



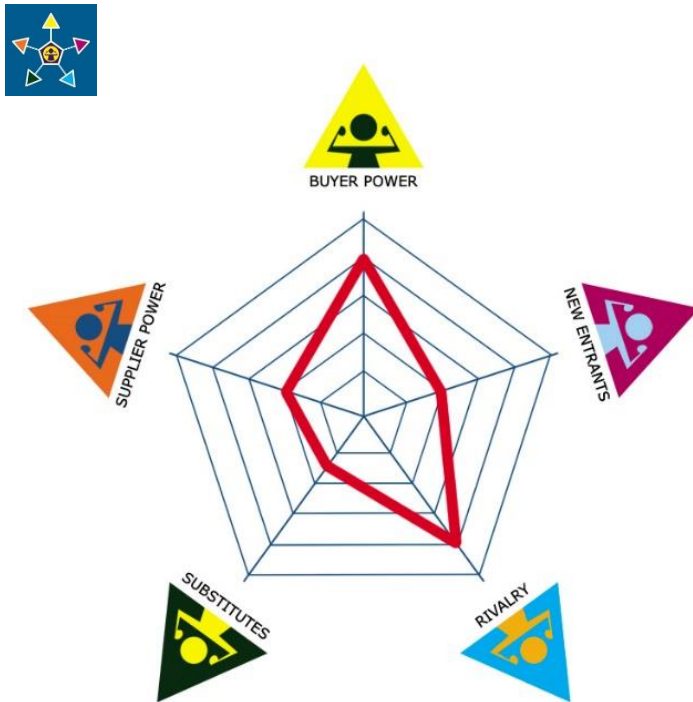
CBI
Ministry of Foreign Affairs

What competition do you face on the European Electronics and Electrical Engineering market?

Introduction

Competition in the European electronic and electrical engineering (E&EE) market and within the value chain is very dynamic. Nevertheless, exporters from developing countries have opportunities to enter the European market using competitive value propositions. Depending on the segment on which they focus and the supplier's production capacity, developing country exporters may decide either to enter Europe with low-price high-volume products or with highly customised value-added products. Cooperation with value chain members and co-development with original equipment manufacturers (OEMs) and start-ups can help to reduce entry costs.

Figure 1: Competitive forces shaping the Electronics & Electrical Engineering market



Market entry

European buyers are looking for reliable partners whose products comply with all the necessary requirements and who have a competitive value proposition to offer. Due to recent technological developments and the speed of innovation in many electronics and electrical engineering applications, innovative and high quality products for niche markets offer the best opportunities for new entrants to this sector. Successful innovations offer for example a high level of integrated functions that replace a number of devices that were needed before. Beyond this, a low price is always a competitive option keeping in mind that the ability to supply in terms of quality, volume, specification and time are prerequisite.

As an example, Samsung and Chinese manufacturers have successfully benefited from their expertise and experience in manufacturing LED screens and displays and have started moving into other lighting application markets such as home lighting. In this way they have developed a very competitive offering challenging European manufacturers such as Osram and Philips.

Moderate entry barriers

New entrants' products must comply with the relevant European statutory requirements, which is a basic necessity for all exporters of electronics and electrical engineering products. In this way exporters demonstrate product quality, durability and safety. Besides costs for certification, the developing country exporters will incur additional entry costs, such as tariffs, that must be included in the product final price calculation.

Tip:

- Learn about all the relevant buyer [requirements](#) for your products at the CBI Market Intelligence platform. Apply for relevant certificates before market entry. Consult the [ITC Market Access Map](#) for more detailed market access conditions and tariffs per product group as well as export destinations within in Europe.

New entrants need to stand as trustworthy partners and have a competitive proposition to offer. Partnering with new entrants might imply additional costs to European players in the form of product testing, for example, and this is why a buyer looks for trustworthy partners. Partner reliability may impact a buyer's willingness to switch to new market entrants.

Tips:

- Capitalise on the importance of pricing and offer competitive solutions to European companies.
- Demonstrate transparency, honesty and cultivate trust in order to generate business with European buyers. Build a good reference portfolio for your potential clients that demonstrates long-term partnerships with global companies.

