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Enabling communities to respond to energy, social and environmental needs

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Compendium of Good Practices

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Enabling communities to respond to energy, social and environmental needs

Smart City Initiatives in Banská Bystrica: Path to a Sustainable and Modern Urban Community

LOCATION OF THE PRACTICE

Banská Bystrica, Slovakia

PROBLEM THAT TACKLES

01 Banská Bystrica , located in central Slovakia, has become one of the leading local governments that actively implements projects focused on smart urban solutions, thus becoming an example for other cities in the country.

This article focuses on the extensive Smart City initiatives that Banská Bystrica is implementing to improve the quality of life of residents and contribute to sustainability.

INTERVENTION

Banská Bystrica became one of the first Slovak towns to switch to energy-efficient LED public lighting. This step not only reduces electricity consumption and lighting costs, but also increases safety and comfort for residents. Smart public lighting allows the city to efficiently manage lighting based on daylight and activity on the streets.

The city has invested in electric buses, which are not only environmentally friendly, but also quieter and more comfortable for passengers. Electric buses reduce emissions and improve air quality in the city, thus contributing to a better environment for residents.

The city of Banská Bystrica is engaged in the digitization of public services, which simplifies administrative procedures for residents. Residents can handle various offices and payments online, saving time and reducing transportation and paper agenda costs.

The city cooperates with local start-ups and technology companies to develop innovative solutions for urban challenges. This cooperation supports the local business ecosystem and enables the faster introduction of new technologies and innovations into the city's infrastructure.

Banská Bystrica has introduced an intelligent parking system that allows drivers to find a parking space more easily through mobile applications. This system helps reduce traffic and emissions while making parking easier for residents and visitors to the city.

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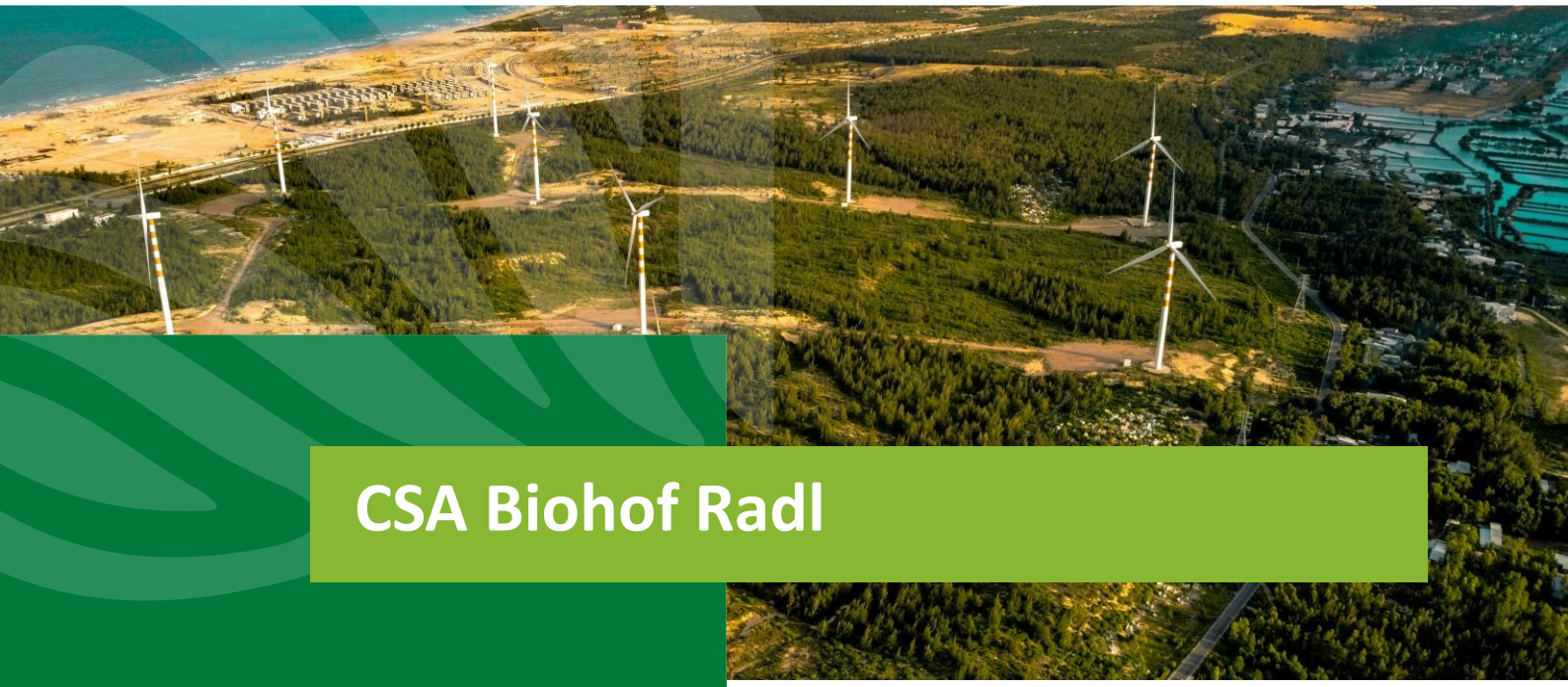
COMPARISON

The green transition is an important part of the Smart City initiatives in Banská Bystrica . Although it is difficult to provide detailed quantitative results, as some initiatives are not yet fully completed, we can evaluate several concrete benefits that Smart City initiatives have brought to the green transition in this city:

- **Reduction of CO2 emissions:** The transition to electric buses in Banská Bystrica contributed to a significant reduction of CO2 emissions in the city's transport system. Electric buses are more environmentally friendly because they produce no emissions during operation and use renewable energy sources, improving air quality in the city.
- **Energy efficiency:** Intelligent public lighting, which is part of Smart City initiatives, is not only energy efficient, but also contributes to the sustainability of the city. These lighting systems respond to ambient lighting conditions, which reduces energy consumption and lighting costs.
- **Promoting sustainable travel:** Smart parking enables drivers to find a parking space faster and more efficiently, which reduces the number of cars on the road and improves traffic flow. This reduces traffic, leading to lower CO2 emissions and a more sustainable urban transport system.
- **Improving the quality of life:** Smart City initiatives not only contribute to sustainability, but also improve the overall quality of life of city residents. Electric buses and smart lighting increase the comfort and safety of residents, while digital services simplify administrative procedures and increase the efficiency of public services.

OUTCOMES

Although some of these initiatives are still ongoing and their results will be fully visible in the future, we can see that the Smart City initiatives in Banská Bystrica has a positive impact on the sustainable and green transition in the city. These initiatives not only reduce emissions, but also increase the quality of life of residents and increase the efficiency of public services. The city has become an example of how technology and innovation can strengthen the green transition and contribute to sustainability at the local level.



CSA Biohof Radl

LOCATION OF THE PRACTICE

Austria

PROBLEM THAT TACKLES

01 Biohof Radl will tackle the issue of locally and sustainably produced and distributed food.

The need for people in the community to have access to seasonal, fresh, and certified organic veggies while encouraging community involvement and bolstering local agriculture is the specific issue at hand.

INTERVENTION

Through the Community-Supported Agriculture (CSA) programme offered by Biohof Radl, members can "rent" a portion of land that the Radl family farms.

