



## THE EUROPEAN MARKET FOR THERMAL INSULATION PRODUCTS

IAL Consultants is pleased to announce the publication of the thirteenth edition of its popular study on **The Market for Thermal Insulation in Europe**.

This study updates the previous report published in 2019 and contains market data for all the main thermal insulation products, by material type and end-use application, for the base year of 2020. Data is presented in both volume (cubic metres and tonnes) and value (€), with five-year forecasts to 2025. The materials covered include:

- Glass Wool
- Stone Wool
- White EPS
- Grey EPS
- XPS
- PUR
- PIR
- Phenolics
- ENR
- PE
- Renewable Insulation Materials
- Vacuum Insulation Panels/Aerogel

***An in-depth report covering 26 countries and the 4 key insulation material types:***

The report is based upon an extensive programme of interviews throughout the industry and across the different geographies in Europe. This has been further supported by an analysis of economic indicators and relevant legislation and/or technical issues affecting the demand for thermal insulation materials. The analysis covers 26 countries (including all major European thermal insulation markets) split into 17 country volumes, covering the insulation materials mentioned above.

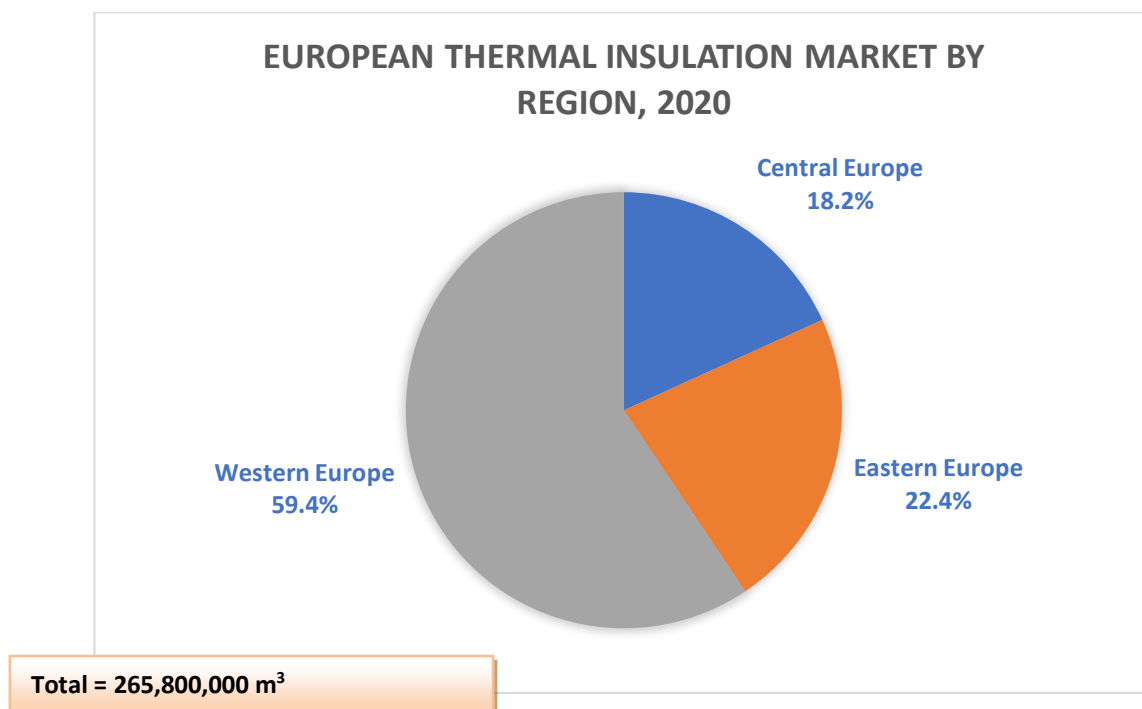
In addition, separate material volumes are provided for the 4 key insulation materials: mineral wool, EPS (white and grey), XPS and PUR/PIR. Data is presented regionally (Western Europe, Central Europe and Eastern Europe) and then for the individual 26 countries.

***All data is available on our online database platform, enabling the customer greater ease of comparison and data manipulation.***

### Market Summary and Key Findings

- The total market for thermal insulation products in Europe stood at **265.8 million m<sup>3</sup>** in 2020 (**9.8 million tonnes**). This equates to an approximate market value of **€16.9 billion**.
- The **CAGR** is forecast at **3.3%** from 2020 to 2025. The 2021 market is estimated at **276.5 million m<sup>3</sup>**, a 4.0% rise over 2020.
- In recent years, the majority of countries in Europe have suffered due to the effects of COVID-19, with every country registering negative growth in overall thermal insulation material demand from 2019-2020, except for Hungary, Denmark, Portugal and Sweden.

