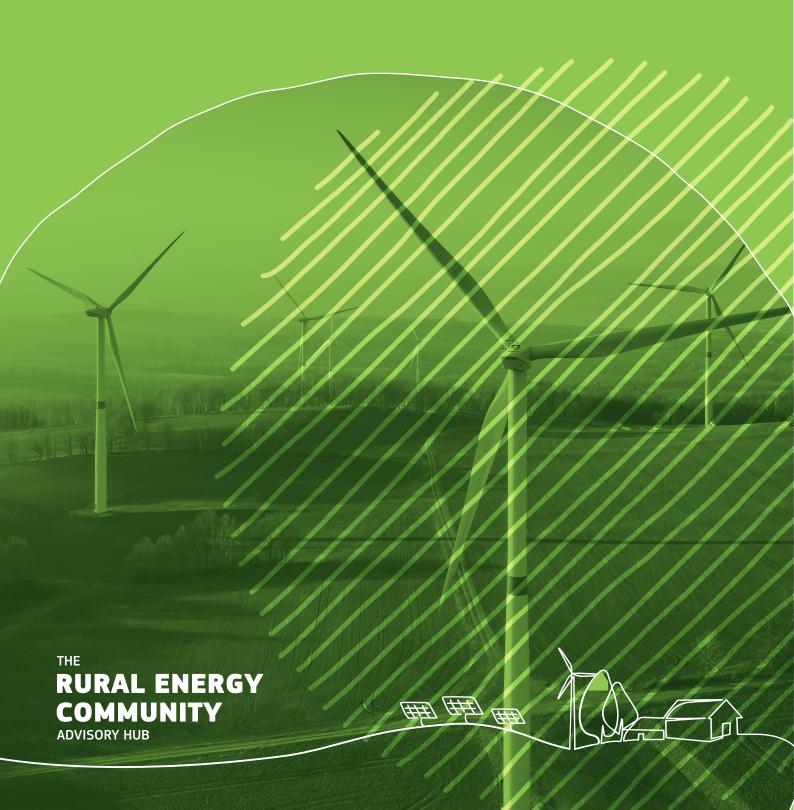


Joining or setting up a rural energy community





Why join or start a rural energy community?

Environmental, economic and social benefits





You will become part of the energy transition to help **reduce the impact of the climate crisis.**





You can **reduce the price** you pay for your energy, reducing energy poverty.

3



It will increase your **energy security** and reduce the dependence of the energy system on imports.

4



Money can be redirected into **community development** plans and kept in the local economy.

5



You can contribute towards rural economic development.

6



You will have **ownership and control** of your energy production.

1



and volunteering opportunities.

8



Your community will **educate citizens** on energy, climate and democracy.

9



Your community can build a platform for collective action and collaboration to strengthen your community.

10



10. You can **set an example** to encourage other groups to start

Think what you can achieve!



Rural energy community development roadmap

When you consider starting up an energy community, it is important to note the common drivers and barriers from the start of your journey to reflect on how your group can succeed in achieving your future goals. This booklet will guide you on your way to either joining or starting a successful rural energy community.

Achieving success

The most important factors for the success and development of rural energy communities can be grouped into five key areas.

Table 1 – Drivers and barriers for developing a successful rural energy community¹

Category	Drivers	Barriers i i
Group	Committed individuals to drive a project forward; strong organisation capable of building momentum and overcoming setbacks.	Lack of clear direction and management in the group, resulting in inaction.
Project	Adequate time, information, skills, finances, and material resources to carry out the project.	A lack of necessary skills, information, finances and material resources.
Community 1	Project design meets your community's needs; successful engagement strategies increase participation and build trust.	Lack of public interest and mistrust of new energy systems, resulting in low engagement and participation.
Network	Effective partnerships with local authorities, neighbouring energy communities, businesses, farmers and other relevant actors.	Lack of cooperation and transfer of knowledge.
Policy	A supportive national policy context, with local authorities involved.	Unsupportive and inconsistent policy setting; hard-to-access grants; difficulties with planning and legal issues.

Another key consideration is that your rural energy community should be set up to comply with the requirements of an energy community – as defined in your national transposition of the RED II (Renewable Energy Directive) for Renewable Energy Communities (REC) or the Electricity Market Directive for Citizen Energy Communities (CEC) – to benefit from an enabling framework that can help overcome the barriers identified above at national level.