Members contribute on a regular basis and receive weekly shares of the farm's harvest, which usually consists of a range of seasonal, organic vegetables. By providing educational materials, hosting community events, and including members in farm labour days, Biohof Radl actively cultivates a feeling of community and encourages involvement in the farm's operations.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

This comparison assesses the Biohof Radl CSA model versus alternative means of obtaining locally grown and organic veggies. It involves contrasting Biohof Radl's CSA's features related to affordability, quality, diversity, and community involvement with other options individuals have for obtaining comparable goods, such as buying from a regular grocery store, signing up for a different CSA, or visiting a farmers' market services.

OUTCOMES

Fresh & Organic Produce: To meet the need for high-quality, locally produced food, Biohof Radl's Community Supported Agriculture (CSA) programme offers members access to seasonal, fresh, and certified organic vegetables.

Building Community: Stronger social ties and a more active community can result from Biohof Radl's efforts to foster a sense of community through events like community nights and farm-work days.

Environmental Impact: Biohof Radl can help lessen the negative effects of agriculture on the environment by encouraging certified organic farming, which uses sustainable and chemical-free methods.
Support for Local Agriculture: The Radl family's farming operation and local agriculture are supported by the CSA model.

Web site: biohof-radl.at/csa

The CEL (Local Energy Community)

LOCATION OF THE PRACTICE

Spain

PROBLEM THAT TACKLES

01 There is a 70% of energetic dependence in Spain apart from a 68% import of energy. That is why it's so necessary to reduce the energy consumption nowadays and become more self-sufficient in order to overcome the effects of the energy crisis.

Likewise, fostering energy saving as well as using a 100% of clean energy is necessary in order to meet the Sustainable Development Goals (SDGs) set by the UN in the 2030 Agenda. Local Energy Communities have as their main objective to produce energy by using renewable resources since they don't generate greenhouse gases nor pollutant emissions, so helping to achieve those SDGs and reduce the negative impact of climate change.

INTERVENTION

The first one of these installations has been located on the roof of La Clau municipal building, which has also been complemented by some others installed upon private and public roofs and whose main objective is to be implemented in as many local households as possible. Solar panels have a service life which exceeds 25 years.

As far as key stakeholders are concerned, it's worth mentioning that the CEL in Alzira is promoted by Sapiens Energía together with the town council of the municipality of Alzira, with the financial support from the Valencian Institute of Business Competitiveness (Instituto Valenciano de Competitividad Empresarial - Ivace) of the Regional Ministry of Sustainable Economy, through the 'Energy Communities Programme of the Valencian Autonomous Community 2020' (Comunidad Valenciana - C.V.), specifically 23,174.33€.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

There were 121 energy communities in Spain at the beginning of 2023, with a total of 6,400 kWp of installed power, so those energy communities had an average of 52,89 kWp of installed power. A whole of 3,146 households are benefitting from it, that is, an average of 26 households per community and 19,201 people, meaning an average of 159 people.

As for the tons of CO2 emissions reduced, these were 2,071 per year, which amounts to an average of 17.12 tons per year, corresponding to 102 trees per year, since 6 trees are equivalent to the reduction of 1 ton of CO2.

After having gathered all the information above, we can state that this community, compared to the average, has a 69% less installed power, that is, 81% fewer users can benefit from it and it has a CO2 reduction of 1,000 trees every ten years, which means a similar rate to the average.

OUTCOMES

This system can supply those electric needs of about 30 users in the town using 16.61 KWp of installed power. It represents some savings of about 20-30% of the annual bill for those households and organizations which have joined it.

It’s a booster of the economic activity and employment in the town. Moreover, some contribution will be destined to families experiencing energy poverty. A CO2 emission reduction is expected, comparable to planting more than 1,000 trees in 10 years.

SMART Green Mohill

LOCATION OF THE PRACTICE

Ireland

PROBLEM THAT TACKLES

01 Amidst the sweeping tide of brain drain, rural depopulation and emigration, a fading retail streetscape, and diminishing traditional employment opportunities, Mohill seemed poised to become yet another fading Irish town.

But for the resilient community of Mohill, adversity was a catalyst for reinvention. The launch of SMART Green Mohill showcased the shared determination of the community and local government to redefine its future.

The starting vision of SMART Green Mohill, was to create a sustainable town which is smart in the way people live, work and learn, working with home owners, businesses and properties in public and community ownership to improve their town.

INTERVENTION

Over the last few years, Mohill's businesses and local communities have been developing the SMART Green Brand.

SMART – In how the town looks. In how they look after their residents. In how they adapt to technology.

GREEN – In how they use energy. In how they provide amenities. In growing their own produce.

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PROGRESS WAS MADE STEP-BY-STEP

- Mohill was actually one of the first communties to establish a Sustainable Energy Community (SEC) under the Sustainable Energy Authority Ireland (SEAI) Programme in 2016. A SEC is a community in which everyone works together to develop a sustainable energy system.
- Over one hundred people had their say at workshops held in the Canon Donohoe Hall about the Mohill they want in the future.
- The development of a Community Charter. Their vision for Mohill SEC is to promote local pride by building on existing community ambitions to create an Eco Town.
- Investment in revitalising the local buildings in the town, including business premises, vacant buildings as well as derelict ones, giving a whole new fresh look to the entire town.
- Established hot desks in the local Enterprise Centre, to accommodate those working remotely.
- Produced an Economic Development Plan for the town and also an Energy Masterplan. The Economic Development Plan received funding under the Towns and Villages Renewal Scheme and Mohill Sustainable Energy Community (SEC) was granted €20,000 by SEAI to carry out an Energy Master Plan.

OUTCOMES

Over the next few years, SMART Green Mohill wants to:

- Establish and maintain a Community Energy Plan for Mohill including a minimum of 6 major energy using facilities in the next year.
- Recruit a further 10 major energy using facilities to the Community Energy Master Plan with the next 2 years.
- Reduce energy use by 20%, through efficiency measures in the key facilities.
- Increase the use of local renewable energy in the key facilities by 20%.
- Initiate a project of at least 1 key facility which aims towards net zero energy use.
- Investigate and promote local options for Electric Vehicle use.
- Explore options for a community energy generator.
- Identify and attend a minimum of 3 energy related training or information events per year.

Cooperative of Melpignano

LOCATION OF THE PRACTICE

Italy

PROBLEM THAT TACKLES

01 It was used to happen that a multinational arrived from outside, installed its plant, took the incentives for 20 years and then left. And the land was left with nothing but ugliness.

This was a phenomenon that the administration wanted to fight, without saying no to renewable energy.

INTERVENTION

Citizens have been invited to put photovoltaic panels on their roofs to benefit themselves. A photovoltaic system was built on the roofs, so that it was not visible from the ground. In this way it would have had no landscape or environmental impact.

All of this was done through a cooperative. The members are those who decide to have a plant on the roof. The incentives are taken by the cooperative, which initially spent the money on photovoltaic systems. The benefits do not return directly to the members who have the photovoltaic panel on the roof, but to the whole community.

The member who makes a roof available has one benefit: being able to consume the energy that is produced for free while it is being produced and, also, that on-the-spot exchange that allows you to receive compensation for the energy fed into the grid and not consumed.

