

The Smart Community Management Manual

Chapter 35 - 2.9a) Local Generation & Carbon Storage



Email info@etownz.com for queries or visit us at www.etownz.ie

Introduction

eTownz has partnered with a number of highly respected research organisations in Ireland and the EU on research projects in the community development and health spaces over the past eight years. The Smart & Engaged Community Management framework was formed based on this research and the guidance of Dr. Maura Farrell of NUIG and Dr. Maura Adshead of UL.

The framework is designed so that it can be applied to any community and under any thematic area of community development. This manual is created using the dynamic “eTownz Knowledge Hub” database which is continually updated with new project ideas and other useful information. If you would like to contribute new ideas please contact us on info@etownz.com. This manual can be used as a standalone document or used along with eTownz Community Management Portal.

Who is involved and what is the structure?



Coordination Team

The Coordination Team facilitates coordination and knowledge sharing between different Town Teams. Highly committed Stakeholders experienced in community development are strongly encouraged to join the Coordination Team. Town Teams should retain independence and responsibility for their own areas.



Town Teams

Town Teams are inclusive smart local teams focused on specific aspects of local development. Town Teams link like minded people together to develop and implement solutions to community problems.

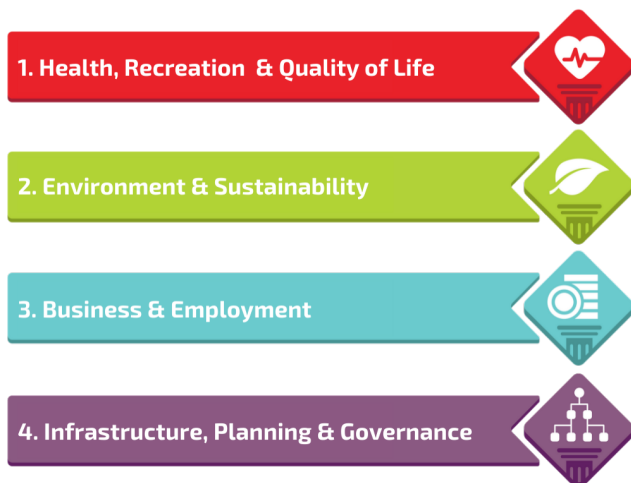


Stakeholders

A stakeholder can be a business, club, public service provider or interested local people. A stakeholder may represent one or more of these interests. All the stakeholders are invited to join a community council.

Core Town Teams x4

Members are invited to form Town Teams related to each of the four main community development Pillars. These are:



Every participating community should aim to have, at minimum 3 to 6 people on each of the four, top-level Town teams.

Town Teams

Specialist Town Teams are invited to form teams related to specific areas under the four main Pillars. Members of the council are invited to join the Town teams that are relevant to them.

