

Process model for the cooperation
of local and regional authorities,
energy utilities and public property
owners in energy efficiency
implementation on district level

1. Background

AREA 21 is a three-year transnational cooperation project that is jointly carried out by 10 partner organizations from the Baltic Sea Region. The project seeks to model energy efficient urban areas of the future, adopting collaborative stakeholder engagement processes in the strategic planning and implementation of energy solutions. Specifically, AREA 21 brings together public authorities, energy providers, property owners and citizens to find and apply the best solutions for saving energy to decrease CO2 emissions. To achieve this, the project enables local authorities from cities around the Baltic Sea Region to run cooperative planning processes within Energy Improvement Districts. The process seeks to help authorities to work together across different sectors, to understand citizens' motives and barriers, and to activate relevant players in urban neighbourhoods. AREA 21 is part-financed by the European Union (European Regional Development Fund and European Neighbourhood Instrument) as part of the Interreg Baltic Sea Region Program 2014-2020, Priority 2 "Natural resources", Specific objective 2.3 "Energy efficiency". The duration of the project is between October 2017 and September 2020 and the project budget is 2.55 M EUR.

AREA 21 aims to provide local authorities, energy agencies and other institutions responsible for energy planning with the know-how and strategic tools on how to plan and implement new solutions for energy efficiency in urban districts. To achieve this, the project develops and tests new formats of cooperation between public authorities, energy providers, public property owners and citizens. Together across seven locations in the Baltic Sea Region, this project will facilitate public organizations and private actors to work together in elaborating holistic strategies and implementing context-specific measures in Energy Improvement Districts. Furthermore, the project also promotes the use of smart technologies to facilitate the energy planning process, to test new forms of public participation, to raise awareness about the individual energy consumption and to promote behaviour change.

Local and regional public authorities have limited knowledge about the added value of cooperation with energy utilities and property owners in co-design integrated approaches to energy efficiency on district level. The cooperation models, which local and regional public authorities currently apply in strategic energy planning and implementation, do not adequately integrate the knowledge and needs of energy utilities and property owners. For this reason, the partnership will develop new formats, tools and instruments to strengthen the cooperation between local and regional public authorities, energy utilities and public property owners and to intensively involve them in the actual implementation of the local EID concepts.

