

Existing support measures for energy audits and energy efficiency in SMEs

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Table of Contents

EXEC	CUTIVE SUMMARY	4
1	INTRODUCTION	7
1.1	Objectives of the LEAP4SME project	7
1.2	Definition of SMEs	8
1.3	Who is this report for and how should it be used?	8
2	METHODOLOGY	9
2.1	Policy mapping exercise	9
3	THE EUROPEAN ENERGY POLICY FRAMEWORK IN RELATION TO S	MES11
3.1	European directives	11
3.1.	1 ENERGY EFFICIENCY DIRECTIVE	
3.1.	2 DEEP DIVE INTO SPECIFIC EED ARTICLES	
3.1.	3 ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE	
3.1.	.4 RENEWABLE ENERGY DIRECTIVE	
3.2	European Funding Programmes	15
3.2.	1 HORIZON 2020	15
3.2.	2 HORIZON EUROPE	
3.2.	3 LIFE PROGRAMME	
3.2.	4 EUROPEAN REGIONAL DEVELOPMENT FUND	
3.2.	5 EUROPEAN FUNDED PROJECTS FOCUSING ON SMES AND ENERGY	
3.3	European strategic policy framework	20
3.3.	1 EUROPEAN GREEN DEAL	
3.3.	2 SME STRATEGY	
3.3.	3 COVID-19 RECOVERY PLAN (INCLUDING NEXTGENERATIONEU)	
3.3.	4 CLEAN ENERGY FOR ALL EUROPEANS PACKAGE	
3.3.	.5 ENERGY LABELLING AND ECODESIGN	
3.3.	.6 EU STRATEGY FOR ENERGY SYSTEMS INTEGRATION	
3.3.	.7 SET PLAN	





3.3	3.8 EU INDUSTRIAL STRATEGY	24
3.3	3.9 CIRCULAR ECONOMY ACTION PLAN	26
3.3	3.10 EU HYDROGEN STRATEGY	26
3.3	3.11 EU SUSTAINABLE AND SMART MOBILITY STRATEGY	27
4	MAPPING NATIONAL AND REGIONAL POLICY INSTRUMENTS	28
4.1	Financial support	29
4.2	Information/advice	31
4.3	Regulations and National plans/strategies	32
4.4	Energy audit policy instruments	32
4.5	Target sectors and areas for support	34
4.6	Successes, challenges and lessons learned	36
5	IDENTIFYING BEST PRACTICE	39
5.1	Innovation and integration	39
5.2	Longevity	40
5.3	Targeted support	41
5.4	Reducing complexity	41
5.5	Communication and engagement	42
5.6	Ensuring high-quality outcomes	43
5.7	Cost effectiveness	44
6	RECOMMENDATIONS	45
7	APPENDIX	48
7.1	Financial support	48
7.2	Information/advice	53
7.3	Regulations and National plans/strategies	59
7.4	Identifying best practice	61





Executive Summary

The LEAP4SME project is investigating the policies affecting small and medium sized enterprises (SMEs) in relation to undertaking energy audits and adopting energy efficiency or renewable energy measures or other forms of environmental protection. Through research, stakeholder engagement and capacity building, LEAP4SME aims to develop and disseminate new policy ideas which can help improve SMEs access to, and understanding of, energy auditing and the benefits of undertaking an audit.

A total of 173 policy instruments were identified through a literature review conducted by the LEAP4SME partners, researching the policies and support programmes available in their countries: Austria, Croatia, Greece, Italy, Malta, Poland, Portugal, Slovakia, and United Kingdom. Information has also been collated and presented on the European policy context in relation to SMEs and energy.

The policy instruments identified have been categorised as either financial support, information/advice, regulations, and national plans and strategies, with further subcategorisation for each type.



Types of policy instruments





The majority of policy instruments identified (66) were specifically targeted at SMEs across all sectors, others were targeted at all business types and sizes (44), or a combination of different stakeholders, including SMEs, large businesses, householder and public bodies. Eight policies were identified which were targeted at SMEs in specific sectors, such as agro-food processing, tourism, and industry.

Information was gathered for each of the policies identified on the successes, challenges and lessons learned, and the barriers to SMEs in taking up the support mechanisms. Some of the key successes include significant energy, financial and CO₂ savings, large numbers of people trained or consultations given, and the creation of jobs in the energy sector. Challenges and lessons learned included (amongst others), low uptake of project applicants and being under the targeted amount of spending for financial support, a lack of appropriate training and information provision specifically targeted at SMEs, insufficient clarity of application processes for programmes, and long time periods for organisations to wait to receive funding/support.

Throughout the review of the various policy instruments and through discussions with LEAP4SME team members, several key recommendations have been discussed which policy makers should consider when designing and implementing SME energy audit and energy efficiency support:

- Best practice examples show that a **mix of different instruments** can be successful to engage and assist smaller companies.
- **Obligations** to conduct energy audits in SMEs and to meet certain CO₂ or energy saving targets could support the implementation of energy efficient measures.
- Well qualified external energy consultants as a one-stop-shop for smaller companies could play an important role in delivering good energy audits and advice.
- Investments by SMEs in energy efficiency and renewable energy are needed and **subsides** are well-implemented policy instruments.
- Awareness raising to motivate SMEs to take action can be a challenge. Sufficient time and resources to **communicating** the policy instrument must be committed from the outset.
- Avoid complex applications processes with overly strict qualification criteria in order to drive uptake by SMEs.





- Plan for an appropriate level of support for SMEs during the application process, programme implementation and following programme delivery to ensure SMEs stay engaged.
- Sector specific policy instruments might be more appropriate for harder to reach SMEs.
- The use of **capacity building** and development of learning as part of a wider range of support, can help to ensure longevity of the policy.





1 Introduction

Every EU Member State has implemented policies to promote energy audits, energy efficiency, and the use of renewable energy in small and medium sized enterprises (SMEs). These policies may be specifically targeted at SMEs or they may be policies targeting businesses of all sizes. They may focus support on businesses in specific sectors or regions or apply to all sectors on a national scale. The policy objective may be only to achieve energy or carbon savings, or there may be wider policy objectives such as capacity building for SMEs.

This report presents the findings of research by LEAP4SME partners into the policy instruments available in their countries (Austria, Croatia, Greece, Italy, Malta, Poland, Portugal, Slovakia, and United Kingdom) and across EU Member States.

1.1 Objectives of the LEAP4SME project

LEAP4SME aims to improve the national and local policies in place to encourage SMEs to undertake energy audits and implement the recommended energy-saving measures. As a first stage the existing policies and programmes have been mapped and their strengths and weaknesses identified. The project aims to overcome the barriers to SMEs in taking up energy audits and will offer a series of replicable recommendations applicable to SMEs across the project partner countries and the EU more widely.

Throughout the project, interaction with a range of stakeholders by means of workshops, questionnaires, and meetings, is a key focus of the work. Through these outward engagements project partners will look to build the capacity of, and disseminate project findings to, policymakers and relevant stakeholders at the European, national, and regional levels.





1.2 Definition of SMEs

An SME is defined by the European Commission¹ as one which employs fewer than 250 persons and which has an annual turnover not exceeding €50 million, and/or an annual balance sheet total not exceeding €43 million. SMEs can be either:

- micro enterprises (employing < 10 persons)
- small enterprises (employing between ≥ 10 and < 50 persons)
- medium enterprises (employing between ≥ 50 and < 250 persons)

Europe's 25 million SMEs represent 99% of European businesses and are the backbone of the EU economy. They employ around 100 million people², account for more than half of Europe's GDP and provide two out of three jobs. Almost a quarter³ of SMEs in Europe already enable the energy transition by offering green products or services.

We note recent work⁴ undertaken around the definition of SMEs as it relates to Article 8 of the Energy Efficiency Directive and particularly around the question of which organisations should be expected to undertake audits. Although these are important considerations this is outside of the scope of this report and so we have adhered to the pre-existing definition outlined above.

1.3 Who is this report for and how should it be used?

This report is targeted at policy makers at all levels (e.g. European Commission and national governments of Member States) and policy implementers (e.g. energy agencies, ministries, local authorities or regional governments), companies involved in the energy services sector and others working with SMEs. It presents a view of the policy instruments from eight EU Member States and the UK which affect SMEs, with a focus on support for SMEs to access energy audits and adopt energy efficiency or renewable energy measures. The report can be used as a guide to the current policy situation and to help identify innovation and best practice in terms of SME support. A further report will be produced for task 2.3 which investigates the energy audit market, the barriers and benefits to SMEs in adopting energy audits and energy efficiency.

⁴ https://op.europa.eu/en/publication-detail/-/publication/fba03290-aedc-11eb-9767-01aa75ed71a1/language-en



¹ Title I of the Annex to Commission Recommendation 2003/361/EC and Article 2(26) of the Energy Efficiency Directive

² <u>https://ec.europa.eu/growth/smes_en</u>

³ 2017 Eurobarometer on SMEs, resource efficiency and green markets



2 Methodology

2.1 Policy mapping exercise

An exercise to research, review, discuss and categorise energy efficiency and audit related policy instruments or support programmes was conducted by LEAP4SME project partners, investigating the policies in their countries. Policy instruments were either targeted specifically at SMEs or affect them as part of a wider group. Details were gathered on the **support category**, such as financial support or information and advice; **support focus**, whether it is energy audits, energy efficiency, renewable energy or other; the **target industry** and whether all SMEs are covered; the **coverage area**, be it regional, national or pan-European; the **budgets**; whether the policy is **COVID related**; programme **start and end dates**; **successes**, **challenges**, **lessons learned**; and **barriers to SMEs** in taking up the support.

Energy Saving Trust prepared a matrix for each of the LEAP4SME project partners to fill with the results of the literature search for their country. This helped to direct the search and to collate the information into a uniform format. Data from websites and available evaluation reports regarding SME policies and support programmes was gathered for each of the partner countries.

Following an initial analysis of the data collected, partners had the opportunity to extend the literature review and were able to provide further clarification or additional policy instruments for review.

The policy instruments and support programmes were categorised as follows:

- **Financial support** where the primary aim of the policy is to provide financial support to SMEs via grants, loans, subsidies, tax relief or a combination of measures.
- Information/advice including support through awareness raising, guidance, providing energy audits, amongst other forms of information and advice.
- **Regulation** policies such as supplier obligations and standards.
- **National plan/strategy** national plans and strategies for energy efficiency, renewable energy or low carbon technologies, or environmental protection which could affect SMEs.





There were certain limitations in the data collection and analysis which are worth noting. As a large number of policy instruments identified are still active, there was a general lack of information around project successes, barriers, challenges, and lessons learned, as most of this information would be made available when programmes finish and undergo an evaluation. For some of the other data fields, particularly budgets, the information was not always easily obtainable through a literature review.