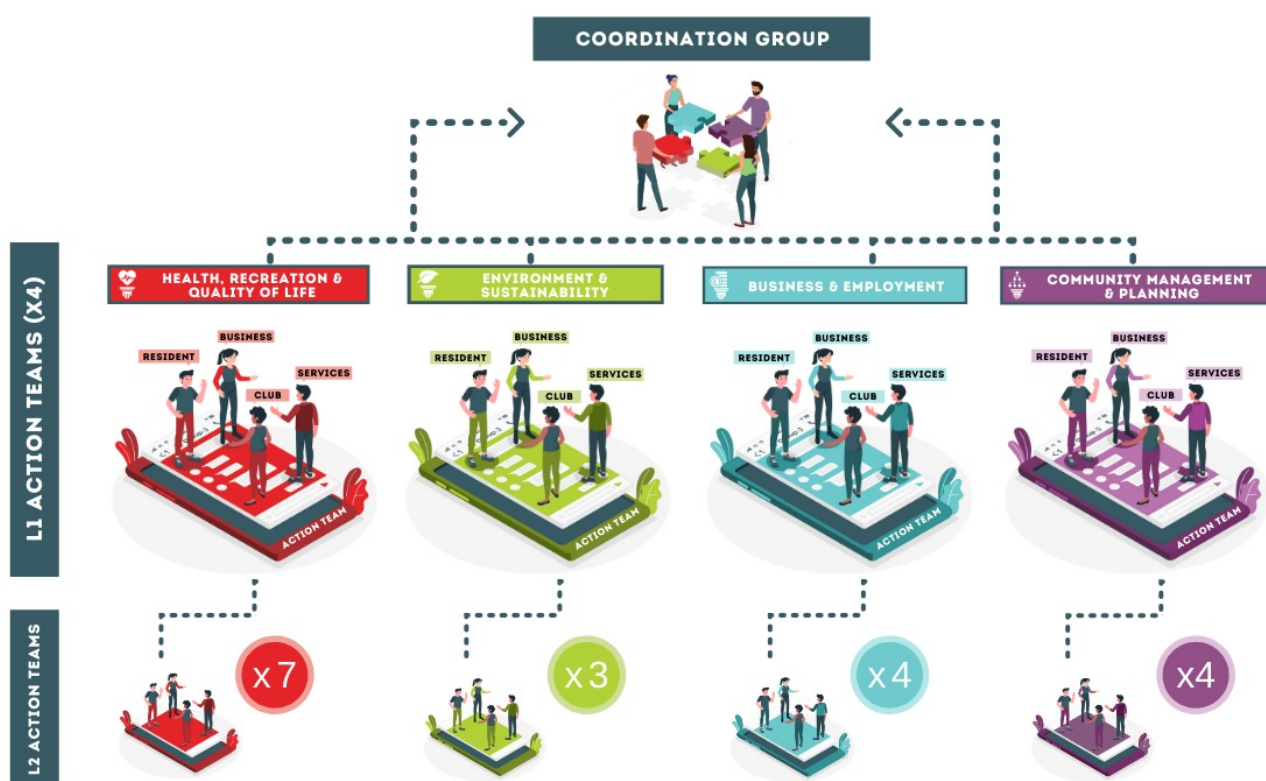
Members of the action team follow the structured format of the smart community framework. They decide their work schedule as a team, creating and implementing local action plans together.

How to use this manual to build a local action team?

The Coordination Team will introduce like-minded stakeholders who wish to form Town teams. The action team then follows a 5-step format illustrated below to compile a “Smart Community Action Plan” for their team. The then follows a 5-step format illustrated below to compile a “Smart Community Action Plan” for their team. The plans can be updated internally throughout the year.

Town teams are invited to submit their plan for the coming 12 months annually. This will be integrated into the overall community plan for the year, compiled before the community AGM.

The AGM helps align the various Town teams and encourage cross-community collaboration on implementation of the plan for the year.



Step 1: Stakeholder Review

The table below can be used by your team to help identify the stakeholders related to this theme. The stakeholders should be invited to provide their ideas, opinions and to join the local action team to help collaborate on initiatives.




Actions

- Manage a register of local assets
- Survey local opinions/ideas
- Recruit & engage local action team



Outcomes

- Top down understanding of local stakeholders
- Bottom up understanding stakeholder perspectives
- Expand team, increase ambitions, plan succession

	Title	Type	#	Comment
	Wind Farm (S851)	Business		
	School Green Flag Initiative (S199)	Public Service		
	SEAI Community Committee (S202)	Club / Group		

Step 2: Asset Review

Use the table below to help build the record list of assets in your area. Use the eTownz portal or a spreadsheet to register your local assets, discuss conditions and how the assets can be better utilised in the community.





Team Building, Management & Metrics - (G103)

local challenges, opportunities and help them formulate a detailed and achievable micro plan for the future. The town team can be small or large and determine its own level of activity. The team may take on its own projects or simply meet occasionally to help coordinate activity among related groups. The team can be comprised of local residents, businesses, club or public service representatives. The team structure can be simple to start with and can decide how often they should meet (e.g. weekly/monthly/quarterly) as they see fit. The team should focus initially on improving the overall understanding of where the challenges and opportunities lie and then help coordinate activities and related projects. There is also a wide variety of supports available and the team can help ensure the community can take advantage of these supports when they become available.



Awareness, Understanding & Skills - (G105)



Preserve, Support & Develop - (G106)

It is important to undertake an assessment of energy usage across the community identifying energy imports into the community and energy generated within the town. The study will identify opportunities for improvement and should result in the preparation of a community energy mass flow diagram. *****
Develop Local Carbon Sinks
Develop initiatives to help lock carbon
Develop projects such as forestry which help lock carbon and reduce the community's carbon footprint. *****
Community Owned Energy Generation Investigate and implement measures to create markets for locally produced energy. Developing schemes and opportunities for locally generated energy is gaining in popularity as the shift takes place across the world to change how we generate and use energy. Locally produced energy can come from a range of sources including biomass, wind, solar and geothermal. The community should seek to understand the potential of local energy generation and implement measures to promote.



