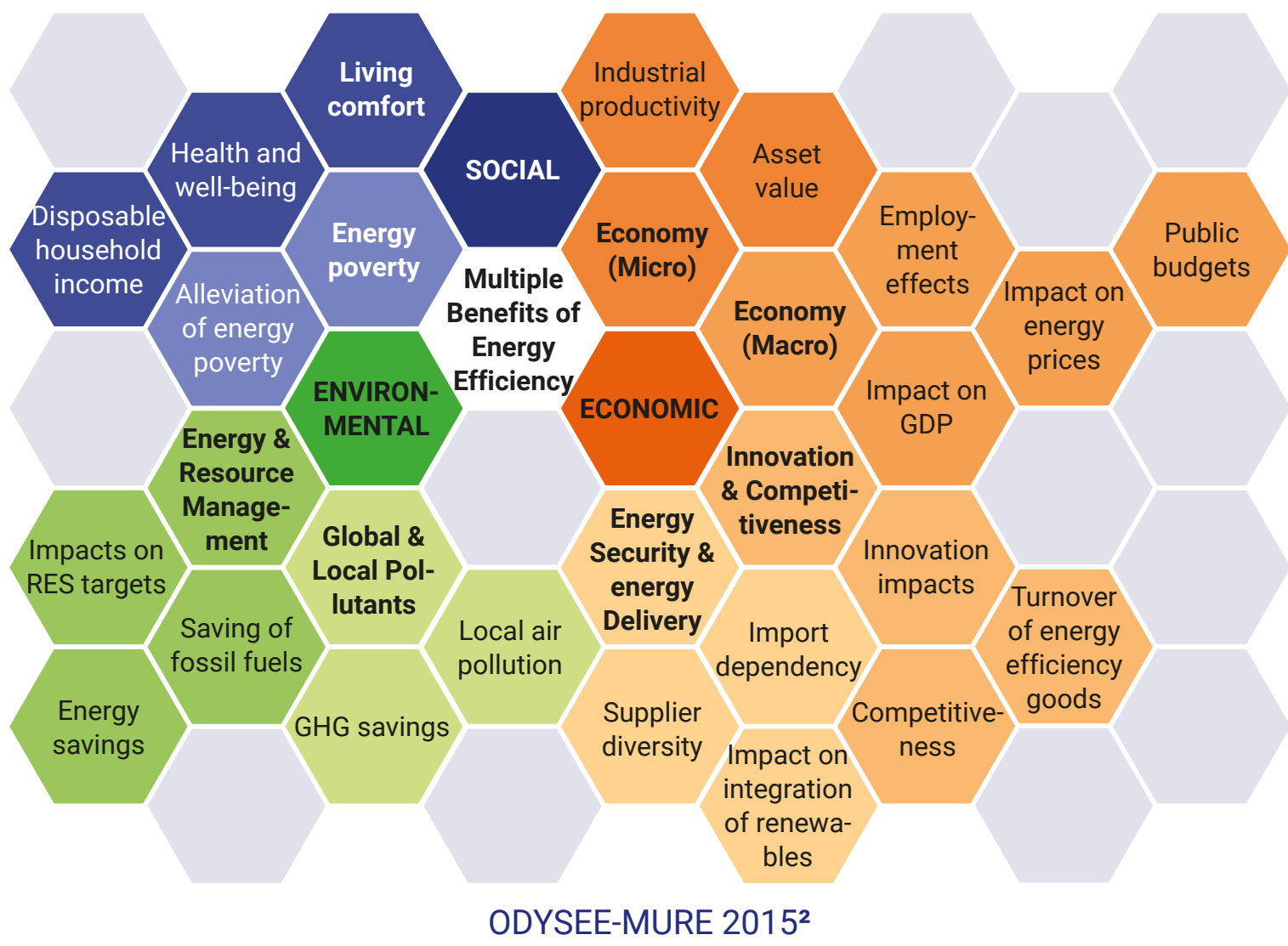