Buyers look for a value proposition. If developing country exporters cannot produce high volumes at low cost, it is better to concentrate on product customisation. This can serve as a unique selling proposition (USP) to compensate for slightly higher costs.

Tip:

- Approach European manufacturers and offer customised products. Trade fairs can be good venues for making the right contacts. Technology and open innovation platforms are gaining momentum in Europe and may present a good opportunity for a new partnership. Make sure that you have done the necessary research and understand the market, so that you can meet the demand of European manufacturers for customised products.

New entrants can focus on niche markets to lower entry costs if they are not competitive in major market segments. Reasons for a lack of competitiveness can be diverse: cost-wise, production capacity-wise, innovation-wise, supply chain-wise. The rising importance and share of electronics in many different applications (such as those used in the automotive, lighting and telemedicine sectors) will create opportunities for new entrants specialising in those niche markets. Many application segments are still fast growing, such as that of LEDs for public lighting and traffic lights.

Tips:

- Improve your know-how and find a new market niche. Develop your technological- and innovative capacities to allow you to participate in future markets such as electric vehicles; monitor which technologies are becoming outdated and reposition your manufacturing to follow future trends (see [CBI Trends for Electronics and Electrical Engineering](#)).
- Yet, outdated technologies can be a profitable niche. Large manufacturers regularly switch to new technologies as they are driven by innovation. This leaves customers behind that have not switched technology and depend on support in regards to spare parts.

Buyer power increases. In 2016 new entrants have to be aware of the increasing buyer power. This comes down to the consolidation of the number of approved suppliers by manufacturers. They strive to reduce costs and complexity of the supply chain management. At the same time the market segment of buyers undergoes a consolidation process itself, increasing the size of companies through mergers and acquisitions and reducing the number of companies, which increases the power of buyers.

Tips:

- Increase your production capacities to help meet larger purchasing volumes of larger buyers and to realize cost reduction in regards to achieving economies of scale.
- Work on the improvement of your supply chain management as reliability in terms of delivery is a key factor when dealing in an environment with increased buyer power.
- Strive for customization, which can be a crucial benefit when facing strong and demanding buyers.

Product competition

Product competition between standardised and customised electronic components is intensifying. Whereas standardisation offers pricing advantages, customisation gains in respect of technological and functional advantages. Highly customised products are an excellent opportunity for SMEs with limited production capacities to stay competitive in the market. Electronic components' manufacturers are advised to take note of innovative products that may become future substitutes for the current electronic components range. For more information about markets for specific products, consult our [studies](#).

An overall low level of substitutability

The competition between standardised and customised products has intensified. Notwithstanding the ongoing standardisation process at certain levels of the value chain, electronic component customisation is a competitive approach to market entry for market players with smaller capacities and therefore higher production costs. Customised electronic components allow for more targeted functionality. In some applications, customised components have the potential to replace mass production entirely through, for example, customised mechanical dimensions or specifications, values and tolerances.

Tips:

- Emphasise the advantages of customised electronic components in your sales pitch. If you have high-volume production capacities, pitch using a low product price.
- Minimise your costs by securing raw materials and provide and develop proficiency in high-volume production for standardised components at a competitive price. For highly customised components, production costs can be minimised through more efficient production processes and effective resource planning;
- Differentiate your product and customise components for fast-growing application sectors, such as automotive, automation, healthcare, homecare and security, in order to diversify your client base.

Innovation drives product competition. New innovative products can be differentiated through the use of different materials - innovative, sustainable, or special materials that enhance system properties and performance, and reduce the carbon footprint. An example is transparent, lightweight and flexible material for conducting electricity (such as GraphExeter) as a substitute for indium tin oxide (the primary conductive material used in electronics). Another example is a topological insulator, a material that enables the free flow of electrons across its surface with no loss of energy.

Tips:

- Keep track of possible product substitutes and threatening or promising innovations, and evaluate whether your product can compete with them in terms of price and quality;
- Consider investigating the use of innovative materials for electronic components, especially if they are sustainable, have a low carbon footprint and are abundant in your production region. Stay on top of trends and innovations.

