



SEC Partnership

Guidance Notes for the Energy Master Plan Funding Application Process

October 2018

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What is an Energy Master Plan?

“A goal without a plan is just a wish”

-Antoine de Saint-Exupéry

The aim of an Energy Master Plan is to allow a community to understand its' current and future energy needs (in electricity, heat and transport) in order for the community to make informed decisions and prioritise actions. It helps communities to identify opportunities so it can become more energy efficient, use renewable energy where possible, and use smart energy technology if appropriate.

Upon completion of an Energy Master Plan, a community should have a good understanding of how energy is used locally, be able to prioritise opportunities, and have at least a medium-term action plan outlining the practical actions in order to avail of these opportunities.

Communities should also be able to identify the energy baseline, and be able to measurably improve on this baseline after they complete energy projects i.e. they should be able to see how many kilowatts/CO2 emissions they can save following successful action.

Community benefits

Doing an Energy Master Plan means your community can have a say in your energy future. It will help your community maximise the benefits from energy projects. The below benefits are worth considering when exploring the scope of your Energy Master Plan.

- **Health** – such as a switch from diesel to electric vehicles reducing local emissions of particulates in car exhaust emissions and improving air quality. Warmer homes and buildings can also aid the health of vulnerable people in the community.
- **Environmental** – moving away from a fossil fuel dependent local energy system is important for the environment, and helps the community become more climate change resilient for current and future generations.
- **Economic** – developing employment opportunities associated with energy supply or enhanced efficiency. Energy efficient buildings are also cheaper to run.
- **Social** – warmer, more comfortable buildings are more likely to be used by the community.
- **Strategic** – you can position your community to avail of opportunities in current and future energy policy, local area plans and future development on a national or regional scale.

General Structure

Communities are diverse and unique in their energy demands, challenges and opportunities. However, the below structure will be relevant to most communities, and will apply a logical approach to developing your energy master plan.

- Desk study – high-level assessment of energy use in the community. Who uses what energy, when, how, where and why.
- Energy audits and BERs – this will provide more detail to the desk study
- Community survey (e.g. for transport or energy awareness)

- Establish energy baseline – based on findings from desk study, energy audits and survey.
- Develop Register of Opportunities
- Community engagement
- Action plan – what are the next steps and how will you implement them

