](#)

### Overview

Germany has one of the largest ICT markets in the world and the single largest software market in Europe with around 100,000 IT companies employing approximately 1.189 million people in 2023. There is a strong demand for U.S. products and services across all segments. Large players such as Microsoft, Apple, Dell, Adobe, IBM, Oracle, and SAP enjoy a large market share.

In 2022 revenue in the different IT subsectors consisted of USD 45.3 billion in IT-Services, USD 34.9 billion in IT-Hardware and USD 34.1 billion in the software subsector. Since 2007, total revenue in the IT sector has increased from USD 76.4 billion to an estimated USD 141.6 billion in 2023, showing a pattern of consistent growth.

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](#), [IT-SA](#), [Gamescom](#) or [Cloud Expo Europe](#).

### Policy Objectives and Challenges

ICT is a priority sector for the German government. Germany's economic and innovation policy is outlined in the [Digital Agenda](#) of the BMWK (Federal Ministry for Economic Affairs and Climate Action). It focuses on digital infrastructure, the digital economy, digital workplaces, innovative governance, digital environments in society, education, research, science, media, and security.

Policy objectives include cybersecurity, the digitization of the German economy and the expansion of the German broadband network. Challenges include the impact of the EU Digital Single Market, the General Data Protection Regulation (GDPR), the E-privacy Regulation on ICT companies, and the latest cybersecurity policy developments, bolstered by the [German National Digital Strategy 2025](#) plan, whose 10-year adoption timeline began in 2016.

The U.S. Commercial Service follows these developments and continues to work with associations and multipliers such as 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, 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**

- IT Security is the 2<sup>nd</sup> largest in Europe and has had strong growth.
- Health IT has experienced strong growth in recent years; experts expect a consolidation process and fundamental changes in the next couple of years.
- The Artificial Intelligence market is expected to grow significantly.
- Smart Social Business Platforms
- 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)

### **Resources**

#### *Trade events*

- [Hannover Messe](#) – Industrial: “Largest industrial trade show in the world. Of interest for U.S. producers of industrial IT solutions”, Hannover, April 22-26, 2024
- [Gamescom](#) – Interactive games and entertainment, Cologne, August 21-25, 2024
- [IFA Berlin](#) – Consumer electronics and home appliances, Berlin, September 2-6, 2024
- [it-sa](#) – IT security: Cloud, mobile & cyber security, data & network security, Nuremberg, October, 2024

#### *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

[NIFIS](#), National Initiative for Information- and Internet-Security

[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

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

Germany is on track regarding its target for 80% of supply to come from renewables by 2030. Germany was at 46% in 2022. However, the 2% reduction of greenhouse gas emission reduction across all industry sectors that occurred in 2022 is not sufficient to put the country on track to reaching its 2030 climate target, which is to reduce emissions by 55 percent compared to 1990. The energy crisis fueled by Russia's war against Ukraine caused an increase in the use of dirtier coal electricity. Both the transportation and real estate sectors missed their 2022 greenhouse gas reduction targets. The country would have to triple the annual reduction from 2 percent in 2022 to 6 percent from 2023 onwards to attain their 2030 goal.

Investments in offshore wind, photovoltaics, grid expansion, and energy storage projects will be necessary. So will 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. For decades, Germany has been the global pioneer in applying renewable energy and environmental technologies.

However, Germany has maintained a high degree of oil and natural gas to maintain electricity supply security with oil and gas 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 planned nuclear and coal phase-outs at the same time 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. Commercial and private consumers can rely on a stable, continuous energy supply, for Germany has one of the lowest power interruption rates worldwide.

### *Energy consumption and generation*

**Energy consumption:** Germany is the largest energy consumer in Europe followed by France and the U.K. As of 2022, primary energy consumption amounted to 11,769 Petajoules, with more than 75% coming from fossil sources, as well as 17.2% from renewables and 3.2% from nuclear energy. Energy consumption is still noticeably lower than before the outbreak of COVID 19. Price developments in energy markets also caused a 3.5% reduction in consumption compared to 2021. The phase-out of nuclear energy and the continued promotion of renewable energies have caused changes in the 2022 energy mix. Mineral oil remained the most important source of energy with a share of 35.3%, followed by natural gas with 23.7%. Lignite accounted for 9.9% and hard coal for 9.8%, as the planned phase-out of coal was put on hold until April 2023 due to dislocations in the global energy market. Biomass, which accounts for more than 50% of renewable energy, recorded a 1% increase in consumption. The output of hydroelectric power stations decreased by 13%, suffering from a prolonged drought. Power generation from PV systems increased by 19% thanks to significantly sunnier weather, while wind power increased 10%.

**Energy production:** Domestic energy generation was able to cover 16% of total consumption in 2023. The most important domestic energy source is renewable energy with a share of 42.3%, a decline of 4% compared to 2021. Lignite follows with 33.3%. Domestic natural gas production increased considerably and added 11.4%. The shares of other energy sources amount only to the low single digits.

