



CBI
Ministry of Foreign Affairs

CBI Trade Statistics:

Electronics and Electrical Engineering

Introduction

Exporters of Electronics and Electrical Engineering (E&EE) products from developing countries (DCs) will find opportunities in mature Western European markets that are characterised by their strong technological advantage and high R&D investments in automation, automotive, electronic lighting and energy application industries. The automotive, automation, lighting, medical, and energy industry are among the latest investment-rich application industries for E&EE. In the long term, DC exporters will benefit from the growing importance of Asian and other developing countries in the global production of E&EE and international trade. The near-shoring trend signals a growing importance of E&EE re-exports through trade hubs such as Germany, the Netherlands and the UK.

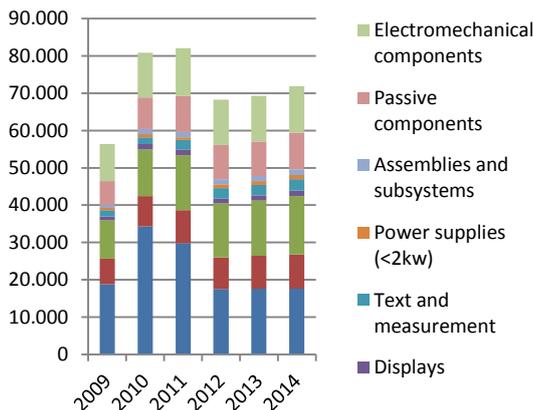
Management summary

The European economy and industry showed slight signs of recovery in 2014, after a sluggish economy slowed production, consumption and trade in electronics and electrical engineering (E&EE) products in Europe in 2013. Electronic products with a total value of € 174.6 billion were imported into Europe in 2014; about 30% of these imports came from developing countries. European exports in this sector were worth € 140.2 billion in 2014, 66% of which were represented by intra-European sales. Ongoing innovation and high R&D investment in the automotive, automation, energy, electronic lighting and medical industries will drive the demand for electronics and electrical engineering products in the long term. Near-shoring (the location of manufacturing plants in less developed European countries in Southern and Eastern Europe) will drive intra-European trade. DC exporters should consider supplying the largest Western European markets, such as Germany, France, Italy, and the UK, with electronic components and customised electronic assemblies and solutions. Low-priced, labour-intensive electronic solutions should do well as introductory products on the European market. Smaller markets in Europe can also be reached through the major trade hubs such as Germany, the Netherlands and the UK.

Consumption

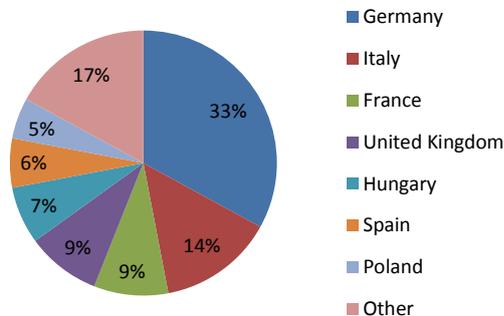
Through the penetration of new markets and the growing share of electronics in current applications, the electronics and electrical engineering market will reinforce its position in Europe in the short and long term. Not only in the energy, lighting, automation and automotive application industries, but also the increasing investment in the medical industry will be among the rising opportunities for electronic components' suppliers.

