



**SUPPORT**  
Interreg Europe



European Union  
European Regional  
Development Fund

## Regional Sustainable Energy Action Plan Kalmar County, Sweden

Complete final version – September 2019  
– Energy Agency for southeast Sweden



## Table of content

|   |    |
|---|----|
| .....   | 1  |
| 1 Introduction .....                            | 3  |
| 1.2 The SUPPORT project.....                    | 3  |
| 2 The policy instrument.....                    | 5  |
| 2.1 Approach to the policy instrument .....     | 6  |
| 3.....  | 8  |
| The making of a Action Plan – an overview ..... | 8  |
| 1.1 Energy data background.....                 | 8  |
| 1.2 Stakeholder composition and influence ..... | 9  |
| 1.3 Developing the actions.....                 | 10 |
| Action plan .....                               | 11 |
| 3.1.1 ACTION 1.....                             | 12 |
| 3.1.2 ACTION 2.....                             | 21 |
| 4 Endorsement.....                              | 28 |

## 1 Introduction

### 1.2 The SUPPORT project

SUPPORT has tackled the difficulties encountered by many cities and towns of partner regions in the implementation of sustainable energy policies. Since the adoption of the Climate and Energy Package, the EU has been supporting local authorities in the implementation of sustainable energy policies. Within the framework of the Covenant of Mayors, more than 4700 municipalities have issued a Sustainable Energy Action Plan (SEAP) to promote energy efficiency. Nevertheless, the implementation of energy efficiency actions is often hindered by lack of funding, “critical mass” and qualified human resources; obstacles in making financial strategies work; poor involvement of the private sector; scarce integration of energy policies in the regulatory/programming framework (including Structural Funds programmes); lack of a site specific, integrated approach. SUPPORT has aimed to improve the coordination and performance of policy instruments intended to implement national and regional energy efficiency programmes at local level, through the reduction of the implementation gap and a more effective use of available funding opportunities (including European Regional Structural Funds), reinforcing the coordination and support role of regions and focusing on the development of more cost-effective and wide range actions. To achieve these aims and contribute to achieve EU objectives on energy efficiency and renewable energy sources, SUPPORT has combined different kinds of interregional learning activities, staff exchange among partners and between partners and stakeholders. We have worked both separately and jointly (and with the collaboration of key regional stakeholders and the technical support of the advisory partner) to analyse our regional background in the field of energy policies, identified and transferred good practices, and defined this Action plan to improve the performance of our energy policy



instrument and also through a more effective implementation of the local plans. Since the national funding for municipalities was dropped by the Swedish government in 2014 a clear decline in energy efficiency work has been shown. During 2010-2014 two municipalities started large scale Energy Performance Contracts (EPC) which has shown good results to although it has been a great administrative challenge for the municipalities to update their property documents. The EPC projects have been financed by the municipalities own investments funds, but there is also the possibility to use low-rate green loans at low interest. Although, most of the municipalities lacks staff to initiate an EPC-project. In most cases the buildings are managed by a municipal property company and have a strict budget each year for maintenance and energy costs. If they request for resources to run an energy efficiency project the claim must go through the city council budget political negotiations and are measured and compared to claims for funding of schools, elderly care, social service etc. This is making it very difficult to get approval. The SUPPORT projects have aimed to demonstrate by shared knowledge and good practice how energy efficiency actions are cost-efficient with good return of investments (ROI). By implementing the action plan into the regional policy document, we foresee increased investments in energy efficiency.



## 2 The policy instrument

The regional policy instrument, “*Action plan for environmental targets in Kalmar County*”, is clearly linked from the national context and is expected to be an umbrella for the local authorities in the county. The policy instrument is developed based upon a broad regional participation. The first instrument was created in 2006 consisting of priority areas. From this, a series of actions has been developed during the years, receiving contributions from municipalities, regional public authorities and local and regional stakeholders, over 150 people has participated. The policy document steering committee has always kept track of the actions, securing results and that the actions aligns with the regional sustainable development strategy.