**Electricity generation:** German electrical generation increased by .4% in 2022 and totaled to 506.8 TWh. A major part of electricity produced and fed into the grid in Germany in 2022 came from conventional energy sources and accounted for 51.7% of total electricity production. Lignite-fired power plants increased their net production to 105

TWh, to ease pricing pressure from natural gas shortages. Net electricity generation from nuclear power totaled 32.8 TWh, from gas-fired power plants around 51.9 TWh and from hard coal-fired power plants 56.3 TWh. The proportion of electricity produced from renewable energy sources and fed into the grid increased as a share of total consumption by 5.6% to 48.3%. Electricity from wind power amounted to about 131.3 TWh and with a share of 25.9% wind was again the most important source of electricity. German photovoltaic systems generated about 55.3 TWh electricity, a 19% increase from 2021. Biomass generated 41.6 TWh and hydropower accounted for the vast majority of the remaining 14.2 TWh contributed by renewable sources. In total, renewable energy sources produced about 244.8 TWh in 2022, about 9% above 2021's value.

**Energy costs:** Energy costs increased dramatically in Germany in 2022 due to decreased supply from Russia. Energy prices for German households (electricity, gas, gasoline) have dropped markedly in early 2023 but remain at a higher level than in January 2022, before Russia's invasion of Ukraine. High energy prices are also a burden for the industry. The German government revealed plans to set aside around \$4.4 billion each year to subsidize electricity prices for energy-intensive industries, in an attempt to shield businesses from high electricity prices that may force some companies to leave the country.

### ***Energy imports***

**Natural Gas:** The total volume of natural gas imported into Germany in 2022 was 1,449 TWh. The largest volumes came from Norway (33%) and Russia (22%). Russia's share was 52% in 2021. Overall, Germany's natural gas imports were down 12% in 2022. While around 1.7 TWh were still being delivered daily from Russia through Nord Stream 1 until the middle of June, those figures dropped initially by 60%, then by 80% and ultimately fell to 0 TWh at the beginning of September. The lack of deliveries from Russia was partially compensated with additional imports from the Netherlands, Belgium, and Norway. Industrial gas consumption remains high at almost 500,000 GWh, which is 58% 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 in various sectors.

**Crude Oil:** Germany's crude oil imports rose 8.5% in 2022 as Europe's biggest economy recovered from the COVID-19 pandemic and the bill for its purchases increased as oil prices surged. Russia remained Germany's biggest supplier, but its share dropped to 25.4% in 2022 from 34.1% in 2021. Germany's other big suppliers last year were the United States, Kazakhstan, Britain, Norway, and members of OPEC.

**Liquefied Natural Gas (LNG):** In 2022, Germany imported around 1.32 million tons of LNG. Germany has sourced LNG from the U.S. and Gulf countries. U.S. LNG exporters boosted shipments to Germany and Europe by more than 137% in the first 11 months of 2022 from the same period in 2021, supplying more than half of Europe's imported LNG. Qatar and the United States will remain Europe's top LNG seller in 2023. U.S. LNG exporters have greater volumes of LNG available for spot market purchases than other major exporters, and as additional U.S. export capacity comes on line.

### ***Energy policy***

The Federal Ministry for Economic Affairs and Climate Action (BMWK) oversees the country's energy policy and supervises the energy sector. The Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) is responsible for environmental protection, nature conservation and consumer protection.

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 will most likely be advanced to 2030.

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 should reach 80% by 2030. By then, Germany's onshore wind energy capacity should double to up to 110 GW, offshore wind energy should reach 30 GW - arithmetically the capacity of 10 nuclear plants - and solar energy would more than triple to 200 GW.

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.

The hydrogen strategy includes a two-stage plan of action. The first 'ramp-up' phase lays the foundation for a well-functioning domestic hydrogen market, which includes the development of the transport and distribution infrastructure for hydrogen and derived products. The second phase will strengthen this market ramp-up and provide a basis for European and international cooperation. The updated strategy is to accelerate the market ramp-up of hydrogen and its downstream products in the industry, for transportation, and aviation.

**Energy security:** Currently, Germany relies heavily on imports of fossil fuels as its domestic resources are largely depleted or their extraction is too costly. The war in the Ukraine, the nuclear phase-out, and Germany's plans to phase out coal-fired power plants by 2030 have left the country with few options to bridge the gap.

Germany has a well-developed natural gas pipeline grid and is connected to terminals in neighboring countries, but until recently neither did it have its own port to receive LNG directly nor did it have its own regasification terminals for LNG, and imports entered through neighboring countries' terminals, especially from Belgium and the Netherlands. The Russian invasion has led to a permanent shift in Germany's energy policy and the German government has undertaken great effort at great cost and record speed to build up its LNG regasification capacities to make up for the discontinuation of Russian gas imports and diversify its energy sources to ensure energy security. The German government agreed to charter and operate five offshore FSRUs in the short run and three onshore LNG import terminals in the medium term.

