

TÜRKIYE

MARKET OPPORTUNITIES

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1 COUNTRY PROFILE

Overview

Regional powerhouse characterized by a large and young population, strategic location, diverse and robust economy, well-developed infrastructure, significant buying power, and openness to global trade; challenges relate to economic stability and geopolitical tensions.

- 6th largest economy in Europe and 18th largest in the world
- Regional HQ for multinationals with global connectivity to Europe, Asia, and Africa
- Part of EU Customs Union since 1995 = tariff-free trade in industrial goods
- Skilled and cost-competitive labor force with high productivity
- Import-oriented economy (import/GDP ratio at 40%)
- NATO member since 1952



Total area: 302,535 square miles (eight times bigger than Virginia)

Population: 85.4 million

Government type: Presidential republic

Language: Turkish (official)

Capital + major cities: Istanbul (15.7 million) + Ankara (5.8 million), Izmir (4.5 million), and Bursa (3.2 million)

Currency: Turkish lira (TRY)

Average annual exchange rates (Central Bank of Republic Türkiye): TRY per USD 1

2019	2020	2021	2022	2023	2024 (Jan-June)
5,671	7,006	8,879	16,550	23,776	31,738

With a 4.0% growth rate in 2023, Türkiye was the second fastest growing economy among OECD member countries (following Croatia) and the third among G20 countries. It is expected to remain one of the fastest growing OECD members throughout the current decade, maintaining an average annual growth rate of 4%.

Key economic indicators, Türkiye

GDP nominal	USD 1,114 billion
GDP growth	2023: + 4.5 % 2024: + 4.0 % 2025: + 4.5 %
GDP per capita PPP (worldwide ranking)	USD 13,110 (69th)
Inflation	2023: 61.98% 2024: 36% 2025: 14%
Unemployment	8.4 % (2024)

Source: TurkStat, 2024

Türkiye’s strategic location at the crossroads of Europe, Asia, and the Middle East makes it a crucial hub for trade and energy transit. The country serves as a bridge between Western markets and emerging economies, which enhances its geopolitical influence.

The IMF classifies Türkiye as an upper-middle-income, mixed-market, emerging economy. The country is a leading global producer of agricultural products, textiles, motor vehicles, transportation equipment, construction materials, consumer electronics, and home appliances. It is also the **5th most visited destination in the world**.

Since 2021, Türkiye's GDP has shown steady recovery and accelerated growth, reaching its highest levels by the end of 2023. However, growth-focused financial policies, including maintaining low interest rates, have contributed to high inflation in recent years. Türkiye has an efficient and robust social security system, with social expenditures accounting for roughly 12.5% of GDP.

Manufacturing is the largest sector in Türkiye’s economy, comprising 22% of companies, followed by wholesale trade (18%) and services (17%). Agriculture plays a vital role, with half of the country’s land dedicated to farming and employing about 15% of workforce. Agriculture contributes around 10% of exports and over 5% of GDP, with more than USD 11.5 billion in agricultural subsidies budgeted for 2024.

Despite being a major food producer, Türkiye is a net wheat importer, sourcing mainly from Russia and Ukraine. The country is **the EU's fourth-largest vegetable supplier and seventh-largest fruit supplier**, with aspirations to extend the EU Customs Union Agreement to include agricultural products.

The automotive industry is an important component of the Turkish economy, ranking 4th in the EU and 14th globally in production, producing close to 1.5 million of vehicles annually.

The European Union is Türkiye's largest trading partner. The Customs Union agreement allows for tariff-free trade in industrial goods between Türkiye and the EU. Major EU markets like Germany, Italy, and France are particularly important trade partners. Post-Brexit, **the UK and Türkiye signed a free trade agreement**, ensuring continued economic ties in areas like automotive, textiles, and defense.

