

# Specific Objective 3

D.3.1.1 Mentoring scheme and implementation plan for energy community creation

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### 1. Introduction

A Mentoring Scheme is a structured framework designed to provide guidance, support, and advice from experienced individuals (**mentors**) to less experienced individuals or groups (**mentees**) with the aim of helping them achieve specific goals. It typically involves a formal process of knowledge transfer, skill development, and problem-solving through regular interactions between mentors and mentees.

In the context of the Activity 3.1, the mentoring scheme refers to a collaborative support system where experienced partners (Participating Partners or PPs) and external experts (REC Ambassadors) guide and mentor local communities and authorities in the Danube region on how to properly set up and manage Renewable Energy Communities (RECs). This mentoring process includes:

- Sharing expertise on the creation and operation of RECs.
- **Providing technical and strategic advice** on how to manage renewable energy resources efficiently.
- **Helping to overcome challenges** related to legal, technical, and financial frameworks needed for establishing RECs.
- **Guiding the communities** through the process of planning, implementation, and testing of RECs in specific pilot regions.

By ensuring comprehensive guidance at every stage—from initial planning to operational success—the mentoring scheme empowers local communities. It provides them with the tools, knowledge, and confidence necessary to build sustainable energy communities, fostering a robust and resilient renewable energy ecosystem in the region.



## 2. Objectives of the Mentoring Scheme for RECs

The mentoring scheme is designed to support and empower RECs by addressing critical areas essential to their successful establishment, operation, and long-term sustainability. By providing guidance, expertise, and collaborative opportunities, the scheme ensures that communities can navigate the complexities of renewable energy projects effectively while fostering innovation and inclusivity. The core objectives include:

- Enable the Successful Establishment of RECs: One of the primary goals is to guide communities through the entire REC creation process by providing hands-on support and tailored expertise. By offering step-by-step mentorship, the scheme ensures that communities can transition from conceptualizing their projects to successfully implementing and managing them, thereby laying the groundwork for energy independence and sustainability.
- **Ensure Efficient Use of Renewable Resources:** By optimizing the utilization of local resources such as solar, wind, or biomass, the scheme helps RECs enhance energy output, minimize waste, and contribute to sustainability goals. Communities are guided in developing efficient energy generation, storage, and consumption strategies.
- Encourage Self-Sustainability and Community-Driven Projects: Empower communities
  to manage and expand their energy systems independently through participatory decisionmaking, robust financial models, and technical capacity building, fostering ownership and
  long-term viability.
- Facilitate Knowledge Transfer Across Regions and Partners: Through sharing best practices, case studies, and insights, the scheme creates a collaborative network for REC development. Communities benefit from the experience of others, enabling innovation and accelerating the adoption of effective renewable energy solutions.
- Overcome Technical, Legal, and Financial Barriers: The scheme addresses obstacles such as technical challenges, regulatory compliance, and funding access by providing targeted solutions. This proactive support ensures RECs can overcome barriers and operate efficiently from inception to execution.

## 3. Key Stakeholders

The success of the mentoring scheme relies on the active participation and collaboration of key stakeholders. Each plays a vital role in supporting the development and sustainability of RECs. PPs and REC Ambassadors act as mentors. On the other hand, local municipalities and community members serve as mentees. Together, these stakeholders form a dynamic ecosystem that drives the establishment of community-driven, sustainable energy solutions.

#### 3.1 Mentors

#### 3.1.1 Participating Partners (PPs)

Participating Partners act as the primary mentors, guiding municipalities and other stakeholders through the process of setting up and managing RECs. Leveraging their experience and best practices from previous energy projects, PPs provide structured support, ensuring that mentees have the tools and knowledge required to succeed. Their role is central to the mentoring scheme, bridging the gap between theory and practical implementation.

#### 3.1.2 REC Ambassadors

REC Ambassadors play a specialized role by offering expert advice in areas such as governance, financing, and technical solutions for renewable energy projects. They serve as external advisors, supporting both PPs and mentees, and ensure that the mentoring process incorporates advanced, actionable strategies to address challenges effectively.

#### 3.2 Mentees

#### 3.2.1 Local Municipalities

Local municipalities are the primary recipients of the mentoring process. They receive tailored guidance to establish and operate RECs within their jurisdictions. Municipalities also collaborate closely with citizens, cooperatives, and other stakeholders, ensuring that REC projects align with community goals and local climate policies.

#### 3.2.2 Community Members

Community members are integral to the success of RECs. They act as co-owners and active participants in the projects, contributing their local knowledge, resources, and engagement to drive the initiative forward. By participating in decision-making processes and project implementation, they ensure that RECs are truly community-driven and sustainable in the long term.

In context of the Activity 3.1, the target group of mentees are:

- Transdanubia region, Hungary
- Labin area, Croatia
- Municipality of Arandjelovac, Serbia
- Municipality in Moldova (Covenant of Mayors member)
- Passau, Germany

Each of these regions is tasked with forming and operating a REC, using the knowledge and tools provided by the mentors. These pilot areas serve as testing grounds for implementing REC models that can later be scaled and replicated in other communities.