3 The European energy policy framework in relation to SMEs

The European Commission is aiming to make the European Union climate neutral by 2050. As part of this trajectory the Commission is in the process of finalising a legally-binding target to reduce emissions by at least 55% by 2030 while increasing energy efficiency by at least 32.5% by the same date. At the same time, the Commission is working to build a strong, competitive and technically advanced SME sector and to support the economic recovery of Europe from the COVID-19 crisis. These strategic drivers combined explain the interest of the Commission in policies to promote energy efficiency in the SME sector. We explore the European level strategic commitments relating to a low carbon economy, SME competitiveness, sustainable technologies and COVID recovery in section 3.3.

The European Union implements its policy ambitions primarily through directives, implemented at national level, and through funding. The next two sections provide details of the **directives and funding programmes which directly affect SMEs** related to energy audits, energy efficiency, and renewable energy.

3.1 European directives

3.1.1 Energy Efficiency Directive

The Energy Efficiency Directive (EED), when originally adopted in 2012, established a set of binding measures to help reach the EU's energy efficiency target of 20% by 2020, with member states required to make energy savings throughout the energy system. A number of important measures were subsequently developed as part of the EED including the requirements for energy company obligation schemes and energy audits of companies which hold relevance for LEAP4SME and SME energy efficiency more generally.

In 2018, as part of the 'Clean energy for all Europeans package', the EED was amended, largely to set a target of at least 32.5% energy efficiency by 2030⁵. In absolute terms, this

⁵ Relative to PRIMES 2007 scenario





means that total EU energy consumption should be no more than 1273 Mtoe (million tonnes of oil equivalent) of primary energy, and 956 Mtoe of final energy consumption in 2030⁶. The EED covers a large variety of approaches and measures to achieve these aims we have discussed a selection of the most pertinent Articles of the EED in the 'Deep dive' section below.

3.1.2 Deep dive into specific EED Articles

Article 8 of the EED

Article 8 of the EED, which has been transposed into national legislation in all member states, requires member states to put in policies for the provision of high-quality energy audits, and the promotion of energy management systems. Article 8 sets the following requirements for policies in regard to SMEs:

- Member States shall develop programmes to encourage SMEs to undergo energy audits and the subsequent implementation of the recommendations from these audits.
- Member States may set up support schemes for SMEs to cover costs of an energy audit and of the implementation of highly cost-effective recommendations from the energy audits.
- Member States shall bring to the attention of SMEs, including through their respective representative intermediary organisations, concrete examples of how energy management systems could help their businesses.

Large companies (non-SMEs) are subject to either mandatory energy audits every four years or to the implementation of energy management systems equivalent to an audit.

Article 7 of the EED

To support the implementation of the EED and the achievement of its goals Article 7 requires Member States to achieve yearly energy savings through an energy efficiency obligation scheme (EEOS) or alternative measures.

⁶ In 2019 EU28 primary and final energy consumptions were 1524 Mtoe and 1118Mtoe respectively





Article 7 of the 2012 EED (2012/27/EU) required each Member State to achieve an annual reduction of 1.5% in national energy sales in each of the years from 2014 to 2020 inclusive. The amended EED (2018/2002) extended obligations out to 2030 and requires Member States to achieve average final energy consumption savings of 0.8% per year out to 2030.

To reach these targets, 'obligated parties' have to carry out measures which help final consumers improve energy efficiency.

Instead of implementing an EEOS, EU countries may also implement alternative policy measures which reduce final energy consumption. These measures could include:

- Energy or CO₂ taxes
- Financial incentives designed to increase the use of energy efficient technology
- Regulations or voluntary agreements that lead to the increased use of energy efficient technology
- Energy labelling schemes beyond those that are already mandatory under EU law
- Training and education, including energy advisory programmes

While the directive states that where countries have an EEOS, some measures must be implemented in vulnerable households, there is no specific requirement for EEOS to apply to SME consumers, although in practice many do.

The specific impacts on SMEs resulting from the implementation of Article 7 of the EED will differ between Member States, depending on which sectors are included within an energy efficiency obligation scheme and/or which alternative measures are implemented. For example, a Member State could choose to direct the funds obtained through the obligation scheme towards improving the energy efficiency of SME premises. Alternatively, an energy or CO₂ tax implemented in a Member State may incentivise SMEs to reduce their energy consumption and invest in energy efficiency improvements. The impacts of obligation schemes and alternative measures (as defined in Article 7) on SMEs has not been thoroughly investigated and remains an outstanding area of research.





3.1.3 Energy Performance of Buildings Directive

The Energy Performance of Buildings Directive (EPBD) is a key energy efficiency policy instrument. EPBD requirements for national policies that affect SMEs, as well as all other types of building owner and occupier, include:

- Requirements for cost-optimal energy renovation standards in building regulations
- Policies to promote a higher rate of renovation
- Policies to promote nearly zero-energy new buildings
- Energy Performance Certification of buildings at the point of sale or rental, providing an asset-based assessment energy performance rating and recommendations for cost-effective improvements.

The vast majority of building and retrofit work is undertaken by SME firms, and the building sector will be a crucial player in achieving the EU's energy and environmental goals. In the EU up to 95% of construction, architecture, and civil engineering firms are micro-enterprises or SMEs.⁷ The education and qualification of blue-collar workers and building professionals is very important. SMEs should be suitably trained for undertaking building renovation activities to avoid construction errors and to be able to design, install, optimise and maintain renewable energy systems correctly on existing buildings. Additionally, most SMEs are likely to operate from within a building and will be subject to paying energy bills as part of their operational costs. For these reasons it is worth considering the impact the Energy Performance of Buildings Directive will have on SME energy efficiency.

As part of the European Green Deal, in October 2020, the Commission presented its renovation wave strategy "A Renovation Wave for Europe – Greening our buildings, creating jobs, improving lives". The strategy contains an action plan with a range of regulatory, financing and enabling measures to promote high quality building renovation.

⁷ <u>https://ec.europa.eu/growth/sectors/construction_en</u>





3.1.4 Renewable energy directive

The original Renewable Energy Directive (2009/28/EC) set out the foundational policy for the production and promotion of renewable energy in the EU.

In December 2018, the recast Renewable Energy Directive 2018/2001/EU entered into force as part of the "Clean energy for all Europeans" package. It requires the EU to source 32% of its total energy needs from renewable energy by 2030, building on the success of reaching the EU target of 20% renewable energy by 2020, and allows for a possible upwards revision of targets in 2023. The recast Directive allows for and encourages greater self-consumption of renewable energy including jointly acting renewable energy consumers. It also promotes the creation of renewable energy communities, which can generate, sell, store and share renewable energy. SMEs could participate in renewable energy communities, for example through providing their roof tops for PV installations.

3.2 European Funding Programmes

The Commission has, through several European funding schemes, aimed to improve SME energy efficiency and increase access to energy audits for SMEs. Some of the main mechanisms are discussed below, but these are not exhaustive.

As well as the key funding and support programmes detailed below there are also several other programmes aimed at promoting best practice and knowledge exchange in energy efficiency with a partial focus on SMEs. For example, the Concerted Action of the Energy Efficiency Directive (CA EED) works across member states to provide a "trusted forum where Members States could exchange experiences and collaborate. With the CA in place, countries could learn from each other, avoid pitfalls and build on the successful approaches of others when implementing the Energy Efficiency Directive."

3.2.1 Horizon 2020

Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.⁸ SME participation has

⁸ https://ec.europa.eu/programmes/horizon2020//en/what-horizon-2020





been encouraged across the whole Horizon 2020 programme, with a particular focus on closeto-market support.

EIC Accelerator Pilot

A dedicated instrument for mainstreaming support to research development and innovationintensive SMEs providing grants along with blended finance (grant in combination with equity investment) with a budget of €3 billion over the period 2014-2020 being distributed to 7,500 companies across Member States or a Horizon 2020 Associated Country.⁹

Other instruments under the EIC Accelerator Pilot include the Enhanced EIC Pilot, the EIC Pathfinder, the Fast Track to Innovation and the Horizon Prizes.¹⁰

Enhanced European Innovation Council (EIC) pilot

The Enhanced European Innovation Council (EIC) pilot supports researchers and innovators developing high-risk, breakthrough innovations with the potential to create new markets and boost jobs, growth and prosperity in Europe. A total amount of €3 billion was budgeted for the period 2018-2020 to fund the most talented innovators and help their companies scale up and expand beyond European borders.

Access to Risk Finance

Under the "Industrial Leadership" pillar, €1 billion has been provided to SMEs through loans, guarantees and other forms of debt finance particularly for research and innovation driven SMEs through InnovFin SME Guarantee and European Fund for Strategic Investments. Since launching in 2014, this mechanism has increased the portfolio of loans available for SMEs by more than €10 billion.¹¹

Innovation in SMEs

Intermediated support to SMEs in the form of tailored services and projects, networking and mobilisation actions for innovation service providers and policymakers and provides direct support to the Enterprise Europe Network which improves SMEs access to funding opportunities. The "Innovation in SMEs" fund also supports "entrepreneurship,

¹¹ https://ec.europa.eu/programmes/horizon2020/en/area/smes



⁹ https://ec.europa.eu/programmes/horizon2020/en/area/smes

¹⁰ https://ec.europa.eu/programmes/horizon2020//en/h2020-section/eic-accelerator-pilot



internationalism and improved access to markets" through the Competitiveness of Small and Medium-Sized Enterprises (COSME) programme.¹² The Eureka/Eurostars Joint Programme Initiative helps market-orientated transnational collaborative R&D projects.

3.2.2 Horizon Europe

Horizon Europe is the EU's key funding programme for research and innovation with a budget of €95.5 billion. It has been formally approved by the European Parliament on April 27th 2021 and will run until 2027. The programme aims to tackle climate change, help to achieve the UN's Sustainable Development Goals and boost the EU's competitiveness and growth. The main features of the Horizon Europe programme are¹³:

- European Innovation Council: Support for innovations with potential breakthrough and disruptive nature with scale-up potential that may be too risky for private investors. This is 70% of the budget earmarked for SMEs.
- Missions: Sets of measures to achieve bold, inspirational and measurable goals within a set timeframe. There are 5 main missions as part of Horizon Europe.
- Open science policy: Mandatory open access to publications and open science principles are applied throughout the programme.
- New approach to partnerships: Objective-driven and more ambitious partnerships with industry in support of EU policy objectives.

3.2.3 LIFE Programme

The LIFE programme is the EU's funding instrument for the environment and climate action. Created in 1992, it has co-financed thousands of projects. The new LIFE programme (2021-2024) will cover the following areas:

- Nature and biodiversity
- Circular economy and quality of life

 ¹² https://ec.europa.eu/programmes/horizon2020/en/h2020-section/innovation-smes
¹³ https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en





- Climate change mitigation and adaptation
- Clean energy transition

The LIFE programme helps companies (mainly SMEs) bring their green products, technologies, services and processes to the market. These so-called close-to-market projects launch innovative, demonstrative solutions that offer clear environmental and/or climate benefits. The main topics are related to waste management, the circular economy, resource efficiency, water, air or climate change mitigation. These projects also have a high level of technical and business readiness. This means that solutions could be implemented in close-to-market conditions (at industrial or commercial scale) during the course of the project or shortly after its completion.