Step 4: Project Register & Planning

The action team should begin this section by taking consideration of the projects undertaken in the past 2 years, the currently active projects as well as project ideas for the future. Use the eTownz portal to conduct an online discussion on this topic. We also provide a suggested format for huddles related to this.

- a Add new & update existing projects in project register
- b Review completed projects, document learnings & celebrate successes
- c Discuss, agree, prioritise and schedule projects for the coming year



- a Continual cycle of new idea generation & team building
- b Teams learn from experience & pass on best practise to others
- c Agree, realistic actions plans to better coordinate

Goal: Team Building, Management & Metrics - (G103)

Initiate & develop a local team who can coordinate activities related to this theme. Support the team in gaining a greater understanding of local challenges, opportunities and help them formulate a detailed and achievable micro plan for the future. The town team can be small or large and determine its own level of activity. The team may take on its own projects or simply meet occasionally to help coordinate activity among related groups. The team can be comprised of local residents, businesses, club or public service representatives. The team structure can be simple to start with and can decide how often they should meet (e.g. weekly/monthly/quarterly) as they see fit. The team should focus initially on improving the overall understanding of where the challenges and opportunities lie and then help coordinate activities and related projects. There is also a wide variety of supports available and the team can help ensure the community can take advantage of these supports when they become available.



Related Project Ideas

Rate

Comments

Become a SEAI SEC ([P259](http://www.seai.ie/SEC/)):

The Sustainable Energy Authority of Ireland (SEAI) is calling on community groups across Ireland to join the dedicated 'Sustainable Energy Community' (SEC) Network. The aim of the Network is to catalyse and support a national movement of SECs operating in every part of the country. - See more at <http://www.seai.ie/SEC/>

Create A Community Energy Charter ([P260](#)):

Creating a community energy charter or commitment and invite local residents, business and council to sign up to the energy charter. The charter can help people come together to achieve a common goal, it also helps the community to consider more long-term and larger projects

Wind Turbine Study ([P364](#)):

A study to determine if a mini-wind turbine can help the local community to generate more of its energy needs and to become a sustainable community. This could also lead to reduced energy costs in the locality

[\(Case Study: 55\)](#) Financial Appraisal of a Small Scale Wind Turbine with a Case Study in Ireland

Community Energy Financing study ([P366](#)):

A report on how a community can finance energy generation and the challenges and opportunities involved in securing financing.

[\(Case Study: 57\)](#) Renewable Energy Financing Case Studies: Lessons to be Learned from Successful Initiatives

Community Energy ([P504](#)):

A partnership approach to delivering multi-faceted community energy action

[\(Case Study: 240\)](#) Kilkenny Better Energy Communities

Renewable Energy Investment ([P535](#)):

Investments in renewable energy helped a pig farm to maintain and increase its competitiveness.

[\(Case Study: 325\)](#) Environment and Economics

Harness Geothermal Energy ([P549](#)):

This multi-million Euro project helped harness geothermal energy to produce heat and power by drilling wells into reservoirs of hot water that are found deep underneath the earth's surface.

[\(Case Study: 319\)](#) Green Well Westland

Cooperative Chain for Biomass ([P574](#)):

A regional cooperative chain for biomass was established to respond to the increasing demand for woodchip.

[\(Case Study: 309\)](#) Biomassalland

Upgrade Roadway Lighting ([P585](#)):

Upgrade of lighting on national roadways to reduce energy consumption and associated carbon emissions

[\(Case Study: 241\)](#) Laois Road lighting Retrofit



Goal: Awareness, Understanding & Skills - (G105)



Goal: Preserve, Support & Develop - (G106)

It is important to undertake an assessment of energy usage across the community identifying energy imports into the community and energy generated within the town. The study will identify opportunities for improvement and should result in the preparation of a community energy mass flow diagram. ***** Develop Local Carbon Sinks Develop initiatives to help lock carbon Develop projects such as forestry which help lock carbon and reduce the community's carbon footprint. ***** Community Owned Energy Generation Investigate and implement measures to create markets for locally produced energy. Developing schemes and opportunities for locally generated energy is gaining in popularity as the shift takes place across the world to change how we generate and use energy. Locally produced energy can come from a range of sources including biomass, wind, solar and geothermal. The community should seek to understand the potential of local energy generation and implement measures to promote.