# 4. Mentorship Framework for Building and Sustaining RECs

#### **Phase 1: Planning and Preparation**

#### 4.1 Preparation and Contextual Understanding

To lay a strong foundation for establishing RECs, it is essential to begin with a comprehensive understanding of the local context, active engagement of key stakeholders, and a clear definition of the goals and scope of the initiative. This process involves:

- Conducting Baseline Assessments: Analyze the local energy landscape to understand energy needs, resource potential, and socio-economic conditions. These assessments provide critical data to shape strategies tailored to the community's specific requirements.
- Identifying and Engaging Stakeholders: Collaborate with a diverse range of stakeholders, including municipalities, community members, technical experts, and financial partners.
   Their involvement ensures a holistic approach, fostering shared ownership and leveraging their expertise for effective REC development.

#### 4.2 Development of the Implementation Plan

A well-crafted implementation strategy is the cornerstone of successfully establishing and operating RECs. This strategy must address technical, financial, operational, and legal aspects while tailoring solutions to the specific needs of the community and the resources available in the region. A comprehensive approach ensures the long-term sustainability, adaptability, and effectiveness of the REC. The process involves several detailed steps:

- Assessing Feasibility and Creating a Detailed Action Plan: The first step in implementing an REC is to assess its feasibility comprehensively. This involves technical, financial, and operational evaluations to determine whether the proposed REC can effectively meet the community's energy needs while remaining financially viable and operationally sustainable.
  - Technical Assessments: Conduct in-depth evaluations of the region's renewable energy potential by analyzing available resources such as solar radiation, wind conditions, biomass availability, and hydroelectric possibilities. Advanced tools, such as Geographic Information Systems (GIS) and renewable energy simulation

- software, can be used to identify optimal locations and configurations for energy systems.
- o Financial Models: Develop detailed financial plans to support the REC's establishment and operation. Identify and secure diverse funding sources, including public grants, cooperative investments, loans, and private funding. The financial model should also include projected returns on investment and mechanisms for revenue distribution to ensure the REC remains profitable and benefits its stakeholders.
- Governance Structure: Establish a democratic governance framework that promotes inclusivity and transparency. This structure should define the roles and responsibilities of stakeholders, set guidelines for decision-making processes, and create accountability measures. A well-designed governance system fosters trust and collaboration among members, ensuring long-term stability.
- O Phased Implementation Plan: Outline a structured timeline for the REC's development, divided into clear phases with specific milestones and deliverables. The phased approach allows for iterative progress, enabling adjustments based on real-world feedback and reducing risks during implementation. Each phase should include measurable goals to track success and ensure accountability.
- Creating Guidelines for Renewable Energy Operations: Developing clear and specific guidelines for renewable energy generation, storage, and consumption is essential to optimize the efficiency and sustainability of the REC.
  - Energy Generation: Specify protocols for the installation and operation of renewable energy systems tailored to the region's resources, such as solar panels, wind turbines, or biogas facilities. The guidelines should include maintenance schedules and performance optimization measures.
  - Energy Storage: Design strategies for integrating energy storage solutions, such as battery systems or thermal storage, to manage fluctuations in energy supply and demand effectively. Storage systems enhance reliability and ensure a steady energy supply, even during periods of low generation.
  - Energy Consumption: Develop community-specific energy consumption plans that encourage efficient energy use. Include recommendations for demand-side management practices, energy conservation measures, and incentives for adopting energy-efficient technologies.
- Establishing Legal Frameworks: Legal compliance is a critical component of any REC implementation strategy. Establishing a robust legal framework ensures that the REC operates within national and regional regulations, providing stability and legitimacy.
  - o Permits and Licensing: Identify and obtain the necessary permits and licenses required for renewable energy installations and operations. This includes environmental impact assessments, construction permits, and connection agreements with energy grids.
  - Energy Trading Regulations: Align the REC with existing energy trading rules, allowing the community to sell surplus energy to the grid or participate in local energy markets. Understanding and leveraging feed-in tariffs or other incentives can enhance the REC's financial sustainability.



 Operational Policies: Define operational guidelines that cover safety protocols, dispute resolution mechanisms, and data privacy regulations. These policies should ensure smooth day-to-day operations while protecting the interests of all stakeholders.

## Phase 2: Mentoring Process (Support & Training)

#### 4.3 Awareness Building and Engagement

Educating and mobilizing the community is a critical step in establishing a successful REC. Building awareness fosters widespread understanding, encourages participation, and ensures long-term support for the initiative. This process can be achieved through a combination of targeted strategies:

- Organizing Workshops, Public Meetings, and Information Campaigns: These events
  provide a platform to explain the concept and tangible benefits of RECs, including cost
  savings, enhanced energy independence, and positive environmental impacts. Tailored
  presentations and case studies can help illustrate how RECs align with the community's
  goals and values.
- Providing Access to Online Learning Resources: Offering digital learning modules, guides, and resource materials equips community members with the knowledge they need to understand renewable energy systems and the operations of RECs. Accessible materials ensure inclusivity and reach broader audiences, including those who may not attend inperson events.