The REC and CEC definitions are similar as they require that the energy project will provide environmental, social or local economic benefits instead of simply existing to make profits. Renewable energy communities are effectively controlled by local actors and have a democratic governance structure that ensures their independence from the private interest of individual members. Citizen energy communities are more flexible: they allow all sorts of actor to join the energy community (including investment banks, not-for profit organisations and public companies), and allow for one individual member (either a local authority, a small enterprise or a citizen) to be in effective control. Obtaining legal entity status will enable your community to apply and access funding streams at an EU and national level.

¹ Table created using information from Seyfang et al. (2013) A thousand flowers blooming? An examination of community energy in the UK - ScienceDirect.

² See the guidance document "Creating value and engaging citizens in the energy transition" for a more detailed description of a renewable energy community and citizen energy community.



BOX 1

Classifying your rural energy community into a legal entity

The Renewable Energy Directive

Defines renewable energy communities as voluntary legal entities established at a local level for the purpose of executing renewable energy projects to provide environmental, economic or social community benefits.

The Electricity Market Directive

Defines citizen energy communities as voluntary legal entities established for the purpose of electricity "generation, distribution, supply, consumption, aggregation, [and] storage", with the primary purpose of providing environmental, economic or social community benefits.

Rural energy community development roadmap

1

CONTEMPLATION

The idea of setting up an energy community emerges from a group/ individual's intention. A shared vision is developed, and you identify the requirements, needed skills, drivers and barriers. Great opportunity for peer-to-peer learning, knowledge sharing and group cooperation to accelerate the development

2

PREPARATION

Planning your community's project.
A leadership team is essential, as well as specific objectives and actions to achieve your shared vision. You should consider different technology options, establish a business model, search for funding and reach out to the wider community for feedback. You can then start initiating member recruitment for your project.

3

IMPLEMENTATION

Your community project becomes a reality and the technologies are installed. For this you'll need a legal structure, formal agreements with your local authority, submissior of funding applications, recruitment of new members and construction and installation contracts.

4 AINTENANCE

MAINTENANCE

The community is set up, and now you must maintain and monitor your project activities. Start by developing and implementing and implement monitoring systems to determine indicators for your community's economic, environmental and social performance. Set more ambitious objectives if the original ones have been met and maintain strong engagement with the core team and members.

CHECKLIST FOR YOUR RURAL ENERGY COMMUNITY

At the end of this guidance document, you will find a checklist for the key activities at each development stage to help you to effectively plan to achieve success and maximise the environmental, economic and social benefits for your local community.



Building your group

Group dynamics and community outreach

Work out the best fit for your participation

Joining an existing community group can be an easier option than forming a new one as resources will already be available. Therefore, as a first step, you should check if you can participate or join an existing local group that might be interested in expanding towards local energy but has not yet done so. A useful tool to help you find existing energy communities in your country is the Energy Community Repository.

If there are no communities in your local area, use your initiative to start a new rural energy community. All energy communities start small and develop over time into bigger communities with large numbers of projects, activities and active members. Take the first step and talk to people in your local area about the idea. This will raise awareness and help you identify likeminded people to collaborate with. Even just meeting for coffee to discuss ideas is already an important first step on the journey.

Your core group dynamics

Rural energy communities need people with the passion to make a difference and to implement good ideas. You should be looking to build a core team of 4–12 people, but the more people involved the better³. It is important that members of your team can work well with each other and establish strong relationships to collaborate for collective goals. Therefore, acknowledging

everyone's ideas is crucial to create a safe space for people to express themselves. You can further develop relationships by enjoying social activities together and building trust. This will also help each of you to better understand your group's interests and motivations, which will be useful when discussion of project ideas takes place. It will also be important to develop co-learning among your group so you can fully understand how to implement the most successful projects in your energy community.

Success story! Società Elettrica Cooperativa dell'Alto But (SECAB)

SECAB is a cooperative founded in 1911 with the aim of producing and distributing hydroelectric energy to serve its community. It was the first cooperative in the Friuli Venezia Giulia Region, and today it produces, distributes and sells hydroelectric energy to the municipalities of the area: Cercivento, Ligosullo, Paluzza, Ravascletto, Sutrio and Treppo Carnico. It all started with two citizens who, following a 1911 conference on hydro-energy, insisted on the need to move the presented hydro-energy project concept away from private interests and financialspeculation and towards an approach based on public interest and citizen participation. They therefore established a cooperative to avoid the exploitation of local resources by external actors. The cooperative now has five sites and more than 3,000 members.

