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Observatorio Eólico de Galicia

ECONOMIC VIABILITY PLAN FOR RENEWABLE ENERGY COMMUNITIES

PRACTICE GUIDE

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This **tool for supporting** the elaboration of the **economic viability plan** for a r**enewable energy community** is a **model of economic analysis** which adapts to the current normative configuration for these legal entities in Spain. Subsequent modifications in the juridic framework will require adaptations on this supporting tool. Its adaptation to other normative realities will make other changes necessary in order to maintain its usefulness within the decision-making process.

This tool was created using the language and commands inherent to the **Excel utility**, by Microsoft. It consists of several Excel spreadsheets which, incorporated within a single workbook, will allow an **estimation** of the **expected economic outcomes** from a community energy initiative. For this purpose, the manager or user of the tool should include a set of **hypotheses** relative to the communitarian initiative.

Coherently, the objective is to **ease** the **decision-making** process at an **initial stage**, when it is necessary to progress in the definition of the scale for the production facilities, along with the prediction regarding both the electricity production over the following 25 years and the price applicable to such electricity, the concretion of the financial sources for affording the investments, and also of the annual amount of the membership fees to be satisfied to the managing entity for guaranteeing the economic viability of the community initiative; among other issues. This economic viability plan is unavoidable even when non-profit legal entities are being considered. This kind of entities, as it is the case for energy communities, do not seek the obtention of a financial return.

The performed estimation will include results available under two analysis scales: Firstly, the economic results for the **renewable energy community**, considered as a whole. Secondly, the results corresponding to the **partners**, both considering the partnership base as a single unit and, under certain hypotheses, also for each of the individual partners.

Aiming to conciliate, for all potential users, simplicity and accessibility in terms of its configuration, with richness and usefulness concerning the information provided, the proposed tool actually presents its own limitations, and we even argue that it will require a constant improvement effort from the part of all users involved.

This is a **freely available** **open-source** instrument, although some of the spreadsheets in the Excel workbook remain hidden for ensuring that its global structure cannot be modified, so avoiding that its utility is eventually missed. Notwithstanding the former, any user has the possibility to deliver to us (observatorio.eolico@uvigo.gal) her **considerations** for the **continuous improvement** of the developed tool.

While any mistake eventually made remains of the own authors' exclusive responsibility, we do not wish to miss the opportunity to mention several people whom, at initial stages, were of great value for improving the structure of this tool. They are Gullermo David Rey, Professor of the University of Vigo; Juan Sacri, from Sapiensenergia; and Mauro Vázquez, from Belianenergy.

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Purpose of the Documents integrating the Viability Plan

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The Excel workbook containing this tool to **support the Viability Plan** aims to provide an approximate view of the economic implications associated with the set up/establishment and operation of a community energy production initiative focused on generating electricity from renewable energy sources.

In this regard, the calculation model allows for the configuration of key elements in the economic viability plan. However, it is important to acknowledge that the concept of a "Viability Plan" or "Feasibility Plan", as commonly understood in economic and financial management, is typically much broader than that covered by the documents generated in the spreadsheets of this Excel workbook.

The documents —referred to interchangeably as the "tool for supporting the preparation of the Economic Viability Plan" or simply the "Viability Plan"— are designed to be **sufficiently flexible** for use across various models of community energy initiative. For instance, they can be applied to collective self-consumption projects and Renewable Energy Communities (RECs) alike. Moreover, this flexibility extends to different economic regimes, whether the community opts for bill compensation, for surplus energy or chooses to sell produced energy to the energy provider/marketer.

The primary objective behind the design and development of the documents is to provide a **practical instrument** to understand the economic implications of projects of this nature. These documents are not intended to serve as formal accounting records, neither from the perspective of financial accounting nor from that of management or cost accounting. Nevertheless, they do aim to closely align with the assumptions characteristic of the latter.

These challenges/shortcomings stem from the intrinsic nature of the economic activity developed within a Renewable Energy Community, which determines the unique approach required to develop a Viability Plan tailored to such a community. This context underscores the need for a specific tool to support this process. Relevant regulatory framework partly shapes the distinct nature of community energy initiatives. In Spain, this framework fundamentally results from the transposition of certain European Directives into national/domestic law.

In this regard, the **Clean Energy for All Europeans Legislative Package (CEP)** is particularly significant. According to **Roberts (2020)**[1], while previous European regulations failed to recognize and adequately address the specific characteristics and challenges of energy communities, the CEP legislative package introduces a groundbreaking legal framework aimed at supporting community ownership within the energy sector. This represents a major shift in the legal context applicable to renewable energy communities in the European Union in recent years.

The integration of renewable energies into the European Internal Energy Market (IEM) had largely negative consequences for community energy projects. Nonetheless, the CEP package, finalized in May 2019, establishes a supportive legal framework for community ownership, designed to help the EU achieve its climate and energy goals for 2030. The CEP package consists of three key legal texts:

a. The **recast Directive (EU) 2018/2001**, on the promotion of the use of energy from renewable sources, also known as the "Renewable Energy Directive II" or "RED II".

b. The **recast Directive (EU) 2019/944**, on common rules for the internal electricity market and amending Directive 2012/27/EU, also known as the "Internal Electricity Market Directive" or "IEMD".

c. The **recast Regulation (EU) 2019/943**, on the internal electricity market, also known as the "Internal Electricity Market Regulation" or "IEMR".

In line with the "Energy Union's" vision of placing citizens at the center of the energy transition, the above-mentioned policy instruments within the CEP establish the "empowerment of consumers to act as market participants in the energy market and the energy transition" as a regulatory principle governing the Internal Energy Market for Electricity.

One relevant contribution of the CEP is that it identifies citizen energy initiatives that emphasize community ownership. In particular, the "IEMD" defines "Citizen Energy Communities" (CECs), while the "RED II" defines "Renewable Energy Communities" (RECs). Both definitions highlight a specific approach to managing collective ownership of energy-related activities through a legal entity that adheres to certain ownership and governance principles, along with a non-commercial purpose.

Firstly, although maximizing self-consumption of electricity generated by community facilities is common in such projects, the Excel tool can also be configured for scenarios where no self-consumption occurs. Secondly, partners in these initiatives do not participate seeking financial gain, as required by the aforementioned regulations. Thirdly, ensuring sufficient economic returns to cover the expenses related to operating and managing the community initiative is a fundamental assumption underlying the business model. In fact, the calculations performed by the tool for the Economic Viability Plan assume that partners will pay a membership fee to the managing entity to cover expected costs. Furthermore,

1 **Roberts, Joshua.** Power to the people? Implications of the Clean Energy Package for the role of community ownership in Europe's energy transition. ***Review of European, Comparative and International Environmental Law, No. 29, Special Issue Article.*** Wiley Periodicals LLC, 2020.

the social and environmental benefits associated with the REC are of central importance. It is important to note, however, that these benefits are not quantified in the documents generated by this tool for the Viability Plan.

Finally, given the legal framework described above, partners in the initiative do not hold assets that can be capitalized by selling them on the market. In this regard, the REC should establish a governance model to define the procedure for joining and exiting the initiative. This procedure should be straightforward, but it should not involve profiting from the market sale of one's share. It is evident that community energy production does not align well with the structure and function of conventional business enterprises. This holds true whether the initiative is governed under an individual-based or collective-based management model, the latter being the case for the initiatives targeted by this tool.

Diffusion of the Viability Plan and its Relationship with Other Public Instruments

2

Implementing a mechanism to make the tool described in this document accessible to potential users is crucial in ensuring it effectively fulfills its purpose to evaluate the economic feasibility of community-based energy initiatives.

As a result, the elaboration of a **communication and diffusion strategy** for this tool deserves particular relevancy. Within such strategy, which includes the elaboration of this document, along with putting it at the disposal of the public, there are three main axes, as pointed below:

- **Making the Excel workbook** containing the described tool **accessible**, along with the present document. The access to these resources is planned to be granted, freely and without any cost, through the following Internet website: http://observatorio.eolico.uvigo.es/
- **Making also accessible an additional Excel workbook**, based on the previous one in terms of its operation and the implicit calculation model. This second workbook would also be accompanied by a document aimed to explain its utility, internal structure and operation. The main objective of this Excel workbook will be allowing the economic assessment of the operation of a community energy initiative, basing on certain real data, effectively observed in a concrete reference year, to be supplied by the initiative manager.
- **Preparing an academic paper** in order to explain the elaboration process behind the Excel workbook described before, making a particular effort to link it with the major research questions frequently addressed in the academic literature on this topic.

As pointed above, when highlighting the action guidelines defined for implementing the diffusion to society of this tool for the Viability Plan of a community energy initiative, there is a second tool, similar to the one to which the current document is devoted to. The similarities between both tools concern their structure, the calculus they perform and their operation dynamics.

This additional tool, derived from the one exposed here, also takes the form of a single Excel workbook combining two groups of sheets: The first of them is composed by sheets on which the manager should write the starting data to be used as the basis for the calculations. The second of them is, in turn, integrated by the sheets intended to show the results arising from the performed calculations.

At least, three **fundamental differences** between both tools should be highlighted:

a. The **purpose or essential objective** to be pursued is different in each of the two cases. In the case of the tool aimed to the elaboration of the Viability Plan, the focus is placed on the study of the feasibility of an initiative which generally will not be a reality at the analyzed moment -an already operating project- but instead only a possibility -a hypothetical project-. For that reason, the purpose is that of disentangling the expected economic behavior, in order to evaluate whether or not it would be, *a priori*, sustainable, so enabling a reasonable decision-making regarding whether or not it should be actually undertaken.

The tool designed for the assessment of real data departs from an existing community initiative, from which the effectively observed data arising from its operation, belonging to a specific year, are available. Thus, the basic objective is not *a priori* evaluation of the feasibility of a future project, but analyzing the actual behavior of an active initiative, through its economic indicators shown in the previously mentioned annual reference interval.

b. The **time horizon** is different for each of the Excel tools, as a result of the different purpose characterizing each one. This is particularly true when it comes to the presentation of the offered results. Specifically, in the first scenario, where the objective is an *ex-ante* assessment of the project considered as a whole, the need arises for considering a pluriannual horizon, appropriate for adequately capture all the expected economic flows arising from such project.