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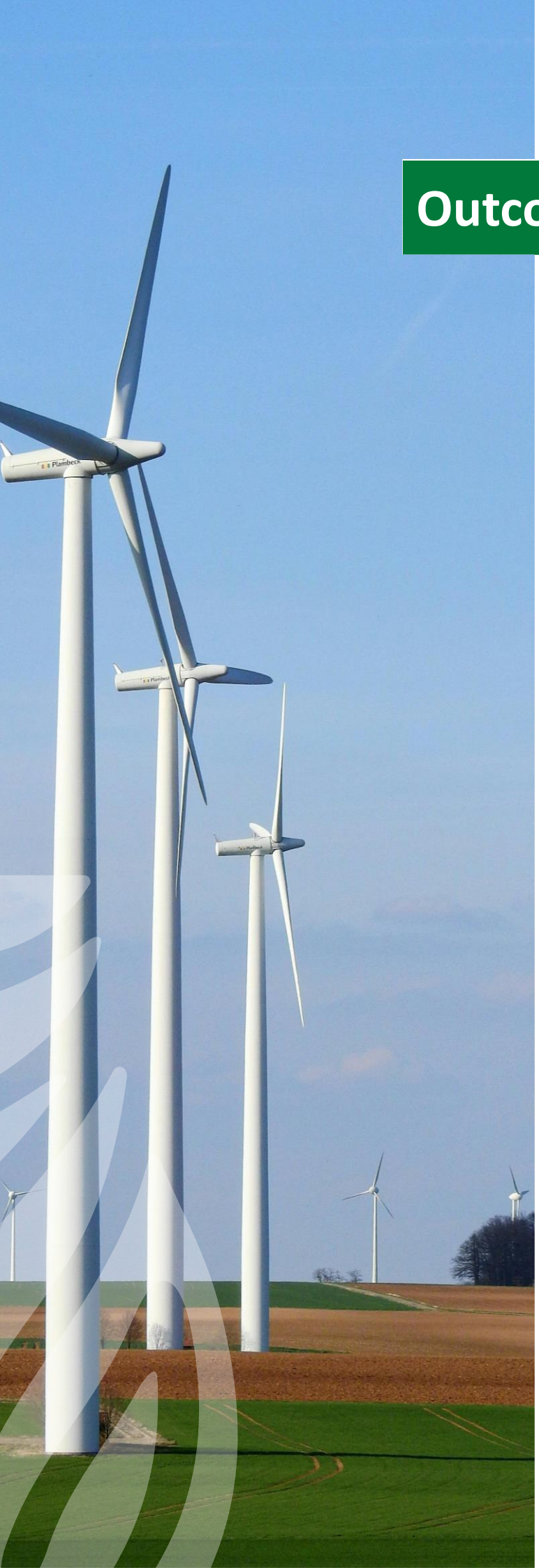

Outcomes

All the people of Melpignano have worked thanks to the photovoltaic systems. Apart from the purchase of photovoltaics, at that time there was nothing built in the area.

Therefore, they were bought from afar. However, the engineers who did the planning, those who took the surveys, the blacksmith to assemble the skeleton of the photovoltaic systems, the electricians. They were all people and partners from Melpignano. Thus, the economy has been boosted.

“Community workshops” were created, which are a way of confronting each other. We thus saw what the community's needs were in order to be able to intervene with ad hoc projects.

Detva: A City in Central Slovakia Actively Use Solar Power plants and Biomass

LOCATION OF THE PRACTICE

Slovakia

PROBLEM THAT TACKLES

01 Detva has become a model example of a city that actively invests in renewable energy sources. Solar power plants on the roofs of public buildings and the use of biomass for heating represent not only financial savings, but also a commitment to sustainability and environmental protection.

Detva shows that even small towns can play an important role in efforts to reduce emissions and increase energy efficiency at the local level.

INTERVENTION

Detva, a small town in central Slovakia, has become an example of how local communities can actively approach the use of renewable energy sources. Detva invests in a solar power plants on the roofs of public buildings and uses biomass to heat local buildings.

Solar power plants are one of the most striking examples of the involvement of the city of Detva in the field of renewable energy sources. Solar panels have been installed on the roofs of public buildings, including schools, libraries and sports complexes. These panels are used to generate electricity from the energy of solar radiation.

Detva uses biomass to heat public buildings and local households. Biomass includes organic material such as wood chips, sawdust and wood shavings that are collected and burned for heating.

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COMPARISON

Advantages of Solar Power Plants:

1. **Renewable Source:** Solar energy is a renewable source that does not deplete fossil fuels and does not contribute to greenhouse gas emissions.
2. **Lower Costs:** Using solar power plants means lower electricity costs for the city and its residents. The city thus saves money and can reinvest these funds in other projects.
3. **Independence:** Detva becomes less dependent on external energy suppliers and price fluctuations because it generates its own electricity.
4. **Environmental Benefits:** The use of solar power plants reduces greenhouse gas emissions, thus contributing to environmental protection.

Advantages of Biomass:

1. **Renewable Source:** Biomass is a renewable source of energy because it can be obtained in a sustainable way.
2. **Regional Independence:** The use of local biomass means that the city is not dependent on fossil fuel supplies, which contributes to greater energy independence.
3. **Lower Costs:** Using biomass can mean lower heating costs because biomass is a locally available resource.
4. **Local Support:** Support for local biomass processing projects can mean job creation and strengthening of the local economy.

OUTCOMES

One of the key factors in the success of the projects in Detva was the involvement of the local community. The residents of Detva were informed about the benefits of solar power plants and the use of biomass, not only in terms of financial savings, but also in terms of environmental protection and sustainability. The local government worked to support these projects and encouraged residents to get involved.

The future of Solar Power Plants and Biomass in Detva:

Detva plans to continue expanding solar power plants to more public buildings and continue using biomass for heating. In addition, the City is committed to monitoring and maintaining these systems to ensure their long-term effectiveness and reliability.

Ouvertura

LOCATION OF THE PRACTICE

Austria

PROBLEM THAT TACKLES

01 Ensuring that everyone has access to healthy food and that nature is preserved is the issue that Ouvertura aims to solve.

They understand that conventional market-driven agriculture systems frequently result in unfair access to food, unsustainable practises, and exploitation.

INTERVENTION

Ouvertura's departure from the market economy is a novel strategy. Rather, they have switched to a model in which the people the farm feeds jointly pay the operation. Members are free to select their own financial contributions according to their own financial situation.

The different strategy seeks to level the playing field for all parties and frees the farm from the restrictions imposed by the worldwide pricing war. They deliver pre-packed food boxes to pick-up locations in Vienna, Mauer, Mödling, Gänserndorf, and Moosbrunn, among other places.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

The comparison for Ouvertura's intervention would involve evaluating their approach against traditional market-based agriculture, where food production and distribution are determined by market forces, and prices are set competitively. Additionally, comparisons could be made with other alternative food distribution models or community-supported agriculture (CSA) initiatives.

OUTCOMES

Encouraging Sustainable Agriculture: Ouvertura encourages environmentally friendly and sustainable agricultural practises by stepping away from the market economy and concentrating on community assistance.

Financial Inclusivity: Encouraging members to select their own financial contributions can help to foster inclusivity by removing financial barriers to obtaining wholesome food.

Building Community: Members may feel more connected to one another as a result of the shared financial model and distribution stations spread throughout different areas.