Additionally, creating spaces for open discussions is crucial for addressing community concerns and building trust. Facilitating open dialogues helps dispel misconceptions, answer questions, and provide clarity on the REC's objectives. Transparent and inclusive discussions not only enhance understanding but also foster a sense of ownership and confidence in the REC's mission.

By combining education with active engagement, communities are empowered to take an active role in shaping and supporting their RECs, ensuring the project's success and sustainability.

#### 4.4 Establishment and Implementation

The formal establishment of a REC marks a pivotal transition from planning to action. This phase involves the administrative, financial, and operational steps necessary to initiate renewable energy projects effectively. The process includes:

Registering the REC as a Legal Entity: Legal registration ensures the REC operates within
the framework of national and EU regulations. This step establishes the REC's legitimacy,
enabling it to engage in energy trading, secure funding, and form contracts. Compliance
with all relevant legal requirements is critical for long-term operational success.



- Securing Funding: The REC must obtain sufficient financial resources to support its projects. This can be achieved through a mix of municipal guarantees, community investments, and public grants. Encouraging local residents to invest fosters a sense of ownership and commitment, while leveraging public grants and ethical loans provides additional capital for infrastructure development.
- Procuring and Installing Renewable Energy Systems: Once funding is secured, the REC can begin acquiring and installing the necessary renewable energy infrastructure. Depending on the region's resources, this may include solar panels, wind turbines, biogas facilities, or a combination of technologies. Proper planning and expert consultation during procurement ensure systems are cost-effective, efficient, and sustainable.

#### 4.5 Individual Mentorship

Individual mentorship is a critical component of the mentoring scheme, ensuring that each REC receives personalized guidance tailored to its unique challenges and needs. This one-on-one support helps foster progress, address obstacles, and build confidence among stakeholders. The mentorship process involves:

- Scheduling Regular Check-Ins: Regular interactions with local authorities and stakeholders
  ensure that the REC's progress is closely monitored. These check-ins provide an
  opportunity to review milestones, discuss challenges, and refine strategies, fostering
  accountability and sustained momentum.
- Offering Tailored Advice: Each REC operates under unique circumstances, influenced by factors such as the local energy mix, regulatory frameworks, and community dynamics.
   Mentors provide region-specific guidance, addressing challenges such as resource optimization, compliance with local regulations, and stakeholder engagement.
- Providing Continuous Troubleshooting Support: Mentors remain accessible to address any technical, legal, or financial issues that may arise during the REC's development and operation. This ongoing support helps resolve challenges quickly and ensures the initiative stays on track.

#### 4.6 Use of Efficient Resources

Mentorship should extend beyond the establishment of RECs to include strategies for encouraging the optimal use of renewable energy resources available within each community. Mentors play a crucial role in empowering communities to maximize the potential of their resources, ensuring sustainability and efficiency in their energy systems. Their roles should encompass:

Conducting Resource Assessments: Mentors work closely with REC regions to evaluate the
availability and potential of local renewable resources. This includes analyzing solar
potential, wind conditions, biomass availability, and other regional energy opportunities.
These assessments ensure that the most suitable resources are prioritized and utilized
effectively.



- Educating the Community: A key part of mentorship is equipping community members
  with the knowledge and skills needed to use energy efficiently. Mentors provide training
  on best practices for renewable energy integration, demand-side management, and
  conservation techniques, fostering long-term sustainability and energy literacy within the
  community.
- Optimizing Energy Systems: Mentors guide communities in enhancing the performance of their energy systems by integrating advanced solutions. This includes implementing energy storage systems, such as batteries or thermal storage, to manage fluctuations in supply and demand. Additionally, sector coupling technologies, like Power-to-Heat systems, are introduced to utilize surplus energy efficiently, linking electricity, heating, and cooling sectors seamlessly.

#### **Phase 3 Monitoring & Evaluation**

A robust Monitoring and Evaluation (M&E) framework is critical for ensuring the effectiveness and sustainability of the mentoring scheme for RECs. This structured approach allows for continuous tracking of progress, evaluation of outcomes, and identification of areas for improvement, ensuring that the RECs meet their objectives efficiently.

#### 4.7 Monitoring

Monitor and optimize REC operations to ensure efficiency and sustainability.

Monitoring focuses on tracking the day-to-day operations of RECs to ensure they operate efficiently and sustainably. Key actions include:

- Deploying Monitoring Systems: Utilize advanced monitoring tools to measure key aspects such as energy production, financial performance, and levels of community participation.
   These systems provide real-time data, enabling timely insights into the REC's functionality.
- Providing Real-Time Mentoring Support: Mentors actively monitor operational issues and offer immediate support to address challenges. This proactive approach minimizes disruptions and ensures the REC remains on track toward its goals.

#### 4.8 Evaluation

Evaluation involves assessing the overall success and long-term performance of RECs against predefined criteria. The process includes:

- Establishing a Long-Term Monitoring Framework: Define clear Key Performance Indicators (KPIs) to evaluate success over time. These KPIs should include:
  - Energy Metrics: Assess total energy production and savings achieved by the REC.
  - o Community Engagement: Measure participation levels and the community's ongoing commitment to the REC.