Without ignoring the pluriannual nature of the analyzed project, when the objective is an *ex-post* analysis of the real data corresponding to a single year of activity, the focus primarily turns to the annual time period which is deserving a particular attention, to which will belong the starting data, effectively observed, supplied by the manager to the Excel tool.

c. The **nature of the starting data**, in coherence with the reasoning contained in the two previous letters, will also be different for each of the Excel tools available.

Namely, when a previous assessment of the economic viability of a community project is pursued, the starting data should necessarily consist of hypotheses concerning the planned characteristics of the projected initiative. Consequently, the Excel tool will not perform the calculations on effectively observed data, but instead on predictions obtained on the basis of the hypothetical conditions specified by the manager.

Complementarily, when the focus is placed on the analysis of data from a particular year, these data, derived from the real operation of the initiative, will usually be available. For that reason, the Excel economic assessment tool will directly operate using these real data, thus overcoming the need of relying on predictive estimates derived from hypotheses set about future facts.

Scope of Documents and Analysis Scales

3

Consistent with the objectives that define the general purpose of this tool, its scope is limited to **economically relevant information**, including both **physical units** and **prices**, as well as the corresponding **monetary amounts or values**.

To refine the selected scope, the documents comprising the tool follow a clear strategy structured around three successive phases:

1. Estimation of Expected **Revenues**
2. Estimation of **Costs** expected from the operation and maintenance of the facilities over time
3. Calculation of net **Results** or performance, defined as the difference between the two previous dimensions, revenues and costs.

Expected revenues, which include the economic value of the generated energy, encompass potential savings for community members from the collective self-consumption of produced electricity, as well as from compensation or sale of surplus energy to the distributor/marketer. The proportions of the produced energy allocated to each purpose can be defined by the manager.

Two complementary analytical scales or perspectives are integrated. On the one hand, the economic flows of the **entity** carrying out the initiative are assessed. On the other hand, a similar analysis is performed from the perspective of its **members**. Within this second approach, the **aggregate behavior of the partners** is considered, as well as the **individual shares** of each partner.

The aggregated or overall perspective, whether considering the entity itself or all partners as a single unit, allows for the presentation of the expected evolution of the project over time. Conversely, the partner's viewpoint focuses on the individual behavior of different partners within the same timeframe.

Configuration of the General Initial Assumptions/Hypotheses and the Fundamental Options of the Model

4

The starting assumptions/hypotheses refer to the parameters that must be set in order to estimate the results of the REC.

1. GENERAL ASSUMPTIONS, IN THE STRICT SENSE

The following outlines the general assumptions that should be defined for the use of the tool.

- **Location of the Facilities:** Within the sheet titled "General Hypotheses", the "Facilities Location (General)" table allows the project manager to specify the exact location of the renewable energy production infrastructure. This specification is made in terms of Autonomous Community (in the "Geographic Area" box), Province, and Municipality (in the "City or Village" box).

  If the facilities are located in Galicia, the "**Facilities Location (Galicia)**" table allows for additional data on the Parish, understood as the territorial unit immediately below the municipality or municipal term. If the facilities are located outside Galicia, this table need not be completed.

  The "Province" variable can directly determine the applicable power factor and indirectly influence the annual energy production. The value for the "City or Village" variable impacts local taxes, primarily in the form of fees or public charges. However, given the variability in tax regulations across municipalities, the tool does not automatically determine the applicable municipal taxes based on the "City or Village" variable. The project manager must therefore make this adjustment.

- **Duration:** This variable allows to define the time horizon of the project, requiring the project manager to specify an integer value in years. The selected duration directly impacts the linear depreciation schedule for the initial investment.

  The model accounts for a portion of the total investment, expressed as a percentage configurable by the project manager, attributed to the inverter. Unlike other technical equipment investments, the inverter's estimated lifespan is shorter than the overall project duration. This shorter lifespan necessitates replacing the inverter once its useful life ends during the project timeline.

- Regarding the **fiscal impact** of the activities on the entity, the manager must specify, in the "**Corporate Income Tax Rate (%)**" field found in the "**General Hypotheses**" table, the tax rate applicable to the direct tax to which the entity is subject, typically the Corporate Income Tax. If the entity is not subject to or is exempt from this tax, the manager should enter 0% as the tax rate.

  The same table also includes a row titled "**VAT – Merchandise Sales, Expenses and Investments (%)**", where the manager should specify the VAT rate applicable to the transactions mentioned. In Spain, the standard VAT rate is 21%.

  Regarding VAT, the manager can also specify the frequency at which the managing entity settles VAT in the same table. This is done using the "**VAT – Settlement Period (Months)**" field, where the number of months for each settlement period is indicated. In Spain, small and medium-sized enterprises typically submit VAT returns quarterly (in this case, the number 3 should be specified), while large enterprises and those opting for the Monthly VAT Refund Regime submit monthly returns. In such cases, number 1 should be indicated.

  Additionally, the table features a field labelled "**Need for Providing Economic Guarantees to the Public Administration (Yes/No)**". The manager should select "Yes" if the managing entity must provide a guarantee to the Public Administration for certain administrative procedures. If a guarantee is not required, the manager should select "No".

- The final row of the "**General Hypotheses**" table is titled "**Cash Remuneration (%)**". The manager should use this field to specify the expected annual average return on balances held in fully accessible current bank accounts. Typically, current accounts in Spanish financial institutions do not offer interest, so the value to enter would be 0.00%.

- **Installed Power:** This variable refers to the total installed power of the projected electricity generation facilities. Its value, expressed in kW, is automatically calculated by the tool based on the available area for the generation facility, measured in square meters, which must be specified by the manager as outlined below.

- **Available Land Area:** This variable specifies the total area available for placing the facilities, which is to be defined by the manager in the table titled "**Land Availability for Facilities Location"**, in square meters. The tool uses this information to calculate the installed power by considering, on the one hand, that a portion of the area is needed for **corridors** required for maintenance operations, and on the other hand, that the **remaining area**, after reserving space for corridors, should have a factor of 0.2 kW of installable power applied per square meter of available land.

- **Land Surface Necessary for Maintenance Corridors:** This variable, expressed in square meters (m^2), indicates the portion of the available land area reserved for maintenance corridors and potential repairs, rather than for equipment installation. Consequently, the tool excludes this area when calculating the installable power factor per square meter, applying it only to the land area not designated for corridors. The project manager can define the value of this variable as needed.

- **Operating Hours or Capacity Factor:** Given that this is a renewable energy facility, knowing the annual operating hours is crucial. This factor directly influences the production capacity of the facility.

  If the energy production facility is located in Galicia, the user can opt to have the capacity factor automatically determined by the tool. To do this, the option "Automatic (Only for Galicia)" should be selected from the dropdown menu associated with the "**Produced Energy (kWh per Year and kWp of Peak Installed Power) Specification Method**" box.

  In this context, the capacity factor varies depending on the specific province of Galicia where the facilities are located. This approach eliminates the need for the energy project manager to manually define the capacity factor, as the tool automatically selects it based on the chosen location. The capacity factors, which represent the energy generated (in kWh) per kWp of installed peak power, are sourced from publicly available data provided by IDAE (The Spanish Institute for the Energy Diversification and Energy Saving).

  When the energy production facilities are located outside Galicia, the manager should select the "Manual" option in the box for determining the energy generated per kWp of installed peak power. Additionally, if the manual determination option is chosen, the manager must enter the estimated annual energy production, in kWh, per kWp of installed peak power in the "Produced Energy (kWh per year and kWp of Peak Installed Power (Manual Specification)" field.

Some of the above commented tables are shown in what follows:

Figure 1. General Hypotheses

Facilities Location (General)	
Geographic Area	Other Countries
Province or Region	******
City or Village	******

General Hypotheses	
Project Time Horizon (Years)	25
VAT - Merchandise Sales, Expenses and Investments	21%
VAT - Settlement Period (Months)	3
Corporate Income Tax Rate (%)	25%
Need for Providing Economic Guarantees to the Public Administration (Yes / No)	No
Cash Remuneration (%)	0,00%

2. ENERGY-RELATED HYPOTHESES

- **Energy Prices:** To estimate the outcomes for the Renewable Energy Community (REC), it is essential to define the average market price of electricity. This price reflects the cost at which the CER purchases all electricity needed by its members that cannot be supplied through self-consumption. Additionally, the compensation the REC will receive for any surplus energy produced but not consumed by the members is defined as a proportion on this average market price.

  These prices, set as general hypotheses, are incorporated into the various Excel sheets of the tool for the elaboration of the Economic Viability Plan, where applicable. This integration ensures consistency in the initial data used across all calculations.

  Specifically, the community energy initiative manager must define two key elements in the table titled "**Energy-Related Hypotheses**". First, enter the **market price of electricity** (in €/MWh), in the box labelled "Reference Market Price of the Electricity (€/MWh)". Second, in the respective boxes within the same table, specify the **percentages** of this market **price** that apply to **self-consumption**, the **compensation rate** provided by the electricity supplier for remunerated energy, and, if applicable, the price for any **energy sold** to the supplier/marketer.

  In addition to this, the Excel workbook of the Economic Viability Plan tool contains a sheet specifically related to electricity bill costs, which will be discussed in the section of this document dedicated to Hypotheses Regarding Electricity Bill Costs.

- **Destination of the Energy Produced:** In the proposed calculation model, the **percentage of self-consumption** is automatically determined based on the variability in the members' consumption profiles. This percentage will fall within one of these three values, which the manager must specify in the designated cells:

  - Proportion of self-consumption relative to energy generated for a **member base** that is **balanced** in terms of distribution between residential and business segments.
  - Proportion of self-consumption for a **member base** that is **partially balanced** according to the same criteria.
  - Proportion of self-consumption for an **unbalanced member base**.