Germany's three terminals have a capacity to cover around 17% of Germany's gas needs. These terminals will be 'hydrogen-ready' facilities and capable of switching from LNG imports to (liquid) hydrogen and hydrogen-based products (ammonia) in the future. In 2023, three more terminals with similarly large capacities are to be launched. In addition, the import volumes from Norway and the Netherlands will increase. The government assumes that Germany will be able to feed in more than 50 billion cubic meters of gas via the terminals as early as winter 2023. That is roughly the amount that Germany imported from Russia before the Ukraine war. Other fixed terminals with even larger capacities than the floating LNG terminals are planned for 2026.

### *Opportunities*

Germany is Europe's largest electricity market with an annual power generation of around 625 TWh and a capacity of around 200 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.

**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 completely new challenges for the transport of electricity because the power generation structure is changing. Increasingly, electricity is being generated by wind and solar installations that are distributed throughout the country, some of them located a long way from the consumers. Furthermore, the 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 as a result 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. Information and communication-based technologies (ICT) provide important information for the safe operation of power grids. Alongside battery storage with solar systems, large-scale storage solutions are playing a growing role in the balancing energy market. Hydrogen also plays an important role thanks to the linking of the energy, heat and mobility sector.

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."

ICT will play a central role in connecting the different parts of the energy system. 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 around 35,000 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 2025, will use the more efficient high-voltage direct current (HVDC) technology. Currently, just 0.4% of the German transmission grid is laid below ground. In response to public protests against overland powerlines and pylons, new legislation has given priority to underground cables, although this technology is more expensive to install and maintain. According to the Federal Network Agency, around 12,234 km of new power lines are needed to successfully implement the energy transition. Only about 1,739 km of the newly planned power grid has already been completed.

Some USD 117.5 billion are needed to expand and upgrade Germany's electricity network by 2050 according to a study commissioned by electricity supplier E.ON. Some USD 34 billion of that amount would be needed by 2030. 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. Without these investments, "follow-up costs" of USD 4.4 billion a year could be incurred because of overloaded networks that are not able to absorb renewable-generated electricity.

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 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 the 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. Energy storage systems will 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.

Around 1.7 million solar power plants with a total capacity of approximately 45 GWp have been installed in Germany over the past 25 years. Around 1,000,000 are residential rooftop installations with a capacity of smaller than 10 kWp. 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 will also be a major driver for improving energy self-sufficiency in private households and commercial operations. Only 8% of rooftop PV systems in Germany are equipped with a battery today – by 2030 it could be well over 80%.

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. These are well-suited to providing control power to stabilize grid frequency. At present, several demonstration and commercial projects have been put in operation or are being



planned. (e.g., There are plans to build the country's largest battery park in Eastern Germany's historic lignite mining belt. The project involves building a USD \$220 million facility to store for wind and solar energy that will gradually replace the sprawling coal pits of the Lusatia region.)

**Hydrogen exports:** There is great potential for hydrogen exports and hydrogen technology solutions to Germany. The government expects that around 90 to 110 TWh of hydrogen will be needed by 2030. And there is an even wider range of forecasts for 2050 for Germany, from 150 TWh to 550 TWh. According to these estimates, Germany's hydrogen imports will account for around two-thirds of its consumption; it will mainly be imported by land via gas pipelines, and also by sea from other continents. Prior to importing hydrogen, Germany needs to invest in hydrogen pipelines which means building new pipelines and upgrading and converting natural gas pipelines as well as building hydrogen underground storage facilities.

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

In early 2023, Germany's RWE and Norway's Equinor have proposed a series of investments for the European hydrogen supply and its utilization in the power sector from 2030 onwards. The plan is to source blue and green hydrogen from Equinor in Norway and to transport it to Germany via a hydrogen pipeline, where RWE, Germany's largest utility, will burn the fuel in hydrogen-ready, gas-fired power plants to produce electricity.

In January 2022, the European Commission has 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 has 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. First deliveries of hydrogen are expected to arrive in Germany in 2024.

## Resources

### *Trade Events*

- [Hydrogen Technology Expo](#), Hamburg, October 22-24, 2023
- [Energy Storage and Expo for Decarbonized Industries](#) – industrial and commercial decarbonization solutions, Duesseldorf, November 28-30, 2023
- [Enlit Europe](#) – power and energy, Paris, November 28-30, 2023
- [E-world of Energy and Water](#) – energy sector, Essen, February 20-22, 2024
- [Hannover Messe](#) – industrial, Hannover, April 22 - 26, 2024
- [The Smarter E Europe and Intersolar](#) – energy transition, Munich, June 19-21, 2024

### *Government Links*

- BMWK Federal Ministry for Economic Affairs and Climate Action - <https://www.bmwk.de/Redaktion/EN/Dossier/energy-transition.html>
- BMUV Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection - <https://www.bmuv.de/en/>
- UBA Federal Environment Agency- <https://www.umweltbundesamt.de/en>
- DENA German Energy Agency – <https://www.dena.de/en/home/>

## Travel & Tourism

### Overview

Travel and tourism are critical drivers of economic growth and employment in the United States, accounting for nearly 3% of U.S. gross domestic product (GDP). With one domestic job stemming from every 69 international visits to the U.S., and 9.9 million American jobs paying more than \$322 billion in employee compensation, approximately 1 in every 20 jobs in the nation is contingent upon continued travel and tourism.

