



MINISTRY FOR ECOLOGICAL  
TRANSITION  
AND DEMOGRAPHIC CHALLENGE



# Spain, 4 years towards a just energy transition.

May 2023





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EXECUTIVE  
SUMMARY



## Executive Summary

In Spain, the closure of coal mines in December 2018 took place in tandem with the process of closing down coal-fired thermal power plants. The PNIEC envisaged the discontinuation of all coal-fired power generation by 2030. However, recent economic, technical and regulatory developments accelerated this process, so **all coal-fired power plants in the country have now either been closed, are in the process of closure or are subject to short-term closure plans, with total coal closure expected around 2025.**

The energy transition is therefore at a very advanced stage compared to other countries. **Greenhouse gas emissions** from coal-fired generation were reduced by almost 80% between 2018 and 2022, leading to the emissions intensity of the Spanish electricity system (tCO<sub>2</sub> eq./MWh) being reduced by more than a third (35%) during that period. Coal's share of the electricity mix has fallen from 14.3% in 2018 to 2.8% in 2022, and continues to drop. In response, the Spanish government is deploying ambitious Just Transition measures.

To accompany the process, the government has put in place an innovative institutional framework organised around Just Transition. In February 2019, the **Just Transition Strategy** was approved together with the Climate Change and Energy Transition Law and the National Integrated Energy and Climate Plan. In addition, following its approval in 2022, the Climate Change and Energy Transition Law incorporated the obligation to approve Just Transition Strategies **every 5 years** to deal with the ongoing effects of decarbonisation. **It is the only law worldwide that includes obligations of this scale.**

As set out in the Just Transition Strategy, the **Just Transition Institute (ITJ)** was founded in April 2020 to develop and implement actual policies, and work was commenced via a new tool: the Just Transition Agreements. All this institutional development of anchoring public policy was set in motion at the same time as solutions to the most urgent problems were deployed.

For the short-term challenges related to the closure of coal and some nuclear power plants, the Just Transition Strategy brought in an **Urgent Action Plan** to address the impacts experienced in **regions affected by the closure of coal mines and power plants.**

The starting point for the Urgent Action Plan was the **Framework Agreement for a Just Transition for Coal Mining and the Sustainable Development of Mining**

**Regions for the Period 2019-2027**, signed by the government, trade unions and the main coal mining employer organization in October 2018. The commitments agreed guaranteed immediate support measures for mining workers, support schemes for municipalities in mining regions and the necessary short-term funding to support economic reactivation.

Secondly, the **Agreement for a Just Transition for coal power plants: jobs, industry and territories** was signed between the companies that own the plants, trade unions and the government in April 2020, with commitments for the relocation of workers, training activities and the search for alternative industrial projects for affected areas, both by the companies (through renewable energy projects and other initiatives) and by the government, with the participation of the trade unions to facilitate and follow up on the pledges.

Beyond the sectoral agreements with trade unions and companies, in order to respond to the particular socio-economic impacts in the affected areas, the Just Transition Institute launched the **Just Transition Agreements (JTAs)**. JTAs are a co-governance tool to guarantee the commitment and coordination of public administrations - national, regional and local - and to propose support instruments to ensure the reactivation of the territories. They are based on extensive public participation processes and the assessment of socio-economic impacts and opportunities at the local level.

In order to set up the development framework, 15 action protocols were signed for 15 just transition areas, between all the administrations concerned: at central, regional and local level. Since the signing of the protocols, diagnostic analyses were carried out for all the zones, strengths and weaknesses for new developments were identified, and channels were opened to receive contributions and analyse proposals.

In the 15 JTAs, more than **2,000 contributions were received from over 800 different social actors** (regional and local entities, business organisations, trade unions, NGOs, women's associations, companies, training centres, associations, etc.). Participation still continues: on the one hand, **follow-up gatherings are held in the**





**territories**, where 500 representatives from various organisations have already participated, and on the other hand, all actors receive a **newsletter** from the Just Transition Institute which periodically informs them of new developments. It has **more than 2,700 subscribed recipients**.

At the same time, within the framework of the Urgent Action Plan and the Just Transition Agreements, numerous support instruments have been put in place to help municipalities, businesses and individuals in generating solutions.

Measures have been deployed to improve the **employability and protection of workers** directly affected by the closures, through the provision of social assistance in the form of early retirement or voluntary redundancy with incentive payments; and the creation of job banks for workers' priority incorporation in the tasks of dismantling the plants, environmental restoration of coal mines and other business activities supported within the framework of the JTAs. Nearly 1,000 affected workers have signed up in these job banks.

The job bank for miners has an **external service that works on medium-term employability**, job search and training. The coal power plant job bank monitors the commitment of the companies that have signed up to the agreement and offers training in green occupations to those registered. The companies signing the agreement have **trained more than 800 people, with 13,700 accumulated hours of training**.

In relation to the necessary re-skilling of directly affected workers and unemployed population in the areas, the Just Transition Institute is working to provide **services for vocational training in green jobs**.

Finally, special attention is paid to improving **women's participation** in energy transition employment, as the fairness of the process will depend critically on making progress in this area. A study is being prepared that will provide detailed information on the current employment situation of women in the sectors linked to the energy transition and the opportunities offered by the new investments planned in these sectors to promote equal employment. The study will also present recommendations to overcome existing barriers.

Importantly, a specific Just Transition component was incorporated into the Spanish government's **Recovery, Transformation and Resilience Plan**, with €300 million from NextGeneration funds and four specific objectives for the areas affected by the closures, in addition to the deployment of national funds. **Spain is therefore a pioneer** in linking European recovery funds to the special needs of areas affected by the closure with a specific component: component 10.



Furthermore, in the centralised support programs by the IDAE (Institute for Diversification and Saving of Energy) related to the **PERTE for Renewable Energies, Hydrogen and Storage** (PERTE ERHA), just transition areas are prioritised transversally. So, projects located in coal regions receive extra points within competitive tenders for grants to support green hydrogen,

energy storage, biogas, energy communities and other innovative renewables. These measures are already producing results: for example, in the programs awarded so far related to **renewable hydrogen, 25% of the funds** were awarded to projects located in Just Transition Agreement areas. In total, some €2.7 billion of IDAE-managed Recovery Plan related to energy transition will have some form of **prioritisation for Just Transition Areas**, through additional scoring or higher aid intensity in support programs.

Meanwhile, on the basis of the *Agreement for a just transition for coal power plants: jobs, industry and territories*, **electricity companies were required to promote new industrial developments** where coal-fired power plants were being closed down. Today, after almost three years of work, industrial projects promoted in the territories by the same companies that closed the installations will represent an overall gain in employment over the closure of the plants. These energy or industrial projects have already been presented and are at different levels of maturity, and will mobilise **more than 7 billion euros in private investment**.

The success of a Just Transition depends ultimately on economic diversification and the creation of alternative activities and jobs beyond declining sectors. Measures have therefore been deployed to promote business developments and activities that help to create a diversified and sustainable economic model, through **support schemes for local business projects and entrepreneurs, primarily SMEs**. Since 2019, €39.8 million in grants have been awarded with a commitment by recipients to create more than 1,200 jobs in the areas most affected by the closures, in activities such as the circular economy, the agri-food and manufacturing industries and rural tourism, among others. Around 40% of the committed jobs are **jobs for women**, which is important in areas traditionally marked by the masculinisation of employment.



A new wave of calls for project proposals was published in early March, with €40 million for employment-generating business projects and **€10 million** for small investment projects. Two further calls for proposals totalling **€27 million** will be launched by the end of the year. It is expected that the 2023 will support an additional **200-300 projects** and help to create **2,000-3,000 jobs**.

In addition to grants, in order to stimulate the creation of new business projects, work is also carried out through territorial support. To this end, the Just Transition Agreements team has held **more than 600 meetings with companies and entrepreneurs**. In addition, more than **40 seminars have been organised to explain the programs** to companies and entrepreneurs and it is estimated that **15 more will be organised by the end of 2023**.

As a key element of innovation in energy transition, the Just Transition Institute created “**Just Transition Tenders**”, a mechanism to tender grid access to renewable energy projects that maximise local benefits where coal power plants shut down. The first tender, in Teruel, represents a **success in the driving capacity of renewables** to generate new industrial projects, synergies with the primary sector and biodiversity. As a result of the tender, more long-term employment will be generated than that provided by the coal-fired power plant, more than 1,300 unemployed will be trained, and energy self-consumption will be provided for 3,800 citizens and companies.

A significant number of **municipal and infrastructure projects** are also receiving support with the aim of providing adequate services to citizens and businesses in Just Transition Areas. In 2020 and 2021, partnership agreements were signed with the regional governments for more than 100 projects with a total budget of 145€ million. In order to bring the projects to fruition, project deadlines have been extended in some cases due to the difficulties caused by the pandemic and the increase in commodity prices linked to the war in Ukraine.

In March 2023, the Just Transition Institute published the resolution proposal of the support program for **municipal environmental, social and digital projects**, endowed with €91 million from the Recovery Plan. **107 projects will be supported in 90 municipalities**. It is interesting to note that 25% of these will be located in municipalities with less than 500 inhabitants and 75% in municipalities with less than 5,000, inhabitants, thus contributing crucially to tackling the **Demographic Challenge in rural areas**.

To reach out to each and every one of the municipalities, an **assistance service** was provided to help local governments submit their applications, plus support by the Just Transition Agreements team distributed across all regions. Through these two channels,

information was provided to municipalities and 1,600 queries were resolved, which explains the good participation by small municipalities.

The restoration of coal mines has been an important part of Just Transition actions. An **Environmental Restoration Plan** is being implemented in areas degraded by coal mining, rewilding and recovering more than **3,700 hectares** for **local socio-economic development**. This plan featured the active participation of local communities to design projects for new alternative uses of restored areas, funded by **nearly 200€ million**, of which 150€ million corresponds to the Recovery Plan. In these projects, priority was given to **hiring ex-miners**, thus transforming coal jobs into green jobs. Restoration works are already underway.



**Image 1.** *La Gran Corta de Fabero (León) was one of the largest opencast coal mines in Europe*

Finally, the first edition of **Dinamiz-ARTj** has been launched through the CIUDEN Foundation, a program to generate a **wide range of cultural activities** in areas affected by the closure of coal mines and thermal and nuclear power plants.

Dinamiz-ARTj brings together local cultural demand with a range of activities offered by **young artists** from any creative field: music, theatre, dance, photography, painting, sculpture, performance, etc., through performances, exhibitions and any type of artistic expression. In addition to promoting cultural activity, the objectives of Dinamiz-ARTj are to encourage visits to the municipalities through the generation of artistic activity,



complementing the range of tourist attractions in areas with great landscape and environmental value. The launch of the project was carried out together with established artists and in its first months of implementation it has been a success, with **more than 1,400 applications for performances by young people for 136 municipalities.**

In short, **the Spanish government is deploying an ambitious framework of measures** and governance structures together with all the actors involved in order to face the challenges of the transition, on which it will continue to work resolutely. It is estimated that by the end of 2023, **all pledges of the 2013-2018 Agreement** on mining closures which were not implemented in that timeframe will be fulfilled, as well as **90% of the pledges of the current framework (2019-2027).**



KEY RESULTS

## Key results

-  **A new institutional Just Transition framework:** the Just Transition Strategy, creation of the Just Transition Institute (ITJ by its acronym in Spanish), sectoral agreements and inclusion of a specific component in the Recovery Plan.
-  **In total, initiatives presented through agreements and support schemes would create a number of jobs similar to that of installations under closure, as they are implemented.** Measures already deployed in coal regions head toward mitigating the impacts of recent closures, and work continues on promoting additional projects. Areas with nuclear power plants closed down can, for the first time, access support instruments to promote alternative projects.
-  **All affected workers** who applied received monitoring by the ITJ, as well as support for retraining and finding new jobs. **Social aid** is financed for the early retirement of mine workers and agreements were reached to **relocate the personnel** of coal power plants and give priority to hiring their auxiliary workers in decommissioning activities and new investments.
-  **Through the closure agreement with electricity companies** -making closures requested by companies conditional on the implementation of new projects- signatory companies have already announced **major industrial projects** -in some cases of national importance- which would mobilise more than €7 billion in investments and generate more industrial employment than that affected by coal power plant closures themselves, as they are implemented.
-  **Support programs for local business projects and entrepreneurs**, with grants for 279 projects to generate more than 1,200 local jobs and additional support schemes worth €50 million in progress.
-  **Innovation is developed through Just Transition Tenders in nodes linked to coal power plants**, with a first experience of international interest in the case of Andorra (Teruel), which will generate more long-term employment than that previously linked to the coal plant, and which features numerous training objectives, environmental and social projects, training for 1,300 people and 3,800 beneficiaries of self-consumption.
-  **An ambitious Environmental Restoration Plan is restoring 3,700 hectares** of former mining facilities, preparing the land for new uses in consultation with local communities, and prioritising the hiring of former miners. Nearly €200 million (mainly via Recovery Plan). Eight of the nine major works are already underway.
-  **More than 200 municipal projects have been approved** that will boost support for entrepreneurship, tourism, health infrastructures and social housing, among others, with a total of €203 million in grants (€91 million linked to Recovery Plan). Some projects are completed, others are underway and others were approved recently.
-  **A pioneering cultural program – Dinamiz-ARTj –** is developed for young artists. The program has received more than 1,400 applications for performances in 136 municipalities. Meanwhile the Térmica Cultural was inaugurated in Ponferrada, managed by the CIUDEN Foundation, thus converting the former Compostilla I power plant into a multi-purpose centre promoting mining history, culture and entertainment.
-  **The Just Transition Institute works in consultation and holds regular workshops with regional governments, local administrations and local social actors.** 15 Just Transition Protocols were signed with regional and local governments. More than 800 actors have submitted ideas and proposals. Follow-up gatherings are held in the territory. Support was provided to each of the 197 municipalities for the submission of proposals, with more than solved 1,600 consultations.
-  **These results were achieved by the Spanish government before the arrival of the European Just Transition Fund**, which will be implemented from 2023 with a budget of around €868 million and will be managed by regional governments

In total, **initiatives presented through the agreements and support schemes would create a similar volume of employment to that of installations under closure**, as they are implemented, raising more than €7 billion in private investment.

