

ETAs in Global Markets: a data-based analysis

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Foreword

This report is part of the study “ETAs in Global Markets: a data-based analysis” carried out by CSIL for the European Organisation for Technical Assessment (EOTA).

The authors are grateful for the helpful insights, the data and the support provided in the study implementation from the EOTA staff, particularly to Mr. Sergio Vazquez Jimenez. The authors are responsible for any remaining errors or omissions.

Quotation is authorised as long as the source is acknowledged.

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ABOUT CSIL

Established in 1980, CSIL is an independent research and consulting company specialising in **applied economic research**, with specific expertise on **market research, industrial policy and SME economics**. In over 40 years of activity, CSIL has gained a strong reputation for trustworthiness and intellectual leadership. CSIL has become an established research centre supporting private and public decision-making. **In the field of industry studies and market research, CSIL provides an in-depth analysis of the business climate in specific industrial sectors**, including the construction sector. It gives private companies, business associations, trade associations, consortia and fairs valuable information on market development, consumer behaviour, supply and demand structures, import and export flows, market shares of leading companies and distribution structures in different sectors and countries.

For the public sector, CSIL has also been involved in several **analytical and evaluation studies** implemented for different services of the European Commission, the European Parliament and the European Investment Bank. In the field of evaluation of legislative initiatives, in 2017, CSIL led the study ‘**Cross-border trade for construction products**’ (for DG GROW), aiming to provide a comprehensive and unbiased understanding of the trends of cross-border trade of construction products over the period 2003-2015 and the factors influencing these trends, among which the role of the Construction Products Regulation (CPR) (305/2011/EU) and harmonised European technical specifications (hENs). CSIL is also the author of the report “**EADs and ETAs: Added value to the construction sector**”, prepared for EOTA in 2020.

In the implementation of these studies, CSIL proved a strong track record in the **development and application of innovative and sound methodologies** for socio-economic, technological, industrial, and sectoral analysis and evaluation.

Executive Summary

Objectives

EOTA has long-standing experience with collecting data on its core activities, i.e., the development of European Assessment Documents (EADs) and the Europe-wide coordination of European Technical Assessments (ETAs) issuance. EOTA data has also been enriched with quantitative and qualitative data from stakeholder surveys on several occasions.

This study constituted an exercise to assess the feasibility and potential benefits of systematic collection and analysis of ETA-related data from external sources on a regular basis. The focus was on collecting and **combining data from EOTA's internal monitoring system and data from publicly available, regularly updated sources**. The objective was to gather data at a sufficient degree of disaggregation to allow analyses at the product area level defined in Annex IV of the Construction Products Regulation (Regulation (EU) No. 305/2011). The ultimate goal of the exercise was to gain knowledge about the **role of the ETA route in global trade** and to investigate how to increase the relevance and visibility of ETAs worldwide.

The main report provides an analysis of the information that could be gained based on linking EOTA's internal information system with general trade and economic relevance data, e.g., on production, number of companies, covering the global construction industry. This summary presents the key results.

Main findings

- An increasing number of manufacturers around the world are showing interest in the ETA route by requesting ETAs. Between 2013 and 2022, **1,347 ETAs** were **issued to non-EU manufacturers, representing 12% of the total number of ETAs** issued at the global level. These figures suggest that ETAs are relevant for manufacturers outside the European Union (EU).
- The number of **ETAs issued in non-EU countries varies widely across countries and product areas**. This finding suggests that strengthening the ETA route outside the EU will require an internationalisation strategy diversified by country and product area.
- At the **PAC level**, most ETAs were requested by non-EU manufacturers producing **fixings** (PAC 33) and **fire stopping, fire sealing, fire protective or retardant products** (PAC 35). Evidence also shows that more ETAs for fixed firefighting equipment (PAC 10) and geotextile, geomembranes, and related products (PAC 8) were issued to manufacturers outside the EU than among the EU27 Member States. **Reinforcing and pre-stressing steel for concrete and ancillaries, post-tensioning kits** (PAC 16) and **structural metallic products** and ancillaries (PAC 20) are product areas **showing increasing demand for ETAs from non-EU manufacturers**.
- At the **country level**, most ETAs issued in non-EU countries were requested by manufacturers located in **Australia** (81 ETAs) as well as in **Asian countries** such as China (73 ETAs), Taiwan (63 ETAs), and India (53 ETAs), and in the **United States** (50 ETAs). Moreover, manufacturers in **China** and **Brazil** have requested an **increasing number of ETAs**, and to a lesser extent, so have manufacturers in **India** and the **United Arab Emirates**.

- Outside the EU, ETAs are usually requested by manufacturers located in countries characterised by **large product markets** and **strong trade relationships** with EU Member States. This finding suggests that the more a country plays a key role in the global market or trades with EU Member States, the more likely it is that ETAs are requested by manufacturers from this country.
- Regarding PAC 4 – Thermal insulation, PAC 9 – External cladding, PAC 13 – Structural timber products, PAC 33 – Fixings, and PAC 35 – Fire-stopping products, **China**, the **United Kingdom**, and the **United States** represent the **main non-EU players** in terms both of market size and the strength of existing trade relationships with EU Member States. Manufacturers in these countries have also requested a significant number of ETAs.
- **Egypt** shows **growth rates in the total production** of PAC 4 – Thermal insulation, PAC 9 – External cladding, PAC 13 – Structural timber products, and PAC 35 – Fire stopping products, and a steadily rising number of **active companies**. **Morocco, Saudi Arabia, South Korea, and Vietnam** show growth rates in their **trade relationships** with the EU Member States. Therefore, manufacturers operating in these countries might become interested in requesting ETAs to access the EU market so as to increase their market shares in EU Member States and in their home markets.
- Some countries are also known to look to the **ETA route as a best practice** (e.g., Australia), which leads to a higher number of ETA requests than can be explained by indicators such as product market size or trade volumes.

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1. Introduction

1.1. Background and objectives

Over the last years, the European Organisation for Technical Assessment (EOTA) has consolidated its position as a key actor in the achievement of the objectives of the Construction Products Regulation (Regulation (EU) No. 305/2011). By providing a framework for issuing European Technical Assessments (ETAs) based on European Assessment Documents (EADs) for construction products, EOTA allows EU and non-EU manufacturers of construction products, particularly innovative and non-standard ones, to bring their products to the European market with CE marking.

To support the Organisation's activities, EOTA has developed a rich internal information system with data-related content on the ETAs and EADs developed. Currently, EOTA is considering to further expand this information system to be prepared to address new requests and demands from Technical Assessment Bodies, EU Institutions, business associations, and manufacturers that might arise in the coming years. This study aims to support EOTA in investigating and understanding how the integration of new data, already available and regularly updated in external data sources, into the EOTA internal information system could be exploited to enrich the evidence available and guide the decision-making processes. More specifically, the present study shows how combining EOTA data with international trade data could help address questions, such as:

- *Which other non-EU countries could be potentially interested in the ETA route?*
- *With reference to non-EU countries, in which product areas would it be beneficial to raise awareness of the ETA route? For which product areas the ETA route is already attracting interest from non-EU countries?*

1.2. Methodology

1.2.1. Overall methodological approach and structure of the report

To achieve the study's specific objectives, the study has been structured around four main steps, summarised in the Figure below.

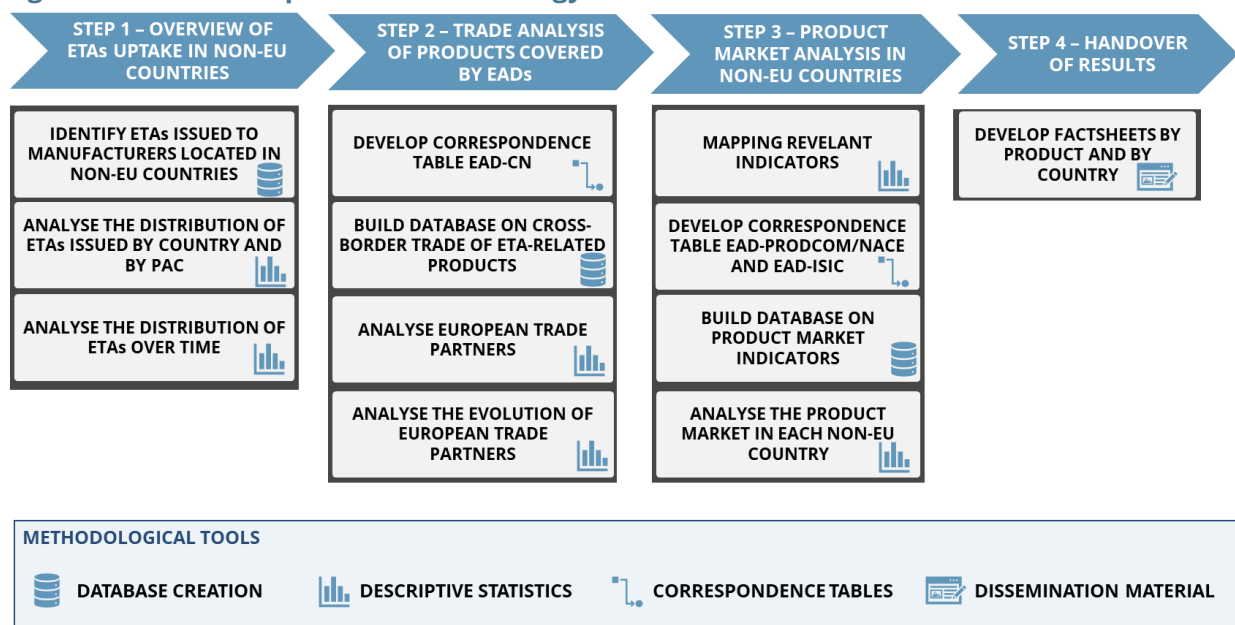
After providing an overview of the ETA route's uptake in non-EU countries (Step 1), which is presented in *Chapter 2*, the report uses trade data (Step 2) and other market indicators (Step 3) to analyse EU trade relationships with extra-EU partners and the size of the construction product markets in non-EU countries (*Chapter 3*). It does so by focusing on a restricted sample of 80 EADs belonging to five Product Area Codes (PACs)¹, selected by EOTA. Specifically, they are EADs under:

¹ The full list of product areas included in the CPR (Annex IV) is as follows: 1 – Pre-cast concrete products; 2 – Doors, windows, shutters, gates and ancillaries; 3 – Membranes, including liquid and applied and kits; 4 – Thermal insulation products, composite insulation systems; 5 – Structural bearings, pins for structural joints; 6 – Chimneys, flues and related products; 7 – Gypsum products; 8 – Geotextile, geo-membranes and related products; 9 – Curtain walling, claddings, structural sealant glazing; 10 – Fixed firefighting equipment; 11 – Sanitary appliances; 12 – Road equipment: Circulation fixture; 13 – Structural timber products, elements and ancillaries; 14 – Wood based panels and elements; 15 – Cement, building limes, other hydraulic binders; 16 – Reinforcing and pre-stressing steel for concrete and ancillaries, post tensioning kits; 17 – Masonry and related products, including units, mortars and ancillaries; 18 – Waste water engineering products; 19 – Floorings; 20 – Structural metallic products and ancillaries; 21 – Wall and ceiling finishes (external and internal), internal partition kits; 22 – Roof coverings, lights, windows, related kits and ancillaries; 23 – Road construction products; 24 – Aggregates; 25 – Construction adhesives; 26 – Products related to concrete, mortar and grout; 27 – Space heating

- PAC 4 - Thermal insulation products, composite insulation systems
- PAC 9 - Curtain walling, claddings, structural sealant glazing
- PAC 13 - Structural timber products, elements and ancillaries
- PAC 33 - Fixings
- PAC 35 - Fire stopping, fire sealing fire protective or retardant products.

A discussion of the main findings of the quantitative analyses is presented in *Chapter 4*. This report is accompanied by a database in Excel and a set of annexes, providing more quantitative figures on each PAC analysed. All this material is handed over to EOTA for future use (Step 4).

Figure 1. The four steps of the methodology



Source: CSIL

1.2.2. Methodology for the overview of ETAs uptake in non-EU countries

The first step of the methodology consisted in providing an overview of the uptake of ETAs in non-EU countries. The objective of this step was to provide fresh statistics on the data already collected by EOTA, with a specific focus on the uptake of ETAs in non-EU countries between 2013 and 2022.

To this end, the team has collected from EOTA the full database of ETAs issued between October 2013 and December 2022. While the dataset included information on all ETAs issued within and beyond the EU borders, the team has restricted the scope of the analysis to ETAs issued to manufacturers located in non-EU countries. It is worth noting that ETAs issued to manufacturers in Iceland, Liechtenstein, and Norway have been excluded from the scope of the analysis because the CPR and, hence, the ETA route is directly applicable there. Likewise, ETAs issued to Türkiye and Switzerland have also been excluded because these two countries are part of the CPR framework

appliances; 28 – Pipes, tanks and ancillaries (not in contact with water for human consumption); 29 – Construction products in contact with water for human consumption; 30 – Glass products (flat, profiled or blocks); 31 – Power, control and communication cables; 32 – Sealants for joints; 33 – Fixings; 34 – Building kits, units, pre-fabricated elements; 35 – Fire stopping, fire sealing, fire protective or retardant products; 36 – Other.

based on bilateral agreements with the European Union (EU). The United Kingdom (UK) is instead considered as a non-EU country, since it formally left the EU on 31 January 2020.

To provide a clear overview of the uptake of ETAs in non-EU countries, the team has combined three levels of analysis:

- **Analysis of the distribution of ETAs issued to non-EU countries by PAC** to gain information on the PACs for which there is already relatively high interest in the ETA route among manufacturers located in non-EU countries (static analysis) as well as the product areas for which there is an increasing or a decreasing request from manufacturers located in non-EU countries (trend analysis).
- **Analysis of the distribution of ETAs issued to non-EU countries by country** to provide evidence on non-EU countries where the uptake of the ETA route is already relatively high (static analysis) and where manufacturers are increasingly requesting ETAs (trend analysis).
- **Analysis of the distribution of ETAs issued to non-EU countries by country and by PAC** to investigate the most relevant PACs in each country, by combining the analysis of the distribution of ETAs by PAC with the distribution of ETAs by non-EU countries.