Figure 1: EU apparent consumption* of E&EE, value in € million



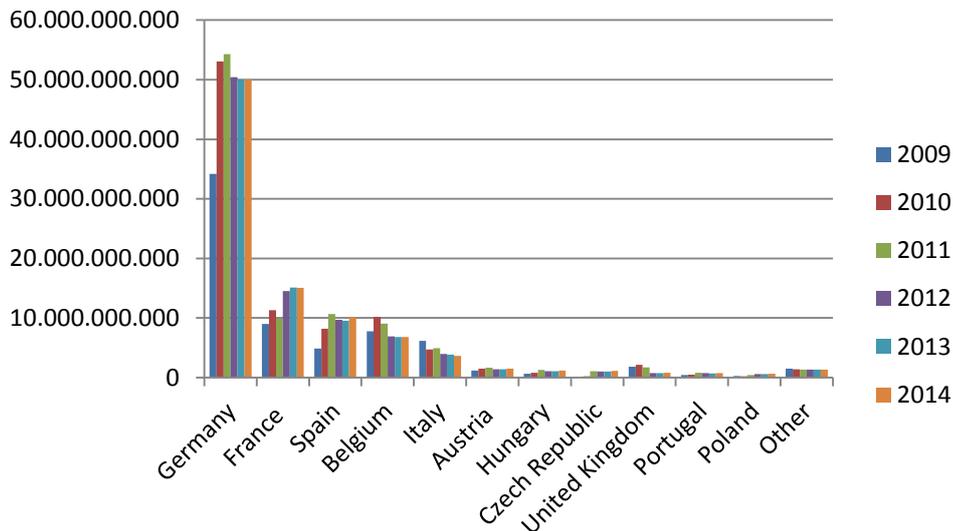
*Apparent consumption (Production + Imports - Exports) Source: Eurostat Source: Source: Eurostat Prodcom, 2014 extrapolated (2015)

Figure 2: EU apparent consumption* of E&EE in 2014, in %



*Apparent consumption (Production + Imports - Exports)
Source: Eurostat Prodcop, 2014 estimated (2015)

Figure 3: EU consumption* of E&EE, volume in billion units



*Apparent consumption (Production + Imports - Exports)
Source: Eurostat Prodcop, 2014 extrapolated (2015)

Interpretations and Opportunities

The European electronics and electrical engineering market experienced hard times in 2013 due to a slow-paced economy in the leading Western European countries. 2014 showed a slight recovery. Semiconductors, which are widely used in numerous applications including energy, automotive, healthcare and other industrial segments, did well in 2014 Europe-wide, showing single-digit growth driven by sales in Germany, France and the UK. Displays and test & measurement products displayed double-digit percentage growth. The penetration of new markets and the growing share of electronics in current markets will strengthen the European E&EE market in the short and long term. Only relocation of the production of finished goods outside Europe may have an adverse effect on the sales of electronic components and benefit other production countries.

Tips:

- Target mature markets from Western Europe with the biggest demand for E&EE within Europe.
- It is best to target smaller Southern and Eastern European countries through large trade hubs in Western and Northern Europe.
- Be aware of the high risk entering countries with negative GDP forecasts such as Greece.

(Source: OECD)

Despite a 2% sales decline in electronic components in 2014, Germany remained the key market for E&EE, benefiting from a technological edge, strong R&D and innovation in automotive, automation, energy, electronic lighting and other application markets. Research in the lighting and medical industry will be one of the central research themes in the next

few years Europe-wide, thus becoming another sector with growing opportunity for electronic component suppliers. (For further trends and opportunities in the European E&EE market, see CBI's 2015 report on [Trends in Electronics and Electrical Engineering](#)).

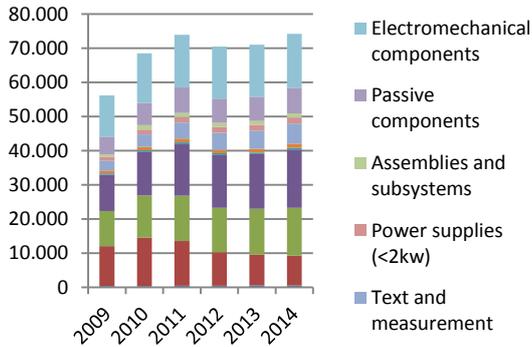
Tip:

- Familiarise yourself with the latest trends and ongoing innovations in electronics and electrical engineering. Depending on your production capabilities, invest into innovation, product customisation and start targeting new application markets such as the energy and medical industries.