The policy instrument with the actions addressed is ambitious in some parts, but weak in others. The policy instrument has a rather general description of climate actions, but needs to link up in a more precise way to the detailed actions that can be found in the SEAPs of local governments in order to be able to give targeted support via the Action Plan for the implementation of the local plans in order to coordinate the actions on local level. By improving the policy instrument with the regional sustainable energy action plan (RSEAP) from SUPPORT and include the local ambitions in the regional policy document – the local authorities will become even more motivated to strengthen their local climate work. The policy instrument has been used and improved developed for 15 years. Focus is now changing from larger environmental threats from industry towards the daily agenda addressing climate change. The targeted policy instrument is together with the regional development the key of how to allocate funding from ERDF, which makes the targeted policy document very important. This policy instrument needs to be improved in order to open for implementing sustainable energy action plans (SEAPs) on local level. This document is a mandate from the national

level to the provincial government and is therefore the official policy governing for all regional climate work.

## *2.1 Approach to the policy instrument*

When the regional council made a survey to what extent energy and climate actions were included in the investment budgets of the municipalities for 2017, the frequency of answers was very low. The few answers indicate that the local Energy Plans, have low or no investment budgets allocated in the overall municipal financial planning. The available municipal funds must be used more strategically to improve energy efficiency actions in public buildings. The knowledge of the planning and funding process must be improved, be it among political decision-makers and the technical municipal staff. Regrettably, the ERDF funding was only available for transport projects during this period. Therefore, our opportunity we found was to address the regional policy instrument for environmental targets. In the current version of the policy instrument targeted we took an active part in the planning by making several proposals for actions. The document is due to be updated during second part of 2019, where we have had a role, together with other regional stakeholders, to participate and propose actions. As for the ERDF, we have been in close contact with responsible staff at the national agency for growth and we all agree that the current writing was limiting and too precise and excluded many areas, i.e. energy efficiency in buildings. Therefore, we are confident that the writing for next programme period will be more open to different kinds of energy actions.

In order to enhance the municipalities to invest in energy efficiency and include more actions in their SEAPs they need to be provided with funding alternatives. This must be reinforced by awareness raising at the regional and local level to strengthen the political will for implementing actions. Through the SUPPORT project we have



provided participation and knowledge sharing from the projects good practice help to self-help for the local authorities to boost the willingness for investments for energy and climate actions. A regional coordination will push the decision makers to take more action. The SUPPORT project will also be a reminder, a support and a push for real actions. The Energy Agency for Southeast Sweden (ESS) is assisting the Administrative Board of Kalmar County to improve the targeted policy instrument, the Action Plan for Regional Environment Objectives in the County of Kalmar 2014 – 2020. ESS is involved in the process as an expert in the topic of climate and energy. Thus, together with long experience and extensive knowledge on energy efficient buildings and local production of RES, ESS can influence the policy instrument and coordinate other stakeholders on the territory.

### 3

#### *The making of a Action Plan – an overview*

##### *1.1 Energy data background*

The public building stock in the county has been neglected for a long time, except for the municipality of Kalmar and some scares initiatives. The work on energy efficiency had a momentum between 2010-2014 when national funding was available, and the energy directive was rather new. Then, in 2015, everything came to a halt. Up to 2014 an early data collection was mandatory, and it was easy to compare and start projects. The situation in 2014 was as follows.

| Energy use in public buildings including electricity | 2009       | 2014       | Local targets for 2020 | Regional target 2020 |
|--|------------|------------|------------------------|----------------------|
|  |            |            |                        | kWh/m <sup>2</sup>   |
| <b>Total municipalities of Kalmar County</b>         | <b>191</b> | <b>174</b> | <b>135-202</b>         | <b>159</b>           |

In the case of a rural small municipality a saving rate could reach up to 200.000 euros a year if there are resources for a systematic approach and with political support for investments in new technology for energy efficiency. In the same municipality, two or three persons in need of 24h healthcare would cost the same amount. So, without national support for contracting energy efficiency staff the local public sector went back to maintenance mode.



Even before starting up a stakeholder group it was easy to identify the lack of energy data as one big piece of the puzzle.

The overall energy- and emission data are centralized in Sweden by national authorities. Energy production and consumption are reported by the industry, electric companies and regional and local supervising authorities. All energy data are collected and processed by the national agency of statistics. After quality review the data are released on national and regional levels. Emission data are collected by the national environmental agency. All data are available public on the agency's homepages but lacks details on local level.

Most energy utility companies can provide energy data for each building along with the municipalities own data. So, the data is available, but resources and a methodology for collection, evaluation and monitoring of results are lacking.