### Impact mitigation:



In total, initiatives presented to date through the agreements and support schemes **would create a similar number of jobs to the number that previously existed in the facilities closed down** (5,176 direct jobs and workers from contractors). In addition, the ITJ funds **social aid** for the early retirement of 324 miners, while thanks to the agreements reached, **the workforce** of coal power plants will be relocated and priority will be given to hiring their auxiliary workers in decommissioning activities and new investments.



The measures already deployed aim to **mitigate 100% of impacts** on employment **in at least 9 of the 13 coal JTA areas**, and work is continuing to develop additional initiatives. At the same time, there are **5 plants still in operation and 9 plants being decommissioned**, maintaining some or all jobs while solutions are deployed. At the same time, mine workers are hired for the **environmental restoration** of mines. In other words, measures are being deployed heading towards the creation of local jobs equivalent to the total number of jobs in installations under closure, while some jobs are still being retained at the plants and for restoration works, thus protecting part of the employment while solutions arrive.



**Areas with closed nuclear power plants** are accessing, for the first time, support instruments to promote alternative business projects and municipal initiatives that help to improve local services and the business community.

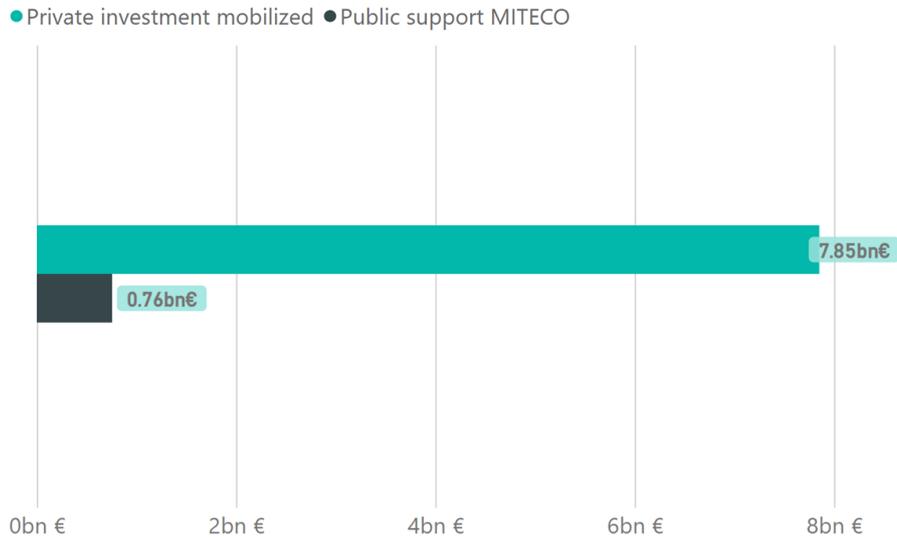
The graphs below show **estimated job creation with the projects announced to date**.

- These are data deriving from the pledges to create employment by projects supported by the government or resulting from sectoral agreements. It includes jobs already created and those pending creation through these pledges. Some of the projects are already under construction or development, while others are pending execution and could be subject to variation.
- Job creation figures will increase following resolution of 2023 support programs.
- Temporary jobs linked to the construction of projects are not included. Only operation & maintenance posts in the operational phase of the projects are considered.

### Job creation



### Investment & public support in just transition areas





## Next steps

- **Presentation of the Study " Assessment of Employment of Women in Just Energy Transition in Spain"**, which will include the state of play regarding participation in employment and recommendations for its improvement.
- **Development of at least 800 cultural events of all kinds by young artists** in Just Transition municipalities during 2023.
- **Support schemes for business projects and entrepreneurs** in Just Transition areas endowed with €50 million already launched and currently in the process of the assessment of applications, plus imminent opening of additional support schemes for business projects and entrepreneurs in mining areas, with €27 million. These two calls are expected to contribute to the creation of between 2,000 and 3,000 jobs.
- **Re-skilling program** in green jobs for unemployed workers in Just Transition areas.
- **New €25 million program for municipal projects** to support some 20 additional projects.
- **Just Transition event within the framework of the Spanish European Presidency.**



PROJECTS IN PROGRESS BY  
JUST TRANSITION  
AGREEMENT

# PROJECTS IN PROGRESS ARAGON JTA

## MUNICIPAL PROJECTS

40 PROJECTS      19 MUNICIPALITIES

18.4 M€

- ❑ **Iberian Interpretation Centre**
- ❑ **Astronomy observation route**
- ❑ **Rural hostel** for geology tourism
- ❑ **"The House of Dreams"** for informal youth training on environment and climate change
- ❑ **Historical-cultural heritage** and consolidation of Islamic fortification
- ❑ **Musealization** of the archbishop's castle.
- ❑ **Social housing** and accommodation for young people and new settlers.
- ❑ **Spaces for entrepreneurship** and the social economy and social innovation.
- ❑ **Elderly care** and socio-health care facilities

## RESTORATION PROJECTS

1,000 HA

- ❑ Cañizar del Olivar and Esterciel (CGMT)
- ❑ Foz-Calanda and Ariño (SAMCA)

19,85 M€

## PROTECTION FOR WORKERS

- ❑ **Early retirements** and severance payments
- ❑ **Support to improve employability**
- ❑ **Direct work** with 60 workers to provide them with training.

32.8 M€

## ANDORRA NODE TENDER. €1,500 MILLION IN INVESTMENT

- ❑ **14 renewable energy plants**, with 1,200 MW of photovoltaic and wind energy, batteries and hydrogen.
- ❑ **Renewable value chain**: solar tracker factory, cement factory for wind towers, electrolyser factory, biomass-processing plant for heating.
- ❑ **Recovery of 50,000 olive trees** to produce oil and preserves, beekeeping project, centre for the dissemination of avifauna and micro-reserves of protected flora, project to integrate people with disabilities in the agro-industry.
- ❑ **Digital platform** to optimise the logistics chain of companies in the agri-food sector
- ❑ **Sustainable tourism initiatives.**
- ❑ **Training** will be oriented towards renewables and organic farming. 337,650 hours of training for 1,300 participants.
- ❑ **Self-supply and energy communities** that will benefit 3,800 families in Andorra and 9 other municipalities

## SUPPORT TO LOCAL BUSINESS PROJECTS €7.9 MILLION.

- ❑ **Business projects** in plastics recycling, artisan gypsum, pistachio processing, olive oil cooperative modernisation for self-supply and use of biomass
- ❑ **Tractor project for the production of leafertilisers**, natural derivatives of charcoal resulting from transformation of large forest masses over millions of years. 40 jobs.

# PROJECTS IN PROGRESS: BIERZO-LACIANA JTA

## MUNICIPAL PROJECTS

22 PROJECTS

12 MUNICIPALITIES

€25.6 million

- ❑ **"Ponfeblino"** old coal and passenger train that connected the municipalities of the mining area with Ponferrada (León) will be recovered as a key feature for tourist development. This project is also designed to celebrate the social history of the area.
- ❑ **Coworking centre** in train carriages, hostel for **pilgrims** on the Camino de Santiago, virtual **nature classroom**, **escape room**, rehabilitation of green areas and paths for pedestrians and bicycles.
- ❑ **Chestnut tree plantation** tractor project and creation of processing companies, beehive manufacturing workshop, projects to improve the use of biomass potential in the area, expansion of social innovation centre.
- ❑ **Projects of a social nature:** rehabilitation of miners' houses for renting to oncology patients, construction of medical clinics, job training spaces.
- ❑ **Improvement of infrastructures:** energy rehabilitation for municipalities, improvements in water treatment. New phase of the Bembibre industrial estate.

## PROTECTION FOR WORKERS

- ❑ **Early retirements** and severance payments
- ❑ **Support to improve employability**
- ❑ **Direct work** with 200 workers to provide them with training

€22 million

## REVITALISATION OF THE CIUDEN FOUNDATION

- ❑ **Storage project and hydrogen** with €30 million from PRTR
- ❑ **La Térmica Cultural**
- ❑ **Dinamiz-ARTj** program for the cultural revitalisation of just transition areas

€40 million

## PROJECTS PROMOTED THROUGH THE COAL POWER PLANTS AGREEMENT

### Endesa, Compostilla

- ❑ Electric vehicle battery recycling factory: €13 million and 50 jobs.
- ❑ Wind blade recycling plant: €8.5 million and 30 jobs.
- ❑ Installation of 200 MW PV, 450 MW wind generators.

### TVITEC, with the Ministry of Industry: €180 million investment and 250-300 jobs:

- ❑ A new glass oven that will incorporate most up-to-date technologies.
- ❑ This new investments will transform El Bierzo into a global hub for the production of curved and flat glass.
- ❑ CO2 emissions reduced by 30%, NOx emissions by 85% and natural gas consumption reduced.

## LOCAL BUSINESS AND SMALL INVESTMENT PROJECTS

Examples: A senior citizens' home specialising in silicosis (Igueña), a 3D printing company (Bembibre), veterinary hospital (Villablino). **€3.8 million**

## PONFERRADA HEAT NETWORK, IDAE TJ PRIORITISATION

**€1.1 million**      **3 PROJECTS**

## ENVIRONMENTAL RESTORATION

**€90.6 MILLION IN 6 PROJECTS**



### **Gran Corta Fabero** (in progress):

€36.8 million, 722 ha, 68-74 jobs.

Recovery for alternative uses: agro-livestock use (pastureland). Environmental forestry recovery and for timber production. Carboniferous fossil area and recreational areas. Hiking paths.



### **Torre-Villagatón** (in progress):

€11.5 million, 90 ha, 44 jobs.

Recreational uses associated with the section of the Camino de Santiago that runs along the Manzanal.



### **Casares-Ladil-Charcón** (in progress):

€19.7 million, 249 ha, 68-74 jobs.

Recovery for alternative uses: recreational areas, pastures, chestnut trees, environmental restoration of woodland and silviculture activities.



### **Mining dumps in Fabero** (in progress):

€2.3 million in aid for the environmental restoration of the Grupo Río waste dumps on the left bank of the River Cúa.



### **La Escondida Mine** (in progress):

€2.1 million in aid for the restoration of an underground mine.



### **Nueva Julia** (work completed):

€18.2 million, 406 ha.

Restoration of vegetation, drainage network, demolition of auxiliary installations and waste management, as well as environmental monitoring and control.

# PROJECTS IN PROGRESS

## MONTAÑA CENTRAL LEONESA-LA ROBLA

### MUNICIPAL PROJECTS

12 PROJECTS

€11.8 million

7 MUNICIPALITIES

- ❑ **Coworking**, enlargement of the **industrial estate**, refurbishment of the **sports facilities** and new **health clinic** at La Robla.
- ❑ Updating of **sports facilities** with climbing wall and camping area, **sociocultural centre** in the old cinema and Camino de Santiago **hostel** at Pola de Gordón.
- ❑ **Public social housing** (Villamanín)
- ❑ **Water treatment** (Vegacervera).
- ❑ **Energy efficiency** at educational, social and municipal facilities in Cistierna, Sabero, La Robla, Matallana de Torío and Vegacervera.

### RENEWABLE HYDROGEN PLANT, €485 million INVESTMENT:

- ❑ **One of the largest H2 initiatives in Spain.**
- ❑ **280 MW** and 90 jobs.
- ❑ **The plant will supply H2** to Arcelor and Fertiberia in Asturias.

### BIOMASS PLANT, €160 MILLION INVESTMENT.

- ❑ **50 direct jobs** and 350 new jobs in the biomass chain.
- ❑ **The project was granted with one of the biomass MITECO renewable tenders**

### SUPPORT TO LOCAL BUSINESS PROJECTS: €460,000

**Small investment projects** and ventures in rural tourism, socio-health services and agri-food industry

### PROTECTION FOR WORKERS: €30.5 million

- ❑ **Early retirements** and severance payments
- ❑ **Grants** for improving employability
- ❑ **Direct work** with 55 workers to provide them with training.

## PROJECTS IN PROGRESS GUARDO-VELILLA JTA

### PROTECTION FOR WORKERS

- ❑ **Early retirement and severance pay:** €1.8 million
- ❑ **Grants** for improving employability

### SUPPORT TO LOCAL BUSINESS PROJECTS: €4 MILLION

- ❑ **Circular economy plant** for tyres, 28M€ investment and 44 jobs (Guardo).
- ❑ **Projects in the agri-food** and chocolate industries

### MUNICIPAL PROJECTS

11 PROJECTS

7 MUNICIPALITIES

- ❑ **Rehabilitation of a rural hotel** at Velilla del Río Carrión.
- ❑ **Territorial connectivity space** at Velilla del Río Carrión.
- ❑ **Refurbishing of old school for new uses:** housing, coworking, gymnasium and exhibition rooms at Barruelo de Santullán.
- ❑ **New urban park and water treatment plant** at Castrejón de la Peña
- ❑ **Energy efficiency** in municipal and educational facilities in several municipalities.