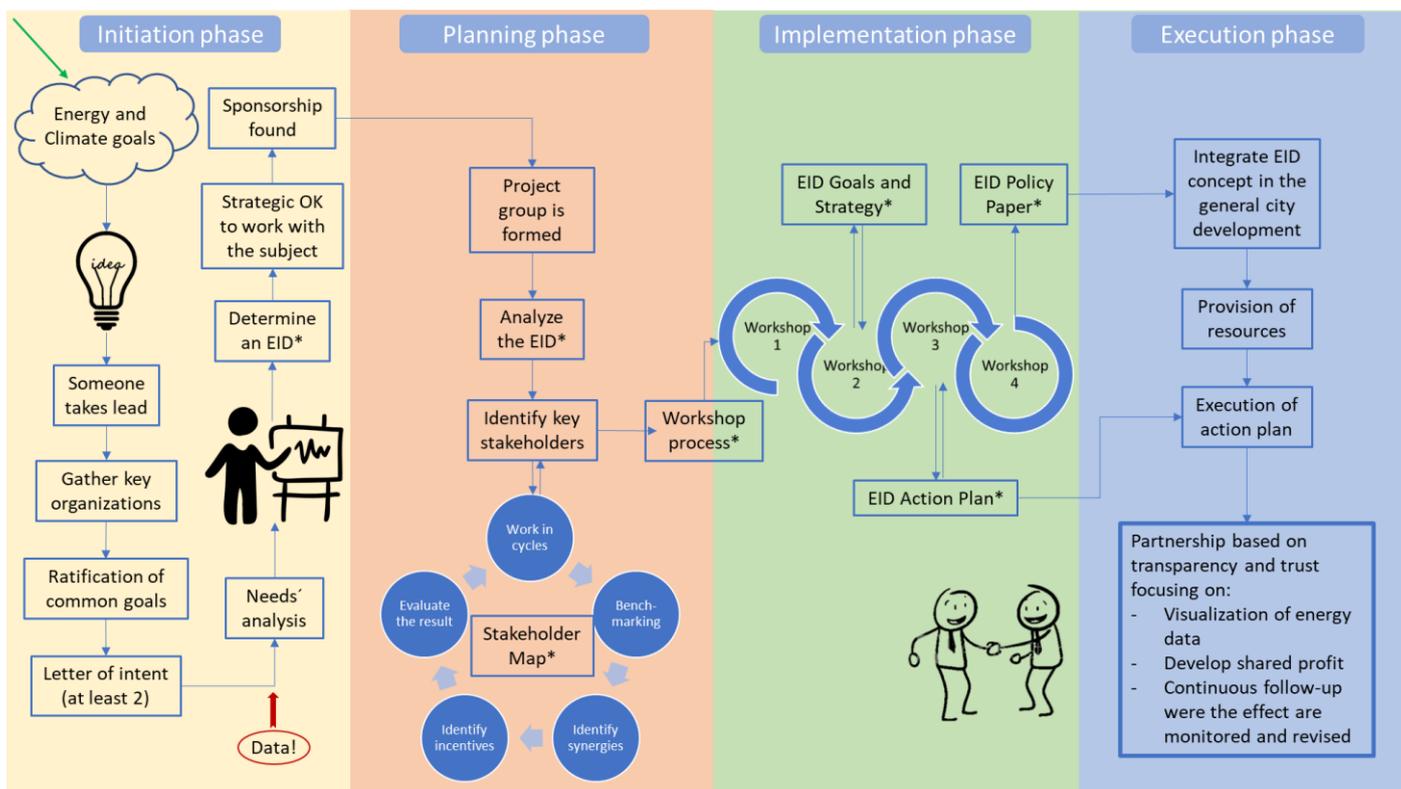
2. Description and aim

The process cooperation model is supposed to be used by BSR cities and regions to implement the EID concept in their specific context. The model will supplement the EID strategy development process and will have a targeted focus on the identification of concrete energy efficiency measures and means for the implementation of the EID concept. The model will guide BSR cities and region in the establishment and promotion of local cooperation formats and processes between local and regional authorities and energy utilities and will support the targeted involvement of property owners as main actors in the implementation of energy efficiency measures. In particular, it will support cities and regions to integrate in their specific local context different cooperation formats for joint identification and subsequent implementation of energy efficiency solutions.

Furthermore, the model will incorporate a catalogue of example means and measures for the implementation of EID concepts. This will provide incentives for all BSR cities and regions to be used for the planning of new energy efficiency solutions and for the identification of possible means and funding models for the implementation of these solutions.

The process model for cooperative energy efficiency implementation on district level will be directly used by public local and regional authorities with responsibility in the energy field to initiate local cooperation processes with energy utilities and property owners and to integrate new cooperation formats and tools in local decision-making processes. In addition, the model will provide energy experts from the public authorities, energy agencies and utilities with guidance for the identification and implementation of energy efficiency measures. The catalogue with example means and measures will support BSR cities and regions in the development of action plans for the implementation of the EID concept in their own local context. In particular, it will guide them in identifying context specific energy efficiency solution and possible ways for their practical realization. In a longer term this will contribute to decrease of the current CO₂ emission levels in existing built up quarters and to achievement of the cities and regions' energy and climate commitments.

3. Process Model



3.1 Initiation phase

Energy and climate goals

Identify national, regional and local energy and climate goals. Structure and break down the goals into suitable ones for your organization. Analyse and investigate whether your organization can accomplish the goals by their own, or if external cooperative help from other organizations are required. For example, you might be dependent on another organization, i.e. the energy utility, for reaching the energy goals, and hence you need to start working together for the goal fulfilment.

Someone takes lead

The organization who has set energy and climate goals and therefore also has identified a possible need of cooperation with other organizations, take the initiative and contact the others. This to start discussions of goal synchronization, synergies and cooperate sustainable development. It is of great importance to map the external organizations' attitude for cooperation in order to determine their willingness and motivation in working against regional, national and global energy and climate goals.

Key organizations

When the organizations of interest have been identified, it is time to gather everyone. Preferably the group consists of public and/or private property owners, energy utility as well as public authorities. Together, these three investigate and determine a couple of areas/goals which they can fulfil together through cooperation and joint activities, and hence achieve greater accomplishments than working by their own.

Ratification of common goals

The group elaborates and formulates common goals/objectives/activities to support a coordinated energy and climate work together within the areas of mutual benefits. Each organization's top management will then jointly decide and ratify these common goals.

Letter of intent

A Letter of intent (LoI) is formulated and signed by all included organizations. The LoI highlights the intentions of the cooperation, i.e. how the cooperation should be implemented and how it will support the fulfilment of common energy and climate goals. Normally a LoI is followed by a legally binding agreement, i.e. a contract, to ensure progress and favour the invested work effort.

Data

It is very critical to get access to aggregated energy data representing the entire EID. This is needed to define a baseline in terms of energy use for the EID, in other words energy usage per inhabitant or energy usage per household. The baseline data will be the reference for the measurements of improvement. Aggregated data is enough and will comply with regulations with in EU (GDPR, etc). Hence, there is no formal barriers, and the only challenge is the data supplier's willingness to share data.

Depending on the country of interest, the data can be collected in different ways. For example, it can be provided by the electricity grid company, gas grid company as well as the district heating company. It is of great importance to initiate the contact with the data suppliers in order to ensure their commitment to the project.

In addition to the specific energy usage, data regarding the environmental impact from the energy usage is also required. This information will contribute to formulating overall energy and climate goals of the area of interest.