Germans are well-known for visiting second and third tier destinations within the United States, not just the major gateways and attractions, thus playing a critical role in the wellbeing of American tourism. All data points to the fact that Germany will remain a significant source market and partner.

Most German visitors to the United States book their travel through German tour operators and/or travel agencies, thus availing themselves of German travel package laws safeguarding their vacation investment. Whereas these packages are typically purchased early, however, the length of time between booking and travel has shortened considerably since the Pandemic. The reversal of this trend may transpire in the course of a “return to normalcy.”

The United States welcomed 1,481,000 visitors from Germany in 2022. Already in the first three months of 2023, over 318,000 travelers from Germany have arrived in the U.S, with this figure ranking among the highest for foreign travel to the U.S. Summer months are the most popular for German travel, so it is likely that this number will rise before the end of the year (ADIS/I-94 Visitor Arrivals Monitor).

For summer 2023, there are more than 400 direct daily flights (or 70 weekly flights) from Germany to the U.S. (with American Airlines, Condor, Delta Airlines, Euro wings Discover, Lufthansa, Singapore Airlines, United Airlines).

	2020	2021	2022	2023
<b>Visitors: Germany-to-USA</b>	294,000	249,000	1,481,008	320,000 (as of March 31, 2023)

**German Travel Sector:** Germany’s 9,000+ travel agencies have experienced significant losses due to uncertainty, but as restrictions have been loosened, many have seen an uptick in their business.

### Opportunities

The Visit USA Committee Germany e.V. plans to continue its successful series of in-person and online training opportunities for members to present to German travel industry partners and consumers. Here is a link to their extensive business plan for 2023/2024:

<https://vusa.travel/business/vusa/post/09394caa-9eb2-4f41-8511-0ad603698cb2>

Contact [office@vusa.travel](mailto:office@vusa.travel) for details on how to sign up.

ITB Berlin, the Internationale Tourismus Boerse, one of the world’s largest travel trade shows, is scheduled for March 5-7, 2024 and will have a USA Welcome Pavilion for U.S. tourism suppliers and partners.. See <https://www.itb.com/en/>.

### *Policy Objectives and Challenges*

The recovery of business travel remains ‘sticky,’ with gradual resumption of normal services; as companies have pivoted towards virtual communications, staff availability remains challenging and resulting upwards pressure on employee hours remains a concern to be addressed. High inflation, the energy crisis, and ongoing war in Ukraine are

of particular worry to German consumers, and rising prices along with the connected drop in demand could present a challenge for U.S. companies. However, as of right now, demand from German travelers remains high.

## Resources

### *Trade Events*

- [Oooh! The LeisureWorlds](#) – holiday and leisure, Hamburg, February 7-11, 2024
- [CMT](#) – tourism and leisure, Stuttgart, January 13-21, 2024
- [f.re.e](#) – leisure and travel, Munich, February 14-18, 2024
- [ITB](#) – travel, Berlin, March 5-7, 2024
- [IMEX](#) – meetings and events industry, Frankfurt, May 14-16, 2024

### *Entry and visa regulations information*

[U.S. Embassy and Consulates in Germany](#)

[Official ESTA Application Website, U.S. Customs and Border Protection \(dhs.gov\)](#)

[Visa Navigators](#)

### *Other*

[Official site of the Visit USA Committee Germany](#)

[Brand USA's consumer website in German](#)

German landing page for Recreation.Gov (<http://www.natuerlichusa.de/>)

[Germany - Travel & Tourism \(trade.gov\)](#)

[Visa Unit at the U.S. Embassy in Berlin \(google.com\)](#)

[Visa Unit at the U.S. Embassy in Berlin \(google.com\)](#)

[U.S. Consulate in Munich \(google.com\)](#)

## 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 are well advised to do their homework thoroughly and make sure they know precisely which standards apply to their product and that they obtain timely testing and certification.