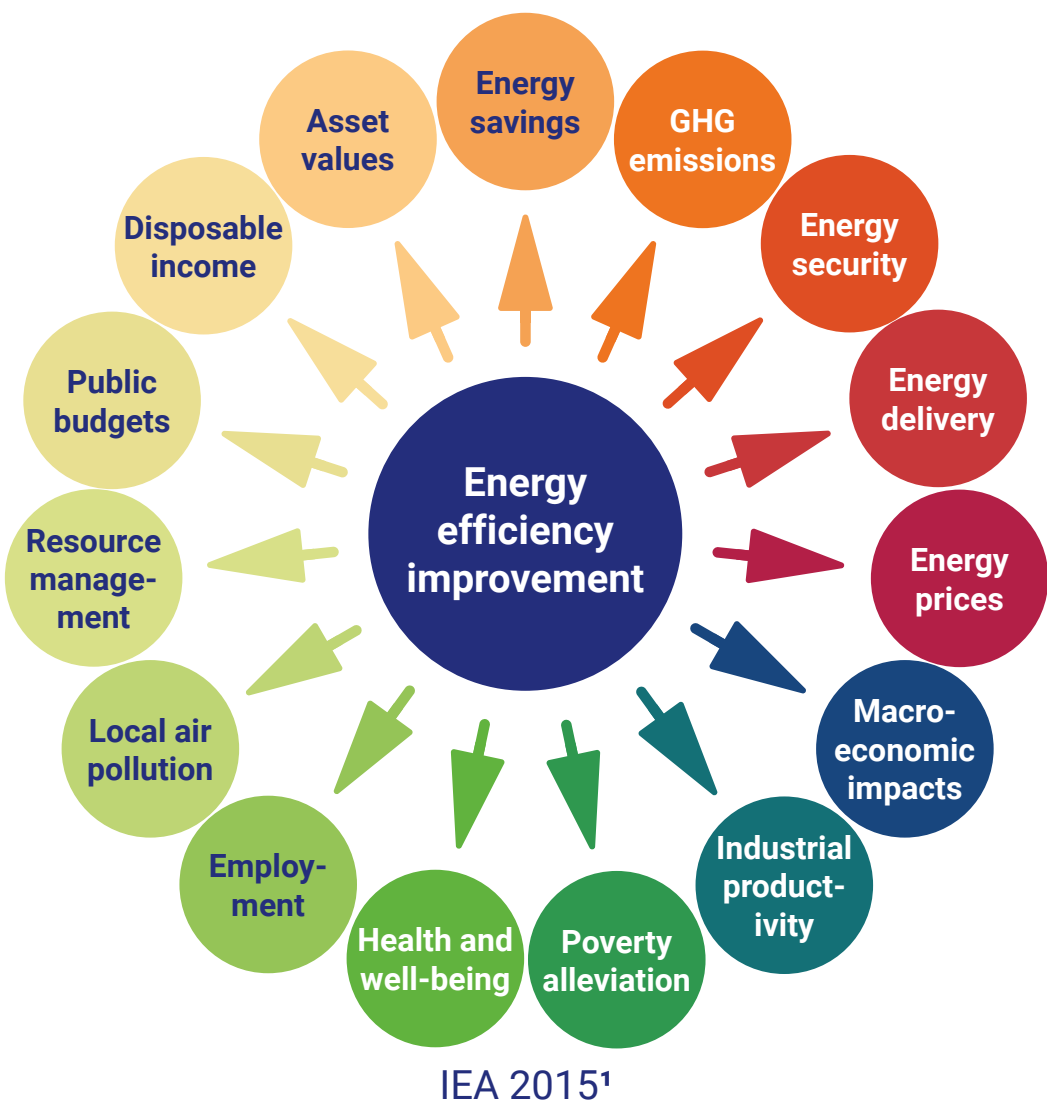