Needs' analysis

As earlier mentioned, the supplied data is analysed in order to set a starting point for the cooperation process. The data is in combination with the ratification of common goals also used for a needs' analysis to select possible areas of cooperation.

Determine an EID

Based on the result of the needs' analysis, an area with a high potential for cooperative energy efficient work is determined; the EID is set. In other words, the area should be selected considering the most optimal way of working against common goals.

Strategic OK

The committed organisations initiating the cooperative process need to ratify the determined EID. This to both support and participate in the upcoming work, as well as pointing out a project manager. This project manager takes charge of the work from now on. This is a key resource in the upcoming work and will serve as a driving force as well as the "spider in the web".

Sponsorship found

The execution of a local cooperation process in an EID requires a sponsorship. The project manager is responsible for presenting a project charter for the strategic group of the organisations whom have written the Letter of Intent. Funds for sponsorship of the upcoming project as well as the work of the project leader can be either international or national public funds, for example EU programs, or simply that the involved organisations equally share the project cost between each other.

For the other general organizational participation of the project, no additional sponsorship should be needed since the respective employer preferably fund this working time. Each participatory organization simply invest with their own time which they have already financed in the daily work.

3.2 Planning phase

Project group is formed

After receiving funding, the project manager forms a project group. The project group should consist of members from each organisation who has identified a benefit of working together towards the common energy and climate goals.

Analyse the EID

The project group or team should start by describing the status quo of the chosen EID. As a support in the physical analysis of the EID, in the development of a strategy and for the preparation of local workshops You should follow the steps for analysis outlined in the document "*Framework for Analysing an EID*". The work with the document is an iterative process to be adjusted along the project period.

Identify key stakeholders

The project group or team should start identifying key stakeholders by using the document: "*Analysing Stakeholders for Energy Improvement Districts: Framework*".

Stakeholder Map

The stakeholder map should illustrate the stakeholders in a diagram from high to low in terms of influence and interest. The map should also be inserted in the document "*Framework for Analysing an EID*".

3.3 Implementation phase

Workshop process

Plan for workshops with the identified stakeholders using the "*Guidelines for the organization, documentation and evaluation of local workshops in EIDs*". The key aim of the workshops should be to support the stakeholders in the work of cooperative energy planning and to establish a long-lasting cooperation.

Before jumping into Workshop 1 please make use of Pre-meetings with the key stakeholders to introduce them to the EID concept and preparing them for the first workshop. Using in-between-meetings along with the workshop process will enhance progress.

Workshop 1

Identify needs, interests and concerns of the stakeholders in order to set mutual EID goals using the guideline above and the document "*Framework for Analysing an EID*". The outcome of the workshop should be the formulation of final goals for the EID after input from the stakeholders.

Workshop 2

Develop a strategy for achieving the mutual goals within the EID. The outcome should be a strategy for implementing the goals for the EID.

Workshop 3

Determine the action plan for the EID and allocate the responsibilities of actions. Identify competence and resources needed and develop an action plan for the strategy. The outcome of the workshop should be an action plan for the EID strategy including allocations and funding.

Workshop 4

During the 4th workshop local decision makers and politicians are invited and presented the EID concept and its positive experiences as well as encountered barriers. The purpose of the workshop apart from introducing the EID concept, to discuss current political barriers experienced at a local, regional and national level, which make the implementation of the EID concept difficult. This to identify potential for

future policy change at a local level and get possible help from the politics in policy and legislative matters obstructing the progress of the EID process.

3.4 Execution phase

Integrate the EID concept as a part of the general city development

During the fourth workshop, the EID concept with its opportunities and possible barriers is presented and discussed upon with local and regional politicians and decision makers. Hopefully these decision makers embrace the concept as an efficient method to speed up the city development toward the climate goals, and use it as a general standardized concept for future energy efficient work. It is of great importance that the EID concept is then integrated as a part of the overall city development plan, to ensure new project plans have the methods in mind when the process starts.

Provision of resources

As a result of integrating the EID concept in the development plans, there can be resources allocated to projects set up as EIDs. This is vital both for the process to be initiated as well as later on implemented. Furthermore, there is also of great importance for an already implemented and elaborated EID about to execute their developed action plan to receive enough resources. Regardless of how successful the implementation and elaboration phase have been for a cooperation process, it is when the expected results are starting to be fulfilled that the real accomplishments are made, and the partnership boosted.

Execution of action plan

The workshop process in the EID concept generates collaborative developed vision, goals, strategy and action plan for the set area. These different outputs build on each other to be useful tools in the continued energy efficiency work in the EID. The action plan needs to have structured activities, allocated responsibilities and a clearly set time frame to be successfully executed. To ensure further progress of the action plan, its activities need to have a continuous follow-up and be well monitored. The activities should preferably be performed as iterative processes, where the involved organizations increase both knowledge and skill alongside the progression. As a result of this, possible barriers will be found, and the advancement can easily be communicated to the sponsors and project participants, which in return will benefit the established cooperation.