

Just Transition Platform Case study:

Open Innovation Platform in Lada and Velilla del Río Carrión

Key information

Member State: Spain **Region:** Asturias (and Castilla y León)

Duration: 2020-2023

Main activities:

Stakeholder consultation, mapping of projects and initiatives, co-creation and formation of a portfolio of interconnected projects

This case study was prepared by conducting stakeholder interviews and desk research.

Background

Asturias and Castilla y León, the two regions touched by the open innovation platform that is detailed in this case study, are at the epicentre of Spain's just transition efforts. Up to a third of the Just Transition Fund (amounting to EUR 869 million overall) for Spain will be devoted to the former, with the latter region also absorbing a substantial share. Indeed, the revitalisation of Asturias – a region with a rich industrial past – is one of the core pillars of Spain's Just Transition Strategy. The Territorial Just Transition Plan for this area has six priorities. First, the re-organisation and transformation of industry away from the most energy-intensive processes (especially in the production of metal, cement, and chemical products). Second, establish a solid value chain of green projects, namely in the production of hydrogen and renewable energy sources (especially wind and solar). Third, diversification of the economy, whereby specific sub-territories are targeted by separate lines of action to improve economic resilience and foster a thriving third sector. Fourth, research and innovation boosting. Indeed, the regional government is planning to establish several research, development and innovation (R&D&I) hubs in the area. Fifth, environmental recovery, with different projects to recover industrial and mining patrimony (e.g. buildings, brown grounds, etc.). The last priority is up-skilling and re-skilling. The resources devoted to the pursuit of these priorities amount to EUR 376 million, mostly coming from EU funding (70 %, EUR 263 million) and partially complemented by the regional government's budget and private sources. Similar interventions are expected in the province of Palencia, where a stronger focus has however been put on the creation of renewable energy production plants.

Regional and Urban Policy

Characteristics of the region

Located in north-west Spain, Asturias has a population of 1.02 million¹. Historically, the region's coal mining industry thrived in the southwestern and central areas, which hosted several coal power plants. Presently, only one coal mine is operational. Comprising 78 municipalities, Asturias faces the direct impact of coal mine closures and the gradual phase-out of coal power plants, with 57 municipalities severely affected². The central municipalities play a pivotal role in the region's economy, hosting a significant portion of the population and most industrial activity. Asturias experience the dual challenges of both population decline and ageing, with peripheral communities bearing a particularly acute impact. According to projected trends, Asturias is anticipated to undergo one of the most substantial population decreases in relative terms by 2029 in Spain, with a projected decline of 8.3 %. This places it second only to the Castilla y León region, which is expected to experience a decline of 9 %³. Asturias exhibits a relatively modest employment rate of 63.2 % in 2018, contrasting with the national employment rate of 67.0 % and the EU average of 73.2 %. In 2019 (Q3), the unemployment rate in Asturias stood at 14.4 %, surpassing the national rate of 13.9 % and ranking among the higher unemployment rates in the European Union. Notably, Asturias faces a substantial youth unemployment challenge, recording a rate of 37.3 % among individuals aged 15 to 24 in 2018, in stark contrast to the EU average of 15.2 %⁴. These trends find their roots in diverse and continuous economic transitions experienced by the region. While it has been declining in importance over recent years, Asturias can be characterised as an industrial powerhouse, with a sure footing in electro-intensive industrial processing activities, encompassing sectors such as steel, zinc, aluminium, paper, glass, and chemicals. Local companies in Asturias share a historically robust connection with the mining and energy sectors, and many are globally oriented. Additionally, Asturias reaps the benefits of a thriving agri-food sector, particularly prominent in dairy products, meat, and beverages, with a considerable number of small-scale, often family-owned enterprises (approximately 1 700 according to the Principality of Asturias in 2020)⁵. Other noteworthy sectors contributing to the region's economic landscape include forestry and wood products, as well as tourism in the Northern and Western parts of the region.