€9 MILLION

### IBERDROLA'S 350 MW PHOTOVOLTAIC PLANT, €217 MILLION INVESTMENT.

- ❑ **One of the largest PV plants** in Spain.
- ❑ **Large volume of employment** in construction.

# PROJECTS IN PROGRESS VALLE DEL NALÓN JTA

## MUNICIPAL PROJECTS

21 PROJECTS  
8  
MUNICIPALITIES

- ❑ **Creation of a space for business and commercial relations** in "Talleres del Conde".
- ❑ **Energy refurbishment** of 258 dwellings in Lada and excavation project at Langreo.
- ❑ **Expansion of ICT Business Centre** at El Entrego (San Martín del Rey Aurelio) and **improvements at industrial estates**.
- ❑ **Rural development school** and **rural innovation laboratory** (Piloña);
- ❑ **Comprehensive care and training centre for rural women** (Sobrescobio).
- ❑ **Environmental restoration and nature tourism:** restoration and revaluation of Monte Carrio (Laviana), nature trail for hiking and cycling tourism, composting project (Langreo), restoration of degraded areas for agroforestry uses (Sobrescobio).

€35.6 MILLION

## EXIOM AND IBERDROLA'S SOLAR PANEL FACTORY IN LANGREO

- ❑ **Spain's first large-scale solar panel factory**
- ❑ One of the first on an industrial scale in **Europe**.
- ❑ €20 million investment and 115 jobs.

## SOCIO-SANITARY PLATFORM IN LANGREO

- ❑ **Socio-sanitary service platform** for the Asturian health system on land owned by Iberdrola.
- ❑ **Around 100 jobs**

## PROTECTION FOR WORKERS

**Job banks** for affected workers

## SUPPORT TO LOCAL BUSINESS PROJECTS: €2.2 MILLION

Examples: manufacture of reusable transport products via circular economy, metal pipes for the shipping and industrial sector, care centre for the elderly in Langreo.

# PROJECTS IN PROGRESS CAUDAL AND ABOÑO JTA

## MUNICIPAL PROJECTS

40 PROJECTS  
11

## MUNICIPALITIES

- ❑ **Reconstruction and deseasonalisation** of the Valgrande-Pajares Winter Resort as an economic force for the Valle de Lena.
- ❑ **Infrastructures:** improvements to industrial estates, water and sewage network, geothermal network, energy efficiency and public transport in several municipalities.
- ❑ **Co-working** for SMEs and **digital innovation (Morcín, Villaviciosa).**
- ❑ **Pedestrianisation** of the market square (Quirós).
- ❑ **Digitisation** of the livestock market (Aller).
- ❑ **Decontamination and restoration** of areas degraded by mining (Riosa).
- ❑ **Refurbishment** of the headquarters of the Neighbourhood Association and the Women's Association at Ujo (Mieres).

€35 MILLION

## EDP'S RENEWABLE HYDROGEN PROJECTS, €600 M INVESTMENT

- ❑ **Reconversion of the Aboño and Soto de Ribera power plants** to produce green H2 and other innovative energy activities.
- ❑ **€39 million in support** from IDAE and declaration as IPCEI.

## SUPPORT TO LOCAL BUSINESS PROJECTS €2.1 MILLION

**Around 50 projects** in agri-food and manufacturing industries, social and health services and tourism.

## PROTECTION FOR WORKERS

**Job banks** for affected workers

# PROJECTS IN PROGRESS SOUTHWEST ASTURIAS JTA

## MUNICIPAL PROJECTS

13 PROJECTS  
5 MUNICIPALITIES

- ❑ **Restoration project** for the village of the Soto de la Barca Thermal Power Station, to set up a **co-housing model** (Tineo).
- ❑ **Multi-purpose space** with a school for adults and a music school, headquarters for a women's association and a retirement home (Tineo).
- ❑ **Multipurpose space for a nursery school, centre for associations** and new **coworking area** (Salas).
- ❑ **Improvements to industrial estates, sanitation, energy efficiency and fibre optics** in Cangas del Narcea, Degaña and Ibias.

€8 MILLION

## ENVIRONMENTAL RESTORATION OF THE TORMALEO, CERREDO AND BUSEIRO MINES €73.7 MILLION FROM PRTR

- ❑ **Native vegetation will be recovered**, various types of fruit trees will be planted, a **lake will be restored for tourist uses**, renewable projects incorporated and tourist and sports trails built.
- ❑ All projects are in progress. **150 jobs created**.
- ❑ **1,167 ha area**, an areas larger than **1,600 football pitches**.

## PROTECTION FOR WORKERS: 78 M€

- ❑ **Early retirement and severance compensation**
- ❑ **Support to improve employability**
- ❑ **Direct working** with 143 workers to provide them with **training**.

## SUPPORT TO LOCAL BUSINESS PROJECTS: €485.000

**Small projects** for investment and entrepreneurship in rural tourism, agri-food industry and biomass.

# PROJECTS IN PROGRESS AS PONTES JTA

## MUNICIPAL PROJECTS

14 PROJECTS

€8 MILLION

11 MUNICIPALITIES

- ❑ **Revitalisation of spaces for SMEs**, entrepreneurs and/or coworking in Cabanas and Moeche.
- ❑ **Construction of industrial building** for logistics centre at As Pontes.
- ❑ **Restoration of the Battery of San Felipe Castle** in Ferrol as a new tourist attraction hub.
- ❑ **Environmental restoration** of the pine woodland and dunes at Cabanas.
- ❑ **Rehabilitation of** municipal hostel and socio-cultural centre, linked to the coastal path of Camino de Santiago at Ortigueira.
- ❑ **Creation of the International Centre for Woodturning** in Xermade.
- ❑ **Centre for the Elderly at Mañón**
- ❑ **Social housing** at As Somozas.

## MAJOR BUSINESS PROJECTS

### **Sentury Tire's smart tyre factory:**

- ❑ >€500 million investment and 750 jobs.
- ❑ The factory will multiply the volume of traffic at the Port of Ferrol and will be located in the former Endesa coal mine.

### **Ence recycled fibre and virgin cellulose mill:**

- ❑ €355 million investment and 150 jobs.
- ❑ The factory will be located on the site of Endesa power plant.

### **EDP and Reganosa H2Pole renewable hydrogen plant:**

- ❑ €156 million investment and 60 jobs.
- ❑ €15 million in aid from the IDAE (H2 Pioneers).

### **1,300 MW renewables from Endesa:**

- ❑ To be mostly used for supplying Galician industries, such as Alcoa and Century.
- ❑ Creation of a wind power maintenance logistics centre for its installations in Spain.

# PROJECTS IN PROGRESS MEIRAMA JTA

## MUNICIPAL PROJECTS

6 PROJECTS

3 MUNICIPALITIES

- ❑ **Renovation of a water park** at Cerceda with water heated by renewable energies to increase its days of active use.
- ❑ **River walk** integrating the environment, the water park and the botanical gardens at Cerceda.
- ❑ **Sustainable mobility route** with cycle park and chargers for electric vehicles at Ordes.
- ❑ **Social rental housing project** at Ordes.
- ❑ **New elderly people's residence** service at Tordoia

€5.1 MILLION

## NATURGY, REGANOSA AND REPSOL'S BIOMETHANE AND BIOFERTILISER PRODUCTION PLANT

- ❑ **Transformation** of 1.2 million tonnes of **livestock waste into biomethane and organic fertilisers**.
- ❑ To be located on the site of the thermal power plant with **five associated pre-treatment plants**.
- ❑ **€146 million investment** and several hundred jobs

## NATURGY, REPSOL AND REGANOSA'S RENEWABLE HYDROGEN HUB:

- ❑ **Initial phase of 30 MW of power and €67 million**, expandable up to 200 MW and 300 M€ of investment.
- ❑ **The H2 production plant** will be located on the site of the Meirama power plant at Cerceda.
- ❑ **It will supply the Repsol refinery** in A Coruña and other hydrogen consumers.
- ❑ **€15 million in grants** from the IDAE.

# PROJECTS IN PROGRESS

## ANDALUSIA JTA

### JTA PUENTE NUEVO-VALLE DEL GUADIATO (CORDOBA)

12 PROJECTS  
8 MUNICIPALITIES  
€9.8 MILLION

- ❑ **Centre for Almond tree Interpretation and Modernisation** at Belmez.
- ❑ **Service centre for agricultural** and regional gastronomic activities at Los Blázquez.
- ❑ **Full renovation of the old olive mill** for a municipal museum on olive oil at Valsequillo
- ❑ **Transformation** of a mining dump into a peri-urban park with an interpretation centre on the former Aurora Mine and tourist activities at Belmez
- ❑ **Socio-health centre** with heated swimming pool, allotment area, rehabilitation and physiotherapy rooms at Peñarroya-Pueblonuevo.
- ❑ **Business incubator** at Villaviciosa de Córdoba.
- ❑ **Residence for the elderly** and day centres at La Granjuela, Fuente Obejuna, Villaviciosa de Cordoba and Belmez.

### JTA CARBONERAS (ALMERÍA)

- ❑ **€720,000 in 2 municipal projects:** environmental restoration and reforestation of degraded areas, and urban rehabilitation.
- ❑ **Renewable hydrogen** and green methanol **project.** €88 million of investment, 140 jobs and €15 million in grants from IDAE.
- ❑ **Endesa's Futur-e** featuring proposals for fish farms and renewable hydrogen.

### JTA LOS BARRIOS (CÁDIZ)

- ❑ **The plant is still in operation.**
- ❑ **Project to convert** the plant into a renewable hydrogen production plant, with investment of up to 550 M€ and 100 jobs. €4 million in aid from the IDAE for 1st phase.
- ❑ **€5 million in 2 municipal projects** at La Línea de la Concepción: environmental and socio-cultural renovation of the Princesa Sofía Park, and promotion of a new tourist attraction around the ruins of Santa Bárbara Fort and Torre Nueva.

# PROJECTS IN PROGRESS

## ZORITA AND GAROÑA NUCLEAR PLANTS JTA:

### ZORITA (GUADALAJARA)

#### MUNICIPAL PROJECTS

10 PROJECTS

10 MUNICIPALITIES

- ❑ Activity centre for **promoting self-employment and entrepreneurship and the economic integration of rural women** in Yebra.
- ❑ **Space for digital innovation and entrepreneurship**, focusing on bridging the digital divide and women's access to entrepreneurship, in Hueva.
- ❑ **Micro-enterprise incubator** in Mondéjar.
- ❑ **Co-working space** offering free access to digital services to reduce the digital divide in Albalate de Zorita.
- ❑ **Comprehensive and energy renovation of the municipality pension** as a focus for tourist development, in Zorita de los Canes.
- ❑ **Day centre for the elderly** to improve social services, stabilise the population and boost the local economy in Mazuecos.
- ❑ **Social housing for new settlers** in Almonacid de Zorita, El Valle de Altomira and Valdeconcha.

€4 MILLION

### GAROÑA (BURGOS AND ÁLAVA)

#### MUNICIPAL PROJECTS

13 PROJECTS

12 MUNICIPALITIES

- ❑ **Revitalisation of tourism** in the Montes Obarenes natural space through improvements in sustainable mobility and the restoration of degraded urban areas in Partido de la Sierra in Tobalina.
- ❑ **Entrepreneurship, co-working and training centres** to boost the rural economy, professional retraining and reduce the digital divide in Frías and Pancorbo.
- ❑ **Social centres** for elderly people that help to create intergenerational relations and the renovation of a residence for the elderly in Santa Gadea del Cid or Valle de Tobalina.
- ❑ **Forest and agricultural biomass collection plant** to promote forest clearing and a renewable resource for local companies in Encío.
- ❑ **Environmental regeneration** of the wetland area in Erriberabeitia and **creation of an open nature classroom** in Valdegovía.

€6.8 MILLION

# THE COAL SECTOR IN SPAIN

# 1. The coal sector in Spain

## 1.1. Coal mining

In Spain, the coal mining sector has been subject to various **reconversion programs since the 1970s**. National coal, like European coal, has found it difficult to compete in the international market and has required state support in different ways. Both the national coal aid frameworks and their termination have been largely determined by European decisions. The EU Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines established a new regulatory framework. This change of orientation was embodied in the **Closure Plan for the Kingdom of Spain**, which included all non-competitive mining units for an orderly cessation of mining activities that failed to reach the break-even point by 31 December 2018.



In 1990, mining companies directly employed **45,200 workers**, in addition to the large number of jobs in ancillary services. Virtually the entire economy of the territories where mining was concentrated revolved around mining, whether it was the jobs directly and indirectly related to coal or the business activities induced by income from mining

and the demographic growth of the areas, which in some cases doubled their population as a result of the opening of the mines. In contrast, in early 2018, coal mining was comprised of only 9 companies that employed a total of **1,833 people in their own workforce and 565 people from subcontractors**, after experiencing a tough reconversion process in recent decades due to the loss of competitiveness of national coal compared to other fuels and energy sources. Consequently, the territories have suffered a significant population and economic decline linked to the energy transition process.