- Financial Viability: Evaluate the sustainability of financial models and the return on investments.
- o Environmental Impact: Track reductions in CO2 emissions and other environmental benefits.
- Conducting Periodic Evaluations: Schedule regular reviews to analyze the REC's performance against the KPIs. Use the findings to refine the mentoring scheme, adjust strategies, and address emerging challenges.

## Phase 4 Capitalization and Knowledge Transfer

The final phase of the mentoring scheme focuses on building upon the success of established RECs by scaling their impact and sharing knowledge to inspire and support other communities. This phase emphasizes expansion, replication, and advocacy for broader adoption of REC models.

#### 4.9 Expansion and Replication

This stage is centered on maximizing the impact of successful RECs by scaling their operations and facilitating knowledge transfer to other regions. Key actions include:

- Expanding Membership, Capacity, or Scope: Increase the REC's reach by attracting more members, enhancing energy generation capacity, or extending its geographic footprint.
   This growth amplifies the environmental and economic benefits, making the REC more impactful within and beyond its community.
- Sharing Best Practices and Resources: Document and disseminate lessons learned, case studies, and actionable templates with neighboring municipalities or regions. These materials provide a blueprint for other communities to replicate successful REC models, fostering a collaborative network of energy communities.
- Advocating for Policy Support: Engage with policymakers to promote legislative and regulatory frameworks that support REC replication and expansion. Advocacy ensures that the success of one REC can pave the way for a broader movement, creating a favorable environment for community-driven energy transitions.



## 5. Key factors for long term success

Ensuring the long-term success of RECs requires addressing a wide range of factors across governance, technical, financial, and social dimensions. These factors collectively create a foundation for sustainability, resilience, and community empowerment.

## 5.1. Strong Governance and Organizational Structure

A robust governance framework is the backbone of successful REC operations, fostering trust, ensuring accountability, and enabling sustainable growth. Democratic decision-making must be a core principle, allowing every member an equal voice in key decisions. This inclusivity builds transparency, strengthens member confidence, and ensures that all stakeholders have a stake in the REC's future.

Clearly defined roles and responsibilities for board members, project managers, and operational teams streamline management and prevent ambiguity or inefficiency. For example, separating oversight roles from day-to-day management ensures both strategic direction and operational effectiveness. Furthermore, governance structures must be adaptable to accommodate growth, whether it involves welcoming new members, expanding into additional projects, or revising operational policies in response to evolving circumstances.

## 5.2. Community Engagement and Participation

Community engagement is a cornerstone of REC success, as it ensures members remain invested in the goals and operations of the project. Active participation can be fostered through regular workshops, public meetings, and platforms for participatory decision-making, enabling members to shape the REC's direction actively.

Education and awareness programs play a crucial role in maintaining community support and involvement. By keeping members informed about renewable energy technologies and the REC's mission, these programs build a shared understanding and enthusiasm for the project. Equally important is inclusivity—ensuring that all community members, including vulnerable or marginalized populations, can benefit from the REC's initiatives. By promoting equity and shared ownership, the REC becomes a unifying force within the community.

#### 5.3. Financial Stability (See Chapter 6)

Financial sustainability is essential for the viability and resilience of RECs. Diverse revenue streams, such as income from energy sales, feed-in tariffs, and government incentives, provide a buffer against market fluctuations. In the early stages, securing start-up capital through grants, low-interest loans, or community investments is critical for financing infrastructure and operational costs.

Efficient cost management is another key factor. Practices such as bulk purchasing agreements for equipment or leveraging economies of scale can help reduce expenses and maximize profitability. Additionally, the ability to generate a steady surplus enables reinvestment into new projects, maintenance, or community initiatives, ensuring the REC's financial health over the long term.

#### 5.4. Robust Technical Infrastructure

A reliable and diversified technical infrastructure underpins REC operations, ensuring consistent energy supply and operational efficiency. Integrating multiple renewable energy sources, such as solar, wind, and biogas, enhances system reliability by compensating for fluctuations in resource availability.

Energy storage solutions, including batteries and thermal storage systems, are critical for stabilizing energy supply and managing surplus production. These systems allow RECs to maintain energy availability during peak demand or low generation periods. Additionally, advanced technologies such as smart grids and energy management tools optimize energy generation, distribution, and consumption, making the REC not only efficient but also future-ready for technological advancements.

#### 5.5. Long-Term Planning and Vision

A clear strategic vision with defined goals for energy production, sustainability, and community growth is essential for the long-term success of RECs. Strategic roadmaps should outline targets over 10 to 20 years, providing a timeline with specific milestones and measurable objectives. These plans should also include adaptation strategies to accommodate technological advancements or changes in regulatory frameworks.

Scalability and replication potential are equally important considerations. A well-designed REC should have the capacity to expand its operations, such as increasing energy production or extending its geographic scope, while also serving as a model for other communities looking to replicate its success.