Company competition

In order to have a strong market position, developing country exporters should specialise in customised products, avoid a negative image associated with the company or the materials used, and develop a unique selling proposition. Special functionality, product quality and service reliability are often more important to the European buyer than the product price.

Strong competition from other countries

China is the leading supplier of standardised electronic components. There is a high degree of rivalry between the developing country suppliers in the European electronics and electrical engineering industry. Meanwhile, the supply side of the market is mostly controlled by high-volume suppliers from China.

Tips:

- To stay competitive in comparison to high-volume Chinese suppliers, specialise in customised products.
- Partnerships with more consolidated exporters to Europe, including Chinese ones, can be advantageous in terms of undertaking the first steps towards export. Through such partnerships the developing country exporters will save on investment costs related to searching for contacts and researching the market and also secure a broader market reach.

European buyers try to avoid countries with a negative image. There is some mistrust in Europe towards products made in China, due to the occasional controversy caused by unsafe materials or products and the perception of lower product quality.

Tips:

- Some buyers have made bad experiences with suppliers from China. They reported bad product quality due to a high error rate of around 40%. Take this example as a chance and work on error rate of lower than 5%.
- Clearly highlight the quality level of your products and the safety of the materials used.
- Avoid cooperation with companies that are known for creating controversy. Certified quality, safety and security by recognized institutions in Europe such as [TÜV](#) (Embedded Systems) are an important step towards achieving trustworthiness. Be transparent in regards to your quality management for potential partners.
- It is advisable to be [TÜV certified](#), especially when entering the German market, as this demonstrates high quality and compliance with safety standards. Certification is quite expensive, but may prove to be worthwhile.

The offering must stand out from the large number of suppliers with a similar product offering. To be able to stand out in the market, suppliers of electronic components need to differentiate themselves by means of high quality and innovative-, customised- and improved solutions.

Tip:

- Make sure that your product portfolio has one or more USPs, such as high quality, highly customised or niche products. Assurance of good quality and timely delivery is often more relevant to European buyers than a lower price, as claim costs and negative publicity can easily outweigh initial price differences. Ensure that you have access to a reliable supply chain.

Strong competition in the supply chain

In a market with strong buyer power and heavy competition from first-tier suppliers, development country exporters will benefit from targeting buyers lower in the supply chain such as second-tier suppliers. Suppliers of unique products have good opportunities in respect of supplying the OEMs directly or through first-tier suppliers (also check CBI information on [market channels and segments for Electronics & Electrical Engineering](#)).

Start-ups, fast developing countries and new application markets are all potential new buyers for electronic components suppliers, as these can be more easily accessed than OEMs and first-tier suppliers. Better conformity with end-customer needs, product differentiation and production cost controlling is the best way to build on supplier power.

The low differentiation in electronics and electrical engineering drives the consolidation and the vertical integration of suppliers and elevates competition between large electronic conglomerates and SMEs.

- The integration of raw materials suppliers by conglomerates such as Samsung Electronics puts up additional entry barriers to SME suppliers from developing countries. This puts price pressures on smaller manufacturers and developing country exporters, and as a result the European buyer has become price sensitive and avoids the high costs of switching suppliers. In this situation, suppliers delivering high volumes have a competitive advantage, as they supply several buyers.
- Europe, and in particular Western Europe, is home to many SME manufacturers and larger industrial players that have specialised in niche segments and are avoiding merger and acquisition (M&A) strategies. These market players offer the best opportunities for the developing country exporters, and they are best approached with customised products.

Tips:

- Consider a market entry lower in the supply chain (further down from the OEMs), as players positioned lower in the supply chain are not as locked into strategic partnerships as OEMs and their direct suppliers, and are more likely to switch suppliers.
- Work on your pricing strategy in order to be competitive and try to diversify your customer base in order to become less vulnerable to OEM and tier-1 buyer power.
- Differentiate your products from other suppliers, possibly by introducing innovative properties or by adapting to the current trends (such as using sustainable materials and introducing energy saving and a minimal carbon footprint.)