Environmental Conservation: Ouvertura supports environmentally responsible and sustainable farming practises, which helps to preserve the environment.

The CEL in Llíria

LOCATION OF THE PRACTICE

Spain

PROBLEM THAT TACKLES

01 There is a 70% of energetic dependence in Spain apart from a 68% import of energy. That is why it's so necessary to reduce the energy consumption nowadays and become more self-sufficient in order to overcome the effects of the energy crisis.

Likewise, fostering energy saving as well as using a 100% of clean energy is necessary in order to meet the Sustainable Development Goals (SDGs) set by the UN in the 2030 Agenda.

INTERVENTION

The first of the photovoltaic installations of the Local Energy Community in Lliria has been located on the roof of the Local Police building, which has also been complemented by some others installed upon private and public roofs and whose main objective is to be implemented in as many local households as possible.

Solar panels have a service life which exceeds 25 years. As far as key stakeholders are concerned, it's worth mentioning that the CEL in Lliria is promoted by Sapiens Energía, an energy community of renewable energies constituted as a cooperative, together with the town council of the municipality of Lliria, with the financial support from the Valencian Institute of Business Competitiveness (Instituto Valenciano de Competitividad Empresarial - Ivace) dependent on the Regional Ministry of Sustainable Economy and Productive Sectors of the Valencian Autonomous Government, amounting to 35,378.85 €, through the 'Energy Communities Programme of the Valencian Autonomous Community 2020

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

There were 121 energy communities in Spain at the beginning of 2023, with a total of 6,400 kWp of installed power, so those energy communities had an average of 52,89 kWp of installed power.

A whole of 3,146 households are benefitting from it, that is, an average of 26 households per community and 19,201 people, meaning an average of 159 people. As for the tons of CO2 emissions reduced, these were 2,071 per year, which amounts to an average of 17.12 tons per year, corresponding to 102 trees per year, since 6 trees are equivalent to the reduction of 1 ton of CO2.

After having gathered all the information above, we can state that this community, compared to the average, has a 25% less installed power, that is, 69% fewer users can benefit from it and it has a CO2 reduction of 1,000 trees every ten years, which means a similar rate to the average.

OUTCOMES

This system can supply those electric needs of between 40 and 50 users in the town using 39,39 KWp of installed power among households, SMEs and some small businesses and buildings of public property and use.

It represents some savings of about 20-30% of the annual bill for those households and organizations which have joined it.

A CO2 emission reduction is expected, comparable to planting more than 1,000 trees in 10 years. It's a booster of the economic activity and employment in the town. Moreover, some contribution will be destined to families experiencing energy poverty.

Cloughjordan Eco Village

LOCATION OF THE PRACTICE

Ireland

PROBLEM THAT TACKLES

01 For decades, Cloughjordan and North Tipperary suffered from a weak urban fabric of towns and villages in addition to a wide dispersal of housing in the countryside.

This pattern was amplified in recent years where the numbers moving out to the countryside increased without a balancing increase in the population of villages and towns.

As background to this initiative, Cloughjordan experienced a population decline of -8.6% in the 2002-2006 Census period, from 431 to 394 residents.

INTERVENTION

Ecological building standards have been adhered to in terms of the construction of the Eco village. The buildings are well insulated as well as covering issues of air-tight construction, ventilation, and maximising natural light and heat through building south-facing.

The building material is non-toxic in nature and regionally sourced and with low embodied energy. The village has pioneered the use of different building types such as passive timber-frame, Durisol blocks of chipped waste wood bonded with eco-cement, cellulose, hemp-lime, and cob.

Co-funded by the Erasmus+ Programme of the European Union

INTERVENTION

• The majority of the 55 houses in the ecovillage have installed photovoltaic panels to generate energy.

• Biomass-fuelled district heating system: All homes in the ecovillage depend on the district system for the supply of hot water and heating. The heating plant contains two 500-kilowatt wood-chip boilers backed up by 500 m2 of solar (thermal) panels.

This system is the first of its kind in a private housing development in Ireland and is estimated to save some 113.5 tonnes of carbon emissions annually over what would be emitted by an equivalent size development using conventional heating methods. The plant supplies hot water daily to all homes via a well-insulated network of piping and the water is stored in each house in an insulated storage tank supplying hot water and heating.

OUTCOMES

The village now has the lowest Ecological Footprint in Ireland. This is the lowest ever measured in Ireland. The Cloughjordan project supports its status as an ecovillage: its ecological building standards, its carbon-neutral District Heating System and its food system centred on Cloughjordan Community Farm.

The Eco Village has grown over the last twenty years. The village has one hundred residents living in 55 Eco-homes, a bakery, an enterprise centre and a hostel which are powered by solar and district heating systems.

The village has an amphitheatre and a community farm with 16 acres of broadleaved forestry is maturing nicely; a meandering biodiversity trail, colloquially known as the “perimeter walk”, is trod daily by eco-villagers and locals alike. There’s also a steady trail of students, both from school and university, who come to learn in the community.

Respira

LOCATION OF THE PRACTICE

Italy

PROBLEM THAT TACKLES

01 RESPIRA is promoted by the Coopfond mutual fund, by Legacoop, by Banca Etica and by Ecomill, a crowdfunding company for energy transition in the portfolio of the Giordano Dell'Amore Social Venture Foundation.

It intends to support the development of Renewable Energy Communities (CERs) in cooperative form, capable of helping the environment and the accounts of families and businesses at the same time.

PROBLEM THAT TACKLES

Energy communities are a new and functional model of citizens' involvement in "energy" projects capable of placing people and communities back at the centre of production processes, generating economic benefits, bringing resources back to the territories, with the possibility of actively participating to the energy transition.

Co-funded by the Erasmus+ Programme of the European Union

INTERVENTION

RESPIRA partners are able to guide citizens and businesses through all phases of the process of building and starting a renewable energy community. A team of experts is, in fact, available in the various areas involved:

• Legacoop supports the proponents in fulfilling the regulatory and statutory aspects necessary for the establishment of a CER in cooperative form;

• Coopfond offers financing in the form of equity;

• Ecomill makes its crowd investing platform available for a participatory equity collection between citizens and members of cooperatives;

• Banca Etica makes loans and other financial instruments available for the implementation of suitable projects;

• RESPIRA's ESCo (Energy Service Company) partners take care of the technical aspects, from the feasibility study to the definition of the best system choices.

OUTCOMES

RESPIRA partners have made themselves available to support organised groups of citizens, cooperatives and other companies, public bodies in the construction and launch of an energy community in a cooperative form, adapting its offer to each specific community, territory, need, making available a chain of technical and financial partners.

Adopting an innovative and almost unique cooperative approach.

https://www.respira.coop/

Banská Štiavnica: Intelligent Publicly Lighting for Savings Energy and Improvement Public Infrastructures

LOCATION OF THE PRACTICE

Slovkia

PROBLEM THAT TACKLES

01 The city of Banská Štiavnica, situated in the heart of Slovakia, is great example how intelligent public lighting can improve energetic efficiency a infrastructure of the city.

Banská Štiavnica invests in modern public lighting system, which combines technology and sustainable solutions with a goal to reach savings energy, increase safety and improve quality of life.