Energy Master Plan – step by step approach

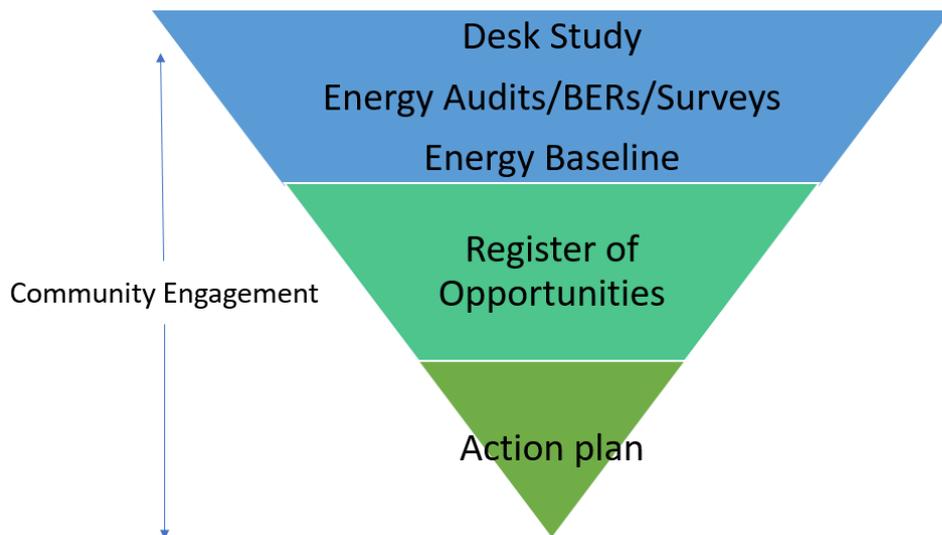


Figure 1. Step by step approach to conducting an Energy Master Plan

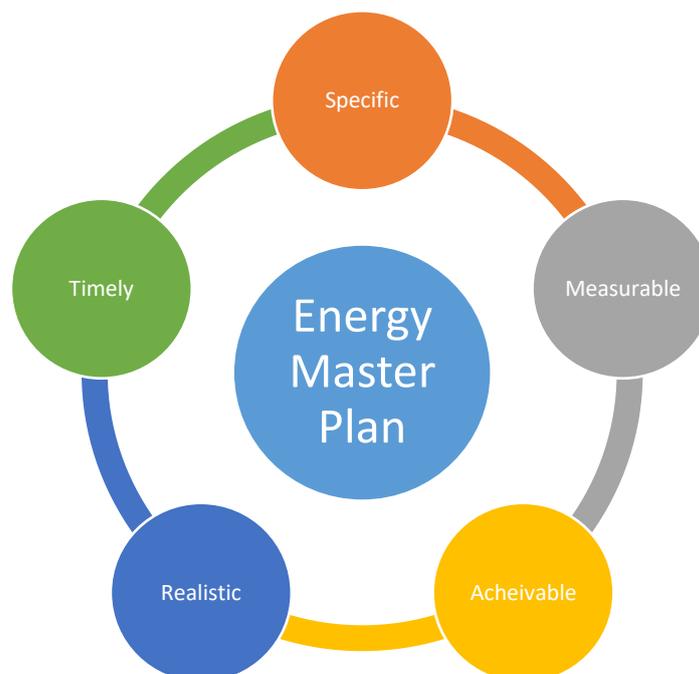


Figure 2. Use S.M.A.R.T goals if they help guide you to how you want to conduct your Energy Master Plan

Final Energy Master Plan report

Outlined below is an approximate structure of the *final* Energy Master Plan report.

1. Introduction

- The community and its local energy system
- Overview of “whole system” approach
- Aims and objectives

2. Local Infrastructure (existing local infrastructure & energy generation)

- Electricity
- Heat
- Transport
- Renewable energy generation

3. Characterisation of the community

- Overview
- Population of community
- Employment
- Residential (overview and estimate of fuel poverty levels)
- Non-residential (local authority, business and other non-domestic users in community)
- Transport (gas oil, petrol/diesel, bus vehicle fuel, household vehicles, EVs)
- Environment (summary of environmental and cultural heritage designations, estimated natural resources)

4. Energy Baseline

- Breakdown of; and overall energy demand (domestic, non-domestic for electricity, heat & transport)

5. Options Appraisal

- Local context (e.g. local development plans, local strategies/action plans etc.)
- Community commentary/views on areas of action
- Community energy opportunities – efficiency, renewables, smart energy technologies

6. Action plan (including a detailed Year 1 plan)

- ### **7. Appendices** – this should include any surveys, energy audits or other data collection methods. Include the excel spreadsheet versions of the energy baseline and register of opportunities. Any other relevant documents.

Energy Master Plan funding application

Following submission of your Community Charter and Competency Assessment, you can apply for Energy Master Plan funding in order to develop a practical knowledge base and action plan for your Sustainable Energy Community.

As the SEC committee would be contributing their time and skills and local knowledge to the development of the Energy Master Plan, SEAI will 100% grant fund the energy consultant required to complete the project as part of the partnership. Mentoring is also provided to help with the application process.

The Energy Master Plan funding application asks several important questions. These questions require some thought and consideration, and it will take some time and effort to complete. Based on feedback and experience from communities who have completed the process so far, it is much more beneficial to have this level of consideration at the beginning of the process, and streamlines the experience.

Remember, your mentor is available to help at this stage. The Sustainable Energy Communities team in SEAI are also happy to accept drafts and give feedback on your funding application.

This will section will go through the application in detail, and is designed to be a guide as you fill it out. There will also be tips and prompts to help you think about what is the best way to approach your Energy Master Plan.

Section 1.1 Applicant details

Each SEC will first need to determine what organisation is going to be the grant applicant. It can be the SEC committee themselves, but a bank account and tax clearance number needs to be set up if they do not already exist. Alternatively, the SEC can operate through another organisation if this was a suitable option.

The requirements for an Applicant are similar to other grant initiatives:

- Are recognised by Revenue (e.g. have a tax clearance number)
- Structure: Steering committee, Main Contact, Chairperson and Financial Controller
- State whether you are eligible to claim back VAT separately or not. If not, SEAI can cover the VAT so you are not out of pocket, but the SEC must supply a letter from Revenue (you can call your local tax office to send you this) stating that they are not eligible. Maximum funding thresholds still apply.

Section 1.2 Request for funding & professional service requirements

Request for funding

Your community is eligible for different levels of funding depending on the annual energy spend. Please provide a high-level estimate of what the energy spend for your community is as supporting

documentation. Consider all the sectors in your community e.g. residential, commercial, agricultural, transport etc. CSO data and average energy spend data (see **Appendix A**) is sufficient at this point, and your mentor can advise on this element.