3.2.4 European Regional Development Fund

The European Regional Development Fund (ERDF) aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. Particular attention is paid to regions which suffer from severe and permanent natural or demographic handicaps, such as the northernmost regions, which have very low population densities, and island, cross-border and mountain regions. Support for SMEs and the low-carbon economy are two key priority areas and ERDF has funded many SME energy efficiency projects.

3.2.5 European funded projects focusing on SMEs and energy

Under Horizon 2020, ERDF, or other EU Funds (such as Interreg and the soon-to-commence LIFE CET programme) several programmes have been or will be funded which focus specifically on energy audits or energy efficiency in SMEs. Ricardo and the European Climate, Infrastructure and Environment Executive Agency recently undertook analysis of 41 projects which focused on supporting the uptake of energy efficiency measures in the Industry and Services sectors and were funded through two European programmes (Intelligent Energy Europe-II and Horizon2020). This research indicates that all 41 projects targeted SMEs to an extent and that 29 of the 41 featured energy audits as a key activity. Their analysis also showed that over 4.5 million people were reached by these projects with 6,257 organisations changing their behaviour as a result of engaging with a project, and 3,553 audits undertaken or expected. For every €m of funding spent on these projects, on average, 38GWh/year of





energy was saved, €5m of investment or funding was triggered and 11ktCO₂e of greenhouse gases were reduced.

The following projects are provided as representative examples of the kind of projects funded through European funding programmes and particularly Horizon2020 which has funded numerous SME energy efficiency projects. The multi-country SME Program for Energy Efficiency through Delivery and Implementation of EneRgy Audits (SPEEDIER), which is currently active, aims to address barriers faced by SMEs that prevent them undertaking energy audits and implementing energy savings measures. The project provides outsourced energy management services from SPEEDIER energy experts and within the lifetime of the project aims to train more than 650 experts to deliver energy management services.

Another multi-country programme delivered with Horizon 2020 funding is SMEmPower Efficiency (A holistic framework for Empowering SME's capacity to increase their energy efficiency). This currently active project seeks to support SMEs through training and capacity building at least 720 energy experts (e.g. energy/environmental managers, energy auditors) in SMEs. Networks and cross-country knowledge sharing will also be promoted through the programme.

An example of a (part) ERDF funded programme is DE-Carbonise Derby, based in the UK. The project helps SMEs based in Derbyshire to reduce carbon emissions, reduce costs and become more sustainable. Conducted in partnership with the University of Derby, Derby City Council and Derbyshire County Council, the project includes a free carbon reduction survey to identify opportunities for SMEs to reduce on-site carbon emissions. Grants for £1000 - £2000 (€1,160 - €2,320) are available and businesses can receive technical and research support for product and process improvements based on recommendations from the carbon reduction report. There is also opportunity for cohort-based learning and development for smart manufacturing and sustainable supply chain innovation.¹⁴

DE-Carbonise Derby Case Study – Glossop Glassworks is an iconic building converted to serviced offices and shared workspaces. Following consultation with the DE-Carbonise technical support, the property manager installed a smart control heating system to create

¹⁴ https://www.derby.gov.uk/environment-and-planning/climate-change-energy-management/decarbonise/business/





heating zones with individual thermostats. The total cost of the intervention was £14,900 with a 40% grant of £6,000, with estimated savings of 3.4 tonnes CO_2 per year.¹⁵

3.3 European strategic policy framework

As well as the specific European policies outlined above which directly relate to SME energy efficiency and energy audits, there are several other European-level policies which indirectly impact SMEs energy efficiency and are therefore of note for the LEAP4SME programme.

3.3.1 European Green Deal

To achieve the ambition of becoming the first climate-neutral bloc by 2050, and the interim emissions reduction target of 55% by 2030, there is a need to significantly step-up energy efficiency efforts. The Commission has therefore pledged to review and revise the existing legislation to meet the 2030 target, including the EED. The Commission began this revision process in the summer of 2020 with the publication of the evaluation roadmap/inception impact assessment for public feedback. A series of dedicated stakeholder workshops were also held in tandem from September through November 2020 to gather feedback on the evaluation of the existing EED and potential solutions for the planned revision. The full public consultation was open for input from 17 November 2020 until 9 February 2021. At the time of writing (April 2021) the Commission is evaluating the responses and feeding this into the preparatory work for the review and the revision of the EED.

15

https://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/environmentandplanning/glossop-gasworks-case-study.pdf







Figure 1. The European Green Deal

3.3.2 SME Strategy

The new European SME Strategy aims to create a more sustainable and digital Europe by enabling SMEs to become more efficient and benefit from increased digitalisation. The Strategy promotes the use of 'one-stop-shops'¹⁶ as one means of helping SMEs comply with the legislation and access EU programmes. The strategy is strengthened through partnership work between different stakeholders across Europe and through dedicated annual events.

The SME Strategy builds on the foundations of the existing EU SME policy framework and support programmes, notably the 2008 Small Business Act, the 2016 Start-up and Scale-up Initiative, the Competitiveness for Small and Medium Enterprises (COSME) Programme, the 2014 Green Action Plan for SMEs, and SME support actions funded under the Horizon 2020 programme and the European Structural Investment Funds. The Strategy draws on the Enterprise Europe Network (including through new Sustainability Advisors) and the European

¹⁶ One-stop-shops are transparent, comprehensive sources of support which cover the whole customer journey from provision of information, technical project delivery assistance to the monitoring of eventual savings. There is growing interest in this approach across Commission work programmes.





Resource Efficiency Knowledge Centre (EREK) which aims to help SMEs save on energy, material, and water costs.

3.3.3 COVID-19 Recovery Plan (including NextGenerationEU)

The EU's coronavirus Recovery Plan, made up of the EU's long-term budget coupled with NextGenerationEU, the temporary instrument designed to boost the recovery, will be the largest stimulus package ever financed through the EU budget (totalling €1.8 trillion). The €750 billion NextGenerationEU temporary recovery instrument and the targeted reinforcements to the long-term EU budget for 2021-2027 will help to rebuild a post-COVID-19 Europe. The ambition is for the funds to help to create a greener and more resilient Europe with 30% of the funding earmarked for tackling climate change. Much of the funding for other programmes described in this document originated as part of the Recovery Plan, and the scale of the funding and desire to reshape the European economic system, means that this Plan will likely impact SMEs across Europe. The Plan is also set to part-fund programmes such as the Just Transition Fund which are yet to be finalised but may support SMEs in becoming more energy efficient in the future.

3.3.4 Clean Energy for all Europeans Package

The EU has recently updated its overarching energy policy framework to facilitate the transition away from fossil fuels towards cleaner energy. This new package of policies – called Clean energy for all Europeans – consists of eight legislative acts spanning a range of energy and environment-focused policy areas. This is the overarching set of policies geared towards achieving European decarbonisation and encompasses many of the other European policies discussed here. As the package continues to be implemented, the approaches taken in individual member states will determine exactly how SMEs will be impacted.

3.3.5 Energy labelling and ecodesign

The use of energy labels to inform consumers and ecodesign standards to improve the quality and efficiency of products have long been tools used by the EU to improve the environmental and climate impact of products. The EU's energy labelling framework regulation sets the





regulations product labelling and the provision of standard product information regarding energy efficiency, the consumption of energy and of other resources by products during use, enabling customers to choose more efficient products and so reduce their energy consumption. The EU Ecodesign framework sets minimum energy performance standards for energy related products. Through a period of rescaling and tightening of these requirements, the least efficient products are removed from the market. Over time, this raises the average energy efficiency of all products in a product category. These issues relate to SMEs and their use of energy as both the producers of products which must meet increasingly stringent standards and the users of the products and services covered by the energy labelling and ecodesign regulations.

3.3.6 EU strategy for energy systems integration

The new EU strategy for energy systems integration published on 8 July 2020 aims to improve the planning and operation of the energy system across multiple energy carriers, infrastructures, and consumption sectors. The strategy relies on three main pillars:

- 1. Operationalisation of the energy efficiency first principle and implementation of a circular energy system
- 2. Electrification of industry, buildings and transport using renewable energy
- 3. Promotion of renewable and low-carbon fuels, including hydrogen, for sectors that are hard to decarbonise, such as heavy transport and industry

Key actions of the strategy include guidance to Member States on how to make the energyefficiency first principle operational across the energy system when implementing EU and national legislation and facilitating the reuse of waste heat from industrial sites and data centres. This could particularly affect SMEs in the industrial sector, through strengthened requirements for connection to district heating networks, energy performance accounting and contractual frameworks, as part of the revision of the Renewable Energy Directive and of the Energy Efficiency Directive (proposal from the Commission due in June 2021).¹⁷

¹⁷ European Commission, 2020: Powering a climate-neutral economy: An EU Strategy for Energy System Integration. COM(2020) 299 final. Brussels, 8.7.2020.





3.3.7 SET Plan

The European Strategic Energy Technology Plan (SET Plan)¹⁸ is a key stepping-stone to boost the transition towards a climate neutral energy system through the development of low-carbon technologies in a fast and cost-competitive way. The SET Plan helps to coordinate national research and innovation (R&I) activities in developing low-carbon energy among European countries and to aligning national R&I programmes with its agenda. The SET Plan is organized in 6 domains (including Energy Efficiency and Nº1 in renewables), with 10 SET Plan key actions and 13 SET Plan implementation working groups.



Figure 2. The European Strategic Energy Technology plan

3.3.8 EU Industrial Strategy

The European Commission launched the EU Industrial Strategy in March 2020, which integrates green and digital transitions better connecting the support provided to all players

¹⁸ <u>https://setis.ec.europa.eu/index_en</u>





within each value chain. The strategy highlighted the importance of an industry that paves the way to climate-neutrality and the need to build a circular economy. It also emphasizes the urgent need to develop green skills, in particular for SMEs. The strategy was updated in May 2021 to incorporate the lessons of the COVID-19 crisis, in particular the strengthening of the internal market.¹⁹

The SME dimension is at the core of the updated strategy, with tailored financial support and measures to enable SMEs and start-ups to embrace the twin transitions. Specifically, the main issues of the European industrial strategy for SMEs are addressed:

- To strength the Single Market resilience: Mobilise significant investment to support SMEs; design and implement Alternative Dispute Resolution schemes to address payments delays to SMEs and provide measures to address solvency risks affecting SMEs.
- To deal with the EU's strategic dependencies: Supports new industrial alliances in strategic areas where such alliances are the best tool to accelerate activities that would not develop otherwise. Alliances provide a platform that is broad and open in principle and will pay particular attention to inclusiveness for start-ups and SMEs.
- To accelerate the twin transitions: Providing SMEs with Sustainability Advisors and supporting data-driven business models to make the most out of the green and digital transitions.

¹⁹ European Commission, 2020: A New Industrial Strategy for Europe. COM(2020) 102 final. Brussels, 10.3.2020.