### Find out more: What characteristics do mining regions share?

The mining districts share some characteristics that have been taken into consideration in the definition of support within the Just Transition Strategy and the different measures that have been launched for its implementation.

Often, these are relatively isolated municipalities that have been suffering progressive decline for decades and are located in rural environments, with services and infrastructures undergoing gradual deterioration. The deteriorating situation is further exacerbated by recent closures.

Furthermore, these areas have been experiencing a process of depopulation associated to the lack of job opportunities beyond mining activities. In terms of the labour market, these areas show low level of entrepreneurship, a high degree of masculinisation in employment, and professional qualifications that are not very diverse and closely linked to the mining sector.

Nevertheless, these areas possess significant wealth in mining-industrial heritage, which is trying to be restored and preserved in order to highlight the deep-seated mining identity shared by the areas in transition, and to ensure that it forms part of the future of these regions.

For more information: characterisation and socio-economic diagnosis reports have been drafted for each affected area, available here:

<https://www.transicionjusta.gob.es>

These difficulties were accompanied by the approval of **specific plans**: the *1998-2005 Coal Mining and Alternative Development Plan for the Mining Regions*, the *National Strategic Coal Reserve Plan 2006-2012* and *New Integrated and Sustainable Development Model for the Mining Regions*, and the *Framework for Action for Coal Mining and the Mining Regions in the Period 2013-2018*. The plans provided aid for the closure of mines, the non-traumatic restructuring of workforces, the decommissioning of installations, the restoration of natural areas, new business projects and the expansion of existing ones, and aid for the implementation of infrastructure projects.

These plans were aimed at local labour markets in mining regions, whose weaknesses have hindered the reconversion experiences: relatively isolated municipalities with a rapid tendency towards depopulation or a labour market with a predominance of salaried work, masculinisation and professional qualifications closely linked to the

mining sector, which did not allow for easy incorporation into other jobs, and the limited success of self-entrepreneurship programs due to the conception of work as a salaried activity and lack of any associated business fabric that could support entrepreneurs. Meanwhile, the absence of women from the labour market for decades meant that they could not find alternative employment in these municipalities.

The restructuring plans were successful in terms of worker protection, the aid helped to ensure a progressive and orderly closure of mining activity and generated very significant environmental, logistical and social infrastructure improvements in the territories. Economic diversification was more successful in some areas than in others, for reasons of geography and the previous intensity of the coal monoculture. Where there had been more economic diversity beforehand, it was easier. Furthermore, there was a lack of planning from the standpoint of territorial development and dynamic evaluation. Therefore, while these plans contributed to the reactivation of the areas, **they were not able to respond to all their challenges.**

Finally, the last one of these plans (2013-2018) left a complicated situation in the context of the **financial crisis**: most of the mining companies went into bankruptcy or liquidation and were therefore unable to meet their obligations for the environmental restoration of the mines, and a significant part of the actions included in the reactivation plan were not implemented due to the cost-cutting measures that were imposed. Moreover, while many of the projects supported in the reconversion remain in place, the financial crisis of 2008 damaged the sustainability of many of them and contributed to the failure of some of them.

In early 2018, Spain's coal mining industry, affected by the closure processes within the framework of the **EU Decision 2010/787/EU** of the European Union, consisted of 9 companies with a total of 13 production units, in four areas of Spain: **Asturias, León, Palencia and Teruel**. These companies employed a total of 1,833 of their own employees. Subcontractors employed, at the same date, a total of 565 people. As mentioned above, these facilities were in most cases in bankruptcy or had failed to become sufficiently competitive to repay the state aid received.

Thus, in 2018, Spain's coal areas faced **new closures**, adding to the **impacts of previous reconversions** aggravated by the effect of the 2008 economic crisis in Spain and the measures employed in the following years to reduce public spending. In addition, the impossibility of maintaining employment through restoration actions due to the **bankruptcy** of most of the companies and significant shortcomings in the implementation of the last framework of support for the alternative development of the areas, all generated additional vulnerabilities.

## 1.2. Coal-fired power plants

In 2019, Spain had **15 coal-fired thermal power plants**, which accounted for 31 thermal groups and a total capacity of 10,619 MW, approximately 10% of the capacity installed at national level. In recent years, the operating prospects for coal power plants have been affected by several **technical, economic and regulatory factors**, in particular the following: the Paris agreement reached in 2015 and ratified by the European Union in 2016 and by Spain in 2017, thereby establishing a starting point for energy policies aimed at decarbonising the economy; the growing incorporation of renewable energies, which had substantially reduced the share of these plants in the electricity generation mix and, therefore, their income from energy sales; the need to undertake investments to reduce the emission of atmospheric pollutants (denitrification and desulphurisation), as a result of EU environmental regulations; the orientation and approach of the new European directives on energy that make up the EU's so-called "Winter Package"; the increase in the price of CO<sub>2</sub> on the emission rights market; and other market factors and business decisions on divestment.

Eight of these plants had applied for closure by the date of the presentation of the Just Transition Strategy in February 2019; these were mostly located in coal-producing areas and were technologically adapted to local coal consumption, so the impacts were occurring in the **same territories** where the mines had closed, thus aggravating the socio-economic impacts. In total, coal-fired power plants employed more than 2,500 workers.

Currently, **all coal-fired power plants in the country are either closed, in the process of closure or subject to short-term closure plans** by their companies.

Spain experienced **the closure of coal mines in 2018**, in addition to a **process of closure of all coal-fired thermal power plants**: depending on the installation, these are either in the process of closure, subject to short-term closure plans by their companies or have already been closed.

This energy transition process entails major **climate, economic and public health benefits**, but it also brings serious **socio-economic impacts at the local level** in areas affected by the closures.

### 1.3. Nuclear power plants under the Urgent Action Plan

The closure of nuclear power plants, in general, is determined by known and pre-agreed timetables, so that reconversion and employment protection policies can be anticipated in order to ensure their success. However, this possibility of anticipation was not adopted in Spain, where **two nuclear power plants** were closed and **no conversion plans** had been developed. Specifically, one plant is currently completing its decommissioning process (José Cabrera, known as **Zorita**, in Guadalajara) while the closure of the other has already been decided (Santa María de Garoña, known as **Garoña**, in Burgos).

At the Garoña plant, 385 people were working on the date of closure, and 172 people were working on the decommissioning of the Zorita plant. In addition to the impact on employment, many municipalities in their areas of influence receive tax revenues and will be affected in the medium to long term by their closures. However, none of them possessed a reactivation plan, so they were included into the Just Transition Strategy's Urgent Action Plan.

## 2. Strategic framework

The energy transition process in which Spain is immersed is circumscribed by the 2015 Paris Agreement and the United Nations 2030 Agenda for Sustainable Development, which marked the beginning of a global sustainability agenda that entails the transformation of the economic model and lays the foundations for a new social contract of inclusive prosperity within the limits of the planet.

Combating climate change is crucial for the Spanish economy. Spain is a country that is highly vulnerable to the effects of climate change and the impacts of increased temperatures, rainfall or droughts can have very serious effects on sectors such as agriculture, livestock, forestry or tourism, as well as on the health of the population.

The Spanish government established the **Strategic Framework for Energy and Climate** to put measures in place to facilitate the change towards a sustainable and competitive economic model that will help to curb climate change. This Strategic Framework is structured into three key pillars: [the Law 7/2021 on Climate Change and Energy Transition](#), the [National Integrated Energy and Climate Plan](#) (PNIEC), and the [Just Transition Strategy](#) (ETJ).

The **Climate Change and Energy Transition Law** establishes that emissions from the Spanish economy as a whole in 2030 must be reduced by at least 23% compared to 1990 and climate neutrality must be achieved by 2050 at the latest. In addition, by 2030, Spain must achieve a penetration of renewable energies in final energy consumption of at least 42%, an electricity system with at least 74% of generation from renewable energies and an improvement in energy efficiency by reducing primary energy consumption by at least 39.5% compared to the baseline in accordance with EU regulations.

The target set for 2030 implies a 39% reduction in diffuse emissions compared to 1990, according to the European Commission's assessment of Spain's PNIEC, exceeding by 13 points the target set for these same sectors in the EU's Effort Sharing Regulation in force at that time.

Furthermore, the Law establishes that these targets are revisable, without lowering levels of environmental ambition, and must reflect the highest possible ambition.

The **PNIEC**, for its part, establishes the path that will ensure the best way from an environmental and socio-economic point of view to achieve the full decarbonisation of

Spain by 2050, and sets out the targets for emissions reduction, renewable energy consumption and improved energy efficiency that passed into law through Law 7/2021.

The PNIEC, in particular, envisaged the cessation of all coal-fired power generation by 2030. However, recent economic, technical and regulatory developments have accelerated this process and led to the current scenario of coal-fired power plant closures. As a result, **greenhouse gas emissions** from coal-fired generation were reduced by **almost 80%** between 2018 and 2022, leading to the emissions intensity of the Spanish electricity system (tCO<sub>2</sub> eq./MWh) being reduced by **more than a third** (35%) in that period. Coal's share of the electricity mix has fallen from 14.3% in 2018 to 2.8% in 2022, and continues to drop.

However, while the transition will generate numerous opportunities and benefits across the board (as highlighted by the PNIEC, which foresees the creation of between 242,000 and 348,000 jobs/year in the period 2021-2030), it may also have negative impacts in specific areas. Thus, the discontinuation of polluting energies in favour of other renewable energies may have an impact on activities located in areas and regions where these activities represent quality jobs with an important tractor effect, and may have negative demographic impacts of depopulation.

## 2.1. The Just Transition Strategy

The [Just Transition Strategy](#) seeks to **maximise the social gains** of ecological transformation and **mitigate the negative impacts** this transition may have on certain territories and people, leaving no-one behind. To that end, the main focus is on factors related to supporting the transformation of economic sectors towards the green economy, and to generating and protecting employment in declining sectors in the areas concerned, including boosting the training required by the job market for such a transition.

The Just Transition Strategy is a **pioneering** element of the Spanish experience on an international level, since it elevates the needs for social justice linked to the energy transition to the highest strategic level, in the form of a national strategy. It forms one of the three key pillars guiding Spain's energy and climate policy, together with the Integrated Energy and Climate Plan and the Climate Change and Energy Transition Law. In this way, Just Transition considerations are not isolated actions, instead they are a guiding principle of the entire Spanish ecological transition.

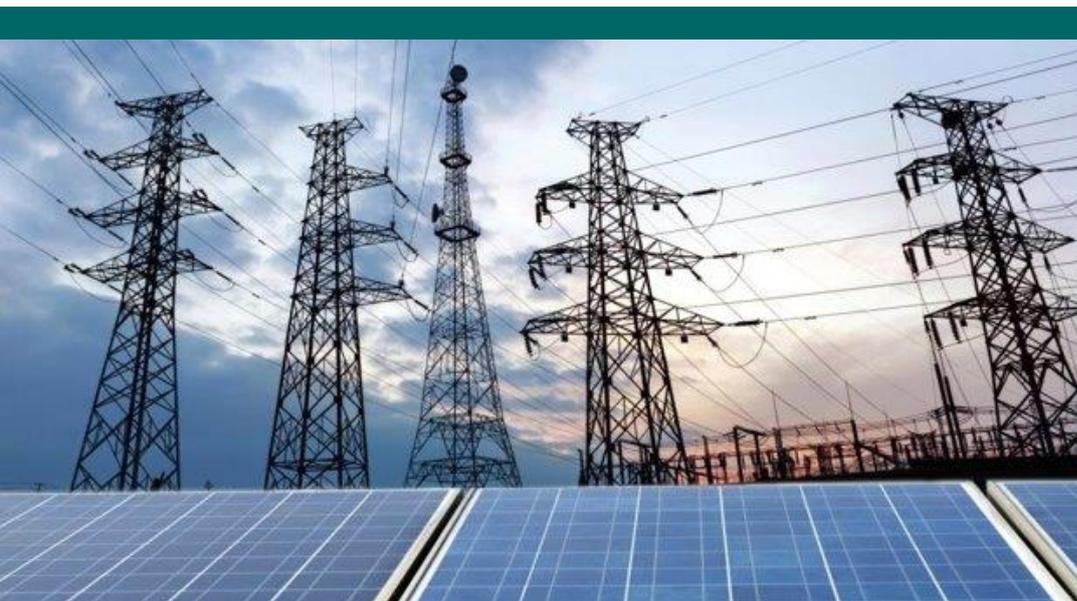
Furthermore, Spain is a pioneer in the incorporation of Just Transition needs at the legislative level in energy and climate policies. In this regard, Section VI of the Climate

Change and Energy Transition Act requires the approval of Just Transition Strategies **every 5 years**, with the aim of updating the priorities and measures for Just Transition as the energy transition itself progresses. In this way, its strategic role is assured by law.

Another innovative aspect of the Just Transition Strategy is the creation of the **Just Transition Institute (ITJ)**, an autonomous governmental body with the rank of Directorate General attached to the Ministry for Ecological Transition and Demographic Challenge. This entity is exclusively devoted to deploying measures to ensure a Just Transition in affected territories and to coordinate the transversal inclusion of Just Transition needs into the Administration's public policies. The existence of a governmental body with exclusive competences to implement Just Transition policies in a centralised and coordinated manner is a unique aspect of Spain's approach at the European and international level.

While the Just Transition Strategy recognises various areas impacted by the ecological transition, an **Urgent Action Plan** is established to address the impacts experienced in areas affected by closure of coal mines and power plants.

