LEAP4SME ENERGY AUDIT POLICIES TO DRIVE ENERGY EFFICIENCY

Mapping SMEs data in Europe

INTRODUCTION

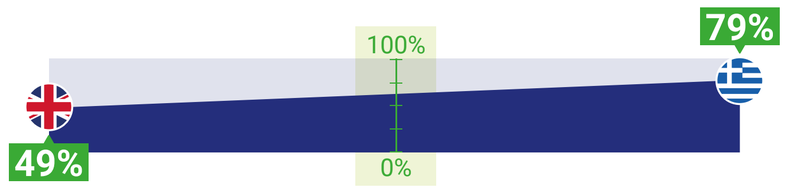
Small and medium-sized enterprises (SMEs) are the backbone of the European economy. Within the LEAP4SME project, we have analysed the economic and energy aspects of SMEs in Austria, Croatia, Greece, Italy, Malta, Poland, Portugal, Slovakia, and the United Kingdom. In all the targeted countries, there are no explicit data sources for energy consumption to enable cross-country comparisons. To obtain consistent and comparable energy data at SME level for all partner countries, a set of different approaches were developed to estimate the total energy consumption of SMEs.

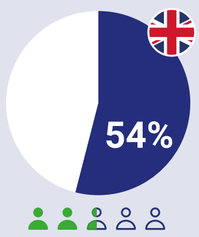
SME mapping in partner countries

The importance of SMEs is shown by the economic database of Eurostat's Structural Business Statistics (SBS), which is categorised in NACE sections and divisions. In all partner countries of LEAP4SME, the economic relevance of SMEs is extremely high:

- **More than 99% of all enterprises are SMEs**, whereas large companies only have a marginal share.
- **Micro enterprises alone account for more than 86% of all enterprises.**
- Looking at the ownership structure, on average, **around 87% of all SMEs are autonomous profit-oriented enterprises** and can make independent financial decisions.

The **economic value** added by SMEs varies between **49% in the UK** and **79% in Greece**





The UK has the **lowest share** of persons employed by SMEs

Greece has the **highest share** of persons employed by SMEs

Wholesale and retail trade SMEs

Contain most enterprises, employees and values added

Manufactoring SMEs

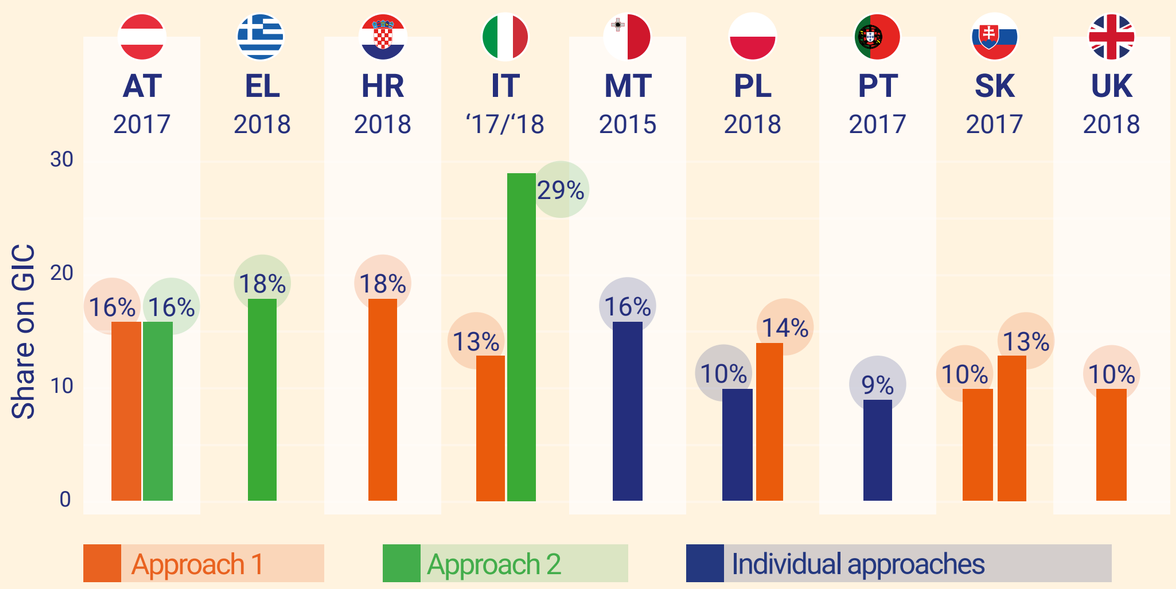
Are second in employees and value added

Professional, scientific and technological SMEs

Are second in number of enterprises

The research revealed that no energy-related data for SMEs were published at European level. At a national level, the quality of existing energy-related data for SMEs was generally insufficient to provide a sound scientific-based support to the policy making cycle.

- Sources analysed: IEA, Eurostat, EIB, OECD, EC studies and initiatives, national energy plans, interviews with experts in the partner National Agencies, 63 EU funded projects on energy efficiency/SMEs/enterprises, peer reviewed publications and main conferences on energy efficiency in Europe.
- Two common different approaches established (Approach 1 and 2) + individual approaches.



Hypothesis, methodologies and assumptions explained in the LEAP4SME report "Mapping SMEs in Europe: Data collection, analysis and methodologies for estimating energy consumptions at Country level"

Approach 1: Bottom-up Approach

Step 1	Definition of threshold consumption for non-household customers that are classified as SMEs.
Step 2	Summation of annual consumption volumes within the threshold.
Step 3	Calculation of the share of other energy sources and extrapolation for total energy consumption.
Step 4	Consideration of additional data to improve the estimates.

Approach 2: Top-down Approach

Basis	Annual energy consumption data of large enterprises from mandatory energy audits, energy balances.
Step 1	Accumulation of the annual energy consumption of large enterprises.
Step 2	Collection of relevant data from the energy balance.
Step 3	Complement of energy balance data with data from physical energy flow accounts (PEFA) and estimation of SME consumption.

REFERENCES

- LEAP4SME, 2021: Report "Mapping SMEs in Europe: Data collection, analysis and methodologies for estimating energy consumptions at Country levels"
- Eurostat's Structural Business Statistics (SBS)

CONSORTIUM

adene Agência para a Energia; The Energy & Water Agency; EIHP Energy Institute Hrvoje Požar; ENEA Italian National Agency for New Technologies, Energy and Sustainable Economic Development; ΚΑΠΕ CRES; SIEA Slovak Innovation and Energy Agency; AEA Austrian Energy Agency; KAPE Krajowa Agencja Poszanowania Energii S.A.; REVOLVE; energy saving trust

ABOUT LEAP4SME

LEAP4SME aims to support countries in establishing or improving effective policies for SMEs to undergo energy audits and implement cost-effective, recommended energy-saving measures through identifying the barriers for unlocking energy efficiency measures and proposing effective solutions to realise both energy and non-energy benefits.

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