INTERVENTION

Banská Štiavnica is an example of good practice in the using of intelligent and energy saving public lighting system and improvement of public infrastructure. Project shows how modern technology and sustainable solutions can be successfully implemented in historical cities. This approach can increase energetic efficiency and quality of life. The project can also to serve as an inspiration for other communities how to reach sustainability a energetic efficiency.

Smart public lighting in Banská Štiavnica combines modern technology with traditional historical character of the city. Solar panels and LED lamps have been installed on strategic places all over the city. These solar panels collect sun light, transform it to the electricity and after sunset the lamps use it for night lighting. Technologies, including sensors, timers and remote control, allow precise management and monitoring of public lighting.

Co-funded by the Erasmus+ Programme of the European Union

Comparison

Advantages of the Intelligent public lighting system:

Savings Energy: The main advantage of the intelligent public lighting represents energy savings. Solar panels and LED lamps are energetically more efficient and reduce costs for electric energy.

Protection of Living environment: Using renewable energy and solar panels reduce emissions greenhouse gases and reduces ecological imprint of the city.

Safety: Smart public lighting system increases security of residents and visitors. High quality LED lights improve visibility and reduce risk of accidents and crimes.

Long term Sustainability: Investments in smart public lighting system have long term effect. The city becomes energetically more efficient and can reinvest savings to another projects and services.

Improved Quality of Life: Quality of public lighting system improves overall quality of life in the city and makes public spaces more attractive. The system also provides more opportunities for night activities and cultural events.

OUTCOMES

Integrated Solutions:
Project of the Intelligent public lighting system in Banská Štiavnica is not limited only for lighting. The city integrates also another solutions to its infrastructure. That includes monitoring quality of the air, traffic and parking sensors, or digital waste management. These integrated solutions allow to local self-government better manage operation and services.

Community Support:
Banská Štiavnica realizes importance involvement of local communities to its projects. Local self-government with the city residents closely cooperates and consider their feedback and ideas for improvements. The city implements educational programs on sustainability and green solutions to educate their own inhabitants as well.

Energiepflanzen GmbH

LOCATION OF THE PRACTICE

Austria

PROBLEM THAT TACKLES

01 One major global challenge is the increasing need for sustainable energy sources and a decrease in carbon emissions.

It is also necessary for the agriculture industry to switch to more ecologically friendly methods.

INTERVENTION

Reinhardsperr and Energiepflanzen GmbH have intervened on several occasions to solve these difficulties.

To aid in the energy transition by offering large and rapidly growing biomass supplies, they planted energy crops like poplars and energy grasses.

Their devotion to ecological sustainability was demonstrated when they started a CO2-free mobile initiative.

To guarantee that trees are planted in Africa as part of their energy crop sales in Europe, Reinhardsperr started a tree-planting initiative in Tanzania in partnership with Be so free.

When placing orders, customers can assist the tree-planting programme by voluntarily contributing a certain quantity of CO2.

Co-funded by the Erasmus+ Programme of the European Union

OUTCOMES

By extending their energy crop operations to other European nations, they have decreased CO2 emissions and replaced heating oil.

They have tangibly aided in reforestation and sustainable resource use in Africa by starting the tree-planting project in Tanzania.

Customers' voluntary CO2 contributions indicate that people are becoming more conscious of and supportive of their environmental activities.

Reinhardsperr and Energiepflanzen GmbH are proponents of environmentally sustainable practises and are actively involved in the energy transition.

https://www.coopbiccari.it/chi-siamo/
https://www.energiepflanzen.com/

The CEL in Crevillent

LOCATION OF THE PRACTICE

Spain

PROBLEM THAT TACKLES

01 There is a 70% of energetic dependence in Spain apart from a 68% import of energy. That is why it's so necessary to reduce the energy consumption nowadays and become more self-sufficient in order to overcome the effects of the energy crisis.

Likewise, fostering energy saving as well as using a 100% of clean energy is necessary in order to meet the Sustainable Development Goals (SDGs) set by the UN in the 2030 Agenda.

INTERVENTION

Their installations have a surface area of 15,000 squared metres, among which 21 municipal public facilities are used to install some collective self-consumption cells.

As far as key stakeholders are concerned, it's worth mentioning that the budget provided for the site refurbishment, led by the local electricity cooperative Enercoop, amounts to 400,000 euros, of which 300,000 are financed by MERLON innovation project.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

There were 121 energy communities in Spain at the beginning of 2023, with a total of 6,400 kWp of installed power, so those energy communities had an average of 52,89 kWp of installed power. A whole of 3,146 households are benefitting from it, that is, an average of 26 households per community and 19,201 people, meaning an average of 159 people.

As for the tons of CO2 emissions reduced, these were 2,071 per year, which amounts to an average of 17.12 tons per year, corresponding to 102 trees per year, since 6 trees are equivalent to the reduction of 1 ton of CO2. After having gathered all the information above, we can state that this community, compared to the average, has a 127% higher installed power, that is, 169% more users can benefit from it.

OUTCOMES

This system can supply those electric needs of 70 households, using 120 kW.
Its 200 kWh system will allow citizens to store some energy during the day in order to be consumed at night, so as not to be depended on some external power supply in case of any blackouts.

It represents some savings for both households and organisations that amount to about 15%-20% of the total annual bill. It is a key factor in boosting the economic activity and employment in the municipality.

Green Skibbereen

LOCATION OF THE PRACTICE

Ireland

PROBLEM THAT TACKLES

01 In 2016, more than 9,357 households (20,844 people) in West Cork Municipal District were living in accommodation constructed before 1970, with the majority being heated by fossil fuels.

85% of buildings that will be used in the Green Skibbereen initiative have already been built, meaning that retrofitting is a massive part of the solution for sustainable communities.

Green Skibbereen was born from a group of friends looking at what they could do within their community to eradicate carbon. Today, Green Skibbereen is formally constituted as a not for profit CLG and brings together a wealth of business, training and community knowledge, a commitment to social justice and is rooted in the West Cork community.

Green Skibbereen has been established to address the challenge of moving to low carbon energy through actively engaging, educating and facilitating a whole community approach, that is driven by local people, businesses and organisations rather than top down, one size fits all schemes that can struggle to reach rural areas.

Co-funded by the Erasmus+ Programme of the European Union

INTERVENTION

Green Skibbereen is a truly community-led project. It was born from concerned local stakeholders looking at what they can do to reduce the impact of their rural town. Through active engagement with the broader community, they have worked on this idea and are setting an example for what towns around Ireland and Europe can achieve.

In the short term, the plan was to develop a Sustainable Energy Community, applying for funding for a Masterplan, to identify energy retrofitting opportunities and renewable energy opportunities in the region, whilst working with NCE's Energy Hub to access SEAI funding for Better Energy Community Grants.

Following Green Skibbereen's first meeting in November of 2019, the vision was set, and the community was mobilised to start greening Skibbereen starting with 3 case study organisations as proof of concept consisting of Baltimore Pool, Drinagh co-op and O'Donnell Furniture. The working group were able to secure funding from SEAI under the 2020 community grants project and deliver 10 energy efficiency projects throughout the community.