Türkiye and the U.S. have a long-standing strategic partnership, particularly through NATO. **The U.S. is also a key supplier of defense equipment, technology, and services.** On the other hand, Türkiye is included in **China's Belt and Road Initiative**, which has led to increased infrastructure investments and trade between the two countries. Countries like Qatar, the UAE, and Saudi Arabia are also important partners in trade, investment, and construction projects and Türkiye maintains strong diplomatic and economic ties with them.

2 ROUTE TO MARKET

This document presents five sectors that offer specific market opportunities for Virginia exporters. However, potential to conduct business in Türkiye certainly exists also beyond these five featured sectors.

Türkiye is a founding member of the OECD and G20 and is considered among E7¹ and CEE & MENA/MENAT countries. It is also a member of NATO, UN, WTO, OSCE, and IMF, which aids in the country's economic progress, policies, security, and international collaboration.

US companies can use a range of options to promote their products and services to the Turkish market.

Routes to market



US companies should benefit from local support. Market insight and connections of local representatives provide a major advantage for entering the business world and gaining market access in Türkiye.

The Ministry of Treasury and Finance various incentives and support to foreign investors such as tax reductions, customs duty exemptions, regional incentive system, tax incentives (corporate tax reduction, VAT exemption) interest support, credit guarantee fund, and double taxation avoidance agreements.

¹ E7 = Seven countries with highest economic performance in the class of emerging economies - Brazil, China, India, Indonesia, Mexico, Russia, and Türkiye; CEE = Central and Eastern Europe; MENAT = Middle East, North Africa, and Türkiye

3 TARGET SECTORS

3.1 DEFENSE AND SECURITY



Armed forces modernization

Türkiye's military modernization program, started in mid-1990s and continuing until today, is an ambitious and multifaceted initiative aimed at significantly enhancing capabilities of its armed forces. It reflects Türkiye's strategic goals of bolstering its regional influence, reducing dependence on foreign defense technologies, and building a more self-sufficient and advanced military force in the face of security challenges.



The total military modernization program investment is expected to reach USD 150 billion.

The government listed 49 modernization and acquisition projects such as upgrading tanks, developing next generation T-155 self-propelled howitzers, ACV-15 combat vehicles, modernizing F-16 fighter jets, and submarines. In addition, a wide range of projects such as **new missiles, radars, electronic warfare, communications, various weapons, ammunition and equipment, air defense systems, satellite, and space systems** will be implemented.

The Turkish Land Forces have completed the modernization of their M60T tanks, upgrading them to the **M60TM** configuration. This upgrade, under the FIRAT Project initiated in 2017, includes advanced systems such as the PULAT Active Protection System, Tank Laser Warning System, and Remotely Controlled Weapon System, among others. The TAF has also launched a comprehensive modernization program for its fleet of **Leopard 2A4 tanks**. This project, managed by the Turkish Defense Industries Agency (SSB), involves upgrading the tanks with enhanced ballistic protection and modern electronics. The initial phase includes the modernization of 81 tanks, with an option to upgrade additional 250 units.

Türkiye continues to prioritize the modernization of its **F-16 fighter jets**, which are a critical component of its air defense strategy. Additionally, Türkiye is progressing in the development of its own 5th-generation fighter, the **KAAN**, which represents a significant step towards greater autonomy in advanced military aviation.

Military ship projects include an Aircraft Carrier design phase, MİLGEM 9-10-11-12 ships (i-class frigates), offshore patrol ships, new type landing ships, new generation mine hunting ships, and national assault boats.

Türkiye’ defense budget exceeded USD 15.8 billion in 2023 (1.5% of GDP), ranking 22nd globally. Over the past decade, Türkiye's defense industry's turnover almost tripled. This growth has been accompanied by a significant rise in exports (from USD 1.6 billion in 2013 to USD 5.5 billion in 2023). Additionally, the value of defense projects in Türkiye surged from USD 5.5 billion in 2002 to USD 60 billion in 2023. This expansion reflects Türkiye's enhanced production capacity and growing international cooperation in the defense sector.

