



ENERGY COMMUNITIES REPOSITORY



Webinar

# SETTING UP COMMUNITY ENERGY ONE-STOP-SHOP

Date:

3 October, 2023

From 10:00 to 11:30 CEST



#EnergyCommunitiesRepository



*Cesar Valmaseda*  
cesar.valmaseda@faen.es

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# FUNDACIÓN ASTURIANA DE LA ENERGÍA

## “ASTURIAS ENERGY AGENCY”

### What FAEN is?:

- the Regional Energy Agency in Asturias (Spain).
- A Public Body attached to the Public Administration of the Principality of Asturias (Government of Asturias)
- A Non-Profit institution

**Objective:** Promotion, support and execution of actions for energy in all areas of Asturian society

**Staff:** 16 employees

**Board of Trustees and Collaborators Companies**  
of Asturias Energy Foundation

#### BOARD OF TRUSTEES



#### COLLABORATORS COMPANIES



Main Headquarters at Mieres



Asturias Technology Park, Llanera Southwest Asturias, Tineo

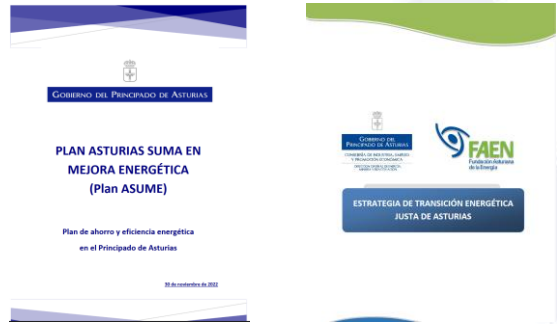


# Main Activities

**Information & Guidance on Energy**  
*from Public Administration to Companies and citizens*



**Energy Advisors and Support**  
 to Policy Makers & Public Authorities  
*(Regional Government, Councils and Municipalities)*



**Regional Energy Assessment, Analysis and Reports**



**Communication & Dissemination, Training and Awareness Raising**



**Research and Innovation & Territorial Cooperation**  
*EU Funding Programmes*



**Technical & Economic Support**  
*SMEs & StartUp*





# Local Energy Communities

## FAEN recognized as Community Transformation Office for the promotion and revitalization of energy communities



The **Asturian Energy Foundation** has recently been recognized and awarded as one of the **Community Transformation Offices for the promotion and revitalization of energy communities**, created by IDAE (Institute for Energy Diversification and Saving of the Government of Spain) for the promotion, encouragement and support of energy communities, within the framework of the Recovery, Transformation and Resilience Plan" financed by the European Union – NextGenerationEU.



# Regional Context

## Asturias, Spain



Region NUTS2 code: ES12 - Principality of Asturias

Region NUTS3 code: ES120 - Asturias

- ▶ Population: 1.004.499 inhabitants
- ▶ Area: 10.604 km<sup>2</sup>
- ▶ GDP: 23.441 M€



### Closure of coal mining

- 2021 < 1.000 workers
- 48% of national coal production



### Closure of thermal power plants

- 2.222MW - 49% of regional installed capacity
- 73,4% share in the mix



### Electrointensive industries

- 18-21% of regional Gross Value Added
- 69% of energy consumption
- Difficulties to decarbonize

- **Energy model based on coal.** Region in energy transition process. The last coal mine will close this year and the coal-fired power plants, 2.222MW, before 2030 (2 of them are closed)

- **Industrial region** - 20% of Gross Value Added comes from industrial activity. Big concentration of electro-intensive industry at regional level with strong difficulties to be decarbonised.