Introduction - Objective

SMEs are the heart of the European economy. There are 23 million EU-27 SMEs (99.8% all companies, employing 83 million people (64% of total employment) and provide 52% of value added.

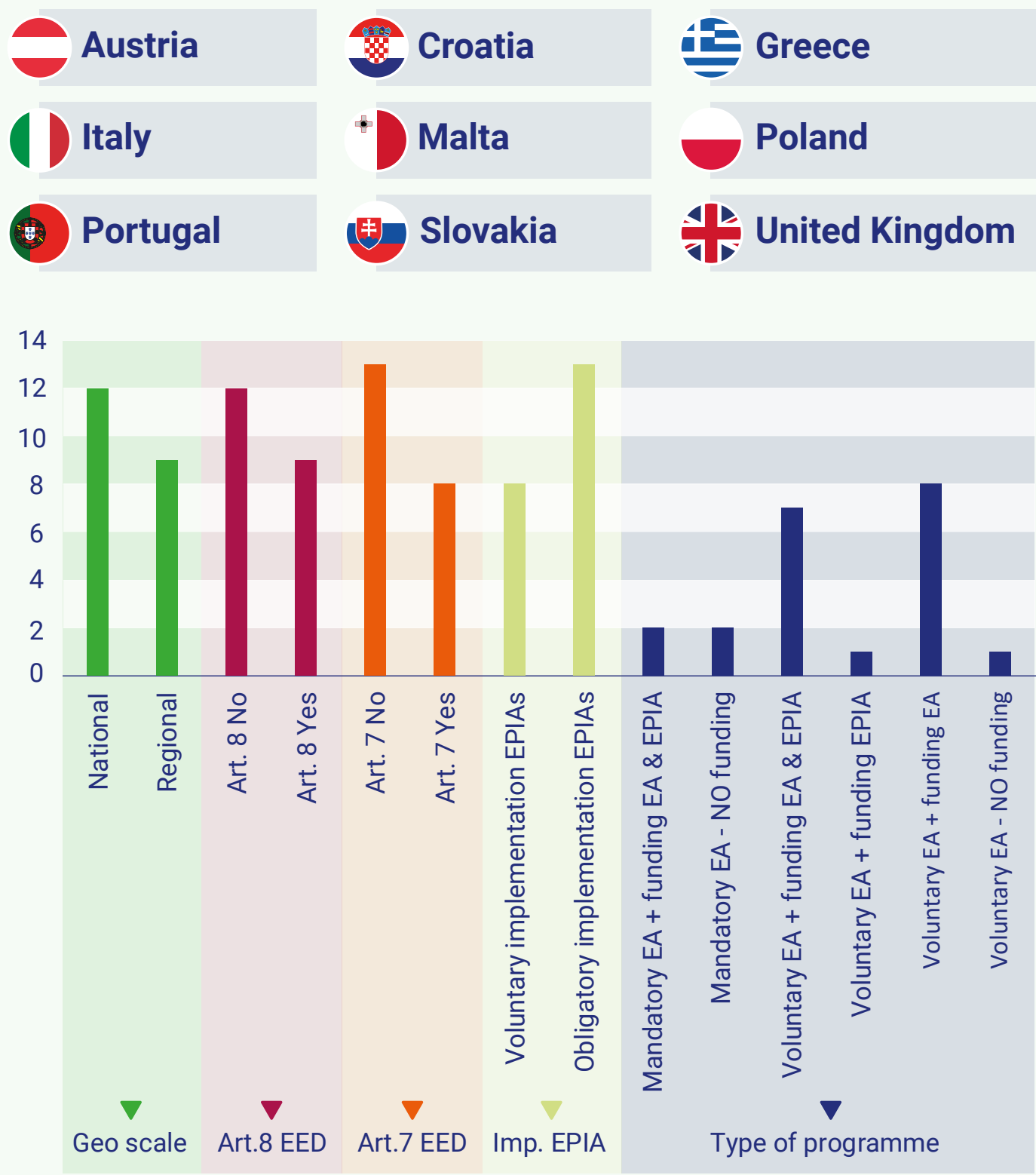
The term ‘multiple benefits’ aims to capture a reality that is often overlooked: investment in energy efficiency can provide many different benefits to many different stakeholders.

Analysing the multiple benefits of energy efficiency in energy audits could be an effective approach to engage non-energy intensive SMEs, which are often unaware and uninterested. The challenge is to understand the relationship between EPIAs’ characteristics and its adoption.