1.2.3. Methodology for the analysis of trade data for products covered by EADs

The second step concerned analysing trade data for products covered by EADs. It aimed at enriching the EOTA internal information system with publicly available data on trade. The ultimate goal was to rank and compare non-EU markets of construction products covered by EADs and European Technical Approval Guidelines (ETAGs) according to existing trade relationships with the EU.

To this end, the team has identified the Comext database provided by Eurostat as the best data source for the analysis. This database includes data on bilateral trade flows, i.e., import and export, between EU Member States (MS) and the rest of the world. The main advantage of this database is that it provides harmonised statistics at the product level. This ensures comparability of data over time and across countries, allowing in-depth analysis of the structural transformations occurring at the geographical and PAC levels.

However, one of this database's main limitations is that the product nomenclature does not capture the sector of application of the product. In other words, isolating products (e.g., fixings) used in the construction industry from other sectoral applications (e.g., automotive) is not possible. As an illustrative example, fixing-related trade flows might not all pertain to the construction industry but might have been used in other sectors in some cases. Therefore, the analysis of the international trade network covers a range of products wider than those covered by ETAs and EADs. Despite these limitations, the Comext database constitutes the best option to gather information on international trade.

To perform the analysis of trade data, three main preparatory steps were needed:

- **Development of a correspondence table EAD-Combined Nomenclature (CN)** to assign to each EAD one or more CN codes.² Creating this correspondence table was crucial to retrieving

² The CN code is the EU's eight-digit coding system, comprising the Harmonised System (HS) codes with further EU subdivisions. It is used as a tool for classifying goods, set up to meet the requirements both of the Common Customs Tariff and of the

trade data on products covered by an EAD/ETAG. While in the Comext database, products are classified according to the CN codes, neither the EADs nor the ETAGs report the CN codes of the construction product covered. To overcome this issue, the team has collected information on the title and abstract of all EADs and ETAGs and, by manually reviewing the label description of each code in the CN nomenclature, has selected the one(s) that best matches the product's description.

- **Creation of a database on trade of ETA-related products** to obtain the total value (in EUR) of bilateral imports and exports between EU27 and non-EU countries each year under each PAC. The team has used an algorithm developed in-house to automatically download data from Comext and organise them in a tabular format.
- **Analysis of European trade partners** to identify the main EU destination markets and origin countries of products covered by the EADs and ETAGs and their evolution over time. On the one hand, the analysis of the main destination markets of EU products enabled the identification of the non-EU countries where EU Member States export the highest number of products covered by the selected EADs and ETAGs and their evolution over time. Additionally, the trend analysis allowed identifying emerging countries where EU products are increasingly being exported, which might become more relevant in the coming years. On the other hand, the analysis of the main EU-origin countries enabled the identification of the non-EU countries from where EU27 Member States import the highest number of products covered by the EADs and ETAGs.
- **Correlation analysis between trade flows and the number of ETAs** to investigate whether the number of ETAs issued in a non-EU country is proportional to the strength of the trade relationship it has with EU Member States.

1.2.4. Methodology for the analysis of construction products market in non-EU countries

This final analytical step was aimed at evaluating the size of the construction product markets covered by EADs and ETAGs and their recent performance. The team has identified the UNIDO-INDSTAT4 (Revision 4) database as the best data source for the analysis. The UNIDO-INDSTAT4 includes various indicators that enable the assessment of product markets' size, such as production, value-added, number of enterprises, number of employees, gross fixed capital formation, wages, and salaries. The main advantage of this database is that it provides harmonised statistics for over 100 countries and more than 150 manufacturing sectors and sub-sectors from 2005 until 2020. This feature ensures comparability of data over time and across countries, allowing in-depth analysis of the structural transformations taking place at the geographical and PAC levels.

However, as for the Comext database, one of this database's main limitations is the low data disaggregation level. Each indicator is, in fact, available at the 3- and 4-digit level of the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 3 and 4 about manufacturing. In other words, it is not possible to evaluate the market at the product level but only at the broader sectoral level. Therefore, the analysis covers a wider range of products than those strictly covered by ETAs. For instance, PAC 33 – Fixings has been associated with the ISIC codes related

EU's external trade statistics (https://taxation-customs.ec.europa.eu/customs-4/calculation-customs-duties/customs-tariff/combined-nomenclature_en).

to the Manufacture of other rubber products (ISIC 2219), Manufacture of basic iron and steel (2410), Manufacture of structural metal products (2511), and Manufacture of other fabricated metal products n.e.c. (2599). Additionally, the time series are not fully available for all sectors in all relevant countries. Despite these limitations, the UNIDO-INDSTAT4 (Revision 4) database constitutes the best option to gather freely available information on the market structures at the global level.

Performing the analysis of the construction product market, entailed three main preparatory steps:

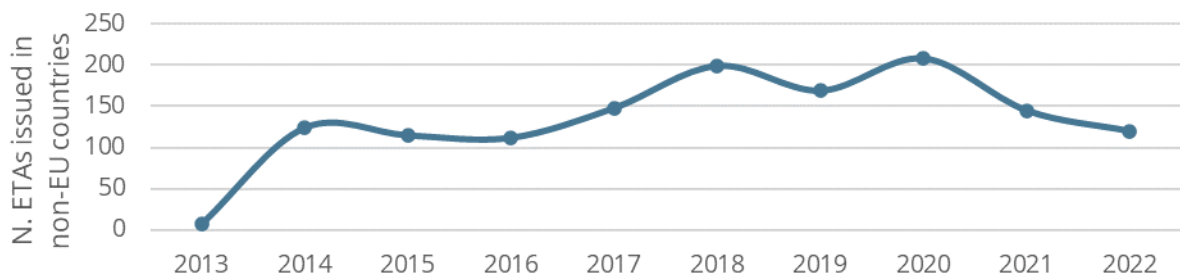
- **Development of a correspondence table EAD-ISIC Rev 4** to assign to each EAD one or more ISIC Rev. 4 codes. Like with the trade data, creating such a correspondence table was crucial because while in the UNIDO database, products are classified according to the ISIC codes, neither the EADs nor the ETAGs report the codes of the construction product covered. To overcome this issue, the team has built on the EAD-CN correspondence table developed in the previous step and developed an ad-hoc correspondence table between the 80 selected EADs and the ISIC Rev 4 nomenclature.
- **Creation of a database on product market indicators** to obtain the number of active enterprises and the total production value in non-EU countries each year for each PAC. Since the original data included multiple data gaps, the team first assessed the problem's magnitude for each PAC, country, and indicator and then estimated the missing data points. Missing data were estimated using either interpolation procedures or applying the average growth rate when the interpolation was not an adequate estimation method. In specific cases, data from national statistical offices were used to fill the gaps.
- **Analysis of the product market in each non-EU country** to provide evidence on the size of each PAC market in non-EU countries and their recent performance. As for the trade data analysis, the team has performed static analysis (e.g., average gross output in China between 2013 and 2019) and trend analysis for each indicator.
- **Correlation analysis between product market size and the number of ETAs** to investigate whether the number of ETAs issued in the non-EU country is significantly positively correlated with local construction product market size. Among the others, this analysis assessed whether countries with more companies are generally associated with more ETAs requests.

2. The ETA's uptake in non-EU countries

2.1. Evolution of ETAs in non-EU countries

The first ETAs issued outside the EU date back to December 2013. Since then, the number of ETAs issued in non-EU countries has steadily increased up to 2020, when the Covid pandemic spread, leading to a drop in the number of ETAs requested. The number of ETAs issued in non-EU countries reached a total of 1,347 ETAs, representing 12% of the total number of ETAs issued at the global level (11,116), i.e., including non-EU ETAs and ETAs issued to EU Member States, EFTA, and Türkiye.³

Figure 2. Number of ETAs issued to non-EU countries over time (2013-2022)



Source: CSIL elaborations based on data provided by EOTA

The increasing number of ETAs issued to non-EU countries prior to Covid suggests that ETAs are relevant for manufacturers outside of the European Union. In this respect, the “Scoping Study for an Australian Technical Evaluation Network (ATEN)” prepared by Swinburne University of Technology⁴ acknowledged that the **ETA route is a best practice** in the field of conformity assessment procedures and that it might be implemented even outside the EU. This shows the high reputation the ETA route has in the non-EU markets, which is encouraging manufacturers to request more ETAs.

Moreover, according to Domenico Tinto (Seconded National Expert at the European Commission – Construction Products Regulation and Sustainable Construction), the EOTA route is becoming more popular outside the EU because *when a manufacturer undertakes the EOTA route, it means that the product in question has great potential for cross-border trade. This tradability is a characteristic of the product itself, and if a product can cross the national borders within the EU, this means that there is a strong potential also to market it outside the EU.*⁵ His point of view highlights that holding an ETA has a potential positive impact on manufacturers’ exports. In the same vein, the study “EADs and ETAs: Added value to the construction sector” (CSIL, 2020) highlighted among the main findings that *“The ETA route has a high standing among construction industry professionals both within and outside the EU. The ETAs are recognised by the manufacturers and business associations surveyed as important documents that not only allow cross-border trade of CE-marked products but also improve the manufacturers’ reputations, increase their sales and opportunity to access new markets.”*⁶

³ Source: EOTA SharePoint

⁴ <https://www.swinburne.edu.au/research/platforms-initiatives/australian-technical-evaluation-network>

⁵ <https://www.eota.eu/news/future-eta-route-three-questions>

⁶ <https://www.eota.eu/sites/default/files/uploads/EOTA%20positions/2020-csil-eota-report-0109.pdf>

2.2. Distribution of ETAs issued in non-EU countries by product area

The distribution of ETAs issued in non-EU countries by product area is very heterogeneous. Most ETAs issued to manufacturers in non-EU countries covered products under Fixings (PAC 33) and Fire stopping, fire sealing, fire protective or retardant products (PAC 35). As shown in Figure 3, 957 ETAs were issued under these two PACs, covering about 71% of all ETAs issued in non-EU countries. These are products where the high reputation of the ETA plays a key role. In an interview with the “Fastener + Fixing Magazine”, the company Bossong Spa noted that while being historically relevant for important building projects, ETA-approved fixings were becoming increasingly important for minor connections. Customers were increasingly asking for ETA-approved fixings because, in these cases, the *quality, know-how, and professionalism of the manufacturer are certified and measured by a third-party institute according to the strict rules contained in the EAD/ETAG.*⁷

Interestingly, data show that **the uptake of the ETA route for Fixed firefighting equipment (PAC 10) and Geotextile, geo-membranes, and related products (PAC 8) is more predominant outside the EU than among EU27 Member States (MS).** Indeed, while the share of ETAs issued in non-EU countries over the total is 14% and 23% for PAC 33 – Fixings and PAC 35 – Fire stopping products, for PAC 10 – Fixed firefighting equipment and 8 – Geotextile, it is 100% and 69%, respectively. Even if the total number of ETAs issued under the two latter PACs is lower than for PAC 33 – Fixings and PAC 35 – Firestopping products (namely, four under PAC 8 – Geotextile and 11 under PAC 10 – Fixed firefighting equipment), the ETA route for these product areas appears particularly interesting for extra-EU countries. UK is clearly one of the main extra-EU countries using ETAs, at least for PACs 8 – Geotextile and 35 – Fire stopping products, where 100% and 90% of all ETAs issued are for the UK. Finally, the results highlighted that there are 12 distinct PACs under which no ETAs have ever been issued in non-EU countries yet.⁸

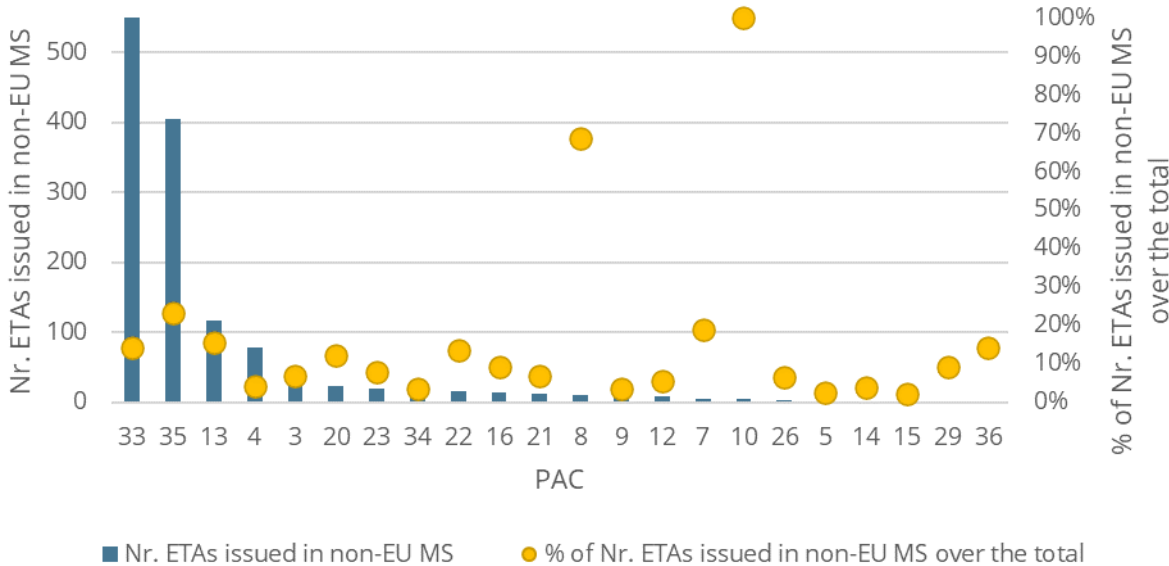
High positive growth rates have been observed in recent years for some emerging product areas, such as Reinforcing and pre-stressing steel for concrete and ancillaries, post-tensioning kits (PAC 16) and Structural metallic products and ancillaries (PAC 20) (

⁷ <https://www.fastenerandfixing.com/construction-fixings/the-importance-of-certification/>

⁸ More specifically, non-EU manufacturers have never requested ETAs for Pre-cast concrete products (PAC 1), Doors, windows, shutters, gates and ancillaries (PAC 2), Chimneys, flues and related products (PAC 6), Sanitary appliances (PAC 11), Masonry and related products, including units, mortars and ancillaries (PAC 17), Waste water engineering products (PAC 18), Floorings (PAC 19), Aggregates (PAC 24); Construction adhesives (PAC 25), Space heating appliances (PAC 27), Pipes, tanks and ancillaries (not in contact with water for human consumption) (PAC 28), Glass products (flat, profiled or blocks) (PAC 30), Power, control and communication cables (PAC 31), Sealants for joints (PAC 32).