Defense industry security legislation in particular covering procurement, **government-to-government sales, funding management, cyber security, artificial intelligence, incentives, and intellectual and industrial property rights** is in place and has been evaluated to meet current needs.

Defense industry

Turkish defense industry overview			
One-third of Turkish defense companies are SMEs & two-thirds are big enterprises	Development of indigenous military equipment	Exports: 90% of Turkish defense production	Presidency of Defense Industry (SSB)

In the area of defense, relationship between Türkiye and the United States is characterized by a mix of ongoing collaboration and significant challenges, primarily shaped by geopolitical developments and Türkiye's defense procurement decisions. The partnership has been strained by Türkiye's purchase of the S-400 system from Russia, leading to its removal from the F-35 program and U.S. sanctions under the CAATSA.

Despite these challenges, the two countries continue to cooperate where possible, particularly through the Strategic Mechanism aimed at managing and improving their complex relationship. **Türkiye continues to work with the United States on the modernization of its F-16 fleet.** This includes the procurement of new F-16 Block 70 aircraft and application of the Viper upgrade to its existing F-16 Block 40/50 airframes. These efforts are aimed at extending the operational life of these jets until at least 2050. Despite tensions over the F-35 program, the U.S. remains engaged in supporting Türkiye’s F-16 capabilities, which are critical for maintaining the country’s air defense.

With the USD 23 billion F-16 deal, Türkiye's ongoing defense sector transformation, from drones to high-tech components to artillery shells, is an integral part of the U.S. defense supply chain and the strength of the NATO alliance. The U.S. and Turkish defense sectors partner to increase mutually critical munitions stockpiles. In Texas, the Department of Defense is building three munition lines purchased from a Turkish defense company. Thanks to the US-Türkiye defense partnership, 30% of the 155mm rounds produced in America by Turkish defense company will come from these factories.

Türkiye's naval modernization efforts, including its indigenous submarine and frigate projects, continue to see some level of interaction with U.S. defense firms, particularly in areas of advanced technology and system integration. Additionally, Türkiye's development of unmanned aerial vehicles (UAVs) and its broader aerospace ambitions remain as areas with potential, though complicated, room for cooperation with the U.S.

Türkiye's membership in NATO provides an advantage, especially when compared to other countries in the East, Far East and MENA (Middle East North Africa) regions. Factors that make Türkiye one of the most popular defense markets is its compliance with NATO standards and mastery of processes.

Many Turkish defense companies collaborate with U.S. companies via technology transfer, joint production, and marketing. Four specific examples of US-Türkiye cooperation are provided below.

aselsanwww.aselsan.com

Cooperating with Lockheed Martin on various projects in the field of radar and electronic warfare systems and Roketsan company on missile technologies and rocket system.

**ROKETSAN**www.roketsan.com.tr

With Raytheon, Aselsan is increasing its technological know-how and production capacity in air defense systems, Roketsan carries out technology transfer and production cooperation in the field of air defense and missile systems.

**TAI – TUSAS** (www.tusas.com)

Technology transfer and joint production activities with Boeing in the aviation and space industry; TAI plays an important role in the production of some aircraft parts for Boeing. TAI cooperates with Sikorsky on the joint production and modernization of Black Hawk helicopters. The T70 helicopters produced in Türkiye are a result of this cooperation.

**FNSS** (www.fnss.com.tr)

Prominent Turkish defense company that has a well-established partnership with BAE Systems, a major British multinational defense, security, and aerospace company. This partnership focuses primarily on the production and development of armored combat vehicles and personnel carriers.

Türkiye hosts several major global events for the defense, aerospace, and technology sectors:

- **Istanbul Airshow 2024** (www.istanbulairshow.com) - September 26-28, 2024
- **Teknofest** (www.teknofest.org) – Aviation, Space and Technology Festival - October 2-6, 2024
- **International Defense Industry Fair (IDEF)**, (www.idef.com.tr) - July 22-27, 2025

3.2 CIVILIAN AEROSPACE



Türkiye's civil aviation sector turnover is expected to reach USD 37 billion in 2024.