Production

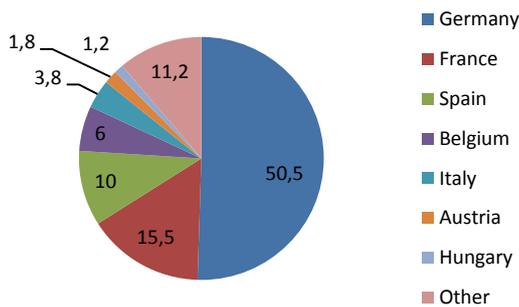
The automotive, automation, lighting, energy and medical industries are set to drive Europe's production of electronics and electrical engineering, in particular professional solutions and finished goods. DC exporters will have opportunities to enter the European market with offerings of various electronic components and customised electronic assemblies.

Figure 4: EU+EFTA* production of electronics and electrical engineering, value in € million



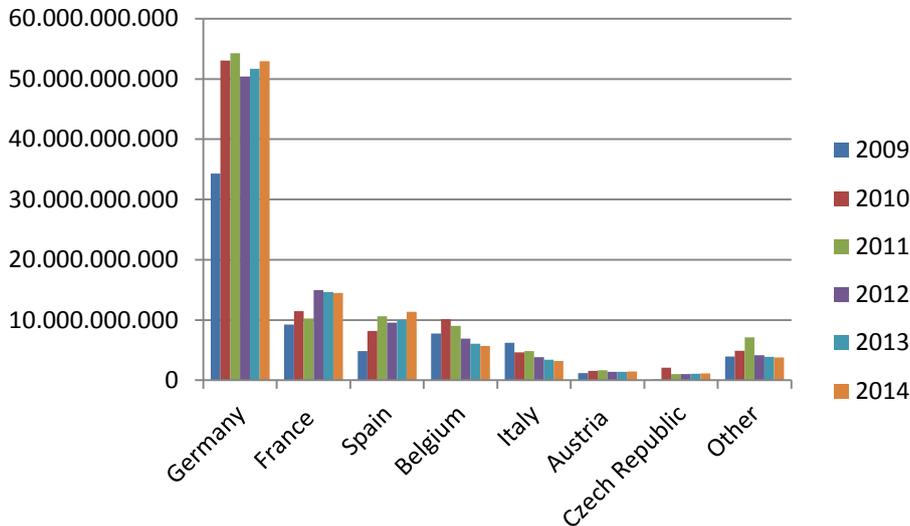
* Excludes data on Luxembourg, Switzerland, Iceland, Malta, Cyprus, Latvia and Liechtenstein
 Source: Eurostat Prodcom , 2014 extrapolated (2015)

Figure 5: Leading producers of electronics and electrical engineering in EU+EFTA*, 2014, in %



* Excludes data on Luxembourg, Switzerland, Iceland, Malta, Cyprus, Latvia and Liechtenstein
 Source: Eurostat Prodcom, 2014 extrapolated (2015)

Figure 6: EU+EFTA* production of electronics and electrical engineering, volume in billion units



*Excludes data on Luxembourg, Switzerland, Iceland, Malta, Cyprus, Latvia and Liechtenstein, Turkey
 Source: Eurostat Prodcop, 2014 extrapolated (2015)

Interpretations and Opportunities

Insecurity in the European market was still high in 2014. This led to stagnation in the production of electronics and electrical engineering by leading European companies. Electronic design, a relatively low-volume professional production solution, did well in 2014, while most product groups showed drops in production volume and value. The production of power supplies, test & measurement equipment and electronic assemblies held up well, reflecting the European advantage in the production of finished goods as opposed to electronic components (Source: ZVEI). The production of electronic components in the period 2015-2020 will be driven by the automotive, automation, lighting, energy and medical industries.

Tip:

- Enter European markets with better-priced proposition for labour intensive electronic solutions. Consider supplying the largest Western European markets such as Germany, France, Italy, the UK, with electronic components, but also with customised electronic assemblies and solutions.