- Western Europe accounted for 59.4% of the European thermal insulation demand, and the market is forecast to show growth at **CAGR 3.4%** to 2025. Denmark and Sweden exhibited strong growth from 2019-2020, with Portugal also performing relatively well.
- The Central European market's share has increased slightly since IAL's last report, representing 18.2% of demand with a **CAGR of 2.8%** to 2025. Croatia, Hungary and Poland were the strongest countries in the region.
- Eastern Europe's market share contracted again in 2020, comprising 22.4% of European thermal insulation demand, down from 24% in 2018. This can be attributed to the significant decline in Turkey's demand, which was caused by political instability and economic turbulence. However, Eastern Europe is expected to recover during the forecast period to register a **CAGR of 3.6%** to 2025. The Baltics is the strongest market in the region and Russia continues to be the largest.



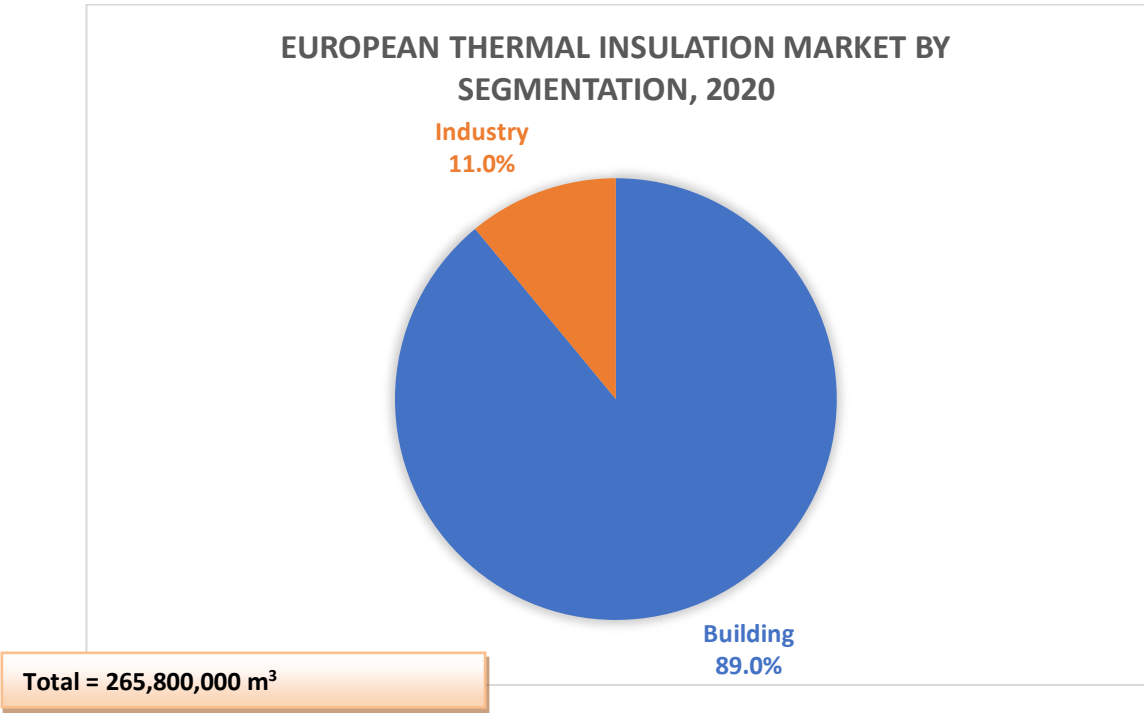
The building segment possesses a much higher share than industry in European thermal insulation, with the overall use in industrial applications remaining considerably smaller, at 11.0% of the market. Wall is still the largest end-use segment in building applications and pipe lagging continues to be the biggest in industrial applications.

### **Insulation materials**

Glass wool and stone wool are the most prominent materials in Europe and, combined, they represent 55% of the thermal insulation market. They have gained market share in recent times due to the emphasis on using non-combustible insulation materials, and this has been aided by new EU regulations governing the fire resistance of insulation materials for buildings above 28 metres (European class A1 and A2), which came into effect following the Grenfell Tower fire. Furthermore, mineral wool manufacturers continue to push their enhanced fire protection characteristics in comparison to foam plastic insulation materials.

EPS remains a very popular material, making up just less than 25% of the whole market. EPS is especially prevalent in external wall insulation systems. However, EPS consumption in many Western European countries is suffering because of its poor fire resistance properties. This is

not the case in some Central and Eastern European countries, where the price sensitivity of the market favours EPS and other, cheaper materials.



XPS growth has remained stable in Europe and the material is used for its low permeability and high compression strength. The physical properties of XPS mean that it can be used in board form in roofing, flooring and wall applications. Due to its high cost, it is mostly used for applications that require its specific properties, such as refrigerated transport, perimeter insulation and cold stores. XPS makes up 6.3% of thermal insulation demand.

