



# Guidelines for policy makers for the successful implementation of energy efficiency programmes in SMEs and for best practice exchange

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**EUSALP Action Group 9**

**To make the territory a model region for energy efficiency and renewable energy**

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Activity 4.3



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## 1. Introduction

The implementation of effective energy efficiency measures is a key element to reach Europe's ambitious energy and climate targets 2030. As part of the European Green Deal, the Commission proposed in September 2020 to raise the 2030 greenhouse gas emission reduction target, including emissions and removals, to at least 55% compared to 1990. The economic sector plays a key role in reaching the necessary energy efficiency improvements required to comply with this objective.

First of all, enterprises need to develop ever more energy efficient products that comply with minimum energy efficiency standards and labelling targets (Ecodesign), thereby supporting the roll-out of Europe's Green Economy that attracts investment, creates jobs and saves consumers' money through energy savings.

While large companies are already obliged to conduct energy audits to determine energy saving potentials, the same is not the case for small and medium-sized enterprises (SMEs).

Through the Energy Efficiency Directive, EU member states are encouraged to implement accompanying and voluntary energy efficiency programmes for SMEs to detect energy saving potentials. In the Alpine territory, several national and regional programmes have been launched to support enterprises to implement energy efficiency measures. Since about 95% of the Alpine economy is constituted by SMEs, the roll-out of these accompanying initiatives in the EUSALP region is therefore desirable from an energy saving potential and from an economic point of view.

## 2. EUSALP and energy efficiency in enterprises

Marco-regional strategies provide a framework for cooperation, coordination and consultation between and within regions and states. MRS are a policy tool to steer processes that help to overcome common territorial challenges. The EU Strategy for the Alpine Region is the fourth macro region in the European Union and was adopted by the European Council in 2015. EUSALP covers a territory inhabited by 80 million people and includes 48 regions from seven countries of which five countries are EU members: Italy, Austria, Germany, France, Slovenia, Switzerland and Liechtenstein. The strategy focuses on the three core areas:

1. economic growth & innovation
2. mobility and connectivity
3. environment & energy

The geographic and structural characteristics of the Alps provide good potentials for renewable energy and enhanced energy efficiency to make the Alps a European model region. Macro-



regional policy planning is meant to support the Alpine region to tackle the challenges to meet energy demand sustainably, securely and affordably.

EUSALP Action Group 9 took up its work in January 2016 and has the mission to make the Alps a “model region for energy efficiency and renewable energy”. The Action Group has 20 members (status: March 2021) representing the regions and states of the EUSALP and is supported by DG Regio, the Alpine Convention, the Alpine Space Programme, CIPRA and Eurochambres in observing role. The members of the Action Group are in charge of transposing the goals defined by the European Commission’s Action Plan COM(2015)366 concerning the European Union Strategy.

Energy efficiency measures in and by enterprises depict a strategic policy field that needs to be further exploited in the context of the EUSALP. Especially the establishment of supporting mechanisms to enhance energy efficiency measures for the SME sector in the EUSALP has a good energy saving potentials. The EUSALP Action Plan proposes the setting up of an Alpine energy efficiency cluster that shall serve as a forum for cooperation and innovation and shall support energy efficiency processes and products. Accordingly, in the period 2017-2019, and funded as a *strategic initiative* by the ASP AlpGov, EUSALP Action Group 9 took first steps towards the realization of a network. In 2017, AG 9 organized the 1<sup>st</sup> EUSALP Energy Conference “Energy Efficiency in Small and Medium Enterprises – An opportunity for the energy model region EUSALP” to network relevant stakeholders and to share good practice approaches for the first time. Mid-2018, EUSALP AG 9 assigned a study to the Austrian Energy Agency to map relevant actors in the MRS also comparing the existing legal frameworks in the EUSALP regions and states to detect gaps for improvements and to develop a roadmap for the setting up of a EUSALP Energy Efficiency Network. In 2019, the Action Group organized the strategic event “Energy efficiency in enterprises in the EUSALP macro-region” in Bozen/Bolzano, bringing together decision-makers, stakeholders and multipliers with expertise in the field of energy efficiency in enterprises. The goal of the event was to collect further good practices in the field of energy efficiency and to define a concrete roadmap and a matrix of activities for the establishment of a transregional experts’ network for energy efficiency in enterprises in the following period.