3.3.9 Circular economy action plan

The European Commission adopted the new circular economy action plan (CEAP) in March 2020. It is one of the main building blocks of the European Green Deal. It provides a sustainable product policy framework with three main pillars:²⁰

- 1. Designing sustainable products
- 2. Empowering consumers and public buyers
- 3. Improving circularity of production processes

SMEs involved in the design, manufacturing and sales of products are particularly likely to be impacted by the plan, which sets out to foster business creation and entrepreneurship amongst SMEs.

3.3.10 EU hydrogen strategy

In 2020, the European Commission adopted a strategy on hydrogen in the EU, outlining key actions to foster the production and use of hydrogen to decarbonise the EU energy system and industry. It proposes several lines of action – from research and innovation via production and use in different sectors including industry and heavy transport, infrastructure development, sector integration to the international dimension. The strategy initiated a process to design market rules for hydrogen and proposes the development of a unified terminology, a common low-carbon threshold/standard for the promotion of hydrogen production installations. The strategy recognises SMEs as key industrial sector actors and the need to support those involved in fuel cell and hydrogen technologies to develop and market cutting-edge technologies.²¹ In particular, access to finance must become easier.

 ²⁰ European Commission, 2020: A new Circular Economy Action Plan. For a cleaner and more competitive Europe. COM(2020) 98 final. Brussels, 11.3.2020.
²¹ European Commission, 2020: A hydrogen strategy for a climate-neutral Europe. COM(2020) 301 final. Brussels, 8.7.2020.





3.3.11 EU Sustainable and smart mobility strategy

This strategy lays the foundation for how the EU transport system can achieve its green and digital transformation and become more resilient to future crises. The strategy sets the following milestones by 2030:

- 1. At least 30 million zero-emission cars will be in operation on European roads
- 2. 100 European cities will be climate neutral
- 3. High-speed rail traffic will double across Europe
- 4. Scheduled collective travel for journeys under 500 km should be carbon neutral
- 5. Automated mobility will be deployed at large scale
- 6. Zero-emission marine vessels will be market-ready

Among others, the strategy emphasizes the need to facilitate access to finance by SMEs, notably for fleet renewals and other innovative and green investments. This can be achieved through communication and guidance, dedicated administrative support, and simplified financial support schemes.²²

²² European Commission, 2020: Sustainable and smart mobility Strategy. COM(2020) 789 final.





4 Mapping national and regional policy instruments

This section reviews the data gathered from the literature reviews from the partner's nine countries, and maps policy instruments using the variables found in the data, such as type, target sector and area. Information is also provided on some of the successes, challenges and lessons learned. In total 173 policy instruments were identified across nine countries. These were classified by the main policy objective being either Financial support (61%), Information/advice (31%), Regulations (3%) and National plans or strategies (5%). Several policy instruments were identified which had a secondary policy objective. For example, the main objective might be raising awareness of the benefits of energy efficiency by providing businesses with free audits, but the secondary objective might be to provide access to finance to help the businesses to invest in improvements. In these instances, for ease of analysis, we classified those policy instruments by what we determined to be the primary policy objective.



Figure 3. Types of policy instruments





4.1 Financial support

Of the financial support available to SMEs, the highest number of policy instruments were loans (29), subsidies (29), and funds (23). Policy instruments categorised as funds often provided a range of other financial support mechanisms for companies, such as mutual guarantees in the case of Portugal's Mutual Guarantee Fund²³ which provides loan guarantees and helps SMEs access finance with favourable conditions to improve their competitiveness.



Figure 4. Financial support policy instruments by type

A number of policy instruments were identified which provide a combination of financial support (11), e.g. loans, grants, and tax relief, all delivered through a single programme. Examples include Poland's "50 kW to start" programme²⁴ which offers SMEs a 10% subsidy and 90% loan with favourable interest rates to help with the costs of installing small scale (50kW and under) renewable energy. Italy's National Strategy for start-ups and innovative SMEs²⁵ provides a range of financial support for "innovative" SMEs²⁶ through tax incentives, access to a guarantee fund and equity crowdfunding opportunities, amongst other support.

²⁶ SMEs qualify as innovative if they meet certain criteria including R&D and innovation spend, the number of highly qualified staff working there, and whether or not the SME owns a patent.



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 893924.

²³ <u>https://www.spgm.pt/pt/institucional/sobre-nos/spgm-sociedade-de-investimento/</u>

²⁴ <u>https://www.wfosigw.katowice.pl/program-50-kw-na-start-wspierajacy-przedsiewziecia-z-zakresu-odnawialnych-zrodel-energii-dla-srednich-malych-i-mikroprzedsiebiorcow.html</u>

²⁵ <u>https://www.mise.gov.it/index.php/en/impresa/piccole-e-medie-imprese/pmi-innovative</u>



Only some of the financial support instruments identified were specifically targeted at SME energy audits and/or energy efficiency. The majority of the instruments fell into two distinct categories: financial instruments which support growth and competitiveness in SMEs, which can be used, amongst other things, to finance energy efficiency; or financial instruments supporting energy efficiency in multiple target groups including SMEs, but also covering homeowners, large businesses and/or the public sector.



Figure 5. Different groups of financial support instruments

A range of policy instruments from the financial support subcategories are presented in Table 1 in the appendix 7.1. These provide a representative sample from across the LEAP4SME partner countries and the various types of financial support instruments found, targeted at different sizes and types of organisation. The table is further split by the different groups of policy instruments demonstrated in Figure 5.





4.2 Information/advice

In total 53 Information/advice policy instruments were identified. A common type seen throughout the data collected was information/guidance (13), referring to policies or support mechanisms which develop and disseminate information relevant to SMEs (and in some instances large enterprises, public sector and/or households) related to energy audits or energy efficiency.



Figure 6. Information/advice policy instruments by type

There were a high number of combinations of different types of support delivered through one policy instrument: a combination of awareness raising, energy audits, capacity building and training being particularly prevalent (13). This indicates a popularity of the 'one-stop-shop' type policies, where a range of support is provided which could potentially benefit a wide range of SME sizes and types.

A total of six policy instruments were identified where the main focus was on carrying out energy audits. It is worth to be noticed that in some cases, such as the Italian regional calls on energy audits, a single policy applies to several regions. Further details on energy audit specific policies are provided in section 4.4 Energy audit policy instruments and within the tables attached to the report. Table 2 in appendix 7.2 shows a representative sample of the different types of information/advice policy instruments from across the partner countries.





4.3 Regulations and National plans/strategies

The remaining 8% of policy instruments identified by partners are classified as either regulations, consisting of obligations (3) and standards (3), or national plans/strategies (8).





It is interesting to note there were no regulations or national plans/strategies identified which are directed solely at SMEs; they typically covered a wide range of stakeholders which included SMEs.

Table 3 in appendix 7.3 provides some sample regulation and national plan/strategy policy instruments gathered by the partners.

4.4 Energy audit policy instruments

Various policy instruments involved carrying out energy audits within SMEs, either as a way to provide information and advice on energy efficiency or as a prerequisite to accessing financial support to assist with the cost of implementing energy efficiency improvements.

An EU funded project, ERASME, which ran from 2012 to 2014 with a budget of €1.4m was focussed on training auditors and offering SMEs a simplified free energy audit in the first phase, followed by an in-depth second phase audit paid for by the companies. The uptake from the scheme included 258 first phase audits, and 102 energy auditors were trained. While some SMEs appreciated the free energy audit and implemented simple measures relatively quickly, uptake for a second phase audit was low, with only 14% of companies committing to





pay for one. The project found that there was an unwillingness to spend money for the indepth audits without certainty of the results, and that the simple audits themselves didn't necessarily lead to action being taken, as there was often a lack of financing available for energy efficiency investments.

The issue of a lack of financing has been tackled through several policy instruments which combined energy audits with access to financial instruments. These would often be free audits specifically for SMEs, as in the case of the ERDF funded Low Carbon Workspaces where businesses in certain regions in the UK receive a free high-level audit and then allocation of a match-funded grant up to £5,000 to cover a third of the cost of energy efficiency measures. The project has given out £1.8m of funding to help 574 businesses, boasting annual savings of 2,555 tonnes CO_2e and financial savings of over £900,000 per year. Another UK based programme, the Business Energy Efficiency Programme – West Midlands, had a similar model of offering SMEs a free audit followed by the chance to apply for a grant of up to £50,000 to cover up to 40% of the cost of energy saving measures. This project, which ran from 2015 to 2020 had a budget of over £2m.

Other policy instruments included energy audits as part of a wider programme of support, often including awareness raising, information and guidance provision, energy audits, capacity and access to finance. An example is Poland's programme of technical support to promote energy audit and investment in energy efficiency in SMEs. This programme consisted of awareness raising through regional events on energy efficiency financing instruments and on the benefits of conducting an energy audit. Training was provided to entrepreneurs interested in improving energy efficiency, and audits for SMEs were delivered alongside the creation of handbooks collecting best practices and other practical tools and information.

Some additional examples of SME policy instruments concerning energy audits include:

- Italy's "Energivori" scheme, where energy intensive SMEs applying for a tax relief on the purchased electricity are obliged to conduct an energy audit or implement an energy management system in line with ISO50001. More than 2,500 audits have been carried out under this scheme.
- Slovakia's "Reducing energy intensity and increasing the use of renewable energy systems in enterprises scheme" which involved energy audits and the implementation of measures resulting from them.





- Malta's "Promotion of Energy Audits in SMEs" programme, where SMEs are given financial support to take up energy audits.
- Croatia's "Public calls for energy audits and energy management systems" which subsidised energy audits for companies.

4.5 Target sectors and areas for support

Figure 8 shows the numbers of policy instruments targeted at different types of organisation and sector. The majority (66) of policies identified were solely targeted at SMEs (all sectors), with a significant number covering large businesses and SMEs (all sectors) (44). Other policies were targeted at specific sectors, with 8 identified that support SMEs in sectors such as agrofood processing, manufacturing, industrial, or tourism. Examples of sector specific support are highlighted in the discussions around best practice in section 5.3 Sector Specificity.



Figure 8. Target sectors for the range of policy instruments

The chart in Figure 9 shows the coverage areas of the policy instruments identified, with 77% focussed on a national scale and 16% focussed on regional (local areas within countries)





policies. The 7% of international policy instruments are made up of EU funded, multi-country programmes. Figure 10 shows the status of the policy instruments, with 65% active, 34% completed and 2% in planning (most of which are due to launch at some point in 2021).



Figure 9. Coverage area of the policy instruments







Figure 10. Status of policy instrument

4.6 Successes, challenges and lessons learned

LEAP4SME partners were asked to provide information on some of the key learnings from the policy instruments which they identified. One of the difficulties faced in data collection was finding information for active support programmes which have not yet undergone an evaluation. Additionally, it was not always clear from the partners' data whether the scale of the impacts from the support programmes are deemed to be a success, due to not having clear indicators for comparison or understanding the targets initially planned for by the policies. However, despite these challenges we have pulled out some specific examples to highlight the successes, failures and lessons learned from a range of policy instruments.