Figure 4). At the end of 2023, the total number of ETAs has grown as compared to 2013 by 600% and 500%, respectively.

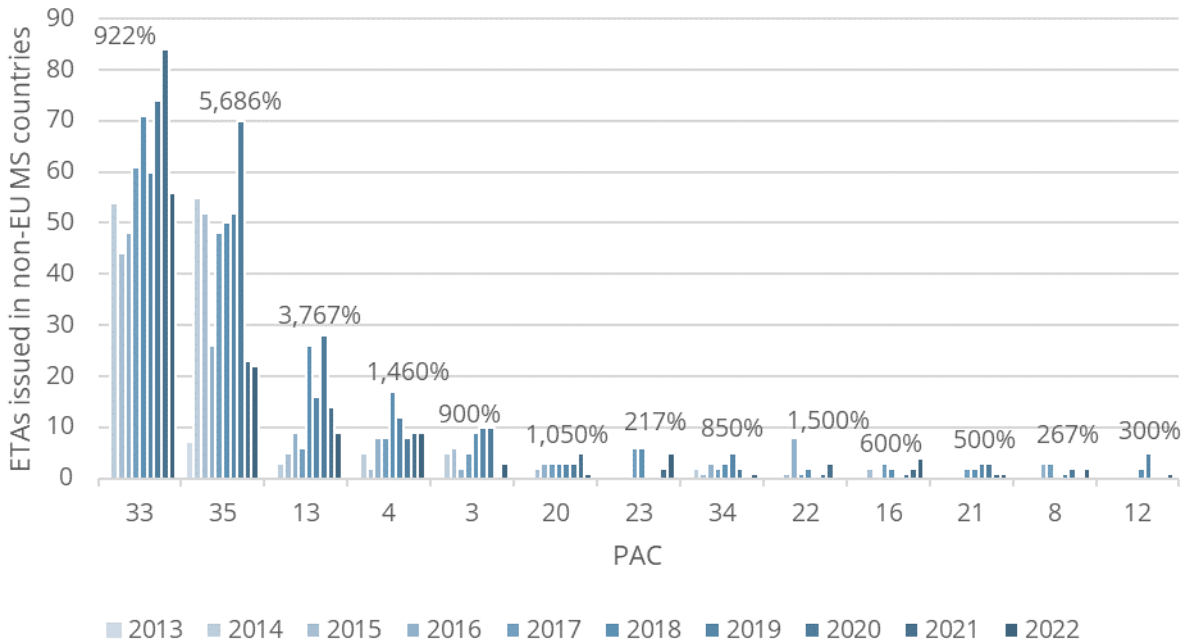
Figure 3. Number (and share over the total) of ETAs issued to non-EU Member States by PAC (2013-22)



Legend: 3 – Membranes; 4 – Thermal insulation; 7 – Gypsum products; 8 – Geotextile; 10 – Fixed firefighting equipment; 12 – Road equipment; 13 – Structural timber products; 14 – Wood-based panels and elements; 15 – Cement, building limes, other hydraulic binders; 16 – Reinforcing and pre-stressing steel, post-tensioning kits; 20 – Structural metallic products; 21 – Wall and ceiling finishes, internal partition kits; 22 – Roof coverings, lights, windows, related kits; 23 – Road construction products; 26 – Products related to concrete, mortar and grout; 29 – Construction products in contact with water for human consumption; 33 – Fixings; 34 – Building kits, units, pre-fabricated elements; 35 – Fire stopping, fire sealing, fire protective or retardant products; 36 – Other.

Source: CSIL elaborations based on data provided by EOTA

Figure 4. Evolution of the number of ETAs issued to non-EU countries by selected PAC (2013-2022) and growth rates



Legend: 3 – Membranes; 4 – Thermal insulation products; 8 – Geotextile; 12 – Road equipment; 13 – Structural timber products; 16 – Reinforcing and pre-stressing steel, post-tensioning kits; 20 – Structural metallic products; 21 – Wall and ceiling finishes, internal partition kits; 22 – Roof coverings, lights, windows, related kits; 23 – Road construction products; 33 – Fixings; 34 – Building kits, units, pre-fabricated elements; 35 – Fire stopping, fire sealing, fire protective or retardant products.

Note: the growth rates were calculated for each PAC comparing the total number of ETAs ever issued in non-EU countries in 2022 with the number of ETAs issued in the first available year.

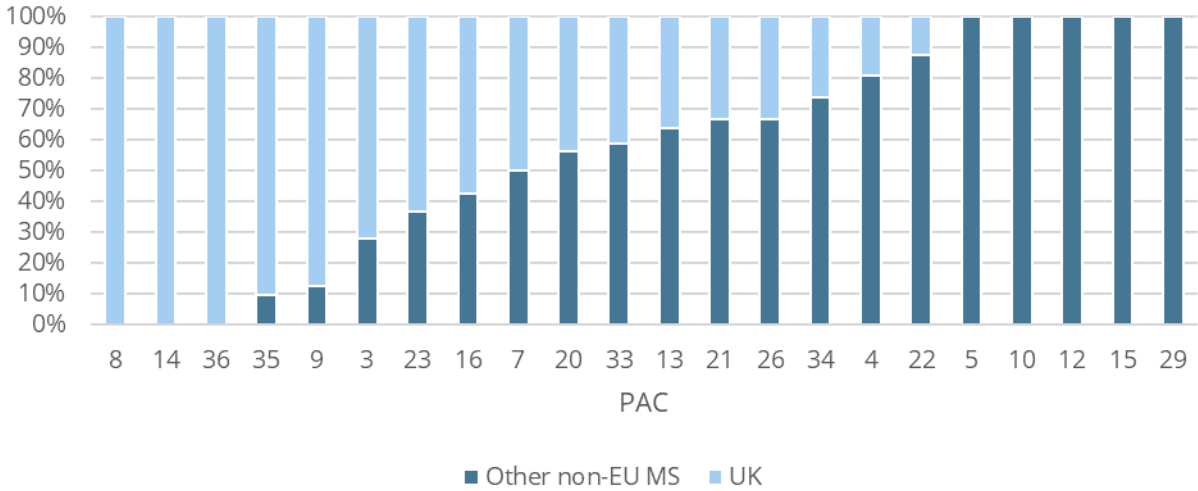
Source: CSIL elaborations based on data provided by EOTA

2.3. Distribution of ETAs issued to non-EU countries by manufacturer’s country

The total number of ETAs issued to non-EU countries (including the UK) accounts for 55% of the total ETAs issued. If the UK is excluded,⁹ the number of ETA issued to non-EU countries equals 600, representing 5% of the total ETAs issued at the global level. It is noted that the share of non-EU ETAs issued to the UK over the total number of non-EU ETAs issued largely varies across the product areas. While there are some product areas (i.e., PAC 8 – Geotextile, PAC 14 – Wood-based panels, and PAC 36 – Other) for which all non-EU ETAs were issued to the UK, there are other product areas for which other non-EU countries have requested all non-EU ETAs ever issued. This is the case, for example, of Cement, building limes, other hydraulic binders (PAC 15). **Evidence shows that the ETA route is very popular in non-EU countries for key product areas, such as Thermal insulation products and composite insulation systems (PAC 4– Thermal insulation).** Concerning this PAC, evidence shows that non-EU countries (excluding the UK) account for almost 60% of all ETAs issued beyond Europe.

⁹ 747 ETAs were requested by manufacturers in the United Kingdom, which has been an EU Member State until 2020.

Figure 5. Breakdown of ETAs issued in non-EU Member States (MS) by PAC and geographical area



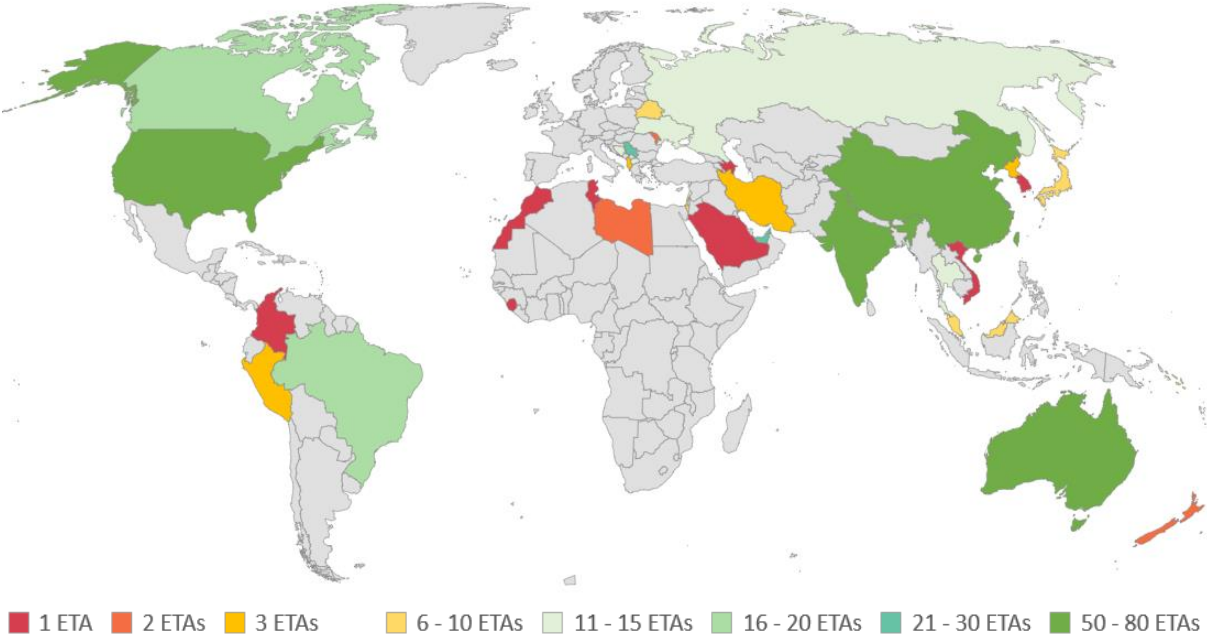
Legend: 3 – Membranes; 4 – Thermal insulation; 5 – Structural bearings; 7 – Gypsum products; 8 – Geotextile; 9 – Curtain walling; 10 – Fixed firefighting equipment; 12 – Road equipment; 13 – Structural timber products; 14 – Wood-based panels; 15 – Cement, building limes, other hydraulic binders; 16 – Reinforcing and pre-stressing steel, post-tensioning kits; 20 – Structural metallic products; 21 – Wall and ceiling finishes, internal partition kits; 22 – Roof coverings, lights, windows, related kits; 23 – Road construction products; 26 – Products related to concrete, mortar and grout; 29 – Construction products in contact with water for human consumption; 33 – Fixings; 34 – Building kits, units, pre-fabricated elements; 35 – Fire stopping, fire sealing, fire protective or retardant products; 36 – Other.

Source: CSIL based on data provided by EOTA

Among the non-EU countries, **a significant number of ETAs has been issued to manufacturers located in Australia** (81 ETAs) as well as in Asian countries, such as **China** (73 ETAs), **Taiwan** (63 ETAs), and **India** (53 ETAs), and **the United States** (51). The large number of ETAs issued in Australia is likely a consequence of the fact that, as mentioned in Section 2.1, Australia looks to Europe and the ETA route as a best practice. Likewise, in Asian countries, the relevant uptake of the ETA route is partly justified by the fact that these countries “recognise ETAs for construction products as accepted documents when national documents are not available”.¹⁰

¹⁰ <https://www.construction-fixings.eu/reliableagileeta/>

Figure 6. Geographical distribution of the ETAs issued in non-EU Member States (2013-2022)¹¹



Source: CSIL- elaborations based on data provided by EOTA

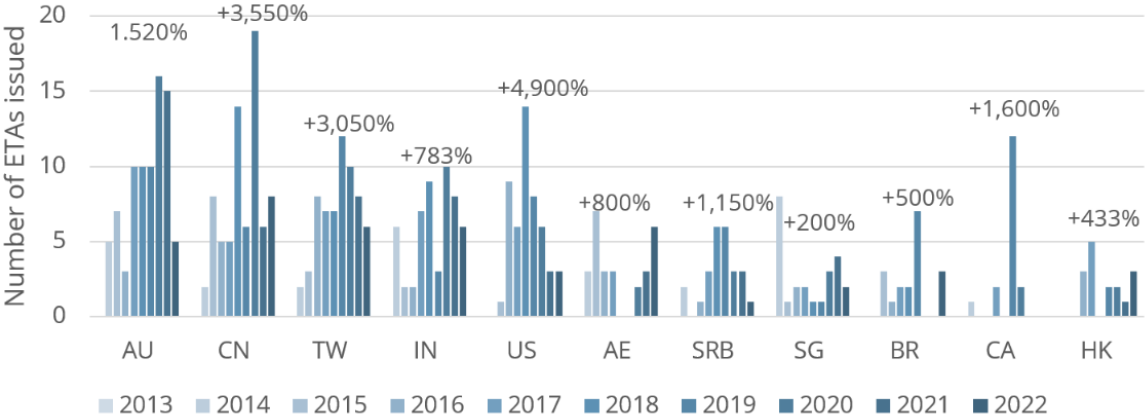
As shown in the Figure below, **most non-EU countries have steadily increased the number of ETAs requested per year between 2013 and 2022**. On average, the annual growth rate in the number of ETAs issued is significantly high in many non-EU countries. The United States is characterised by the highest average annual growth rate (AAGR) in the number of ETAs requested (i.e., 112%). Even more striking is the growth rate in the cumulative number of ETAs issued: the total number of ETAs ever issued in the US at the end of 2022 was 50 times larger than the number of ETAs issued in the US in 2015 (when the first ETA was ever issued). Other countries where, on average, the number of ETAs requested, even if still limited, has tremendously increased are China, Brazil, and, to a smaller extent, India and the United Arab Emirates.