MARKET BREAKDOWN (2023)

Number of aircraft: 1,856 (668 airplanes, 431 air baloon, 207 air taxi)	Airplane passengers: 214 million	Airports freight: 4,211,507 metric tons
Airline seat capacity: 122 million	Airline companies: 13 Airports: 59	Employees: 263,000 (14,884 pilots)

Türkiye's convenient location and its significant investments in airport infrastructure make it an outstanding international aviation hub with connections to 130 countries & 342 destinations.

Türkiye ranks sixth in Europe with an average of 3,613 daily flights (the leader is the UK with 6,122 average daily flights).

THY A.O. (Turkish Airlines), the largest airline and flag carrier in Türkiye, plays a crucial role in civil aviation expansion and ranks third among European airlines in terms of the highest number of flights in 2024, averaging 1,519 flights per day.

Istanbul Airport, the only airport in the world's top 20 list to have recovered and exceeded its pre-pandemic level by 37%, ranks **second in Europe** after Frankfurt for hub connectivity, with an average of 1,435 flights per day, and **third in the world**. According to ACI's World Airport Traffic Forecast, Türkiye is expected to be among the top 15 fastest-growing countries with a compound annual growth rate (CAGR) of 4.6% up to 2040, while no other European country is included in this ranking.

Türkiye is a member of the International Civil Aviation Organization (ICAO), European Civil Aviation Conference (ECAC), European Organization for the Safety of Air Navigation (EUROCONTROL), D8 Civil Aviation Working Group, and JAA-TO.

A cooperation agreement between Türkiye's Directorate General of Civil Aviation and the U.S. FAA (Federal Aviation Administration), signed in 2022, covers the process of importing aircraft and other products, where the design organization and type certification are under the FAA's responsibility, into Türkiye, as well as the continued airworthiness support for these products after import. The scope of this cooperation is expected

to expand in the future to include mutual recognition in critical aviation safety areas, such as airworthiness and maintenance. This agreement is also significant for Türkiye as it marks the beginning of further collaboration with the FAA in the coming period.

Türkiye has received support from the U.S. in the civil aviation sector via its involvement with Women in Aviation International (WAI), an Ohio-based organization that promotes the training of women aviators globally. WAI awards over USD 1 million in scholarships annually and offers special courses for women executives. The primary goal is to achieve a 25% female employee ratio in the civil aviation industry by 2025, up from the current 20%, as set by IATA.

Türkiye's civil aviation investment projects include **computer software and hardware renewal, digitalization, maintenance, repair, and renovation.**

TAV Airports will make a **USD 275 million** investment to increase terminal capacity at Medina Airport, which served 9.4 million passengers in 2023. The investment is planned to be completed within three years.

Competition and cooperation go hand in hand in the Turkish aerospace industry:



The Turkish Engine Center is a joint venture with Turkish Technic specializing in CFM56 and V2500 engine overhaul and repair. The Turkish Engine Center unites the long histories of engineering and maintenance excellence of its parent companies. The facility located at Istanbul's Sabiha Gokcen Airport performed more than 400 engine overhauls.



Kale Pratt & Whitney Aircraft Motor Industry Inc., established in 2010 (51% Kale Group and 49% Pratt & Whitney partnership), is involved in the manufacture and assembly of engines and body parts for aircraft.



Turkish Nacelle Center established in 2010, upon signing of Joint Venture Agreement between Turkish Technic Inc. and Collins Aerospace Aerostructures Business Unit, provides repair, maintenance, overhaul, and modification of thrust reverser and nacelle systems for almost all types of engine platforms being used on commercial aircraft.