  The tool uses the following **criteria** to select the applicable proportion of self-consumption:

  - If the absolute difference between the percentages of residential and business members does not exceed 20%, the maximum self-consumption proportion is applied (Residential-Business Member Mix: "Balanced").
  - If the difference exceeds 20% but does not exceed 40%, an intermediate self-consumption proportion is applied (Residential-Business Member Mix: "Partially Balanced").

- If the difference is greater than 40 percentage points, the tool assumes the least favorable scenario, applying the lowest self-consumption proportion (Residential-Business Member Mix: "Unbalanced").

In this context, the **exogenous percentage of energy savings** each member should achieve is defined. This percentage reflects the reduction in their initial energy consumption — measured in kWh— due to self-consumption and compensation or sale of produced energy not consumed by them. This constant savings proportion is effectively applied as long as it does not exceed the member's allocated energy volume based on their participation percentage and the reference period.

If the exogenous energy savings percentage is hypothetically set at 100% of energy consumption, both the self-consumption percentage and the percentage corresponding to the remaining energy would fall within that 100%. The remaining energy would then be allocated to compensation or sale to the supplier/marketer, depending on the applicable regime for surplus energy that is not self-consumed.

At this stage, the manager must also specify the proportion of the compensated energy that will receive effective financial compensation from the supplier/marketer on behalf of the members. This percentage should be entered in the box labelled "**Proportion of Compensated Energy to be Economically Retributed by the Energy Selling Company if Virtual Battery does NOT exist**". This applies only if the option indicating the absence of a virtual battery is selected in the "Virtual Battery (Yes / No)" box. If a virtual battery is present, it is assumed that 100% of the compensated energy will be financially remunerated.

- **Energy Compensation or Energy Sale:** The manager must specify a value in the corresponding box by selecting one of the two options from a dropdown list: "Compensation" or "Sale". These are the only valid choices for this variable. Selecting "Sale" automatically sets the percentage of compensated energy to zero, with the sale percentage being the difference between the self-consumption percentage and 100%. Conversely, if "Compensation" is chosen, the sale percentage is set to zero, and the non-self-consumed energy attributable to the member will be allocated for compensation.
- **Virtual Battery:** A general energy-related hypothesis allows the community energy initiative manager to specify whether a "**virtual battery**" mechanism is used for managing energy that is not self-consumed instantaneously. The manager should choose "Yes" or "No" from a dropdown list based on whether this mechanism is applicable. If the "Yes" option is selected, it implies that all energy allocated for compensation -under the applicable regime- will receive full compensation. In this case, the percentage of effective compensation specified by the manager will not apply.

Some of the tables mentioned in this letter, devoted to "energy-related hypotheses", are shown below:

Figure 2. Energy-Related Hypotheses

Energy-Related Hypotheses	
Reference Market Price of the Electricity (€/MWh)	100,00 €
Self-Consumption Price (% over Reference Market Price)	100,00%
Compensation Price (% over Reference Market Price)	50,00%
Sale Price (% over Reference Market Price)	75,00%
Energy Compensation or Energy Sale, Excedents Regime Applicable	Compensation
Exogenous Percentage of Savings over Total Electricity Consumption (%)	100%
Virtual Battery (Yes / No)	Yes
Proportion of Compensated Energy to be Economically Retributed by the Energy Selling Company if Virtual Battery does NOT exist.	75%
Self-Consumption Over Produced Energy Proportion (Resid-Corp. Balanced Mix)	50,00%
Self-Consumption Over Produced Energy Proportion (Resid-Corp. Partially Balanced Mix)	40,00%
Self-Consumption Over Produced Energy Proportion (Resid-Corp. Unbalanced Mix)	30,00%

Adjustment Only Applicable for the Cash Flow Statement Calculation
Inclusion of the Produced Energy Value as an Income which generates a cash flow (Yes/No)
Yes

Produced Energy (KWh per year and KWp of Peak Installed Power) Specification Method
Manual

Produced Energy (KWh per year and KWp of Peak Installed Power) (Manual Specification)
1.276,00

3. HYPOTHESES REGARDING MEMBERS

An essential piece of information is the number of members or participants in the initiative. This number is crucial for determining the individual participation coefficient, which influences each member's investment contribution and their share of generated energy, including both self-consumed and surplus energy.

The **number of members is automatically calculated** based on the forecasted annual energy generation for the available area at the chosen site and the energy typically allocated to a single member. In other words, knowing the estimated annual energy production and the energy allocated to an average member makes it easy to determine the maximum number of members the community initiative can support.

Simultaneously, the energy allocated to each individual member is determined by their monthly electricity consumption and the exogenous savings percentage applied to that consumption. This allocation includes both the energy portion for self-consumption and energy designated for compensation or sale.

Once the maximum number of members is determined, it is assumed that the actual **number of members** will match this maximum, naturally rounded down to the nearest whole number. The manager of the energy initiative must indicate the **proportion** of **residential** members in the overall member base by specifying the percentage in the box titled "Residencial Segment Partners Proportion", within the table labelled "**Partnership Composition**". The remaining percentage, completing 100% of the member base, is assumed to correspond to business segment profiles.

As previously noted, the balance between the two member profiles automatically determines the proportion of generated energy that can be self-consumed. The energy allocated to a member based on their participation coefficient that cannot be self-consumed will be designated for compensation. This assumes that the exogenous savings percentage could reach 100% of the energy consumed.

The **regular fee to be paid by members** is calculated **automatically**, based on the total estimated annual costs and the number of members. It is assumed that each participant will pay the same amount. In addition to the regular fee, the manager can specify a **special —extraordinary— fee** applicable only in the **first year**, as well as **other expected monthly incomes** from members, in the corresponding cells of the table titled "**Membership Fees and Other Monthly Incomes**".

The expected financial flows between the members and the community, in terms of fee payments, provision of other services by the entity to members, or similar items, will constitute revenue for the entity and, at the same time, a cost item from the perspective of the members.

Related to the entity's tax treatment is the option to include an estimate of the annual tax cost on direct profit in the calculation of member fees. This applies when the manager selects "*Yes*" in the "**Corporate-Tax Impact transferred to the Membership Fees"** box in the "**Membership Fees and Other Monthly Incomes**" table. This consideration does not affect the role of the overall annual direct tax on the entity's cost structure, which remains a component of the expense assumptions for the managing entity.

Additionally, the Economic Viability Plan preparation tool requires the monthly energy consumption, expressed in kWh, of a hypothetical "average partner" for its calculations. If the energy production facilities are located in Galicia, the manager can choose to have this consumption automatically estimated by the tool. To do this, they should select the "Automatic (Only for Galicia)" option from the dropdown menu in "**Average Partner Monthly Electricity Consumption (kWh) Specification Method**" table. If the manager prefers to specify this consumption value manually, they should select the "Manual" option. For energy generation facilities located outside Galicia, the "Manual" option must be selected.

When the "Manual" option is selected for determining the monthly consumption of the average-type member —either because the manager prefers it or because the facilities are

outside the Galician territory— the manager must enter the appropriate value in the box labelled "**Average Partner Monthly Electricity Consumption (kWh) (Manual Specification)**".

If the tool automatically determines the monthly electrical consumption of the average-type member because the facilities are in Galicia and the manager has selected this option, it will use an estimate based on the average monthly household consumption for the "Atlantic-North" climate zone, which encompasses all of Galicia.

Several of the tables discussed within this letter, relative to the hypothesis "regarding Members" can be observed in below:

Figure 3. Hypotheses Regarding Members

Partnership Composition	% Over Total Partners
Residencial Segment Partners Proportion	60,00%

Membership Fees and Other Monthly Incomes	% Over Total Partners
Extraord. Fee for the First Year (€/Month)	- €
Other Monthly Incomes (€/Month)	- €
Corporate-Tax Impact transferred to the Membership Fees (Yes/No)	No

Figure 4. Average Partner Monthly Electricity Consumption

Average Partner Monthly Electricity Consumption (KWh) Specification Method
Manual

Average Partner Monthly Electricity Consumption (KWh) (Manual Specification)
294,41

4. HYPOTHESES RELATED TO INVESTMENTS

Like any business initiative, establishing and operating community projects requires a significant allocation of resources, primarily for acquiring fixed assets. These capital assets are defined by their useful life extending beyond a single fiscal year.

Investment in fixed assets, a key element of the initial investment, is supplemented by expenditures with a multi-year impact, such as establishment expenses. Although these costs are no longer classified as multi-year expenses in accounting terms, they are considered investments from a management perspective. Similarly, resources required for working capital or net operating funds are also part of this investment.

The **initial investment**, referring to the expenditure on installations at the start of the project, is automatically calculated by the tool based on the expected installed capacity and the **investment ratio** specified by the community initiative manager. This ratio, expressed as € per kW of installed capacity, should be entered in the first row of the table titled "**Investment Details: Facilities and Establishment Expenses"**.

For the **investment in equipment**, the manager must specify both the **proportion** of the initial expenditure on installations that corresponds to the **inverter** and the **useful life** (in years) of this equipment. This information should be provided using the table entitled "**Investment Details: Data Related to the Power Inverter"**, which includes two rows for these data points: one for the proportion of the initial expenditure attributed to the inverter and another for the estimated useful life.

This information is important because the useful life of the inverter is expected to range between 10 and 15 years. In contrast, the amortization or allocation of the remaining installation investment, establishment expenses, and financing for working capital net needs is spread over a period equal to the **"Project Time Horizon"** specified.

Based on the useful life of the inverter, the tool calculates the need for one or more replacements by rounding up the result of dividing the total project period by the useful life of the inverter. Once the number of replacements is determined, the tool automatically calculates the total investment required for these replacements.