Thus, Spain has already started to deploy specific measures for a Just Transition of coal workers, structured through the **Just Transition Agreements**.



**Table 1.** Summary of elements of the Spanish Strategic Energy and Climate Framework

Elements of the Strategic Energy and Climate Framework	Main lines of action
<a href="#">Law 7/2021 of 20 May on Climate Change and Energy Transition</a>	<p>Achieving climate neutrality by 2050 at the latest and a target to reduce emissions in the Spanish economy by at least 23% by 2030 compared to 1990, which implies a 39% reduction in diffuse emissions compared to 1990.</p> <p>Penetration of renewable energy in final energy consumption by at least 42%, an electricity system with at least 74% generated by renewable energy by 2030.</p> <p>Improving energy efficiency to reduce primary energy consumption by at least 39.5% compared to the baseline, in accordance with EU standards.</p> <p>The Law establishes an obligation to approve Just Transition Strategies every 5 years and includes Just Transition Agreements as a tool to reactivate affected areas.</p>
<a href="#">National Integrated Energy and Climate Plan (PNIEC) 2021-2030</a>	<p>It establishes the path that will ensure the best way, from an environmental and socio-economic point of view, to achieve the full decarbonisation of Spain by 2050. It also sets out the targets for emissions reduction, renewable energy consumption and energy efficiency improvement that have passed into law via Law 7/2021.</p>
<a href="#">Just Transition Strategy</a>	<p>It aims to maximise the social gains of ecological transformation and mitigate the negative impacts that this transition may have on specific territories and people, without leaving anyone behind.</p> <p>The Just Transition Institute is created, an autonomous governmental body attached to the Ministry for Ecological Transition and Demographic Challenge.</p> <p>It establishes an Urgent Action Plan for coal regions, coal-fired power plants under closure and nuclear power plants without reconversion plans as a short-term priority objective, to address the impacts that these territories are already suffering.</p>

## Elements of the Strategic Energy and Climate Framework

### Main lines of action

#### [Just Transition Strategy Urgent Action Plan](#)

Ensure adequate compensation for workers who lose their jobs in mining companies that close down.

Maintain employment for the mining areas through various plans.

During the timeframe of the Plan, present the Just Transition Agreements as measures designed to ensure that closures will not produce impacts on employment and population when the process is over.

## 3. Urgent Action Plan and measures developed in Spain on Just Transition 2019-2023

The Just Transition Strategy's Urgent Action Plan, designed to respond to this situation of urgent vulnerability, was approved for the period 2019-2021 but it is still being implemented due to, among other things, the difficulties and new problems related to the COVID 19 crisis.

The following objectives were set:

- 1. Guarantee adequate compensation to workers** who lose their jobs in mining companies that close down.
- 2. Maintaining employment** for the mining areas through various schemes.
- 3. During the timeframe of the Plan**, in areas subject to mine closures by 31 December 2018, and the closure of coal or nuclear power plants, present the **Just Transition Agreements** as measures designed to ensure that the closures will not produce impacts on employment and population when the process is over.

The following measures are part of this Urgent Action Plan.

### 3.1. Agreements with companies and trade unions: social dialogue for a Just Transition

The first expression of the Just Transition Strategy and its Urgent Action Plan being translated into genuine action was the signing of **tripartite agreements** between the **government, trade unions** and the **companies** involved in mine and plant closures, with the aim of ensuring that the closures take into consideration the needs of workers and provide them with vocational training and new jobs.

Thus, the coal transition in Spain is characterised by coordinated action between administrations, companies and workers' representatives, all of whom have pledged to contribute to mitigate the impacts of closures.

Consequently, an **agreement was signed for the closure of the 15 coal-fired power plants** which involves the relocation of workers and a search for alternative activities for the affected areas, both by the companies (through renewable energy projects and other activities) and by the government (through the deployment of support instruments organised around the Just Transition Agreements) and with the participation of the trade unions to facilitate and monitor the fulfilment of the pledges.

Similarly, a **coal mining agreement** has been signed which guarantees social measures for former miners and local development policies.

Specifically, these agreements are:

- [\*Framework Agreement for a Just Transition for Coal Mining and Sustainable Development of the Mining Regions for the Period 2019-2027.\*](#) Signed in October 2018 by the Ministry for Ecological Transition UGT-FICA, CCOO Industry Federation, the Federation of Industry of USO and the employers' association of the sector, CARBUNION.
- [\*Agreement for a just transition for coal power plants: jobs, industry and territories.\*](#) Signed in April 2020 between the State Administration (Ministry for Ecological Transition and Demographic Challenge and Ministry of Labour), the companies with thermal power plants in closure (Endesa, Iberdrola, Naturgy and EDP, the latter in March 2021) and the trade unions (CCOO Industria, UGT FICA).

To coordinate and verify the fulfilment of the pledges, the agreements themselves establish **governance structures** that bring all parties together on a regular basis. The power plant agreement envisages monitoring commissions to be held every 6 months and the mining agreement establishes the periodicity of an annual commission. In practice, however, the parties involved have met more frequently, with a total of 9

commissions between 2020 and 2022. This is in addition to countless bilateral meetings by the government and the unions and the companies involved.

### 3.2. A new instrument: Just Transition Agreements

Beyond the sectoral agreements with workers and companies, in order to respond to the socio-economic impacts of the affected areas, the Just Transition Institute has launched the [Just Transition Agreements](#) (JTA): a tool for **co-governance** aimed at ensuring the commitment and coordination of public administrations and proposing **supporting instruments** in the Just Transition process. While sectoral agreements are at the state level and focus on companies and workers, Just Transition agreements focus on the territory and are included in the Just Transition Strategy and the Law on Climate Change and Energy Transition.

The objective of the JTAs is to promote economic activity and its modernisation in concerned territories. They start from an **assessment** of potential job losses and develop a series of **pledges**, with a final list of measures to maintain employment and the population. They are developed for areas affected by the closure of mines and coal-fired power plants, as well as for areas with nuclear power plants closed down without previous conversion plans (Zorita and Garoña).

In particular, the **priority objective of the JTAs is to maintain and create activity and employment**, as well as to consolidate population in rural areas or in areas with installations in closure. To that end, diversification and specialisation consistent with the socio-economic context is promoted and at-risk sectors and groups are provided with tools to boost investment, environmental restoration, the improvement of public infrastructures, support for industrial projects, retraining of workers and the development of SMEs.

There are currently 15 Just Transition Agreements in place, in the following regions:

- Asturias: JTA Suroccidente; JTA Valle del Nalón; JTA Valle del Caudal and Aboño.
- Andalusia: JTA Puente Nuevo-Valle del Guadiato; JTA Los Barrios; JTA Carboneras.
- Aragon: JTA Aragon.
- Balearic Islands: JTA Alcúdia.
- Castilla y León: JTA El Bierzo-Laciana; JTA Montaña central leonesa-La Robla; JTA Guardo-Velilla; JTA Garoña.
- Castilla-La Mancha: JTA Zorita
- Galicia: JTA As Pontes; JTA Meirama.

For each of these JTAs, a **General Action Protocol** was signed between the representatives of the national, regional and local administrations.

### 3.3. The territories have their say. Social participation in Just Transition Agreements

The starting point of the Just Transition Agreements is the drafting of a [socio-economic diagnosis](#) for each area and the launch of public participation processes where local actors can contribute to the diagnosis and propose projects and ideas to reactivate their territories. To date, diagnoses have been drawn up for the 15 agreements, they have been subjected to public participation and external evaluation, processes have been developed that saw the participation of over 800 agents and more than 2,000 ideas and proposals have been received.

Stakeholders of all kinds have been involved, including companies, business sector organisations, local authorities, trade unions, universities, educational institutions, environmental and other non-governmental organisations and associations, development agencies, local action groups and other interested or affected entities. In addition, specific participation frameworks for young people and women were established and will be expanded and improved.

Throughout 2022 and 2023, a series of **follow-up gatherings** are being held in the territories in which the JTAs are carried out, with the aim of communicating the work being done, explaining the projects under development and informing people about the different support instruments for economically revitalising the areas of Just Transition. In addition, all stakeholders are kept up to date on progress through regular **newsletters** which are sent to more than 2,600 stakeholders.

A window of participation is also open in the form of the **territorial agents** that the Just Transition Institute has deployed in each region, which means that new actors and proposals are added on a continuous basis and a **constant dialogue** is maintained with the participants.

The ITJ's territorial agents are also responsible for analysing the projects received and matching them up with the support instruments best suited to their needs, where possible, with the aim of helping them turn into real alternatives for the areas. They represent a key tool for local actors, especially for SMEs and small municipalities.

In this way, the Spanish experience of public participation is not based on unidirectional participation channels, as is commonly the case; instead it aims to create bidirectional channels, maintained over time, that give rise to constant dialogue and exchanges **between civil society and public administrations**.

This social participation has been crucial in order to **adapt the support tools** to the territory's **real needs**, and it constitutes the basis of the Spanish government's Just Transition policies.



**Image 2.** *Just Transition Agreements team and its territorial agents*

### 3.4. What impacts are acted upon?

The geographical scope of JTAs -the territories for which pledges are made and support instruments are deployed- is defined on the basis of an objective, exhaustive assessment of the socio-economic impacts of closures on local populations. Impact assessment is crucial because the objective of JTAs is to achieve zero impact on employment and the population of the areas by the end of their implementation, and so the impacts serve as outcome indicators for the fulfilment of objectives.

Thus, the basis of Just Transition Agreements is to identify which municipalities affected by the energy transition suffer **the greatest relative impacts**, and concentrate the support tools on them. Specifically, the impact assessment methodology (which was subjected to external technical evaluation), considers the following:

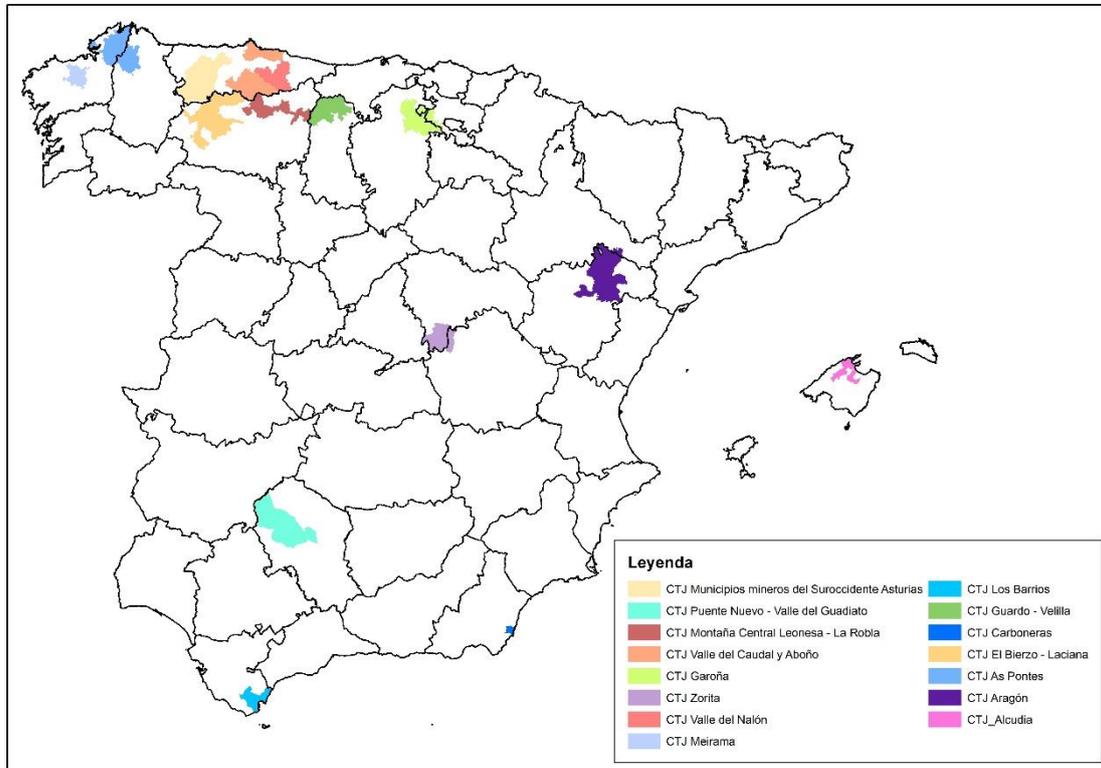
- a) Criteria relating to the current economic impact of closures
  - Location of facilities to be closed.
  - Relative impact on local employment.
  - Relative impact on local wages.
- b) Territorial coherence and cumulative impact criteria
  - Cumulative impact of previous closures, particularly mining.
  - Territorial coherence criteria based on the geographical continuity of municipalities and regional coherence.

The methodology takes **employment** as its key indicator and focuses on the employment impacts of mine and power plant closures on municipalities. To that end, information is collected on the number of workers (both employees of the installation and of subcontractors) affected by the closures and their municipality of residence.

On the basis of these data, the geographical scope of the Just Transition Agreement is delimited in such a way as to include the municipalities whose working age population is most impacted in relative terms as a result of the closure of the facilities. This identifies the municipalities most affected at the local level, while ensuring that they represent the vast majority of workers. A similar analysis of the impact on **wages** is carried out to supplement the employment diagnosis.

This delimitation is accompanied by **territorial coherence and cumulative impact criteria**, which seek to provide geographical continuity to the JTA area, as well as to maximise the precision of the diagnosis and delimitation, by analysing the cumulative impact of previous closures.