Fast

Challenging

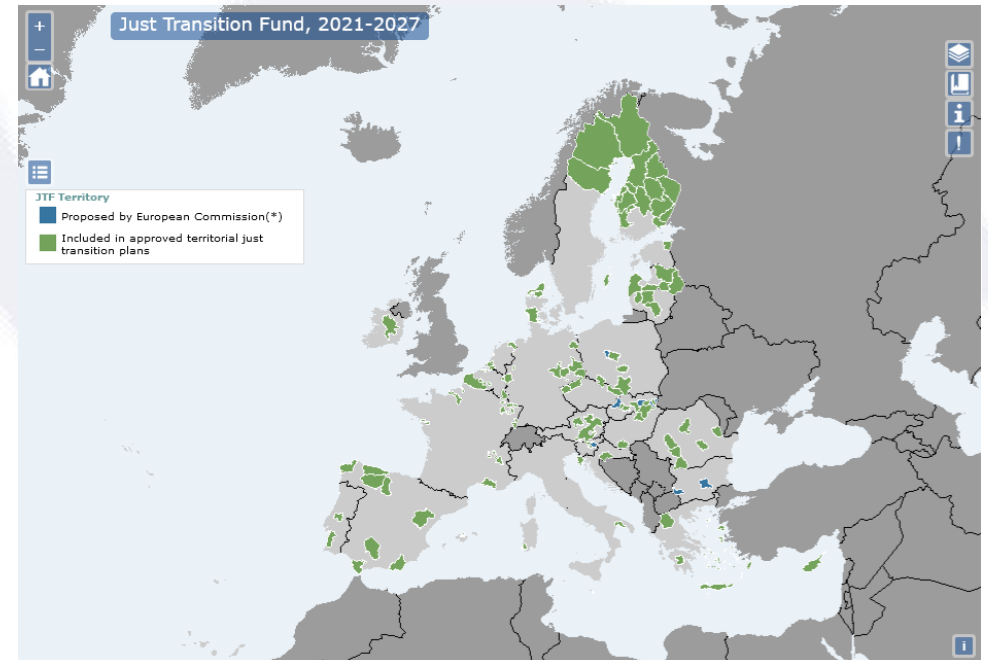


# Coal Region in Transition



*"We must show solidarity with the most affected regions in Europe, such as coal mining regions and others, to make sure the Green Deal gets everyone's full support and has a chance to become a reality."*

**Frans Timmermans, Executive Vice-President of the European Commission**



## What are Territorial Just Transition Plans (TJTPs)?

TJTPs should be prepared by Member States together with the relevant local and regional authorities of the most-affected territories. They should provide a detailed plan to meet EU climate and energy targets by 2030 and 2050, and evidence of the impact of this transition process.

These plans should identify specific territories affected by the transition. In order to be eligible for JTF funding, these territories must be able to justify their dependence on fossil fuels or greenhouse gas-intensive activities, the social, economic, demographic and environmental challenges stemming from the phasing out or transforming of activities, and negative impacts resulting from the transition.



# Industrial Decarbonization

Asturias is an Industrial region - 20% of Gross Value Added comes from industrial activity.

Big concentration of electro-intensive industry at regional level with strong difficulties to be decarbonised.

# ASPIRE

PROCESSES4PLANET RESEARCH ASSOCIATION



PROCESSES4PLANET



Minerals



Pulp & paper



Refining



Steel



Water



Cement



Ceramics



Chemicals

## POLICY INSTRUMENTS

JUST-ENERGY Strategies & Plans  
Observatories

## Energy Efficiency, 1<sup>st</sup>

*Reducing Demand  
Buildings, Districts and Cities  
Neighbourhoods  
Regeneration  
Social Housing*

## Industrial Decarbonization

Electro-Intensive Industry (SPIRE)  
Carbon Capture, Usage &  
Storage, (CCUS)  
**Waste Heat Recovery**

## A Hydrogen Valley

Green H<sub>2</sub>,  
Production, Distribution & Demand  
Energy Carrier and Industrial Feedstock  
Mobility and Transport,  
Maritime Ports

## Coal Region in Transition

A Territorial Just Transition Plan,  
Coal phase-out commitments,  
Mining closures and land  
reclamation,  
Closure of Thermal Power Plants

## PEOPLE

Social Innovation,  
Empowering, Engagement,  
Training, Citizen  
Participation, Energy  
Democracy, Inclusion,  
Equality, Energy Poverty,  
Fair Deal, Just Transition,  
Re-skilling,

## Mobility & Transport

*Sustainable and Resilient  
E-Mobility & H<sub>2</sub> Mobility  
Intermodality  
Dissemination & Education*

## Local Energy Communities

*One Stop Shop  
Governance models, technology and  
investment plans  
Consumers and Prosumers  
Democratization, energy (price €) Market,  
Demand Response, Flexibility, P2P*

## Bio-Economy

Biogas, Biomass  
Waste Recovery & Circular  
Economy  
Primary sector: Forest & Agro

## Renewable Energy Technology

Marine renewable energy  
(Offshore, waves, tides, algae)

## DIGITAL 4 ENERGY

Twin Transition, Tools and Services

## CLIMATE AND ENERGY

Sustainability, Resilience, Adaptation



# Promoting Local Energy Communities

FAEN, as Asturias Energy Communities office, implementing the concept of **One-Stop-Shop** for Energy Communities in Asturias.