Establishment expenses, part of the initial expenditure along with the investment in installations, can be treated as either a fixed amount or a variable amount based on the initial investment in installations. The manager can choose between these options in the "**Investment Details: Facilities and Establishment Expenses**" table by selecting "Fixed" or "Proportional" in the box labelled "**Establishment Costs (Fixed Amount or a Proportion Over Investment)**". In the corresponding cells, the manager should specify either the **fixed amount of the establishment expenses** or the **percentage** they represent relative to the initial investment in installations. The tool will apply the selected option accordingly.

Another piece of information the energy initiative manager must provide is the investment required, in Euros, to obtain a new Unified Supply Point Code (USPC). This amount should be entered in the box labelled "**Investment Cost of Getting a New USPC**". This cost will be added to the initial investment in installations only if the manager selects the "Yes" option in the box titled "**Need for a New USPC, Own one**." If "No" is selected, this cost will be disregarded. These options are located in the second and third rows of the table "**Investment Details: Facilities and Establishment Expenses**".

In what follows, some of the tables mentioned above, relative to the "investment" hypotheses, will be presented:

Figure 5. Hypotheses Related to Investments (Investment Details)

Investment Details: Facilities and Establishment Expenses	
Investment Rate over Installed Power (€/kW)	1.000,00 €
Need for a New USPC (Unified Supply Point Code), Own one (Yes/No)	No
Investment Cost of Getting a New USPC (€)	800,00 €
Establishment Costs (Fixed Amount or a Proportion Over Investment)	Fixed
Establishment Costs (Proportional Amount, % over Initial Investment, if Applicable)	1%
Establishment Costs (Fixed Amount, if Applicable) (€)	150,00 €

Investment Details: Data Related to the Power Inverter	
Power Inverter Investment (% Over Initial Investment on Facilities)	20%
Power Inverter Investment Time Period (Estimated on-use Lifetime, Years)	15

5. HYPOTHESES RELATED TO THE FINANCING MODEL

Investments involve allocating funds, and it is essential to specify the sources of financing for these investments. The tool for supporting the preparation of the Economic Viability Plan adopts a straightforward **financial structure**, requiring the community initiative manager to define the proportion of debt, which reflects the share of external financing relative to the total resources. To specify this, the manager should enter the relevant information in the box labelled "% of Third-Party Financing (Debt)", in the first row of the "**Project Financing**" table.

Based on the specified proportion, the model assumes that a loan will be obtained for the corresponding amount, calculated from the required initial investment and the defined proportion of debt. The manager can configure the **financial characteristics of the loan operation**, including the **opening fee**, **repayment term**, interest rate (detailing the **Euribor** rate and the **margin** applied by the lender), and whether a **grace period** (a "lack of need for payment" period) is included. These details should be entered in the relevant boxes in the "Project Financing" table. The equity, representing the capital contributed by members or partners, will be the portion of the initial investment not covered by external financing.

An important aspect regarding the financing structure is the potential inclusion in the model of a non-repayable public grant or subsidy. Although this financing is considered additional to the contributed capital; it is treated as part of equity in line with standard accounting practices.

The grant is defined as a percentage of the initial investment in installations. The tool will automatically calculate the grant amount and its annual allocation to the income statement, applying a linear distribution over a period that matches the stated installation term (The

"Project Time Horizon"). The energy initiative manager must specify the "public funding ratio," which is the percentage of the grant relative to the initial investment in facilities, in the second row of the table titled "**Public Funding**". In the first row of this table, the manager should indicate whether to consider the subsidy by selecting "Yes" or "No" in the box titled "Public Grant or Economic Support (Yes / No)".

The grant is assumed to be awarded and disbursed in the first year of operation. However, while the cash flow from the subsidy is received in a single year -the first one-, the impact of the subsidy on the income statement is recognized proportionally over the useful life of the installation, thus reflecting that the installation is the asset being subsidized.

Below we provide a view of the tables covered within this letter, relative to the definition of the "Financing Model" of the project:

Figure 6. Hypotheses Related to the Financing Model

Project Financing	
% Investment Third-Party Financing (Debt)	0,00%
Loan Term (Years)	15
Lack of Need for Capital Reimbursement Period (Years)	0
Lack of Need for Interest Payment Period (Years)	0
Number of Months for the First Year	12
Euribor (European Reference Interbancarian Interest Rate) (%)	3,69%
Margin Over Euribor (%)	3,00%
Loan Opening Fee (%)	0,30%

Public Funding	
Public Grant or Economic Support (Yes / No)	Yes
Public Funding Rate (Grant -%- Over Initial Investment on Facilities)	60%

6. HYPOTHESES REGARDING REVENUE

When quantifying revenue items, it is crucial to distinguish between the entity and its members, as the revenue items to be considered will differ in each case.

From the perspective of the entity managing the community initiative, revenues include both the value of the energy consumed by members and the amounts credited to members as compensation on their electricity bills. Additionally, if the entity sells energy to a retailer, the proceeds from this sale are also considered the entity's own revenue.

The energy produced for self-consumption by the members is valued according to the price defined for this purpose, as a proportion of the average market price of electricity. Energy sold, if any, is also valued according to the corresponding price set as a general assumption. Energy allocated for compensation is valued based on whether a virtual battery is present. In the presence of a virtual battery, 100% of the members' non-self-consumed energy will be compensated. Without a virtual battery, the percentage of energy to be effectively compensated is the rate specified by the manager of the community energy initiative in the General Hypotheses.

In the table titled "**Adjustment Exclusively Applicable for the Cash Flow Statement Calculation**", the field "Inclusion of the Produced Energy Value as an Income which generates a cash flow (Yes/No)" allows the manager to choose whether to treat the value of energy produced and allocated for self-consumption or compensation as an economic cash flow in the Cash Flow Statement (CFS). Selecting "Yes" includes this value as a pseudo-monetary cash flow, whereas "No" excludes it. If "No" is selected, an adjustment is made to the operating result to exclude the energy value from the Operating Cash Flow. If "Yes" is chosen, no adjustment is made, and within the Financing Activities Cash Flow, the value of the produced energy is reflected as a distribution of a dividend in kind to the members.

In addition to the economic **valuation** of the **produced energy**, the entity's revenues are supplemented by **membership fees** and **other** potential income from the same source. Both the "Extraordinary Fee for the First Year (€/Month)" and those "Other Monthly Incomes (€/Month)" are specified by the initiative manager when filling out the respective cells in the first and second rows of the table "**Membership Fees and Other Monthly Incomes**", which was already mentioned when discussing the general hypotheses specifically related to the members of the initiative.

With the exception of ordinary membership fees, revenue for subsequent years is calculated by applying the "Growth Rate of the Maximum Amount for Rates". This rate, defined by the manager, represents an incremental percentage over the previous fiscal year value and must be entered in the last row of the table labelled "**Deindexing Formula**", shown below. The other rows in this table allow the manager to specify different annual variation rates for various cost categories. Membership fees are calculated to precisely cover all monetary disbursements for each specific year.

Figure 7. Hypotheses Regarding Revenue: "Deindexing Formula" Table

Deindexing Formula	Annual Percentage (%)
Sectorial Wages Updating Rate (= CPI)	3,10%
Energy Cost Updating Rate	1,60%
General Operation Expenses Updating Rate	3,20%
Other Operation Expenses Updating Rate	3,20%
Growth Rate of the Maximum Amount for Rates	3,10%

From the perspective of the members, revenue is essentially limited to the value of the energy allocated to them based on their participation percentage in the initiative. Notwithstanding, the two rows in the table titled "**Other eventual perceptions by Partners, from the Energy Initiative Entity, Different from the Produced Energy**" allow the manager to specify the annual value, in Euros, for all members collectively, in the following two additional revenue items:

- "Income Deriving from Free-of-Charge Services provided to the Partners by the Energy Initiative Manager-Entity"
- "Other Incomes perceived by the Partners from the Energy Initiative Manager-Entity"

The table discussed in the previous paragraphs is shown below:

Figure 8. Hypotheses Regarding Revenue: Other Eventual Perceptions by Partners

Other eventual perceptions by Partners, from the Energy Initiative Entity, Different from the Produced Energy	Annual Amount for All Partners (€)
Income Deriving from Free-of-Charge Services provided to the Partners by the Energy Initiative Manager-Entity	- €
Other Incomes perceived by the Partners from the Energy Initiative Manager-Entity	- €

Hypotheses Regarding Expenses

5

The expense hypotheses covered in this section refer exclusively to the expenses of the management entity of the community energy initiative, focusing on the amount that the initiative's manager estimates to be foreseeable for each cost item during the first year of the project. This information is provided in the Excel sheet labelled "**Expenses Hypotheses**". The calculation of initial year expenses follows a typical profit and loss statement structure, with the following major categories:

- Purchases of Materials and Services
- Personnel Expenses
- External Service Expenses, which include, among others:
  - Leases
  - Professional Services (notaries, registrars, lawyers, etc.)
  - Insurance Premiums
  - Banking Services
  - Utilities (water, electricity, telephone, etc.)
  - Other Services (consulting, management, or other general services)
- **Regional and local taxes and fees**. This section also includes a specific category for guarantees required by Public Administrations, if indicated as necessary in the general hypotheses by the manager of the initiative.
- **Other losses from routine operations ('Other Losses Arising from Ordinary Corporate Operation Activities")**, including potential charges/costs related to the entity's regular management activities, such as adjustments for potential inventory discrepancies.

It is important to note that for all cost items included in the table titled "**EXPENSES: Materials and Services Purchases**", as well as for most items in the table "**EXPENSES: External Services Expenses**", the user only needs to specify the number of units purchased and the unit acquisition value for each of those units. The corresponding total annual amounts in Euros will be calculated internally by the tool.

This can be illustrated with a couple of simple examples. Suppose the entity has a bank account to manage monetary flows arising from its activity. If the economic conditions for maintaining this account determine a maintenance fee of €60 quarterly, the correct way to record this expense would be to indicate, under the item "**Banking Services**", the consumption of 4 units at a unit value of €60. Alternatively, if the costs are monthly, such as those for landline or

mobile phone services, and the entity decides to subscribe to a flat-rate plan costing €30 per month, the expense would be recorded by indicating under the item "**Landline and/or Mobile Telephony**" the consumption of 12 units at a unit value of €30.