High-tech platforms constitute an accelerated route for approaching start-up buyers. High-tech platforms bring together companies, research institutes, universities and organisations in order to define common directions and agendas in innovation, share costs and face common challenges. New European electronics and electrical engineering start-ups are gaining strength by joining technology platforms, forming alliances and clusters for developing innovations, sharing knowledge and dealing with suppliers and the supply chain in general. These platforms are present in many European countries (for example, the Netherlands and Germany) and regions and can encompass several applications. Examples for [platforms](#) are: [HighTechNL](#), [Microcentrum](#), [HighTechGründerfonds](#), [Gründerszene](#) (webpage only in German), [HighTechStartbahn](#).

Tip:

- To reach out to start-ups in electronics and electrical engineering, consider entering the market through innovation clusters and platforms and sharing ideas, solutions and products on these high-tech platforms. Information and contact data about platforms and networks you find online.

Shift of buying decisions with increasing demand in the developing country markets. In the long run, European buyer power might decline in relative terms, as a result of the fast development of the developing countries as both producers and consumers (see [CBI Trends for Electronics and Electrical Engineering](#)).

Tip:

- Consider developing sales relationships with those developing countries that are fast-growing as consumers of E&EE products, as they might be the leading innovators in the years to come.

Despite the rising production costs, high-volume suppliers provide strong competition in the market.

Traditional suppliers (mainly from China) with a high-volume capacity are experiencing a rise in production costs due to increasing labour costs. Notwithstanding this situation, their power might still be very relevant due to the expertise and economies of scale they have developed.

Tip:

- Plan your production and innovation process in a way that will allow you to reach a number of important global platforms. This will increase your potential customer base, keep you more in line with the end-customers' needs and decrease your costs.

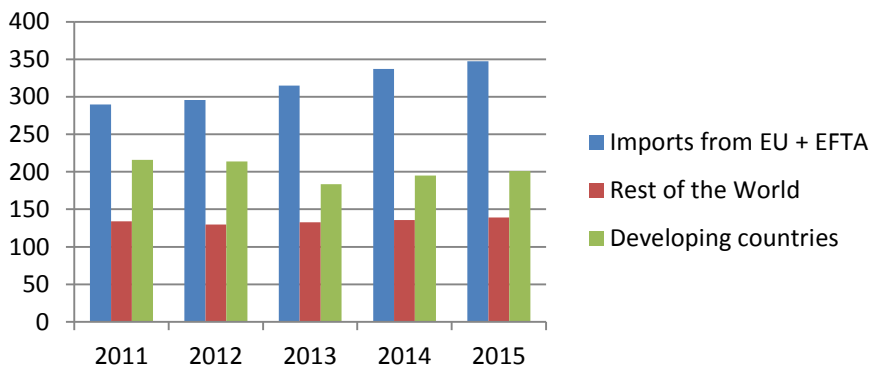
What competition do you face when entering the European market?

Intra-European trade has remained the most important type of trade within the EU in 2015 and 2016 and will do so throughout the upcoming years. The Netherlands have traditionally been a strong trade hub, mainly due to their large sea port Rotterdam. Most of the electronics and electrical engineering products are still manufactured in Europe for the European market. Manufacturers and buyers benefit from the single market (freedom of movement of goods, capital and human resources), low logistic costs, short distances and reaction times between suppliers and customers as well as a high level of productivity in regards to production, production costs and highly qualified employees. This is part of the competition suppliers from developing countries face.

Tip:

- Develop a product offering that provides answers to why a European customer should contract you - how do you overcome competitive advantages of suppliers based in Europe or Asia?

Figure 2: EU+EFTA imports of electronics and electrical engineering products, value in € billion



Source: ZVEI (2016)

In regards to trade of electronics and electrical engineering products the environment in Europe is ambivalent. While Germany and the UK as large economies in Europe demonstrate steady growth in the low one-digit area between 1 and 4%, France and Italy are struggling. Both economies are faced with a set of structural challenges as regards their labour market and economic policy which decrease their competitiveness and productivity in regards to production.