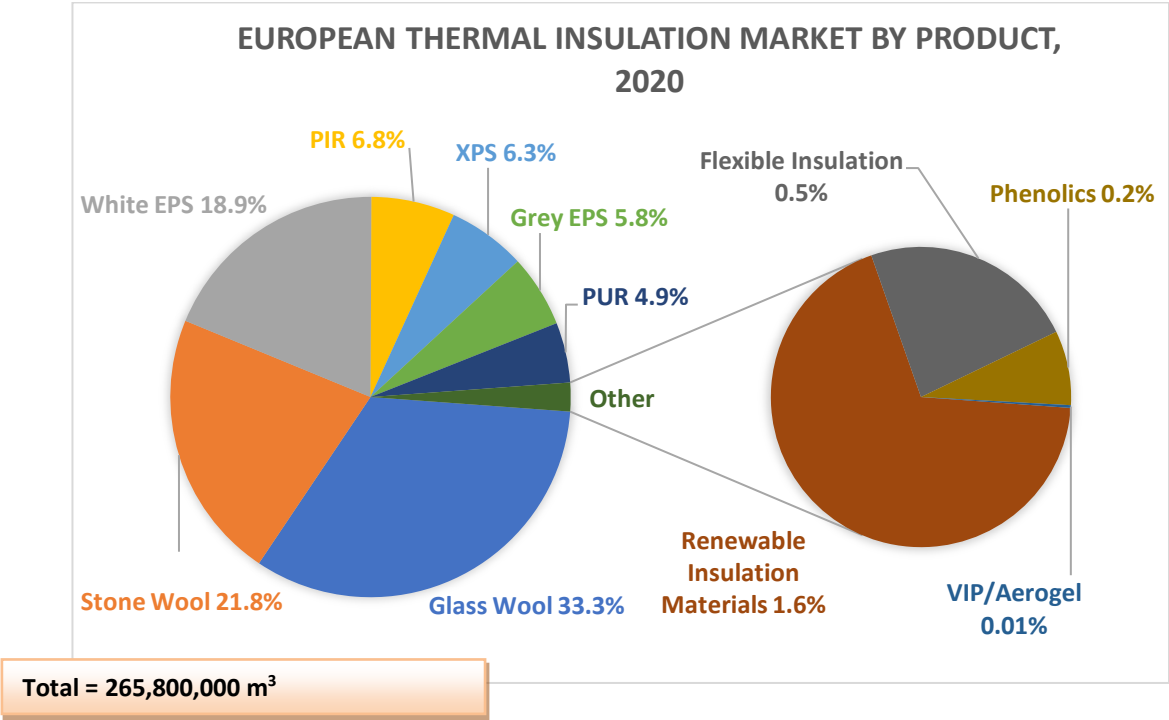
PUR and PIR foams are not as widely used as some other materials due to their relatively high cost. However, the excellent low thermal conductivity and wide operating temperature mean that they are very versatile materials. The PUR/PIR industry has faced a few challenging years due to raw material shortages and resulting price increases, as well as changes in blowing agent regulations. However, these materials are some of the better performing in the thermal insulation market, together representing 11.7% of demand. PIR continues to take market share from PUR due to its superior thermal performance. Phenolic foam is one of the fastest-growing materials currently, but remains a niche market in thermal insulation, finding most of its use in industrial applications, such as pipe lagging. Phenolic foam makes up 0.2% of the market.

Flexible insulation is primarily used for pipe insulation, with ENR being preferred for cold pipes, HVAC and process plant applications, and PE being used in domestic lagging. In volume terms, ENR is a smaller market but is showing faster growth than PE due to its superior fire resistance properties. ENR and PE possess 0.5% market share, combined.

Renewable insulation materials are a natural alternative to synthetics and have become more prominent in recent years, owing to the global emphasis on environmentally friendly products. There are many types of renewable thermal insulation, with cellulose being the most popular because of its ease of application and ability to be used in retrofitting. Wood fibres are also popular in this segment. Renewable insulation materials account for 1.6% of demand.

VIPs use the insulation of a vacuum within a gas-tight film to give outstanding thermal performance. They are mostly used in specific applications where space is an issue, due to their lower thickness when compared to other panels. Aerogels are synthetic, ultra-light materials derived from a gel (usually silica) and are mostly used for niche applications that require high thermal performance, such as pipe insulation for cryogenics in the liquefied natural gas industry. These materials have the smallest market share at 0.01%.

Prices for all thermal insulation materials have increased in recent years, some more significantly than others, owing to supply chain issues and increasing energy prices. However, the EU Green Deal is expected to have a positive impact on the market and will increase the demand for all types of thermal insulation. Individual countries have also implemented their own incentives, such as Italy, which put into place its Superbonus and Ecobonus tax credit schemes in 2020. While the Ecobonus benefited PU materials, the Superbonus has been more advantageous for other thermal insulation materials such as mineral wool, EPS and XPS.



***The European Market for Thermal Insulation Products*** is now available from IAL Consultants. Prices start at €1,300 for single country volumes and €3,750 for market volumes. The whole report is priced at €15,000, which includes online database access and the executive summary.

***All data in this report plus additional historical trends and forecasts are now available in our unique online database.***

To purchase the report or for more information please contact:

**Mrs Cathy Galbraith**

**IAL Consultants**

**CP House, 97-107 Uxbridge Road, Ealing, London W5 5TL, UK**

**Tel: + 44 20 8832 7780**

**Fax: + 44 20 8566 4931**

**Email: [cgalbraith@brgggroup.com](mailto:cgalbraith@brgggroup.com)**

**Website: [www.ialconsultants.com](http://www.ialconsultants.com)**