Certain costs require more detailed recording and explanation due to their specificity. These costs are categorized based on the table in which they appear:

1. HUMAN RESOURCES EXPENSES

i. **Number of Full-Time Equivalent Employees:** In this item, under the "**Units**" column, indicate the number of employees in terms of full-time equivalents. Let us consider a simple example. Suppose the entity has two part-time workers and one worker hired for 30 hours per week. The two part-time workers are equivalent to one full-time employee, while the worker hired for 30 hours per week, given that full-time is 40 hours per week, should be considered equivalent to 0.75 full-time employees (30 divided by 40, to reflect the proportion of the worker's schedule relative to full-time). Therefore, with the indicated workforce, the correct number of employees to be reflected in the "Units" cell would be 1.75 (1 + 0.75).

ii. Separately, the manager should use the "**Gross Monthly Wage"** column for the item titled "**Number of Full-Time Equivalent Employees**" to indicate the gross monthly salary corresponding to a single full-time employee working for the community energy initiative.

iii. The item "**Social Security Costs to be Assumed by the Entity**" covers the cost of social security contributions paid by the managing entity on behalf of its employees. To complete this section, the manager should specify the percentage of each worker's gross monthly salary that is allocated to these contributions.

iv. The personnel cost table concludes with the row "**Other Social Expenses**". This category reflects personnel expenses not covered in the preceding sections. The manager should enter the number of months in each fiscal year (generally 12), in the "Units" column and the average monthly value of these costs in the "Gross Monthly Wage (€)" column.

The table titled "Human Resources Expenses" is presented below:

Figure 9. Hypotheses Regarding Expenses: Human Resources Expenses

EXPENSES: Human Resources Expenses	Units	Gross Monthly Wage (€)
Number of Full-Time Equivalent Employees	0,125	800,00 €
Social Security Costs to be Assumed by the Entity (% over Gross Wages)	32,00%	
Other Social Expenses (Other Personnel Costs)	- €	- €

2. EXTERNAL SERVICE EXPENSES

i. **Rentals (Land and Others)**: This item refers to rent that the community energy initiative's managing entity may have to pay to the owners of land or surfaces where the energy production facilities are located. To reduce the effort required from the manager, it is enough to indicate the monthly rental fee per square meter of surface area. This value, in Euros, should be entered in the "Unit Value" column, which is the only one that allows data entry for this cost item. The Viability Plan elaboration tool will internally perform the necessary calculations to determine the corresponding total annual amount.

i. **Insurance Premiums (% Over Initial Investment, Annual)**: As suggested by the text in parentheses, the initiative manager should only specify the annual insurance premium as a percentage of the initial investment in facilities. The premium covers the energy production facilities owned by the managing entity. The proportion should be entered in the "Units" column, which is the only editable field for this cost item.

In what follows, the table called "**External Services Expenses (Excl. Other Services)**" is presented:

Figure 10. Hypotheses Regarding Expenses: External Services Expenses

EXPENSES: External Services Expenses (Excl. Other Services)	Units	Unit Value (€)
Rentals (Land and Others)		*1,20 €*
Facilities Repairing and Maintenance		
Facilities Repairing Costs	*1,00*	*100,00 €*
Facilities Manintenance Costs	*1,00*	*500,00 €*
Profesional Services (Notaries, Lawyers, Registry Officers, Economists, Advisors, etc.)		
Notary and Registry Costs	-	- €
Legal Advisory Costs	-	- €
Economic and Financial Advisory Costs	-	- €
Technical Advisory (Engineering) Costs	-	- €
Transportation Expenses	-	- €
Insurance Premiums (% Over Initial Investment, Annual)	*2,00%*	
Banking Services	*4,00*	*60,00 €*
Advertising, Propaganda & Public Relations		
Advertising Materials and Activities	-	- €
Promotion Activities	-	- €
Public Relations	-	- €
Supplies		

EXPENSES: External Services Expenses (Excl. Other Services)	Units	Unit Value (€)
Landline and/or Mobile Telephony	-	*30,00 €*
Internet Connection	*12,00*	*30,00 €*
Electricity Supply (Power Term)	*12,00*	*12,87 €*
Electricity Supply (Energy Term and Other Concepts)	*12,00*	*13,00 €*
Running Water Supply	-	*25,00 €*

3. DETAILS CONCERNING ADVISORY AND MANAGERIAL EXPENSES (OTHER SERVICES)

This table includes three cost items related to advisory and support services such as "Accounting Advisory, Tax Advisory and Other Advisory Services", expenses for professional advisory services; "Entity Management (Up to 25 Partners)", costs associated with administration management; or "Energy Monitoring for Partners", technical support for monitoring members within the energy initiative. From an accounting perspective, these are typically categorized under "**Other Services**" within the broader "External Services Expenses" category.

For these cost items, the manager must specify the monthly cost per member for "Member Monitoring". For the other two costs listed in this table, the manager should indicate the estimated monthly amount for the entire membership. Only one column should be filled out for each cost item: either "Monthly Amount per Partner (€)" or "Total Monthly Amount (€)", depending on the context.

The table discussed in this letter is show below:

Figure 11. Hypotheses Regarding Expenses: Details concerning Advisory and Managerial Expenses (Other Services)

Details concerning Advisory and Managerial Expenses (Other Services)	Monthly Amount per Partner (€)	Total Monthly Amount (€)
Entity Management (Up to 25 Partners)		60,00 €
Energy Monitoring for Partners	1,50 €	
Accounting Advisory, Tax Advisory and Other Advisory Services		30,00 €

A new category labelled "General Expenses Not Included in Previous Items" is introduced under "**Other Services**". This category takes the value zero if the expenses under "Other Services" already account for 5% or more of the business revenue. If the expenses fall short of this threshold, this category will automatically be adjusted to cover the difference, ensuring

that "Other Services" costs represent at least 5% of the revenue. The tool calculates this value automatically according to the outlined criteria, so it does not appear in the Excel sheet for Expense Hypotheses, and no manual input from the manager is required.

As explained above, this mechanism acts as a safeguard that can be activated or deactivated by the community energy project manager by selecting the appropriate option in the box labelled "**Applicability of the Expense Concept "General Operating Expenses Not Included in Previous Items"**", shown below. If the "No" option is selected, this expense category will take a zero value, even if the total of "Other Services" expenses fall short of the 5% of the business revenue.

Figure 12. Hypotheses Regarding Expenses: Applicability of the Expense Concept "General Operating Expenses Not Included in Previous Items"

Applicability of the Expense Concept 'General Operating Expenses Not Included in Previous Items' (Min. Other Services = 5% Entity Turnover)
No

4. OTHER HYPOTHESES REGARDING EXPENSES

The manager can choose **whether or not to include** annual **investment depreciation** as a part of the entity's expenses. If included, depreciation will appear in both the income statement and the cash flow statement generated by the model. Conversely, if depreciation is excluded, it will not be reflected in either statement. Nonetheless, it is crucial to account for depreciation from a financial perspective. If depreciation is excluded from the calculation of member contributions (the entity's monetary income), the entity will absorb the gradual loss in value of the investments through its own equity.

The selection to include or exclude depreciation as a cost is made by choosing either "Yes" or "No" from the dropdown menu provided in the corresponding box, labelled "**Accounting "Depreciation" Considered as a Cost (Yes/No)**". This box appearance can be appreciated in the following illustration:

Figure 13. Hypotheses Regarding Expenses: Accounting "Depreciation" Considered as a Cost (Yes/No)

Accounting 'Depreciation' Considered as a Cost (Yes/No)
No

Another decision the manager must make concerns the projected costs related to material and service purchases. This is done simply by selecting the appropriate option in the box "**Materials and Services Purchases (Yes/No)**". If the "No" option is chosen, this expense category will be set to zero, regardless of any entries in the relevant tables of the Excel sheet for "**Expense Hypotheses**".

Regarding costs associated with "Management Tasks" of the entity, the manager must choose from three options in the field designated "**Management Tasks Performance Alternative**": "Own Staff", "Outsourcing", or "Self-management". This choice affects both external consulting expenses (including accounting advisory, tax advisory, and administrative management) and personnel costs. If "Own Staff" is chosen, personnel costs will apply, while they are excluded for the other two options. Additionally, external consulting costs vary based on the selected management model, being lower for "Own Staff" or "Self-management" and higher when the "Outsourcing" option is chosen.

For costs related to utilities, an option is provided where the manager can specify whether or not the initiative requires its own **internet connection** for its operations. This option either includes or excludes the estimated monthly cost of such a connection. The box for this selection is labeled "**Own Internet Connection Required (Yes/No)**".

In the Excel sheet designated for inputting expense assumptions, the manager can define costs by specifying the desired combinations of physical units and their corresponding unit prices. These costs represent the estimated amounts for the first year of the community energy initiative's operations.

Expenses in subsequent years are calculated automatically for each fiscal period based on the amount from the previous period, adjusted by applying the operating cost update rate that can be defined by the community energy initiative manager as a general hypothesis. This rate is entered in the relevant fields found in the previously mentioned table titled "**Deindexing Formula**", included in the "**General Hypotheses**" Excel sheet. Specifically, this table includes rows labeled "Sectorial Wages Updating Rate" for personnel costs, and "General Operation Expenses Updating Rate" and "Other Operation Expenses Updating Rate", both of which relate to other operating expenses. The latter distinguishes costs included in the specifically mentioned category ('Other Operation Expenses").

In terms of **taxation**, in addition to taxes on the entity's profits, **local or regional taxes** (mainly fees or public charges) applicable to the initiative are included as costs in the income statement under the "Other Taxes" category. These taxes are determined based on the entries provided by the manager in the table labelled "**Economic Guarantees, Regional and Municipal Taxes, and Other Fiscal Duties**", within the "**Expenses Hypotheses**" section of the Excel sheet. The manager can also specify any guarantees that may need to be provided to public authorities. This cost is only factored in if the manager selects "Yes" in the "**Need for Providing Economic Guarantees to the Public Administration (Yes / No)**" field within the General Hypotheses section.