Central framework conditions

With the cessation of coal mining operations and the ongoing decommissioning of coal-fired power plants, Spain has embarked on an ambitious strategy to decarbonise its energy production. This transformative shift entails substantial social and economic ramifications in the affected regions, coupled with a temporary escalation in the country's energy dependency. The coal-mining sector has witnessed the loss of over 8 000 jobs since 2008, primarily concentrated in Asturias, Teruel (Aragon), and León and Palencia (Castilla y León). At the end of 2018, Spain operated 14 coal-fired power plants, with four located in Asturias, an additional four in León and Palencia (Castilla y León), three in Cádiz, Almería, and Córdoba (Andalucía), two in A Coruña (Galicia), and one in Teruel (Aragon), collectively possessing an installed capacity of approximately 10 000 MW. This transition underscores Spain's commitment to reshaping its energy landscape, albeit with profound consequences for employment and regional energy dynamics. Ahead of the curve, in 2017, the energy company Iberdrola announced the complete closure of its coal-fired power plants. This mission statement involved the plants of Lada (Province of Langreo, Asturias) and Velilla (Province of Palencia, Castille y León). Given the fear of negative employment outlooks and further economic decline, the commitment of the company to positive environmental and social development - which is testified by its global leading position in the market for renewable energy and one of the most ambitious climate pledges by a private company in the world - led to the creation of the open innovation platform that is presented in this case study.

Description of the Open Innovation Platform

In 2020, after announcing the closure of the coal-fired power plants in the cities of Lada (Asturias) and Velilla del Río Carrión (Castile and León) in 2017, the energy company Iberdrola created an **Open Innovation Platform** to promote and facilitate collaboration between citizens, companies, and public entities, to foster a just transition by stimulating the systemic and sustainable change of the socio-economic models of these territories, whose wealth and history had been deeply intertwined with the operations of the coal-plants. Open innovation acknowledges the potential value of ideas originating from external sources, in this case from the communities residing in the areas affected by the closures. Extracting such insights depends on fine-tuned methodologies. In plain terms, the Open Innovation Platform was set up to scope challenges and opportunities in the territory by means of extensive and in-depth stakeholder engagement, and to offer a forum were actions, projects and initiatives could be discussed and undertaken by the citizens.

That is why Iberdrola engaged two research centres to design and carry out the process. One of them is the <u>Centro de</u> <u>Innovación en Tecnología para el Desarrollo Humano</u> (itdUPM) of the Polytechnic University of Madrid. The other one is the <u>Agirre Lehendakaria Center</u> (ALC), founded in 2013 by the University of the Basque Country (UPV/EHU) in collaboration with AC4-Columbia University in New York, which specialises in the design of social innovation processes, namely, how

¹ https://energy.ec.europa.eu/system/files/2020-07/asturias_regional_profile - start_technical_assistance_0.pdf

² Ibid.

³ Ibid.

⁴ Ibid

⁵ Ibid

to find new ways of identifying and addressing social needs. These last two organisations had already been collaborating in separate initiatives, which may have led to the recognition that each of them brought different expertise and skillsets into the venture; specifically, itdUPM is more knowledgeable in the creation of novel organisational formulas for multi-stakeholder collaboration, whereas ALC holds greater expertise in the use of listening and co-creation methods. Since 2017, the two institutes have been developing and sharing new methodologies, which converged in the four-step process which was applied in Lada and Velilla del Río Carrión starting in July 2020 and February 2021 respectively.

Type of activities

The Platform has focused on the following activities. First, any work that pertained to the project was anticipated by **an initial** scoping aimed at mapping the relevant actors, listening to their experiences, hopes and concerns, and a collective interpretation of the narratives that emerged. The systematic mapping led to the identification of the key actors within the affected communities, as well as to the identification of relevant initiatives ongoing in the regions (classified into five areas: community, small-medium scale, large scale, services, and regulation). This enabled the precise characterisation of the challenges and bottlenecks faced by citizens in the regions. After the mapping was conducted, a listening process - carried out via both quantitative and qualitative tools - enabled a reconstruction of the narratives existing in the communities. Such narratives can be defined as the subjective perceptions that people hold about their lives and the lives of their peers, and while they do not necessarily correspond to the objective reality on the ground, they can be very powerful in shaping it. The information collected through the listening process was then transformed into insight using collective interpretation. This was a fundamental activity, whereby spaces for contrast and shared reflection were created, and the results of which were visualised through a series of ethnographic profiles. In Lada, these profiles - which included even the inputs of actors which are usually overlooked by common citizen participation initiatives (such as informal economy workers or older people) – highlighted a sense

of nostalgia for the "glory days", a feeling for which companies were indebted to the territory, and a general pessimism about the endogenous capacity for change of the local community.