Under the same aim, it works to promote awareness and understanding of the need for community action on climate change in Skibbereen & West Cork and encourage the uptake of renewable energy and energy efficiency measures by the local community. The Green Skibbereen Steering group identified the opportunity of establishing a Centre for Excellence for Climate Action & Sustainability (CECAS) at Myross House just outside of Skibbereen and approached the owners. In 2021, they carried out feasibility studies and went about sourcing funding for the centre.

OUTCOMES

Born from a group of local stakeholders identifying that something needed to be done about climate action within the community, Green Skibbereen has successfully delivered energy efficiency projects and has set up a Centre of Excellence for Climate and Sustainability https://cecas.ie/ . CECAS is an inclusive, effective, practical and innovative centre for investigating and demonstrating practical solutions to Climate Change and Biodiversity loss.

The CECAS land bank provides the opportunity to research and raise awareness about both sustainable infrastructure and communities, and the importance the preserving biodiversity and how that interconnect with climate action. CECAS operates an education centre where students come and learn about the environment.

Other plans include a business hub, an accommodation centre, a training & research hub, an events centre (hosting green weddings and concerts), a well-being centre and other important community learning projects.

Community of Biccari

LOCATION OF THE PRACTICE

Italy

PROBLEM THAT TACKLES

01 The Community Cooperative of Biccari (C.C.B.) represents a special model of social aggregation capable of building answers shared by citizens to collective needs, making their creativity, skills and know-how available.

It is a project characterized by strong social innovation and based on sharing: the citizen-members identify needs together, develop ideas and build a response path consistent with the resources available in the area.

INTERVENTION

The intent of the Promoting Committee, in particular, was to build an intra-generational and complementary pact in terms of professional skills and work experience in order to enhance the potential of the Biccarese area.

Through the recovery and management of unused or undervalued public assets, the Cooperative has the objective of building alliances on the territory and recovering the dormant heritage, trying to put it into a system and make it productive, both from an economic and social.

OUTCOMES

To date, the C.C.B. unites about 200 biccaresi (number in constant growth), divided into working members, sovventori and users, grouping together different working figures (freelancers, workers, students, traders, pensioners, etc.) and age groups (from 18 to 90 years old).

https://www.coopbiccari.it/chi-siamo/

Co-funded by the Erasmus+ Programme of the European Union

Dolná Krupa : Example Communities Exploiting Solar Renewable and Reduction Power Plants Energy Costs

LOCATION OF THE PRACTICE

Slovakia

PROBLEM THAT TACKLES

01 Dolná Krupa, small village in Slovakia, becames an example how community can active uses solar power plants and other green reduction solutions to reduce energy costs.

Their importance for sustainability and environmental protection is not negligible.

INTERVENTION

Projects realised in Dolná Krupa using renewable energy resources do not contribute only to the financial savings but have a significant impact on sustainability and protection of life environment. Dolná Krupa shows that also small villages can play important role in the effort to reduce emissions and increase energy efficiency on the local level.

Solar power plants were one of the key ones elements projects in Dolná Krupa. These power plants have been installed on roofs of public buildings, such as schools or municipal infrastructure. Their main task is to generate electric energy from the Sun light.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

Advantages of Solar power plant:

1. **Lower Costs:** Using the Solar power plant means lower electricity costs. Dolná Krupa has been achieved significant financial savings. This allows to invest these funds to other projects and services for citizens.

2. **Independence:** Own source of solar energy allows the village less dependency from external suppliers' energy and price fluctuations.

3. **Energetically Effectively Public Buildings:** Municipality modernized public buildings to increase their energy efficiency. These adjustments include isolation of buildings, installation energetically effective windows and control temperature systems.

4. **LED Lighting:** Replacement of a traditional public lighting for energy efficient LED lights meant lower energetic cost to the municipality and better lighting at public premises .

5. **Programs for Effective Heating:** Dolná Krupa supports efficiency energy programs for its local inhabitants. These programs including installations energetically effective heating systems and isolation of houses and thus help to reduce energetic costs of households.

OUTCOMES

Involvement of local community was a key factor for success projects in Dolná Krupa. Residents of the village were informed about benefits and advantages of green solutions and solar power plants. Their support a engagement led to a successful enforcement these projects.

Dolná Krupa planning continue to expand solar power plants to another buildings and areas in the village. In addition to that committed to monitoring and maintenance these systems to ensure their long-term sustainability efficiency and reliability.

Energiegenossenschaft Mürztal

LOCATION OF THE PRACTICE

Austria

PROBLEM THAT TACKLES

01 Clean and sustainable energy sources are required to lessen climate change and cut carbon emissions.

Promoting ethical and sustainable land usage in agriculture is essential. Austria, a nation that has been actively engaged in the energy transition and sustainable agricultural practices, provides context

INTERVENTION

To help with the energy shift and lower carbon emissions, they have planted energy grasses and poplars, which grow quickly.

To demonstrate their dedication to ecological sustainability, they have started a CO2 free mobile initiative.

By adding a CO2 quantity to their orders, customers have the option to voluntarily contribute to the tree planting initiative, encouraging group action for ecological sustainability.

OUTCOMES

By extending their energy crop operations to other European nations, they have decreased CO2 emissions and replaced heating oil.

Customers' voluntary CO2 contributions demonstrate an increasing understanding of and support for their environmental activities. It is proponents of eco-friendly practises and are actively involved in the energy transition.

Co-funded by the Erasmus+ Programme of the European Union

The CEL in Albalat dels Sorells

CATEGORY

Click to type...

LOCATION OF THE PRACTICE

Spain

PROBLEM THAT TACKLES

01 There is a 70% of energetic dependence in Spain apart from a 68% import of energy. That is why it's so necessary to reduce the energy consumption nowadays and become more self-sufficient in order to overcome the effects of the energy crisis.

Likewise, fostering energy saving as well as using a 100% of clean energy is necessary in order to meet the Sustainable Development Goals (SDGs) set by the UN in the 2030 Agenda.

INTERVENTION

The first one of the two installations is located on the roof of the AlternaCoop eCoworking and in a warehouse of the Cooperativa Agrícola Santos de la Piedra. The second one, in particular, is located in the cooperative warehouse located at C/Puig de Santa María (P.C. Cant, 5).

As far as key stakeholders are concerned, it's worth mentioning that the CEL in Albalat is promoted by Sapiens Energía - a renewable energy community established as a cooperative, -AlternaCoop - a cooperative that works to boost shared mobility- and the town council, with the cooperation of Cooperativa Agrícola Santos de la Piedra. In addition, the two solar roofs have received subsidies from the Valencian Institute of Business Competitiveness (Ivace), part of the Department of Sustainable Economy and Productive Sectors of the Valencian Autonomous Government, through the '2020 Energy Communities Programme of the Valencian Autonomous Community.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

There were 121 energy communities in Spain at the beginning of 2023, with a total of 6,400 kWp of installed power, so those energy communities had an average of 52,89 kWp of installed power.

A whole of 3,146 households are benefitting from it, that is, an average of 26 households per community and 19,201 people, meaning an average of 159 people. As for the tons of CO2 emissions reduced, these were 2,071 per year, which amounts to an average of 17.12 tons per year, corresponding to 102 trees per year, since 6 trees are equivalent to the reduction of 1 ton of CO2.

After having gathered all the information above, we can state that this community, compared to the average, has a 131% higher installed power, when adding both installations; so, 188% more households can benefit from it and it has a CO2 reduction of 1,000 trees every ten years, which means a similar rate to the average.