It is important to highlight that the table mentioned in the previous paragraph is specifically tailored to the regulatory framework applicable if the initiative operates in Spain. For **financial guarantees**, the manager is only required to enter the deposit amount, in **Euros, per kW of installed capacity** planned for the energy production facility. This value should be input in the column labeled "Tax Rate".

For the "**Regional Tax for the First Registration**" entry, the manager should directly indicate the tax due using the "Tax Amount Payable (Prev. Deducts.), €" column. In Galicia, this amount is set at a fixed rate of €10.47 for the year 2024.

For the remaining entries in the table, which account for various potential tax obligations, the manager must specify the taxable base ('Tax Base" column) and the "Tax Rate" for each obligation in the corresponding columns, where applicable. Additionally, the "Tax Amount Payable (…)" column must always be completed to indicate the resulting tax amount due for each case.

In the "**Economic Guarantees, Regional and Municipal Taxes, and Other Fiscal Duties**" table, a column labeled "Tax Deductions or Tax Bonifications Over Initial Tax Amount Payable (€)" allows the manager to enter the amount, in Euros, to be subtracted from the full tax rate ("Tax Amount Payable (…)") if applicable. In the context of the Spanish tax system, such reductions are typically considered deductions or discounts from the gross tax liability, hence the label for this column.

Finally, this same tax obligations table includes a column labeled "Applicability", where the manager must indicate whether each listed tax is relevant to the community energy initiative by selecting either "Yes" or "No" for each entry. A partial view of this table is offered below this paragraph.

Figure 14. Hypotheses Regarding Expenses: Economic Guarantees, Regional and Municipal Taxes, and Other Fiscal Duties

Economic Guarantees, Regional and Municipal Taxes, and Other Fiscal Duties	Tax Base	Tax Rate	Tax Amount Payable (Prev. Deducts.), €
Economic Guarantee for the Grid Access and Connection Application (40€/KW)		40	
Regional Tax for the First Registration -Official Electric Facilities Registry- (For Galicia, Tax Code 30.02.00 Annex 1)			10,47 €
Municipal Tax for the Urbanistic License Issuance			- €
Municipal Tax Over Constructions, Facilities and Works (ICIO, in Spain)			- €
License of Activity Issuance Tax			- €
Other Fiscal Duties			- €

In the lower section of the Excel sheet titled "**Expenses Hypotheses**", a table features a single item labeled "Other Losses Arising From Ordinary Corporate Operation Activities". This item includes two columns for data entry: "Units" and "Unit Value (€)". The accounting category of "Other Losses Arising from Ordinary Corporate Operation Activities" essentially refers to losses arising from the routine operations of the entity. This might include, for instance, adjustments to the inventory of tools and equipment. Typically, the economic significance of such losses is

minimal in most business projects. While such losses generally have limited financial impact in most projects, it is still important to consider how this type of expense should be accurately recorded in specific cases.

Let us assume that the entity managing the energy initiative holds a certain number of tools intended for use by personnel responsible for carrying out maintenance and conservation tasks, and that these tools are owned by the managing entity. At the end of the year, an inventory of these tools is conducted, and it is discovered that, compared to the inventory conducted at the beginning of the fiscal year, two tools are missing: one valued at €20 and the other at €40. Given this situation, the manager should enter the number “2” in the “Units” column and record the average value of all affected units in the “Unit Value (€)” column, which in this case would be “€30” ([(20+40) / 2]).

Assumptions Regarding Electricity Bill Costs

6

For entering the initial data used in calculations, the Excel workbook at the disposal of the manager, includes a dedicated sheet titled "**Electric Invoice Costs**". On this sheet, the manager of the community energy initiative must define key cost-related assumptions, which will be explained in detail below.

These assumptions play a crucial role in simulating the electricity bills of a hypothetical typical member, both before and after joining the community energy initiative. They include factors like the applicable taxes on the member's electricity bill, covering both general indirect taxes (VAT) and specific levies (Special Electricity Tax).

Additionally, the table titled accordingly requires specifying the "**Electricity Power Agreed by Each Individual Partner**", expressed in kW, for each of the considered time periods (Period 1, P1, and Period 2, P2; representing peak and off-peak hours, respectively). The first table in this Excel sheet should indicate the applicable power term prices for each of these two periods, expressed in euros per kW of installed power per day. If only a single time period is used to calculate the power term, the manager should input the contracted power under P1 and the cost in € per kW per day in that row. In this scenario, the fields for power and unit cost related to P2 should be set to zero. It is assumed that the energy term will be based on the market price of electricity as specified in the "**General Hypotheses**" sheet.

The tax rate specified by the manager as the "Temporarily Reduced Tax Rate" in the first table, located at the top of the Excel sheet, will only be applied when the "Yes" option is selected in the dropdown list provided in the field titled "**Reduced Tax Rate for the Electricity Special Tax (Yes / No)**". If the "No" option is selected, it will be assumed that the Electricity Special Tax amounts on the members' electricity bills will be calculated using the standard tax rate. This rate should be specified by the manager in the "Electricity Special Tax (Ordinary Rate)" field in the first table.

The last three rows of the first table in the Excel sheet, which pertains to defining assumptions for electricity bill costs, are designated for the manager to specify the applicable **VAT tax rates**, expressed as percentages, that may apply to electricity billing.

A distinction is made between the standard rate, which traditionally -and at the time of writing- applies to electricity under the Spanish tax system; a reduced rate of 10%, introduced at certain periods in Spain to lower consumer bills; and a extra-reduced rate of 5%, historically absent from the Spanish tax system but temporarily applied as a short-term fiscal relief measure.

It is important to note that, in each billing period, only one VAT tax rate will typically be applied. The tool designed for supporting the Economic Viability Plan, therefore, considers only one of the three VAT rates specified by the manager as applicable to electricity, assuming that this rate will remain consistent throughout the duration of the project. The manager's ability to define each of the three VAT rates mentioned earlier allows the tool to accommodate potential changes in Spanish legislation that could affect the VAT tax rate applied to electricity.

The table titled "**VAT Tax Rate**" provides a dropdown list with the following options, enabling the manager to select the VAT rate that should apply to the electricity consumed by members:

- VAT (Ordinary Tax Rate)
- VAT (Reduced Electricity Tax Rate)
- VAT (Extra-Reduced Electricity Tax Rate)

This same Excel sheet also includes a table named "**Heterogeneous Participation Hypotheses (Partners' Consumptions Randomly Distributed)**", which is used to specify, in kWh, the estimated minimum and maximum monthly electricity consumption for each member, on an individual basis. These estimates are solely intended to simulate a hypothetical distribution of consumption among the members, in the particular case that it is assumed that the participation in the initiative is heterogeneous across members, and it is distributed according to their electricity consumption.

The tables designed for entering the contracted power data, and for making the choice concerning the applicable tax rates in both the VAT and the Electricity Special Tax are reported below:

Figure 15. Hypotheses Regarding the Electricity Invoice Costs: Agreed Power, Tax on Electricity and Applicable VAT Tax Rate

Electricity Power Agreed by Each Individual Partner	KW
Power Term (Peak Period, Period 1)	3,30
Power Term (Valley Period, Period 2)	3,30

Reduced Tax Rate for the Electricity Special Tax? (Yes / No)
Yes

VAT Tax Rate
VAT (Ordinary Tax Rate)

It is important to highlight that some of the issues the manager must define regarding electricity bill costs are highly technical. This involves concepts that can be complex and whose specific meaning in this context may not be immediately clear.

Additionally, it is worth noting that the cost structure used to design the fields for the manager to input expected electricity costs is based on the categories typically found on electricity bills

in Spain. Given the regulated nature of the electricity sector in Spain, this cost breakdown is significantly shaped by the applicable regulatory framework.

Taking into account the points raised in the previous two paragraphs, the following provides an illustrative set of possible values that could reasonably be considered at the time of writing this document to define the calculation parameters for a typical residential electricity bill. The table presented below actually follows the same structure of the one to be filled-out by the manager for these data collection:

Figure 16. Hypotheses Regarding the Electricity Invoice Costs: Reasonable Values with an Illustrative Purpose

Concept	Value	Unit
Power Term (Peak Period, Period 1)	0,10	€/KW and Day
Power Term (Valley Period, Period 2)	0,03	€/KW and Day
Social Bonus Financing	0,0385	€/Day
Electricity Special Tax (Ordinary Tax Rate) (%)	5,11%	% s/ Sum of Previous Concepts
Electricity Special Tax (Temporary Reduced Tax Rate) (%)	0,50%	% s/ Sum of Previous Concepts
Electricity Meter Rental	0,0268	€/Day
VAT (Ordinary Tax Rate)	21%	% s/ Tax Base (Sum of Previous Concepts)
VAT (Reduced Electricity Tax Rate)	10%	% s/ Tax Base (Sum of Previous Concepts)
VAT (Extra-Reduced Electricity Tax Rate)	5%	% s/ Tax Base (Sum of Previous Concepts)

Results Derived from Using the Proposed Tool

7

1. ENTITY'S PERSPECTIVE

The proposed tool for helping in the elaboration of the Economic Viability Plan, specifically within the Excel sheet titled "**Operating Account**", offers the entity a projected **profit and loss account** for each year, broken down into key income and expense categories. This summary provides an overview of the projected financial outcomes and their evolution over time, while also highlighting the key factors that most significantly impact these results.

Several of the items included in the results account provided by the tool for supporting the Economic Viability Plan preparation are shown in the figure 17 below. They are reported along with their corresponding possible values for a hypothetical specific case of community energy initiative.

The tool also offers an estimate of the projected cash flows for the project and its members in the Excel sheet titled "**Cash Flow Statement**". This estimate is based on the results from the profit and loss account, with automatic adjustments applied as needed. The **Cash Flow Statement** generated by the model details the project's cash flow, for each year, categorized into the following **components**:

- Operating cash flow —or cash flow from operating activities–
- Cash flow from investing activities
- Cash flow from financing activities

This presentation clearly differentiates the net cash flows generated or consumed by the entity each fiscal year from its core operations —operating activities— from those related to investments and the financing structure chosen.