Upcoming events:



Sept. 21-22, 2024

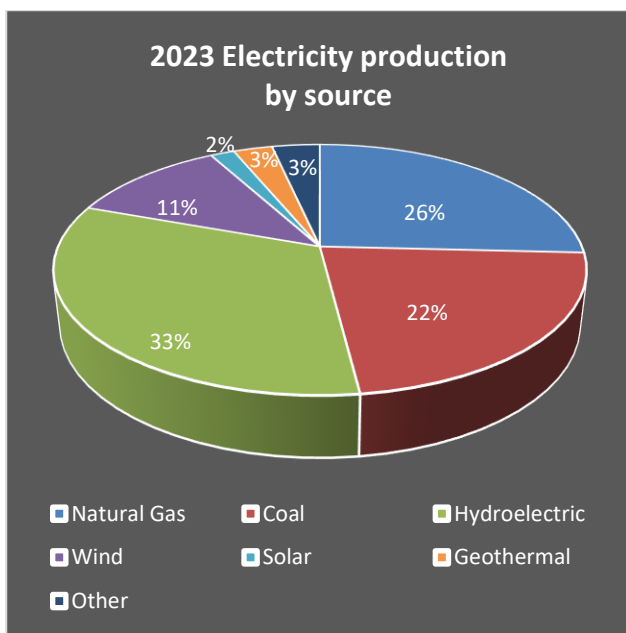


Sept. 26-28, 2024

3.3 ELECTRIC POWER



Türkiye is a net **energy importer**. Its import dependence has been the main driving force behind the formulation and implementation of new policies and investment models to commission local and renewable energy resources. Türkiye boasts a substantial renewable energy potential, and utilization of this potential has been on the rise over the last decade. As of the end of 2020, **hydro, wind, and solar resources** constituted the vast majority of the country’s renewable energy resources, accounting for 30.9 GW, 8.8 GW, and 6.7 GW of the total installed capacity respectively.



In 2023, total electricity consumption increased by 0.23% to 328.8 TWh and production decreased by 0.17% to 324.8 TWh. The share of **renewable energy sources in total production amounted to 42.5%**.

Between 2025 and 2035, the transportation sector is expected to be the fastest-growing in terms of electricity consumption within the energy sector. An annual growth rate of 27.8% (CAGR 2020 to 2035) is anticipated in electricity consumption during this period (**380 TWh in 2025, 455 TWh in 2030, and 510 TWh in 2035**). The number of electricity generation plants increased to 13,077 (84% solar, 6% hydroelectric, 5% other, 4% wind) in 2023. **The share of electricity from renewable sources is expected to reach 47% by 2030.**

Türkiye overtook Poland to become the second largest coal-fired power generator in Europe, with a record of 118 TWh. Meanwhile, Türkiye’s dependence on imported coal for power generation continued to increase.

Türkiye imports 99% of its natural gas supplies, sourcing from Russia, Azerbaijan, and other countries.

In October 2021, Türkiye signed the **Paris Agreement** and subsequently announced its commitment to achieve an economy with **Net Zero Greenhouse Gas emissions** by 2053. The National Energy Plan summarizes perspective on targets that need to be met until 2035 in order to secure the achievability of 2053 vision. Compared to 2012, greenhouse gas emissions are estimated to decrease by 41% by 2030.

The Ministry of Energy and Natural Resources has projected a relatively limited hydrogen capacity for Türkiye by 2030, estimated at approximately 2 GW, which is modest compared to EU countries. However, with the development of local electrolyser production and hydrogen transmission and storage capabilities, Türkiye anticipates achieving 70 GW of installed electrolyser capacity by 2053.

Despite an increase in installed thermal energy capacity projected for the period of 2025-2035, a decrease in the load factor is observed. This reduction in thermal energy use is expected to lead to a corresponding decrease in carbon emissions from electricity generation.