Successes

Success was reported for the policy instruments across various indicators, such as number of SMEs reached, energy, financial and carbon savings. For some policy instruments additional metrics like numbers of people trained, or numbers of jobs created, were also provided. Other comments on success included the development of technical leadership, well received communication by the target groups, and the development and understanding and best practice.





Specific highlights include:

- An example of achieving successes across various areas is demonstrated by the UK Coventry and Warwickshire Green Business Programme. Since the programme began in 2016, £2.5m of grants have been awarded to 213 SMEs; over 14,000 tonnes of CO₂ have been saved; 60 new jobs have been created; 150 SMEs have received nonfinancial support; and 1,450 SMEs have joined the Green Business Network. The programme is still currently active and expects the scale of impact to continue to grow.
- In Austria, a policy instrument which appears to have achieved a large reach in a short timeframe is the aws Investment Bonus programme, which gives out non-repayable grants to subsidise the investment in digitisation or installing environmentally friendly technologies. It is open to all business types and sizes. From its launch on 1st September 2020 until the end of December 2020, 67,800 applications were received, 93% of which came from SMEs. The amount of grants applied for was €2.6bn which is predicted to trigger €26.4bn in investments. It is estimated that half of the companies applying aim to invest in environmental projects.
- Another policy instrument which has had a large reach is Italy's ECOBONUS tax deduction scheme. In 2019, 395,000 interventions were made, corresponding to almost €3.5bn of total investment and accounting for energy savings of 1,254 GWh/year, although it should be noted that these figures are applicable to several business types and sizes, and at present has been mostly used by households.
- Poland's National Energy Consulting Project²⁷ has a running tally of the numbers of consultations (61,888), training (1,880), and advice given (159,069).
- Malta's Investing in Energy project, where awareness was raised of the benefits to SMEs of carrying out energy audits, and then the companies were targeted for energy audits. Through the project they found that companies were more receptive towards auditing as the Agency had provided them with all sufficient resources to understand the benefits and to carry them out.

Challenges and lessons learned

There were also a number of challenges and lessons learned reported by partners related to: low uptake of project applicants (in particular SMEs), including being under the targeted

²⁷ https://doradztwo-energetyczne.gov.pl/en-gb/





amount of spending for financial support; a lack of appropriate training and information provision; programme planning and insufficient time allowed for piloting projects; ineffective evaluation and data capture; insufficient clarity of application processes for receiving support; and long time periods for organisations to wait to receive funding/support.

- An example of an underspend in the project budget is Slovakia's Reducing energy intensity and increasing the use of renewable energy systems in SMEs. The programme ran from 2017 to 2019 with a total budget of €40m, but only around €22.8 of the funds were allocated.
- Malta's Consume-less project faced issues related to project planning and timescales. The testing phase of Consume-Less tourism model had to be extended and staggered into separate stages as additional challenges and limitations other than those initially thought of at planning stage were encountered.
- Italy's Nuova Sabatini (capital assets) financing scheme reported long wait times for organisations to receive a response to applications of 4 months, and a mean time to receive funding of 18 months. These wait times can be particularly challenging for SMEs who may be more dependent on financial support to keep their businesses afloat.
- An important lesson learned by Malta's Investment Aid for Energy Efficiency Projects scheme was that schemes can be adapted to provide an increased, or more targeted, level of support. The previous version of the scheme consisted solely of tax credits, but it was updated to include an element of grants since tax credits are not attractive to all businesses.
- Another programme which modified how it was delivered due to low uptake was Italy's Support programmes for energy audits in SMEs and the adoption of energy management systems. Initial uptake was small and limited to a few geographic areas, attributed to lack of an appropriate training and information programme to support interested SMEs throughout application and delivery process. The programme was relaunched with a more regional focus by implementing a training and information programme targeted at SMEs at regional level and working closely with regional government and local trade associations.





5 Identifying best practice

Due to the varied nature of Europe's SMEs, covering all sectors and geographies, and with the size range of one to 249 employees, there are obvious challenges in identifying 'best practice' policies which would work for all SMEs. For example, what is suitable for a microbusiness in the tourism sector in Italy might not be appropriate for a medium sized business in the financial services sector in Poland.

Despite the challenges, throughout our review of over 170 policy instruments we have identified certain characteristics which are worth noting and could help to influence future recommendations for policy makers. These characteristics are discussed in the following sections and Table 4 in appendix 7.4 provides some example policy instruments which we thought displayed best practice against certain criteria.

5.1 Innovation and integration

While there is extensive replication between the types of policy instruments in different countries, some stand out as distinctive, new approaches for the SME sector. Perhaps the most important aspect of innovation that we identify and recognise is the move towards integrated programmes, to provide a joined-up solution to the known barriers to SME energy efficiency. A strong example of this is the Austrian klimaaktiv programme which sets advanced guidelines for new buildings' energy performance and encourages advanced levels of retrofit in existing buildings. SMEs are encouraged to adopt the standards through help with funding for measures and through information, advice, and subsidised consultancy. Also, under the klimaaktiv programme SMEs are encouraged to publicly express a willingness to carbon reduction through to 2030 once they start installing improvements.

Further examples of innovative best practice are:

 Approaches to promoting action on new/emerging aspects of the low carbon economy: e.g. ADENE's (Portugal) development of a circular economy labelling scheme.





- **Taking new and integrated approaches to advice and engagement:** e.g. a series of programmes in Malta includes multiple different approaches to engaging SMEs with training, meetings, awareness raising etc.
- A focus on low carbon technologies as part of wider innovation and competitiveness funding programmes: e.g. in Croatia where SME innovation funding programmes focus on both digital and green technologies.
- Promoting innovation in companies providing energy efficiency services to SMEs: e.g. in the UK a funding programme supports the development of new commercial offers and services for SME energy efficiency support.

5.2 Longevity

The legacy of a support mechanism and the lasting impact for the participating SMEs and wider society is a key indicator of best practice. Longevity could be measured by whether a policy instrument continues to impact SMEs after the delivery mechanism has come to an end, and whether the SMEs have become resilient, self-sufficient and continue to benefit from the intervention. Below are some key points to consider for best practice regarding longevity of a support programme, with examples presented in more detail in Table 4 in appendix 7.4.

- Long term planning and alignment with long term targets: Effective support programmes should aim to be aligned with sectoral, regional and national targets in order to encourage SME participation over the long term – e.g. Portugal's Environmental Fund which provides support to work towards national environmental targets.
- Generate support networks: The support mechanisms will be more effective if they are reinforced by the establishment of supportive networks and communities amongst the target groups. Networks can become sources of engagement on key issues and help to boost knowledge transfer e.g. Grow your business in Greece.
- Capacity building: A best practice programme should enable SMEs to increase longterm adoption of energy efficiency support through capacity building and training of their employees – e.g. Poland's National Center for Research and Development for enterprises.





- Sustained incentivisation and rewards: Encouraging sustained engagement of SMEs in a programme through incentives for participating or achieving a reduction target – e.g. Austria's thermal refurbishment programme.
- **Paradigm shift:** The programme results in a shift away from the "business-as-usual" scenario and changes behaviour or understanding to embrace energy efficiency e.g. Malta's circular economy INCIRCLE programme.

5.3 Targeted support

Some of the policy instruments were particularly targeted towards the needs of SMEs in specific sectors and sub-sectors, aiming to help them overcome barriers that are relevant to their industry and increase accessibility and uptake.

Examples of programmes that provide best practice support for a specific SME sector include the following features:

- Sector specific support: Programmes that are tailored to meet the specific needs of a particular industry or sector, thereby better incorporating the priorities and challenges of those SMEs e.g. Greece's RESOLIVE programme supporting the olive oil industry to adopt renewable technologies.
- **Demographic focussed**: Programmes that target the requirements of specific demographics e.g. Slovakia's Loan BUSINESSWOMAN programme.
- Regional: Support mechanisms for a particular region, utilising local resources and networks which benefit general awareness and engagement of the scheme – e.g. Poland's Technical support to promote energy audit and investment in energy efficiency.

5.4 Reducing complexity

Policy instruments and support programmes for SMEs which are overly complex are less likely to drive mass uptake and produce results and learnings that can lead to long-term change. Complexity has been highlighted as a common barrier to SMEs in adopting support, which often lack the resources or understanding to be able to commit to lengthy and complex





application processes. Barrier to SMEs will be explored in more detail in a further report by LEAP4SME for task 2.3 'Energy audits market overview and main barriers to auditing SMEs'.

Below are some factors related to complexity which should be considered when designing and implementing policy instruments and support programmes:

- Ease of application processes: Application processes which require specialist technical knowledge, or which take a significant amount of time through, for example, completing lengthy forms, compiling evidence, multi-stage application processes and/or long wait times for application results, are less likely to be successful in attracting SMEs and keeping their interest through to programme delivery.
- Strictness of qualifying criteria: If a programme aims for mass uptake, the qualifying criteria should not be too onerous, and a degree of flexibility should be given and communicated from the outset. This should be balanced with fraud prevention, especially important when the policies are using public money.
- **Ongoing support for SMEs:** Adequate levels of support for SMEs during both the application phase and the delivery phase of a programme should be determined and implemented.

5.5 Communication and engagement

For those schemes open to SMEs as well as larger firms or the public sector, delivering effective communications to engage SMEs to participate seemed like a consistent challenge. We also found that even for those programmes specifically targeted at SMEs it could be difficult to reach out and engage with large numbers of businesses. This is perhaps not surprising given the smaller workforces of SMEs and therefore the lack of capacity to engage with the energy efficiency agenda.

Some of the most effective schemes used pre-existing networks and trusted regional partners (e.g. regional trade bodies or local government) to engage with SMEs, with this approach often resulting in more SMEs accessing the support programmes. One such programme is the Polish Government's Projekt Doradztwa Energetycznego (Energy Advising Project). This programme operates on the basis of a national network of professional energy advisers spread across the country's regions who are able to support and advise organisations, free of charge,





on topics covering the low-emission economy, energy efficiency and renewable energy sources. The energy professionals engaged in the programme have undertaken almost 60,000 consultations since the programme's launch in 2017.

Existing and future SME energy efficiency and energy auditing programmes will benefit from a strong, and sufficiently funded communication and outreach plan. Whether this is through trusted regional partners, which proved effective in Projekt Doradztwa Energetycznego, or a more 'top-down' method such as that employed as part of the Maltese Awareness Campaign, the importance of communicating and engaging with SMEs before, during and after the intervention should not be underestimated.

The features of a strong communication and engagement plan include:

- Use of trusted regional or local partners
- Prioritisation of communication, engagement and outreach in project planning
- Adequate funding for varied communication and engagement activities
- Engagement with SMEs during and after the intervention

5.6 Ensuring high-quality outcomes

Ensuring high-quality outcomes is essential for the success and longevity of policy instruments. If SMEs feel they have received empirically robust and high-quality, actionable advice they will be more likely to undertake work and share positive experiences with other SMEs in their network. Ensuring high standards means using accredited and experienced assessors and trainers, defining targets, metrics and expectations at the beginning of programmes, and undertaking robust monitoring, reporting and verification after works are completed. As well as improving the experience of SMEs in a particular programme, insisting on high-quality work and robust data collection also helps the design and delivery of subsequent programmes across the EU and allows for a better assessment of what has been effective and where improvements can be made.