In this light the Action Groups 2 and 9 applied for ARPAF funding to support the establishment of the above mentioned network and the development of instruments and activities to help regions, clusters and energy agencies guide SMEs towards energy efficiency improvements.

### 3. Activities and results of CAESAR

The CAESAR project brought together 5 partners organisations and 3 observers from the Alpine region:

- Agency for Energy South Tyrol – CasaClima (IT, lead partner)
- ClusterAgentur Baden-Württemberg (DE)



- Energy Management Agency of Friuli Venezia Giulia (IT)
- Energie Tirol (AT)
- E-institute (SI)
- Auvergne-Rhône-Alpes - Energy Environment (F – observer)
- Autonomous Province of Trento, APRIE (IT – observer)
- Infrastrutture Lombarde SpA (IT – observer)

All these Alpine organisations engage in advancing energy efficiency in strategic sectors in their respective regions, and on transnational level. The principal objectives of the CAESAR project were defined as follows:

1. *Establish a transnational energy efficiency stakeholder network engaged in exchange of best practices and experiences;*
2. *Provide low-barrier instruments and support tools for energy efficiency audits in SMEs*
3. *Define benchmarks and key performance indicators for the main economic sectors of activity*
4. *Organise capacity building sessions for „energy tutors“, enabling them to perform energy efficiency audits using the CAESAR outputs.*
5. *Raising awareness for best practices and available support tools in the field of energy efficiency for enterprises, and provide recommendations for future activities.*

The project duration was 22 months, with a total EU contribution of 231,090 €.

#### **4. Benefits of energy management in SMEs**

Continuous energy management and the associated regular implementation of energy efficiency measures can help enterprises to:

- reduce energy costs;
- protect the environment;
- improve the corporate image;
- take advantage of subsidies, but also of legal facilitations.

Furthermore, a good energy management system supports enterprises in the following measures:



- gain transparency about energy consumption
- allocation of energy costs to the individual cost centres according to their cause;
- fast detection of the energetic relevance of company changes (production changes, other materials, other requirements, etc.);
- awareness-raising of employees;
- determination and reduction of your CO<sub>2</sub> emissions.

## 5. Recommendations for policy makers and SMEs

The following recommendations are inspired by those developed by the Austrian Energy Agency for EUSALP Action Group 9 in 2019 (Study on energy efficiency in Alpine enterprises: Analysis of supporting instruments for realising energy efficiency measures and the use of renewable energies. Nicole Hartl; Naghmeh Altmann-Mavaddat), and discussed during an expert workshop in Bolzano on 22/23 March 2019, further complemented by findings from the CAESAR project.

### *a. General recommendations for supportive programmes*

Experience from recent years has shown that the market and the mechanisms of the market only serve the energy saving potential in SMEs to a limited extent satisfactorily. One recommendation of the experts is therefore that for successful regional rollout of energy efficiency schemes for small-medium enterprises, which adhere to such schemes on a voluntary basis, public energy agencies must strongly engage in trust-building, information and technical support.

The following set of recommendations on non-binding policy instruments has been developed in the project:

### *b. Recommendations regarding awareness-raising*

#### **Intensifying communication and increasing the awareness of non-energy benefits**

Inform intensively about issues like benefits of energy efficiency measures and the use of renewable energies, best practices and funding possibilities/subsidies. The focus of information campaigns should not be restricted to the possibility of cost saving. Non-energy benefits are of great importance when convincing the person responsible in enterprises to reflect on and, subsequently, to realise energy efficiency measures and to use renewable energies. Information must be neutral and independent from sales interests. Confidence-building measures in the programme are very important. And they must be close to the end customer and regional initiatives.



## **Addressing concerns regarding the payback period of energy efficiency investments.**

It is recommended to put the focus in communication strategies on changing the attitude concerning the payback period. Enterprises should be convinced to take investments in energy efficiency and renewable energies into account even if they exceed the usual payback period. Intensive information about non-energy benefits, as mentioned before, can considerably support the change in attitude.

## **Showcase efficiency measures**

In order to give specific branches an initial idea of the most substantial energy-saving measures, funding organisations, as well as national and regional energy agencies should concentrate on communicating these measures and correlating funding possibilities. These actions should range from “low hanging fruits” (measures which can be realised easily and with no or low investments) to more complex and costly measures.