The Figure 18 offers a view of the commented structure of the Cash Flow Statement, also including the monetary values for each of its items, for a hypothetical case. The reported amounts belong to the initial moment when the community initiative is set up —column labeled with the number "0"—, and also to the end of the first year of operation —column labeled with the number "1"—.

Figure 17. Operating Account

INCOME	Ref. 1
Total Income from Energy Produced	***6.699,00 €***
Membership Fees	2.470,47 €
Income Deriving from Other Complementary Services provided to the Partners	- €
Total Income from Membership Fees and Other Complementary Services	***2.470,47 €***
Capital Grants Transferred to the Financial Year Result (Annual Attribution)	1.680,00 €
Total Operating Income	**10.849,47 €**
EXPENSES	
Materials and Services Purchases	***- €***
Human Resources Expenses	***- €***
Rentals (Land and Others)	480,00 €
Facilities Repairing and Maintenance	600,00 €
Profesional Services (Notaries, Lawyers, Registry Officers, Economists, Advisors, etc.)	- €
Transportation Expenses	- €
Insurance Premiums	1.400,00 €
Banking Services	240,00 €
Advertising, Propaganda & Public Relations	- €
Supplies	360,00 €
Other Services	450,00 €
External Services Expenses	***3.530,00 €***
Other Taxes (Different from the Corporate Income Tax or the Value Added Tax)	10,47 €
Other Losses Arising From Ordinary Corporate Operation Activities	50,00 €
Total Operating Expenses	**3.590,47 €**
EBITDA (Earnings Before Interests, Taxes, Depreciations and Amortizations)	**7.259,00 €**

A notable feature of the Economic Viability Plan elaboration tool is its flexibility regarding the Cash Flow Statement. Specifically, it allows the community initiative manager to decide whether to include the value of the energy produced as cash flow-generating income. To facilitate this decision, the Excel sheet titled "**General Hypotheses**" includes a field named "**Inclusion of the Produced Energy Value as an Income (...)**". The functionality of this field is detailed in the section on General Hypotheses, particularly in the segment covering revenue-related hypotheses.

Figure 18. Cash Flow Statement

	0	1
Concepts		**2025**
Operating Cash Flow		
Operating Result		7.259,00 €
(-) Self-consumed and Compensated Energy Revenues		**- €**
(+) Amortization of the Investment		- €
(+) Net Change in Working Capital (Estimated in 1 Month of Operating Expenses)		299,21 €
(-) Allocation of Grants to Profit or Loss for the Year		-1.680,00 €
(-) Financial Income		- €
(+) Financial Expenses (Interest on Debt)		- €
(-) / (+) Other Non-Cash Revenues and Expenses		
(=) Operating Cash Flow or Cash Flow from Operating Activities [A].	**- €**	**5.878,21 €**
Cash Flow from Investing Activities		
(-) Investment Payments Made	-70.150,00 €	
(+) Proceeds from Divestitures Made		
(=) Cash Flow from Investing Activities [B]	**-70.150,00 €**	**- €**
Cash Flow from Financing Activities (Shareholders' Equity and Debt)		
(+) Issuance of Equity Instruments (Shares or Participations)	70.150,00 €	
(-) Amortization of Equity Instruments (Shares or Participations)		
(+) Grants Received		42.000,00 €
(+) Loan Concession	- €	
(-) Loan Amortization		- €
(-) Debt Remuneration Payments (Loan Interest)		- €
(-) Remuneration Payments for Equity Instruments (Dividends)		-6.699,00 €
(=) Cash Flow from Financing Activities (Equity and Debt) [C]	**70.150,00 €**	**35.301,00 €**
Free Cash Flow [A+B+C]	**- €**	**41.179,21 €**
Project Cash Flow [A+B]	-70.150,00 €	5.878,21 €

2. PERSPECTIVE OF THE GROUP OF MEMBERS

From the perspective of the group of members participating in the community initiative, we assume that all members share a uniform participation percentage. This percentage is calculated solely based on the total number of members in the entity. For instance, in a group of 25 members, each would have a participation percentage of exactly 4%, ensuring that the total of all individual percentages equals 100%.

Given that this participation rate remains consistent over time, it is straightforward to determine the maximum amount of generated energy attributable to each member for any given period, whether annual or monthly.

Once the energy attributable to each member is determined, we can calculate how much of this energy will be used for self-consumption, compensation, or sold to the energy provider, based on predefined hypotheses.

Given the maximum savings rate each member can achieve on their energy consumption expressed in kWh (a model assumption), we can ascertain the portion of energy produced that it is effectively attributable to each partner; this being the **lowest** of the two following amounts:

- **Energy attributable** to the partner according to her **participation coefficient in the initiative**, resulting from applying such percentage to the total energy produced and available for being attributed to partners.
- **Energy attributable** to the partner as a result of the application of the **exogenous savings percentage** over her total electricity consumption at the outset. This energy amount would encompass both self-consumed energy and compensated -or sold- energy.

The lowest amount among the two ones listed above, will be the one taken as **energy effectively attributed to the partner**. This energy will be further distributed among the **self-consumption** and the incorporation to the grid. The latter will take place either through the energy **compensation mechanism** or through the **sale of the surplus energy**.

The distribution between the energy self-consumption and the energy compensation or sale takes place according to the self-consumption rate applicable. Once the amount of energy that can be self-consumed by the partner is known, the portion of the effectively demanded energy that will be still bought to the marketer is determined. This amount of energy will coincide with the difference between the consumed electricity -or effectively demanded electricity- of a partner, and the quantity of electric energy he or she is able to self-consume.

With a fixed monthly electricity consumption for each member, we first compute a typical electricity bill for a consumer without any community energy initiative. This is then compared to the bill that would result from implementing the community energy production initiative, taking into account self-consumption and any credits applied to the member's bill for the compensation of surplus energy, or for energy sales, if applicable.

The above approach **allows for the calculation of a "profit and loss account"** for both the entire group of members and each individual member's participation in the community initiative. The profit and loss account for all members collectively is presented annually in the Excel sheet titled "**All Partners Accounts"**. Such results account, for all members collectively, is shown below, reporting the monetary values that could have been obtained for the first three years of operation in the case of a hypothetical energy initiative:

Figure 19. All Partners Accounts

	1	2	3
	2025	**2026**	**2027**
Revenues from Self-Consumed Energy	4.466,00 €	4.604,45 €	4.747,18 €
Revenues from Excedentary Energy Subject to Energy Compensation	2.233,00 €	2.302,22 €	2.373,59 €
Revenues from Excedentary Energy Sold	- €	- €	- €
Income Deriving from Free-of-Charge Services provided to the Partners by the Energy Initiative Manager-Entity	- €	- €	- €
Other Incomes perceived by the Partners from the Energy Initiative Manager-Entity	- €	- €	- €
Total Revenues Derived from the Community Energy Initiative Membership	**6.699,00 €**	**6.906,67 €**	**7.120,78 €**

	1	2	3
	2025	**2026**	**2027**
Extraordinary Initial Membership Fee (Only for the First Year)	- €	- €	- €
Membership Fees	2.470,47 €	2.460,00 €	2.574,56 €
Charges for Complementary Services Provision to Partners	- €	- €	- €
Total Expenses Deriving From Community Energy Initiative Membership	**2.470,47 €**	**2.460,00 €**	**2.574,56 €**

Annual Result of the Collective Membership of Partners in the Community Energy Initiative	**4.228,53 €**	**4.446,67 €**	**4.546,22 €**
Present Value of the Annual Result of the Partner Membership	4.095,23 €	4.170,74 €	4.129,68 €

Meanwhile, the **profit and loss account for each individual member** —assuming all members exhibit identical behavior and participation in the energy initiative— is detailed annually in the Excel sheet titled "**Individual Partner Account**". Each of these profit and loss accounts —both collective and individual— includes three primary **income items**:

1. The **economic value of the energy** produced which is attributed to the members, either in full or in proportion to each individual member's share. This economic value comprises the sum of the following two components:

   a. The economic value of the energy allocated for self-consumption by the group of members or by each individual member.

   b. The economic value of energy attributed to the members that is not used for self-consumption and is therefore fed into the grid. This energy may be compensated in each partner energy bill or sold to the energy retailer, depending on the applicable economic regime for surplus energy.

2. Potential in-kind income that members may receive in the form of **free services provided** by the entity managing the community energy initiative on behalf of those members.

3. In addition to these service-related incomes, the line item for "**Other Incomes perceived by the Partners from the Energy Initiative Manager-Entity**", captures **any additional financial benefits** received by the members, from the manager-entity, that are not included in the previously mentioned categories.

Regarding the **costs incurred by members** for their participation in the community initiative, the primary expenditure consists of the fees paid to the managing entity. These fees are categorized into the following two types:

1. "**Extraordinary Initial Membership Fee** (Only for the First Year)" represents any additional amount required from members as a special fee applicable only in the first year of the operation of the initiative. This fee is zero in all subsequent years.

2. "**Membership Fees**" refers to the regular fees paid by members for their participation in the community energy initiative. These fees are designed to provide the managing entity with sufficient financial resources to cover its operating, management, and functional expenses.

In parallel to the estimated profit and loss accounts for both the entire group of members and each individual member —assuming identical participation and behavior— the Excel sheet titled **"Individual Invoices Comparison"** provides a **comparative analysis**. It contrasts the **average monthly electricity bill** of a hypothetical individual member, based on the average consumption specified by the initiative's manager, with the bill that would be incurred if that same individual were not part of the community energy initiative.

All key components of a typical electricity bill in the Spanish market are included in the tables provided. For each component, the differences between the scenarios with and without the community energy initiative are calculated, expressed both in absolute terms and as a percentage of the total original bill amount without the initiative.