## *1.2 Stakeholder composition and influence*

In Kalmar county there is a Climate Commission consisting of the Administrative Board of Kalmar County as secretary and with the county governor as chairman. Members are regional politicians and energy managers from the most important industries. They propose new targets for the regional energy action plan and promotes actions implemented by awarding a yearly energy- and climate award for SMEs, NGOs and private persons. The other is the municipality network of strategists and coordinators and have several meetings during the year where they discuss implementation and future common projects. Unfortunately, very few energy- and property managers are members of this group, so the implementation and monitoring of energy efficiency actions have lacked coordination. This is one of the key-actions that must be considered. The Administrative Board of Kalmar County work on a new regional sustainable action plan during 2018-2019 and are developing clear goals for energy efficiency where the regional members of the SUPPORT has participated in the

progress. Later 2019 the work will begin on the main policy document of the county that is the action plan for regional environmental targets. There we will have an opportunity to include all the actions in the RSEAP developed in SUPPORT.

### 1.3 *Developing the actions*

With regional energy building data available, the regional stakeholder group identified key elements that needs to be considered in developing the actions.

- *Design of new energy efficiency targets for the region with target year 2030 based upon energy data from 2008.*
- *Common methodology of data collection*
- *Designing common energy data portal*
- *Need of common educations*
- *Need of agreements and cooperation for energy services and energy audits.*
- *Need of information system regarding finance opportunities and projects*
- *Need of a regional network to exchange experience*

Therefore, stakeholders and project staff has discussed the necessary actions to enhance the regional work on energy efficiency. Keeping the above in mind, together with the findings at the interregional workshops, staff exchange, and Interreg good practice learning platform, has led to the needs of regional organization, targets and education.

Finally, the actions are therefore developed to meet the regional demand for a clear and structured progress work on energy efficiency and will provide improved possibilities for financing.

*Action plan*

**Action Plan – PP7 ESS Sweden**

**Part I – General information**

Project: Support local governments in low carbon strategies (SUPPORT)

Partner organisation: PP 7 Energy Agency for southeast Sweden

Other partner organisations involved (if relevant): no

Country: Sweden SE

NUTS2 SE21: NUTS 213 Kalmar County

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**Part II – Policy context**

The Action Plan aims to impact: Other regional development policy instrument

Name of the policy instrument addressed: Action plan for regional environment objectives in the County of Kalmar 2014-2020, thematic area – Climate and Energy



## Part III – Details of the actions envisaged

### 3.1.1 ACTION 1

#### 1. Collaborative municipalities for joint energy data collection methodology

#### 2. The regional background

The regional stakeholder meetings in semester 1 and 2 clearly showed the lack of a regional network for project development, measuring & verification, monitoring and reporting system and innovative funding mechanisms connected to publicly owned buildings. All stakeholders agreed upon the immediate need for better coordination or EE actions will take a long time to implement if it must be done by local initiative. The lack of coordinated energy data collection on regional level makes it too difficult to follow up energy targets, joint procurement and joint knowledge raising events. Therefore, we would like to enhance the possibility to allocate more support to investments related to implementation to new technology, demonstration sites and innovative funding mechanisms etc.

The collection of energy and emission data is centralized in Sweden by national authorities. Energy production and consumption are reported by the industry, electric companies and regional and local supervising authorities. All energy data are collected and processed by the national agency of statistics. After quality review the data are released on national and regional levels. Emission data are collected by the national environmental agency. All data are available public on the agency's homepages but lacks details on local level. Therefore, the 21 County Administrative Boards of Sweden, who has the task of coordinating the regional energy- and climate work, ordered by procurement regional energy data on local level. Thanks to this cooperation we had access to very useful local energy data. With this very

detailed information we had the possibility transform the local energy data to present each municipalities situation in energy balances. This is demonstrated by Sankey diagram, a diagram showing the flows in arrows proportionally to the flow quantity, in this case energy. The report was presented with a press release in time for the regional workshop.

## **Regional seminars and events**

The invited stakeholder group consisted of public regional and local energy and climate strategist, responsible for their local action plans. The group agreed that there are good possibilities to tackle the identified weaknesses of the regional energy data presentation. Especially the need for network activities where policy makers and other stakeholders can discuss and follow up the new and improved targets. To structure the implementation of the targets it is crucial to have a common methodology. According to the energy data presented at the regional stakeholder meeting the following priority actions to be addressed by a regional network was concluded by the stakeholder group.