By 2035, Türkiye's nuclear capacity is projected to be around 7.2 GW, assuming additional plants are built beyond Akkuyu. However, this is based on existing and planned projects. The claim that nuclear energy will account for nearly 30% of Türkiye's installed capacity by 2053, representing a 35-40 GW increase, is ambitious. It would require the construction of multiple large-scale nuclear plants over the next few decades. Current plans do not clearly indicate such an aggressive expansion, as they focus on completing Akkuyu and potentially developing other sites like Sinop and İğneada.

“Green Energy” stood out as an important focus area of the **HIT-30 High Technology Incentive Program**. In order to increase renewable energy investments in Türkiye, grants of up to USD 8,000 per megawatt will be given to cell investments for the establishment of a minimum production capacity of 5 GW in solar energy. This package will reach a total of USD 2.5 billion. Manufacturing support for products in the field of wind energy, such as critical components and offshore turbines is planned in order to build a local wind energy brand. A total of USD 1.7 billion has been allocated for these investments.

Major Players



Electricity Generation Corporation (**EÜAŞ** www.euas.gov.tr), with an installed capacity of 21,243 MWe, ranks first among Turkish electricity producers, accounting for approximately 20% of Türkiye's total electricity production. Its generation resources include hydroelectric power plants (13,892 MWe), natural gas power plants (4,735 MWe), domestic coal power plants (2,424 MWe), and wind power plants (17 MWe).



TEİAŞ (www.teias.gov.tr) - the state-owned monopoly that owns and operates the electricity **transmission** system. It is also responsible for operating the balancing power market and the ancillary services market.

Several ventures have been investing in building EV charging network stations. The legal framework was approved, and EMRA (Energy Market Regulatory Authority) started to distribute licenses for charging stations in May 2022 (Charging License Requirements: 3.7 million TL/MWh equity investment, establishment of 50+ charging units in at least 5 different cities within 6 months). As of June 2023, there were 7,501 charging points for commercial electric vehicles. **A total of 132 firms were licensed to operate an EV charging network in 2023.** EV sales reached 10,028 in the first six months of 2023 (up from 8,210 in 2022 and 2,849 in 2021). BMW and Mercedes Benz were the leading EV brands in Türkiye. TOGG (a national initiative), Tesla, and various Chinese brands entered the Turkish EV market in 2023.

3.4 MEDICAL TECHNOLOGIES & HEALTH IT



Türkiye is a sought-after destination for medical tourism, attracting patients from Europe and the Middle East who seek high-quality healthcare services at more affordable prices.



Türkiye aims to attract 2.2 million visitors for healthcare purposes by 2024, which contributes to growth in the medical technology market.

Healthcare system

The healthcare system consists of both public and private services. All residents registered with the Social Security Institution (SSI) are entitled to free healthcare through universal public health insurance, known as **General Health Insurance (GSS)**. In 2023, 10.5% of the population had private health insurance and 4.2% opted for Supplementary Health Insurance.

Healthcare spending accounted for 4% of GDP in 2023. Of this, 66.4% was allocated to treatment, while 33.6% covered medicines, prescription service fees, and other items, totaling USD 16.8 billion. Additionally, 6.6% of the Central Government Budget, altogether amounting to USD 22.2 billion, was allocated to the Ministry of Health for 2024.

There are **1,555 hospitals** (922 by the Ministry of Health, 68 university, and 565 private) **with 264,969 beds; 1,455 are general hospitals, 20 of them are city hospitals** (large, comprehensive healthcare facilities located in urban areas, providing a wide range of medical services), 25 Ophthalmology, 18 Physical Treatment and Rehabilitation, 17 Obstetric and Child, 10 Psychiatry, 9 Chest Diseases, 5 Child Diseases, 4 Cardiovascular Surgery, 3 Oncology, and 3 Bone Diseases. Türkiye has 3.1 beds per 1,000 inhabitants (very close to the US with 2.8 beds/1,000 inhabitants).