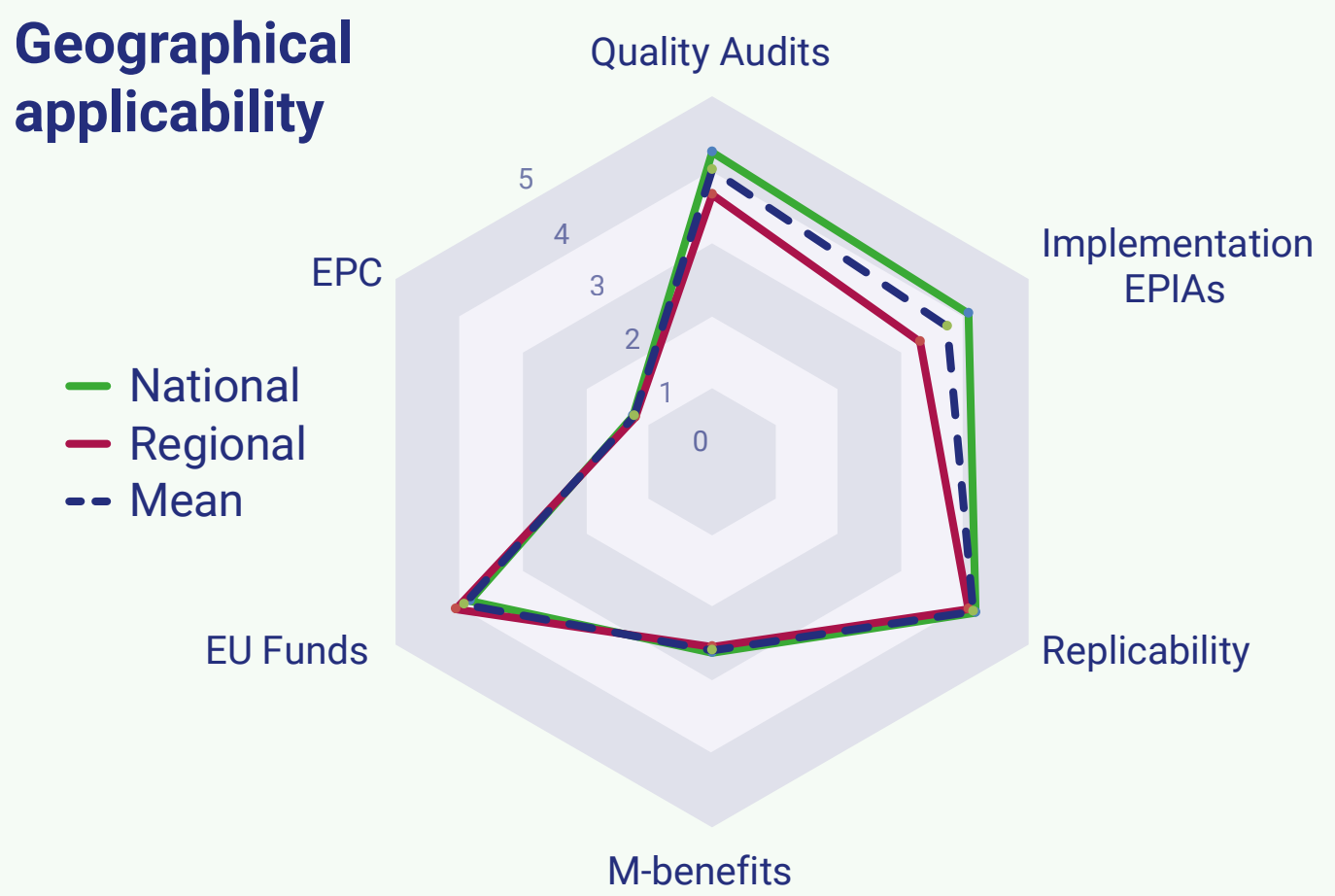
Current status³

21 policies and programmes analysed in 9 European countries



- Obligation of implementation of EPIAs included in the audit depends on the territory (national or local), being more frequently mandatory in national than in regional programmes.
- Obligation of the implementation EPIAs is correlated with stringent requirements of energy audits.
- The evaluation of multiple benefits is usually excluded from the current policies.