- Common methodology of data collection
- Designing common portal for municipal buildings energy data
- Identification of common educational needs
- Inter-municipal agreements and cooperation for energy services and energy audits.
- Information system regarding finance opportunities and project possibilities

For the actions it is important that the local implementation have a clear organisation. When establishing a joint regional data collection methodology for energy efficiency it is important to reach all local key-players. Within the region there are two different models of approaches that needs to be considered. Most of the municipalities have centralized strategies and responsibilities giving the opportunity to have an overall perspective and also to allocate own and external funding. They miss though the bottom-up perspective and detailed knowledge of the complexity regarding energy efficiency. For that reason, some municipalities have chosen a decentralized organisation leaving each office responsible for implementing energy efficiency actions. With technical knowledge and the possibility to act without waiting for formal political approval they can implement actions easier. So, when setting up the methodology it is important to have these differences in mind.

## **Regional background analysis**

Since 2014 a structured regional energy data collection is missing for public buildings. To be able to reach any regional energy efficiency targets this data collection is crucial. Some of the larger municipalities have own data collection systems where energy efficiency has been implemented by EPC. A new mandatory energy data reporting system is vital to reach new targets in the upcoming regional energy action plan and for a regional network to coordinate.





## Project partners good practice

During the interregional seminar in Alba Iulia we took special interest in the good practice from our Croatian project partner, Croatian Government Real Estate Agency, how to construct a working network and energy data collection (EMIS). They have a National database of energy and water consumption in all buildings of public sector. The system receives remote meter readings, cost of energy, input from meteorological systems: temperature, heating degree-days. Another interesting function is that receives input from sensors for each room in the individual building which is absolute crucial to follow up on energy efficiency actions. The system also provides various reports of interest, individual or summary, based on the demands. It clearly showed an established base for continuous energy management which not only detected energy anomalies but also provided a list of priorities for building owners, financial institutions and ESCOs. The EMIS system works as an excellent role model for the establishment of the data collection methodology.

During the interregional workshop on Gozo, Malta, another very interesting good practice was the development of Energy and Climate protection Management (ECM) in Rhineland-Palatinate which intends to structure a regional energy efficiency programme *Energy efficient communities programme* for over 100 small municipalities. This has been working since 2017 and is much appreciated by the municipalities where they must perform an energetic analysis to identify the energy consumption and a list of different actions and methods to improve energy efficiency. The example on how this has been implemented by the community association of *Jockgrim* gave a clear view of the challenges a small municipality faces when it comes to a systematic approach to energy efficiency. The need of knowledge and financing instruments are the two most important factors to consider. The most interesting part which we would like to incorporate to our network was the evaluation of proposed energy efficient

actions where many measures are validated. Payback time 25 %, energy costs savings 25 %, Energy efficiency investment costs 15 %, Need 15 %, Public image 10 %, Implementation speed 5 %, Internal personnel expenses 5 %. This gives a broader view of the action, which enables decision making for politicians easier. We feel that this is one of many important tasks for a network to address in order to enhance more investments in energy efficiency.

## 2. Action

Since 2014 a structured regional energy data collection is missing for public buildings in Kalmar county and its 12 municipalities. The size of the municipalities varies between 7.500 to 70.000 inhabitants. The lack of coordinated energy data collection on regional level makes it too difficult to follow up energy targets, joint procurement and funding opportunities. To be able to reach any regional energy efficiency targets this data collection and proposed measures is crucial. It is estimated that 2 million euros are unnecessary paid by the municipalities each year in heating, cooling and electricity use. Some of the larger municipalities have own data collection systems where energy efficiency software has been implemented within an EPC. A new mandatory regional energy data reporting system through a common access database is vital to reach energy efficiency targets in the Action Plan for Regional Environment Objectives in the County of Kalmar 2014 – 2020. The reporting is done by each municipality on quarterly basis for energy use per m<sup>2</sup>, heating, cooling and electricity. This is done by a software system that will be provided by the county administrative board. The software has open access for the municipalities and the administrative board will then summarize and compare the results for identification of target buildings and project development. The participating municipalities will then meet twice a year where ongoing projects are discussed, and the reported energy data analysed.