Second, a **co-creation process** followed, with the facilitation and mediation of Iberdrola, itdUPM and ALC. This search for concrete actions, as well as prioritisation work, built directly on top of the insights generated during the mapping and listening phase of the project, and it enabled the creation of a series of interconnected proposals that integrated the scoped needs, challenges, and opportunities into a **portfolio of projects**, **pilots and prototypes**. This portfolio approach, which constituted the third phase of the Platform's operations, relies on the consideration and fostering of synergies amongst the identified projects. The interconnection of initiatives in the portfolio has been carried out taking into account several aspects. First, the thematic and territorial relationships between initiatives. Second, the use of common or exclusive resources. Third, the targeting of the same public. Fourth, the belonging to the same or similar value chain. And finally, the facing of similar regulatory, technological or operational challenges.

As a last step undertaken, the members of the Platform opted for a **distributed governance system**, which meant that no hierarchy was set up, information was shared in an unrestricted manner, and strategic decisions were taken by all participants.

Goals and approach

As argued, the **goal** of the Platform is to facilitate the just transition of the socio-productive model of Lada and Velilla del Río Carrión. This objective is pursued by acting as a catalyst, bringing together people and initiatives to boost the potential of these territories after the phase-out of the two homonymous coal-fired power plants (owned by Iberdrola). It's important to note that the closure of the thermal power plants is only the last development of an ongoing decline, as de-industrialisation in the area has been ongoing for several years. Accordingly, the positive momentum granted by the Platform promises benefits that go beyond the simple weathering of the negative consequences implied by the closure of the plants.

Several key success factors transpire in this case study and from the experiences of the people interviewed. Chief among them is the fact that the Platform is not owned or managed by any of the original partners that financed it or developed the methodology underpinning it (i.e. Iberdrola, itdUPM and ALC). It was instead implemented so that regional and local actors could feel ownership, belonging and access to the initiative. The **strong engagement of local stakeholders** was very important for the success of the initiative. Indeed, it helped to overcome both the citizens' perception of which regions lacked endogenous capacities for change and the mistrust in top-down resolutions made by big companies. This latter worry was nurtured by many who – over their lifetimes – saw big factories and production plants relocate or close down after the benefits and resources in the area were believed to be exhausted.

A second key lesson learned concerns the focus on the **specificities of the territories involved**. For example, despite being geographically very close, the mapping and listening phases highlighted how the initiatives that should receive support in the two areas of Lada and Velilla del Río Carrión were widely different, and one couldn't transfer the insights gathered in one province to the other.

A third key finding granted by the Platform was the usefulness of a **systemic approach** in scoping individual actors and organising existing or infant initiatives into a coherent portfolio. Indeed, linking projects in this fashion allowed them to exploit synergies and leverage more resources than the ones that are generally involved in single, linearly defined projects. Finally, one of the lessons learned that could be of most use to external stakeholders concerns the validity of the methodology that was developed by the itdUPM and ALC. To the extent that the required expertise can be sourced in different contexts, this approach can function as a blueprint for regions facing similar challenges.

Scalability and transferability

Concerning transferability, one should note how the ALC operates various open platforms across the world, two of which are in Europe (one is the Platform subject to this case study, and the other one is a similar experiment in the Basque country). The **wide geographical dispersion** of these experiments suggests how the approach is highly replicable. Indeed, at the heart of these platforms lies the engagement of local populations with their specific needs, thus cultural and historical differences are no hindrance to the approach, but rather starting points. Also note that the initial **financial outlay** for these types of projects is marginal at best, making them suitable for reproduction. However, mapping the relevant initiatives and interviewing all