## **Transferring experiences of real examples to enterprises**

Offer appropriate, regular information events (workshops, peer-to-peer meetings and workshops) to pick up the companies where they stand. The information exchange is recommended to take place directly from enterprise to enterprise - no one can convince an entrepreneur better to implement energy efficiency measures than a testimonial. Therefore, site visits are a suitable event to inform interested enterprises about the direct cost effects and non-energy benefits of efficiency measures. Ensure to involve all stakeholders and multipliers: these are of course the business associations, chambers of commerce and industry, professional chambers and colleges of technical professions, but also banks and funding authorities.

Cross-border exchange of experiences can further contribute to the sharing of best practices from across the entire Alpine region.

In order to improve the motivation and level of involvement of enterprises, it can help to award enterprises which have realised exemplary energy efficiency measures (e.g. Alpine Energy Award). This will furthermore increase visibility for the enterprises.

## **Increasing trust in funding systems and energy efficiency measures**

In order to increase the trust in support programmes and energy efficiency measures, the funding organisations and energy agencies should reinforce their communication strategies and pay special attention to non-energy benefits and measures which have already been realised by companies.



## **Intensifying communication**

Considering all aspects of communication described before, relevant stakeholders should inform more intensively about issues like benefits of energy efficiency measures and the use of renewable energies, funding possibilities and actually refurbished enterprises. These stakeholders are national and regional energy agencies, local authorities, energy advisors, planners and suppliers of technologies and energy efficiency measures, chambers of commerce, economic associations, financing institutes, and national and regional networks. Organisers of information events have to choose suitable platforms to pick up enterprises where they currently are. Especially, SMEs prefer on-site visits or regional events, and being advised by professionals. Site visits with accompanying information are examples of useful events.

The information exchange between enterprises which are interested in efficiency measures, on the one hand, and enterprises offering advantageous solutions for specific challenges, on the other hand, is another important issue. Business breakfasts or site visits are successful examples of appropriate events.

## **Establishing financing institutes as funding guides**

Funding organisations in cooperation with national and regional energy agencies should build up competences in financing institutions to enable them to inform applicants about energy efficiency measures, renewable energies, funding possibilities, basic requirements, funding amounts and the process. They should also have basic information brochures at hand.

### *c. Recommendations regarding energy advice*

#### **Low-cost energy advice**

To provide sound information about the current energy consumption, relevant benchmarks, conditions of plants, possible efficiency measures and their benefits is to open the door to the realisation of measures. In order to attract enterprises which are not yet convinced of the necessity and benefits of energy efficiency measures, the funded advice has to be free or available at just a fraction of the real costs. Public agencies could offer 1st level support in the form of a reduced and economically interesting if not free energy audit.

#### **Taking special conditions for enterprises in the Alpine region into account**

In order to take the specific challenges of the energy supply and usage in the Alpine region into consideration, an adapted, sector-specialised and holistic consultation, planning and realisation is vital. There are numerous possible starting points and, at the same time, many useful and suitable technologies exist already to be applied in Alpine regions. These technologies concern heat recovery, use of district heat, etc.



It is very important that the energy consultants are very well trained, that the processes and audits are well structured and that quality and success controls are carried out on an ongoing basis. It is furthermore crucial that energy consultants must acquire sector specific knowledge on market dynamics and technologies to be able to consider particular issues when advising enterprises of certain sectors.

This leads to a higher acceptance of the consultations and a higher probability of the realisation of energy efficiency measures.

Funding organisations should therefore attach much importance to list or assign primarily such sector-specialised energy consultants.

### **Offer local energy advice**

Organise energy consultations and information events regionally in close cooperation with regional professionals, regional consulting companies, and mayors or even with local banks.

### **Offering support through the whole refurbishment process**

Experiences show that the probability of the realisation of measures is higher in regions in which regular support is given to enterprises. Regular support in this context means regular contact to persons responsible in enterprises, enquiring about the state of considerations, offering technical support, guiding through the planning AND realisation process as well as assisting the monitoring process afterwards.

### **Provide technical support to SMEs to enable, and give visibility to, their path towards climate neutrality.**

Climate protection and business competitiveness go hand in hand. This is why it is important to ensure that actions taken by SMEs towards climate neutrality are communicated to employees, customers and suppliers as an everyday business practice. Therefore, the aim should be to provide support to SMEs in defining and communicating their paths towards climate neutrality and in considering energy transition as a strategic factor to increase their competitiveness.