Source: Comunità Rinnovabili, Legambiete (2021), development of renewable sources in Italian municipalities and new experiences of self-production. La Società elettrica cooperativa dell'Alto But



Engaging with your group

Engaging with your group and members is an important requisite of a successful rural energy community. You can organise regular meetings with your core team to discuss project ideas and identify people who have relevant experience, leadership qualities and connections to create a diverse group with a range of skill sets. These meetings should occur either weekly or bi-weekly to ensure that engagement and motivations remain high at the start of the project.

In addition, every meeting should finish with a list of actions for attendees to complete, and a dedicated person can take notes to circulate to the group and to any members who could not attend. Other engagement strategies include information supply, consultations, discussions with the public and utilising co-decision making. For example, organising different regular events for the core group and all members is a good way to increase member engagement.

Resources to help you and your group become energy literate and build knowledge on energy communities



- The Rural Energy Community Advisory Hub
- Support page of the Energy Community Repository
- How to build, organise and develop leadership strategies in your group
- Energy communities: An overview of energy and social innovation (JRC)
- How to get energy literate (and why): Our Energy (our-energy.eu)
- Office of Energy Efficiency & Renewable Energy, Department of Energy
- Newcomers' Handbook
- Handbook for Energy Communities
- Brand new guidebook on how to set up an energy community (REScoop)
- Sustainable Energy Communities Handbook (SEAI)

You should also consult available national resources.

Obtaining and managing your finances

Through the different stages of setting up and developing a rural energy community you will need financial support. There are different financing options available, some from public funds, such as EU funding

mechanism or national funding schemes, and others through private investors. The guidance document "Obtaining and managing finances for a rural energy community" will provide you with information on EU policy and financing, types and examples of effective funding strategies, and information for setting up viable business models.



Building networks and support

Bringing people together for collective action

Local authorities are key to building your energy community

Your rural energy community will increasingly be able to build up networks, partnerships and alliances with a broad variety of actors, such as municipalities, companies and energy community networks and associations. Partnering with others opens a wider array of possibilities for your projects and provides the opportunity to scale up successful initiatives. A good starting action is to contact your local authority and check if they are members of the Covenant of Mayors, as your rural energy community can help them reach their renewable energy and energy efficiency goals.

Local or regional authorities are the first place to start when developing your network. The most successful rural energy communities in Europe have collaborated closely with local and regional authorities. The current EU energy legislation framework, including the Clean Energy Package, encourages the involvement of local

authorities to become members and shareholders of energy communities, cooperating with citizens and local SMEs without taking full control. They are especially important for starting up new projects and can provide a range of benefits, including:

- support through legal technical assistance and planning permission approvals
- raising awareness to increase citizen participation and energy literacy in your community
- purchasing your energy for public buildings in the community
- providing legitimacy for your energy community to attract new external investments and facilitating dialogue with additional actors in the energy field
- providing public spaces, municipal staff and additional resources to implement projects (e.g. access to bioenergy resources)

Helpful resources for gaining support from external parties



- REScoop's community energy guide provides a list of persuasive points for overcoming potential reluctance from local authorities to cooperate with your rural energy community
- The REScoop municipality approach
- Check if your local authority is a member of the Covenant of Mayors
- Solution booklet for energy communities (European Commission)
- How local authorities can encourage citizen participation in energy transitions (Energy Cities)
- How to use a Community of Practice to improve your community (Our Energy)



External parties that can help you

Intermediary organisations have become central building blocks for the emergence and prevalence of rural energy communities. These organisations act as "enablers", creating spaces and opportunities for others (to learn, share knowledge and access opportunities), mediating between other actors (working and making connections with them) and brokering resources, knowledge and relations.⁶ They can perform a variety of beneficial activities for your energy community, including building knowledge, sharing information, capacity building, brokering relationships, developing business models, helping to set out longterm goals and advocating through lobbying activities for energy communities. For example, you can receive advice on the most suitable technologies, recommended areas to implement projects and other vital information for the planning stage of your community.