Those programmes which have sought to ensure high-quality outcomes typically feature the following:

• Agreed upon standards for the quality and usability of energy audits





- Using accredited and experienced assessors and trainers
- Defining targets and expectations at the beginning of programmes
- Undertaking robust monitoring, reporting and verification and feeding back learning to continuously improve programmes

5.7 Cost effectiveness

The cost effectiveness or value for money of a policy instrument is a key indicator of its success. A policy instrument may be considered cost effective if it reaches (or goes beyond) the intended audience and delivers impact over the long term, whilst sticking to the intended budget. Indicators for cost effectiveness of a particular policy instrument should be determined from the outset with specific targets set. These might include numbers of engagements with SMEs, numbers of audits delivered, energy or carbon savings from implemented measures.

- Budgets for the policy instruments identified by the partners ranged from tens of thousands to billions of Euros, with financial support type policies tending to have larger budget, as well as policies which targeted a wider range of stakeholders (e.g. not just SMEs). Although no specific details were provided by partners on the cost effectiveness of different policies, a couple of examples seemed to be particularly cost effective. Malta's Awareness Raising campaign on the benefits of energy audits for SMEs had a budget of €10,000. The campaign led to an increase in applications for available schemes for SMEs to carry out energy audits by more than 50% in two months.
- UK's Low Carbon Workspaces project has given out £1.8m of funding to help 574 businesses, leading to annual savings of 2,555 tonnes CO₂e and financial savings of over £900,000 per year. This provides good value for money in terms of annual savings achieved per pound spent on the project.





6 Recommendations

Through the review of the various policy instruments which impact SMEs in terms of energy audits and energy efficiency, and discussions on best practice, we can make the following recommendations in relation to the design and implementation of SME energy audit policies.

- In most of the countries, it is still a challenge to address smaller companies, which often do not have the time or resources to participate in energy efficiency training or network activities. Best practice examples show that a **mix of different instruments** can be successful to engage and assist smaller companies.
- Obligations to conduct energy audits in SMEs and to meet certain CO₂ or energy saving targets could support the implementation of energy efficient measures. However, any obligations need to be combined with sufficient additional technical and financial support for SMEs.
- Well qualified external energy consultants as a one-stop-shop for smaller companies could play an important role in delivering good energy advice and quality audits to drive action for energy efficiency.
- Energy efficiency and renewable energy in SMEs are complex topics. A **close cooperation** between trades (buildings, heating, ventilation & air conditioning systems, productions plants, digitalisation, lighting, mobility, energy supply, etc.) should be encouraged.
- Policy stakeholders responsible for different support instruments must have regular communications to coordinate different instruments with each other (e.g. awareness raising programmes, capacity-building programmes).
- **'Energy Efficiency First'** principle: in defining energy policies for SMEs, it is important to take the energy efficiency first principle into consideration.
- Investments by SMEs in energy efficiency and renewable energy are needed and subsides are well-implemented policy instruments in many countries. It is important to limit the administrative burden for SMEs for applying for financial investments.
- Avoid complex applications processes with overly strict qualification criteria in order to drive uptake by SMEs. Plan for an appropriate level of **support** for SMEs during the application process for support instruments, programme implementation and following





programme delivery, to ensure SMEs stay engaged throughout the process. This goes for supporting instruments which are solely targeted at SMEs and those which cover a wider target audience. In order to achieve sufficient uptake by SMEs, specifically **tailored** support might be necessary.

- Dedicate sufficient time and resources to **communicating** the supporting instrument to the target audience. Wherever possible, use local or sector specific partners to help amplify the messaging. Mixed methods of communication can be particularly effective in reaching a wider number of SMEs.
- Awareness raising to motivate SMEs to implement energy efficiency measures is a challenge. To increase the understanding of the senior management and employees of SMEs, energy efficiency and renewable energy should be integrated in the education system in a proper way.
- For harder to reach SMEs, **sector specific** policy instruments might be more appropriate, involving sector partners and network in the design and delivery to help develop meaningful policies and drive engagement. Sector specific policy instruments might be particularly important in certain sectors, for example the construction sector where SMEs should be prepared for delivering building renovation activities and develop skills to design, optimize, install and maintain renewable energy systems.
- **Benchmarks** for Energy Performance Indicators (EnPIs) are important: on the one hand benchmarks can give policy makers a basis for decisions and on the other hand they help companies to evaluate and take actions to improving their energy efficiency.
- The use of capacity building and development of learning networks (which are well received by SMEs) as part of a wider range of support, can help to ensure longevity of the policy, as SMEs develop their own knowledge and skills to help them undertake energy audits and implement energy efficiency measures.
- Policy stakeholders can be role models to SMEs. The awareness of policy stakeholders, such as public servants, of energy related topics is important. Public procurement should have binding requirements related to energy efficiency and renewable energy.
- Monitoring of supporting instruments, in a transparent way, is very important to be able to analyse the uptake of the instruments and the barriers and the success factors.





In a subsequent LEAP4SME project report 'Energy audits market overview and main barriers to auditing SMEs', barriers to SMEs and recommendations to overcome them will be discussed in more detail.





7 Appendix

7.1 Financial support

Table 1. S	Table 1. Sample of financial support policy instruments from across the partner countries (a dash indicates no data available)								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of financial support	Summary of policy objective	Start date	End date	Target of policy instrument		
1. Financi	1. Financial instruments supporting growth and competitiveness of SMEs								
Portugal	Portuguese Mutual Guarantee System	Sociedade de Investimento (SPGM)	Funds	Fund to provide SMEs with loan guarantees and easy access to finance under competitive market conditions.	1994	Active	SMEs (all sectors)		
Greece	Competitiveness of businesses and SMEs (COSME)	National Bank of Greece (NBG); European Investment Fund (EIF)	Loans	Encourage SME growth through investment by providing loan guarantees	2018	Active	SMEs (all sectors)		
Slovakia	Microloan programme for SMEs	Ministry of Economy	Loans	Micro-loans (between 2,500 and 50,000 Euros) for SMEs under more favourable terms compared to commercial market conditions	1997	Active	SMEs (all sectors)		
2. Financi	al instruments supporting ene	rgy efficiency in SMEs	·		•				





Table 1. S	Table 1. Sample of financial support policy instruments from across the partner countries (a dash indicates no data available)									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of financial support	Summary of policy objective	Start date	End date	Target of policy instrument			
Slovakia	Operational Programme Quality of Environment: Reduction of energy intensity and increasing the use of RES in enterprises	Ministry of Environment; SIEA	Funds	40m Euro fund to increase financing of energy audits and increasing energy efficiency and RE uptake in SMEs.	2017	2019	SMEs (all sectors)			
Malta	Investment Aid for Energy Efficiency Projects	Malta Enterprise; EWA	Grants, Tax deductions	Cash grants or tax credits (or a combination of both) to encourage investment in technological solutions to improve energy efficiency for the beneficiaries.	2018	Active	SMEs (all sectors)			
Portugal	Credit Line for Decarbonisation and Circular Economy	Sociedade de Investimento (SPGM)	Loans	Provide medium to long-term loans for SMEs in the industrial and tourism sectors to finance projects to reduce energy consumption.	2019	Active	SMEs (industrial and tourism sectors)			
Poland	Energy-saving investments in SMEs	National Fund for Environmental Protection and Water Management	Loans, Subsidy	Subsidised loans for energy efficiency and renewable energy investments for eligible equipment, or with demonstrated energy savings for non-eligible equipment.	2014	2016	SMEs (all sectors)			
Greece	Financial support for SMEs for technological modernisation and energy saving investments	Region of Epirus	Subsidy	5m Euros to help subsidise investment in energy efficiency technologies, as well as other forms of modernising a business such as automation and standardization.	2018	Active	SMEs (all sectors)			





Table 1. S	Table 1. Sample of financial support policy instruments from across the partner countries (a dash indicates no data available)									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of financial support	Summary of policy objective	Start date	End date	Target of policy instrument			
Malta	Promotion of Energy Audits in SMEs	EWA	Subsidy	Subsidise the cost of energy audits for SMEs.	2018	Active	SMEs (all sectors)			
Croatia	Public calls for energy audits and energy management systems in SMEs	The Environmental Protection and Energy Efficiency Fund	Subsidy	Subsidised energy audits of buildings and the introduction of energy management systems.	-	Closed	SMEs (all sectors)			
Austria	Federal support programmes	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Subsidy	Subsidise the cost of consulting services to identify energy efficiency measures, promote the uptake of renewable energy, or establish an environmental management system.	-	Active	SMEs (all sectors)			
3. Financi	al instruments supporting ene	rgy efficiency in multiple ta	rget groups							
Italy	National Fund for Energy Efficiency	Ministry of Economic Development	Funds	310m Euro Fund provides loans and financing options to public authorities and businesses for measures that help meet the national energy efficiency targets.	2019	Active	Large enterprises, SMEs (all sectors), public sector			





Table 1. S	Table 1. Sample of financial support policy instruments from across the partner countries (a dash indicates no data available)									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of financial support	Summary of policy objective	Start date	End date	Target of policy instrument			
Austria	aws Energy & Climate	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Subsidy	Subsidy of up to 50,000 Euro to encourage implementing an energy management system or improving energy know-how through receiving consultancy and training.	2018	Active	Large enterprises, SMEs (all sectors)			
Poland	Preferential loans from BOŚ Bank	BOŚ Bank	Loans	Credits and loans on different actions for environment protection.	2020	Active	Large enterprises, SMEs (all sectors)			
Austria	Umweltförderung im Inland (UFI) Environment subsidy	Kommunalkredit Public Consulting	Subsidy	The Austrian Environmental Support Act provides the basis for environmental assistance granted in Austria, assisting companies and public institutions with investment measures for increasing energy efficiency and, in particular, for thermal renovation of buildings, adoption of renewable energy sources, e-mobility and carrying out demonstration projects. The Austrian government provides grants up to 35% of environmental relevant investment costs for large companies and SMEs.	1993	Active	Large enterprises, SMEs (all sectors), public sector			
Croatia	Increasing energy efficiency and the use of renewable energy sources in the service sector (tourism, trade)	Ministry of Economy and Sustainable Development	Subsidy	10m Euros to subsidise tourism businesses investment in energy efficiency and renewable energy measures which achieve at least a 20% reduction in energy consumption.	2018	2018	Large enterprises, SMEs (tourism and trade sectors)			