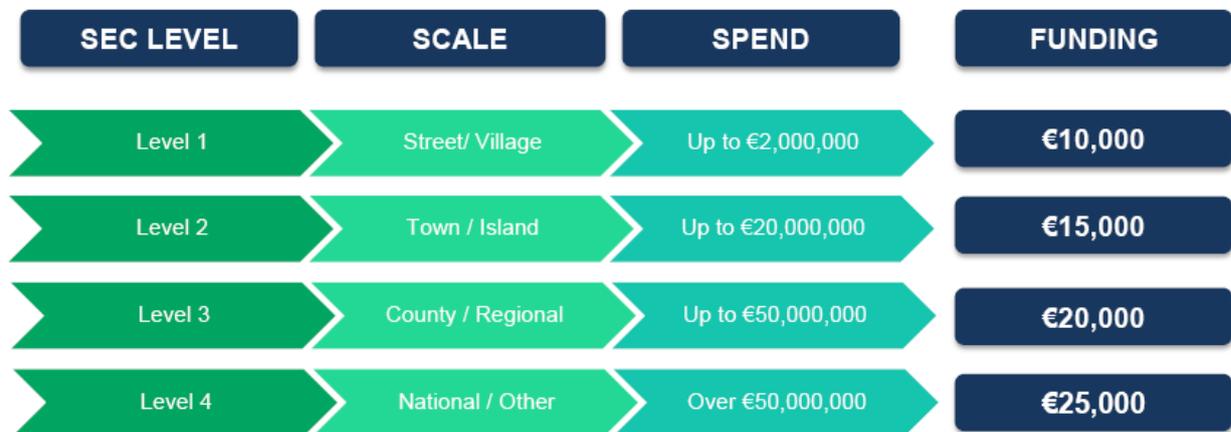


Figure 3. Max. funding levels for professional services to help with your Energy Master Plan

Professional Services

You need to consider what professional input is required for your energy master plan. You don't need detailed cost information at application stage, but you should include an estimate of what you think the costs might be. For example, an average BER assessment can cost *approximately* €100-€200, and an energy audit on a community centre might cost *approximately* €500 (these estimates are subject to size, location, and complexity of the building and how much detail you want from the assessment).

These services should be appropriate to the funding level being sought. While most of the funding request should be allocated to data collection, you can use some funding (max. 20%) to get professional help on wider community engagement (specifically linked to the Energy Master Plan).

Examples of such Energy Master Plan professional services include, but are not limited to the following:

- Detailed desk study analysis on the area
- BER ratings for households
- Energy Audits for community buildings and enterprises
- Energy mapping
- Community surveys
- Energy consultant to put together Register of Opportunities

You may need one energy consultant for the entire Energy Master Plan, or you may need more than one – this will depend on the scope of your plan and availability of professionals in the area to conduct the work.

Section 1.3 Grant milestone payments

In recognition of the financial barriers communities can experience due to the retrospective nature of the grant, the SEC can submit milestone payment requests in order to finance the project easier. There can be up to four milestones claimed throughout the 12 month period the community has to complete the energy master plan.

Section 1.4 SEC Summary

Here, we ask for a general summary of your Sustainable Energy Community. Please consider the following when summarizing your community:

General information

- What is the geographic area?
- How many households and businesses are in the area?
- Is it rural, urban or suburban?
- Who are the other stakeholders in your community e.g. local authority, industry, farmers etc.

Energy-related information

- Who is in the steering group?
- What level of community engagement has there been so far?
- Are there any energy efficiency projects underway or completed?
- What are the energy challenges and opportunities in your community?
- What do you anticipate will be the challenges and opportunities when doing the Energy Master Plan?
- Is there any other relevant information?

Section 1.5 SEC inputs

General summary of your SEC inputs. What non-financial inputs will your SEC committee give to the project?

- Local knowledge:
 - Existing community relationships/organisations
 - Previous energy surveys or feasibility studies
- Time input:
 - Identify your SEC inputs on the Work Plan
 - Use Guidelines in **Appendix B**
- People:
 - SEC team members and structure
 - Local participation

Section 1.6 Energy Master Plan outputs

This is a very important section and is designed to help you figure out how to get the most from your Energy Master Plan. Please consider the following:

- What practical outputs does your SEC want from the Energy Master Plan (e.g. energy efficiency projects, energy awareness in the community, to apply for other grants, etc.)?
- How will your SEC achieve these outputs?
- What will the next steps be after completing the Energy Master Plan?
- How will your SEC measurably improve on the energy baseline? (e.g. will you do a yearly review of energy projects completed to see how much energy has been saved? How/who will do this?)
- How will these outputs benefit your SEC's future ambitions? (e.g. how will the Energy Master Plan link with the ambitions in your community charter?)