#### 5.6. Policy and Regulatory Compliance

Alignment with local, national, and EU policies is critical for ensuring REC legitimacy and operational success. Regular updates on regulations affecting RECs help maintain compliance and minimize



potential roadblocks. Proactive advocacy for supportive policies—such as streamlined permitting processes, incentives for renewable energy projects, and favorable feed-in tariffs—strengthens the environment in which RECs operate.

By engaging with policymakers and aligning REC activities with broader energy transition goals, RECs can position themselves as integral players in achieving regional and national sustainability targets.

#### 5.7. Collaboration and Partnerships

Collaboration enhances the impact and efficiency of RECs. Partnerships with municipalities provide access to infrastructure, funding opportunities, and public support. Cross-sector collaborations with technical experts, NGOs, and private sector stakeholders bring specialized knowledge, resources, and innovative solutions to REC operations.

Networking with regional and international REC initiatives, such as the Covenant of Mayors, fosters knowledge sharing and collective impact. These collaborations create a strong ecosystem that supports REC growth and amplifies its contributions to the energy transition.

#### 5.8. Social and Environmental Impact

Delivering tangible social and environmental benefits is crucial for maintaining community support and ensuring REC longevity. Addressing energy poverty by offering affordable energy tariffs or targeted assistance for vulnerable groups fosters equity and inclusivity, strengthening the REC's social value.

On the environmental front, RECs must prioritize reducing carbon emissions, enhancing energy efficiency, and promoting sustainable practices. Contributions to broader community initiatives, such as creating local jobs, supporting urban agriculture, or advancing recycling programs, further solidify the REC's role as a catalyst for positive change.

#### 5.9. Continuous Monitoring and Evaluation

Ongoing monitoring and evaluation are essential for tracking REC performance and identifying areas for improvement. Establishing key performance indicators (KPIs), such as energy production levels, CO2 reductions, financial returns, and community engagement metrics, provides measurable insights into the REC's effectiveness.

Transparent reporting mechanisms ensure accountability and maintain stakeholder trust. Regular feedback loops, incorporating input from community members and other stakeholders, enable iterative improvements and adaptive management, ensuring that the REC remains aligned with its objectives and responsive to evolving needs.



## 6. Funding Application for RECs

Securing funding is one of the most critical and challenging steps in establishing and sustaining RECs. The process demands strategic planning, a compelling project concept, and alignment with funding priorities to successfully attract financial resources. Effective funding not only ensures the feasibility of initial project implementation but also lays the foundation for long-term financial resilience. This step-by-step guidance equips municipalities, cooperatives, and community groups with a comprehensive framework to navigate the complex funding landscape.

#### 6.1. Understand the Funding Landscape

The journey begins with a thorough understanding of the various funding options available to RECs. These include grants, loans, cooperative investments, and innovative financing models such as crowdfunding or green bonds. Identifying programs specifically tailored to support community-driven renewable energy initiatives is essential. These may include EU funding schemes (e.g., Horizon Europe or LIFE), national subsidies, or local energy transition funds.

Evaluating each program's objectives, eligibility criteria, and funding limits helps determine the best match for your REC's goals. For instance, grants targeting rural energy initiatives may prioritize smaller-scale projects with community involvement, while innovation-focused funds might support technology-driven RECs incorporating smart grids or advanced storage systems. A clear understanding of the funding landscape enables RECs to position themselves effectively and align their proposals with the priorities of funders.

#### **6.2. Define Your Project Objectives**

A successful funding application hinges on a well-defined project concept. Articulate the purpose, goals, and expected outcomes of your REC initiative in a clear and compelling manner. Highlight how the project contributes to renewable energy generation, reduces carbon emissions, or addresses pressing challenges like energy poverty.

Emphasize innovative aspects, such as integrating community-owned storage solutions, deploying advanced renewable technologies, or fostering inclusive governance models. Establish measurable objectives, such as "Install a 5 MW solar farm to supply renewable energy to 2,000 households within three years," to demonstrate feasibility and impact. This clarity provides funders with confidence in your REC's ability to deliver tangible results.

#### 6.3. Identify Partners and Stakeholders

Collaboration is often a prerequisite for accessing many funding programs. Identify and engage a diverse group of stakeholders who can enhance your application's strength and credibility. This includes technical experts for feasibility studies, municipalities for regulatory support and cofunding opportunities, and community representatives to demonstrate local buy-in and active participation.

Clearly define the roles and contributions of each partner to avoid overlaps and ensure accountability. Formalize these relationships through agreements outlining responsibilities, timelines, and resource commitments. Strong partnerships not only enhance the quality of the application but also increase the likelihood of project success.

#### 6.4. Conduct a Feasibility Study

A detailed feasibility study is essential to demonstrate your project's viability and alignment with funding priorities. This study provides evidence-based insights and assures funders of the project's reliability. Key elements include:

- Technical Assessments: Evaluate the renewable energy potential in your region through tools like wind analysis, solar mapping, or biomass resource evaluation.
- Financial Modeling: Estimate project costs, revenue streams, and return on investment. Present a clear financial plan to showcase economic feasibility.
- Risk Analysis: Identify potential challenges, such as regulatory barriers or market fluctuations, and propose mitigation strategies.