Manufacturers in extra-EU countries have requested a large number of ETAs for **fixings products (PAC 33)**. As an illustrative example, all ETAs requested by manufacturers in **Australia** cover products belonging to the Fixings products area (PAC 33 – Fixings). Likewise, in the United **Arab Emirates, Singapore, Brazil, and Hong Kong**, the lion’s share of ETAs requested belong to the Fixings products area (PAC 33). Other product areas are more relevant in countries such as Canada, Serbia, and the United States. More specifically, in **Canada, fire stopping, fire sealing, fire protective or retardant products (PAC 35 – Fire stopping products) seem more relevant, while in Serbia, a larger share of ETAs was requested for thermal insulation products and composite insulation systems (PAC 4 – Thermal insulation)**. Evidence also shows that almost all **ETAs issued for structural timber products, elements and ancillaries (PAC 13 – Structural timber products) were requested by Asian manufacturers**.

These findings suggest that **if the ETA route is to be strengthened outside the EU, it is advisable to diversify the internationalisation strategy by country and product area**.

¹¹ UK is excluded.

Figure 7. Evolution of the number of non-EU ETAs issued by selected country (2013-2022) and growth rate

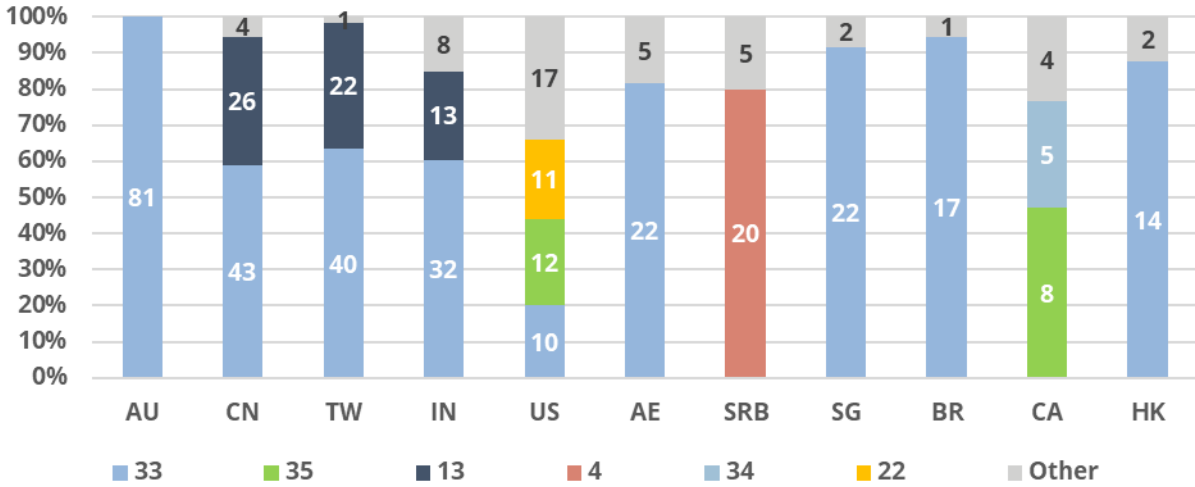


Legend: AU – Australia; CN – China; TW – Taiwan; IN – India; US –United States; AE –United Arab Emirates; SRB – Serbia; SG – Singapore; BR – Brazil; CA – Canada; HK – Hong Kong.

Note: (1) Countries where less than 15 ETAs were issued are excluded for graphical reasons. The UK is also excluded to focus the attention on extra-European countries. (2) The growth rates were calculated for each PAC comparing the total number of ETAs ever issued in non-EU countries in 2022 with the number of ETAs issued in the first available year.

Source: CSIL elaborations based on data provided by EOTA

Figure 8. Distribution of ETAs issued by PAC in selected non-EU countries



Legend: 3 – Membranes; 4 – Thermal insulation; 13 – Structural timber; 22 – Roof coverings; 33 – Fixings; 34 – Building kits; 35 – Fire stopping; AU – Australia; CN – China; TW – Taiwan; IN – India; US –United States; AE – United Arab Emirates; SRB – Serbia; SG – Singapore; BR – Brazil; CA – Canada; HK – Hong Kong.

Source: CSIL based on data provided by EOTA

3. The economic relevance of PAC 4, PAC 9, PAC 13, PAC33, and PAC 35 in non-EU countries

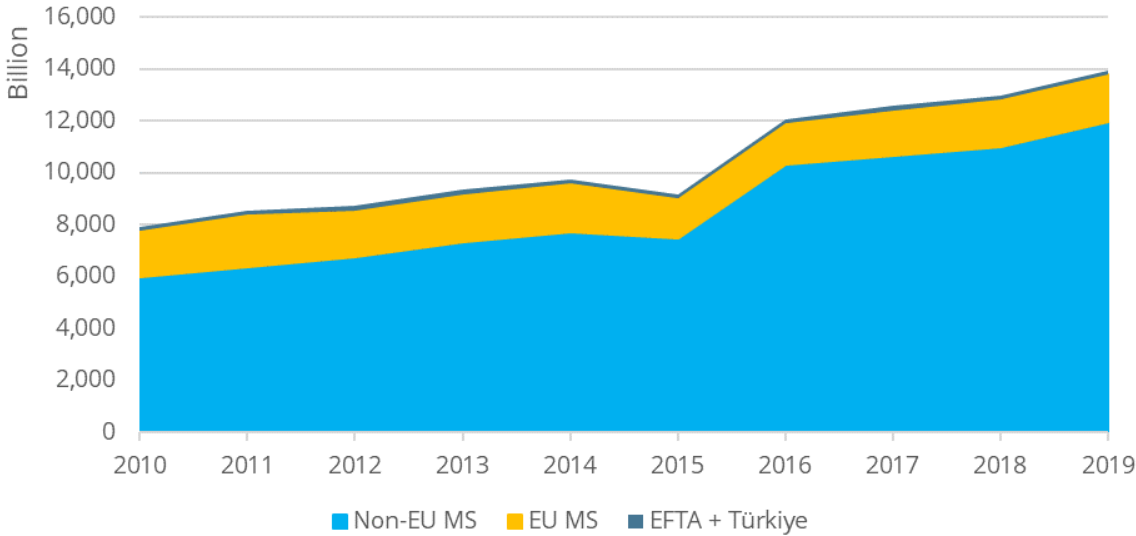
This section provides an overview of the economic relevance of products covered by ETA under PAC 4 - Thermal insulation products, composite insulation systems, PAC 9 - Curtain walling, claddings, structural sealant glazing, PAC 13 - Structural timber products, elements and ancillaries, PAC 33 - Fixings, and PAC 35 - Fire stopping, fire sealing, fire protective or retardant products in non-EU countries. More specifically, it shows how data from the Comext and UNIDO-INDSTAT4 databases can be used to analyse the key extra-EU players and trade partners in the above-mentioned markets.

3.1. The global production

The world aggregated production of industry sectors producing fixings (PAC 33), thermal insulation products, composite insulation systems (PAC 4), structural timber products (PAC 13), curtain walling, claddings, and structural sealant glazing (PAC 9) and fire stopping products (PAC 35) stood at roughly 11,979 billion USD in 2019. Overall, the industrial sectors responsible for these products have increasingly expanded their production. **Between 2010 and 2019, global production increased by 76%, at an average annual growth rate of 6.9%.** Only in 2015, the annual growth rate in these sectors was negative (-5.9%), but this negative trend aligned with the global trends in the overall construction industry.

The Figure below shows that the **output lion's share is produced in non-EU countries, especially the Asian-Pacific region.** While the value of production manufactured in EU27 has remained almost stable over time, its share over the total production has decreased from 21% in 2010 to 12% in 2019. Conversely, the value of production manufactured in non-EU countries recorded a 95% growth rate between 2010 and 2019. Consequently, the share of production manufactured in non-EU countries has increased from 77% in 2010 to 87% in 2019. These figures imply that **even though the European production has not shrunk, the European market shares in the selected markets under analysis have declined due to an expansion of extra-EU production.**

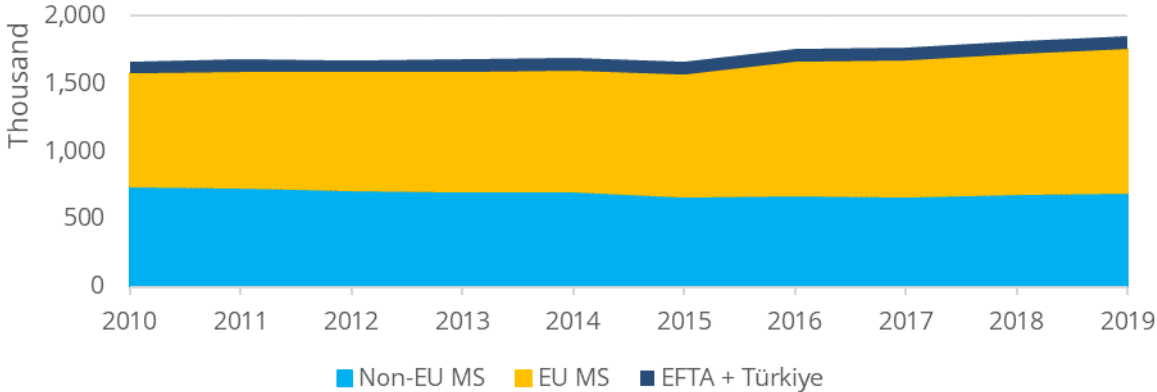
Figure 9. Evolution in the world production of PAC 4, 9, 13, 33, and 35 (2010-2019)



Source: CSIL elaborations based on UNIDO INDSTAT4

The evolution of the global production in the selected PACs is aligned with the overall evolution in the number of active companies each year. Indeed, at the world level, the number of companies responsible for producing fixings (PAC 33), thermal insulation products, composite insulation systems (PAC 4), structural timber products (PAC 13), curtain walling, claddings, and structural sealant glazing (PAC 9), and fire stopping products (PAC 35) increased from 1,664 thousand in 2010 to 1,847 thousand in 2019, with an average annual growth rate of 1.2%. **Between 2010 and 2019, the number of companies in non-EU countries represented 40% of construction firms worldwide**, while companies in EU Member States accounted for 54%. The comparison of the share of output produced in non-EU countries and the share of companies there active reveals that manufacturers in non-EU countries have higher production value, which might be due to higher prices or larger numbers of products manufactured. Over time, the average production value per company has increased in non-EU countries while remaining almost stable in EU Member States, EFTA countries, and Türkiye.

Figure 10. Evolution in the number of companies in PAC 4, 9, 13, 33, and 35 worldwide (2010-2019)



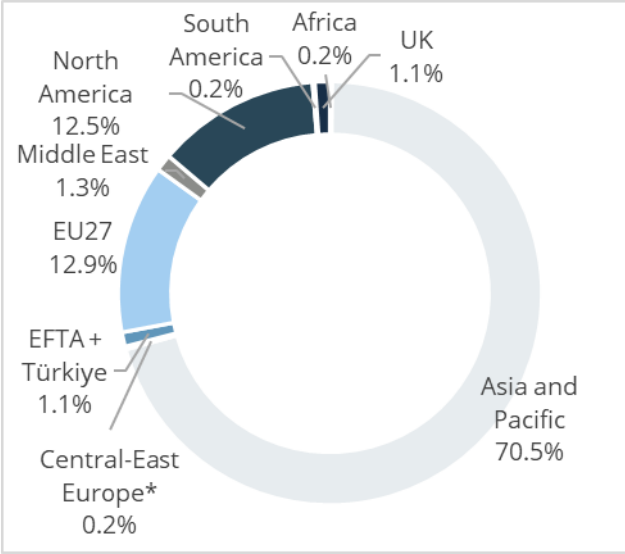
Source: CSIL elaborations based on UNIDO INDSTAT4

Given the relevance of non-EU markets, it is worth mentioning that the market shares of non-EU countries vary significantly across the different geographical areas. As shown in the Figure below (Panel a), in 2019, **70.5% of the global production in the selected sectors was manufactured in the Asian and Pacific regions**. The African, Middle Eastern, South American, Central-East and European region accounted instead for only 1.9% of the total production.

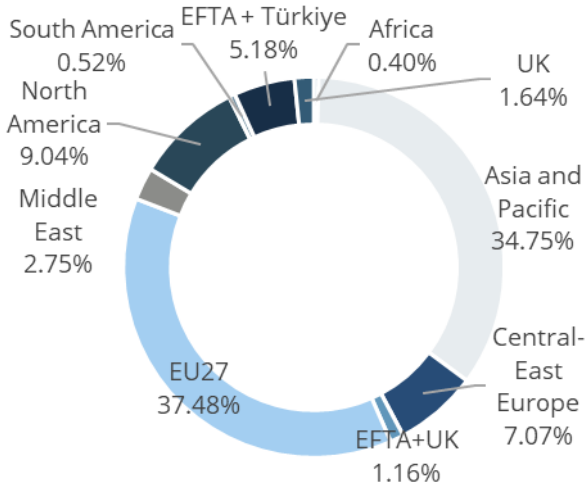
Companies' distribution by geographic area diverges from output distribution by geographic area. Indeed, in 2019, EU Member States manufactured 13% of the global production in the selected industry sectors associated with the PACs, even though 37.4% of companies were active there. Moreover, the analysis reveals that, on average, the companies in Asian and Pacific countries contributed significantly to global production. While representing only 34.8% of the total population, companies located in Asian and Pacific countries manufactured 70.5% of the total output in 2019.