The result of applying this methodology is a precise delineation of the areas most affected by the energy transition, which are identified in the following map:



**Map 1.** Geographical location of the areas covered by the Just Transition Agreements.

**Just Transition Agreements** are the tool implemented in Spain to respond to the socio-economic impacts of coal closure in the territories.

They are a **co-governance** tool to ensure **commitment and coordination** of public administrations and to propose **support instruments** for the Just Transition process.

They are based on extensive **public participation** processes and **assessment of socio-economic impacts at the local level**.

### 3.5. A specific component for Just Transition in the Recovery, Transformation and Resilience Plan

A unique aspect of the Spanish measures is the incorporation of a [specific Just Transition component into the Recovery, Transformation and Resilience Plan](#) (PRTR by its acronym in Spanish). As the COVID 19 crisis has exacerbated the vulnerabilities of transition territories and created new difficulties for them, component 10 on Just Transition was included in the PRTR for the implementation of Next Generation funds, endowed with €300 million and four specific objectives:

1. **Environmental restoration** of areas degraded by mining or coal-fired generation activities.
2. **Supporting improvements in environmental, digital and social infrastructures** in areas affected by closures.
3. **Promoting energy storage and energy efficiency projects** in Just Transition areas.
4. **Encouraging professional transition** and improving the employability of workers and population directly affected by the energy transition.

### 3.6. JTA Support: different instruments and aid programs

Within the framework of the Urgent Action Plan and Just Transition Agreements, the Spanish government is deploying various support instruments to help maintain employment, reactivate the economy and restore the environment in affected territories.

Both area-specific support tools and transversal Just Transition policies have been introduced into the energy and environment measures, as summarised in **Table 2**.

**Table 2.** Support instruments in place for Just Transition in Spain (2019-2023)

Support instruments	Main lines of action	Allocation (€)
Measures to improve the employability and protection of the working population directly affected by mining closures.	<ul style="list-style-type: none"> <li>• Early retirement and severance pay for people affected by the closure of the coal mining industry under the 2019-2027 Agreement.</li> <li>• Job banks for workers affected by mine closures and coal-fired power stations.               <ul style="list-style-type: none"> <li>✓ Opened in 2019 and 2020, respectively</li> </ul> </li> <li>• Employment improvement service for people affected by the closure of the coal mining industry.               <ul style="list-style-type: none"> <li>✓ Operational from 2021</li> </ul> </li> <li>• Support plan for the professional re-skilling and job placement of affected workers and population, linked to the PRTR.               <ul style="list-style-type: none"> <li>✓ Under development.</li> </ul> </li> </ul>	<p>Estimated cost of early retirements and severance payments: 172 million</p> <p>1.9 million for employability improvement service</p> <p>9 million for re-skilling plan in green jobs, linked to the PRTR</p>
Local business projects	<ul style="list-style-type: none"> <li>• Support schemes have been launched for business investment initiatives and entrepreneurs that generate employment and promote alternative development of affected areas.               <ul style="list-style-type: none"> <li>✓ Call for applications 2019</li> <li>✓ 2021 call</li> <li>✓ Calls planned for 2023</li> </ul> </li> </ul>	<p>39.8 million awarded</p> <p>50 million in open calls</p> <p>27 million in upcoming calls</p>
Municipal, cultural and infrastructure projects	<ul style="list-style-type: none"> <li>• Municipal and infrastructure projects are being funded in mining areas, with the aim of providing adequate services to citizens and companies to maintain their life and activity in the territory.               <ul style="list-style-type: none"> <li>✓ Projects approved in 2020</li> <li>✓ Projects approved in 2021</li> </ul> </li> <li>• Pilot support scheme for projects in municipalities affected by the closure of thermal power plants.               <ul style="list-style-type: none"> <li>✓ Call 2020</li> </ul> </li> <li>• Programs for the conservation of cultural and industrial heritage and cultural activities.               <ul style="list-style-type: none"> <li>✓ Under development.</li> </ul> </li> </ul>	<p>145 million for projects in mining areas</p> <p>7 million in call for municipalities with thermal power plants</p>

Support instruments	Main lines of action	Allocation (€)
Environmental, digital and social infrastructures	<ul style="list-style-type: none"> <li>A support program has been deployed for environmental, social and digital infrastructure projects in municipalities in areas affected by the energy transition, based on the needs that local entities have communicated through public participation processes. <ul style="list-style-type: none"> <li>✓ Call awarded in 2023</li> </ul> </li> </ul>	€91 million, linked to PRTR
Environmental restoration of degraded mining areas	<ul style="list-style-type: none"> <li>Implementation of an Environmental Restoration Plan for areas degraded by mining activity, linked to the PRTR, including actions to improve the reactivation of the areas, with the aim of combining environmental restoration with opening up new opportunities. This is in addition to restoration projects financed directly through national funds. <ul style="list-style-type: none"> <li>✓ All restorations are currently underway</li> </ul> </li> </ul>	€150 million linked to PRTR and €50 million from national funds
R&D in energy transition	<ul style="list-style-type: none"> <li>R&amp;D project on energy storage and green hydrogen at the CIUDEN Foundation <ul style="list-style-type: none"> <li>✓ Under development.</li> </ul> </li> </ul>	€30 million linked to the PRTR
Renewable tenders in just transition nodes	<ul style="list-style-type: none"> <li>Grid access capacity freed up by coal-fired power plants is awarded to renewable energy projects through tenders that prioritise proposals with the greatest socio-economic and environmental benefits for affected areas. <ul style="list-style-type: none"> <li>✓ Resolution awarded in 2022 in Andorra (Teruel)</li> </ul> </li> </ul>	No budget allocation: 1,202 MW tendered in Andorra (Teruel)
Just Transition as a transversal theme in support instruments for energy transition and green jobs	<ul style="list-style-type: none"> <li>Prioritisation elements for Just Transition Agreement areas have been included transversally throughout the Renewable Energy, Renewable Hydrogen and Storage Strategic Projects for Economic Recovery and Transformation (PERTE) package. <ul style="list-style-type: none"> <li>✓ Calls in 2020, 2021, 2021, 2022, 2023</li> </ul> </li> <li>Priority has also been given to projects in Just Transition areas in the subsidies of the <i>Empleaverde</i> program managed by the Fundación Biodiversidad. <ul style="list-style-type: none"> <li>✓ Annual calls and more in the pipeline</li> </ul> </li> </ul>	<p>Prioritisation in calls for proposals endowed with €2.7 billion (IDAE)</p> <p>Prioritisation in calls for proposals endowed with &gt;€9 million (Fundación Biodiversidad)</p>

### 3.7. Those most directly affected: support for workers

One of the most important lines of work concerns workers affected by the closures. As part of the **tripartite agreements** reached in the framework of the closure of coal mining and coal-fired power plants, a number of measures were agreed which aim to support those affected by the closure process.

On the one hand, the ITJ funds **social aid** to coal mining workers in the form of early retirement and severance payments for 360 beneficiaries, at a total cost of more than €172 million, in compliance with the Mining Framework Agreement 2019-2027. On the other hand, the agreements reached will **relocate the staff of the coal power plants** and prioritise the hiring of auxiliary workers in decommissioning activities and new investments.

Meanwhile, two **job banks** were launched, both managed by the Just Transition Institute. The first of these is for workers of the companies involved in mining closures, as well as their subcontractors. Currently, 308 people are part of this job bank. The second is open to persons affected by the closures of the coal-fired power stations and ancillary companies. At present, 633 people are registered at this second job bank.

In both cases, **monitoring** has been carried out in order to incorporate them as a **priority** in the works involving the decommissioning of the plants and the environmental restoration activities at abandoned mines, as well as other business activities proposed as part of the different JTA support schemes.



With the same aim of promoting the **employability** of this group, **assessment criteria** have been

included in support programs for local business projects launched by the ITJ, establishing higher subsidy levels and scores for projects that include the hiring of workers registered at the job banks, thus enhancing their employability.

- **All workers in the mining job bank** have received individual counselling to improve their employability. Job placement has been mainly linked to environmental restoration work.

- **80% of workers registered in the job bank for coal power plants** already being decommissioned are currently employed.

Meanwhile, work on **training and professional re-skilling** is carried out through an advisory service to improve the employability of workers registered at the mining job bank. In addition, a professional training service in green occupations will be deployed, and work is being done to monitor the training activities implemented by the companies that own coal power plants, in compliance with their pledges under the *Agreement for a just transition for coal power plants: jobs, industry and territories*.

- **The advisory service to improve employability** has had so far a volume of 13.038 interactions with workers registered in the mining job bank, via phone, emails and whatsapp.
- **The Just Transition Institute has sent so far more than 800 communications** to workers registered in the **mining job bank** on training opportunities, information about the advisory service and responding general inquiries by workers.
- **The Just Transition Institute has sent so far more than 1.200 communications** to workers registered in the **job bank for coal power plants** on training opportunities, job offers and responding general inquiries by workers.

### **Find out more: How re-skilling for people affected by closures is being implemented**

The Just Transition Strategy pushes for industrial, employment promotion and vocational training policies. Within this framework, different initiatives are developed linked to the training and re-skilling of people affected by the closures.

In the case of coal mining, the people who are part of the mining job bank have had the opportunity to receive personalised advice on improving their employability and searching for a new job. To that end, a personal analysis is made of the employment situation in which the person finds him/herself, those elements that are an obstacle to employment are analysed and the employment expectations of each person are taken into account. Based on this information, the main training needs are identified and a personal learning path is designed, planning the necessary activities to improve the person's soft skills.

Meanwhile, as part of their pledges in the *Agreement for a just transition for coal*

*power plants: jobs, industry and territories*, electricity companies are incorporating specific actions for vocational training and job placement to guarantee the improvement of the employability of workers in their new activities, both in the work of decommissioning power plants and the new investments in renewables and other industries, which are promoted by the companies themselves.

The companies have conducted training courses focusing on decommissioning and the installation of renewable energy plants (photovoltaic, wind and renewable gas) and on improving the energy efficiency of buildings. 48% of job bank-registered workers associated to power plants under decommissioning have received training offers. Meanwhile, companies have developed training activities for wider groups of unemployed people located in affected areas. A total of 829 people have been trained so far, with a total of 13,760 hours of training.

Furthermore, the Fundación Biodiversidad prioritises projects in Just Transition areas within the *Empleaverde* program, aimed at projects boosting the transition, in order to promote initiatives to increase the skills and qualifications of workers in green and blue economy sectors.

Finally, the ITJ is currently working on a re-skilling program in green occupations for unemployed people in Just Transition areas.

### 3.8. A diversified and sustainable economic future: promoting local business development

Another key aspect of a Just Transition process is promoting alternative business activities that diversify territories and create new jobs within the context of coal mine and power plant closures.

To that end, the Spanish government has launched [support schemes for local business projects and entrepreneurs](#) through the Just Transition Institute. These grants schemes encourage investment in these vulnerable areas by providing subsidies that cover a proportion of the investment costs, thereby attracting new projects that create jobs and help to maintain existing ones.

In particular, two types of schemes are deployed, mainly SMEs. On the one hand, there is a support program for business projects that generate employment, and on the other, a support program for small investment projects and entrepreneurs, focused on smaller but necessary initiatives to maintain the social and economic fabric of the areas.

These are competitive schemes, and consequently priority is given to projects with **the greatest social and environmental benefits** for areas in transition.

To date, this support was mainly concentrated in mining areas, due to the fact that mine closures have occurred earlier than in municipalities affected by the closure of power plants. However, new schemes have already been opened for both areas within the framework of Just Transition Agreements.

Specifically, since 2019, the following calls have been launched:

- Support program for employment-generating business projects promoting alternative development in the mining areas of Aragón, Asturias, Castilla-La Mancha and Castilla y León in 2019 and 2021.
- Support program for small investment projects promoting alternative development in mining areas in Aragón, Asturias, Castilla-La Mancha and Castilla y León in 2019 and 2021.
- In 2023, two calls for proposals have been launched for Just Transition Agreement areas endowed with €50 million.
- Two further €27 million calls for mining areas will be launched by the end of 2023.

In total, since 2019, **grants** worth €39.8 million have been granted to **279 projects**, which mobilized a total investment of more than €345 million to create more than 1,200 jobs in the territories affected by coal closures. Many of these projects are already underway or under development, while others are pending implementation and may be subject to change.

These include projects for the industrial recycling of plastics, tyres and batteries, generating business activity through the **circular economy**, industrial **manufacturing** and **agri-food** projects linked to the endogenous resources of the areas, projects to attract **tourism** to the areas via rural hotels, hostels and promotion of the natural heritage, placing special emphasis on natural sites in Asturias and the Camino de Santiago, which runs through the mining areas in León, and projects to provide **socio-health services** ranging from retirement homes to physiotherapy and veterinary clinics.

While these schemes represent a first step towards raising investment and creating jobs, there is a need to carry on working along these lines in order to further strengthen the economic diversification of the territories concerned, and this will continue to be one of the key lines of action of the Just Transition Institute.

In addition to channelling grants, in order to stimulate the creation of new business projects, work is also carried out through **support in the territory**. To that end, the Just Transition Agreements team and agents in the territory have held more than **600 informative meetings** with companies. In addition, **40 seminars have been held** to explain schemes to companies and entrepreneurs and it is estimated that 15 more will be organised by the end of 2023.