### **Energy Efficiency + Lean Transformation: an effective approach to maximize the flow of value produced, at the same time eliminating energy and production waste (continuous improvement)**

The production process of a company uses energy to transform raw materials into finished products. Therefore, it is important to raise awareness among SMEs about the fact that by monitoring the energy flow (Energy Efficiency) it is also possible to monitor the flow of the value



generated by the production process (Lean Transformation). This allows for the identification and reduction of energy and production waste to increase value (continuous improvement perspective).

### **Promoting authorisation of consultants to apply for the subsidy**

Energy advisors as well as planners of measures and technologies should be skilled in applying for funding so that they can at least support in or, in the best case, take over the application process. Therefore, an authorisation of consultants and planners to apply for funding should be introduced. Offering this service is an additional value for the experts concerned. If they carry out the application for funding on a regular basis, this service can be done very quickly and rarely causes additional costs.

### **Introducing a temporary energy manager**

It is advisable to deploy a temporary energy manager at the enterprise, who is employed at a regional energy agency, for a certain amount of time to undertake the required activities, from recording and analysing energy consumptions to planning and accompanying the realisation of measures.

### **Instruments supporting the roll-out of energy efficiency measures**

In order to achieve maximum comparability and impact across the board, it is vital to work on standardising and harmonising the benchmarks across the regions. This also allows for a more straightforward communication of the action.

Providing free and simple tools (such as energy accounting software, etc.) can greatly lower the barrier for energy efficiency audits in enterprises

#### *d. Recommendations regarding the energy efficiency network and supportive instruments*

The creation of a permanent EUSALP competence network for energy efficiency in SMEs has to be pursued consistently in time in order to capitalize on the exchange between experts, clusters/enterprises, decision makers and funding bodies.

The added value and possible activities of an energy efficiency network include:

- Pooling of resources
- Development of common instruments, such as checklists, catalogues of criteria, audit protocols and tools, common benchmarks, information brochures, sector and technology reports, incentives and support concepts, further training concepts



- Organization of peer-to-peer meetings/workshops/events
- Competence building in regions to support them in setting up accompanying programmes
- organise peer-to-peer excursions in the Alpine region to exchange good practices

The network also helps raising awareness about the issue throughout the Alpine region.

#### *e. Recommendations regarding investment funding and incentives*

As energy audits are voluntary, it is important that there are subsidies to promote and facilitate them.

### **Establishing One-stop-shops**

Setting up a One-Stop-Shop not only for support with technical questions, but also for advice on the available funding possibilities.

### **Setting the focus on suitable funding programmes / Embedding**

An attempt should also be made to use all the different funding channels for energy efficiency measures. The funding bodies and energy agencies have suggested that monitoring of the effects of funding should also be set up. How effectively and efficiently are the funds used? Will this enable us to achieve our energy and climate protection policy objectives? It is vital for energy agencies to lobby for the alignment of funding programmes with the needs of the energy transition. This so-called “embedding process” is for instance being enforced within EUSALP, where Action Groups engage in a structured exchange with funding authorities (and above all the EU Commission) to make sure that funding programmes respond to the needs of the EUSALP on key issues, such as for example Hydrogen. It is important that this embedding process is extended to all strategic sectors for decarbonisation.

### **Simplifying application and management procedures**

The funding system in a country should consist of just a few funding programmes and ideally one single application portal. The information should be as short as possible and better targeted towards the companies.

In addition to the required increase of the skill of consultants and planners to apply for funding, the application conditions and procedures should be simplified. This will heighten the interest of enterprises in realising efficiency measures and using renewable energies.



## **Separating operating organisations**

Keeping the structure of separated financing body and operating funding organisation is recommended. The funding organisations managing the system, assessing funding applications and assigning subsidies need, and in all cases have, detailed technical know-how to evaluate demands. Coordination and approval processes should be limited and, if necessary, should take place regularly to keep the waiting period for the enterprises for approval of the subsidy as short as possible.



## 6. References

Nicole Hartl, Naghmeh Altmann-Mavaddat (2019): Study on energy efficiency in Alpine enterprises: Analysis of supporting instruments for realising energy efficiency measures and the use of renewable energies. Austrian Energy Agency for EUSALP Action Group 9.

Link: <https://www.alpine-region.eu/publications/study-energy-efficiency-alpine-enterprises>

ENEA: Linee guida e indicazioni operative per diagnosi energetiche nelle imprese.

Link: <https://www.energiaenergetica.enea.it/servizi-per/impresediagnosticaenergetica/indicazioni-operative.html>