## **Chosen interregional experience and best practice exchange**

This action is a result from the interregional exchange from two interregional seminars and adjusted to the regional context of Kalmar: First presented at the interregional seminar in Rovinj and later during the interregional seminar in Alba Iulia, we took special interest in the good practice from our Croatian project partner, Croatian Government Real Estate Agency, on their system for energy data collection (EMIS), the EMIS software simplifies the process of energy management in public building through easy access to data on energy and water consumption which leads to easier identification of potential measures of energy efficiency improvements, implementation of projects, monitoring and verification of achieved results. The easy access of the energy data will be adopted in the action described. Another very interesting good practice - presented at the interregional seminar in Gozo, Malta - was the development of Energy efficient communities programme (ECM) in Rhineland-Palatinate which intends to implement local energy management systems for over 100 small municipalities. Each municipality must perform an energetic analysis to identify the energy consumption and a list of different actions and methods to improve energy efficiency. This approach will be used in the Swedish context together with the energy data collection since it is proven to work out fine for smaller German municipalities.

The development of the software for energy data collection, and energetic analyses, will support a common methodology of open energy data and description of measures, it will increase investments in energy efficiency by municipalities and create joint funding and procurement possibilities. Together with other regional stakeholders such as ESCOs accomplish a structure for a database for the coordination/collection of energy data and methods of measure and verification.



## **Improvement of the policy instrument addressed**

The software data system will provide more actions and will influence the policy instrument “*Action Plan for Regional Environment Objectives in the County of Kalmar 2014 – 2020*” by providing increased investments in energy efficiency. This will be a significant contribution to the overall aim to lower emission and use of energy. By this software the policy instrument addressed will be improved by change in the strategic focus of the policy instrument since the local governments will be able to follow up their energy use in a more useful and clear way. The visualization made by the software provides comparisons, evaluation of the proposed measures, verification of energy efficiency improvements. It will also contribute to the development of local energy efficiency improvement plans, implementation of projects that deliver energy and financial savings and at the end to monitoring and verification of achieved results. Hence, this will make it possible for the local governments to plan more detailed actions as described in the local government’s SEAPs. By doing that, the policy instrument will be able to give targeted support and coordination to the implementation of actions on local level.

The procurement requirements will be organized by the Energy Agency for Southeast Sweden as project coordinator and funding investigator. The Administrative Board of Kalmar County will be responsible for the procurement and run the daily work as owner of the policy instrument and regional energy coordinator. The software will use the same approach as the good practice of the German Energy efficient communities programme. All 12 municipalities in the region are presupposed to participate and implement projects.

1. Analysis of the starting point and procurement requirements based upon the regional energy data collection from phase one.

*Carried out by the Energy agency for Southeast Sweden*

2. Procurement and implementation of the software.

*Carried out by the Administrative board of Kalmar county*

3. Energy data and measures reporting.

*Carried out by the 12 municipalities under surveillance and support from Energy Agency for Southeast Sweden and the Kalmar county Administrative board*

4. Introduction of first analyse and presentation of project funding opportunities and business models

*The municipalities energy managers will meet twice a year, whereof one will be a major seminar with invited speakers. Web meetings are foreseen upon demand.*

#### 4. Timeframe

08/2018-09/2019 Finalization of required structure and project development. In this phase we are identifying the needs together with the stakeholder group.

11/2019-04/2020 Introduction of regional network and energy data collection of public buildings. First network meeting on how to organize the data collection and the introducing the purpose of the network.

05/2020-12/2022 Implementation of joint energy data collection and early report/conference. Setting up a local reporting structure directly to the regional network. Implementing network meetings at least 3 times a year. Using data to highlight energy efficiency projects at a yearly award conference/network meeting.

## 5. Costs

1. Procurement of database software. 15.000 euros.

Task operated by the administrative board of Kalmar County energy data collection will be provided by each municipality, costs depend on level of required details.

2. For local implementation and collection of energy data, the cost is foreseen from 2.000 euros up to 5.000 euros per municipality and year depending their size and property stock.

## 6. Funding sources

Administrative board for Kalmar County has as regional energy coordinator funding from the Swedish Energy Agency for regional networking activities. The Energy Agency for southeast Sweden are also participating in the call:

H2020-LC-SC3-2018-2019-2020 with the TOOLS4MAV project proposal (Tools for measure and verification of SEAP actions). If successful, work starts during 2020.





### 3.1.2 ACTION 2

#### Improving energy efficiency by procurement and monitoring.

##### 1. The background

Based upon the available energy data the regional stakeholder group decided to set up new energy targets to help to reach the energy efficiency target for 2030. Too general targets will not have the effect that is needed to increase the number of energy efficiency projects. These new targets must be explained, implemented and accepted to achieve good results.