Table 1. S	Table 1. Sample of financial support policy instruments from across the partner countries (a dash indicates no data available)								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of financial support	Summary of policy objective	Start date	End date	Target of policy instrument		
Italy	ECOBONUS Tax deduction scheme	Ministry of Economic Development; ENEA	Tax deductions	Tax deductions (income tax) for building renovations achieving energy savings, available for both businesses and households. Mainly used by households it is applicable also to enterprises.	2017	Active	Large enterprises, SMEs, households		
ик	Climate Change Agreements (CCAs)	BEIS; The Environment Agency	Tax deductions	Voluntary agreements with energy-intensive industries to promote reduction of energy use and CO ₂ emissions in return for a discount in the Climate Change Levy, a tax applied to energy bills.	2001	Active	Large enterprises, SMEs (energy intensive sectors)		





7.2 Information/advice

Table 2. Sample of information/advice policy instruments from across the partner countries									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective	Start date	End date	Target of policy instrument		
Austria	klimaaktiv EEB (Energy- Efficient Businesses programme)	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Awareness raising, Energy audits, Capacity building, Training	Within klimaaktiv different programmes for different target groups are existing (e.g. for buildings, mobility, products, households, municipalities). The Energy- Efficient Business programme is addressed to SMEs, but also large companies can take part. klimaaktiv EEB has a range of support for to help companies to optimise energy efficiency: training for companies and energy advisors, information, and guidance, employee awareness raising tools, networking and knowledge exchanges. Also, a Voluntary Agreement Programme for klimaaktiv EEB programme/project partners has been established.	2005	Active	Large enterprises, SMEs (all sectors)		
Greece	Grow your business in Greece	European Bank for Reconstruction and Development; European Investment Advisory Hub; Ministry of Development and Investments Greece	Information/guidance	Support for SMEs to start up and grow, through advice provision and network opportunities.	2018	Active	Large enterprises, SMEs (all sectors)		





Table 2. S	Table 2. Sample of information/advice policy instruments from across the partner countries										
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective	Start date	End date	Target of policy instrument				
Greece	Increasing energy performance by transfer innovation to the agro-food SMEs of the Mediterranean areas (SINERGIA)	Various partners including energy agencies (CRES, ENEA) and industry federations of the Mediterranean region	Awareness raising, Energy audits, Capacity building, Training	Promoting energy efficiency innovation in agro- business in the Mediterranean region, through undertaking energy audits identifying innovative solutions and sharing knowledge across national stakeholders.	2013	2015	Large enterprises, SMEs (agro-food sector)				
Italy	Energy efficiency information and training programme	ENEA; Ministry of Economic Development; Ministry of Environment, Land and Sea	Training	Information and training aimed at promoting and facilitating the efficient use of energy among numerous target groups. For businesses the campaign aimed to raise awareness of energy audits, the implementation suggested recommendations, and/or the adoption of an EMS.	2014	Active	Large enterprises, SMEs (all sectors), public sector				
UK	Virtual Energy Audits	British Gas Business	Energy audits	British Gas is a UK company supplying energy to homes and businesses. They offer businesses free, web-based audits to identify energy-saving opportunities that businesses may have missed. During COVID lockdowns they have provided a safe way to help businesses.	2020	Active	Large enterprises, SMEs (all sectors)				





Table 2. S	Table 2. Sample of information/advice policy instruments from across the partner countries									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective	Start date	End date	Target of policy instrument			
UK	DE-Carbonise Derby	University of Derby; Derby City Council; Derbyshire County Council	Energy audits	Part funded by ERDF, and run in partnership between the University of Derby, Derby City and Derbyshire County Councils. SMEs in Derby can get a free initial audit and apply for grant funding of up to £20,000 to cover 40% of the costs of installing energy saving measures.	2019	Active	SMEs (all sectors)			
UK	Green Business Network	Coventry Council	Networks	A free-to-join network funded by ERDF to bring businesses together to share ideas and promote energy efficiency. Members can access technical advice, free audits, events, workshops and webinars, networking opportunities, and grant funding of up to £50,000.	2018	Active	SMEs (all sectors)			
Malta	Awareness Campaign - benefits of energy audits for SMEs	EWA	Awareness raising	Awareness raising campaign among SMEs to highlight the benefits of carrying out energy audits. The campaign also promotes the schemes currently available to support SMEs in carrying out of energy audits and implementing energy efficient measures. Weekly infographics on various social media channels, blog posts, articles in local newspapers and adverts in magazines were used to reach the desired audience.	2020	Active	SMEs (all sectors)			





Table 2. S	Table 2. Sample of information/advice policy instruments from across the partner countries									
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective	Start date	End date	Target of policy instrument			
Malta	Energy, Water and Waste Solutions Sustainability Training Course	EWA	Training	One-day course aimed at corporate employees to create a positive impact on businesses by raising awareness of their role in sustainability. The course aims to present concepts and issues faced by the corporate sector on sustainability and offers ideas as to how such challenges can be tackled. Moreover, the course also aims to promote employee well- being and instill behavioural change across the corporate sector.	Planned for 2021	-	Large enterprises, SMEs (all sectors)			
Poland	Technical support to promote energy audit and investment in energy efficiency in SMEs	KAPE; Ministry of Climate and Environment	Awareness raising, Energy audits, Capacity building, Training	Regional events to discuss energy efficiency financing instruments and conducting energy audits within SMEs. Training for entrepreneurs interested in improving energy efficiency. Audits for SMEs and handbooks collecting best practices and other practical information.	2018	Active	SMEs (all sectors)			
Poland	National and Regional consultancy support system for the public sector, the residential sector and enterprises in the scope of energy efficiency and RES	National Fund for Environmental Protection and Water Management	Networks, Capacity building, Training	National network of professional energy advisers who support and advise businesses, individuals and the public sector free of charge in the field of low- emission economy, energy efficiency and renewable energy sources (RES). Free audits and energy efficiency investment advice is available.	2017	Active	Large enterprises, SMEs (all sectors)			





Table 2. Sample of information/advice policy instruments from across the partner countries								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective		End date	Target of policy instrument	
Slovakia	Extending energy efficiency monitoring	Ministry of Environment SK; SIEA	Energy audits	Increasing the number of regional plans and strategies related to low-carbon through the extension of monitoring system of energy efficiency. Collects data about energy consumption, energy audits, and energy distribution.	2015	Active	Large enterprises, SMEs (all sectors), public sector	
Croatia	Strengthening the competitiveness of companies by investing in digital and green transition	Ministry of Economy and Sustainable Development	Awareness raising, Energy audits, Capacity building, Training	Support companies' investment in green and/or digital technologies, strengthen competitiveness and stimulate the growth of SMEs, and promote a green recovery from COVID. Support is delivered through capacity building to develop knowledge, skills and competencies of SME employees, provision of advisory services, and financing.	2021	Active	SMEs (all sectors)	
Slovakia	Living Energy Project	Ministry of Environment SK; SIEA	Awareness raising	Increase awareness of energy efficiency and energy savings in households, SMEs, large enterprises, and the public sector through workshops, seminars and conferences. Free professional energy advice is provided through the programme.	2016	Active	Large enterprises, SMEs (all sectors), households, public sector	





Table 2. Sample of information/advice policy instruments from across the partner countries								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of information/advice support	Summary of policy objective	Start date	End date	Target of policy instrument	
Malta	Investing in Energy Project	EWA; Malta Chamber of Commerce; Regulator for Energy and Water Services; Ministry for the Economy and Industry	Awareness raising, Energy audits, Capacity building, Training	The first phase focused on detailed data collection on energy consumption, followed by a pilot set of energy audits. The second phase continued to expand on the number of energy audits but focussed mainly on providing technical workshops, training opportunities in aspects of energy auditing and business breakfasts to share good practices between enterprises.	2017	2018	Large enterprises, SMEs (manufacturing, services, and trade sectors)	
Italy	Technology and innovation for savings and widespread energy efficiency (TREND)	Lombardy Region	Awareness raising, Energy audits, Capacity building, Training	The project was aimed at promoting awareness, competences and tools for energy efficiency in SMEs. An initial investigation phase helped to identify the energy efficiency measures most commonly used in SMEs. The second phase involved undertaking subsidised energy audits, matching demand/supply through a call for energy experts. The third phase involved the implementation of energy efficiency measures through a call for suppliers of technology and/or energy services.	2010	2013	SMEs (all sectors)	
Italy	Regional calls and tenders under the European POR FESR 2014/2020	Italian regions	Energy audits	Regional calls/tenders to promote energy efficiency in enterprises (the majority being SMEs) including undertaking energy audits.	2015	2020	SMEs (all sectors)	





7.3 Regulations and National plans/strategies

Table 3. Sample of regulation and national plan/strategy policy instruments from across the partner countries								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of policy instrument	Summary of policy objective		End date	Target of policy instrument	
ик	Minimum Energy Efficiency Standards	BEIS	Standard	The Energy Efficiency (Private Rented Property) Regulations 2015 establish a minimum level of energy efficiency for privately rented property in England and Wales. Landlords of privately rented property in England or Wales must ensure that their properties reach at least an Energy Performance Certificate (EPC) rating of E before granting a new tenancy to new or existing tenants.	2018	Active	Large enterprises, SMEs, households, public sector	
Austria	OIB Guideline 6 Energy saving and thermal insulation	Austrian Institute for Construction Engineering	Standard	The OIB Guidelines prescribe the minimum requirements for the energy efficiency of buildings by setting a limit, for example, for the U-values of building components, heat energy demand, heat protection in summer, air tightness, share of electricity demand, which can be covered by PV, etc. for new and refurbished buildings. It also prescribes the necessity of EPCs and exceptions to the mentioned requirements.	2007	Active	Large enterprises, SMEs, households, public sector	
ик	Northern Ireland Sustainable Energy Programme	Northern Ireland Utility Regulator; EST	Obligation	This is an £8 million fund, which is collected from all electricity customers (both domestic and commercial) through a public service obligation (PSO) and is used to provide funding for energy efficiency schemes. Most schemes are targeted at vulnerable households however some cover businesses, helping to install energy efficiency or renewable energy measures.	1997	Active	Large enterprises, SMEs, households, public sector	





Table 3. Sa	Table 3. Sample of regulation and national plan/strategy policy instruments from across the partner countries								
Country	Name of policy/support (English translation)	Name of the organisations involved	Type of policy instrument	Summary of policy objective		End date	Target of policy instrument		
Italy and Poland	Energy Efficiency White Certificates (WhC)	Ministry of Economic Development, Ministry of Economic and Finance, IT The Energy Regulatory Office, PL	Obligation	WhC is a scheme based on the obligation placed on electricity and natural gas supplier with a certain threshold of customer numbers, to achieve a quantified target of annual energy savings. These savings can be achieved through energy efficiency actions among end-users. WhCs are tradable shares which certify energy savings through activities and projects to improve energy efficiency. Energy savings are to be additional, meaning that for each project measured consumption baselines are compared with legislative requirements and market averages and supply.	2005	Active	Large enterprises, SMEs, households, public sector		
Portugal	National Energy and Climate Plan 2030	Ministry of Environment and Climate action; ADENE	National Plan	The National Energy and Climate Plan (PNEC 2030) establishes new national targets for reducing greenhouse gas emissions, including sectoral ones, targets for incorporating renewable energy and energy efficiency, as well as the lines of action and measures to be adopted for the decarbonisation of society and for the energy transition, in conjunction with the Carbon Neutrality Roadmap 2050.	2021	Active	Large enterprises, SMEs, households, public sector		
Italy	National Plan for Industry 4.0	Ministry of Economic Development	National Plan	The plan provides a wide array of consistent and complementary measures promoting investment in innovation and competitiveness. The planned measures can be put in place automatically by every company without any restrictions in terms of its size, sector or location. Considerable financial resources have been committed to the Plan (> 5 billion EUR / year) to support investments, the digitalization of industrial processes, improvement in workers' productivity, as well as the development of new skills, new products and new processes.	2015	2020	Large enterprises, SMEs (all sectors)		