For information on existing trade barriers, please see the [National Trade Estimate Report on Foreign Trade Barriers](#) published by USTR. Additional resources are [SBA's Office of International Trade](#) and [Trade and Development Agency](#). Information on agricultural trade barriers can be found at the following website: [Foreign Agricultural Service](#). To report existing or new trade barriers and get assistance in removing them, contact the [Trade Compliance Center](#). 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, counseling 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 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 or another form of BIS authorization to verify compliance with the EAR and the conditions of the license or authorization. An EUC is an on-site verification of a non-U.S. party to a transaction to determine whether the party is a reliable recipient of items subject to the EAR. EUCs are conducted as part of BIS’s licensing process, as well as its compliance program, to determine if items were exported in accordance with a valid BIS authorization or otherwise consistent with the EAR. 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 regulates transactions involving the export, reexport, or transfer (in-country) of “dual-use” and less sensitive military items (commodities, software, and technology) as well as certain U.S. person activities. Items subject to BIS's jurisdiction include items found 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 basket 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 advice and regulatory requirements on items under the export control jurisdiction of other U.S. Government agencies, exporters should consult other U.S. Government agencies. For example, the U.S. Department of State's Directorate of Defense Trade Controls has authority over the defense articles and defense services that are not subject to the EAR. 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 [BIS website](#) and 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 transfers of items. The CSL consolidates eleven 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) 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.

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/TXT/?uri=CELEX%3A32021R0821>. Regulation 428/2009 is available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R0428-20210101>. 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](https://www.bafa.de/DE/Aussenwirtschaft/Ausfuhrkontrolle/ausfuhrkontrolle_node.html). BAFA's Export Licensing System (ELAN-K2) is accessible here: [https://elan1.bafa.bund.de/auth/realms/Bafa-Realm/login-actions/authenticate?client\\_id=portal&tab\\_id=sK7MJ2S7Cps](https://elan1.bafa.bund.de/auth/realms/Bafa-Realm/login-actions/authenticate?client_id=portal&tab_id=sK7MJ2S7Cps).

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, 8:00am-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](mailto:ECDOEXS@bis.doc.gov).

Contact information for BIS's overseas ECOs can be found at:  
<https://www.bis.doc.gov/index.php/enforcement/oea/eco>

### **BIS Export Control Office Germany**

Tel: (+49) 69-7535 0

### **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 Regulations**

Please refer to our European Union Country Commercial Guide article on [customs regulations](#).

### **Standards for Trade**

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](#).

### **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 World Trade Organization (WTO) Members 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 does not require registration unless the user wishes to receive customized e-mail alerts. Use it to browse notifications on past as well as new draft and updated product regulations, food safety and animal and plant health standards and regulations, find information on trade concerns discussed in the WTO SPS and TBT Committees, locate information on SPS/TBT Enquiry Points and notification authorities, and 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.

Notify U.S., operated and maintained by the National Institute of Standards and Technology (NIST) since 2003 to distribute and provide access to notifications (and associated draft texts) made under the WTO TBT Agreement for US stakeholders, has reached its end of life. Per obligation under the TBT Agreement, each WTO Member operates a national TBT (and an SPS) 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 Inquiry

Point. Refer to the comment guidance at <https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> 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.

For EU CCG: Include reference to article with a video on CE Mark: <https://www.trade.gov/ce-marking>

## **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 State's [Investment Climate Statements website](#).

#### **Franchising**

U.S. businesses looking to franchise within the European Union will likely find that the market is quite robust and friendly to franchise systems in general. There are several laws that govern the operation of franchises within the European Union, but these laws are fairly broad and generally do not constrain the competitive position of U.S. businesses. The potential franchisor should take care to look not only at EU regulations, but also at local laws concerning franchising. More information on legislation relating to franchising can be found on the website of the [European Franchise Federation](#).

### *German Franchising Market*

Key to a successful market entry is finding the right partner with which to develop the market. Multi-brand franchising is still relatively unknown in Germany, but according to the [German Franchise Association](#) it will become more important in the future. Individuals/companies already in the franchise market have the expertise and financial connections to pave the way. Reaching out to these active players can greatly ease the access into Germany and provide local knowledge of the market. This can be achieved through cooperation with the industry/trade associations, franchise consultants, brokers and media channels reaching out to the appropriate industry audience. Individuals/companies already in the franchise market can also help create brand awareness that minimizes the risk for the potential investor. German business partners prefer to talk directly to the owner, not the manager. German business partners are cautious investors and prefer to see new concepts tested and proven successful in Germany before investing in them, even if a business has already been successful in its home or neighboring country. U.S. franchisors are advised to first set up a subsidiary as a corporate pilot with a German partner and then start franchising.

Germany's population and industry are decentralized and there is no one single predominant business center. It is common in Germany for franchisors (and many other business sectors) to divide the country into regions and then appoint area developers to oversee a group of franchisees. Successful market strategies consider regional differences as part of a strong national market presence.