Following targets have been proposed for all new public buildings and dwellings.

*Energy use must be cut by 50 % in 2030 compared to 1995 or by latest 2008*

*When renting buildings energy targets must be set*

*The use of electricity and lightning must be reduced significantly*

*In new buildings or refurbishment energy use must not exceed 50 kWh/m<sup>2</sup>*

*All new buildings must have an energy supply 25% lower than the legislation require*

*At refurbishments, at least 50% decrease of the total energy demand, including electricity, together with indoor comfort enhancement components and a local renewable energy component*

*At new buildings and refurbishment, the use of PVs should always be considered*

These targets must be implemented for all public buildings, municipal as regional. The targets will in a clear and direct way show how to reach the policy documents targets on energy efficiency.

## **Regional seminars and events**

Many energy systems in buildings are the result of cost-efficient procurement in earlier decades. Lowest price was the default criteria, and no, or very little, regard was given to the operational costs. There was also a sub-culture among many property managers of keeping politicians happy by low maintenance costs. This has led to the critical situation of today with very high operational costs and weak budgets for maintenance. To change the mindset, it requires very concrete actions and targets. The new targets have also to be well known and accepted. In many municipalities ambitious targets have been set in local energy- and climate strategies but lacking connection to the property managers, economists and politicians. The regional stakeholder group emphasized the importance that there is a capacity building activity to the new targets, not only to get recognized but also pedagogically explaining the background.

## **Regional background analysis**

The actuality of the local action plans varies, so all new regional energy targets must be incorporated in the new versions of the local action plans. Looking at the local municipal directives for the municipal housing companies, only two of the municipalities have any targets regarding energy efficiency. Very few have energy managers for controlling, planning and reporting. With no political directives, no efforts or resources will be initiated by technicians or property managers. The integration of sub-targets to reach the 2030 goals are very important, not only to enhance the efforts, but to have energy efficiency on the daily agenda.

## **Interregional learning process**

During the interregional seminar in Seville, best practice from the Horizon 2020 Greens project with the city of Cádiz for procurement and monitoring gave input to many of the targets. The city together with the provincial energy agency developed green public

procurement to enhance the sustainable development in the region. This provides improved possibilities to procure sustainable products, services and setting energy efficiency targets. In the case of Cádiz electricity supply procurement led to more than 80.000 euros in savings per year for the provincial government of Cádiz.

### **Project partners good practice**

At the interregional seminar in Alba Iulia our partner ALEA presented the Cluj Competitive and performance indicator-based system for public buildings renovation that was in operation in the city of Cluj-Napoca. They identified that the requirements for improving energy efficiency was not specific enough and did not require energy performance indicators. They were missing indicators the indoor comfort enhancement components such as HVAC and lighting, as well as investigation the local renewable energy component like PVs or district heating. By setting new requirements an improved quality of efficiency was obtained were the main beneficiaries was the occupants of the public buildings, especially kindergarten children, students and teachers.

An inspiring good practice came from partner Energy agency of Rhineland-Palatinate and their Energy and Climate protection management for municipalities in cooperation with the German Energy Agency (DENA). The management is based on a systematic energy controlling and components of the Plan-Do-Check-Act-method: Collection of consumption data collection, continuous documentation of technical performance and maintenance. The key-factors were to establish organizational structures and adopt a mission statement. This makes it possible to support municipalities in the political decision-making process.

At the Alba Iulia interregional seminar, we heard an interesting presentation by the Croatian ministry for construction and physical planning. The National Programmes of



energy renovation of buildings has set up specific targets, for example renovation of central government buildings, - 3% of the fund per year, renovation of public buildings 2014 –2015, minimum 200.000 m2, and renovation of public buildings 2016-2020 with energy savings of 50 GWh per year. All initiatives available with three different financing models. So the sub-targets were completed with an implementation idea and funding opportunity.

## 2. Action

Based upon the available energy data, the regional stakeholder group also decided to upgrade the regional energy targets to increase investments in energy efficiency and to improve the policy instrument. The actual energy requirements by legislation are considered too weak to impact the instrument. Also, specific energy efficiency projects are too few to have a major impact on the instrument, but when including energy targets in procurement for all refurbishment and new buildings, the demand for energy providers and services, ESCOs and innovative funding will increase. By doing so, it will also improve the policy instrument.

