



B: Defining scope and organizing stakeholders

This chapter is primarily relevant for you if you have the role of a **Trusted Partner** towards a cluster of SMEs and have the ambition to contribute to increasing energy efficiency in this cluster. A six-step guidance on how to define the scope of your work in terms of overall objectives, activities and services to offer, motivate the SMEs to participate, and organizing the stakeholders, is presented in sub-sections B.1 to B.6.

B.1 Forming an Energy Working Group

You form a core group of persons who can support you in the development of the collective. The group could consist of representatives from SME frontrunners, energy associations, or other enthusiastic stakeholders.

B.2 Setting your ambition

You set and formulate the ambition and focus of your local energy collective - together with your Energy Working Group - and with the needs and priorities of the SME cluster in mind. The ambition level can vary widely between collectives.

B.3 Services and activities you want to offer

You tailor the services and activities of the collective to the needs of the SMEs. The focus varies between collectives and will develop, as the energy maturity of your SMEs grows. The offer is summarized in a value proposition.

B.4 Motivating SMEs to participate

You get to know the SMEs and highlight how the services and activities offered answer to the specific challenges and business values of the individual SMEs that you contact. Ask questions and go back and adapt your offer if needed.

B.5 Involving the right stakeholders

You identify and mobilize relevant stakeholders, such as Energy Service Suppliers or public organizations, that may play a role in the local energy collective and develop your network. The network stakeholders may be more or less involved, and in different roles.

B.6 Setting organizational structure

You develop a long-term structure for the organization, ownership, membership and revenue flows of your collective. For less mature energy collectives, free participation for the SMEs might be preferable - as the collective evolves so does organizational structure, into more formal commitments.



Depending on your specific situation, all steps might not be equally relevant for you and your local energy collective – at least not right now. The idea is therefore to focus on the steps that currently seem most relevant to your own collective.

To illustrate potential outcomes of each step, two examples are provided in the table below.

	Example A	Example B
Energy Working Group	Trusted Partner with representatives from active SMEs	Trusted Partner with the municipality's energy advisor
Impact Ambition	Achieving a sustainable business park – zero climate impact	Motivate SMEs to start thinking about energy
Value proposition	Focus on collective energy projects	Focus on offering free energy scans and free energy workshops.
Approach towards motivating SMEs	Kick-start a well-prepared first project to let its success motivate further actions	Focus on the needs of individual SMEs and target multiple benefits of energy efficiency
Network development	Detailed stakeholder analysis and long-term agreements with key Energy Service Suppliers.	Energy experts from Multiplier Organization engaged to lead the workshops.
Organization structure and revenues	A formalized long-term organization where SMEs are partners.	All activities included in Trusted Partners current role and funding



B.1 Forming an Energy Working Group

Short description	You form a core group of persons who can support you in the development of ambition and activities of the collective.
Tools provided	—

Setting up a local SME energy collective could take quite some time and effort. It will therefore be helpful to form a team with enthusiastic stakeholders from your own network. This working group can motivate each other in the process, support you in all activities, and contribute to all the decisions that need to be made. Let's call this team the Energy Working Group. Note that you can re-use the efforts and analysis from this step for the local stakeholder analysis in Section B.5.

The Energy Working Group can be made up of various types of stakeholders. To identify the potential members, you can start by making a list of potential stakeholders active in the local area based on your own experiences, discussions with people from your network and possibly a quick internet search. You can think of enthusiastic SMEs, existing sector or energy associations, non-commercial agencies, municipalities and other governmental agencies, grid operators, financial service providers, etc. After completing the list, you plot these stakeholders in a circle diagram (see example in Figure 1). You put the stakeholders that you know best and collaborate most closely with in the central circle and the ones you know less, further out.

From this overview, you want to invite stakeholders for your Energy Working Group. The most important criteria are that they are enthusiastic and that you think they would be willing to work on developing the collective with you. Ideally, these team members have also complementary skills and knowledge, e.g. a broader network, knowledge of a specific sector or knowledge of SMEs.¹ Approach your selected stakeholders (potential members for the Energy Working Group) personally and invite them to be part of the team. Make sure to focus on the benefits: 'what's in it for them'.

Together with these stakeholders, you can start the process of developing the local SME energy collective.

¹ The other stakeholders in these circles, who you did not select as members of the Energy Working Group, can be people that could be helpful for other or next steps of forming and shaping your collective.



Figure 1. Example of a stakeholder overview².

² Adapted from TNO et al. (2016).



B.2 Setting your ambition

Short description	You set and formulate the ambition and focus of your local energy collective – together with your Energy Working Group – and with the needs and priorities of the SME cluster in mind.
Tools provided	Impact ambition development tool (see Figure 2)

When initiating a local energy collective, a good starting point would be to describe the goals you want to achieve: the impact ambition. Below, you will find two examples.

Example: Impact ambition for a local energy collective focusing on energy auditing and energy management in an industrial district of 200 SMEs

The Impact Ambition, set with a time horizon of 5 years:

- Conduct energy scans with at least 100 SMEs
- At least 50 SMEs purchase a full energy audit, out of which 20 through collective purchases
- At least 30 SMEs implement at least some type of energy efficiency measure, in accordance with a supplier
- At least one collective purchase of some type of service/technology is performed
- At least one SME is certified with ISO 50001

Example: Impact ambition for a Zero Emission industrial park

In the framework of the NEMO project in Germany (see also example in A.1), SMEs of the Industrial Park wanted to show that voluntary environmental initiatives by companies are possible – instead of via government requirements. A systematic initial assessment of the potential was carried out with the objective of reaching 80-95% CO₂ savings by 2050 (in comparison with 1995), which can be seen as the overall impact ambition. This was then broken down into smaller steps, where the first aim was to determine the necessary measures for the next 10-15 years focusing on savings in the joint purchase of fuel oil and photovoltaic panel project and central heating system.

The impact ambition helps you understand what should be included (and not) in your local energy collective and to what extent you should get involved in certain activities. It also helps to create support from others for your goal. Your impact ambition determines how you create impact, in other words, which approach your local energy collective uses to create value for the SMEs. Collectives with a clear impact ambition are more successful, since they are able to select activities that directly contribute to the goal they aim to achieve.³

³ See e.g. Bauwens et al (2020), Han and Shah (2020), Jacobs et al. (2018) and Schut et al. (2020).



An impact ambition is aimed at a positively formulated outcome, it might be ‘the whole business park energy neutral before 2030’ or ‘95% of SMEs in this cluster have performed an Energy Audit by 2025’. Your impact ambition does not directly focus on the challenges experienced by SMEs. These are addressed when designing activities and services needed to achieve the ambition (see Section B.3).

You can formulate the impact ambition by answering seven simple questions (see Figure 2). If you already have or are assembling an Energy Working Group (see Section B.1), setting and formulating the ambition can be a good team exercise. If you already have ideas for additional potential partners for the local energy collective, you could also involve them. Finally, you can also look for other types of support or background information to shape your impact ambition. For example, insights in challenges and drivers of SMEs towards energy efficiency, alignment with national impact ambitions or alignment with existing business driven impact ambitions might be helpful.

If an impact ambition is supported by (potential) partners, this will result in clear guidance on what type of activities and services to focus on. It will also help to evaluate in later stages if the activities conducted by the local energy collective have actually led to the intended impact.

Figure 2 shows the impact ambition development tool, consisting of seven questions. If you want to use (potential) partner input, every partner first answers these questions individually, after which the outcomes are shared and discussed to create consensus. The answers to these seven questions together form your impact ambition.