Some important points to note:

- No two Energy Master Plans will be identical, but there will be many common features. Each SEC is expected to design and develop their own plan in line with the aims of their Community Charter.
- You can design your Energy Master Plan to suit your capacity. Some plans will be more detailed than others. Please note that every community is encouraged to look at efficiency first and foremost. Efficiency work is low risk and has high payback.
- The Energy Master Plan is a live record of energy status and progress against targets. It will evolve as your SEC progresses.
- The Energy Master Plan is technology neutral – this isn't for feasibility studies of specific technologies.
- The Energy Master Plan is not for someone to get one or two buildings done – this has to be done for the benefit of the community i.e. as many energy users as possible.
- A max. of 20% can be used for community engagement *directly* related to the energy master plan as long as the purpose and benefit of it is clear.
- It's fine to start relatively small – you can be more ambitious later.

Make no mistake, your Energy Master Plan is in itself an energy project. It will be the foundation for other applications and projects in your community.

What happens after submitting the final Energy Master Plan application?

Letter of offer

Once submitted to SEAI, the application will go through internal approvals. Upon final approval, you will receive a letter of offer (also known as a grant agreement). Once you send back the signed letter of offer, you are free to commence your Energy Master Plan.

Finding your consultant/s

At this stage, communities will seek an appropriate energy professional/s to carry out the technical aspect of the plan. Due to public procurement rules, we ask that you seek three quotes in writing (i.e. via email) before deciding on the right consultant to work with you on this project. If you do not choose the cheapest quote, please provide justification as to why you choose a more expensive option.

You can find a list of registered professionals on SEAI's website:

<https://www.seai.ie/resources/find-a-registered-professional/>

Please note, this isn't a formal tender process.

It is recommended that you provide as much information on what you want out of your Energy Master Plan as possible (most of this should be in your application) so that you can get as accurate a quote as possible. It is also recommended that you ensure there is an initial scoping meeting with the consultant/s so that they are clear on what your aims are. They also might be able to advise on appropriate methods or approaches to your Energy Master Plan.

Submitting payment requests

There is a guide and templates available from SEAI and/or your mentor when you are preparing to draw down your first payment. Please ensure you request these documents in advance of putting in your payment request.

Advice from other communities when doing your Energy Master Plan

“Communicate with another group who have been through it & have been successful.”

“Keep it simple, only commit to something achievable”

“Don't be daunted by forms when you first look at them.”

“Gather like-minded people first and then get as much information as possible. Also, go on the organised visits as they are very worthwhile.”

“Get the full assistance of both the mentor and the specialized resources available from the SEC in regard to scope and costing. Review each stage with the SEC committee in particular with members who have had experience of project work.”

“Be as clear as possible about what it is and what it is leading towards. Secondly, learn from what others are doing and apply what makes sense in your context.”

“Be very clear about what you want to achieve with the EMP and the time investment required from the SEC.”

“It is very possible to do. Don't get frightened by the look of the form. Consult with your mentor.”

“Make sure that there is buy-in from the whole community and not just a small technical-oriented group. Tidy towns should be involved, residents associations, local PPN members etc. Also business people and local authority. The potential of SEC is enormous but it must be presented in such a way as not to frighten off non-technical people. Focus on this stage before formally tackling an Energy Master Plan. Find out what the community wants - solar with feed-in tariffs? Heat pumps? More retro-fitting? Electric car power points? Stake in windfarm? Ownership of turbine? This can be done through surveys, questionnaires, focus groups, seminars etc. Let the possibilities be known generally **GENERATE EXCITEMENT!**”

“Every community should have one.”