A shift from public to private healthcare, strongly recommended by the OECD, is actively encouraged by the Turkish government. As a result, a new and dynamic private healthcare market is emerging, which has transformed the structure of healthcare providers to become more demand-driven and patient-oriented.

Türkiye ranks first in Europe for adoption of health information systems. The National Health Information System of Türkiye (NHIS) is a nation-wide infrastructure for collecting and to some extent sharing patient "Electronic Health Records (EHRs) since 2009. The MoH uses its centrally stored healthcare data to forecast the population's health and to analyze illness patterns. (www.e-saglik.gov.tr).

In addition, the Ministry of Health has been investing heavily in the digitization of healthcare over the past five years by supporting and encouraging business endeavors to launch web-based and cloud platforms, as well as smart hospitals. This focus on digital health infrastructure presents a significant niche opportunity for U.S. investors, particularly those specializing in health IT, telemedicine, and advanced medical technologies.

Medical equipment

In 2023, Türkiye's public sector, primarily managed by the General Directorate of Public Hospitals, accounted for 79% of Türkiye's healthcare expenditures including a significant portion allocated to medical devices.

Türkiye stands out as an attractive medical equipment market being the first in MENA and second in CEE regions. According to Fitch Solutions, Türkiye's **medical device market** is projected to reach **USD 2 billion in value in 2024**, growing to USD 2.6 billion by 2026.

80% of domestic demand for medical equipment is covered by imports. Although Türkiye has increased its domestic production in some areas (e.g. medical imaging devices, patient monitors, and laboratory equipment), it remains dependent on imports for various advanced & high-tech medical devices. Medical equipment is mainly supplied from the United States, Germany, China, Malaysia, and Ireland.

MRI, CT scanners, PET scanners, and other advanced medical imaging devices, robotic surgical systems, telemedicine, and advanced devices in genetics and molecular biology supplied by US companies can help Türkiye modernize its healthcare sector and provide more effective healthcare services through R&D collaborations and technology transfers. This growing demand presents a significant opportunity for U.S. companies to expand their presence in the Turkish market by supplying cutting-edge medical technologies and fostering long-term partnerships in the healthcare industry.

<u>CONSUMABLES</u> 4% CAGR (2021-2026)	<u>DIAGNOSTIC IMAGING</u> 4% CAGR (2021-2026)	<u>ORTHOPAEDICS & PROSTHETICS</u> 4% CAGR (2021-2026)
<ul style="list-style-type: none"> • 2nd fastest growing product area by 2026 (USD 646mn) • Import supply: 80% • Ostomy, first aid, suture products 	<ul style="list-style-type: none"> • A fast-growing product area by 2026 (USD 457mn) • Import supply: 95% • Production bases & partners to enter USD 6 billion market supported by Industry Collaboration Project 	<ul style="list-style-type: none"> • The fastest growing product area by 2026 (USD 2,347mn) • Import supply: 80% • Electro-mechanic suppliers & hip and knee replacement

Medical Devices are subject to conformity assessment procedures to ensure compliance to the new harmonized EU regulations (EU 2017/745 MDR and EU 2017/746 IVDR) provisions before placing them on the market.

Turkish Medicines and Medical Devices Agency (TITCK – www.titck.gov.tr) is the regulatory body.

3.5 INFORMATION AND COMMUNICATIONS TECHNOLOGY



In 2023, the ICT market increased by 34% to USD 33 billion, with 51% attributed to Information (Hardware, Software, Services) and 49% to Communication Technologies (Electronic Communication, Hardware). **It is forecasted to achieve an annual growth rate (CAGR) of 9.3% from 2024 to 2029.** In 2023, a 4% growth was recorded. The software market's CAGR is estimated at 6.9% from 2024 to 2029, leading to a market volume of USD 0.9 billion by 2029. Since the early 2000s, Türkiye has attracted close to USD 19 billion in international investment, with employment in the sector surpassing 213,000. Today, nearly 50% of ICT sector employment is in R&D, and 70% of those employed are under the age of 35.