Tip:

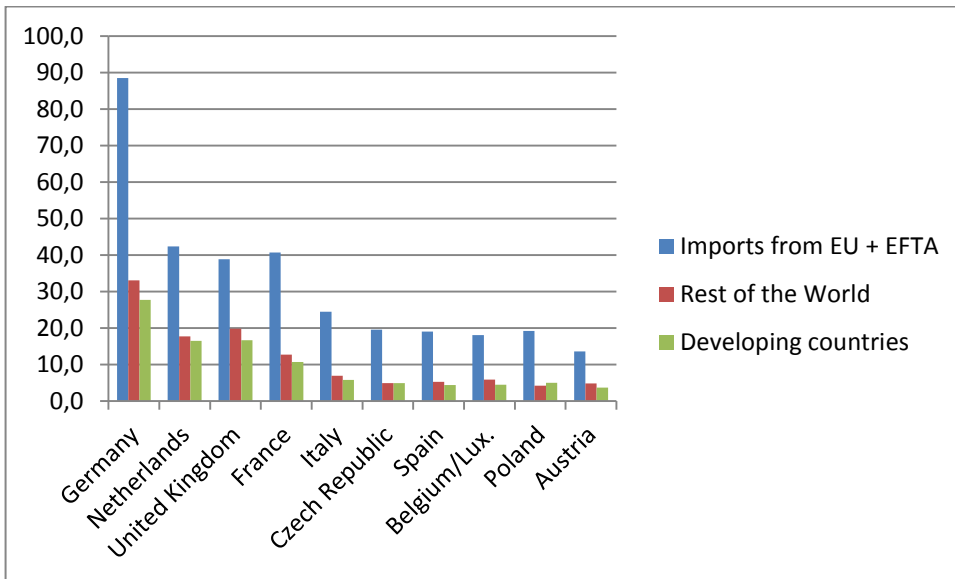
- Analyse the demand trends for different product groups in electronics and electrical engineering in the European countries. Understand the potential of electronic components in specific applications and gather information on the key trends in target markets to create a unique buying proposition (see [Trends Electronics and Electrical Engineering](#)).

Germany, the UK, the Netherlands, France and Italy are the major importers of electronics and electrical engineering products, and it is unlikely that this will change in the next 2-3 years. Though smaller in imports value, Ireland, Malta, Romania, Croatia and the Baltic States saw the fastest growth in imported electronics and electrical engineering products, 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.

Figure 3: Leading importers of electronics and electrical engineering products by region, 2015, value in € billion



Source: ZVEI (2016)

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 2011-2015. Costa Rica could also increase exports to Europe.

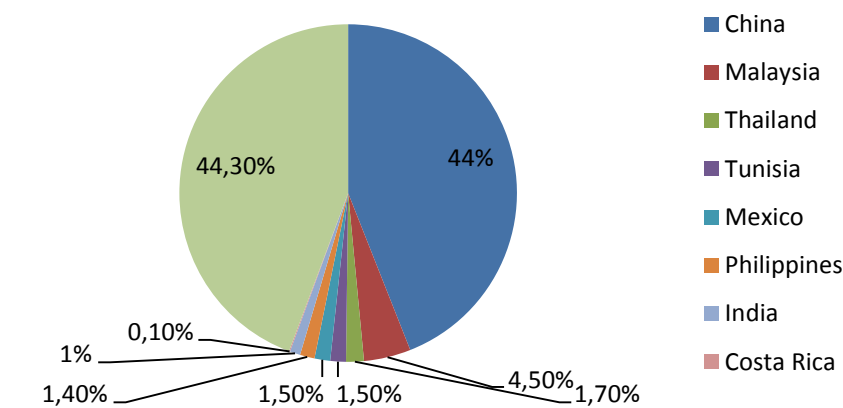
A further growing importance of Asian countries (excluding China) and other developing countries in the production of electronic components driving the international trade, is foreseen for the upcoming years.

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 operating in Europe will be essential for suppliers from developing countries.

Tip:

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

Figure 4: Share of electronics and electrical engineering imports of the leading developing country suppliers to EU+EFTA, 2014, in %



Source: Eurostat, estimated (2015)



CBI Market Intelligence

P.O. Box 93144
2509 AC The Hague
The Netherlands

www.cbi.eu/market-information

marketintel@cbi.eu

This survey was compiled for CBI by CBI market researcher Klaus Dellmann
in collaboration with CBI sector expert Günther P. Fandrich

Disclaimer CBI market information tools: <http://www.cbi.eu/disclaimer>

September 2016