Figure 11. Distribution of the world production and companies in PAC 4, 9, 13, 33, and 35 by geographical area in 2019

a) Output



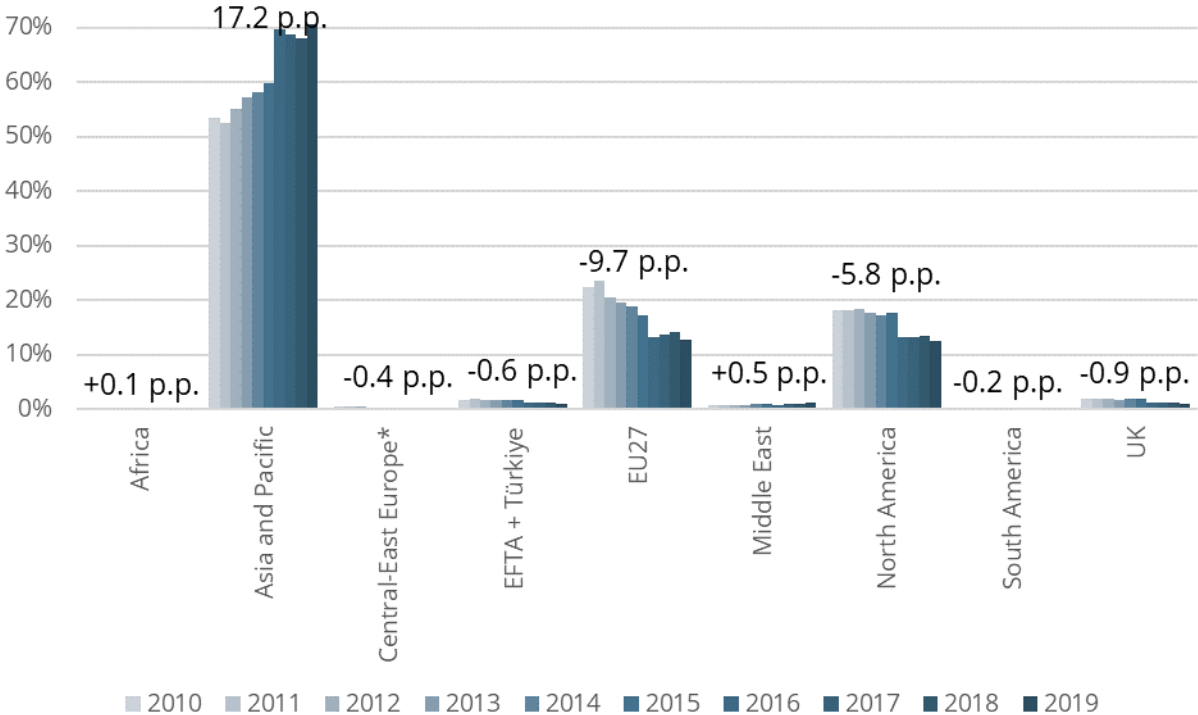
b) Number of companies



Source: CSIL elaborations based on UNIDO INDSTAT4

Over time, the key role played by countries in the Asian and Pacific region has increasingly strengthened, to the detriment of the market shares of the European and North American countries. As shown in Figure 12, in 2015, the market share of the Asian and Pacific countries increased by ten percentage points, namely from 60% to 70%, while those of North American countries and EU Member States decreased, respectively, from 19.0% to 14.3%, and from 16.1% to 12.3%. The market shares in the other geographical areas have remained pretty stable over time.

Figure 12. Evolution of market shares in PAC 4, 9, 13, 33, and 35 by geographical area (2010-2019)



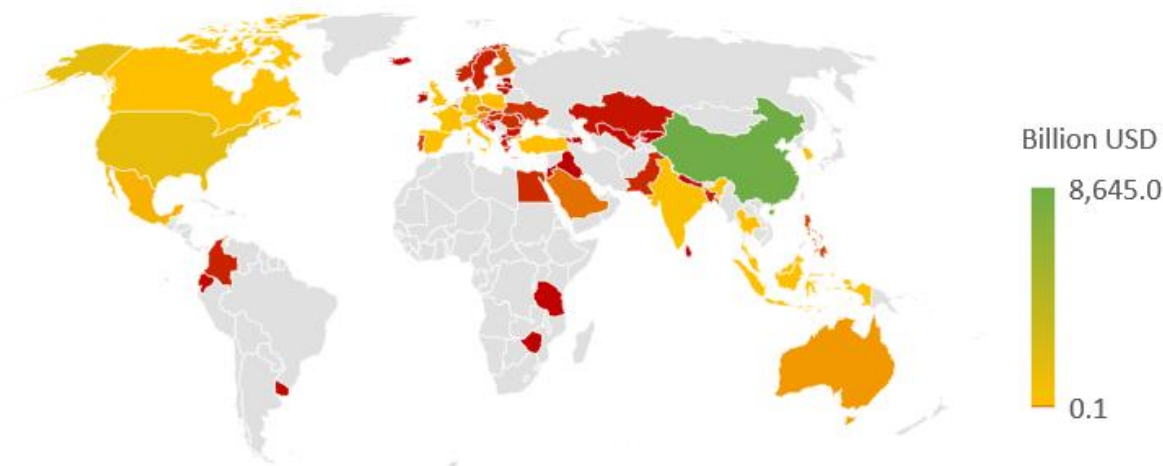
Source: CSIL elaborations based on UNIDO INDSTAT4

At the country level, China is the main player, being responsible for about 62% of the global output and 88% of the output of the entire Asia and Pacific area and being the country where 12% of the active companies operate. While China is the top country in terms of production and number of active companies, the ranking of the other countries partly differs according to the selected indicator. On the one hand, the United States are the second country in terms of output produced. On the other hand, Thailand is the second country in terms of number of companies.

Moreover, the analysis carried out at the PAC level (see PAC FACT SHEETS in Annexes 2 – 5) shows that **China and the United States are the main players in terms of output produced for all the five PACs analysed**. Conversely, the top countries per number of active companies slightly differ across PACs. Notably, while China is among the top three countries per number of companies for all PACs, Thailand is relevant only as far as thermal insulation products (PAC 4) are concerned. The horizontal analysis also reveals that Mexico has the largest number of companies dealing with curtain walling, claddings, structural sealant glazing (PAC 9) and fixings (PAC 33).

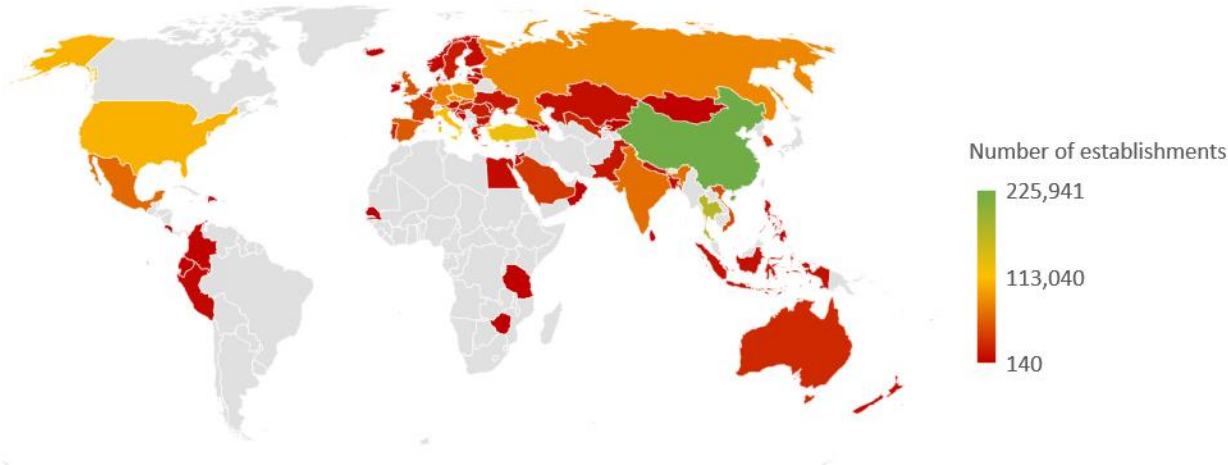
On top of these existing key players, **countries such as Iran, North Macedonia, and the Philippines are exhibiting high average annual growth rates in their output**. Although their production is still very limited, their average annual growth in output is above 20% per year. Likewise, the **number of active companies is significantly increasing in Egypt (92% per year), Peru (39% per year), Nepal (33% per year) and the Philippines (21% per year)**. This result suggests that these countries might become more relevant in the global market in the coming years.

Figure 13. Global production in PAC 4, 9, 13, 33, and 35 by country in 2019



Source: CSIL elaborations based on UNIDO INDSTAT4

Figure 14. Number of companies producing in PAC 4, 9, 13, 33, and 35 by country in 2019



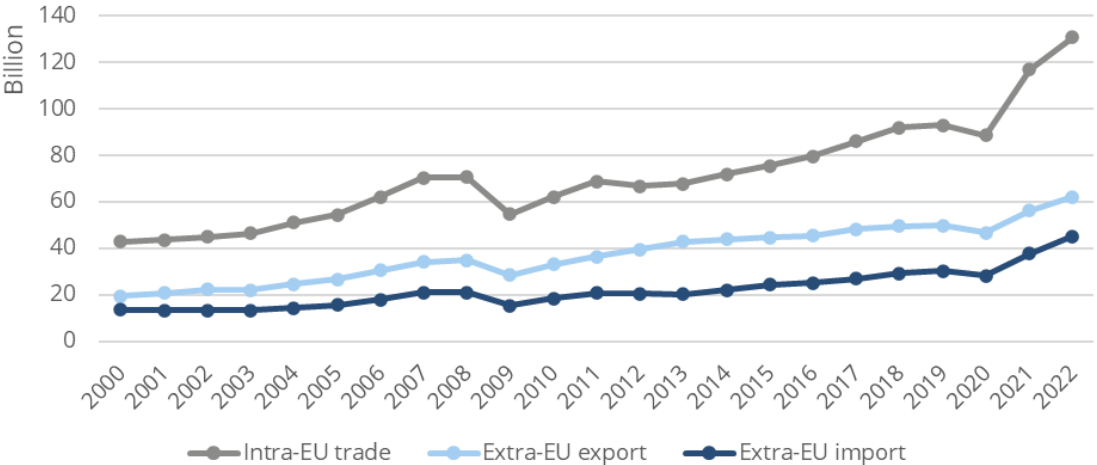
Source: CSIL elaborations based on UNIDO INDSTAT4

3.2. International trade

Overall, **the EU cross-border trade** of fixings (PAC 33), thermal insulation products, composite insulation systems (PAC 4), structural timber products (PAC 13), curtain walling, claddings, structural sealant glazing (PAC 9), and fire stopping products **has steadily increased** between 2000 and 2022 internally (**intra-EU trade**) and with **extra-EU countries**, with **intra-EU trade constituting the largest share of commercial flows**. As shown in the Figure below, extra-EU exports and extra-EU imports have followed the same evolution as intra-EU trade, registering a drop in the export/import value in 2009, following the global financial crisis, and in 2020, following the spread of the COVID-19 pandemic and the consequent mobility restrictions. Since 2021, the value of trade flows has started recovering, and in 2022, the reached levels are above the pre-Covid crisis. Although trade flows are increasing again within and beyond the European borders, evidence shows that intra-EU trade flows are increasing much faster than extra-EU flows, i.e., annual growth is higher for intra-EU trade flows. This dynamic is probably because, after the pandemic, many countries have started considering the importance of reducing the global value chains, reshoring production and relying to a lesser extent on third countries, especially if far away.

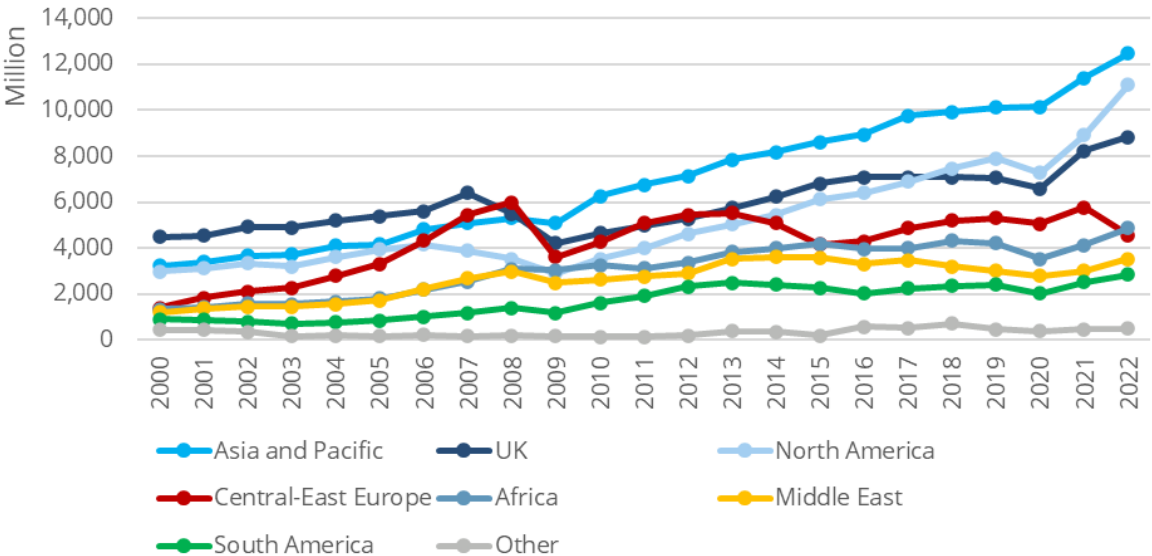
Regarding extra-EU trade, data shows that exports from EU27 Member States to the Asian and Pacific countries, and North American countries have historically represented a lion's share of the total extra-EU export. While in 2000, North America was the third EU destination market, after the financial crisis, the EU reduced its export values in North America and increased its exports in the Asian and Pacific region. Consequently, starting from 2009, they represent the first EU destination market. The United Kingdom is another key destination market. African, Middle Eastern and South American countries (mainly Brazil) are increasingly importing goods from the EU Member States, even though their relevance is still very limited as compared to the other geographical areas.

Figure 15. Evolution of intra and extra-EU trade flows of products related to PAC 4, 9, 13, 33, and 35



Source: CSIL elaborations based on Comext data

Figure 16. Evolution of extra-EU export of products related to PAC 4, 9, 13, 33, and 35 by geographic area



Source: CSIL elaborations based on Comext data

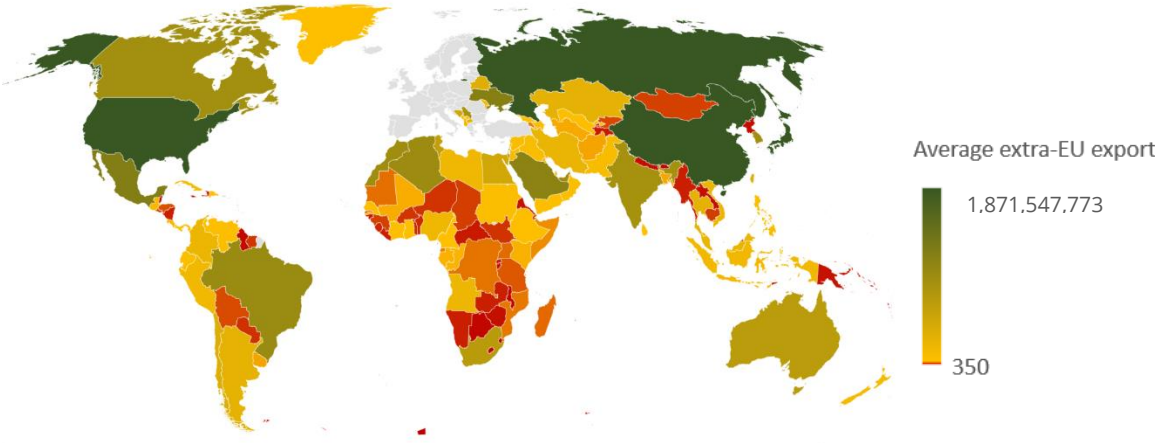
At the country level, between 2000 and 2022, **the top destination countries** (after the UK) **are the United States and China**, where EU Member States have exported, respectively, an average of 4,006 billion USD and 2,356 billion USD of selected products per year. The United States has been one of

the main destination markets over the entire period of analysis, except for 2008, when the United States ranked second. China, instead, has significantly increased its imports from the EU after the 2008 financial crisis.