### 3.9. Energy transition as engine for job creation

Promoting the energy transition and its industrial value chain is a key line of action for the ecological transition itself to serve as an engine for the reactivation of the territories where coal is closing down.

To that end, the Spanish government is taking action in several areas.

Firstly, legal amendments were enacted (Royal Decree-Law 2023/2020) which rule that the electricity grid access capacity freed up after the closure of coal-fired power plants will be awarded through **tenders in Just Transition nodes**, also known as “Just Transition Tenders”. These are tenders that prioritise renewable energy projects that maximise the socio-economic and environmental benefits at the local level.

This is a pioneering measure, since instead of awarding grid access permits solely on the basis of technical considerations, as is customary, the projects’ contribution to the Just Transition Strategy will also be assessed, in terms of employment (with special attention to women and coal workers), re-skilling activities, promotion of energy self-consumption, and paying particular attention to associated industrial projects and local investments, among other aspects. As a consequence, this fosters a **virtuous circle** where companies that want to implement renewable energy projects must compete with each other to **improve the socio-economic benefits for local populations**. Thus, renewable expansion is used as a tool to respond to the needs of the territories affected by the closures.

The first Just Transition Tender took place at [Andorra’s coal power plant node](#) (Teruel) with 1,202 MW up for tender.

The results have been a success story; the jobs that will be created will significantly outweigh those affected by the closure of the plant.

## Results of the Mudéjar node tender in Andorra (Teruel):

- 
**The winner energy project is based on 14 renewable energy plants** in different municipalities, with 1,202 MW of photovoltaic and wind power and the installation of batteries to facilitate energy storage, also including hydrogen production for local consumers, all of which adds up to an investment of €1.5 billion.
- 
**Renewable value chain industry:** a solar tracker factory will be set up to supply plants in the area and other Spanish provinces. Also, the company will create an electrolyser factory for producing components in the renewable hydrogen value chain, while partnering with a local concrete manufacturing industry to produce wind tower components and diversify its activities within the renewable value chain. Also, a woodchip processing plant for biomass heating will be set up.
- 
**The production of renewables will be made compatible with environmental protection, biodiversity and the agricultural sector.** 50,000 hundred-year-old olive trees will be recovered to produce oil, thereby consolidating an associated oil mill and canning plant. Also, agreements with shepherds and beekeepers will be promoted, and an inclusive olive grove project will be created to bring people with disabilities into work in agri-food industry activities. Creation of a centre for the promotion of birdlife and micro-reserves of protected flora.
- 
**A digital platform will be developed** to optimise the logistics chain of companies in the agri-food sector in Andorra and the surrounding region to connect production centres with urban consumption centres, by means of non-CO2 emitting transport solutions.
- 
**Sustainable tourism will be developed.** A "Just Transition green mile" will be created, connecting nearby renewable developments and their associated agricultural initiatives by means of a hiking route, and the Val de Zafán railway line will be upgraded as a greenway. The Museum of the Evolution of Beekeeping project will also be consolidated and Andorra will become the third "picto village" in Spain for people with disabilities.
- 
**Job training** will be oriented towards renewables and the agricultural sector, with the collaboration of Afammer (rural women organization) and Asaja (agricultural association), as well as social inclusion, with the Juan XXIII Foundation and Atadi. 337,650 hours of training will be provided for 1,300 participants.
- 
**Self-consumption and energy community projects** will benefit 3,800 families in Andorra and 9 other municipalities.

### Find out more: How tenders work in Just Transition nodes

Just transition nodes are those where the grid access capacity freed up after the closure of closed coal or nuclear power plants is tendered out to be used by new renewable energy plants connected to the node. Access capacity is granted by taking into consideration criteria regarding the socio-economic and environmental benefits that projects propose for Just Transition Agreement areas.

The awarding criteria takes into account many of the aspects that form the backbone of the Just Transition Strategy, such as employment creation for unemployed workers, women and young people, and the implementation of re-skilling plans to enable the local population to participate in the generation of jobs. In addition, the indirect effect on related local business and industrial projects is analysed.

Other factors that are also assessed include the proposal of associated socio-economic plans, agreements with other enterprises or local associations to promote local initiatives, as well as the promotion of energy self-consumption and energy communities for citizens and companies in the area. The income that will be generated both in the municipality affected by the closure and in the municipalities within its area of influence is also considered. The maturity of the project is examined, along with, and, specifically, the description of proposed investments and their planning, their technical, economic and legal feasibility and their innovation.

In all cases, the project must minimise its environmental impact under the principle of "not causing significant harm", as set out in the Recovery and Resilience Mechanism regulations. Projects must also respect the criteria associated with generation technology (assessment made by Red Eléctrica de España - REE).

More information: <https://www.transicionjusta.gob.es/es-es/Paginas/La-Transicion-Justa/Nudo-de-transicion-justa.aspx>

Regulation on the Mudéjar tender in Andorra (Teruel):

[https://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2021-17966](https://www.boe.es/diario_boe/txt.php?id=BOE-A-2021-17966)

Another key aspect of the Spanish approach is the idea of introducing Just Transition needs into the country's energy policies transversally, in addition to the specific instruments deployed by the Just Transition Institute. Just Transition has thus been included as a transversal component of the whole package of Strategic Projects for Economic Recovery and Transformation (**[PERTE](#) for Renewable Energy, Renewable Hydrogen and Storage**) funded by the Recovery, Transformation and Resilience Plan.

It is estimated that **support programs with prioritisation criteria** for Just Transition areas will be launched with a total value of EUR 2.7 billion. In this way, support schemes for green hydrogen projects, energy storage, energy communities, biogas, heating and cooling networks, repowering and recycling wind farms and other innovative renewables all set prioritisation criteria for projects located in Just Transition Agreement areas in the form of higher scoring or higher economic support, thus improving their funding opportunities and attracting proposals to the territories affected by the transition.

In the case of **renewable hydrogen**, for example, 25% of funds to date have been awarded to projects located in Just Transition Agreement areas, thus creating a new future linked to the energy heartland they have always been.

In addition, the government launched the transformation of the carbon capture and sequestration facilities of the **Fundación CIUDEN**, (attached to the Just Transition Institute and located in El Bierzo mining region) in order to develop research and innovation projects in new vectors of energy transition, such as storage and green hydrogen and associated public-private projects. This is a project provided with €30 million from the Recovery, Transformation and Resilience Plan that will create **a centre for R+D+i in energy transition** in one of the mining areas most affected by the end of coal.

Meanwhile, the ***Agreement for a just transition for coal power plants: jobs, industry and territories*** involves a commitment by electricity companies to propose new investments in renewable energies or other sectors, in the same territories where they are closing their plants. As a result, tractor projects have already been announced - in some cases of national importance - which would involve €7 billion in investments and would create more jobs than the ones lost by plant closures, as they are implemented. These include renewable hydrogen plants, circular economy industrial projects, renewable value chain industry and renewable energy initiatives, among others. Some of these projects are already underway or in the process of development, while others are pending implementation and may be subject to changes.

**Find out more: examples of alternative investments proposed through the Agreement for a just transition for coal power plants: jobs, industry and territories.**

Within the framework of the *Agreement for a just transition for coal power plants: jobs, industry and territories*, the signatory companies pledged to propose alternative activities in the areas affected by the closures of their coal-fired power plants. Where resources allowed, new renewable energy ventures were explored, in other cases new activities outside the energy sector will be sought.

In the case of coal power plants managed by **Endesa**, the company launched *Futur-e* contests to attract and select new projects that could inherit the land and facilities of the power plants, thus finding new enterprises that create economic activity re-using the valuable assets of power plants. In As Pontes (Galicia), work will begin this year on installing a macro smart tyre factory, creating 750 direct jobs, and a new plant for producing recycled fibre from recovered cardboard and paper and virgin cellulose. In Carboneras (Almeria), proposals have been received for projects linked with the area's marine and fishing traditions, as well as plans associated with renewable energies and new energy vectors. In Andorra (Teruel), Endesa won the node's just transition tender and will install 1,202 MW in renewable energies along with partnering with other enterprises and organizations to promote multiple industrial, agro-food and sustainable tourism projects. The area of the Compostilla power plant (León) will host several projects, including industrial-scale circular economy initiatives for wind blades and electric car batteries.

As for the plants managed by **Naturgy**, the largest green hydrogen plant in Spain was proposed in La Robla (León). Enagás Renovables and Naturgy are already working together to promote this renewable hydrogen project and will contribute to the decarbonisation of the industrial processes of companies in the area. Also, Naturgy, Repsol and Reganosa have formed an alliance in Meirama (Galicia) to produce green hydrogen to supply Repsol's refinery in A Coruña. The three companies are also developing a large-scale project to transform surplus livestock manure and other waste into biomethane, organic fertilisers and CO<sub>2</sub>-neutral bio-based fertilisers. In Tineo (Asturias), the company transferred part of its installations to the local government, which will restore the workers' settlement to attract new families and provide additional services.

In the case of **Iberdrola**, the company joined an industrial partner to set up a manufacturing plant of photovoltaic panels in Langreo, which will become the first large photovoltaic factory in Spain. The expected investment is €20 million and will contribute to the economic reactivation of Asturias' mining basins with the creation of 115 direct jobs in the area. Additional projects are also under study in the area. In the region of Velilla's coal power plant (Palencia), construction of 350 MW of photovoltaic plants has begun, which will create a large number of jobs in the short

term while additional projects are considered.

Regarding the plants managed by **EDP**, its proposals focus on replacing coal with green hydrogen production centres in Los Barrios (Cádiz), Aboño (Asturias) and Soto de Ribera (Asturias). All of them have received grants from the IDAE to begin their development. In addition, renewable energy plants are proposed in Puente Nuevo (Córdoba).

For more information, [find the agreement here](#).

The Spanish Government is advocating that the energy transition itself **should serve as a driving force for the reactivation** of areas affected by the closure of coal, through tenders in just transition nodes, R&D&I projects in the territory, promoting industrial projects and renewable energies through the Agreement with the electricity companies and introducing the Just Transition transversally into the country's energy policies.

### 3.10. Territories with better services, with a healthy environment and respect for identity and heritage

A key element in achieving a Just Transition is the improvement of **public services and infrastructure**, with the aim of providing adequate services for citizens and businesses to support their lives and activities in the territory.

This is especially necessary in the case of Spain, where mining areas have been in progressive decline for decades and are located in rural environments, with services and infrastructures that are in gradual deterioration. This decline is further exacerbated by recent closures.

In response to these needs, the Spanish government has launched a **support plan for municipal and infrastructure projects in mining areas in** Aragon, Asturias, Castilla-La Mancha and Castilla-León by signing specific collaboration agreements in 2020 and 2021 with the regional governments.

To date, agreements have been signed for **102 municipal projects**, funded with **€145 million**. These initiatives include energy efficiency rehabilitation, improvements to industrial estates to attract new companies, social and health services to stabilise the population and care for the elderly, and tourism projects focused on the local cultural and natural heritage, among many others. In order to ensure maximum flexibility for

the projects' success, their deadlines have been extended due to difficulties caused by the pandemic and the increase in raw material prices linked to the war in Ukraine.

In addition to the municipalities affected by the closure of the mining industry, support programs have also been introduced for municipalities affected by the closure of thermal power plants. Tax revenue from coal-fired power plants in many cases accounted for a significant proportion of municipal budgets for maintaining public services, making it necessary to deploy alternative tools for municipalities to develop proposals for their citizens and businesses.

First, the Ministry launched, a program endowed with **€7 million** for municipalities directly affected by the closure of coal power plants, that provided funds for the creation of co-working and teleworking centres to promote entrepreneurship, the renovation of buildings for new cultural and educational activities, elderly care centres in municipalities with high rates of ageing, and a health centre to serve areas that had been left without adequate health coverage, among other projects.

Subsequently, in late 2021, a new support program endowed with €91 million was set up to develop projects for [environmental, social and digital infrastructures](#) in municipalities located under Just Transition Agreements, within the framework of the Recovery, Transformation and Resilience Plan. These grants were a direct result of the public participation processes of the Just Transition Agreements, where countless local authorities listed the existence of degraded or underused municipal buildings, linked to the decline of coal, and their desire to rehabilitate them for new uses.

The resolution proposal was published in March 2023, and featured support for **107 projects** distributed throughout all Just Transition areas, with several emblematic projects for the territory such as Ponfeblino in El Bierzo, the rehabilitation of workers' settlements in Tineo's power plant in south-west Asturias and the restoration of the Historic Mining Centre in Peñarroya-Pueblonuevo (Córdoba), among many others.

The projects will provide new services to citizens, renovating and making buildings and facilities available to help boost business activity, provide **social housing** for new settlers and temporary workers, and **digitised spaces** to promote entrepreneurship and associative life that also guarantees connectivity for citizens and companies. This will help to create spaces to attract digital nomads and retain young talent. Traditional activities and services for small industries linked to **endogenous resources** are also supported.

Also, in order to boost tourism as source of wealth and jobs in coal regions, projects are supported for the rehabilitation of unique buildings to enhance their **cultural heritage**. There are also initiatives to restore old **industrial and mining heritage**, so the identity

of these areas is preserved and new economic activities flourish around it. **Natural landscapes** are also the subject of projects that combine their preservation, the traditional exploitation of their resources and their adaptation for leisure purposes. There are numerous initiatives to restore paths and trails for walking and cycling routes.