The decline of production in Europe is frequently driven by the production shift to lower-cost regions. The importance of Asian countries (excluding China) and other developing countries will continue to outpace developed countries such as Japan and European countries. (Source: Decision Etudes & Conseil consultants)

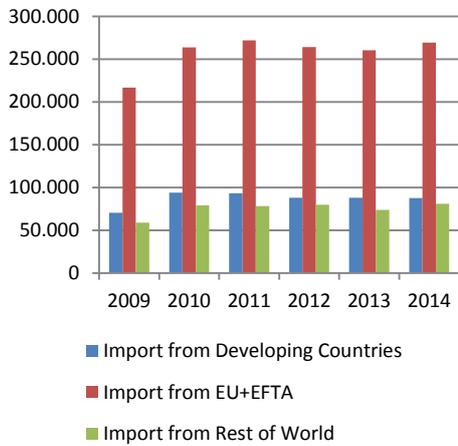
Tip:

- Consider approaching European peers' local manufacturing units in developing countries. Approvals from the European headquarters of the target manufacturers will be essential to supplying the manufacturing units outside Europe.

Import

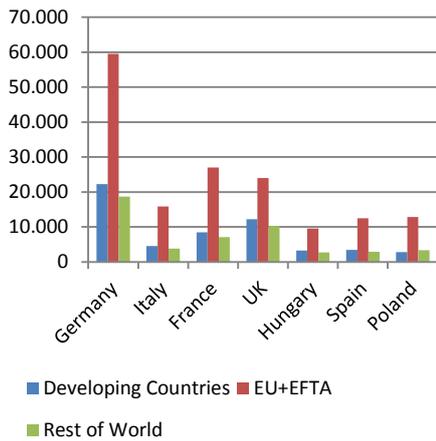
The European economy was sluggish in 2013 and 2014, but international trade is expected to recover in the short term. In the long term, production and international trade in electronics and electrical engineering with Asia (excluding China) and other developing countries is set to overtake trade with historically developed regions such as Japan and European countries.

Figure 7: EU+EFTA imports of electronics and electrical engineering, value in € million



Source: Eurostat, 2014 extrapolated(2015)

Figure 8: Leading importers of electronics and electrical engineering by region, value in € million in 2014



Source: Eurostat, 2014 GTAI/Eurostat(2015)

Figure 9: Share and growth of electronics and electrical engineering imports of the leading developing country suppliers to EU+EFTA, 2014, in %

Leading DC suppliers	Share in Imports, 2014	CAGR* (2009-2014)
China	44%	7%
Malaysia	4.5%	5%
Costa Rica	0.1%	34%
Philippines	1.4%	5%
Thailand	1.7%	2%
Tunisia	1.5%	9%
India	1%	0%
Mexico	1.5%	4%

Compound annual growth rate

Source: Eurostat, 2014 estimated (2015)

Interpretations and Opportunities

The economic environment in Europe is not currently favourable to trade in electronics and electrical engineering. After a 2.2% drop in imports in 2013, imports grew again by around 3.5% in 2014. EU initiatives to reinforce domestic production of certain product groups generated a slow shift of production back to European countries, in particular for embedded systems. There will, however, be no impact on the major product groups, such as active components and electromechanical components, or on some smaller product groups.

Tip:

- Analyse your production capabilities and the demand trends for different product groups in electronics and electrical engineering in Europe. Understand the potential of electronic components in specific applications and gather information on the key trends in target markets to create a unique buying proposition (see BI [Trends E&EE](#)).

Germany, the UK, the Netherlands, France and Italy are the major importers of electronics and electrical engineering, what is unlikely to change in the next 2-3 years. Though smaller in imports value, Ireland, Malta, Romania, Croatia and two of the Baltic States (Latvia and Lithuania) saw the fastest growth in imported electronics and electrical engineering, driven by a production growth and/or the economic recovery of these countries.

Tip:

- Consider cooperation both with the biggest European markets such as Germany, the Netherlands and the UK, and with rapidly developing but smaller European markets such as Croatia, Romania, and other Southern and Eastern European countries.