7.4 Identifying best practice

Table 4. E	Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument			
Portugal	Circular Economy Label	ADENE	Innovation: focus on circular economy; providing new ways for low carbon SMEs to promote their products	Information and advice Product labelling	The goal of the Circular Economy Label is to give the consumer a clear indication of a given product's (e.g. rice, wine, etc.) "circular economy performance" throughout its complete value chain.			
Austria	Model refurbishment	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Innovation: support for deep refurbishment including consultancy and financial support	Financial support Information and advice	The Climate and Energy Fund supports innovative renovations that go beyond the usual scope of renovation. In addition, all funding applicants and contractors are given the opportunity to discuss suggestions for improvement and optimisation with relevant experts, free of charge. Within the programme a subsidy rate of 40% is awarded for the thermal-energy refurbishment of buildings and a subsidy rate of 25% for measures to use renewable energy and to increase energy efficiency.			
Austria	klimaaktiv EEB Project Partner	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Innovation: signed action plan,	Awareness raising of standards and energy efficiency	klimaaktiv project partners are a part or the klimaaktiv energy efficient enterprises program and implement measures to reduce CO ₂ emissions in their own area. Project partners in the program have implemented an energy efficiency measure and signed a climate protection agreement with an action plan for 2030.			





Table 4. E	Table 4. Examples of best practice features in different policy instruments						
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument		
UK	Boosting Access to SME Energy Efficiency (BASEE)	Department for Business Energy and Industrial Strategy	Innovation: competition for new services targeted at SMEs	Innovation in commercial offerings for SMEs in energy efficiency	The BASEE Project is supporting the development of new commercial services to help SMEs address energy efficiency.		
Malta	Investing in Energy Project	The Energy and Water Agency	Innovation: use of a wide range of detailed engagement approaches to encourage action on energy audits	Data collection and energy audits	Focusing on the manufacturing, services, and import/distribution industries. The project was designed in two phases; the first phase focused on a detailed data collection on energy consumption, followed by a pilot set of energy audits. The second phase focused mainly on providing technical workshops, training opportunities in aspects of energy auditing (mainly on auditing transportation) and business breakfasts to share good practices between enterprises.		





Table 4. E	Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument			
Croatia	Strengthening the competitiveness of companies by investing in the digital and green transition	Ministry of Economy and Sustainable Development	Innovation: integration of digital and low carbon technologies as central feature of competitiveness focused support programme	Digital innovation for energy efficiency	The funding supports: a) the use of digital technologies and solutions in business processes to increase efficiency, competitiveness and internationalization of business b) the application of digital and green technologies and solutions in production processes with the purpose of optimizing business, reducing the negative impact on the environment and more efficient use of resources in production c) the transition to a circular economy			
Portugal	Environmental Fund	Ministry of Environment and Climate action; DGEG	Longevity: alignment with long term targets	Support for environmental policies related to climate change, water, nature conservation	Aims to support environmental policies to meet sustainable development objectives which contribute to the fulfilment of national and international objectives.			
UK	Enterprise Finance Guarantee (formerly the small firms loan guarantee)	British Business Bank	Longevity: long term planning	Financial access to SMEs	Providing financing over the long term, from three months up to 10 years for term loans and asset finance and up to three years for revolving facilities and invoice finance.			





Table 4. E	Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument			
UK	Coventry and Warwickshire Green Business Programme	Coventry Council	Longevity: generate support networks	Advice and grants for energy efficiency measures	Participation in the programme provides automatic and free membership to the Green Business Network.			
Portugal	Innovative Support Fund	DGEG; ADENE	Longevity: generate support networks	Funding for energy efficiency innovation	Establishes meaningful partnerships between Portuguese companies and the National Scientific System			
Italy	Energy efficiency information and training programme	ENEA - Ministry of Economic Development - Ministry of Environment, Land and Sea	Longevity: capacity building Communication and engagement: prioritisation of communication, engagement and outreach in project planning; engagement with SMEs during and after the intervention	Provision of information and training on energy efficiency	The measure is a three-year information and training program aimed at promoting and facilitating the efficient use of energy. It identifies specific objectives to be achieved for each target group which includes SMEs as well as larger companies, public administration, households, students and vulnerable groups.			
Poland	National Center for Research and Development (NCBR) for enterprises	National Center for Research and Development (NCBR)	Longevity: capacity building Complexity: ongoing support for SMEs	Knowledge sharing	NCBR online is a series of meetings during which participants gain knowledge and skills useful when applying for support for the implementation of innovative projects.			





Table 4. E	Table 4. Examples of best practice features in different policy instruments								
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument				
Austria	Thermal refurbishment - comprehensive refurbishment	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Longevity: sustained incentivisation and rewards	Subsidised energy efficiency measures	The subsidy is granted if the heat energy demand achieved is below the requirements of the OIB-Guideline 6 (contains minimum requirements for the thermal quality of buildings) or the heat energy demand is reduced of more than 50 % compared to the baseline				
Malta	Feed-in-Tariff allocation for a Photovoltaic system Installation (+1kWp and below 40kWp)	EWA; Regulator for Energy and Water Services; Ministry for Energy, Enterprise and Sustainable Development	Longevity: sustained incentivisation and rewards	Renewable financial support	This scheme provides a feed-in-tariff for a solar photovoltaic installation with capacity above 1kWp and below 40kWp. The aim of this scheme is to make the installation of solar photovoltaic systems economically viable thereby contributing to the country's RES targets.				
Slovakia	Slovak Business Agency microloans programme	Ministry of Economy	Longevity: paradigm shift; long term planning	Business support	The Microloan Programme addresses the issue of access of small entrepreneurs to the capital. It focuses on increase of the rate of survival of micro/small enterprises and start- ups, thus creating conditions for job maintenance and creation of new job opportunities in different regions of Slovakia.				
Italy	Capital goods "Nuova Sabatini"	Ministry of Economic Development	Sector specific support	Financial support	This financing scheme is designed to increase credit access and to boost the competitiveness of the manufacturing sector to invest in energy efficient appliances or refurbishments.				





Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument		
Greece	Aid to tourism SMEs for their modernisation and upgrading the quality of services provided	Ministry of Development and Investments (also ERDF funded)	Sector specific support	Subsidising investment into modernising energy and water infrastructure	Financing support for SMEs in the tourism sector in order to modernise them, upgrade their quality and enhance their offering in terms of products and services. This includes upgrading of building and other infrastructure and energy/water savings interventions.		
Austria	klimaaktiv mobile	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Technology specific	Awareness raising of sustainable transport	Climate protection campaign aimed at the transport sector focuses on environmentally compatible and health- enhancing, renewably powered transport.		
Austria	Exit from Oil bonus	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Technology specific	Subsidised uptake of renewable heat	This subsidy supports the new construction or change from fossil fuel driven heating system to a renewable heating system (wood heating, heat pumps, district heat, with a thermal output of less than 100 kW.		
Slovakia	Call for Financial Support Applications: Construction of facilities using biomass through refurbishment and modernization of existing energetic facilities using fossil fuels	Slovakian Ministry of Environment; SIEA	Technology specific	Uptake of renewable technology	Objective is to support construction of facilities using biomass through refurbishment and modernisation of existing fossil fuel heating systems.		





Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument		
Slovakia	Businesswomen loans	Slovakian Ministry of Finance	Demographic specific	Financial support	Enabling and simplifying access to credit resources for female entrepreneurs.		
Poland	Technical support to promote energy audit and investment in energy efficiency in small and medium-sized enterprises	KAPE; Ministry of Climate and Environment	Region specific	Events and training on energy efficiency	Regional events are organised to discuss energy efficiency financing instruments and energy audits.		
Poland	Energy Advising Project	Regional and National Fund for Environmental Protection and Water Management; Lubelskie Voivodeship	Communication and engagement: use of trusted regional partners	Energy advice provision, Capacity building	This programme operates based on a national network of professional energy advisers spread across the country's regions who are able to support and advise organisations on topics covering the low-emission economy, energy efficiency and renewable energy sources free of charge. The energy professionals engaged in the programme have undertaken almost 60,000 consultations since the launch in 2017.		
Poland	Technical support to promote energy audit and investment in energy efficiency in SMEs	KAPE; Ministry of Climate and Environment	Communication and engagement: use of trusted regional or local partners; prioritisation of communication, engagement and outreach in project planning	Awareness raising, Capacity building, Training	Regional events bring SMEs together to discuss energy efficiency financing instruments, the benefits of conducting energy audits, and how to organise them. Training sessions are conducted for those interested in improving energy efficiency. As well as these in-person events, static resources such as handbooks detailing best practices and other practical information are produced.		





Table 4. Examples of best practice features in different policy instruments							
Country	Name of policy/support (English translation)	Name of the organisations involved	Best practice feature	Summary of policy objective	Description of policy instrument		
Malta	Awareness Campaign - benefits of energy audits for SMEs	EWA	Communication and engagement: prioritisation of communication, engagement and outreach in project planning; adequate funding for varied communication and engagement activities	Awareness raising of the benefits of SME energy audits	The awareness campaign aimed to raise awareness among SMEs of the benefits of carrying out energy audits. The campaign also promoted the schemes available to support SMEs to carry out of energy audits and the implementation of energy efficient measures. Weekly infographics on social media, blog posts, articles in local newspapers and adverts in magazines were all used to reach the desired audience. The campaign is considered a success as it managed to engage with several companies and auditing service providers with an increase in applications observed for the promoted schemes. Uptake of the energy auditing scheme increased by more than 50% in two months.		
Austria	Solar thermal energy - large- scale solar systems	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	Ensuring high quality outcomes: defining targets and expectations at the beginning of programmes; undertaking robust monitoring, reporting and verification	Grant funding for large-scale solar thermal plants	Large-scale solar thermal systems are eligible for funding in the form of non-repayable investment grants. In addition, the Climate and Energy Fund offers all applicants for funding and system operators the opportunity to discuss suggestions for improvement and optimisation possibilities with relevant experts free of charge as part of the obligatory submission consultation during project development. Subsequent monitoring of the plants is useful means of gaining insight and detailed information about the behaviour of the system for different installations to learn from these experiences to optimise future plants.		