OUTCOMES

The AlternaCoop installation can supply the electricity needs of more than 60 households, several companies and public buildings with 68.85 kWp of installed power and 23 kWp of storage. The second photovoltaic generation infrastructure of the Local Energy Community in Albalat dels Sorells has an installed capacity of 53,46 kWp, which will supply 15 small companies in the industrial park in Albalat.

A CO2 emission reduction is expected, comparable to planting more than 1,000 trees in 10 years. It's a booster of the economic activity and employment in the town. Moreover, some contribution will be destined to families experiencing energy poverty.

Templederry Renewable Energy Supply

LOCATION OF THE PRACTICE

Ireland

PROBLEM THAT TACKLES

01 The need for Community Power, Ireland's first community-owned electricity supplier, arose from the desire to address the challenges in Ireland's energy system.

The group recognises that Ireland's energy system is in crisis, with over 90% reliance on climate-polluting fossil fuels, but many people are struggling to pay high energy bills in cold homes. That's why Community Power is working to make sure the many benefits of generating renewable power are shared by the people and communities of Ireland.

There was a need to transition to clean, renewable power sources and ensure that the benefits of generating renewable energy are shared by the people and communities of Ireland.

Co-funded by the Erasmus+ Programme of the European Union

INTERVENTION

The intervention taken by Community Power involved the set up of Ireland's first community owned windfarm the Templederry Wind Farm in Co Tipperary. Over a period of 12 years, they developed and built this wind farm which generates approximately 15 GWh of electricity annually, which is the equivalent to the energy used by the town of Nenagh (8,000 population).

Following the success of the wind farm, Community Power expanded their practices to work with more Irish communities to develop more renewable energy projects owned by the people. They now buy renewable electricity from various small and micro hydro and wind generators across Ireland and sell it to their customers to use in their homes, businesses, farms and community buildings.

The main goal is to provide communities with access to clean, renewable power and ensure that they have a real stake in it by being community owned. By partnering with community energy organisations and gaining support from various groups and communities, Community Power actively promotes and supports a sustainable energy future for Ireland.

OUTCOMES

The key outcomes from the Templederry Renewable Energy Supply initiative include:

- Increased renewable energy generation through the wind farm and collaboration with other small hydro and wind generators, they contribute to increased energy production in Ireland, reducing fossil fuel reliance, helping contribute to the country's efforts to combat climate change.

- Using the community-owned approach, it empowers local communities, giving them a sense of ownership and responsibility for their own energy, resulting in a better engagement in renewable energy projects.

- By providing renewable electricity to the community, means they are actively contributing to the reduction of energy bills, meaning fewer cold homes and happier locals.

The efforts of Community Power are contributing to Ireland's goal of transitioning to a more sustainable energy system, ensuring a cleaner and greener future for the country.

Network of sustainable municipalities

LOCATION OF THE PRACTICE

Italy

PROBLEM THAT TACKLES

01 The Community Cooperative of Biccari (C.C.B.) represents a special model of social aggregation capable of building answers shared by citizens to collective needs, making their creativity, skills and know-how available.

It is a project characterized by strong social innovation and based on sharing: the citizen-members identify needs together, develop ideas and build a response path consistent with the resources available in the area.

INTERVENTION

The intent of the Promoting Committee, in particular, was to build an intra-generational and complementary pact in terms of professional skills and work experience in order to enhance the potential of the Biccarese area.

Through the recovery and management of unused or undervalued public assets, the Cooperative has the objective of building alliances on the territory and recovering the dormant heritage, trying to put it into a system and make it productive, both from an economic and social.

Co-funded by the Erasmus+ Programme of the European Union

OUTCOMES

The Network of Sustainable Municipalities makes the following activities:

– Using a “set” of objective, scientific and authoritative indicators to measure sustainability policies and the effects of local government choices;

– Accompany the Municipalities in strategic planning, in the drafting of "Action plans for the sustainable municipality", Local Agendas 2030 and DUP aimed at improving the indicators and therefore the quality of life and the environment of local communities;

– Network the Municipalities and the Unions of Municipalities in order to encourage the comparison and exchange of experiences, good practices, ideas and projects;

– Helping Municipalities to seize project funding opportunities through participation in European, national and regional tenders;

– Contribute through communication and participation campaigns to raise awareness among citizens, civil society and businesses of sustainability issues in order to encourage a "community mobilization";

– Disseminate the “Network of Sustainable Municipalities” brand, enhancing local experiences which, with forward-looking government choices, improve the quality of life of its citizens;

– Promote moments of advanced training for local administrators and municipal employees on sustainability issues.

Spišsky Hrhov and Geothermal Energy: Meaning Exceeding the Limits of Heat

LOCATION OF THE PRACTICE

Slovakia

PROBLEM THAT TACKLES

01 Spišsky Hrhov, little one village in Slovakia, became an example of how local communities can to use a geothermal energy for heating local buildings.

Geothermal energy is renewable and sustainable source energy, which uses heat from inside the Earth to generate heat and electricity.

INTERVENTION

Spišský Hrhov is located in the region where a geothermal energy is accessible and available. It uses with here Earth's heat from the depths, which is subsequently used for heating local buildings. Installation of a geothermal heating plant in Spišský Hrhov represents important step towards sustainability and reduction emissions greenhouse gases.

Installation the geothermal heating plant in Spišský Hrhov demanded investments in infrastructure and technology that would prove effectively collect and distribute geothermal energy. Heating plant includes system of thermal pumps that pump heat from the Earth and transmit it into the electricity networks for heating of buildings. Local population is connected to this system and has access to warm water and heating thanks geothermal energy.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

Advantages Geothermal Energy in Spišský Hrhov:

1. **Sustainability:** Geothermal energy is renewable source which does not rely on fossils fuels. In this way Spišský Hrhov contributes to the reduction from its dependencies from traditional energy resources.

2. **Lower Emissions:** Use geothermal energy in local buildings significantly reduced emissions greenhouse gases. Heat pumps that use geothermal heating plant do not produce emissions during the heating.

3. **Financial Savings:** Spišský Hrhov achieves significant financial savings thanks to exploitation of the geothermal energy. Lower costs for energy production mean that local self-government can invest these financial sources to others projects and services for citizens.

4. **Stable Energy Production:** Geothermal energy is stable source of energy, as it is not affected seasonal changes or external factors such as changes in the weather conditions. It guarantees that reliable heating for locals' inhabitants.

5. **Local Independence:** Exploitation of local geothermal resources means that Spišský Hrhov is less dependent from external suppliers energy and price fluctuations.

OUTCOMES

One of the key success factors of the project represents involvement of local communities. Residents of Spišský Hrhov were engaging in discussions and informing about benefits of a geothermal energy. Their support and commitment played important task at enforced this project.

Spišský Hrhov showed that a geothermal energy can represents viable solution for heating in local communities in Slovakia. The future project includes expansion of this system to the another buildings and areas in the village. In addition to that, continue monitoring and maintenance of the geothermal heating plant to provide long term sustainability and efficiency is planned.

Spišský Hrhov provides inspiration for others Slovakia local municipalities as they consider using geothermal energy for heating. Project of the geothermal heating plant in this village meant not only reduction emissions and financial savings, but also increased independence from traditional energy resources. It is an example of how local communities they can active contribute to sustainability and energy efficiency on the local level.