- offering a **specific set of services**
- **accompanying** the whole process
- monitoring a **full alignment** to existing regulation
- Disseminating best practices and **regional lighthouse initiatives**

# Providing a set of services

FAEN, as Asturias Energy Communities office, is offering a **specific set of services** to support Energy Communities (EC) initiatives (renewables, citizen, local or rural),



## Technical Assistance

*How to size the solar PV system  
What elements, select location  
Grid connected or standalone  
“point of interconnection”  
Existing ICT tools*

## A proper Governance Model

*Guiding Agreement(s) among members  
How to fit distribution coefficients  
A legal entity is needed  
(association, cooperative...)  
How to involve public bodies, municipalities in  
the loop*

## Financial criteria and advice

*Viability and financing plans  
Approaching possibilities (individual or  
collective - own investment)  
Calculating economic parameters (Payback  
and RoI)  
Public aids and other grants or subsidies*

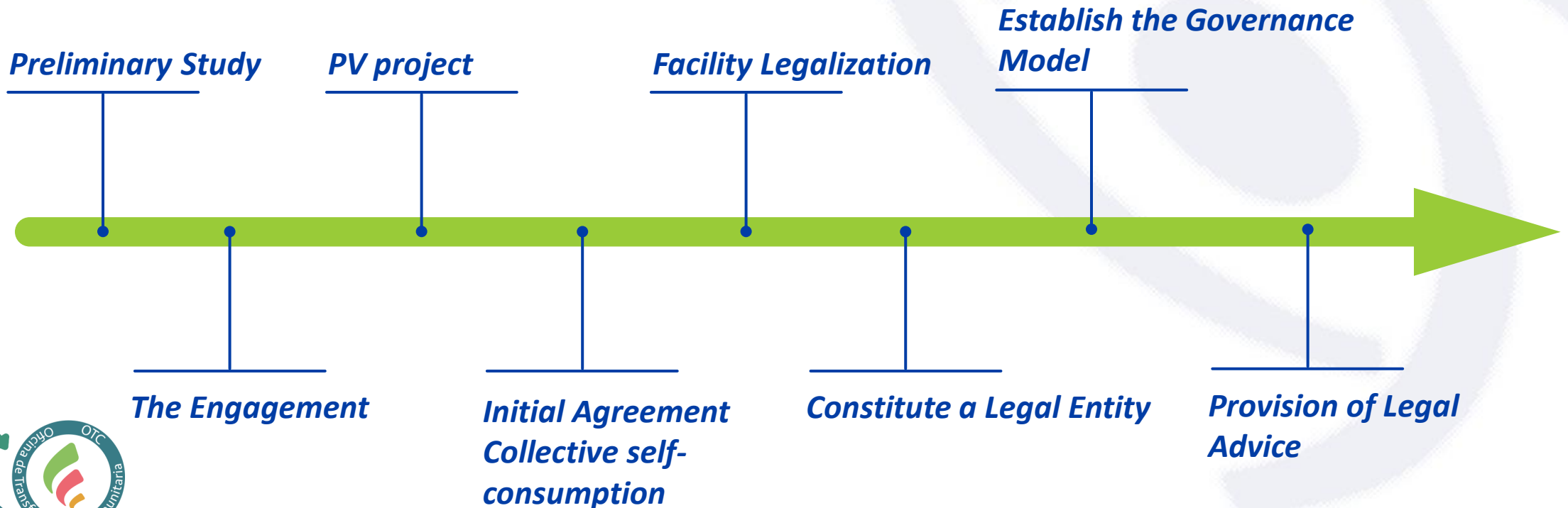
## Legal, regulatory and policy framework