Appendices

Appendix A – Estimating Your Energy Spend

The follow proxies are an aid to help you establish an approximate level of energy spend for your SEC as part of your EMP application. Your mentor will also be able to assist you in identifying a basis for estimating your energy spend. Consider the following sectors:

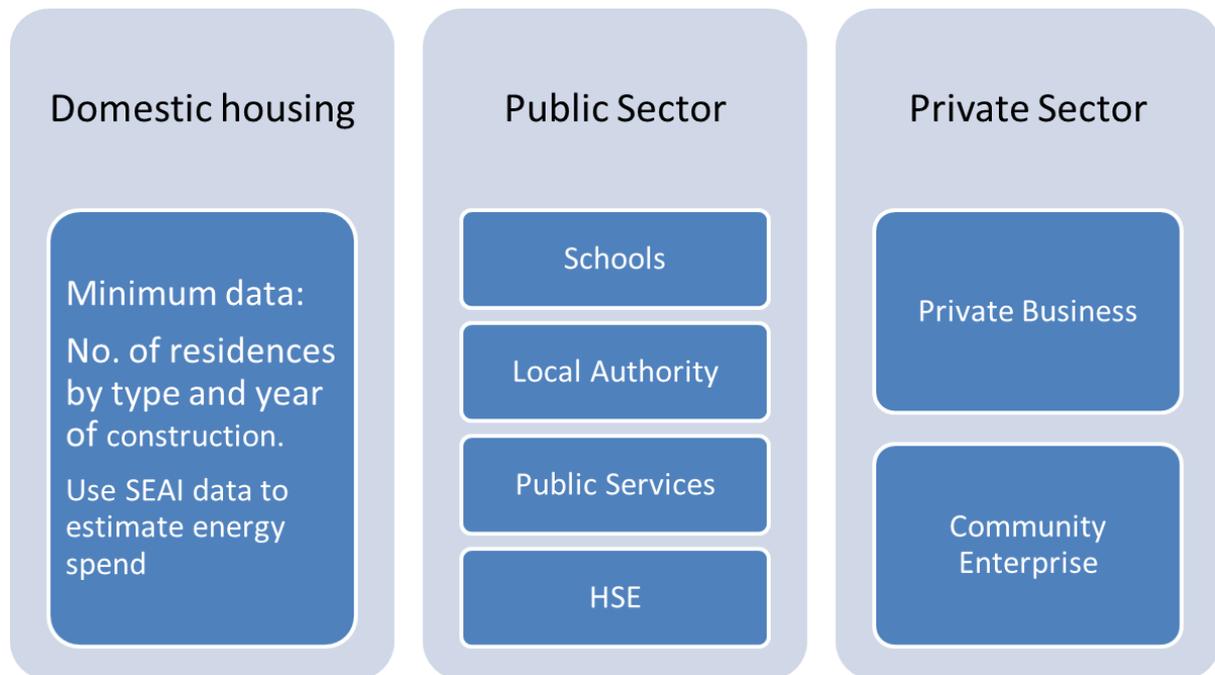


Figure 4. Different sectors to consider when calculating annual energy spend in your community

Residential:

Based on the 2018 SEAI publication "[Energy In the Residential Sector](#)", the average Irish dwelling consumed approximately 18.5 megawatt hours of energy, 80% of which was for space and water heating (primarily oil or gas) and 20% of which was electricity.

On average, the energy spend of an average household is €1990 for both heating and electricity.

Tables 1 and 2 in SEAI's "[Your Guide to Building Energy Ratings](#)" also provide indicative BER rating grades for typical homes based on age and heating type and associated annual running costs for space and water heating based these bands.

Transport:

The average Irish private motorist usually drives the following amount on an annual basis:

- 17,000 kilometres (10,500 miles) on average for petrol vehicles.
- 24,000 kilometres (15,000 miles) on average for diesel vehicles.

Using [average real-world consumption values](#) for economical driving at current average fuel prices this equates to an annual spend of €1,525 per car for petrol vehicles or €1,680 for diesel.

Business:

Small business – low volume: up to €10,200 annually on gas / €5,100 on electricity.

Medium business – medium volume: up to €36,000 annually on gas / €21,000 on electricity.

Large business – high volume: about €36,000 or more annually on gas / €21,000 or more on electricity

Appendix B – Estimating Your Time Inputs

Included here is a sample table to assist you in estimating the time required to carry out community engagement and your EMP (Year 1) activities.

WORK DONE ALREADY			
SEC Network and Development	Number of people involved	Average hours per person	Total hours
Community engagement and meetings			
Research and consultation			
Total Hours			
PROPOSED ACTIVITIES FOR EMP			
Energy Master Plan Activities	Number of people involved	Average hours per person	Total hours
Survey of energy users (house calls, Chamber of Commerce engagement etc)			
Energy Use Data Collection			
Review of energy data			
Communicating of results to community			
Identification of solutions			
Total Hours			
Total value (*€21.90 per hour)			

*Metric – average community salary/average industrial wage, [CSO](#) (28th June 2016)