Related Project Ideas	Rate	Comments
Business Owner Generated Energy Audit (P225): To see what the source of energies is available in the local area, for example, an audit and research in the local area to find out if it is possible to obtain wind or solar energy. (Case Study: 54) Renewable energies: success stories		
Baseline Energy Usage Audit (P245): There is a growing availability of data regarding energy usage patterns available from SEI, and CSO and a variety of online resources. Using available data conduct a baseline energy audit to estimate energy usage/costs in the area. The results of such an audit are not very accurate but they are useful at giving people basic understanding of the value of the local energy economy.		
Home Energy Audits (P246): Develop a simple programme which will allow people		

to conduct a basic energy assessment of their own home and encourage them to share the results. The audits can help stimulate local interest in energy issues and also provide an excellent understanding of energy use in residential stock. If people come together, there is a possibility to get group discounts if some homes wish to employ professionals for advanced audits later.		
Business Energy Audit Program (P248): Develop a simple plan or programme which will allow business owners to conduct a basic energy assessment of their business and encourage them to share the results. Business accounts for the considerable portion of energy use in any community. Greater efficiency is also a benefit to the business bottom line. Initiate a group business energy audit program where local business can avail of group discounts and work together as a group to understand and address their energy efficiency		
Business Energy Audit (P249): Develop a simple plan or programme which will allow business owners to conduct a basic energy assessment of their business and encourage them to share the results.		
Home Energy Generation Research (P250): There are growing opportunities for homes to generate energy onsite including technologies such as heat pumps, solar panels and wind. Undertake research to determine which technologies are most applicable in your area and encourage local residents to take the opportunity.		
Local Energy Generation (Business) (P251): There are growing opportunities for business to source energy locally or even onsite technologies such as biomass, heat pumps, solar panels and wind. Undertake research to opportunities for local business to source or generate their energy locally		
Community Owned Energy (P252): Local generated, community-owned energy schemes are now very popular. There are a variety of opportunities in wind, solar and biomass among others where the community take full or part ownership of the capital costs and ongoing financial benefits (Case Study: 450) Comharchumann Fuinnimh Oileáin Árann Teoranta		
Promote Tree Planting (P261): Encourage local residents to plant and nurture tree where they can and explain the benefits of growing trees among people in the community (Case Study: 449) The Afforestation Project		
Renewable Energy Co-op (P352):		

Co-Op to develop community owned renewable energy. The Co-Op believe we can become self-sufficient through the use of renewable energy technologies including energy crops, solar, wind energy etc. We believe communities should be empowered and take responsibility. The key barrier to entry for any voluntary group is access to information and funding. Empowering knowledge, opens the mind to new and exciting opportunities which in turn pushes the door open to confidently raising funding. Immediately socio-economic benefits to be seen by the communities who then push on to achieve their goals.

[\(Case Study: 242\)](#) Dundalk: sustainable energy zone.
[\(Case Study: 455\)](#) Claremorris and Western District Energy Co-Operative

Wind Turbine Study [\(P364\)](#):

A study to determine if a mini-wind turbine can help the local community to generate more of its energy needs and to become a sustainable community. This could also lead to reduced energy costs in the locality

[\(Case Study: 55\)](#) Financial Appraisal of a Small Scale Wind Turbine with a Case Study in Ireland

Play-school/Montessori energy study [\(P365\)](#):

This is a study of the local play-school and it determines the heating/lighting needs of the facilities. An energy audit can help the school/montessori to be more energy efficient and even lead to reduced childcare costs.

[\(Case Study: 56\)](#) Case Study MaryK's Childcare, Preschool and Montessori, Co. Clare

Community Energy Financing study [\(P366\)](#):

A report on how a community can finance energy generation and the challenges and opportunities involved in securing financing.