What?	•Our intended outcome is ...
How?	•We aim to reach our intended outcome by ...
For whom?	•Our target group is ...
Where?	•Our invention area is ...
How many?	•Size of the target group aimed for ...
By Whom?	•The leading organizations are ...
When?	•The time to reach the desired outcome is ...
Why?	•The social change we contribute to is ...

Figure 2. Impact ambition development tool.



Once your impact ambition is well defined, you can use it to follow up on the results of your work. This might require that you break down the overall impact ambition into several, more specific objectives, which should be measurable and time-bounded so that they can be monitored and followed-up. Chapter D gives more guidance on how to define SMART objectives for monitoring.

Example: BE+ (business parks energy positive, the Netherlands)

The Impact Ambition: Making 250 business parks energy positive before 2030, by facilitating and supporting local approach/initiatives with mutual contacts, deployment of specialists and the development of generic instruments.

What? Our intended outcome is... to make 250 business parks of SMEs energy positive.

How? We aim to reach our intended outcome by... facilitating and supporting local approach/initiatives with mutual contacts, deployment of specialists and the development of generic instruments.

For Whom? Our target group is... business parks consisting of SMEs

Where? Our invention area is... the Netherlands

How Many? Size of the target group aimed for... is 250 business parks consisting of SMEs

By Whom? The leading organizations are... BE+ together with local initiatives

When? The time to reach the desired impact is... within 10 years (by 2030)

Why? The social change we contribute to is... to make the Netherlands more sustainable by achieving a total energy saving of 32PJ, which is 33% of the Energy Agreement in one swoop (according to calculations by TNO)



B.3 Services and activities you want to offer: value proposition

Short description	You tailor the services and activities of the collective to the needs of the SMEs. Your offer is summarized in a value proposition.
Tools provided	Value proposition in one sentence tool (see Figure 3)

You have described the impact ambition of your local energy collective: the end goal you want to achieve. In this step, it is time to select and describe the services and activities that you will set up to reach this end goal. You will do this by selecting activities and services that address both SMEs' motivation to participate and alleviate or overcome challenges they face.

In Table 1 in Chapter C, you can find a list of potential services and activities a local energy collective can offer. These activities differ in complexity and impact on SMEs – from setting up networking events and arranging energy audits, to setting up an ESCO (Energy Service Company) that takes over the entire energy management of a group of SMEs. In this step, you select those activities that are:

1. Best matched with the needs and desires of your target SMEs.
2. Suited to your organization and ambition – (with support of partners) you need to be able to organize these activities in a collective setting.

You can also think of this as a **value proposition**⁴: a statement which identifies clear, measurable and demonstrable benefits that SMEs get when joining and participating in the collective. It should convince SMEs of the added benefit of your local energy collective: that they are better off with the services and activities of the collective than doing nothing. So, a good selection and description of your local energy collective offer will help you in attracting SMEs to be part of the collective, and thereby realizing your ambition. You will use this when motivating SMEs to participate in the collective.

Value propositions may change over time. There are multiple ways to come to a selection of services and offers. Maybe you can write your proposition (or propositions) down directly, or you may need more work. In this section, we offer two pieces of support, first about unraveling SME needs and challenges, which you can use as input for the second step, developing your value proposition(s) in a simple one sentence format.

A value proposition is also a marketing instrument. You can offer the same services or activities to different target groups and fulfill different needs. This would result in multiple value propositions.

⁴ See Osterwalder et al. (2014).



B.3.1 Unraveling SMEs needs and challenges

To select and frame the services that your local energy collective should focus on, you want to identify both the needs and challenges the SMEs in this specific cluster encounter (as a group).

Examples of challenges SMEs could encounter are the lack of:

- Awareness of benefits of energy efficiency measures.
- Access to finance to implement measures.
- Knowledge on which energy suppliers to turn to.
- Time and resources to focus attention to energy efficiency measures.
- Organizational capacity to develop collective measures.
- Connection to other SMEs for collective projects.

The level of maturity of SMEs when it comes to implementation of energy projects can differ greatly, both individually and between regions. In some regions, simple measures such as solar panels and LED lighting might still only be implemented by some, while in other regions, these measures are wide-spread and SMEs are considering collective energy storage or charging infrastructures. More examples can be found in Chapter E.

To identify these challenges, you can interview or have informal talks with some of the SMEs regarding their experiences and beliefs on these topics. In these meetings, you should focus on discovering what (i) their level of maturity and interest is regarding energy efficiency measures and (ii) what their biggest challenges are or could become regarding implementing energy efficiency measures (see also



Table 1 in Section B.4.2). In the next step, you determine the services and activities you offer that contribute towards the impact ambition while overcoming the challenges.



B.3.2 Value proposition in one sentence

Here are a few examples of services and activities and how they are presented in relation to the needs of the targeted SMEs.

Example: One of the Dutch Business Parks energy positive (BE+) initiatives

The Boekelermeer⁵ initiative, a part of the Dutch BE+ initiative, organizes itself around multiple value propositions, two of which are included below

“For Boekelermeer SMEs in the Netherlands, who want to invest in solar PV but do not have the time and knowledge for acquisition and supplier selection, we offer collective solar PV purchasing services that result in a good quality product and obtain quantity discounts.”

“For Boekelermeer SMEs, who want to comply with new energy standards, but do not know where to start, we offer qualified and subsidized energy audits and local guidance during the process.”

Example: Local energy collective focusing on energy scans and training

In this fictive example, the assumption is that the Trusted Partner has connected to the local association of energy auditors and the national energy authority to be able to propose the following value proposition.

“For SMEs in the local industrial area, who want to reduce costs and improve their competitiveness, but lack resources and knowledge for individual actions, we offer:

- Free energy scans performed at business park level
- Collective purchases for SMEs that sign up for full-scale energy audits
- Support by a Trusted Partner
- Opportunities to take part in training events”

If you look closely at the examples, you can see that a good value proposition can be summarized in one sentence. For SMEs who want [... *something related to EE* ...] but [... *face a challenge* ...], we offer [... *services and activities* ...]. The value proposition is about combining SME needs with your offer.

You can formulate multiple value propositions for one local SME energy collective. Depending on your ambition, the size of your organization and your mission, it can be that you want to target multiple groups of SMEs with different services and activities (see e.g. the Boekelermeer initiative example, above). As a guideline: ideally you describe the value proposition per different offer and if relevant per different target group.

⁵ Boekelermeer is a municipality in the Province of North Holland.

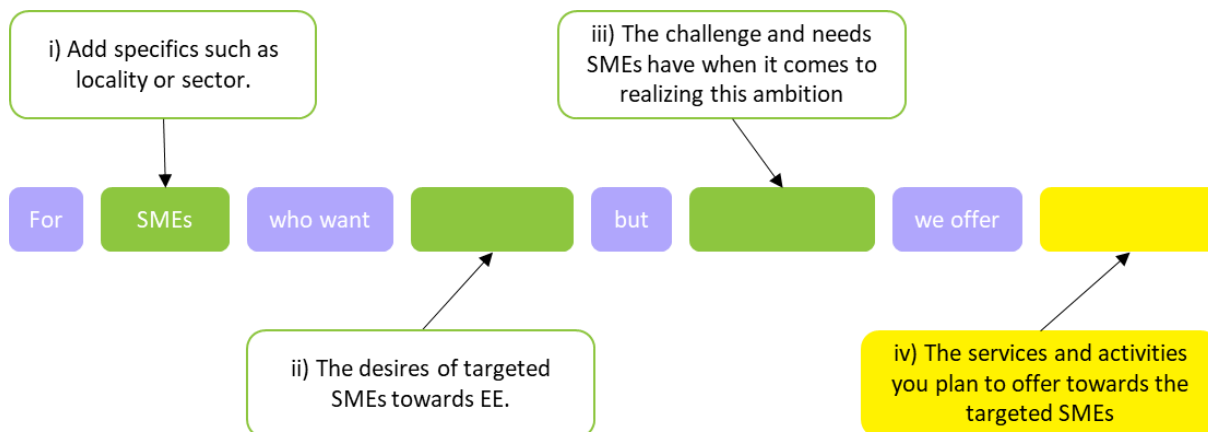


Figure 3. A value proposition in one sentence.