Despite its historical key role as a destination market, in 2022, European exports to the UK almost stagnated compared to the previous years, registering an annual growth rate of 2% against an average annual growth rate of 6% between 2013 and 2022. Among other things, the growth rate has declined because of the end of the Brexit transition period, and so **it is likely that the relevance of the UK as a European partner might further decline in the coming years**. Similarly, another country that has dramatically reduced its imports from EU Member States is Russia, due to the trade sanctions adopted after Russia’s aggression on Ukraine. In 2022, the trade value from EU Member States to Russia almost halved, dropping from 2,814 million USD in 2021 to 1,527 million USD in 2022.

In contrast, **other extra-EU countries might become more relevant trade partners to the EU**. Among these, **Morocco, Saudi Arabia, and India are becoming more and more important destination markets**. In 2022, the exports to Saudi Arabia increased by 25% against an average annual growth rate of 4% over the 2000-2022 period. Though less striking, in Morocco and India, the 2022 growth rates equalled 19% and 27%, respectively, against average annual growth rates of 9% and 9%. These findings show that these countries are increasing their import from the EU at a pace far above their historical average.

Figure 17. Average extra-EU export of selected product by destination country (2000-22)



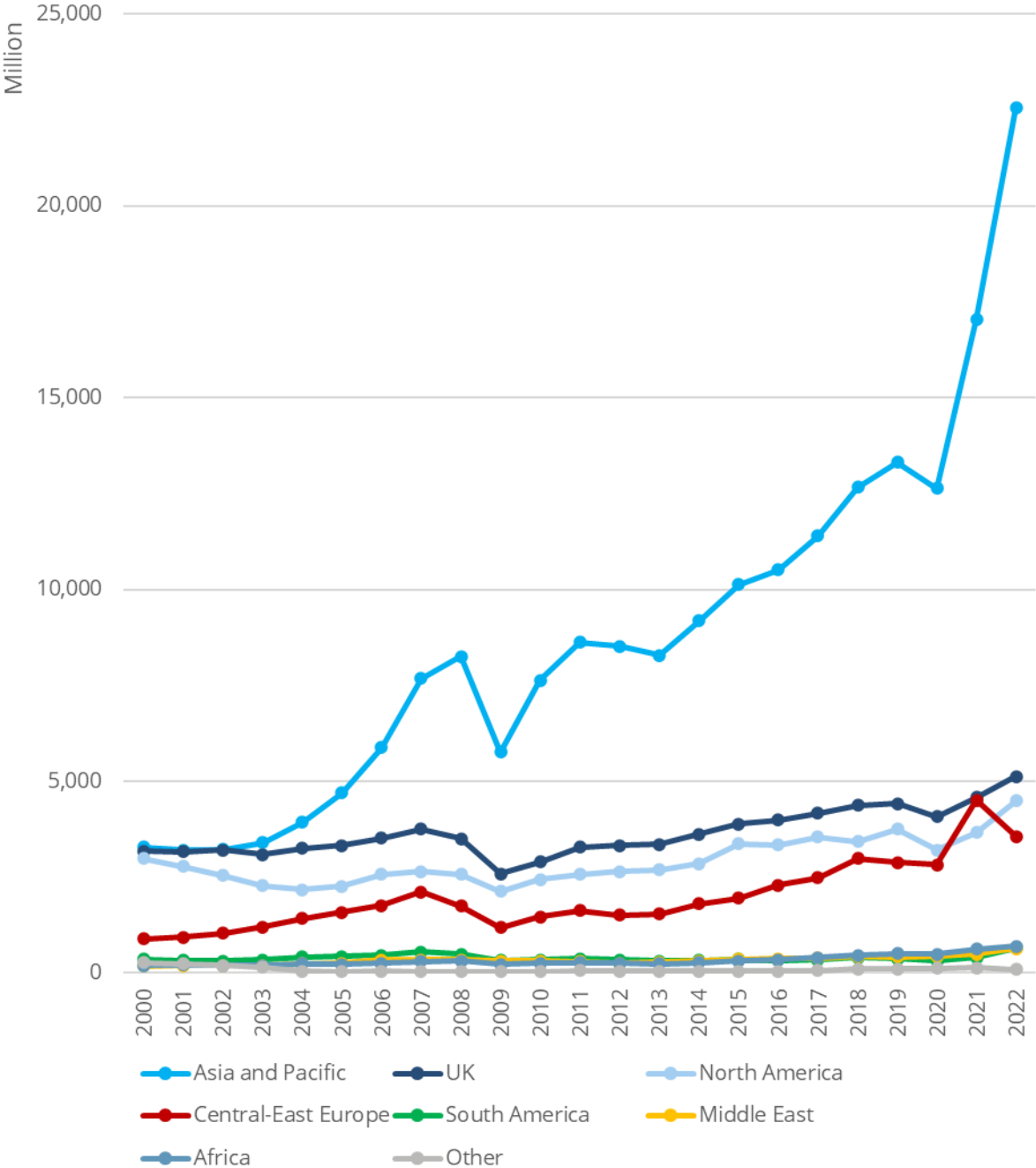
Source: CSIL based on Comext data

The Asian and Pacific region not only represents the primary EU destination market for most of the products under analysis but also constitutes the geographic area the EU Member States import the most from. The key role played by the Asian and Pacific region is mainly due to China, India, and Taiwan. In 2022, EU imports from the Asian and Pacific region for the products under analysis reached approximately 22,000 million USD. From 2020 onwards, extra-EU imports from the Asian and Pacific region have experienced a remarkable surge, showcasing an average annual growth rate of 34%. This underscores the pivotal role the Asian and Pacific region plays in the EU’s international trade landscape, as well as the growing importance of trade ties between the EU and this dynamic part of the world.

Furthermore, between 2021 and 2022, another notable trend has emerged, as South American countries have significantly increased their exports to Europe. The value of total European imports from South American countries has witnessed substantial growth, jumping from 317 million USD in 2020 to 654 million USD in 2022. This upswing highlights the diversification of the EU’s trade

partnerships and its expanding engagement with South American markets, further enriching the global trade landscape.

Figure 18. Evolution of extra-EU import of PAC 4, PAC 9, PAC 13, PAC 33, and PAC 35 by geographic area



Source: CSIL based on Comext data

Similar to the distribution of extra-EU exports by destination country, EU Member States have consistently imported the bulk of selected goods from three prominent origin countries between 2000 and 2022: China, the United Kingdom, and the United States. Notably, China has secured its position as the foremost supplier of these products to the EU since 2006. After a drop in response to the spread of the COVID-19 pandemic, in 2022, EU imports from China suddenly recovered so that they almost doubled the 2019 values in 2022.

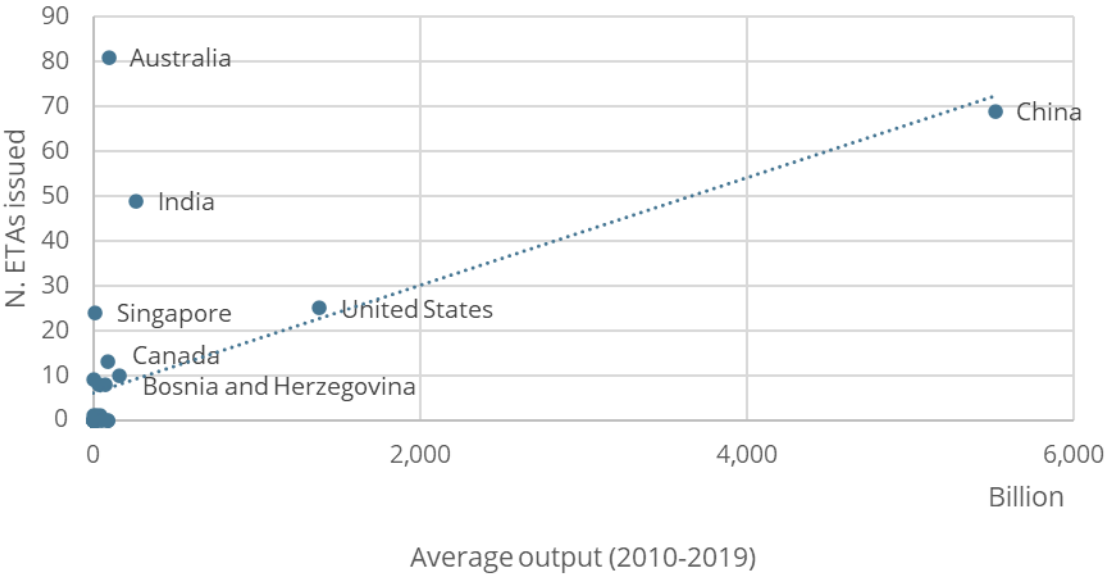
Moreover, the period 2000 to 2022 has witnessed the rise of other significant origin countries that EU Member States have increasingly turned to for their imports. South Korea, for instance, has climbed from the 12th rank in 2000 to the seventh rank in 2022, marking a substantial increase in its contribution to the EU’s import market. Likewise, India has ranked among the first ten origin countries since 2008 and ranked fifth in 2022. Another key country is Vietnam, which ranked ninth in 2022.

These trends in EU imports reflect the ever-evolving dynamics of international trade, where established trading partners like **China and the US continue to dominate while emerging economies like South Korea, India, and Vietnam gain traction**, diversifying the EU’s import sources and enriching its global trade portfolio.

3.3. The relationship between economic relevance and ETAs

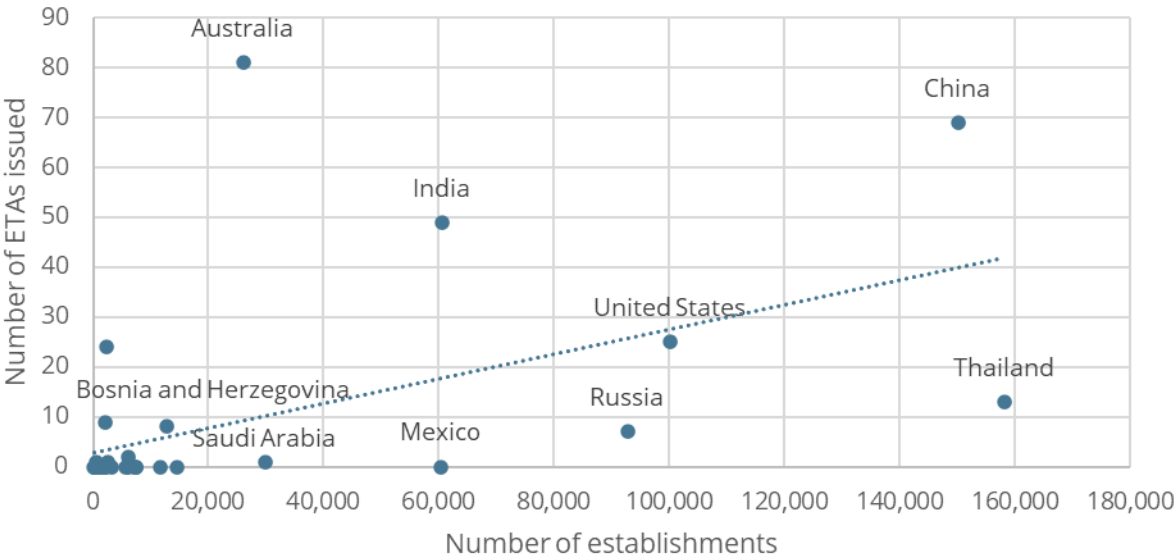
The analysis of the relationship between the economic relevance of PAC 4 – Thermal insulation, PAC 9 – External cladding, PAC 13 – Structural timber products, PAC 33 – Fixings, and PAC 35 – Fire stopping products in each country and the number of ETAs issued there shows a **slightly positive correlation** between the two. This finding implies that **a higher number of ETAs in a given PAC are usually requested in countries that are key players in the associated industry.**

Figure 19. Non-EU countries by number of ETAs requested and output value



Source: CSIL analyses based on data provided by EOTA and UNIDO INDSTAT4

Figure 20. Non-EU countries by number of ETAs requested and number of companies



Source: CSIL analyses based on data provided by EOTA and UNIDO INDSTAT4

As shown in Figure 19, the **number of ETAs** under PAC 4 – Thermal insulation, PAC 9 – External cladding, PAC 13 – Structural timber products, PAC 33 – Fixings, and PAC 35 – Fire stopping products requested at the country level is **proportional to the country's total production** in these industries. For example, while China has requested a significant number of ETAs and is responsible for 62% of total production, other countries manufacture proportionally less output and correspondingly request a lower number of ETAs. The United States hold an intermediate position, having produced, on average, 1,386 billion USD of output per year between 2010 and 2019 and requested 25 ETAs.

Likewise, the analysis of the relationship between the number of ETAs issued in a country and the average number of companies established there shows a slightly positive relationship, as shown in Figure 20. A few exceptions to this positive relationship are Mexico, where, despite the high number of active companies in the construction sector, no ETAs have been requested (yet), and Australia, for which many ETAs were issued despite the relatively low number of companies.