*How to stay a collective self-consumption  
facility,  
Modalities of self-consumption, with or without  
surplus, with or without compensation  
Challenges and benefits of public-private  
collaboration*



# Accompanying the whole process

FAEN, as Asturias Energy Communities office, is **accompanying the whole process** to support Energy Communities (EC) initiatives (renewables, citizen, local or rural),





# Local Energy Communities

A local energy community is often not a one-size-fits-all solution:  
*Local - rural, renewable, citizen - energy community*

Moving forward from PV systems:



- *Energy Efficiency First Principle*
- *Alternative heating systems:*
  - *District networks for Heating (and cooling)*
- *Local Renewable Energy Re-Sources:*
  - *mini-hydro, biomass,*
- *Sharing resources for mobility & transport*
- *Social Innovation for Engagement and public Participation at Energy Transition (training, reskilling)*
- *Neighbourhood Regeneration Process*

# Seven Asturian LEC lighthouse initiatives

Moal, Peón, Bimenes, Llanera, Aller, Langreo, Santa Barbara (Gijón)

Xúntate Llanera o cómo llegar a ser la primera comunidad energética de Asturias



**Moal aspira a convertirse en la Baviera asturiana de la autosuficiencia energética**

El proyecto local, "ejemplo de lucha contra la despoblación", incluye una instalación fotovoltaica, una central hidráulica y un sistema de biomasa



**Aller pone en marcha dos comunidades solares de autoconsumo colectivo**

Se instalarán paneles fotovoltaicos en los colegios de Moreda y Cabañaquinta para abastecer a los propios centros, así como a comercios y residentes de la zona



**Santa Bárbara constituye "Asol Asturias" su comunidad energética**

El proyecto, que busca ahorrar entre un 20 y un 30 por ciento, nace con 38 viviendas

**Fontoria (Bimenes) se convierte en el primer pueblo de Asturias que produce ya su propia energía eléctrica**

Siete vecinos ponen en marcha los paneles solares que abastecerán a esta aldea yerbata



**xúntate**  
Comunidad energética Llanera



**CTIC impulsa un programa piloto de comunidad energética en Peón**

Los participantes, en la presentación del proyecto. E. C.



Los vecinos de Fontoria, en Bimenes, delante de los paneles solares de la primera comunidad energética rural de Asturias



# EU programmes

## R&D + Territorial Cooperation

Additionally, FAEN is participating in EU programmes and projects oriented to support energy communities' initiatives (i.e., DATACELLAR, GLOCALFLEX, both Horizon Europe projects).

Not only EU programmes oriented to R&D or innovation actions but also other actions more oriented to investment like PDAs (FAEN is currently preparing one PDA), investment funds, 13 instruments, etc.



GINNGER  
ReGeneratIoN of NeiGhbourhoods through placE-based appRoaches

Co-funded by the European Union

BIOWIND

Hy<sub>2</sub> Market

REGIO1ST

GLocalFlex

Green JOBS  
RFCS RESEARCH PROJECT

DEQ  
DIGIECOQUARRY  
DIGITAL WATER SOLUTIONS  
AGGREGATED SYSTEMS

JUSTEM

VANGUARD INITIATIVE  
New growth through smart specialisation

DATA CELLAR

i-nergy  
Artificial Intelligence for Energy

Stratego  
ENHANCED HEATING & COOLING PLANS

soWHAT

NeSSIE  
North Sea Solutions for Innovation & Carbon for Energy

BATTERI

Hygenet

ECO-COMBOS  
Uno de los residuos forestales como combustible en proceso de su combustión

ATLANTIC POWER CLUSTER  
MARINE RENEWABLE ENERGY PARTNERSHIPS

the Autonomous Office

CLIPPER  
Interreg Europe

European Union European Regional Development Fund

HIDROTOR  
Energy from Water

REDAWN  
Reducing Energy Dependency in Atlantic Area Water Networks

Interreg Atlantic Area  
European Regional Development Fund EUROPEAN UNION





**Thank you!!**

*Indalecio González*  
*inda@faen.es*

*Cesar Valmaseda*  
*cesar.valmaseda@faen.es*

**Board of Trustees and Collaborators Companies**  
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