In Figure 3, you can find the structure of the value proposition. You can use this in the following way:

- i) Describe the target group of SMEs you have identified earlier on, e.g. a business park, a SME sector, a region of SMEs.
- ii) Describe the main desires/wishes/ambitions of this target group with respect to energy efficiency. These needs might, in the eyes of the SMEs, be something other than energy efficiency and linked to different potential benefits (see Table 1 in Introduction). The table below shows a few examples of SME needs related to energy but framed into core business benefits. Depending on the SME, you can use the left-hand-side (energy efficiency on management agenda) of the table in your offering, or the right-hand-side (little energy efficiency awareness).

SME needs related to Energy	Core Business Benefits
Comply with environmental standards	Reduce Risk
Improve sustainable image	Be an attractive employer for young talent
Make use of lots of waste heat in process	Value Proposition (sell waste heat)
Energy management should be on the management agenda	Reduce Risk – Reduce Costs

Double check whether the desire you have described really is a desire from SMEs. Maybe you are very familiar with the needs of SMEs in your environment, but it can also be quite challenging to find out their actual needs (see also



Table 1 in Section B.4.2).

- iii) Describe the challenges of your target SMEs in realizing their ‘want’ (ii). Typical challenges are: ‘not enough time’, ‘not enough know-how’, ‘administrative burden of subsidy applications’, ‘only works or makes sense if others join’ (see also Section B.3.1 and Chapter E). Select those challenges that you think you can alleviate. For example: you cannot create an easier subsidy application processes, but you might be able to apply for a subsidy on behalf of a group of SMEs.

- iv) Based on (ii) and (iii) you can select the services and activities your local energy collective will offer (see the table in Chapter C). For each of the services and activities you come up with, keep asking yourself in this step whether they truly help realizing an ambition in ii) or help taking away one of the challenges in iii). Taking the perspective from the SME’s needs and challenges is key here. Add a reason why this offer through a local energy collective is better suited to the SME needs than the alternatives (doing nothing, or addressing the challenge individually). The table below gives some *examples* of what types of services and activities can be connected to what needs or desires.

SME Need	Challenge	Local SME collective offer
Comply with environmental standards	No time & no know-how	Energy Audits
Reduce environmental compliance risks	Unfamiliar with Energy Efficiency Directive and energy efficiency standards	Seminars on experiences and factual information w.r.t energy efficiency measures and standards
Improve sustainable image	No marketing capabilities	Be part of sustainable & entrepreneurial community (including its marketing)
Improve sustainable image	No marketing budget	Group purchasing of externally visible PV panels
New waste heat value proposition	Dependent on others in cluster	Initiating a local heat network project in local industrial area

When developing a value proposition, use your creativity and business sense of what might work in the local context you are familiar with. Possibly some iterations and feedback rounds within your group are required before you come up with a value proposition that feels right.





B.4 Motivating SMEs to participate

Short description	You get to know the SMEs and highlight how the services and activities offered answer to the specific challenges and business values of the individual SMEs that you contact. The multiple benefits of energy efficiency are crucial selling points.
Tools provided	Checklist for energy maturity (Appendix B.1) Guidelines for collecting SME energy profile (Appendix B.2) Guidelines for collecting information about energy and environmental consciousness in SMEs (Appendix B.3)

The activities and services mentioned above aim at benefitting the SMEs, but it is not self-evident that the SMEs are interested in receiving those services. As a Trusted Partner you, therefore, need to find out what would motivate the *individual* SME to participate. How much effort this takes depends on the relation you already have with the companies and if the companies already have an interest in energy and environment. In any case, **be aware that it often takes more time than you expect**. Earlier initiatives have shown this to be the most challenging part of all.

One advice is to start out with the companies that show an interest in the energy collective. Maybe there are SMEs involved in your Energy Working Group, or maybe you have received input from SMEs when you developed your impact ambition and offered services and activities. Alternatively, you could start with SMEs that are large energy users. Once you have a small group gathered, the motivation of additional companies will be easier. Good examples of how other SMEs have acted can have greater influence on environmentally friendly behavior than pure information.⁶

As a Trusted Partner, you may already have active contacts with a cluster of SMEs in relation to other issues, i.e. the SMEs are already part of a collective. This is, of course, an advantage, since then you do not have to initiate the energy collective from scratch but instead introduce an energy focus in an existing collective. If you are setting up the collective from scratch, engaging the SMEs is likely to require more effort.

⁶ See e.g. Abrahamse and Matthies (2018).



Example: Motivating SMEs by building on experiences and relationships from successful examples of other local energy projects

In one business park, the Trusted Partner was a park manager, who already had a strong relation to the companies. Here, the collaboration around energy aspects was initiated through an initiative by a smaller group of companies to collectively invest in solar panels. This concrete action was used as a starting point for continued and further work with energy efficiency and the recruitment of other SMEs in the park.

Examples: Introducing energy aspects in existing SME collectives

In the Roveri industrial district, companies are affiliated to one of the industry associations operating in Italy. The Trusted Partner is a member of one of these industry associations, and already acts as an advisor for all her affiliated companies for matters concerning safety and the environment. Once the “Roveri energy collective” project is started, and the Trusted Partner has started drafting the value proposition, she starts mentioning the project to individual SMEs during routine calls. The Trusted Partner introduces the value proposition and gathers feedback about how it could be improved and tailored to the needs of the SMEs in the collective.

In another example, the local energy advisor planned to initiate a local energy collective addressing all the SMEs within the municipality. At the municipal level, there was also a local SME association, which had regular meetings. The local energy advisor, who acts as a Trusted Partner in this example, asked to present his idea at this meeting and brought along one SME he knew worked actively with energy efficiency and that had achieved great improvements. To the meeting he brought a simple one-pager of his idea and all participants could sign up if they were interested to receive more information. After that, he contacted each SME that had signed up individually. Since he had already established an initial interest, he could then add a short questionnaire to ask about their main interests and adapt the focus of the energy collective to these.

Figure 4 shows the main areas of importance for the process of engaging SMEs to participate in the activities of the local energy collective. They are explained in more detail in the following sections. You can, of course, use “collective” approaches (such as newsletters, group emails and invitations to information meetings) to inform the SMEs on the energy activities planned. However, to **motivate them to actively participate, one-on-one contacts will be needed**. Below, the main focus is on these contacts.