Projects are also developed to help improve the balance between people's working lives and their family care needs. This involves the provision of **socio-health services** for elderly people in residential homes and day centres. There are also initiatives to create schools for 0-3 year olds. The provision of new, adapted and energy-efficient offices for citizens, the upgrading of municipal sports facilities and the creation of parks, squares and urban paths account for a significant percentage of the projects approved.

Results of the program for environmental, social and digital infrastructure projects:

- Participation rate: 95% of the total number of municipalities under Just Transition Agreements.
- Projects submitted: 274.
- Projects supported in the final resolution: 107
- Demographic considerations:
  - 74% of the projects are located in municipalities with less than 5,000 inhabitants.
  - 26% in municipalities with less than 500 inhabitants.
  - Therefore contributing crucially to tackling the Demographic Challenge in rural areas.

To reach out to each and every one of the municipalities, an **assistance service** was provided for the submission of applications, plus direct support by the **Just Transition Agreements team**. Through these two channels, clear information was provided to municipalities and 1,600 queries were resolved, which explains the **excellent participation by small municipalities**.

### 3.11. Healing scars: environmental restoration plans

The environmental restoration of areas degraded by coal mining has been an important part of Just Transition policies. In 2022, an [Environmental Restoration Plan](#) was launched in areas degraded by coal mining, aimed at re-naturalising and restoring more than **3,700 hectares** for local socio-economic development, with the active **participation of the local communities** to design the projects for new alternative uses of restored areas. Funding of **almost €200 million** was provided, of which €150 million comes from the Recovery Plan. In these projects, priority is given to hiring former miners and transforming **coal jobs into green jobs**. Restoration works are already underway.

The projects funded by the Recovery Plan focus particularly on mines closed in 2018 following European Council Decision 2010/787/UE, with a scenario of bankrupt companies that did not fulfil their restoration duties, and against which previous administrations had not anticipated actions. Therefore, an environmental restoration plan had to be drafted to prevent local communities from inheriting such environmental liabilities. Seven major projects are being implemented. The works will last three years and will create 350 direct jobs across coal regions, with **priority given to coal mining workers**.

In addition to re-naturalising the affected landscapes, remodelling the land, removing waste dumps and managing waste and drainage, actions are taken to help reactivate the areas, combining environmental restoration with the creation of **new opportunities**. Local communities have been actively involved in the drafting of the projects. Their proposals are at the heart of their design and corresponding environmental and social solutions. These major environmental infrastructure works will have a very beneficial impact on the quality of the rivers in the areas.

In particular, these restorations will achieve the following:

- **Improving water quality:** by reducing the impact of mining on the more than 21 km of watercourses and streams in surrounding areas; protecting 10,000 m<sup>2</sup> of watercourses by lining them and restoring their drainage capacity and excavating 254,000 m<sup>3</sup> of sludge and other accumulated materials; and by protecting aquifers from contamination by infiltration.
- **Improving environmental conditions:** by managing existing waste, which is estimated at 930 tonnes of tyres, 355 m<sup>3</sup> of potentially hazardous waste and 6,600 m<sup>3</sup> of non-hazardous waste; increasing protection against forest fires by treating and clearing 182 hectares of forest; and closing 58 mine openings for the safety of the population and wildlife.

- **Restoring ecosystems:** by recovering vegetation cover and endogenous forests in degraded systems through the planting of 1.4 million plants, seeding 780 hectares of pastures and 5 million m<sup>2</sup> of hydro-seeding. The biodiversity of the ecosystem will be restored and the landscape will be integrated with wildlife habitat.
- **Promoting socio-economic development:** by using part of the forest mass for forestry activities, as well as promoting extensive and sustainable livestock farming in the more than 500 hectares of new pastureland. Recreational areas will be created to promote rural tourism. The connectivity of the territory will be improved through the creation and maintenance of more than 49 km of vehicle tracks. There will be synergies with beekeeping, agricultural, tourism and leisure activities. The territory will be handed back to the people.

Thus, the **Gran Corta de Fabero**, an enormous open pit in El Bierzo (León) that once was the largest coal mine in Europe, is being restored, recovering its 700 hectares for native re-vegetation and alternative uses. These uses include the creation of an enclosure for observing and studying the fossils found in the excavations, creating recreational areas and trails through the repopulated native vegetation, recovering pastures for agricultural and livestock uses and woodland recovery for forestry uses.

Also in El Bierzo, the opencast and underground mines of **Casares-Ladil-Charcón and Torre-Villagatón** are undergoing restoration. In the former, native vegetation will be recovered, pastures and native chestnut trees will be planted for agricultural and livestock uses and solutions for pollinators will be incorporated. Meanwhile in the latter, the project includes the creation of paths and recreational areas associated with the section of the Camino de Santiago passing along the Manzanal and traditional techniques will be developed to improve environmental results and the integration of former mine workers.

In south-west Asturias, the open-cast mines and underground sections of **Buseiro, Cerredo and Tormaleo** are being restored, where native vegetation will be recovered, various types of fruit trees planted, a lake will be restored for tourist uses, renewable energy projects will be incorporated and tourism and sports trails will be built.

In **Mequinenza** (Aragon), the open-cast mine is being restored, the landscape is undergoing rewilding and a mining interpretation centre is being created, together with trails linking up the mine openings with the archaeological sites in the area.

€22 million of state funds will also be provided for the restoration of areas degraded by coal mining in **Teruel and Laciana** (León). While the Recovery Plan's restoration aid is focused on mines belonging to companies involved in bankruptcy proceedings (and which became the subsidiary responsibility of regional governments), this further

support is aimed at restoring mines owned by companies that continued their activities in 2018. Thus, in Teruel, the open-pit mines of **Carmen y Pura** in Foz Calanda, **Santa María** in Ariño and **Mi Viña** in Cañizar del Olivar and Estercuel are all being restored. In Laciana (León), the underground mine **La Escondida** is also under restoration. In total, more than 1,000 hectares are restored under this program, creating more than 150 jobs.

In addition, support is given to environmental restoration projects for **open-cast mines and waste dumps in León** (Cabrillanes-Villablino, Fabero and Matallana de Torío) worth €27.3 million, with more than 400 hectares restored, implemented through specific collaboration agreements with regional governments.



**Image 3.** *Tormaleo mine (Ibias, Asturias). The environmental reclamation of the coal mines in progress prepares the land for new uses that generate new activities for sustainable territorial development.*

### 3.12. The participation of women

The Just Transition Institute believes that special attention should be paid to the challenges and opportunities for women's employment and well-being in areas where Just Transition Agreements are developed. A number of initiatives are therefore being introduced to reduce inequality between men and women in affected territories.

First, the multiple support programs incorporate elements that prioritise projects advocating gender equality. For example, calls for municipal projects include several **evaluation criteria** designed to prioritise projects that promote women's employment, that contribute to economic revitalisation led by women or that promotes the development of infrastructures reducing the digital divide between women and men or boost women's access to new technologies. Likewise, support schemes for local business projects and entrepreneurs incorporate gender criteria, **scoring up** and providing **greater economic support** for projects that promote women's employment.

In addition, **conferences** are held to specifically support female entrepreneurship and business ownership.

Importantly, the Just Transition Institute is collaborating with the Naturgy Foundation on the report "**Women's employment in the just energy transition in Spain**". This is a quantitative and qualitative analysis that will provide detailed information on the current employment situation of women in sectors related to the energy transition, as well as the opportunities offered by the new investments planned in these sectors to promote equal employment.

The study, which will be made public soon, has two objectives: to understand the evolution of women's employment in quantitative and qualitative terms and to determine the obstacles that women face in accessing employment in the main subsectors of the energy transition included in the Integrated Energy and Climate Plan (PNIEC) 2021-2030 (renewable energy, green hydrogen, energy efficiency, energy restoration of buildings) and to offer specific recommendations for measures to promote the employment of women involved in the energy transition.

A group of independent professional experts in the fields of employment, gender equality and energy transition participated in the drafting of the report, coordinated by the Just Transition Institute and the Naturgy Foundation.

### 3.13. Culture at the centre

The first edition of [Dinamiz-ARTj](#) has been launched through the CIUDEN Foundation. This is a program to generate a broad range of cultural activities in Just Transition Agreement areas. Dinamiz-ARTj brings together local cultural demand with a range of activities offered by **young artists** working in any creative field: music, theatre, dance, photography, painting, sculpture, performance, etc., through shows, exhibitions and any type of artistic activity.

In addition to energising cultural life, the objectives of Dinamiz-ARTj is to encourage people to **visit these regions** through cultural activities, thus promoting tourism and reinforcing their natural and industrial heritage with new attraction points.

The launch campaign was carried out with established artists from or associated to Just Transition areas: Pedro Halffter with KLARA Ópera at 4 haikus (Ponferrada), Café Quijano with Manhattan (La Robla), El Naan with Gira Germinal (Velilla, La Regadera with No pienso, luego existo (Valle Tobalina), Xabier Díaz & Adufeiras de Salitre + Margarida Mariño with As catedrais silenciadas (Cerceda) B-Vocal with Las voces de

Goya (Andorra), Marisa Valle Rosso with Lo fugaz (Langreo) Los Berrones with Los Berrones en concierto (Tineo) Xosé Touriñán with Aquí tou! (As Pontes), Orquesta de Plectro de Espiel with La energía de la música (Espiel), Despistaos with Ilusionismo (Almonacid de Zorita), Tomatito (Carboneras) and Maika Makovsky with Acústico 2022 (Alcudia).

The first months of the program are proving very successful, with more than 1,400 applications received for performances by young artists in 136 municipalities.

Also worthy of note is the project **"La Térmica Cultural"**, which has converted the former Compostilla I power station in Ponferrada (León) into a multi-purpose centre promoting mining history, culture and entertainment, aiming to become the nerve centre of a Just Transition cultural network. To that end, €1.3 million were invested in fitting out the facility, which will house exhibitions and be managed by the CIUDEN Foundation.

The space will also function as a centre for congresses, forums, conferences and events. It will also host digital training and skills-building programs and workshops linked to the processes of Just Transition and the Demographic Challenge. Finally, a space to be used for culture and local associations will be created.

Nature plays a major role in the project. The former power plant's boiler house, renamed the *Green Fire* area, is filled with tree ferns over 300 years old that generate an industrial landscape conquered by nature.



**Image 4.** *Tèrmica Cultural in Ponferrada (León).*

### 3.14. The Just Transition Fund

The Just Transition Fund is a new financial instrument under the **European Union's cohesion policy** which aims to support territories facing severe socio-economic challenges resulting from the transition to climate neutrality and to avoid exacerbating regional disparities. The Just Transition Fund will facilitate the implementation of the European Green Deal, aiming to achieve a climate-neutral Union by 2050.

Its main objective is to **mitigate the impact of the energy transition** by providing funding for the diversification and modernisation of local economies and mitigating negative impacts on employment. The Fund will support investments in areas such as digital connectivity, clean energy technologies, emission reductions, regeneration of industrial sites, training and re-skilling for workers affected by the transformation. **It will be managed by the regional governments and coordinated by the Just Transition Institute.**

Support measures included as part of this Fund will be essential to boost development in the areas, both for revitalising SMEs and for promoting tractor projects that emulate the economic pull effect that coal-related activities used to have in these areas.

The main areas of action of the [Territorial Plan of Spain](#) are as follows:

1. The green transformation of industry and promotion of sustainable mobility, circular economy and energy efficiency.
2. Boosting the value chain of renewable energies, self-supply, energy storage and renewable hydrogen.
3. Promoting SMEs and business projects which can function as motors for the economic diversification of the territories.
4. Promoting research, development and innovation (R&D&I), ICT integration and digital transformation.
5. Environmental restoration, nature conservation, biodiversity and ecosystems, promotion of historical, cultural and industrial heritage, and promotion of sustainable tourism.
6. Promotion of social infrastructures, the social economy and training and re-skilling initiatives.

<b>Territorio</b>	<b>Ayudas FTJ</b>	<b>%</b>
Palencia	71.558.029	8,24%
León	125.517.602	14,45%
<b>Castilla y León</b>	<b>197.075.631</b>	<b>22,69%</b>
Cádiz	69.631.757	8,02%
Córdoba	32.160.979	3,70%
Almería	51.817.002	5,96%
<b>Andalucía</b>	<b>153.609.739</b>	<b>17,68%</b>
Asturias	262.850.921	30,26%
<b>Asturias</b>	<b>262.850.921</b>	<b>30,26%</b>
Teruel	91.703.862	10,56%
<b>Aragón</b>	<b>91.703.862</b>	<b>10,56%</b>
A Coruña	111.380.018	12,82%
<b>Galicia</b>	<b>111.380.018</b>	<b>12,82%</b>
<b>Zona TJ Alcadia</b>	<b>17.374.897</b>	<b>2,00%</b>
<b>ITJ</b>	<b>34.749.795</b>	<b>4,00%</b>
<b>TOTAL FTJ</b>	<b>868.744.863</b>	<b>100,00%</b>

Therefore, the measures resulting from the Just Transition Fund will help complete and extend the work already initiated by the Spanish government, explained throughout this document, thus helping to meet the objective of the Just Transition Strategy that closures should generate zero impact on employment and population over the medium-term.



VICEPRESIDENCIA  
TERCERA DEL GOBIERNO  
MINISTERIO  
PARA LA TRANSICIÓN ECOLÓGICA  
Y EL RETO DEMOGRÁFICO



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PARA LA  
TRANSICIÓN  
JUSTA