There are many options for advertising on the German market. A selection of franchise focused sites/media include:

#### Magazines:

- FRANCHISEConnect: <http://www.avr-werbeagentur.de/>
- franchiseErfolge: [www.unternehmerverlag.de](http://www.unternehmerverlag.de)

#### Online Platforms:

- Deutsche Unternehmerboerse <https://www.dub.de/> (in German) – print and online, site advertising investment possibilities
- Franchise Pool International (FPI) [www.franchisepool.org](http://www.franchisepool.org) (in English and German) – consultant pool with listing of franchises
- FranchisePORTAL [www.franchiseportal.de](http://www.franchiseportal.de) (in German) – virtual franchise fair with listing of available franchises
- Punkt Franchise (in English and German) <https://www.punktfranchise.de> – virtual franchise fair with listing of available franchises

#### Franchise Trade Events in Germany:

- [Franchise Expo Frankfurt](#) – conference and exhibition for the franchise industry, Frankfurt, November 9-11, 2023
- [EXPO REAL](#) – Europe's largest real estate and investment trade fair, Munich, October 4-6, 2023

### **Direct Marketing**

Most German companies use direct marketing to sell their products and services. The most frequently used formats are email and online marketing, telephone marketing, and direct mail. It is important to know the pitfalls of using direct marketing as a selling tool in Germany. Data protection and privacy laws are stringent, and consumer protection guidelines and competitive advertising are also highly regulated. Companies should consult with a lawyer before raising, storing, or processing any sort of data in Germany. Other potential challenges regard the laws pertaining to unfair competition and rebates.



## **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 Bundeskartellamt 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 incl. 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 have to 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 2022, total sales were estimated at USD 141.2 billion, which translates to 11 percent growth compared to 2021. It is expected that the online population in Germany will increase from 62.4 million in 2020 up to 68.4 million in 2025. E-commerce penetration in 2022 reached 80 percent in the German market, the third highest worldwide. As a result of strict COVID lockdown measures throughout 2020 and 2021, many German consumers have increased their online purchases and bought goods like groceries and sanitary items online for the very first time. Key reasons for consumers to shop online include home delivery (69 percent of online shoppers in Germany agree), 24/7 availability (64 percent), and convenience (60 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 82 percent, with a social media penetration of 53 percent. The role of social media platforms such as Facebook, YouTube or Instagram continues to be of high importance.

## **Popular e-Commerce Sites**

The most popular online retailers in Germany in 2021 were amazon.de (net sales of USD 18.6 billion), otto.de (USD 6.1 billion), zalando.de (USD 3.0 billion), mediamarkt.de (USD 2.8 billion), and ikea.com (USD 2.1 billion). Combined, those five online retailers share 26 percent of the German E-Commerce market

## **Product Categories**

The most popular products purchased online include clothing (76 percent of online shoppers), shoes (73 percent), food & drinks (69 percent), consumer electronics (61 percent), books/movies/games (58 percent) and healthcare products (56 percent). It is further expected that toys and “Do it Yourself” (DIY) products will play an increasingly crucial role by 2025. Consumers are most price-sensitive in the clothing and food industries, whereas luxury product sales are most common for smartphones and shoes.

## **Online Payment**

When it comes to payment, the most common methods are purchase on invoice, PayPal, 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 44 percent of products purchased were returned in 2022.

## **Mobile e-Commerce**

The strong e-commerce market in Germany can be attributed to the considerable proportion of the population who owns smartphones (82 percent). In 2022, 66 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 elsewhere around the world, requires long-term commitment to market development and sales backup, especially if U.S. companies are to overcome the geographic handicap with respect to European competitors. Germans at times perceive U.S. suppliers as tending to process a U.S. domestic order before taking care of an export sale or being quick to bypass a local distributor to deal directly with its customer. Some German entrepreneurs with selective experience with U.S. companies are skeptical about their long-term commitment and after-sales support. U.S. firms entering Germany today are generally aware of the factors that make for a successful export relationship and are ready to establish a credible support network. However, U.S. firms should be ready to address any lingering doubts from prospective German clients/partners.

### **Trade Promotion and Advertising**

#### *Trade Fairs*

Few countries in the world can match Germany when it comes to leading international trade fairs. Such a reputation should be no surprise given that the trade fair concept was born in Germany during the Middle Ages. Today, Germany hosts a major world-class trade event in virtually every industry sector, attracting buyers from around the world. Trade fairs thrive in Germany because they are true business events where contracts are negotiated, and deals are consummated. U.S. exhibitors at German fairs should be prepared to take full advantage of the business opportunities presented at these events. While U.S. exhibitors and visitors can conclude transactions, all attendees can use major German trade fairs to conduct market research, see what their worldwide competition is doing, and test pricing strategies. Finally, German fairs attract buyers from throughout the world, allowing U.S. exhibitors to conduct

business here with buyers from across Europe, Asia, Africa, Latin America, the Middle East, as well as with other U.S. companies.

German trade fairs, in general, attract impressive numbers of visitors and exhibitors. This reality confirms the conviction that there is no other venue where an American company can get so much product exposure for its marketing dollar. Trade fairs also provide a U.S. company interested in entering Germany with the opportunity to research its market and the potential of its product properly before making a business decision.

Many German Trade Fairs were cancelled or postponed in 2020 and 2021 because of the COVID pandemic. However, many of these trade fairs returned in 2022, predominantly in-person events supplemented by some virtual elements.