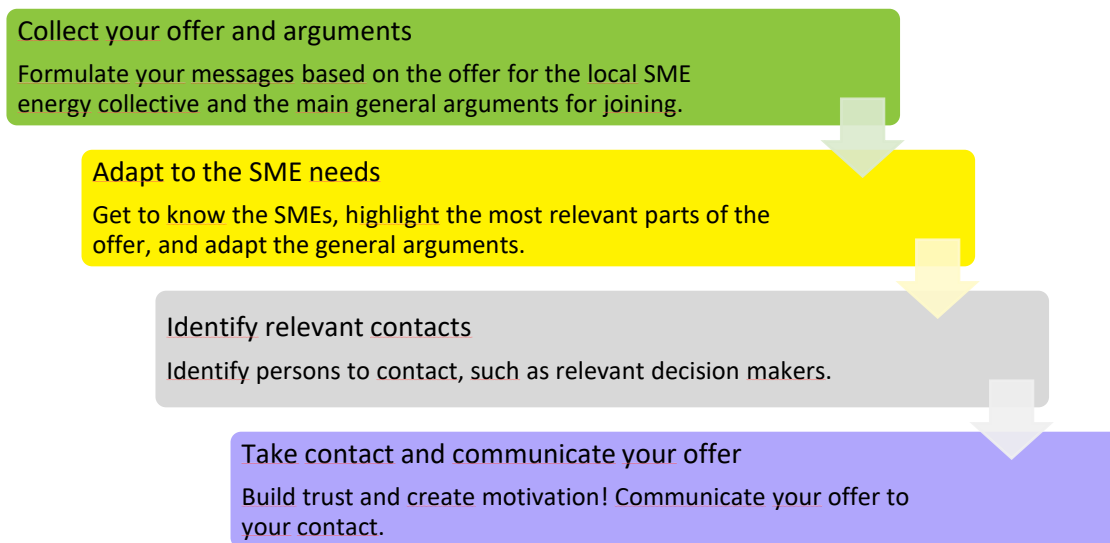


Figure 4. Main steps of the process of involving SMEs in the local energy collective.

Note that this is an iterative process – communication will be enhanced by each contact you are taking. A successful motivational strategy may be to, early on – before the collective is fully formed – offer an activity to the SMEs that you are contacting, such as a seminar on energy management or regulatory aspects or preparations for energy scans. For inspiration for this type of activities, see Chapter C.

The table below lists a summary of approaches that can be used to motivate the SMEs to get involved in the local energy collective.

A local energy collective with a value proposition focused on coordinating energy efficiency improvements in the individual companies	A local energy collective with a value proposition focused on collective energy projects
<p>Show examples of similar companies, which successfully implemented energy efficiency measures.</p> <p>Highlight the multiple benefits of energy efficiency. Provide examples – tailored to the needs of the individual SME.</p> <p>Offer the first activities without requiring formal commitments from the SMEs.</p>	<p>Build on experiences and relationships from other collaborative projects in the business park.</p> <p>Show examples of successful collective energy projects from other business parks.</p> <p>Ask about results from previous work with energy efficiency in the company and what the plans for their next step are. Find connections to the ambition for the collective project.</p> <p>Highlight the benefits of a collective approach to reduce time, resources and risks for the individual SME.</p>



B.4.1 Offer and general arguments

Before you start contacting the SMEs, you should have developed your value proposition, so that you can describe the services and activities you offer and why (see also Section 0). Additionally, it is useful to define general arguments for the SMEs to take part in the activities, to be communicated at the same time. Examples of such arguments can be found above in the tables in Introduction and are linked to:

- the potential multiple benefits for the SMEs from saving energy, including reduced energy costs and contribution to climate mitigation,
- the additional benefits from doing this with a collective approach, including for example that the SMEs can support and learn from each other, and may benefit from collective energy projects.

Try to present concrete, good examples from other ongoing or earlier local energy collectives (see examples included in this Handbook). If you have access to examples with a local connection, this is even better.

Example: Recruiting SMEs to Energy Efficiency Networks in Sweden

For the Energy Efficiency Networks (EENet) in Sweden, a short brochure describing the concrete offer was available to the Trusted Partner from start. The coordinators (Trusted Partners) then recruited companies by direct contacts via telephone, email and – in many cases – visits to the specific companies. The contacts focused on asking questions to the companies about their interests, challenges and ambitions. The coordinators had also prepared material, beyond the brochure, on all the strong points and multiple benefits associated with the planned network and could refer to this directly in the dialogue with the companies. For these networks, recruitment might have been an especially challenging step, since in most cases the link between the coordinator and the SMEs beforehand was not very strong.

B.4.2 Company information

To motivate SMEs for energy efficiency work, you need to identify why joining certain activities of the local energy collective would be especially relevant to the individual SME. To do that, you need to know each company well enough. Start with what you already know about the company, collect information that is openly available at the company's website, and ask questions in your contacts with the company. The type of information that you are interested in is summarized in



Table 1. However, your knowledge will of course develop gradually, when you work with the collective and the SMEs longer-term.



Table 1. Type of information that is relevant for you to know about the individual company.

Facts and figures	Description	Further guidance
The business segment of the SME	What products/services are they offering, and what does the overall economic situation look like for this segment.	Appendix B.2 can be used as support for collecting information.
Company size	Provides a background relevant to understanding their capacity to address aspects related energy efficiency improvements.	
Total energy use / energy intensity	A rough estimate, including main type of energy source and use of renewables. SMEs having high energy intensity may be easier to motivate. For SMEs with lower energy intensity the “multiple benefit” concept may be especially relevant and attractive.	
What energy is mainly used for	For instance, is energy used in production processes, for buildings (e.g. ventilation and lighting), and/or for transport.	
Energy maturity	Description	Further guidance
Overall maturity in terms of energy management practices	To what extent do they already have experience of energy efficiency actions, defined responsibilities and planning processes in relation to energy use.	Appendices B.1 and B.2.
Existing ‘energy culture’ among the staff		Appendix B.3 ⁷ .
Values and drivers	Description	Further guidance
Dominating values and drivers	Examples can be security for employees, profit maximizing, environmental consciousness, or to be a force of innovation.	Appendix B.3 ⁷ .
The core business and which KPI:s that are monitored	Contributes to identification of the SMEs specific benefits of energy saving, e.g. positive effect on productivity, working environment, customer satisfaction or company image.	See also Table 1 in Introduction.

⁷ Note that Appendix B.3 mainly addresses the aspects of ‘energy culture’ that relate to environmental consciousness.



If it is difficult to find information about the individual company's energy use, it may also be possible to find relevant information in public sources, such as the online 'Energy Efficient SME' portal. You can also search the internet for information about energy efficiency for the specific sector or activity of interest, whether it is offices, textile manufacturing, or restaurants. This may also provide you with good examples of successful energy efficiency projects that can serve as motivation and inspiration.

Based on your knowledge about the company, **highlight the parts of your offer that are most relevant for this company**. Also, use the company information to adapt the general arguments from the previous section (B.4.1).

The purpose is to make your information about the energy collective as relevant as possible for the specific company. Tailored information usually encourages behaviour change more effectively than general information.⁸ For example, if you know that a company mainly uses energy in the form of transportation fuels for their vehicles, you can focus your questions and information on energy efficiency in transportation and logistics, while an office company is likely to be more interested to hear what can be done about heating, ventilation and appliances in their premises.

This task might seem daunting, considering that there may be hundreds of SMEs in the local cluster that you are addressing. Then remember to **start with a few companies, and with some information, and develop the group and your knowledge gradually**. For instance, you might want to save issues relating to values/drivers and core business for later (but do not forget it since it can help you both to discover what is important for the specific company).

B.4.3 Persons to contact

You also need to figure out who to call at the company. Who is making decisions, and especially decisions that relate to participating in a local energy collective? Maybe there are several people, and maybe at different organizational levels. It is usually a good idea to start by contacting people you already know at the company. Otherwise, try with the best option you find at the company's website. Ask questions during the call (see Section B.4.4) that help you get the whole picture.

To create a broad engagement for energy aspects at the company, you might also need to contact persons who especially would benefit from an energy collective, that is, persons that need the support of such a collective (for example the energy or production manager). Another aspect is who can contribute with relevant company information (see the lists above).

⁸ See e.g. Abrahamse and Matthies (2018).