A robust feasibility study forms the backbone of your application and helps you anticipate and address potential obstacles.

#### 6.5. Develop a Detailed Budget Plan

Prepare a comprehensive budget that accounts for all aspects of the project, including infrastructure, equipment, personnel, training, operation, maintenance, and contingencies. Demonstrate financial sustainability by including co-funding sources, such as municipal guarantees or community investments.

Ensure the budget aligns with the funding program's requirements, such as cost-sharing percentages or eligible expense categories. Transparency in your financial planning assures funders of your REC's responsible approach to managing resources.

#### 6.6. Write a Compelling Proposal

Crafting a professional and persuasive funding proposal is critical. Align your proposal with the specific priorities of the funding program, ensuring each section addresses their evaluation criteria. Include:

- Executive Summary: A concise overview of your project, objectives, and alignment with funding goals.
- Project Description: Detailed explanation of the project scope, activities, and expected outcomes.
- Community Impact: Clear articulation of how the project will benefit the local population, such as reducing energy costs, creating jobs, or addressing energy poverty.
- Environmental Impact: Quantifiable reductions in carbon emissions and other environmental benefits.
- Work Plan: A detailed timeline with milestones and deliverables.
- Budget Breakdown: Justifications for all costs with a clear alignment to project activities.

Use concise, evidence-based language and emphasize the unique value proposition of your REC, such as its innovation, scalability, or inclusivity. Tailoring your proposal to the funder's priorities increases your chances of success.

#### 6.7. Submit the Application

Submit the completed application through the designated portal or process for the funding program. Pay close attention to submission requirements, including formatting, word limits, and deadlines, to avoid disqualification. Retain a copy of the submission and note any follow-up timelines for communication with the funding body.

#### 6.8. Follow Up and Address Feedback

After submission, maintain active communication with the funding body. Be prepared to answer questions, provide additional information, or clarify aspects of your proposal. If the application is unsuccessful, request detailed feedback to identify areas for improvement in future submissions. Learning from this feedback can significantly enhance your chances of success in subsequent applications.

#### 6.9. Manage Funds and Reporting

Once funding is approved, responsible fund management is crucial. Maintain detailed financial records, track expenditures, and ensure alignment with the approved budget. Regularly report progress to the funding body, including updates on milestones, outcomes, and challenges. Highlighting the project's impact through clear and transparent reporting not only fulfills your obligations but also strengthens your reputation for future funding opportunities.



## 7. Best Practice – EWS Schönau (Elektrizitätswerke Schönau)

EWS Schönau, one of Germany's leading RECs, originated in the small town of Schönau, Baden-Württemberg, during the 1990s. This grassroots initiative was born out of the community's strong opposition to nuclear energy following the Chernobyl disaster. The residents envisioned an energy system that prioritized clean, renewable sources and democratic control. Over time, this vision transformed into a pioneering REC that became a model for sustainable, community-led energy transitions.

EWS Schönau demonstrates how local action can drive energy independence and sustainability. It highlights the power of citizen ownership in reshaping energy systems, providing invaluable lessons for RECs worldwide.

#### 7.1. Motivation & Goals

The primary objectives of EWS Schönau were to eliminate reliance on nuclear and fossil fuels and transition entirely to renewable energy sources. Central to its mission was the establishment of community ownership, ensuring that the local population could participate in and benefit from energy production. The REC sought to decentralize energy systems, empowering citizens to make decisions about energy management while fostering a culture of sustainability. Additionally, EWS Schönau prioritized public education to raise awareness about the environmental and societal benefits of renewable energy.

#### 7.2. Key Actions and Steps

- Awareness Campaigns (1990s): Educated citizens about the risks of nuclear energy and the benefits of renewables.
- Fundraising for Grid Purchase: Mobilized the community to raise funds for acquiring the local power grid.
- Formation of the Cooperative (1997): Established a citizen-owned cooperative to manage the grid and oversee the energy transition.
- Renewable Energy Adoption: Replaced nuclear and fossil fuel energy sources with solar, wind, and hydroelectric power.

Scaling Operations: Expanded beyond Schönau to supply renewable energy nationwide.

#### 7.3. Stakeholder Involvement

The success of EWS Schönau was rooted in the collaborative efforts of its stakeholders. Local citizens were at the heart of the initiative, providing both financial and moral support. They became co-owners of the cooperative, actively participating in decision-making processes. Local authorities also played a crucial role by supporting the initiative during its formative stages. Technical experts contributed their knowledge to design and implement renewable energy systems, while external partners, including other cooperatives and green energy companies, offered valuable resources and expertise.

#### 7.4. Challenges and Solutions

EWS Schönau faced significant challenges throughout its journey. Following we will try to address these challenges and how they overcome them.

#### 7.4.1. Financial Barriers

Anyone wanting to operate a power grid in Germany must purchase it locally so acquiring the local power grid required substantial capital, a daunting task for a community-driven movement. The previous license holder, which was also involved in the bidding, estimated the net value of the Schönau electricity grid at 8.7 million Deutschmark, while an independent appraisal commissioned by EWS Schönau estimated it at 4 million Deutsche Marks. To proceed, the cooperative decided to pay the higher amount, with plans to contest the valuation legally.