Lagerhaus cooperatives

LOCATION OF THE PRACTICE

Austria

PROBLEM THAT TACKLES

01 To support farming, construction, and ordinary life, rural regions frequently require consistent access to agricultural items, machinery, electricity, building materials, and home and garden supplies.

Farmers require a marketplace to buy and sell agricultural products.
For productive farming, access to agricultural gear, replacement parts, and maintenance services is critical.
Access to a diverse range of fuels and combustibles is critical for agricultural and residential energy requirements.

INTERVENTION

- They serve as a marketplace for farmers to buy and sell agricultural products.
- They provide agricultural machinery, spare parts, and maintenance.
- They provide a diverse spectrum of fuels and combustibles.
- They provide access to construction materials and services.
- They have a large selection of home and garden goods.
- They provide expert guidance in all of these areas to help clients make decisions.

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COMPARISON

Lagerhaus cooperatives are a one-stop shop for rural communities, comparable to many specialised vendors.

The availability and breadth of their offerings could be compared to comparable cooperative or non-cooperative market options.

OUTCOMES

They are vital to the agricultural sector, providing farmers with products, machinery, and expertise. They make farming more effective by providing machinery, spare parts, and maintenance services. They help to increase energy availability by providing a diverse range of fuels and combustibles.

They aid in the development of infrastructure and construction by providing building supplies and construction services. They improve the quality of life in rural communities by providing household and gardening goods. Their skilled counsel assists customers in making educated decisions.

The CEL in Canet de Berenguer

LOCATION OF THE PRACTICE

Spain

PROBLEM THAT TACKLES

01 There is a 70% of energetic dependence in Spain apart from a 68% import of energy. That is why it's so necessary to reduce the energy consumption nowadays and become more self-sufficient in order to overcome the effects of the energy crisis.

Likewise, fostering energy saving as well as using a 100% of clean energy is necessary in order to meet the Sustainable Development Goals (SDGs) set by the UN in the 2030 Agenda.

INTERVENTION

Three shared self-consumption installations have been built at the auditorium, the town hall and the municipal swimming pool.

Solar panels have a service life which exceeds 25 years.

As far as key stakeholders are concerned, it's worth mentioning that the CEL in Canet D'En Berenguer is promoted by the town council with some advice from Sapiens Energía and financial support from the Valencian Institute of Business Competitiveness (Ivace) dependent on the Regional Ministry of Sustainable Economy and Productive sectors in the Valencian Autonomous Government.

Co-funded by the Erasmus+ Programme of the European Union

COMPARISON

There were 121 energy communities in Spain at the beginning of 2023, with a total of 6,400 kWp of installed power, so those energy communities had an average of 52,89 kWp of installed power.

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After having gathered all the information above, we can state that this community, compared to the average, has a 131% higher installed power, when adding both installations; so, 188% more households can benefit from it and it has a CO2 reduction of 1,000 trees every ten years, which means a similar rate to the average.

OUTCOMES

This installation supplies the energy needs of 23 users including households, businesses and SMEs in the municipality from 24,3 kWp of installed power.

It produces some savings for households and organizations that join with an average of around 20% - 40% of the annual bill.

A CO2 reduction is expected, similar to planting more than 1,339 trees every 15 years. 50% of the energy produced is used to supply public buildings and services, while the remaining 50% is used by households and businessess in the municipality. In addition, some of the energy generated is destined to those families in town at risk of energy poverty.

Coole Eco Community

LOCATION OF THE PRACTICE

Ireland

PROBLEM THAT TACKLES

01 The Coole Eco Community is in the early stages of creating an eco-village and education centre on 38 acres in County Offaly, Ireland.

They currently have four full-time residents and a strong network of regular visitors and supporters.

The growing concerns about depleting natural eco-systems, decreasing biodiversity, and increasing carbon footprints demanded a new approach to land and resource management.

To address these challenges, the community sought to create an eco-village and education centre that embraces sustainable living practices. By focusing on regenerating the environment, growing food while preserving natural eco-systems, and reducing their carbon footprint and waste, they aimed to establish a self-sufficient and eco-friendly community, and so Coole Eco Community was formed.

Co-funded by the Erasmus+ Programme of the European Union

INTERVENTION

The Coole Eco Community has implemented various initiatives to regenerate their local environment, combat climate change, and support their community. These include:

- Establishment of agroforestry systems, integrating diverse animals and plants to optimize land use and improve the ecosystem.
- Cultivation of a fully organic garden using No-Dig gardening methods, providing a variety of fruits and vegetables for both residents and visitors while enhancing soil health.
- Creation of food forests and native forests, promoting biodiversity, sequestering carbon, and contributing to carbon sinks.
- Planting of a Coppice Woodland to ensure self-sufficiency in firewood.
- Implementation of Mob Grazing techniques with Angus beef suckler cows to mimic natural grazing behaviour and support grassland regeneration.
- Restoration of degraded hedgerows by planting native trees and shrubs to enhance biodiversity.
- Introduction of honey bee hives and planting of nectar-rich plants to support pollinators.
- Salvaging and upcycling materials to reduce waste and create useful items.
- Implementation of composting toilets to manage human waste sustainably and produce safe compost.

OUTCOMES

The garden, now in its third year, yields flavourful, nutritious vegetables due to the No-dig system enhancing soil fertility and reducing water usage.

Their Food Forest successfully provides a variety of foods, sequesters carbon, and supports biodiversity, with plans for further expansion.

The Native Woodland, only six years old, shows promising signs of native ground cover, while the Coppice Woodland progresses toward providing sustainable firewood.

The Mob Grazing system with cattle results in healthier livestock, improved soil fertility, and increased biodiversity.

Efforts to revitalize hedgerows enhance plant and animal biodiversity, providing shelter and promoting ecosystem health.

Their Education Programme offers essential courses for sustainable living, from Forest Gardening to composting.

Beekeeping contributes to pollination and provides honey for the community.

Material reuse and upcycling minimize waste and promote sustainability.

Compost toilets reduce environmental impact while providing nutrient-rich compost for gardening.

Oil free zone of Monti Dauni

LOCATION OF THE PRACTICE

Italy

PROBLEM THAT TACKLES

The oil Free Zone is a concertation tool between public bodies, aimed at managing the energy transition process, already present in Italian legislation with Law 221/2015 art. 71.
The forecast of the OFZ, and the connected establishment of a specific memorandum of understanding between the municipalities of the area, responds precisely to the need to define and stimulate a shared political will in order to interact more effectively with the regional and national administrations in defining and plan intervention tools to implement those energy transition processes that are more suited to local specificities and opportunities

INTERVENTION

The aim and purpose of the OFZ has been integrated into the context of the Internal Areas Strategy of the Monti Dauni. Specifically, the general strategy of the OFZ provides for:

- The definition of energy planning, in line with the sovereign powers of the Region and the Central State, based on the area's producible energy potential (energy from biomass);

- The development of concerted actions with the competent Concessionaires (transmission and distribution) for the upgrading of electricity lines and networks;

- The definition of support strategies for the revamping and repowering of the wind farm already present in the area;

- The implementation of training courses to adapt and ensure the presence of adequate professionalism in the field of green energy.

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