B.4.4 Contacting the SMEs

In the direct contacts with the company your primary aim is to **communicate the offer and arguments for participating**, especially the aspects you think are most relevant to the specific SME (see Section B.4.2). Almost as important is to **ask questions** to find out more about the specific SME and what would motivate it to take part in planned services and activities. This means that you continue in all contacts to tailor your information to what is most relevant for the specific SME. Also, try to find out if there are more persons you should contact for specific questions (for example energy related) or regarding the decision process. Strive to end all contacts with an agreement regarding the steps to follow. What you are able to agree upon may vary, but at least you need to decide on how to continue your dialogue.

In your contacts, adapt your information as much as possible to the one you are talking to – based on the person’s role and expertise as well as on the answers and reactions you receive on your questions and information. For example, if a person is driven by environmental concern, failure to recognize this may result in that the motivation for participating in an energy collective will risk to fade out due to one-sided attention to, for example, cost savings, or vice versa.

The first activities offered are not likely to require any formal commitment from the SMEs. You might want to ask them to sign up for a newsletter or accept to come to a first meeting. But at an appropriate, later stage in the process, it might also be relevant to formulate and make commitments between you and the SME (see Section 0). Formal commitments can give a stronger base for collaboration.

As noted above, there may be other types of information channels that you can use, for example, to reach several companies at the same time. However, personal contact is important for building trust as well as for creating and capturing motivation. Keep in mind that to build trust, you not only need to get to know the SMEs, but they also need to get to know you. Two-way communication via calls or meetings gives the possibility for them to ask you questions and to develop their trust and confidence in the initiative.



B.5 Involving the right stakeholders

Short description	You identify and mobilize relevant stakeholders that may play a role in the local energy collective and develop your network.
Tools provided	Value Creation Canvas (see Figure 5) Stakeholder analysis table (see Figure 6)

Apart from you and your Energy Working Group, additional stakeholders (such as Energy Service Suppliers, linked SME associations, entrepreneurs and the municipality) can play a role in the activities of a local energy collective and in the realization of collective energy projects. This step revolves around engaging those organizations, mobilizing them and formalizing the collaboration.

When designing the value proposition of the local energy collective, you have decided on an initial selection of the type of activities and services you are going to organize for (and with) the collective. To effectively carry out these activities, you need a team with suitable resources. It is therefore important to understand which resources are required, which role the partners in the Energy Working Group have, and which additional partners are needed as complements. Four activities have been designed to help get insight into these questions and into the potential partners for the local SME energy collective. These are described in sections B.5.1 – B.5.4 below.

B.5.1 Identifying the needs and resources

First, you want to have a clear view on what resources are required to fulfill the impact ambition and value proposition of the local SME energy collective. These can be resources or capabilities that you, as a Trusted Partner, have yourself, but also things that you might seek to provide indirectly by building external partnerships. Most of the resources needed are intangible resources (knowledge and capacity). Experiences of other local SME energy collectives show that fully mature collectives operate best if they have access to the resources listed below (see Section B.5.2):

- Collaborative capabilities to build a strong network, find partners for the network and exchange information within the network
- Innovative and technical knowledge to implement the energy projects, this includes knowledge on energy efficiency and novel energy measures
- Strategic capabilities to keep track of the (potentially changing) needs and individual ambitions of the SMEs and multiple benefits on energy projects
- Leadership capabilities to be inspiring and to create a long-term vision for the SMEs
- Mediating capabilities to be a trustworthy intermediary between the SMEs and the Energy Service Suppliers



- Financial resources and capabilities for financing the local energy collective (Section 0 explains various ways to structure the revenues)
- Organizing capabilities for the networking events and creating promotional materials
- Support from local governmental agencies

For realization of your specific impact ambition and related services and activities, it might be necessary to add some extra, specific resources to the list.

The idea is to then identify or recognize which resources are readily available to you, and what activities you would easily be able to perform. Next, you can identify which resources are still lacking and should be provided by partnerships with external organizations and/or individuals.

One way to get a clear overview of your internal resources, and required external resources is to use the Value Creation Canvas (Figure 5). In the middle, you write down the value proposition of the local SME energy collective. On the top, you fill out what you can offer: your own activities and resources. And at the bottom, you write what you need from other stakeholders. The canvas, then, simultaneously captures the activities and the connected resources that you have or that your partners should have.



Figure 5. Template of the Value Creation Canvas⁹.

⁹ Adapted from Groote Schaarsberg et al. (2015)



B.5.2 Scanning your network

As described above, some of the resources and activities you need to find externally. For this, you need to find enthusiastic partners to take up a (supporting) role in the local SME energy collective. By analyzing the stakeholders in your network, you get insights into their resources and interests, which enables you to identify potential partners.

Example: Partners in the NEMo project of the Network Motzener Straße

In the NEMo project (a zero emissions initiative in the German network Motzener Straße), cooperation was established with an engineering office, that supported participating companies with measurements as part of the actions identified for the initiative's climate protection plan. The network also participates in EU-projects with different actors, particularly with universities (for example on circular economy).

First, you want to assemble a long list of stakeholders (e.g. Multiplier Organizations, municipality, progressive SMEs and sector organizations) within your network. If you have formed an Energy Working Group, then you can use that stakeholder overview as a basis. You can also extend the overview by adding stakeholders from the network of the Energy Working Group. Important stakeholders to include are Energy Service Suppliers that can support the SMEs with energy efficiency measures. Energy Service Suppliers include, for instance, energy auditors, energy advisors, energy service companies (ESCOs), technical experts, and equipment suppliers.

Once you have this long list of stakeholders, you can analyze the stakeholders and their current roles. By understanding their interests, resources, and influence, you can identify which parties are most important to involve. Based on your own experiences, discussions with the Energy Working Group, and possibly a scan of the stakeholder's website, you can fill out the table below for each stakeholder¹⁰.

When analyzing which Energy Service Suppliers to involve, it is important to match them with the needs of the SMEs in this specific local SME energy collective and to the actual services to be offered (see examples below).

¹⁰ Source: TNO et al. (2016)



Stakeholder	Name	Interest	Influence	Resources / possible role
Sustainability department municipality	Jane Do	Very high	High	Network of SMEs and local service suppliers, access to finance
Chair of entrepreneurial organization	Access to SMEs, initiating the idea to the SMEs
...				Specialist in renewable energy
				Access to data on energy consumption

Figure 6. Example of way to structure information in a stakeholder analysis table that needs to be completed for each specific case (i.e. table incomplete on purpose) ¹⁰.

B.5.3 Reaching out to supporting stakeholders

Based on this analysis, you can identify the most important stakeholders to involve to fulfill your ambition and which combination of stakeholders suits best, e.g. stakeholders that already have a good relationship, or stakeholders with aligning visions. Stakeholders with high influence and high resources can enable the local SME energy collective, and stakeholders with high interest provide a driving, enthusiastic force.

You might also want to think about the timing: who do you need now, and who can be involved later for specific activities. For example, an important element of the local SME energy collective is to bring SMEs and Energy Service Suppliers together. Some of the suppliers can be (more or less) continuously involved as their services are included in the offer of the energy collective. Others can be more temporarily involved, depending on the activities over time.

The next step is then to reach out to the key stakeholders and start shaping the collaboration. Together with the Energy Working Group, you can engage them by discussing their mutual interest of establishing a local SME energy collective. By focusing on “what’s in it for them”, you can make potential partners enthusiastic in joining and taking up responsibility. The table below shows some examples of relevant motivation aspects for Energy Service Suppliers.



Motivational aspects for Energy Service Suppliers

Raising awareness and contributing to energy savings

Benefits of scale due to the collective approach (many small customers included at the same time)

SMEs have expressed need for its services, involvement will give positive PR

Increased network with other entrepreneurs

Good examples of supplier involvement in similar ongoing/earlier initiatives (see example below, or even better, from your own local experience)

It is advised to start approaching the potential partners that are already enthusiastic and have high influence on others. Connecting these stakeholders to your local SME energy collective could increase the interest of others. In your contacts, you can try to identify additional benefits for the stakeholders to engage in the collective and understand what would motivate them to be involved.