Partnering with other energy communities helps build the potential to identify best practice and can facilitate fast learning in your community projects. These already established energy communities act as knowledge banks and can be particularly useful for your community to develop relationships, networks and collaboration opportunities.

Middle actors are important collaborators for your rural energy community. They are people that possess specific expertise to help with activities that require technical knowledge (such as accountants, electricians, lawyers and housing associations). For example, an

electrician helps households understand how to use a smart meter and how to interpret digital information; a lawyer will help you formulate a legal form that can enable access to financial support schemes.

Distribution network operators control the electric grid, and so can provide technical expertise to run a microgrid or connect your installations to the regional or national grid.

Examples of intermediary organisations

Enostra, Italy – An intermediary organization operating across Italy that supports municipalities, citizens and SMEs to setup new renewable energy communities. It provides support and services for feasibility studies, legal and financial advice, awareness raising, communication and engagement campaigns, capacity building activities. The cooperative also produces and sells renewable energy electricity to its over 10.000 members. For more information, visit their website. www.enostra.it

Prowindgas, Germany – Initially set up in 1999 as an energy cooperative, Prowindgas has now developed into an intermediary organisation that shares knowledge and experience with new energy communities across Germany. They also produce and sell affordable energy to their 30,000 members. For more information, visit their website.

Success story! "Common light" – born from the Mayor's dream⁵

The Mayor of a little village in Sicily – Ferla, with no more than 2,000 citizens – has always believed that "change can start from little actions" and that citizens should be the main actors in implementing change. In 2021, in collaboration with the University of Catania, technical experts and a lawyer, the municipality officially launched the process of energy transition and opened a call to citizens and SMEs who wanted to join the energy community.

In March 2022, the first PV system of 20kW was installed on the Town Hall rooftop, to indicate that the city and its citizens are truly behind this project and are looking to achieve a full energy transition.

⁵ Ferla, energia green e 'terza missione' – Bolletting Atenec

⁶ Cited from NEWCOMERS Deliverable 3.3: Energy communities in different national settings – Barriers, enablers and best practices



Choosing your activity and technology types

Key factors to consider for achieving success

The most common form of activity of an energy community is energy production, as it has the potential for significant impacts and benefits. This could be installing energy production technology such as solar PV, biomass, wind, hydropower or geothermal. The following are useful questions to ask yourself in your planning phase, to help ensure that the most profitable technologies and locations are identified early.

- Would people be happy to have this technology installed?
- How can we increase acceptance of renewable energy technologies in the community?
- Can I obtain planning permission permits for the installation?
- Will I be able to sell the energy to the local grid or to members of the energy community?
- Does my local authority provide financial support for the project and, if so, what is feasible to install?
- Are there any specific subsidies and funding

- Have I consulted local maps on wind speed and solar irradiation to understand what locations are most suitable for wind and which rooftops get the most sun?
- Have I approached local farmers' organisations to understand if resources to facilitate energy production (e.g. biomass produce from agriculture waste) exist in the area?
- Are there buildings we can put solar PV systems on?

The most profitable activities and technologies depend on your community's natural and regulatory environment. For example, biomass might be the most lucrative investment for areas in the proximity of agricultural activities due to the availability of materials from agricultural waste produce. Similarly, since rural areas are characterised by large open spaces, it might be possible to install wind turbines or ground-mounted PV plants. A mix of technologies could also provide you with success, as there is potential to integrate more than one type. You can start with one, and then diversify into new installations as your community grows. It is also important to research the regulatory environment in your locality as there may be fast-track procedures, subsidies, grants or loans available for you to get started.

Supply and distribution of energy

Your community can now become a supplier of energy, which can be done either through selling the energy produced to clients or through buying renewable energy from other producers for your members. If you want to take it a step further, you can take significant ownership of your energy systems by operating the local distribution grid, which is the software and hardware that enables electricity to travel to buildings. In some EU Member States, municipalities provide concessions to grid operators with time limits (15 years on average)⁷ and allow new entities to apply to take over after the contract expires. This could be your energy community if you manage to build enough energy installations successfully.





Improving energy efficiency and heating homes

Another way your group can help reduce the impact of the climate crisis while saving money is through improving your community's energy efficiency. This could be a good first project while you build your group, your networks and your community support. Inefficient homes in Europe are a major problem, losing heat and energy through thin walls and windows. This leads to consumers being faced with a choice to either spend a vast amount of money on energy to heat their home or to have a cold home. You can help tackle this difficult decision by using a public survey to identify people in your community who are struggling. From here you can organise a larger meeting with your community to decide on the best way to retrofit homes, pool resources together and contact a company to implement your project.