### **Chosen interregional experience and best practice exchange**

The action was inspired by a presentation during the interregional seminar in Seville, where the best practice from the Horizon 2020 Greens project and the city of Cádiz, explained that energy targets are useful in procurement and monitoring. The city, together with the provincial energy agency, developed green public procurement to enhance the sustainable development in the region. This also provides improved possibilities to procure sustainable products, services by setting energy efficiency targets. For the public property sector, the regional energy efficiency targets for 2020

have not been met, so implementation of energy requirements in procurement and monitoring are vital. We also learned from our partner ALEA, at the interregional seminar in Alba Iulia, that they had identified that the requirements for improving energy efficiency was not specific enough in refurbishment projects and did not require energy performance indicators. Their project, the Cluj competitive and performance indicator-based system for public buildings in the city of Cluj-Napoca, had been very successful, including the indoor comfort enhancement component with full HVAC and lighting, as well as the local renewable energy component. Our aim is to repeat that in our region according to regional targets.

### **Improvement of the policy instrument addressed**

The following requirements are to be included in all building procurements:

- *When renting temporary buildings energy targets must be set.*
- *In refurbishment, total energy use for heating and cooling must not exceed 50 kWh/m<sup>2</sup>*
- *All new buildings must have an energy demand 25% lower than the legislation requires.*
- *At refurbishments, at least 50% decrease of the total energy demand, including electricity, together with indoor comfort enhancement components and a local renewable energy component*
- *At procurement for new buildings and refurbishment, the use of PVs should always be considered in all tenders.*

The additional regional efficiency targets must be implemented in local procurements and be frequently monitored. The action will ensure that energy efficient requirements, indoor climate components and local RES are present in all procurements regarding public buildings. It will clearly improve the policy instrument by enabling an increased demand for energy efficiency services.

For the implementation of the action two pilot municipalities has been chosen for implementation and evaluation in the first phase (2020). In these municipalities an introduction and implementation of the new procurement targets will be directly connected to the local action plan for energy efficiency in public buildings. During a test period, the municipalities will incorporate all new targets in their ongoing and planned building procurements. The procurements targets will undergo feasibility studies, monitoring evaluation and verification reporting methods. This will result in a handbook for the other municipalities within the region, who then will implement these in phase 2 of the action (2021). The result of the handbook for energy performance procurement guidelines will in phase three be distributed to all Sweden's municipalities by the 21 county administrative boards of Sweden.

## Players involved

Energy Agency for Southeast Sweden. Project coordinator and funding investigator. Administrative Board of Kalmar County. Owner of policy instrument and general coordinator of regional energy network. Region of Kalmar. Owner of energy- and climate policy document and general coordinator of the regional network of civil servants.

Pilot municipalities in phase 1. Several other municipalities as evaluators. Consultant for energy efficiency and consultant for measurement and verification. As steering committee will act the regional association of Good housing, the national information



centre for sustainable buildings and the public credit institution with “green loans”. To ensure good participation a first letter of intent has already been collected from several municipalities.

### 3. Timeframe

12/2019 to 12/2020 Phase one with pilot implementation, support and evaluation of the procurement guidelines.

01/2021 to 09/2021 Phase two with a full-scale test of the guidelines in several municipalities

06/2021 to 12/2021 Phase three with preparation and dissemination of the guidelines