Due to a growing importance of the production shift or outsourcing to lower-cost countries, imports from countries such as Costa Rica (the key partner country for US manufacturers) and Tunisia (the key partner country for European manufacturers) have recorded a significant growth in 2009-2014. Decision Etudes & Conseil consultants foresee a further growing importance of Asian countries (excluding China) and other developing countries in the production of electronic components, driving the international trade in the upcoming years. The production share of electronic components in global and developed economies such as Japan and Europe will decline, as the focus on lower-volume customised solutions has not compensated for the growing production in Asia. Approvals in European headquarters for global supply to these companies will be essential.

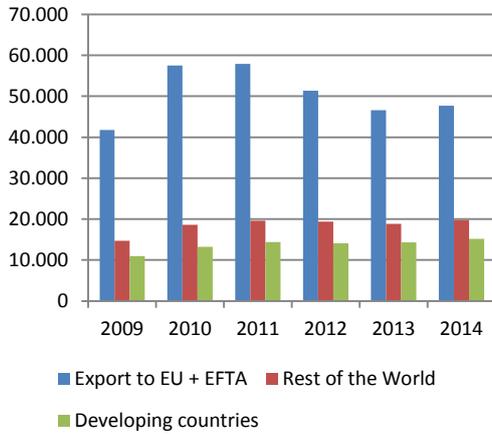
Tip:

- Continue developing your technological know-how, production capacity, and work on best-price offers to grow your import share to Europe.

Exports

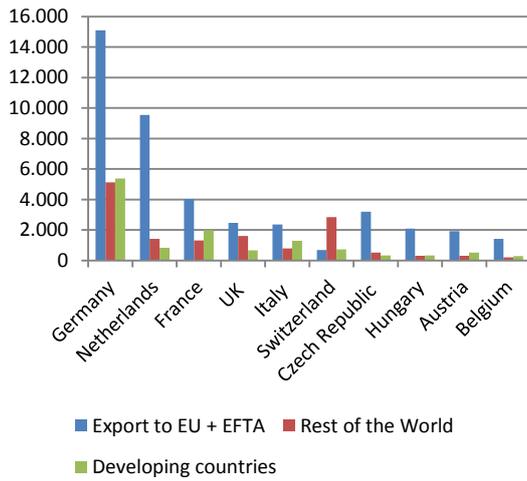
DC exporters should pursue opportunities through cooperation with the main European trade hubs such as Germany, the Netherlands, Belgium and France. Despite the stagnation in intra-European trade, market experts foresee a growth in the importance of E&EE re-export driven by a near-shoring trend.

Figure 10: EU+EFTA exports of electronics and electrical engineering by region, value in € million



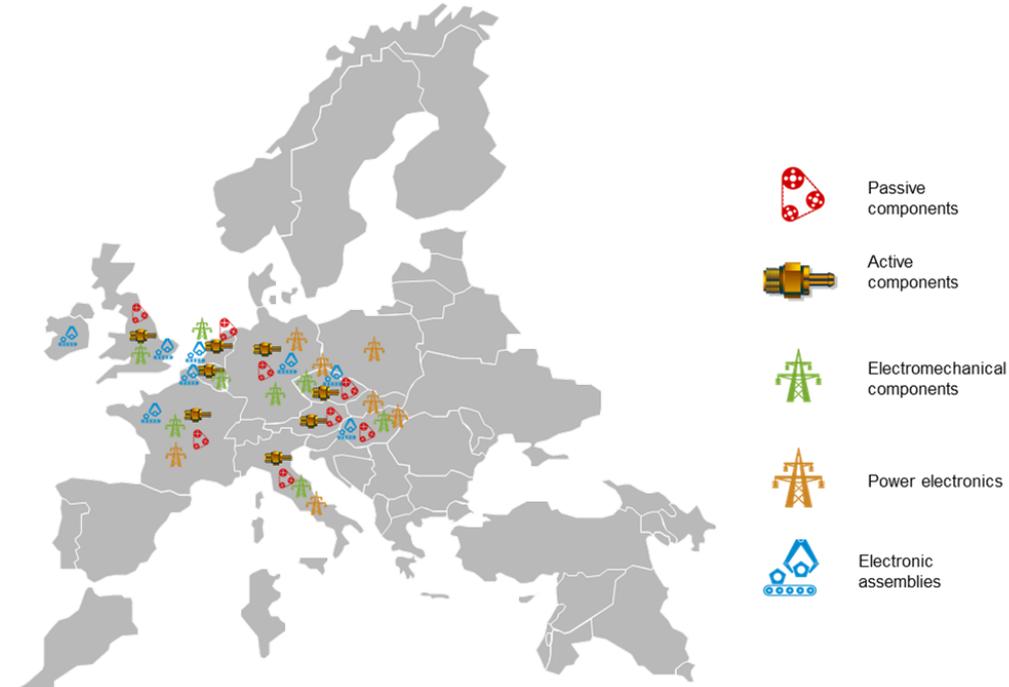
Source: Eurostat, 2014 extrapolated (2015)