Key challenges

One of the key challenges that quickly became apparent as the operations of the Platform unfolded was the **lack of confidence and defeatist mentality** that developed in many citizens who saw the region's decline from a prosperous industrial past to a situation of decline. The narratives uncovered by the listening process make this point very clear. A reflection of this mentality lay in the mistrust towards Iberdrola. Many of the people interviewed complained about the Platform being some sort of marketing or greenwashing move. However, as recognised even by officials within the Regional Ministry, the system thinking approach applied to the social process largely overcame this, and pessimism amongst the participants turned into a positive proactive engagement. Another key challenge to the project that

the key actors on the territory – with the necessary thoroughness – is a **time-consuming endeavour** which makes these types of platforms less suitable for scale-up, especially given how a shallow understanding of the local context would largely defeat their purpose. Given the resources, it is possible to extend to wider areas, but the key advantage of the approach lies in its ties to the territory and the capacity to engage even segments of the population which are often excluded and unheard. For this reason, open innovation platforms should **remain local initiatives**, also not overburden the distributed governance structures which may lose efficiency, or even stall, due to too numerous members.

was highlighted by some of the interviewees was the **inability to engage the public administration** in the Platform in a more active role. The involvement of the State has been occasional and dependent on the interest of individual public officials. If the State had engaged more proactively with the initiative, the Platform could have become more institutionalised and could have provided a higher degree of confidence in the actors involved and be conducive to more active engagement and collaboration.

Box 1 - Areas of opportunity

Through the Open Innovation Platform, representatives from Iberdrola, itdUPM and ALC actively engaged with the community, seeking out the diverse voices within the area to understand their perspectives, opinions, and the challenges and opportunities that shape the territory. Their approach involved the comprehensive identification of initiatives and projects, whether established or emerging, ranging in scale from large to small, with a keen focus on their relevance to the community.

This process of attentive listening, mapping of initiatives, and co-creation has culminated in the Platform crafting a portfolio of transformative projects. These projects are strategically designed to propel the socio-productive transformation of the territory towards a more sustainable model. For example, the portfolio encompasses eight specific areas of opportunity for the area of Lada: food systems, energy, training, health, circular economy, regulation, financing, and green employment.

- **Food systems**: One of the core initiatives identified concerned the creation of a R&D&I center to support the agri-food industry, focusing on the development of new techniques in food preservation and transformation (e.g. preservation in controlled atmosphere, bio-packaging, etc.).
- **Energy**: The operations of the Platform highlighted the opportunity of harnessing existing surplus heat that is generated by industrial activity in the area, through the creation of network that could service both residential and industrial customers.
- **Training**: Interest form a private promoter in converting the area now occupied by the Lada thermal power plant into an electrical training center that could offer highly technical curricula to up to 15 000 people a year.
- **Health**: The Open Innovation Platform fostered the proposal to create a clinical center where socio-health and biomedical companies can test and validate non-invasive preventive and rehabilitation technologies, aimed especially at the enhancing of the quality of life of elderly people. The technologies that could be explored include, for example, robotic therapies, electrotherapy, magnet therapy, etc.
- **Circular economy**: The Platform worked for several months with the company Saint Gobain Glass, located in another Asturian city, to try to implement a flat glass treatment and recycling center so that they can introduce it into their blast furnace and reuse it as secondary raw material in the manufacture of new products.
- **Regulation**: Participants to the Platform suggested how the territory of Lada, due to its need to transform its socio-productive model, could be made into a regulatory sandbox, offering the possibility to test small-scale regulatory innovation before moving to larger scale deployment.
- **Financing**: Platform's participants agreed to institute a seed capital investment fund to accelerate the development of promising green business models.
- **Green employment**: The open innovation platform led to the creation of a secondary platform, the <u>Platform for Green Jobs and</u> <u>Entrepreneurship</u>, an alliance between social parts and industry practitioners to ensure that the skills needed for the ecological transition are aptly formed. It is made up of four partners: the Spanish Green Growth Group; Ingeus / Daleph; the Polytechnic University of Madrid, ECODES Ecology and Development Foundation.

Outlook

The initiative is now in a transfer process. The official workings of the Platform – in its current layout – terminated in July 2023, but the partners are seeking out a local actor to inherit the Platform's methodology. In addition, the third formal evaluation of the project (carried out through a Most Significant Change monitoring design) will be published. Those results will be used to organise a final session for stakeholders to meditate and reflect on what has been achieved and how to move forward.

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