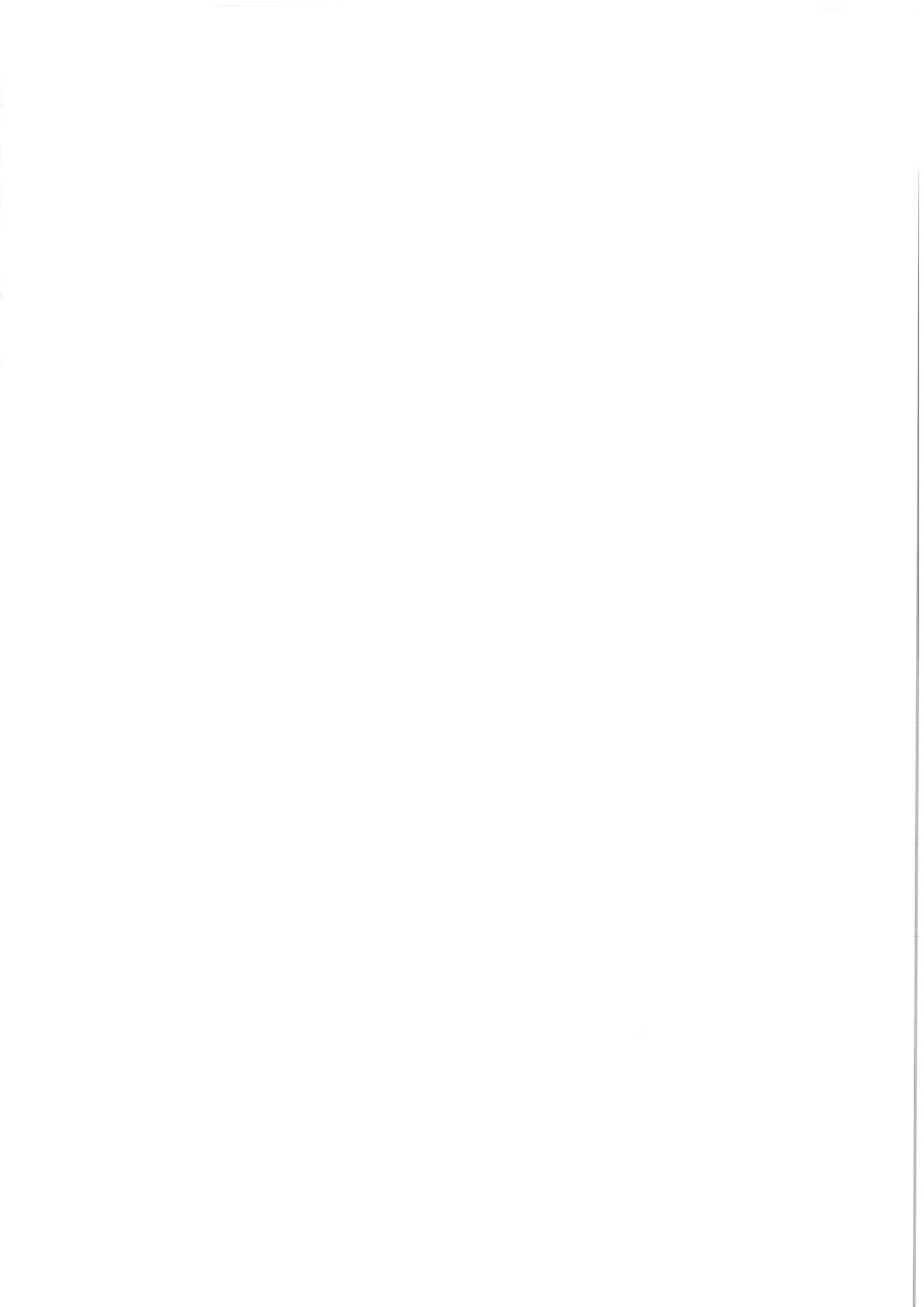
### 4. Costs

Preliminary budget breakdown:

|                                     |               |
|-------------------------------------|---------------|
| Project coordination and management | 200.000 euros |
| Municipal staff                     | 80.000        |
| Experts                             | 46.000        |
| Travel, accomodation, meeting costs | 7.000         |
| Technical equipment                 | 4.600         |
| Procurement of publisher            | 9.300 euros   |
|                                     | <hr/>         |
|                                     | 346.900 euros |

### 5. Funding sources

National calls by the National energy agency and Horizon 2020 Calls. The action has applied for funding to a call in September 2019 by the Swedish national energy agency. Evaluation of other funding possibilities by Horizon2020 calls within secure, clean and efficient energy.



H2020 LC-SC3-EC-5-2020: Supporting public authorities in driving the energy transition.

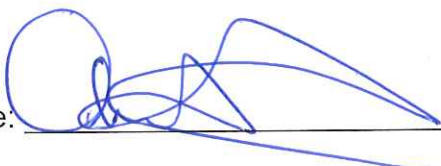
H2020 LC-SC3-B4E-8-2020: Renewable and energy efficient solutions for heating and/or cooling, and domestic hot water production in multi-apartment residential buildings.

H2020 LC-SC3-B4E-11-2020: Financing for energy efficiency investments - Smart Finance for Smart Buildings

## 4 Endorsement

The Energy Agency for southeast Sweden agrees to support and promote the implementation of the actions detailed in this document.

Date: 2019-09-26

Signature: 

**Christel Liljegren,**

*Managing director of the Energy Agency for Southeast Sweden*