Figure 11: Leading exporters of electronics and electrical engineering, 2014, value in € million



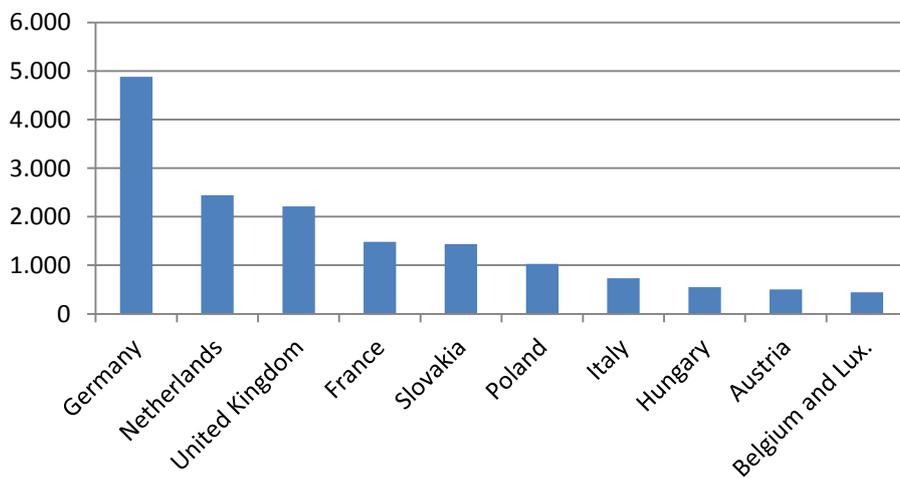
Source: Eurostat, 2014 GTAI/nso (2015)

Figure 12: Trade-hubs of electronics and electrical engineering, 2013



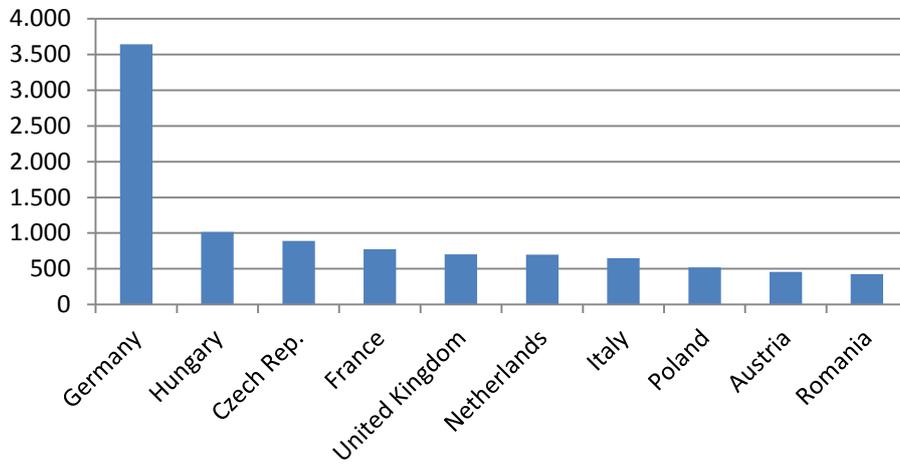
Source: Eurostat (Updated in April, 2014)