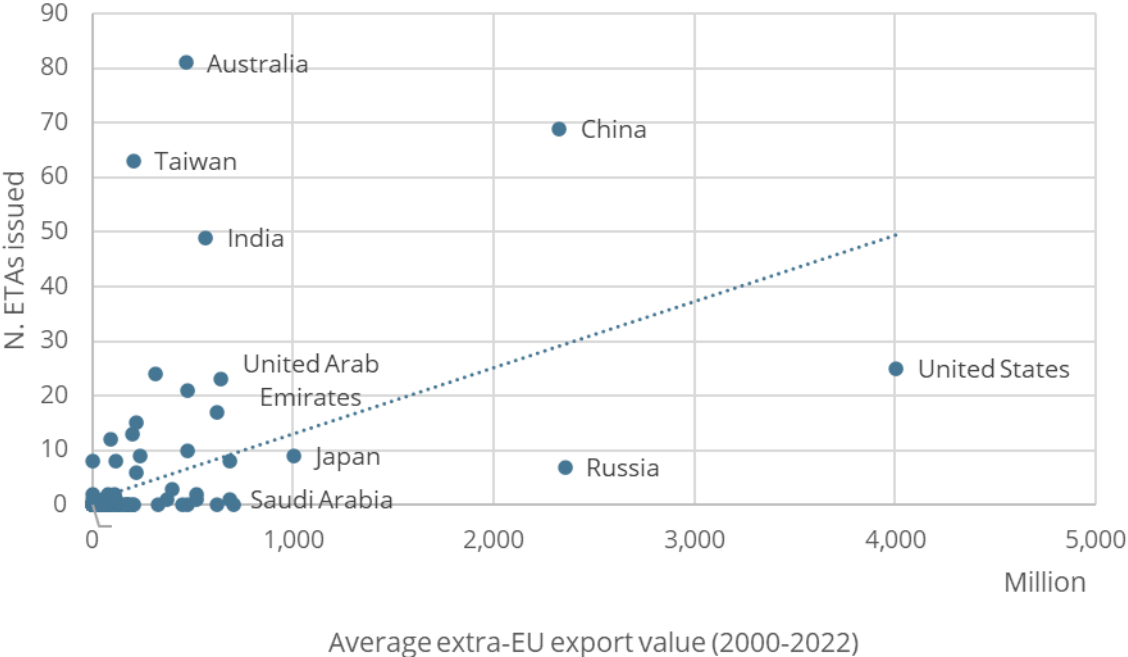
The positive relationship between the number of ETAs issued to a country and its economic relevance in the sector also holds when considering economic relevance in terms of EU trade partners. The analysis shows a **positive correlation between the number of ETAs issued to a country and its average extra-EU export value**, as shown in Figure 21. This finding implies that more ETAs are usually requested in countries to which EU Member States export the most. A good example is China, which is among the top EU export destination countries and is simultaneously where manufacturers requested a significant number of ETAs. The United States and Australia represent two exceptions to this pattern.

On the one hand, while the United States is the second EU destination market, American companies requested a relatively low number of ETAs. However, it is known that the content of EADs and ETAs has been adapted to fit into the US assessment framework, leading to a solid degree of technical harmonisation between EADs and US assessment criteria issued by the International Code Council Evaluation Service (ICC-ES), especially in the field of fixings (PAC 33). EOTA expects the level of technical harmonisation to increase even more in the future and spread to more product areas due

to agreements reached with ICC-ES on the mutual use of technical intellectual property and because ICC-ES was welcomed to EOTA as an observer in 2021.

On the other hand, Australia is in 19th place in terms of extra-EU exports but in second place in terms of the number of ETAs requested. **This suggests that ETAs are also requested in countries that are not used to importing much from the EU but look to the ETA as a best practice. Parallel to the Australian case, in Taiwan and India, manufacturers have requested many ETAs over time, even though their trade relationship with EU Member States is not as strong as other countries'.**

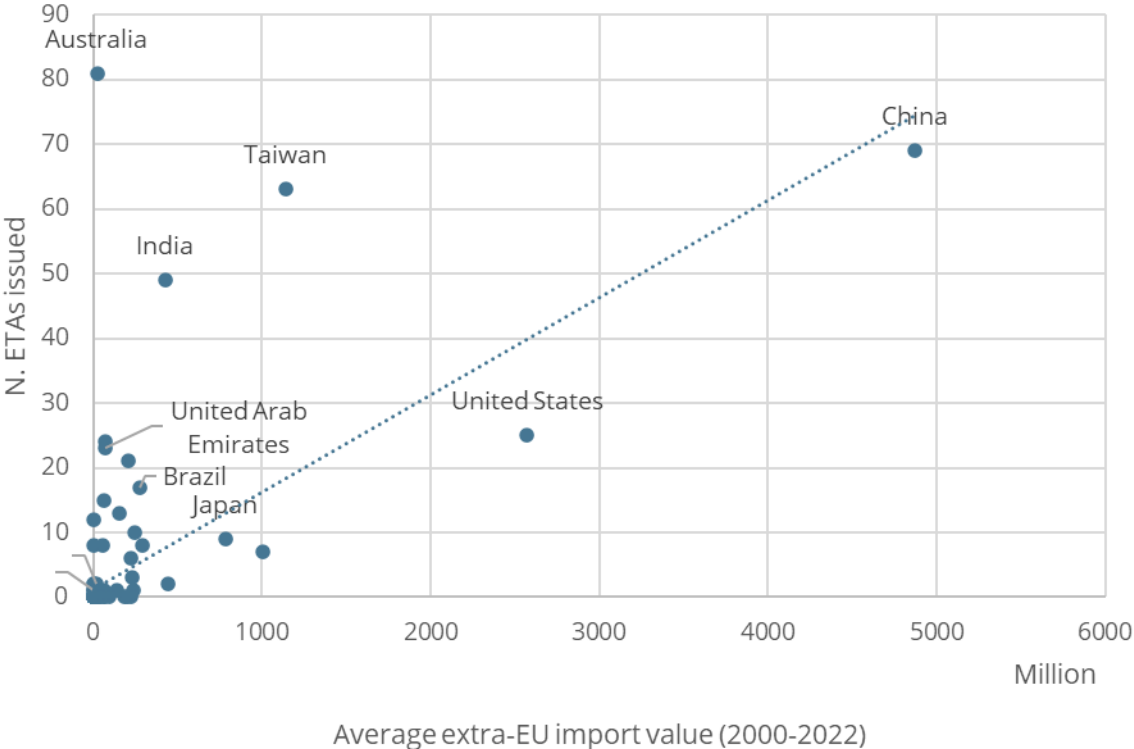
Figure 21. Non-EU countries by number of ETAs requested and extra-EU export value



Source: CSIL elaborations based on data provided by EOTA and Comext

Taiwan's interest in the ETA route may be justified, among other reasons, by the role the country plays as a source for imports to the EU Member States. As shown in Figure 22, a slightly positive relationship exists between the number of ETAs requested in a country and the value of products EU Member States import from it. Evidence shows that the number of ETAs in China and Taiwan is probably linked to the fact that EU Member States widely import goods from them. The rationale behind this positive relationship might be that, as mentioned in Section 2.2, ETA-assessed products ensure that the product is characterised by high quality and safety levels. The conclusion is that non-EU manufacturers request ETAs to be competitive on the EU markets and increase their export shares in Europe.

Figure 22. Non-EU countries by number of ETAs requested and extra-EU import value



Source: CSIL analyses based on data provided by EOTA and Comext

4. Discussion of findings

In accordance with the Construction Products Regulation (EU) 305/2011, the ETA route provides European and non-European manufacturers with the **opportunity to CE-mark their products** in cases where they are not (fully) covered by harmonised standards (hENs).

Analysis of the ETAs issued in **non-EU countries** has revealed that an **increasing number of manufacturers are showing interest in the ETA route by requesting ETAs**. However, the uptake level of the ETA route beyond Europe varies widely across countries and product areas. A large number of ETAs were requested by non-EU manufacturers producing **fixings** (PAC 33) and **fire stopping, fire sealing, fire protective or retardant products** (PAC 35). Between 2013 and 2022, most ETAs issued to non-EU countries were requested by manufacturers located in Australia (81 ETAs) as well as in Asian countries, such as China (73 ETAs), Taiwan (63 ETAs), and India (53 ETAs).

This report has shown how externally available data (Comext and UNIDO-INDSTAT4), properly matched with EADs, provide additional valuable insight to understand the relevance of the ETA route in countries outside the EU. Some of these insights are mentioned here to trigger future discussion within EOTA and its stakeholders.

The analysis of the economic relevance of PAC 4 – Thermal insulation, PAC 9 – External cladding, PAC 13 – Structural timber products, PAC 33 – Fixings, and PAC 35 – Fire stopping products highlights that even though European production has not shrunk, extra-EU countries are responsible for increasing proportions of global production. Over 70% of the total production is actually concentrated in the Asia Pacific region. At the country level, China is the main player, responsible for about 62% of the global output and 88% of the output of the entire Asia Pacific area, and is where 12% of the active companies operate. China a key trade partner of the EU. However, the analysis of key EU trade partners also shows that countries such as Morocco, Saudi Arabia, and India are becoming more and more important destination markets for European construction products.

From the perspective of imports, while China and US continue to be the main origin country for construction products covered by the five PACs analysed (PAC 4 – Thermal insulation , PAC 9 – External cladding, PAC 13 – Structural timber products, and PAC 33 – Fixings, PAC 35 – Fire stopping products, imports from some emerging economies, such as South Korea, India and Vietnam, are gradually increasing. A slightly positive relationship between these factors also emerged by triangulating the number of ETAs issued with product market indicators and trade data. **ETAs are currently requested more frequently by manufacturers in countries with larger product market sizes and strong trade relationships with EU States**. Although the analysis does not allow to conclude whether ETAs are responsible for the increase in trade or trade is responsible for the increase in ETA requests, the **link between ETAs and trade** suggests that the ETA route could be promoted in the main EU trade partners, especially if the relevant countries do not have a national certification system. This strategy would benefit both EU Member States and non-EU countries.

EU countries that rely increasingly on products manufactured in non-EU countries, as shown in section 3.2, would benefit from the fact that the imported goods comply with high quality and safety standards. Consequently, EU companies would be able to import goods, because they could fully trust the performance of these products. There could also be positive spillover effects on the overall European society, given the high safety standards imposed by ETAs. As well, manufacturers in non-EU countries could also benefit from adopting the ETA route because this could allow them to increase the volume and the value of their exports to Europe.

Despite the expected benefits, it is worth considering the effort needed to successfully promote the ETA route beyond Europe. Moreover, as mentioned, the level of awareness and interest in the ETA route in non-EU countries is currently heterogeneous across product areas and countries. Thus, it might be advisable to **diversify the internationalisation strategy by PAC and country/countries** and start approaching countries that have already shown high interest, e.g., Australia, Taiwan, and India, and discuss on a case-by-case basis the feasibility of an internationalisation project.

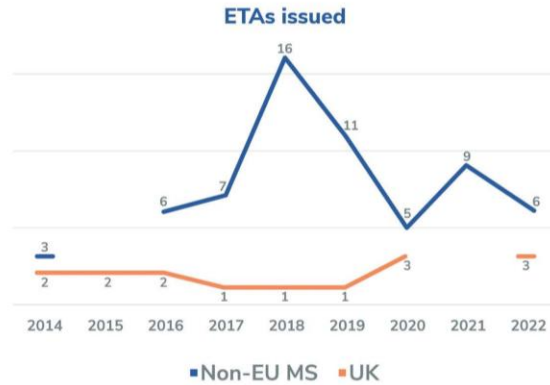
Annex 1. EAD-CN correspondence table

See separate Excel file.

Annex 2. PAC 4 – Thermal insulation products, composite insulation systems

FACT SHEET PAC 4 – Thermal insulation products

78 ETAs (4%) requested by non-EU manufacturers



26% ETAs issued to manufacturers in Serbia



201

5,067 billion USD in thermal insulation products (all sectors) produced worldwide

86% produced outside the EU

85% of extra-EU production concentrated in:

- China (69%)
- United States (16%)

Emerging country: Egypt



2019

834,000+ thermal insulation companies active worldwide

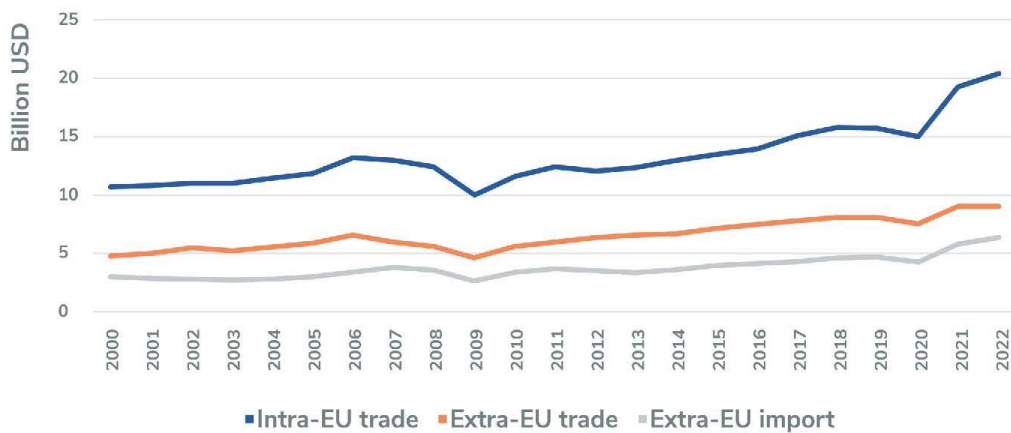
31% located outside the EU

48% of the extra-EU companies concentrated in:

- Thailand (24%)
- China (12%)

Emerging country: Egypt





EU cross-border trade of thermal insulation products has steadily **increased** internally and with extra-EU countries.

2022

7.36 billion USD in thermal insulation products **exported outside the EU**, accounting for **25%** of total EU exports.

26% of the **extra-EU exports** concentrated in:

- United States (21%)
- China (5%)



2022

5.41 billion USD in thermal insulation products **imported from outside the EU**, accounting for **21%** of total EU imports.