Remember there is power in numbers, with grants available to help with the finances and local authorities and intermediary organisations with the know-how to facilitate your success. Your community may also be eligible to receive a financial discount for large-scale community retrofitting for a range of energy efficient strategies. Below are some of the types of energy efficiency improvement that can help you save money on energy bills, while keeping your houses warm:

- insulating and draught-proofing homes to prevent heat losses
- ensuring heat sources (e.g. boilers, radiators) are working efficiently
- checking that heating controls, thermostats and timers are set correctly
- implementing efficient LED bulbs
- · upgrading windows to double or triple glazing

Success story! ERE43, Yssingeaux, Haute-Loire, France

1. Heat production through biomass: There are 18 micro-biomass plants totalling 1.92 MW.

The user pays ERE43 for what they consume in heat, with a meter point at the output of the boiler.

The fuel is locally sourced chipped or thinning wood from rural areas. Some of the wood is sourced from waste wood, for example from forest tending. Other advantages include an infrared camera in the silo that allows measuring the levels of stock to provide on-time delivery.

2. Renting rooftops for solar power: The owner of the rooftop receives a rental fee and needs to be member of the society, with at least €3,000 of capital. ERE43 provides the financing (including installation and maintenance) of the solar panels. ERE43 then sells the generated electricity to EDF. After 20 years, the owner of the rooftop becomes the owner of the installation.

Useful resources for starting energy efficiency projects in your community



Plus Energy Efficiency Toolkit (REScoop)
Energy Solidarity — Energy Efficiency (REScoop)
Behavioural drivers for energy efficiency (REScoop)
Energy Poverty Handbook (Housing Europe)
District heating case studies (Thermos-project.eu)



Collective self-consumption

self-consumption Collective involves producina and consuming your own energy. Your rural energy community can distribute energy locally through a public grid⁸ instead of selling it directly to the national grid. There are benefits of self-consumption: it provides the prosumer⁹ with a good energy price, contributes to balancing the local grid capacity and optimises existing network infrastructure, rather than building new grid connections. In addition, the provision of smart meters¹⁰ and other energy management systems through localised energy consumption enables citizens to make informed decisions on their energy use, while providing flexibility services to the grid.

Find out more about how your rural energy community can operate its very own microgrid here:

 Introducing Microgrids & Local Energy Communities (incite-itn.eu)

- What are microgrids and how can they help in the energy transition? (ief.org)
- These Dutch microgrid communities can supply 90% of their energy needs (World Economic Forum)

You can also use self-consumption of energy to adopt flexible assets, such as electric vehicles through installing charging stations. With the electrification of vehicles, there is now an excellent opportunity to develop innovative rural mobility solutions and develop additional returns on investments. Rural energy communities have become increasingly successful in installing electric vehicle charging stations that utilise local energy production. Your community can also make valuable investments in electric vehicles, which can be shared by members through booking systems. As a result, this will save individuals in the community from making investments on their own, reduce overall CO₂ emissions and help your community develop relationships through the option to complete trips together while travelling.

Success story! Comunità energetica dell'Angitola, Italy

The objective of the community is "operating in the social, cultural and institutional field in order to promote: protection of the environment, energy saving, diffusion of renewable energy sources, production of energy in the area, and energy self-sufficiency of the citizen shareholders."

The rural energy community is located in one of the poorest areas of Italy, the Angitola area. The project fits into the larger context of alleviating energy poverty by spreading the energy community and self-consumption of energy generation. It consists of five solar PV installations with a power of 200 kW each and a total energy production potential of 1,000 kW on the roofs of residential buildings and car parks. The objective is for the energy produced to cover 50% of the requirements of community members, including provision of energy to electric vehicle charging stations.

Source: Comunita Rinnovabili (2021) (Legambiente)

¹⁰ Smart meters show you the cost and the amount of energy you are using based on real-time energy prices



⁸ Also known as a microgrid that transmits electricity through specific boundaries.