After discussing the local SME energy collective, its ambition and value proposition, you should discuss their commitment. Once you have all the required stakeholders on board, you will need to discuss these roles and responsibilities together. Roles to think of are:

- You, as Trusted Partner: chair of the local SME energy collective, enthusing SMEs, awareness for the local SME energy collective in your network;
- Municipality and/or regional governmental agency: co-financing, information about measures, taking energy-saving measures in the public space, subsidy contributions, information about tax deductions, assistance with communication; and
- Development company: offering financing from funds, integration of renewable energy in restructuring projects.



Example: BEST Energy Check-up Enschede Harbour Area

In the Enschede Harbour Area (Netherlands), a local energy initiative has been developed by the Belangenvereniging Ondernemers Havengebied (BOH, local entrepreneurial association) and the BEST initiative (Climate-KIC project consortium). The goal of the initiative is to activate SMEs to invest in energy efficiency measures. The local initiator of the project is the BOH that plays the role of Trusted Partner in this initiative. The BOH provided the organizational resources for, e.g. a secretary through which SMEs on the business park could be contacted. To stimulate SMEs to participate in the collective initiative, the support of the municipality was used. Due to their strong, trustworthy relationship with the SMEs, the municipality was able to actively address them.

The local entrepreneurial association had already organizing and interaction skills, but only limited knowledge on energy efficiency. Therefore, the resources of the BEST initiative were used to fill this gap. Skills on energy measures and financing was supplied by the BEST initiative, as well as the capacity needed to execute the energy project. For continuation of the local energy collective after the BEST initiative, funding from the province has been obtained, which provides BOH with resources to run the local energy collective over multiple years.

Example: Involving Energy service suppliers in Energy Efficiency Networks in Sweden

In the Swedish Energy Efficiency Network programme (EENet), each network was connected to a dedicated energy expert. The energy expert visited each company in the network to help to make an energy audit and provided continuous guidance in the work with energy efficiency, for example setting energy-related goals and strategies and develop action plans for implementation of measures. The network programme was partly financed by public funding, which supported this service and allowed for hiring energy experts so that this service could be included in the offer to the SMEs. For the energy experts, the involvement in the energy efficiency networks was a large, long-term commission, involving great opportunities to reach many new potential customers with a similar type of projects.



B.5.4 Formalizing the collaboration

To formalize the collaboration and ensure commitment from all stakeholders, there are multiple options. The local SME energy collective can have a less formal (or legal) status. It can also be part of an existing organization, like an entrepreneurial organization, a sector association, or perhaps even a local energy advisor. It is important to consider the most appropriate form to suit the activities of the initiative.

Creating a legal structure requires a significant investment in time and money. It is, therefore, only advised to establish this legal entity when you already have a solid group of motivated partners and, for example, have already experience with these partners in energy projects. Being a legal entity does have its advantages, as you would be able to sign contracts for assignments, subsidies, and projects directly, instead of having separate contracts for all individual members.

Several legal forms may be applicable for a local SME energy collective. The ultimately chosen legal form will play a central role in the implementation of the activities, managing costs, and revenues, and is the point of contact for the SMEs and possibly for (external) financiers. In Appendix B.4, information on these various legal forms is enclosed:

- Association
- Cooperative
- Foundation
- Private company.

It is important that there is a good match with the (future) activities and the various participating parties. And remember, a choice for one legal form is not binding. Over time, you can decide to change the legal form, if the activities change. It is also possible to combine legal forms. For example, a foundation that is the full shareholder of the private company of which the participating SMEs receive certificates. It is important to involve the participating SMEs in the initiative and in the ultimate choice of legal form. It is recommended to seek advice from your lawyer in this process.

You can also choose not to form a legal entity. The local SME energy collective only needs to be a legal entity when it will sign contracts for assignments, subsidies, and projects itself. If this is not the case, signing a *collaboration agreement* is a less formal way of ensuring the commitment of all partners. In this agreement, you write down the intentions you have with the local SME energy collective. This includes the impact ambition, how you are going to achieve this ambition (value proposition, services and activities), the roles and responsibilities of each stakeholder, a timeline and the cash and in-kind contributions of each stakeholder. All partners have to sign this document.



Example: Funding of the NEMo project

In the Motzener Straße industry park (Germany), the SMEs themselves have founded an association (also mentioned under A.1). This association initiated a climate protection concept (the NEMo project, see also B.1, page 23), which was developed with the association’s own funds and with the help of various funding supports (local and national). The creation of the association allowed member SMEs to have a structure that coordinates actions and activities and can access, in addition to its own funds, grants on a local or national scale.

B.6 Revenue structure

Short description	You develop a long-term structure for the organization, ownership, membership and revenue flows of your collective.
Tools provided	—

In this section, we will look a bit deeper into how you expect to fund or finance your activities within the local energy collective. Probably you will combine different revenue streams, e.g. from regional or national funds, subsidies, and direct payments from SMEs.

Considering your revenue structure can help you for multiple reasons. Firstly, funding may be required to make it possible for you to spend time and effort in the initiative. Secondly, potential revenue streams (e.g. subsidies or funds) can be used for kick-starting new projects with local SMEs. Thirdly, some forms of revenues (membership fees) can create more commitment of SMEs towards the local SME energy collective and future willingness to pay for energy efficiency measures. If a local SME energy collective has overcome its first kick-off and initiating hurdles, you want to grow (both in maturity and in success of implementing measures). We know from past experiences that a good way to make a collective grow and be successful is to have SMEs actively contributing both financially and in-kind to a collective (see Section B.6.1).

If you have decided to opt for creating a legal entity (see Section 0), part of your revenue streams are already set. Still, these revenue structures should fit your value proposition and the (near future) level of engagement of your SMEs. In Section B6, we combine potential revenue streams and zoom in on how to determine the size of the revenue streams (i.e. fees or service payments). We would also like to note here that you will need to operationalize your chosen revenue structure and make sure proper reporting to authorities is in place, e.g. you would have to collect member fees, report to governmental agencies that proved you with funding, make an annual financial statement, etc. And you need to organize the legal boundary conditions, such as keeping relevant registrations up-to-date and organizing general meetings for your members.



B.6.1 Revenues from SMEs

First, you want to determine how to organize the SMEs in your collective. A common method is to work with a membership structure in which SMEs can become a member. Each member then pays a membership fee and services and activities are only offered to the members. A membership fee can be a fixed price per year, per month, or depend on the size of the SME. You can also think of a membership fee structure that decreases when SMEs implement more measures to motivate them even further. In some collectives, participation is free for the SMEs.

There are plenty of variations possible to this standard ‘membership’ model. In the table below, you can find an overview of options and their advantages and disadvantages.

If your ambition level is high and you involve already strongly motivated SMEs that are rather familiar with the topic of Energy Efficiency, we recommend developing towards a membership structure, in which SMEs become a member and pay a monthly or annual fee for this membership. But if SMEs are not yet clearly motivated towards this topic, starting with a competitively priced service or activity might fit better.