#### **Solutions:**

- Transparent Fundraising Campaign: EWS Schönau launched a public fundraising initiative, emphasizing the importance of local ownership and the environmental benefits of renewable energy. This approach galvanized community support and attracted contributions from across Germany.
- **Affordable Cooperative Shares:** To ensure broad participation, the cooperative offered small, affordable shares, allowing individuals from various economic backgrounds to invest and have a stake in the project.
- **Ethical Bank Loans:** EWS Schönau secured loans from ethical banks aligned with their mission, providing the necessary financial support to complete the grid purchase.

#### 7.4.2. Regulatory Hurdles

Operating within Germany's monopolistic energy market presented regulatory challenges, including obtaining the necessary licenses and navigating complex legal frameworks.

#### **Solutions:**

- **Legal Expertise:** The cooperative engaged legal experts to navigate the regulatory landscape, ensuring compliance and facilitating the acquisition of grid rights.
- **Advocacy and Policy Influence:** Collaborating with advocacy groups, EWS Schönau worked to influence energy policies, setting precedents that benefited other renewable energy communities.

#### 7.4.3. Community Skepticism

Initially, there was skepticism about the community's ability to manage the grid and compete with established energy providers.

#### **Solutions:**

- Community Engagement: EWS Schönau organized meetings, workshops, and town halls to address concerns, provide information, and involve residents in the decision-making process.
- **Showcasing Success Stories:** The cooperative highlighted testimonials and examples from similar initiatives to demonstrate feasibility and build confidence.
- Transparent Governance: By promoting transparency and collective decision-making, EWS Schönau fostered trust and encouraged active participation from community members.

Through these strategies, EWS Schönau successfully transformed challenges into opportunities, establishing a model for community-led renewable energy initiatives.

#### 7.5. Results and Impact

EWS Schönau's achievements have been both quantifiable and qualitative. The cooperative supplies 100% renewable energy to over 200,000 customers across Germany, reducing thousands of tons of CO2 emissions annually. Financially, the cooperative generates significant returns for its members, creating a self-sustaining model for renewable energy production.

On a broader scale, EWS Schönau has empowered communities to take control of their energy futures. It has raised awareness about the benefits of renewable energy, fostered a sense of pride among citizens, and demonstrated the potential of community-driven energy systems.

## 7.6. Lesson learned (Recommendations for Implementation)

## 7.6.1. Begin with small, community-driven initiatives to build trust and support

Start with manageable projects, such as installing solar panels on community buildings or creating a small wind farm. These initiatives serve as tangible demonstrations of benefits, fostering trust and encouraging broader participation. Organize town hall meetings, workshops, and information



sessions to educate and gather input, ensuring that the initiative reflects the community's needs and aspirations.

#### 7.6.2. Secure funding through a mix of community investment and ethical loans

Encouraging local investment by offering shares or memberships in the REC promotes a sense of ownership and shared responsibility while raising essential capital. This community-driven approach strengthens commitment to the project and fosters inclusivity. To complement this, partnering with ethical banks and financial institutions that support sustainable initiatives provides access to favorable loan terms. Additionally, leveraging grants and subsidies available for renewable energy projects further enhances financial resilience and ensures the REC's long-term viability. Together, these strategies create a robust financial foundation for successful renewable energy communities.

### 7.6.3. Partner with experienced cooperatives and renewable energy experts

Partnering with established energy cooperatives and engaging technical experts are critical to the success of RECs. Collaborating with experienced cooperatives provides valuable mentorship, offering insights into best practices, governance structures, and operational strategies while helping avoid common pitfalls. Simultaneously, engaging engineers, project managers, and legal advisors specializing in renewable energy ensures that projects are technically sound, regulatory compliant, and financially viable. These partnerships build a strong foundation for successful and sustainable REC initiatives.

### 7.6.4. Advocate for supportive policies and address regulatory barriers early

Actively participating in policy discussions at local, regional, and national levels is essential to fostering a regulatory environment that supports RECs. Building strong relationships with policymakers helps advocate for favorable regulations and streamline processes. At the same time, identifying potential regulatory challenges early and working with legal experts ensures smooth navigation through permitting, grid access, and compliance requirements, minimizing delays and enhancing the REC's success. This combined approach of proactive engagement and regulatory preparedness lays the groundwork for long-term stability and growth.

## 8. Best Practice – Energiezukunft Fuchstal

Fuchstal, a rural municipality in Bavaria with approximately 4,000 residents, has emerged as a leader in renewable energy innovation through its initiative, Energiezukunft Fuchstal. The project aims to achieve energy self-sufficiency by 2024, integrating multiple renewable energy technologies and leveraging innovative approaches like sector coupling and community engagement. This initiative exemplifies how smaller communities can spearhead sustainable energy transitions, serving as a replicable model for other rural regions aiming to enhance energy independence and reduce carbon footprints.