37% of **extra-EU imports** came from:

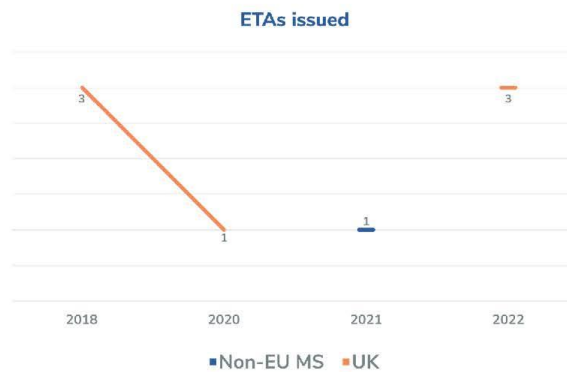
- China (27%)
- Russia (10%)



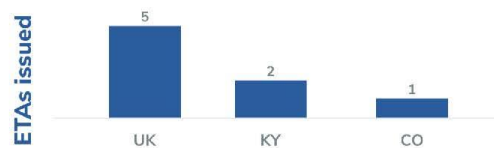
Annex 3. PAC 9 – Curtain walling, claddings, structural sealant glazing

FACT SHEET PAC 9 – Curtain walling products

8 ETAs (4%) requested
by non-EU manufacturers



ETAs issued to manufacturers in UK, Cayman Islands and Colombia



2019

2,698 billion USD in curtain walling, claddings and structural sealant glazing
(all sectors) produced worldwide

79% produced outside the EU

78% of **extra-EU production** concentrated in:

- China (59%)
- United States (19%)

Emerging countries: Philippines and Egypt



2019

766,000+ curtain walling **companies** active worldwide

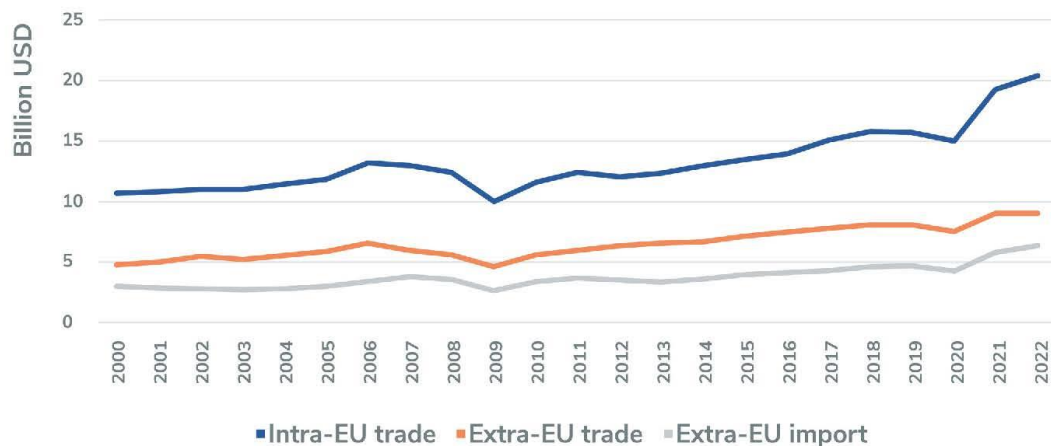
41% located outside the EU

28% of **extra-EU companies** concentrated in:

- Mexico (15%)
- China (12%)

Emerging countries: Egypt and Nepal





EU cross-border trade of thermal insulation products has steadily **increased** internally and with extra-EU countries.

2022

7.36 billion USD in thermal insulation products **exported outside the EU**, accounting for **25%** of total EU exports.

26% of the **extra-EU exports** concentrated in:

- United States (21%)
- China (5%)



2022

5.41 billion USD in thermal insulation products **imported from outside the EU**, accounting for **21%** of total EU imports.

37% of **extra-EU imports** came from:

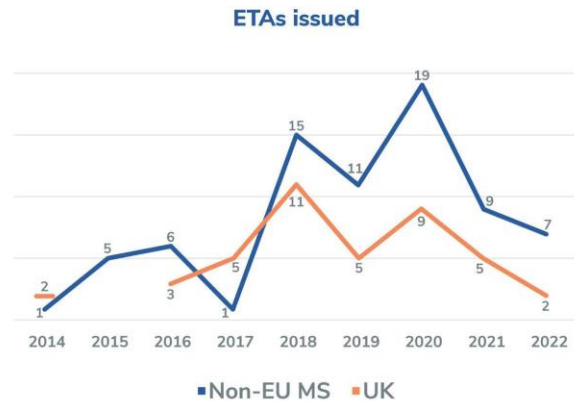
- China (27%)
- Russia (10%)



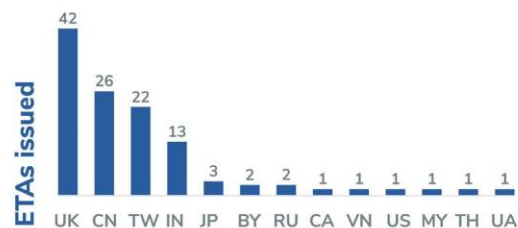
Annex 4. PAC 13 – Structural timber products, elements and ancillaries

FACT SHEET PAC 13 – Structural timber

116 ETAs (15%) requested by non-EU manufacturers



81% ETAs issued to manufacturers in UK, China and Taiwan



2019

895 billion USD in structural timber products (all sectors) produced worldwide

87% produced outside the EU

90% of extra-EU production concentrated in:

- China (79%)
- United States (11%)

Emerging countries: Egypt and Kyrgyzstan



2019

165,000+ structural timber companies active worldwide

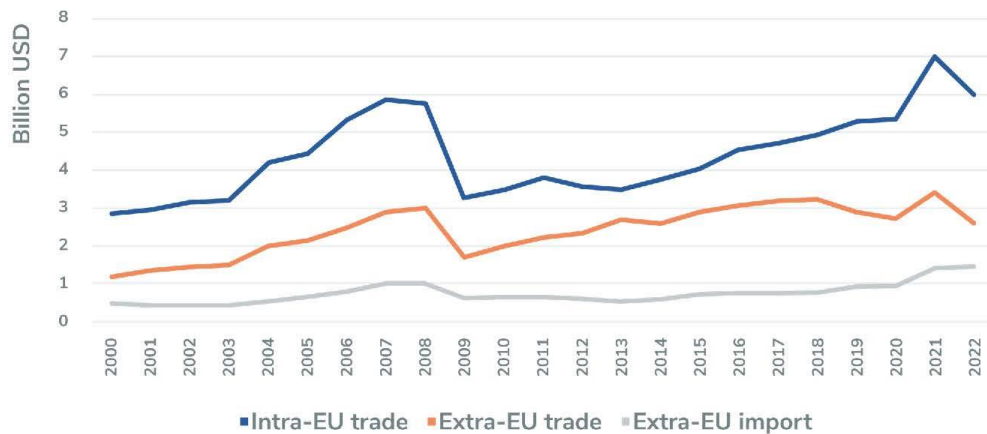
55% located outside the EU

36% of extra-EU companies concentrated in:

- China (22%)
- United Kingdom (14%)

Emerging countries: Egypt and Nepal





EU cross-border trade of curtain walling products has steadily **increased** internally and with extra-EU countries until 2021 and dropped in 2022.

2022

1.50 billion USD in curtain walling products **exported outside the EU**, accounting for **17%** of total EU exports.

52% of **extra-EU exports** concentrated in:

- United Kingdom (41%)
- United States (11%)



2022

1.26 billion USD in curtain walling products **imported from outside the EU**, accounting for **21%** of total EU imports.

53% of the **extra-EU imports** came from:

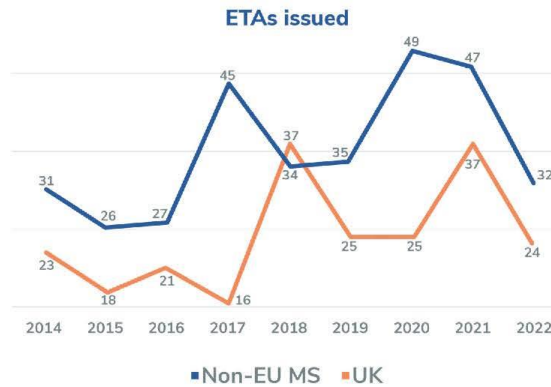
- China (39%)
- United Kingdom (14%)



Annex 5. PAC 33 – Fixings

FACT SHEET PAC 33 – Fixings

552 ETAs (14%) requested by non-EU manufacturers



56% ETAs issued to manufacturers in UK and Australia



2019

4,170 billion USD in fixings (all sectors) produced worldwide

63% produced outside the EU

86% of extra-EU production concentrated in:

- China (71%)
- United States (11%)
- India (4%)

Emerging countries: Philippines and Iran



2019

506,000+ fixings companies active worldwide

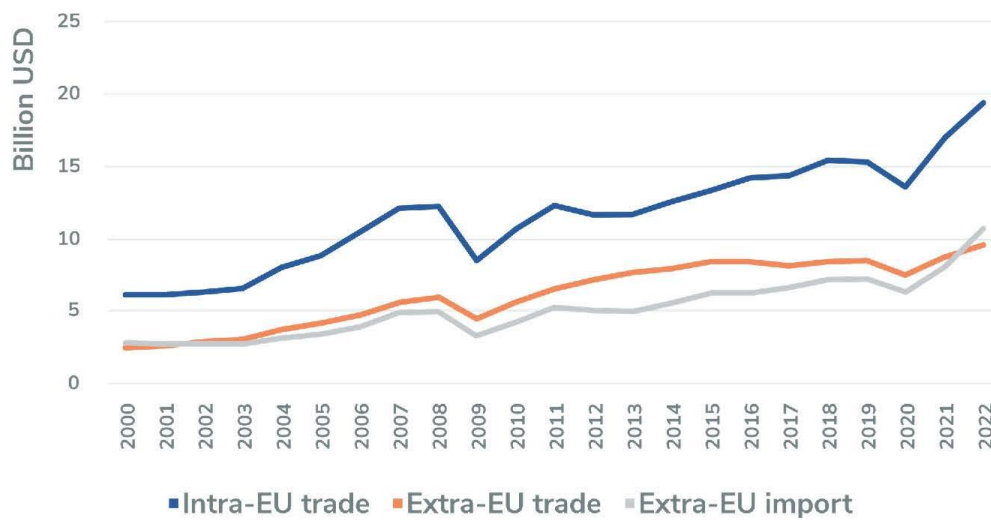
35% located outside the EU

47% of the extra-EU companies concentrated in:

- Mexico (20%)
- United States (15%)
- China (12%)

Emerging countries: Egypt and Peru





EU cross-border trade of fixings has steadily **increased** internally and with extra-EU countries.

2022

7.68 billion USD in fixings **exported outside the EU**, accounting for **27%** of total EU exports.

53% of **extra-EU exports** concentrated in:

- United States (22%)
- China (16%)
- United Kingdom (15%)



2022

9.03 billion USD in fixings **imported from outside the EU**, accounting for **31%** of total EU imports.

65% of **extra-EU imports** came from:

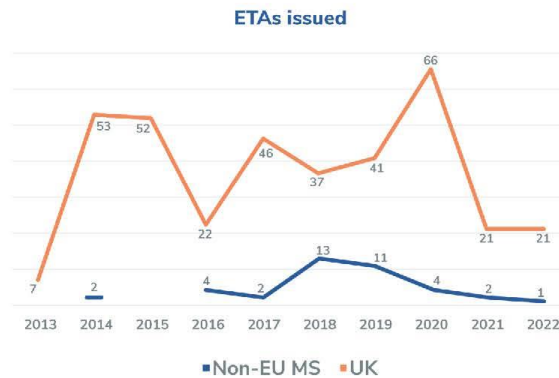
- China (33%)
- Taiwan (22%)
- United States (10%)



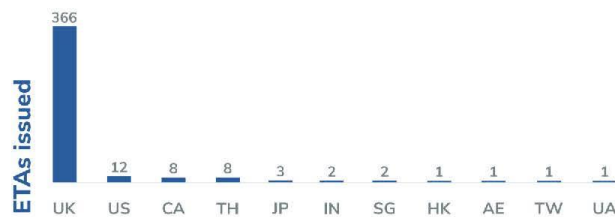
Annex 6. PAC 35 – Fire-stopping, fire sealing, fire protective or retardant products

FACT SHEET PAC 35 - Fire-stopping products

405 ETAs (23%) requested by non-EU manufacturers



90% ETAs issued to manufacturers in UK



2019

10,581 billion USD in fire-stopping products produced worldwide

87% produced outside the EU

83% of extra-EU production concentrated in:

- China (70%)
- United States (13%)

Emerging country: Philippines



2019

1,180,000+ fire-stopping companies active worldwide

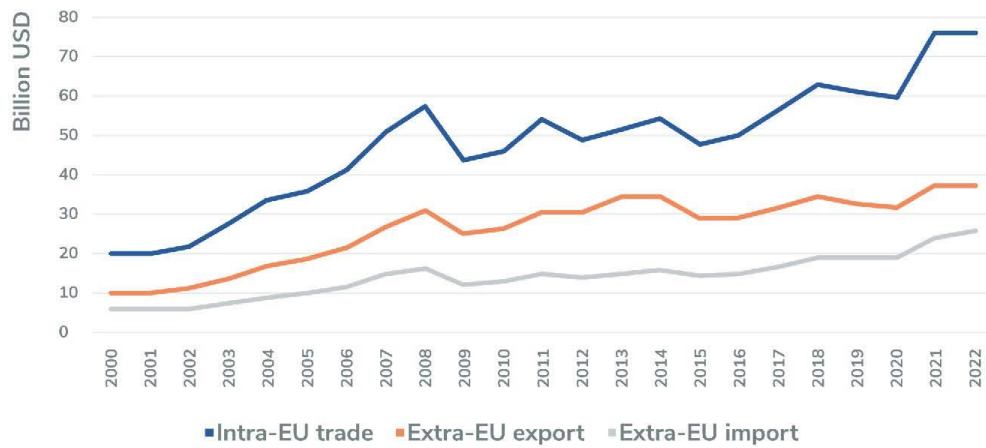
35% located outside the EU

29% of extra-EU companies concentrated in:

- China (18%)
- United States (11%)

Emerging country: Egypt





EU cross-border trade of fire-stopping products has steadily increased internally and with extra-EU countries.

2022

27 billion USD in fire-stopping products **exported outside the EU**, accounting for **26%** of total EU exports.

43% of the **extra-EU exports** concentrated in:

- United States (18%)
- United Kingdom (16%)
- China (9%)



2022

21 billion USD in fire-stopping products **imported from outside the EU**, accounting for **21%** of total EU imports.

71% of the **extra-EU imports** came from:

- China (41%)
- United Kingdom (17%)
- United States (13%)





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