 $^{^{}m 9}$ A prosumer is an individual who both consumes and produces energy



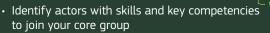
Checklist for energy communities

1. Contemplation

Community

- · Formulate a shared vision and goals
- · Create a governance model
- · Establish project ideas
- · Develop objectives and pathways to achieve them
- Develop a general intention for action
- · Agreement on the rules for decision making
- Attract members
- Develop social media platforms to engage and become visible to the local community

Staff



Financial

- Develop a business model
- · Assure a cash flow
- Secure a resource buffer
- · Identify existing infrastructure to use

Support

- Contact your local authority
- Develop a relationship with the local authority
- · Receive support from local inhabitants

Technical



- Formulate legal forms (contact a lawyer to help with this)
- Develop scope of values to be provided (environmental, economic, social)

Network



 Reach out to other groups (energy communities, intermediaries) as role models to reflect on examples and lessons learnt

2. Preparation

Community



- Choose your project(s)
- · Members commit to allocate their time
- Develop effective interactions resulting in plans being formulated
- Contact neighbourhood organisations
- · Engage citizens to participate
- · Reach multi-stakeholder agreements
- · Consider environmental questions around the project
- · Formulate how benefits will be distributed

Staff



- Attain sufficient staff members with a complete set of competencies (i.e. technical, legal, financial, social)
- Form a leadership team
- · Develop a clear management structure
- · Establish regular communication of key personnel
- Ensure board diversity, with inclusiveness
- Contractual founding of a formal organisation

Financial



- · Establish initial financing concept
- · Collate and manage available capital and assets
- Secure public funding
- Develop means to generate cash (e.g. crowdfunding)
- Explore funding options and submit applications
- · Prepare applications for permits and subsidies
- Conduct a feasibility scan of your business case

Support



- · Identify administrative and regulatory barriers
- Develop strong connections with local and regional administrations
- Seek to find "political home" (support from public officials)

Technical



- Explore and compare different technologies (i.e. solar, wind, biogas, hydro, etc.)
- · Obtain land leasing agreements
- Conduct feasibility and risk analysis of project plans
- Receive support from external technical experts
- Clarify technical questions relating to your activity

Network



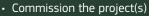
- Explore partnership opportunities
- · Provide regular education to staff and members
- Connect to learning platforms/ intermediary organisations

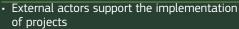


Checklist for energy communities

3. Implementation

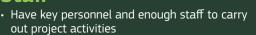
Community





- Increase rural energy community membership size
- Attain visibility in the local community
- Increase member recruitment and provide volunteering opportunities

Staff



· Have effective project management

Financial

- Achieve a good cash flow ratio
- Mobilise finances of the energy community
- Pay for construction activities
- Complete funding applications

Support

- Track political and public support
- · Establish and sign legal forms

Technical

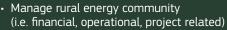
- · Consistently deliver effective operation of installed technology
- Reach equilibrium for consump-tion and production
- Achieve coownership of project assets
- Implement cybersecurity, data management plans and risk registry
- Implement a monitoring system

Network

- Adapt from lessons learnt
- Reflect learning on your own projects and performance
- Collaborate with research institutes

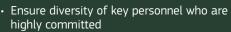
Maintenance

Community



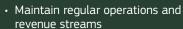
- Attain diversity of members
- Hold regular dialogue with members and residents living around energy installations
- to reflect more ambitious goals and objectives
- Explore new projects and recruitment of new

Staff



• Include entrepreneurial skill sets in the leadership team

Financial



Achieve returns on investment

Support

· Pursue membership in larger community energy networks

Advocate through political connections

Technical

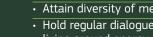
- · Provide a wide range of services
- Record growth in energy production and consumption
- Achieve CO₂ emissions reduction

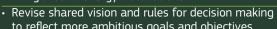
Network

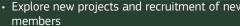
- · Achieve recognition outside the energy community?
- · Continuously grow and reach out to more households and organisations, both locally and regionally
- Replicate successful projects to other contexts
- Improve current processes to enhance benefits for all parties involved
- Use intermediary organisations to share knowledge and "enable" other communities to improve or set up a rural energy community
- Contribute towards transformative change in the energy sector (i.e. take ownership of the grid through being the DSO)



Exploration of citizen engagement methodologies in European R&I projects - Bridge project





















THE RURAL ENERGY COMMUNITY

ADVISORY HUB