Revenue source	Description	Advantage	Disadvantage	Legal entity
Membership fee	SMEs become a member of the collective and pay a membership fee	Keep SMEs engaged and motivated, creating a sense of 'us' as members	Can be a barrier to participate if fee is too high or added value is not clear	Direct result from being an <i>association</i> or <i>cooperative</i>
Payment per activity or service	Each SME that participates in an activity or service of the collective pays a small fee	SMEs only pay for what they actually use in a direct way	You need to convince SMEs to join for every new activity or service	Works for any legal entity Also if the payment is direct to Energy Service Suppliers, a legal entity for the collective is not necessary
Percentage of EE saving	If SMEs apply EE measures through your network or advice, they pay a percentage of their monthly savings	'no-cure no-pay', they only spend money they saved	You want SMEs to really feel how much more can be gained from applying EE, this omits insights in the non-energy benefits	Works for many legal entities Also if the payment is direct to Energy Service Suppliers, a legal entity for the collective is not necessary
Completely free	The services and activities you offer are free and you are funded by government subsidies or other type of funding	SMEs do not need to pay anything, to them activities, advice and other services are free	When SMEs pay for things they might be more motivated to make it a success (if it is for free it can be easily taken for granted)	Not necessary
A mixture of the options above. For example, members pay a small membership fee, and in return they get a discount on the services offered that can also be used by non-members.				



B.6.2 Revenue structure

In the previous section, we talked about revenues collected from SMEs. But determining the exact combination and the size of e.g. a membership fee is dependent on two other important items:

- The other potential revenues, such as subsidies and grants.
- The cost structure of your organization (marketing costs, labor costs, utility costs).

To get an overview you can set up a balance sheet, including an indication of all the costs that you have as a collective and a list of all expected revenues through funds, fees and so on. In the following table, a list of potential costs and revenues is included. From a balance sheet tool, you can determine the size of the revenue streams that you can influence, and also to roughly assess if your collective is financially sustainable. Note that once your collective grows, a simple balance sheet tool is not sufficient anymore. Then you might want to hire professional support (e.g. an accountant and a business analyst) for running your business.

Relevant questions include: how high does a potential membership fee need to be to cover your costs? Would this be low enough that SMEs would want to participate? If I can find other types of revenues (such as additional payment for certain services or activities), then what would happen? Are there available subsidies from my local or national government or entrepreneurial funds in my surroundings? Can I arrange for in-kind contributions from local stakeholders or partners for specific services or activities?

Potential costs	Potential revenues
Communication and marketing costs	Membership fee
Building rental or mortgage	Payment for activities
Utility costs (energy, water, internet)	Subsidy from European, national or regional governments
Material supplies	Subsidy or grants from local or national entrepreneurial organizations
Labour costs	In kind contributions
Tax and insurance	Energy savings rewards
Activity or service specific costs	



Example: The energy collective of companies in Utrecht (ECUB)

ECUB (in Dutch: EnergieCollectief Utrechtse Bedrijven) is a non-profit energy collective in Utrecht, the Netherlands. ECUB regards their role to be a connector between various parties, such as companies, governments, business organizations, installers, and knowledge institutions. ECUB builds a network of SMEs, provides financial support, information, and serves as a link with Energy Service Suppliers and governments.

ECUB has a strict membership policy and only admits SMEs as member if (i) they are also member of a partnering business association, and (ii) they agree to an energy audit. Based on this audit, ECUB and the SME together decide what the energy efficiency priorities of the SME should be for the coming years. Each SME is assigned a certification of maturity when it comes to energy efficiency, which is reevaluated each year. The results are published through newsletters, the ECUB website, and partner websites, unless the SME objects to this.

Obtaining a level of certification will contribute to a positive sustainability image for ECUB members. But apart from that, it also aims to ensure that certified companies are less likely to be visited by municipal enforcers. This is an important and unique benefit, since enforcement agencies do have the right to inspect randomly. In practice, however, they appear to be more lenient towards ECUB members.

The main revenue streams of ECUB are via membership fees and additional funding from the 'Utrecht Entrepreneurs fund'. ECUB is also supported by the Municipality of Utrecht, the Utrecht Economic Board, The Utrecht Energy Fund, and The STIP (Innovation and Promotion Foundation De Wetering-Haarrijn).

ECUB did not start out with this membership fee strategy straight away. In the beginning, they experimented with a percentage fee, i.e. a percentage of the member's financial savings as a result of energy saving projects facilitated by ECUB was paid to ECUB to cover its costs. However, this proved to be a barrier for SMEs to use ECUB's services.



APPENDIX B.1: Checklist for energy maturity

This tool is meant to function as a starting point for a small company’s journey to a more structured and systematic way of working with energy efficiency. It can be used as a self-assessment tool, or as a support tool for Trusted Partners who want to understand the level of maturity for the SMEs in the local energy collective.

Level 1

Question	Comment	Check
Do you know the size of the company’s energy use?	For all different energy carriers such as electricity, oil, district heating, etc (in kWh or m ³). Check energy bills.	
Are you doing anything to save energy?	For example, routines aimed to reduce energy use, e.g. care and maintenance of machinery, and switching off lights.	
Is responsibility for energy issues distributed within company?	For example, that someone handles energy bills and follow up the energy use	
Are you aware of what energy-related regulations and requirements that affect your organization?	What applies in your specific country	

Level 2

Question	Comment	Check
Do you have access to statistics and data of the company’s energy use?	Check energy bills and/or customer pages at your energy supplier’s website. Compare one year to another, or season to season. Customer pages may also show hourly values. This can be used to identify idling load.	
Do you know what in your operations uses most energy?	Audit or scan your energy use and identify the major energy users	
Is management involved in the work with energy?	Management should make sure that energy-related issues are handled and provide enough resources for the work.	
Have you selected a person for the overall responsibility for energy issues?	Someone has an overview of all parts, e.g. energy bills and production	
Do you have energy goals/targets?	Possibly together with environmental targets, SMART objectives.	



Level 3

Question	Comment	Check
Do you have an energy policy or an environmental policy describing energy issues?	Describes the direction of the work with energy. Connect policy to energy targets and objectives.	
Have you developed an action plan for energy efficiency?	Write down what has been done, what should be done, and plans to achieve this.	
Do you consider energy / energy efficiency when making investments?	Energy performance, compare life cycle costs for investments.	
Are you using energy related KPIs?	Could this be a possibility for your business? Energy use per product, per euro or something else.	

Level 4

Question	Comment	Check
Do you follow up your action plan and the result from implemented energy efficiency measures?	Update the action plan, its measures and calculate costs and savings.	
Is there a possibility for employees to contribute with ideas to the work of reducing the company's energy use?	E.g., in coffee breaks, workplace meetings.	
Are energy related routines updated regularly?	Internal revision, e.g., once a year.	



APPENDIX B.2: Guidelines for describing the SME energy profile

In order to collect relevant information about the energy profile of an individual SME, the following questions can be used to guide and support communication between the Trusted Partner and the SME (e.g. to be discussed during calls or company visits).¹¹

COMPANY IDENTIFIER

Country: _____

1. What is your organization's NACE Code? _____
2. How many employees does your company have?

<input type="checkbox"/> Less than 9; <input type="checkbox"/> Between 10 and 49;	<input type="checkbox"/> Between 50 and 249; <input type="checkbox"/> Over 250.
--	--
3. Annual turnover:

<input type="checkbox"/> Less than 2 million euro; <input type="checkbox"/> Between 2 million euro and 10 million euro;	<input type="checkbox"/> Between 10 million euro and 50 million euro; <input type="checkbox"/> Over 50 million euro.
--	---
4. Usable area of the building(s):

<input type="checkbox"/> Less than ... m ² ; <input type="checkbox"/> Between ... m ² and ... m ² ;	<input type="checkbox"/> Between ... m ² and ... m ² ; <input type="checkbox"/> Over ... m ² .
---	--

ENERGY PROFILE OF THE COMPANY

5. What is your company's annual global energy consumption? (100TOE = 1.16 GWh)

<input type="checkbox"/> Less than 1 GWh; <input type="checkbox"/> Between 1 and 5 GWh;	<input type="checkbox"/> Between 5 and 10 GWh; <input type="checkbox"/> Over 10 GWh
--	--
6. What is the share of energy costs in the company's turnover?