The results provided to the manager specifically highlight the two sources of savings a consumer can achieve by joining the community energy initiative:

1. On one hand, the **savings** a member achieves **on** their **bill** are calculated based on the differences between their electricity bill without the community energy initiative and the bill with the initiative in place.

2. On the other hand, the savings are increased by the **amount** derived from **surplus energy**. This surplus can come from either compensation for non-self-consumed energy or income from selling that energy, depending on the applicable economic regime as outlined in the assumptions.

A partial view of the comparative table prepared by the Excel tool is provided below. The monetary values shown refer to a "typical partner" when a particular hypothetical case of community initiative is under consideration:

Figure 20. Individual Invoices Comparison

Invoiced Concept	Without a Community Energy Initiative (€)	With a Community Energy Initiative (€)
Power Term (Peak Period, Period 1)	10,04 €	10,04 €
Power Term (Valley Period, Period 2)	3,01 €	3,01 €
Energy Term (Consumption)	29,44 €	14,72 €
Social Bonus Financing	1,17 €	1,17 €
Subtotal (Sum of Previous Concepts)	43,66 €	28,94 €
Electricity Special Tax (Temporary Reduced Tax Rate) (%)	0,22 €	0,14 €
Electricity Meter Rental	0,81 €	0,81 €
VAT Tax Base (Sum of Previous Concepts)	44,69 €	29,90 €
VAT (Temporary Reduced Tax Rate)	9,39 €	6,28 €
Total Invoice Amount (VAT Tax Base + VAT Ammount Payable)	54,08 €	36,18 €
Energy Compensations	Without a Community Energy Initiative (€)	With a Community Energy Initiative (€)
Value of the Energy Subject to Compensation Transmitted to the Energy Marketer	- €	7,36 €
Value of the Energy Sold Transmitted to the Energy Marketer	- €	- €
Amount to Pay to the Prosumer for the Energy Compensation or the Energy Sale	- €	7,36 €

The described development enables the presentation of **expected results for the group of members** throughout project's duration, as well as the expected results for **each member in a reference year** —the initial year— from **two distinct perspectives**: one involves attributing the relevant economic values to members, as recorded in the managing entity's accounts, while the other entails comparing the individual monthly electricity bills of a typical consumer with and without the community energy initiative.

The relative weight of this result on each member's original electricity bill in the initial year provides a measure of the net savings or final benefit that each member would hypothetically achieve by participating in the community energy initiative.

3. PERSPECTIVE OF INDIVIDUAL MEMBERS (HETEROGENEOUS PARTICIPATION PROPORTIONAL TO CONSUMPTION)

In the results provided in the Excel sheet labeled "**Partner Accounts (Heterogeneous Participation)**" —referred to as "Partner Acc. Heterogeneous P."— each member's relative participation is determined based on their electricity consumption as a proportion of the total consumption for all members. This model simulates a random distribution of monthly electricity consumption across the different partners, adjusted to the minimum and maximum values specified by the manager as hypotheses, for each partner and monthly period, in terms of kWh.

We begin with a hypothetical distribution of electricity consumption in kWh among the members and use this to determine each member's percentage of participation within the group; under the assumption that each member's proportion remains consistent throughout the project duration.

Using these individual participation shares, we calculate the energy attributable to each member in a manner similar to the method described in section 2 above. By also knowing, in the mentioned way, the distribution of energy between self-consumption and compensation (or sale if applicable), and so, the energy that each individual partner should continue purchasing to the energy marketer, we can determine the monetary value of the energy each member can allocate for self-consumption in the initial year of reference. Additionally, we can calculate the compensation each member would receive for the energy which, being effectively attributed to her, is not self-consumed, but instead incorporated to the grid either through surplus compensation or sale.

Once the income from electricity bill **savings** and compensation or sale of energy is calculated for each member, the **regular -ordinary- and extraordinary membership fees** are then deducted based on their estimated average monthly values for the initial year. Additionally, **costs for each member** include "Other Monthly Amounts Paid by the Partner to the Community Energy Initiative Manager-Entity **(...)**". It is assumed that these fees are uniform for all members and that the year under consideration would be the initial one and, so, the extraordinary fee only applicable for that first annual period should be included.

The structure of the account per member -or partner-, prepared by the tool for the preparation of the Economic Viability Plan, for scenarios involving heterogeneous participation proportional to each member's electricity consumption, closely resembles that of accounts prepared for homogeneous participation scenarios. This similarity extends to both the collective account for all members and individual accounts for each member. **Key differences** that should be highlighted include:

- In the case of heterogeneous participation, where only a single year is analyzed, the analysis tool provides a more detailed output by reporting all **amounts on a monthly basis**. For this purpose, it is assumed that each annual figure is evenly distributed throughout the year, with each monthly amount calculated as the annual value divided by twelve.

- The "**Total Positive Economic Impact**" is not derived from the managing entity's profit and loss account but is instead simulated based on the average monthly bills of each individual member. The impact is calculated by comparing each member's bill with and without the community initiative. This approach considers two key factors: first, the **reduction in the member's electricity bill** resulting from decreased consumption due to self-consumption; and second, the estimated monthly **income** from either **compensation or sale of surplus energy** that is fed back into the grid rather than being self-consumed.

This results in the "**Expected Monthly Net Result (...)**" arising, for each member or partner, from her membership in the community. Such result is calculated as the difference between the positive economic impact achieved and the total costs incurred. This outcome allows the manager to identify **variations in net savings among members relative to their original electricity bill amounts**. These differences arise from the heterogenous distribution of consumption and corresponding participation shares, contrasted with the uniform fees paid to the entity by its members. These fees represent the primary cost item in each member's individual "profit and loss account".

The structure of the profit and loss account for different partners, in case of a hypothetical energy community initiative, under the assumption of heterogeneous participation rates across partners in the project, those being determined proportionally to the electricity consumption distribution, is provided following these lines:

Figure 21. Partner Account (Heterogeneous Participation)

Partner ID Number	1	2	3	4
Concept				
Total Positive Economic Impact (Monthly) (Savings Achieved on the Electricity Invoice and Revenues from Excedentary Energy Compensation or Sale)	**30,55 €**	**9,95 €**	**44,62 €**	**29,77 €**
Extraordinary Monthly Membership Fee for the First Year -€ per Month-	- €	- €	- €	- €
Ordinary Monthly Membership Fee (All Years) -€ per Month-	8,23 €	8,23 €	8,23 €	8,23 €
Other Monthly Amounts Paid by the Partner to the Community Energy Initiative Manager-Entity -€ per Month-	- €	- €	- €	- €
Total Monthly Costs Assumed by the Partner, Deriving from the Membership in the Community Energy Initiative (€)	**8,23 €**	**8,23 €**	**8,23 €**	**8,23 €**
Expected Monthly Net Result of the Community Energy Initiative Membership for the Partner (€)	**22,31 €**	**1,72 €**	**36,38 €**	**21,54 €**
Expected Monthly Net Result of the Community Energy Initiative Membership for the Partner (% on Initial Invoice Amount)	**36,2%**	**5,3%**	**44,6%**	**35,6%**

Conclusions

8

Within this document, the objectives, characteristics, operation and structure of a calculation tool were described. This tool is based on the Microsoft Excel Application, integrated into the Office suite. It was designed and developed to the end of making it possible an ***ex-ante* evaluation** concerning the **economic implications** arising from a **community-owned electricity production initiative**. This economic assessment constitutes a necessary part within the popular concept of the "**Viability Plan**", this concept being defined according to how it is commonly understood in the field of the economic and financial management.

Juridic support for the community energy production initiatives is provided by a relatively recent European legislation, yet to be transposed to the internal law in many member States. Such regulation, particularly favourable to the stimulus of this kind of projects, is based on the active role of the citizenry in the ownership and the decisions inherent to the participation in the electric energy market.

The alluded juridic norms, of which the "**Clean Energy Package (CEP)**" constitutes a key legislative package, are presented as appropriate means for reaching the goals defined at the European level for 2030, relative to both climatic issues and energy policy, on the pathway towards a carbon-neutral economy in the EU by 2050.

The Economic Viability Plan is, as pointed above, a necessary element for formalizing the strategic planning process which must precede any initiative or project with economic implications. Specifically, it plays a fundamental role for ensuring the sustainability of a community energy proposal prior to the decision about its effective realization, therefore also before the need for providing the resources required to finance the necessary investments.

Considering the ideas expressed in the previous paragraph, the calculation tool introduced by this document performs, **basing on** a set of **starting hypotheses**, the required **predictions** in order to provide to the user, under a visual and summarized format, the main **documents** configuring, precisely, the Economic Viability Plan for the above-mentioned initiative.

Supplementing the tool for the elaboration of the Economic Viability Plan, which is described in the present document, another calculation model was developed, also based on an Excel workbook structured through a combination of several sheets for data entry and for results reporting. The purpose of this second tool is that of helping the manager of a community energy production initiative with the **analysis of the effectively observed results** deriving **from the operation** of such project during a specific annual period.

As stated above, **putting these two tools at the disposal** of the (potential) managers is a crucial requisite for them to reach their common aim of serving as useful instruments for easing the

decision-making processes when they refer to issues having economic consequences. For that reason, a straightforward communication and diffusion strategy is conceived, with the opening of the described tools to the access of the general public, through an internet website, as an essential component of such strategy.

Finally, the two Excel workbooks supporting this pair of solutions for backing the processes of both planification and decision-making when they relate to the management of community projects involving economic implications, are regarded as being alive instruments, in the sense that they are subject to **permanent revision, adaptation and improvement**, with the intention of being able to serve, in a progressively more adequate and complete manner, to the mission behind their creation. For that reason, the electronic mailbox of the Galician Wind Observatory (OEGA, according to its Spanish acronym) is put at the disposal of any interested person, for facilitating that this institution can receive the consultations, suggestions or considerations of any other kind which, relative to these resources, such people wish to share: observatorio.eolico@uvigo.gal

Observatorio Eólico de Galicia