### **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 20<sup>th</sup> Century. Although it has been modified over time, this law continues to be valid today. The law allows suits to be brought if advertising "violates 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 B2B relations.

### **Sales Service/Customer Support**

#### **Germany**

The German commercial customer expects to be able to pick up the telephone, talk 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](#)

(Federation of German Wholesale, Foreign Trade and Services)

[Verband Deutscher Maschinen- und Anlagenbau](#) (VDMA)

(German Association of Machinery and Plant Manufacturers)

[Centralvereinigung Deutscher Wirtschaftsverbände fuer 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. The electronic funds transfer (EFT, equivalent to SWIFT or wire transfers) is the most popular payment mechanism by which German importers remit payment to their U.S. suppliers and is the fastest and cheapest way to transfer funds. Current technology makes online transfers reasonably 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 antiquated payment mechanism is also passing from the scene. Cash-in-advance is also rare in German import payment.

Both private and public credit insurance are available in Germany. Euler Hermes (German), Coface (French) and Atradius (Dutch) are among the private providers (which also offer ranking and scoring services), and the main public insurer is the Staatliche Kreditversicherung (Hermes-Bürgschaften), which is administered by Euler Hermes 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 the small- and medium-sized enterprises of Germany's famed Mittelstand.

Germany's universal banking system allows the country's more than 1,679 banks and savings banks and total network of 25,800 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 is increasingly under pressure given very low interest rates, high-cost structures, growing competition from FinTechs, and increasing compliance costs as a result of new regulation and supervision. German banks have seen their interest margin narrow during the negative interest rate period that began in 2014. Banks are currently discouraging customers by charging negative rates to a growing number of depositors – corporates and private retail clients alike (depending on the bank on deposits exceeding EUR 50,000 or EUR 100,000) – and have substantially increased fees for banking services and accounts to compensate for interest rate earnings losses.

Private banks control roughly 40 percent of the market, while publicly owned savings banks partially linked to state and local governments account for 50 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 Commerzbank (fourth-largest bank), with balance sheets of EUR 1.3 trillion and EUR 477.4 billion respectively (2022 figures). Commerzbank received EUR 18 billion in financial assistance from the federal government in 2009, for which the government took a 25 percent stake in the bank (now reduced to 15.6 percent). Merger talks between Deutsche Bank and Commerzbank failed in 2019. The second largest of the top ten German banks is DZ Bank, the central institution of the Cooperative Finance Group (after its merger with WGZ Bank in July 2016), followed by KfW, Commerzbank, and then LBBW grouped among German branches of large international banks (UniCredit Bank, HVB, or ING-Diba) and regional state-owned banks (LBBW, Bayern LB, Helaba, NordLB). Germany's regional state-owned banks were among the hardest hit by the global financial crisis and continue to face major challenges to their business models. The federal government is still in the process of winding down several so-called "bad banks" composed of toxic assets of failed banks WestLB (now Portigon AG) and Hypo Real Estate. All German banks have weathered the COVID-19 pandemic well thanks to cheap central bank liquidity regulatory easing, and moratoria on corporate insolvency laws.

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. A large number of 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

Neue Mainzer Straße 52, 60311 Frankfurt am Main, Germany

Phone: +49 69 589910

BNY Mellon

Messe Turm, Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main, Germany

Phone: +49 69 12014 1025

Citigroup Global Markets Germany

Reuterweg 16, 60323 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

Silicon Valley Bank

Guiollettstraße 48, 60325 Frankfurt am Main, Germany

Phone: +49-69-7158-950

State Street Bank International GmbH

Solmsstraße 83, 60486 Frankfurt am Main, Germany

Phone: +49 -69-6677-45000

Wells Fargo

An der Hauptwache 7, 60313 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](mailto: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, particularly the U.K. and France. Although the relatively high debt levels of the German federal government and local authorities would seem to favor this type of financing, difficult economic conditions have also limited anticipated rates of return for potential project finance developers. Other 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 decision in 2011 to accelerate the phase-out of nuclear energy by 2022, the decision in June 2020 to end coal power generation in Germany by 2038 at the latest, 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**

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 would be perceived as late, and more than fifteen minutes are 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.

Appointments are made for most matters. 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.

Addressing people: We advise clients to respect formal introductions and the use of official titles, for example: Dr., Prof., Ing., among others. 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, they 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 unless they invite you to do otherwise.

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

First approach: A greeting usually consists of a smile (even when covered by a mouth and nose covering) and 'elbow bumps' or 'fist bumps' which have largely replaced handshakes as hygiene controls came into place due to the pandemic. 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 to exercise 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](#)

[Department of State Visa Website](#)

[Center for Disease Control and Prevention](#)

[CDC on Germany](#)

## Visa requirements

You do not require a visa for tourist or business stays up to 90 days within the Schengen Group of countries as a U.S. citizen. This includes 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](#).

Please review the E.U. travel restrictions which are now in place as a result of the global health crisis. You can find information and updates on the website of the [European Commission](#).