Figure 13: Main destinations of exports of active components in the EU, 2014, value in € million



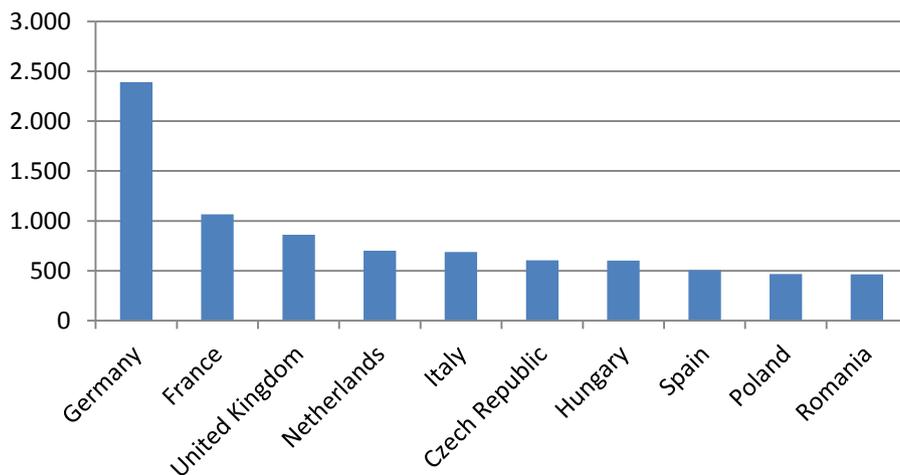
Source: Eurostat (2015)

Figure 14: Main destinations of exports of passive components in the EU, 2014, value in € million



Source: Eurostat (2015)

Figure 15: Main destinations of exports of electromechanical components in the EU, 2014, value in € million



Source: Eurostat (2015)

Interpretations and Opportunities

Economic instability in Europe caused total exports to decline by 1.7% in 2013, while 2014 showed a reverse trend with 3.25% growth in overall exports. Economic recovery in countries such as Spain and the UK is promising. Intra-European trade also shows signs of recovery, with low single-digit percentage growth rates. Intra-European trade accounts for around 65% of total exports of electronics and electrical engineering. Germany, France, the UK, Italy, the Netherlands, Belgium and Austria are some of the key trade hubs for active, passive and electromechanical components. These products are exported to destinations such as Sweden, Finland, Cyprus, Ireland, Malta and other European countries. The increasing importance of near-shoring will drive intra-European trade in the short term.

Tip:

- Target the key trade hubs in Europe, i.e. mature countries such as Germany, the Netherlands, France, the UK, Belgium and Italy. By collaborating with trade hubs, developing country exporters can indirectly reach out to other smaller, but just as important markets.

Main sources

- Eurostat, URL: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>
- Eurostat ProDeveloping Countryom, URL: <http://epp.eurostat.ec.europa.eu/portal/page/portal/prodevelopingcountryom/introduction>
- German Electrical and Electronic Manufacturers Association ZVEI, URL: <http://www.zvei.org>
- Decision Etudes & Conseil, URL: <http://www.decision.eu/>
- Distributors' and Manufacturers' Association of Semiconductor Specialists, URL: <http://www.dmass.com/>
- The European Semiconductor Industry Association (ESIA), URL: <http://www.eeca.eu/esia/home>
- Organisation for Economic Co-operation and Development (OECD), URL: <http://www.oecd.org>

More information

CBI market information: Promising EU export markets.

- EU Expanding Exports Helpdesk - <http://exporthelp.europa.eu> - go to 'trade statistics'.
- Eurostat - <http://epp.eurostat.ec.europa.eu/newxtweb> - statistical database of the EU. Several queries are possible. For trade, choose 'EU27 Trade Since 1995 By CN8'. Use the guide 'Understanding Eurostat: Quick guide to easy comext' (<http://epp.eurostat.ec.europa.eu/newxtweb/setuphelp.do?keepsessionkey=true>) for instructions.
- International Trade Statistics - <http://www.trademap.org> - you have to register



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