Key areas include artificial intelligence, industrial cloud platforms, cyber security, modernization of old/legacy systems, virtual reality, augmented reality, mixed reality, metaverse, blockchain, decentralized finance, NFT, Web 3.0, hyperautomation, and sustainable technology.



Technology development zones

In 2023, 97 Technology Development Zones were established in 62 provinces (15 Istanbul, 11 Ankara, 5 Kocaeli and 4 Izmir). There are 445 foreign or foreign-partnered companies, 2,662 incubators, 1,951 companies with academic partners, and other companies, totaling 10,275 active entities with 108,360 employees; 14,678 ongoing and 54,291 completed projects.

In 2023, USD 2.3 billion was allocated from the central government budget for R&D activities.

The country is home to many successful software companies such as Trendyol, Getir, and Yemeksepeti who have contributed to the creation of a strong software development ecosystem by attracting investments from global companies such as Google, Microsoft, and Amazon.

Türkiye presents a high-potential destination for companies wishing to invest in the IT sector. The country plans to make significant investments to popularize 5G technology, with its fiber network expected to expand to approximately 2 million kilometers. The resulting impact could contribute USD 19 billion, or 2.2% of GDP,

annually until 2030. In the long term, R&D efforts will also be initiated on 6G technology. **Smart city applications** will be implemented in Türkiye's major cities. Within the scope of these projects, innovations will be made in areas such as smart traffic management, energy efficiency, smart buildings, and digital services. **Digital transformation offices** will be created to guide and support the digital transformation processes of the public and private sectors.

As the ICT sector is considered a priority sector by the Turkish government, various **initiatives** have been taken to promote investments. The greatest indicator of these efforts is the **R&D Law**, entailing the government's support areas in R&D and introducing an incentives package. The incentives package includes **corporate tax exemptions, VAT exemptions, social security premium support, and more.**

The HOT-30 High Technology Investment Program aims to produce 65-nanometer and smaller chips in Türkiye. With USD 5 billion available, including capital contributions and grant supports, the production of chips needed in areas such as automotive, white goods, electronics, defense, and aviation is planned (www.hit30.sanayi.gov.tr). The goal is to create 80 gigawatt-hour battery production capacity in Türkiye. Incentives including grant support of up to USD 6,000 per megawatt-hour will be provided for the development and production of batteries, which are critical for the electric vehicle and energy storage sector until 2030 so Türkiye can become a high-tech production base.

Türkiye's ICT sector presents a range of promising opportunities for U.S. companies, particularly in areas that are directly tied to the ongoing digital transformation of the country:

- **Health informatics and digital health** – Türkiye invests heavily in modernizing its healthcare system, with a growing need for advanced health IT solutions such as telemedicine platforms and smart hospital technologies to enhance its healthcare infrastructure.
- **Cybersecurity** - With a rapid expansion of digital infrastructure across the country, ensuring the security of these systems has become a top priority. This creates substantial opportunities for U.S. firms specializing in cybersecurity, including threat detection, network security, and data protection, to offer their services and technologies in Türkiye.
- **Cloud computing and data centers** – As more businesses and government agencies in Türkiye transition to cloud-based operations, demand for cloud services is increasing. U.S. companies that provide infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) are well-positioned to tap into this expanding market.
- **Telecommunications** – With Türkiye actively working to expand its 5G network and upgrade its overall telecommunications infrastructure, this push for advanced connectivity offers opportunities for U.S. telecom companies to provide the necessary equipment, network solutions, and expertise to support Türkiye's ambitions in deploying 5G technology.
- **Adoption of artificial intelligence and machine learning** across various industries is on the rise. U.S. companies that develop AI-driven solutions can find a receptive market in Türkiye, especially in sectors like finance, healthcare, and manufacturing, where AI is being leveraged to improve efficiency and decision-making.
- **Smart city development** offers U.S. companies a prime opportunity to propose innovative applications.