[\(Case Study: 57\)](#) Renewable Energy Financing Case Studies: Lessons to be Learned from Successful Initiatives

Anerobic digestion plant for farm waste recycling [\(P380\)](#):

A project to turn slurry and farm waste into biogas or biomass. This process can also provide compost. Such a project can make a community more sustainable.

[\(Case Study: 110\)](#) Renewable Energy Camphill

Community Wind Farm [\(P435\)](#):

A project for the development of a wind farm. This could involve some smaller wind turbines which could provide cheap and sustainable energy.

[\(Case Study: 166\)](#) Killala Community Wind Farm

Study on renewable energy [\(P436\)](#):

A feasibility study on sustainable energy in the community

[\(Case Study: 167\)](#) Renewable Energy in Mayo

Community Energy [\(P504\)](#):

A partnership approach to delivering multi-faceted community energy action

[\(Case Study: 240\)](#) Kilkenny Better Energy Communities

Competitiveness In The Food Industry [\(P544\)](#):

A project to enhance the competitiveness and low carbon economy in agriculture and the food industry, through the analysis of alternative future scenarios.

[\(Case Study: 432\)](#) A foresight into the future of the food industry in South Savo

Solar Energy [\(P624\)](#):

An innovative interterritorial cooperation project brought together Local Action Groups and other social partners to demonstrate and promote the use of solar energy by local communities.

[\(Case Study: 383\)](#) Promoting the use of solar energy in local communities

Endogenous Renewable Energy [\(P637\)](#):

Promote the use of endogenous renewable energy and management plans contributing to climate change mitigation and adaption.

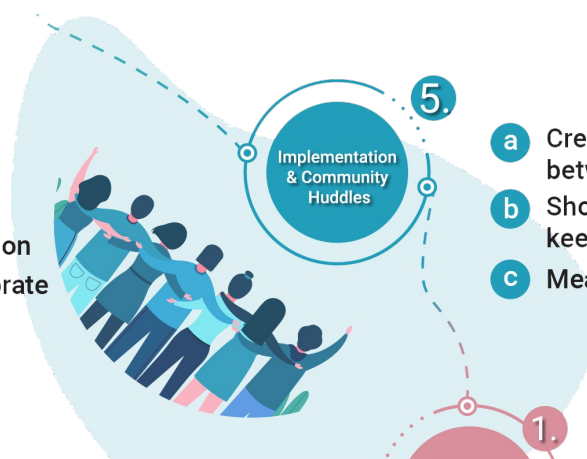
[\(Case Study: 365\)](#) Setup a renewable energy visitor centre

[\(Case Study: 366\)](#) Energy, Forest and Climate Change (ENFOCC)

Step 5: Community Huddles & Implementation

Community Huddles cover a variety of different meetings types that take place throughout the year. This includes remote meetings, project planning or project implementation meetings. We provide a suggested one hour format for the main meeting types to help make best use of people's time.

- a** Organise an annual public "Community Huddle",
- b** Team agree huddle plans, coordination and implementation
- c** Present individual plan & celebrate



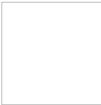
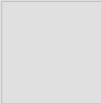
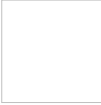
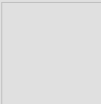

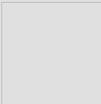
- a** Creates meaningful engagement between local Teams
- b** Short, actionable recurring meeting keep teams on track
- c** Measures success/progress

Appendices: Additional Info

Quick Win Projects

Summary	<input checked="" type="checkbox"/>
Car Maintenance Efficiency: Ensure my car is regularly maintained to ensure its running as efficiently and as safely as possible	<input type="checkbox"/>

Relevant/Supporting Organisations

Title	Comment
 Lorrha Rathcabbin Better Energy Community SEAI has issued a call for communities to apply for grants available for energy efficiency upgrades to households and building retrofits within communities.	
 BPTT Community Energy BP Trinidad and Tobago invests in Arts & Culture, Education and Enterprise Development.	
 Bank of IDEAS Community and economic development consultancy specialising in rural renewal, national youth policy, tourism and asset based community development.	
 Claremorris and Western District Energy Co-Op Claremorris and Western District Energy Co-Op is an innovation and development community enterprise focused on the development of Renewable Energy.	
 Energy Co-operatives Ireland Developing renewables energy technology, and helping communities grow	
 Drombane/Upperchurch Energy Team Energy Conservation on a community scale	