Geographical applicability

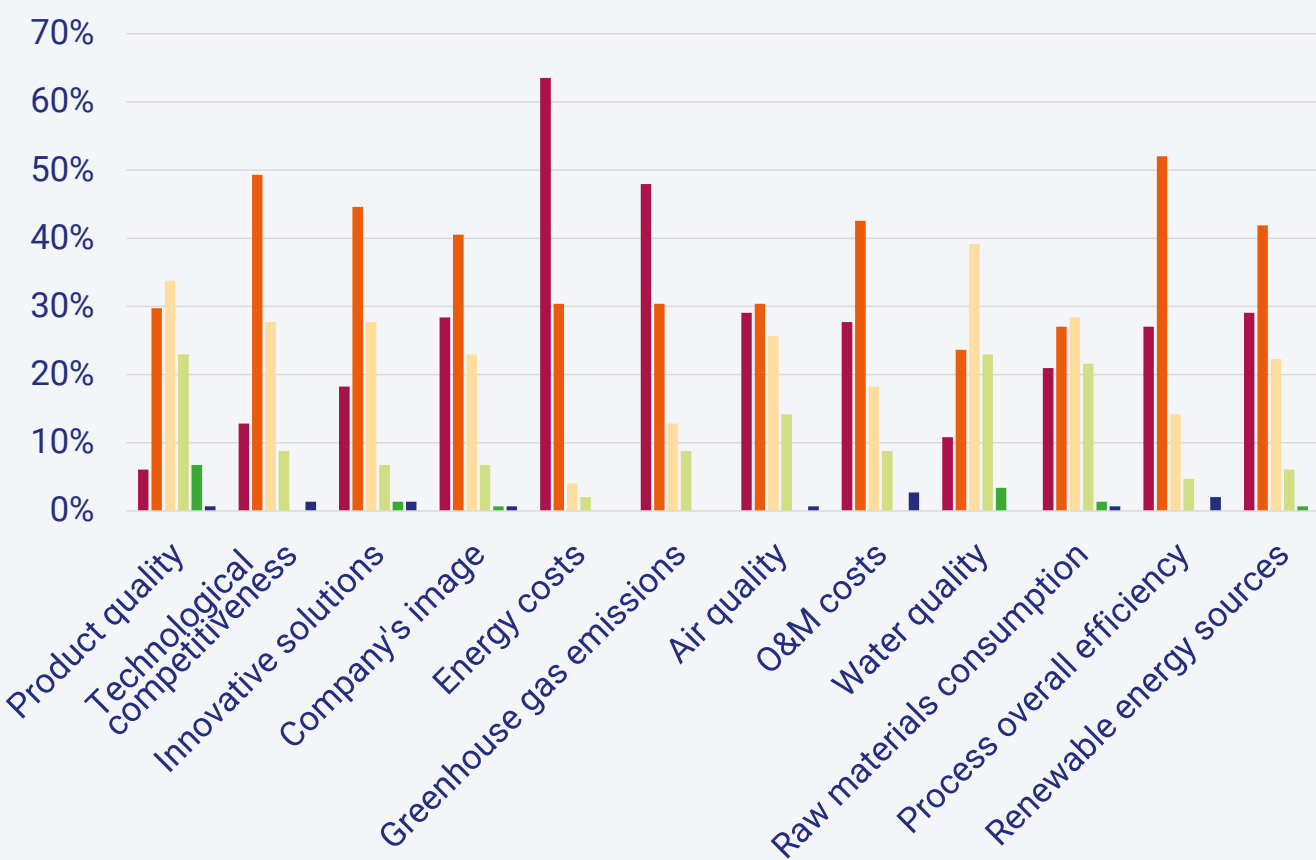


Perception mapping⁴

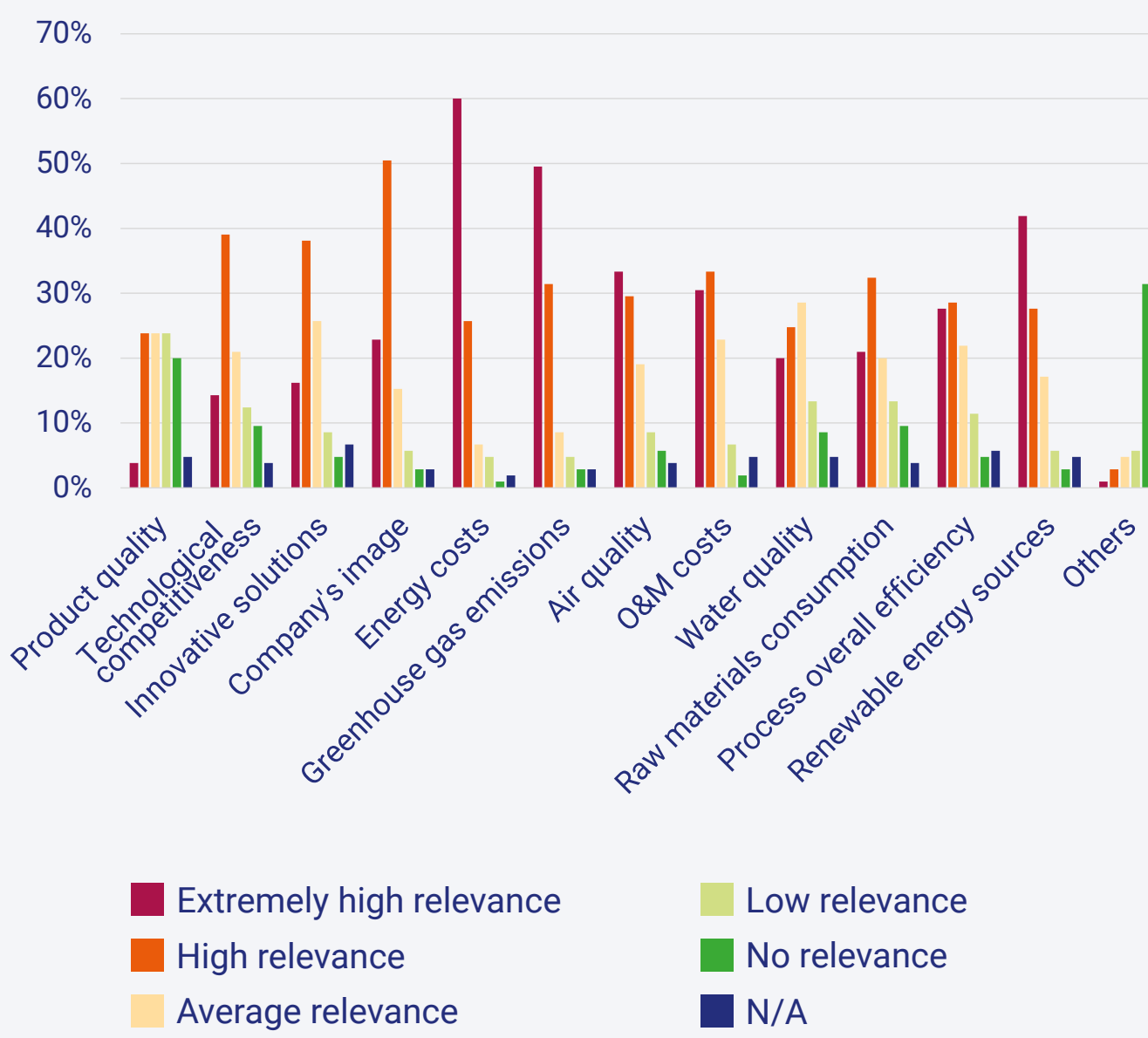
Different perceptions of importance of multiple benefits from Organisations (174) and SMEs (116) in the ongoing project survey

#	Organisations		SMEs	
1	Energy costs	94%	Energy costs	86%
2	Process overall efficiency	79%	Greenhouse gas emissions	81%
3	Greenhouse gas emissions	78%	Company's image	73%
4	Renewable energy sources	71%	Renewable energy sources	70%
5	O&M costs	70%	O&M costs	64%
6	Company's image	69%	Air quality	63%
7	Innovative solutions	63%	Process overall efficiency	56%
8	Technological competitiveness	62%	Innovative solutions	54%
9	Air quality	59%	Technological competitiveness	53%
10	Raw materials consumption	48%	Raw materials consumption	53%
11	Product quality	36%	Water quality	45%
12	Water quality	34%	Product quality	28%

Organisations



SMEs



Multiple benefits indicators⁵

- Quantifying multiple benefits is a difficult task, despite their potential impact on the financial metrics of energy efficiency investments
- Energy efficiency is usually underestimated when considering only direct economic analysis
- Mapping and evaluation of indicators should be based on a mixture of experience, observations, calculations, and/or estimations
- Raw materials and water data integration in energy audits can drive a better understanding and implementation of EPIAs

Group	Indicator
Water Consumption	Total water consumption
Water Intensity	Water consumption per GVA Water consumption per employee
Water Sources	Share of alternative water sources used Share of wastewater treated and reused
Water Cost	Share of water costs in the total costs incurred Water specific cost Economic productivity of water
Material Use	Materials specific consumption Waste valorisation rate Share of subproducts in production process rate
Water-Energy Nexus	Energy specific cost of the hydraulic circuits Water specific cost of the hydraulic circuits



Survey for Organisations



Survey for SMEs

- 1 IEA (2015), Capturing the Multiple Benefits of Energy Efficiency, IEA, Paris
- 2 ODYSSE-MURE (2016), Multiple Benefits of Energy Efficiency, <https://www.odyssee-mure.eu/data-tools/multiple-benefits-energy-efficiency.html>
- 3 LEAP4SME (2022) , D3.3 Compilation of good practices
- 4 LEAP4SME (2021) , D3.2 Report on SMEs characterization to address an effective policy development
- 5 LEAP4SME (2022) , D6.1 Report on the literature review analysis of multiple benefits