<input type="checkbox"/> Low (<2%); <input type="checkbox"/> Moderate (2-10%); <input type="checkbox"/> High (> 10%).

¹¹ Guidelines developed by Servelect and Technical University of Cluj-Napoca.



7. What is the structure of energy consumption (% in total consumption)?

TYPE OF ENERGY	0%-30%	30% - 60%	60%-90%
Electricity			
Natural gases			
Liquid fuel (gasoline, diesel, Light liquid fuel, etc.)			
Purchased thermal energy (steam, hot water)			
Energy from renewable sources (biomass, solar, others)			

8. How do you monitor energy consumption within the company?

ENERGY CONSUMPTION MONITORING SYSTEM	<i>Fuels</i>		<i>Electricity</i>		<i>Thermal energy</i>	
	Yes	No	Yes	No	Yes	No
There are energy cost centres monitored by the administrative institution						
There are separate counters on the main production sections, installations, machinery and equipment						
There is only a general counter						
Building management system considers						
The energy management system considers						

9. When was the last energy audit carried out within the company?

- Less than 1 year ago;
- More than 1 year ago, but less than 5 years ago;
- More than 5 years ago, but less than 10 years ago;
- More than 10 years ago;
- We did not carry out an energy audit.

10. Is there an energy efficiency strategy within the company for the next 2 years?

- Yes;
- No;
- I do not know.

11. Is there a budget approved for investments in reducing energy consumption or switching to renewable energy in the company?

- Yes;
- No;
- I do not know.

12. What is the policy of your company regarding investments in energy efficiency? (multiple choices)

- Energy efficiency investments have priority;
- For investments in energy efficiency the same criteria are used as for all investments;
- Investments in energy efficiency are proposed only if they have a short pay-back period;
- Investments in energy efficiency are proposed only if they are considered low costs measures;
- There are other investments with a higher priority than investments in energy efficiency.



13. In your opinion, which are the main barriers to adopt renewable energy? (multiple choices)

- High initial capital cost
- Lack of financing mechanism
- Inefficient technology
- Need for backup or storage device
- Unavailability of solar radiation data
- Lack of awareness of technology
- Less efficiency
- Lack of trained people and training institutes
- Lack of local infrastructure
- Lack of national infrastructure
- Scarcity of natural and renewable resources
- Unable to meet electricity power demand alone
- Lack of political commitment
- Lack of public interest litigations
- Ecological issues



APPENDIX B.3: Guidelines for collecting information about energy and environmental consciousness in SMEs

The following questions can be used as a guideline or checklist for a discussion about energy culture and environmental consciousness within the group of SMEs or with all the employees of one SME.¹²

An individual's acceptance of a technology, although not strictly a psycho-sociological term, can be regarded as an intention to adopt or use the technology, or to consent or actively support its development. It is well known that methodological approaches to measuring attitudes, behavior and intended behavior in environmental psychology include quantitative (attitudinal surveys) and qualitative methods (e.g., semi-structured interviews, focus groups). Moreover, energy-efficiency practices of an employee, regardless the position in the SME, are influenced by knowledge, experience, and other factors.¹³

1. In your opinion, climate change affects:
 - Breathable air
 - Safe drinking water
 - The planet earth fauna
 - Secure shelter due to extreme weather and natural calamities
 - Public Health
 - Agriculture
2. In your opinion, which are the main factors contributing to climate change?
 - Heavy industry
 - Textile industry
 - Fossil fuels-based mobility (car, train, bus, plain)
 - Fossil fuels-based electricity
 - Waste
3. In your opinion, which are the solutions to overcome the effects of climate change?
 - Forego fossil fuels
 - Infrastructure Upgrade
 - Consume less and more efficient (food, energy, daily consume goods)
 - Stop cutting down trees
 - Use alternative fuels and energy sources
 - Mobility electrification

¹² Guidelines developed by Servelect and Technical University of Cluj-Napoca.

¹³ References: [1] Stephenson, J., Barton, B., Carrington, G., Gnoth, D., Lawson, R., Thorsnes, P. (2010). Energy cultures: A framework for understanding energy behaviours. *Energy Policy* 38(10):6120-6129. [2] Roche, M.Y., Mourato, S., Fishedick, M., Pietzner, K., Viebahn, P. (2020). Public attitudes towards and demand for hydrogen and fuel cell vehicles: A review of the evidence and methodological implications. *Energy Policy* 38(10):5301-5310. [3] Miroso M., Gnoth, D., Lawson R., Stephenson, J. (2010). Characteristics of Household Energy Behaviours. University of Otago New Zealand. [4] <https://climate.nasa.gov/>.



4. Which are renewable energy sources that you are aware of? (multiple choices)

- Solar photovoltaic
- Wind
- Biogas
- Liquid biofuels
- Renewable hydropower
- Geothermal
- Marine
- Mixed hydro plants
- Renewable municipal waste
- Solar thermal
- Solid biofuel

5. Which are the main sources of information regarding renewable energy technologies?

- Public authorities reports
- Professional bodies
- News and reports
- Research projects
- Scientific papers
- Social media
- Other (please specify): _____

6. In your opinion, the main advantages of renewable energy are:

- They will never run out
- Increasing of the comfort level
- Reduction of utilities bills
- They are low-maintenance energy sources
- Renewable energy saves money long term
- The environmental benefits
- Less reliance on imported energy = stronger economy
- Improving public health
- Building stronger communities
- More jobs
- Other (please specify): _____

7. In your opinion, the main disadvantages of renewable energy are:

- Unreliable weather can affect energy supply
- It's hard to produce the same amounts as non-renewable sources.
- Higher upfront cost
- Storage capabilities
- Geographic limitations
- Other (please specify): _____



8. In your opinion, which are the main barriers to adopt renewable energy? (multiple choices)

- Inefficient technology
- Lack of consumer awareness to technology
- Need for backup or storage device
- Lack of information technology resources
- Lack of awareness of technology across general public
- Lack of research and development work
- Lack of trained people and training institutes
- Lack of local infrastructure
- Lack of national infrastructure
- Scarcity of natural and renewable resources
- Geographic conditions
- Lack of political commitment



APPENDIX B.4: Examples of legal forms for a local SME energy collective

Form	Explanation
Association	<ul style="list-style-type: none"> - The objective of an association is to use the profit to achieve the objectives of the association - The members have control through a general meeting of members (GMM) and appoint the board of the association who implements the decisions of the GMM - 2 types associations: an association with full legal capacity and an association with limited jurisdiction. Directors of an association with full legal capacity are not personal liable for the obligations of an association.
Cooperative	<ul style="list-style-type: none"> - It is an association that enters into an agreements with and for its members; “an association with a company” - The members have control and appoint the board of the cooperative - All members share in the profit of the cooperative - Different types of cooperatives, such as a business cooperative (buying, selling and supplying by the members), the consumer cooperative (collectively buying and selling) and the employee cooperative (whereby members provide services / products in the service of the cooperative). - The cooperative can also be established with exclusion of liability. With the exclusion, the members are never liable for any losses.
Foundation	<ul style="list-style-type: none"> - Non-profit; the proceeds (profits) must be used for the realization of its objectives (similar as association). - A foundation does not have members (difference with association). - Authority in a foundation rests with the board.
Private company	<ul style="list-style-type: none"> - Control rests with the general meeting of its shareholders - The (registered) capital of the legal entity is divided into shares, these shares are not freely negotiable or transferable as it happens on a stock exchange, hence the term private company. - A private company can also be combined with a cooperative, in which the cooperative has full ownership of the private company.



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