## Health Considerations

Travelers should check for updated entry requirements concerning COVID-19 Vaccination. Latest information can be found on the home page of the German state department. (<https://www.auswaertiges-amt.de/en/search?search=coronavirus>)

## Currency

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

Table: Exchange rate from EUR to USD (as of January 1 <sup>st</sup> )							
Year	2017	2018	2019	2020	2021	2022	2023
EXR	1.0795	1.2420	1.1444	1.1093	1.2136	1.1374	1.0683

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 bureaus, and currency converters provide convenient and often inexpensive currency exchange services.
- Once on foreign soil, the best means to convert currency is to use a foreign ATM or identify if your bank has ATMs or banking affiliates nearby.
- Many credit and debit card issuers allow users to purchase with no foreign transaction fees.

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

### 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.

### Transportation

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 that dot 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 which includes trains, trams and buses is generally very reliable and most locations have extensive connections and routes. The [Deutsche Bahn](#) website is the easiest way 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.

## Language

German is the official language. In larger towns and cities, many people can communicate in English, particularly in business settings. German is also an official language in the neighboring countries Austria, Liechtenstein, and Switzerland.

## Health

Good medical care is widely available. Doctors and hospitals may expect immediate payment in cash 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 on the following page ([https://www.zoll.de/EN/Private-individuals/Travel/Entering-Germany/Restrictions/Medicinal-products-and-narcotics/medicinal-products-and-narcotics\\_node.html](https://www.zoll.de/EN/Private-individuals/Travel/Entering-Germany/Restrictions/Medicinal-products-and-narcotics/medicinal-products-and-narcotics_node.html))

The situation with COVID-19 can change rapidly. Travelers must keep abreast of any [Coronavirus Entry Regulations](#) when visiting Germany. You may need to complete a [Digital Registration on Entry](#) if you are arriving from a risk area.

## 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 electronic goods, cameras, and musical instruments into Germany, we strongly recommend that you first contact the 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](#).

## 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.](#)

### **Executive Summary**

As Europe's largest economy, Germany is a major destination for foreign direct investment (FDI). Germany is consistently ranked as one of the most attractive investment destinations based on its stable legal environment, reliable infrastructure, highly skilled workforce, and world-class research and development. U.S. investment continues to account for the third-largest share of Germany's FDI after Luxembourg (first) and The Netherlands (second).

An EU member state with a well-developed financial sector, Germany welcomes foreign portfolio investment and has an effective regulatory system. Capital markets and portfolio investments operate freely with no discrimination between German and foreign firms. Germany has a very open economy, routinely ranking among the top countries in the world for exports and inward and outward foreign direct investment.

Foreign investment in Germany mainly originates from other European countries, the United States, and Japan, although FDI from emerging economies has grown in recent years. The United States is the leading source of non-European FDI in Germany. In 2021, total U.S. FDI in Germany was \$170.2 billion. Key U.S. FDI sectors include manufacturing (\$37.2 billion), chemicals (\$13.1 billion), information technology (\$12.6 billion), machinery (\$8.0 billion), finance (\$13.2 billion), and professional, scientific, and technical services (\$7.8 billion). From 2020 to 2021, total U.S. FDI in the industry sector "chemicals" grew significantly from \$9.5 billion to \$13.1 billion and in "information technology" from \$5.3 billion to \$12.6 billion. Historically, machinery, information technology, finance, holding companies (nonbank), and professional, scientific, and technical services have dominated U.S. FDI in Germany.

German legal, regulatory, and accounting systems can be complex but are generally transparent and consistent with developed-market norms. Businesses operate within a well-regulated, albeit relatively high-cost, environment. Foreign and domestic investors are treated equally when it comes to investment incentives or the establishment and protection of real and intellectual property. Germany's well-established enforcement laws and official enforcement services ensure investors can assert their rights. German courts are fully available to foreign investors in an investment dispute. New investors should ensure they have the necessary legal expertise, either in-house or outside counsel, to meet all national and EU regulations.

The German government continues to strengthen provisions for national security screening of inward investment in reaction to an increasing number of high-risk acquisitions of German companies by foreign investors, particularly from China, in recent years. German authorities may screen acquisitions by foreign entities acquiring more than 10 percent of voting rights of German companies in critical sectors, including health care, artificial intelligence, autonomous vehicles, specialized robots, semiconductors, additive manufacturing, and quantum technology, among others. Foreign investors who seek to acquire at least 10 percent of voting rights of a German company in one of those fields are required to notify the government and potentially become subject to an investment review. German authorities are committed to fighting money laundering and corruption. Federal Minister of Finance Christian Lindner (FDP) announced in August 2022 a plan to create a new agency – the Higher Federal Authority for Combating Financial Crime – to address shortcomings within the anti-money laundering system within Germany. The government promotes responsible business conduct and German Subject Matter Experts are aware of the need for due diligence.

[2023 Investment Climate Statement Germany \(full report\)](#)