#### 8.1. Objectives and Goals

The core objectives of the Energiezukunft Fuchstal initiative are clear and ambitious:

- Energy Self-Sufficiency: Achieving 100% energy independence in electricity and heating sectors by 2024.
- Environmental Impact Reduction: Reducing carbon emissions and advancing sustainability goals.
- Economic Resilience: Strengthening the local economy through energy savings, job creation, and enhanced energy security.

These goals highlight the dual focus on ecological sustainability and community development.

#### 8.2. Key Actions and Implementation Steps

The success of the initiative stems from its strategic actions:

- Deployment of Renewable Energy Sources: A diverse mix of photovoltaic systems, hydropower plants, biogas facilities, and a citizen-owned wind park forms the backbone of Fuchstal's energy transition.
- Energy Storage Solutions: Investments in central heat storage systems and battery units enable the efficient management of energy surpluses and demand fluctuations.
- Sector Coupling: Power-to-heat technologies are employed to convert surplus electricity into heat, maximizing resource utilization.
- Community Engagement: Local residents are actively involved through investment opportunities and decision-making processes, fostering ownership and trust.

This integrated approach ensures the efficient and resilient use of renewable energy resources.

#### 8.3. Stakeholder Involvement

Key stakeholders played pivotal roles in the initiative's development and success:

- Local Government: Provided leadership and oversight, ensuring alignment with municipal sustainability goals.
- Residents: Participated through financial contributions and energy-saving programs, reinforcing community ownership.
- Technical Partners: Delivered expertise in renewable energy systems, ensuring technical feasibility and integration.
- Environmental Organizations: Offered guidance on adhering to sustainable practices and regulatory standards.

#### 8.4. Challenges and Solutions

#### 8.4.1. Regulatory Hurdles

Strict regulatory frameworks delayed the approval processes for biogas plants, photovoltaic systems, and wind parks. Navigating these regulations required significant time and resources, especially for environmental impact assessments and grid connection permits.

#### **Solutions:**

The Fuchstal team engaged legal experts to address compliance issues and collaborated with local authorities to streamline approvals. This proactive approach minimized delays and established a model for future projects in the region.

#### 8.4.2. Financial Constraints

The substantial upfront investments required for large-scale renewable energy infrastructure, such as district heating systems and biogas plants, posed significant financial challenges, especially given the municipality's limited budget.

#### **Solution:**

Fuchstal adopted a diversified funding strategy that combined public grants, private investments, and community contributions through cooperative shares. By partnering with ethical banks and green energy funds, the initiative secured favorable loans for infrastructure development. This comprehensive financial approach ensured sufficient capital while distributing financial returns equitably among investors.

#### 8.4.3. Community Skepticism

Initial skepticism among residents stemmed from concerns about the feasibility and benefits of transitioning to renewable energy, including potential cost implications and technical viability.

#### **Solution:**

NRGCOM

The project team conducted extensive community outreach through informational sessions and workshops to educate residents on the advantages of renewable energy, such as cost savings, environmental benefits, and opportunities for profit-sharing. They shared success stories from similar projects, like EWS Schönau, to build confidence in the initiative's feasibility. Establishing a

transparent governance structure, where residents had equal voting rights in cooperative decisions, further fostered trust and accountability.

## 8.5. Lessons Learned and Recommendations for Implementation

The Energiezukunft Fuchstal initiative offers valuable insights into the implementation of RECs. By analyzing its successes and challenges, several lessons emerge that can guide other municipalities in their energy transitions:

- Community Involvement is Paramount: One of the most critical lessons is the importance
  of early and continuous community involvement. Actively engaging residents from the
  outset through workshops, public meetings, and participatory decision-making fosters
  trust, ownership, and long-term commitment. Highlighting tangible benefits such as cost
  savings, job creation, and profit-sharing opportunities helps gain public support and
  enthusiasm.
- Diversification Enhances Reliability: Combining multiple renewable energy sources, such as solar, wind, and biogas, enhances reliability and resilience. Communities should assess their local resources and develop an energy mix that aligns with their unique environmental and geographical conditions.
- Addressing Regulatory Barriers Early Reduces Delays: Proactively addressing regulatory barriers is vital to avoiding delays. The Fuchstal team's approach of engaging legal experts to navigate complex regulations and building relationships with local authorities provides a model for reducing administrative obstacles and streamlining project approvals.
- Financial Strategies Ensure Sustainability: Fuchstal's financial success underscores the
  importance of a multi-pronged funding strategy. By combining public grants, private
  investments, and community contributions, the initiative mitigated financial risks and
  ensured sustainability. Highlighting the project's profitability and environmental impact
  can also attract ethical investors and secure favorable loans.
- Policy Advocacy is Crucial: Supportive policies play a crucial role in enabling local energy initiatives. Advocating for more flexible regulations and aligning community energy goals with national and EU sustainability objectives ensures smoother project implementation. Collaboration with policymakers can help harmonize local needs with broader energy policies.
- Reinvestment Drives Growth: Reinvesting profits into system upgrades, new technologies, and maintenance funds ensures the long-term viability and growth of RECs. By dedicating revenue to continuous improvement, communities can maintain operational resilience and expand their renewable energy capacities.