

JUST TRANSITION STRATEGY



GOVERNMENT
OF SPAIN

VICE-PRESIDENCY
OF THE GOVERNMENT

MINISTRY FOR ECOLOGICAL
TRANSITION AND THE
DEMOGRAPHIC CHALLENGE

STRATEGIC ENERGY AND CLIMATE FRAMEWORK

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A JUST TRANSITION
STRATEGY TO
INCREASE CLIMATE
AMBITION

In February 2019, the Spanish Government approved the Strategic Framework for Energy and Climate, through which measures will be implemented to facilitate the change towards an economic, sustainable and competitive model that will help to curb climate change. This Strategic Framework is structured on three pillars: the draft bill on Climate Change, the draft of the National Integrated Energy and Climate Plan (PNIEC), and the Just Transition Strategy (ETJ).

These three elements will enable Spain to have a solid and stable strategic framework for the decarbonisation of its economy: the draft bill offers an efficient roadmap for the coming decades; the PNIEC lays the foundations for decarbonisation during the 2021-2030 period, in accordance with the goal of achieving net zero emissions in 2050; and the Just Transition Strategy is a solidarity-based support strategy to ensure that people and territories make the most of the opportunities of this ecological transition without leaving anyone behind.

Two of the elements of the framework significantly increase Spain's climate ambition.

On the one hand, the draft bill on Climate Change and Energy Transition (LCCTE) proposes that the electricity system be 100% renewable and neutral in terms of greenhouse gas emissions for the whole economy by 2050.

On the other hand, the draft of the PNIEC that has been sent to Brussels proposes a reduction of 23% in greenhouse gas emissions by 2030 in comparison to 1990. Proportionally, this is a mitigation effort that is much higher than the current EU target of 40%, and is in line with the 50-55% range that the EU is heading towards. In addition, the draft PNIEC envisages reaching 42% of renewable energy consumption out of the total energy consumption by 2030, which means doubling the figure expected to be reached this year, 2020. In the case of electricity generation, the percentage of renewables would be 74%. The country's energy efficiency would improve by 39.5% during the 2021-2030 decade.

The opportunities that will be generated by this ambitious increase of goals are numerous:

- ▶ Mobilization of 241 billion Euros over the next decade from private, public and mixed investment.
- ▶ Savings of approximately 67 billion Euros by 2030 due to the reduction of fossil fuel imports, which will also improve energy security.
- ▶ Growth of between 16.5 and 25.7 billion Euros in annual GDP between 2021 and 2030, which will be an additional 1.8% of GDP growth in 2030 compared to a scenario without a plan.
- ▶ Positive effect on employment, since between 253,000 and 348,000 jobs will be generated in the next decade, mainly in manufacturing and construction.
- ▶ Economic revitalization of depopulated areas, as a result of the creation of green jobs in these territories, thus contributing to meet the demographic challenge. Reduction of about 27% in the number of premature deaths caused by air pollution.

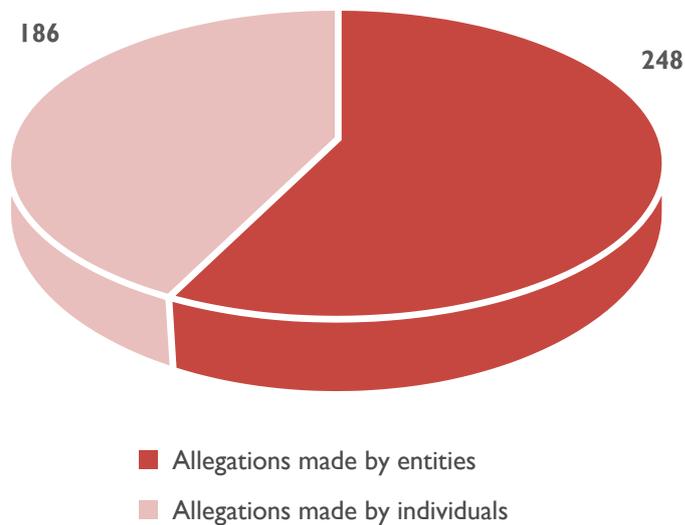
The third element of the Framework seeks to maximize the social gains of the ecological transformation and to mitigate the negative impacts of this ecological transition. It is detailed in this Just Transition Strategy.

THE PROCESS OF
PUBLIC PARTICIPATION
OF THE ETJ

The draft of the Just Transition Strategy was presented on 22 February 2019 and underwent a public participation process that ended on 1 April 2019. The present text incorporates a large number of the allegations made, mainly those that have led to a better definition of tools or have proposed additional measures.

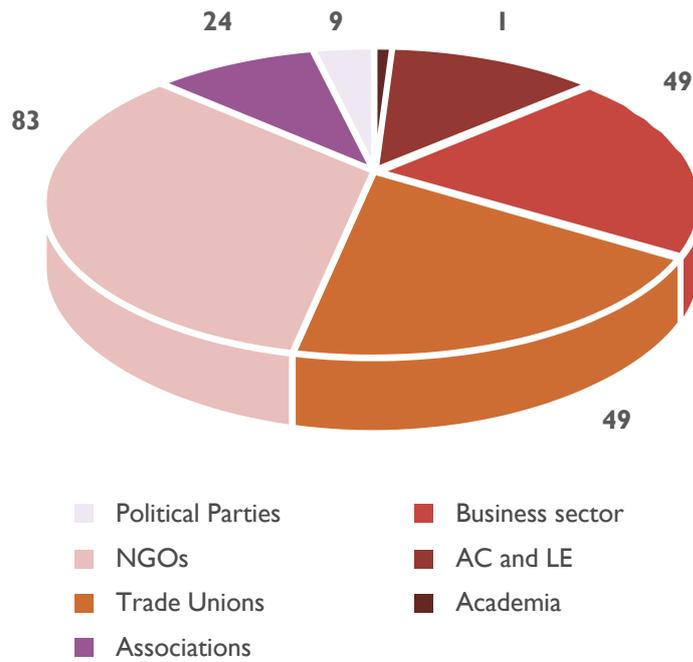
Of the 434 allegations received, 159 were not accepted, as they referred to the modification of goals of the PNIEC or of the Climate Change and Energy Transition draft bill; or they referred to elements already dealt with in these documents. In some cases they have not been accepted because, although they are enriching for the work on the subject, due to their level of detail they were beyond the scope of a national strategy, although they are being incorporated into the more specific work of the Just Transition Agreements.

Figure 1: Number of allegations received by type of person/organisation



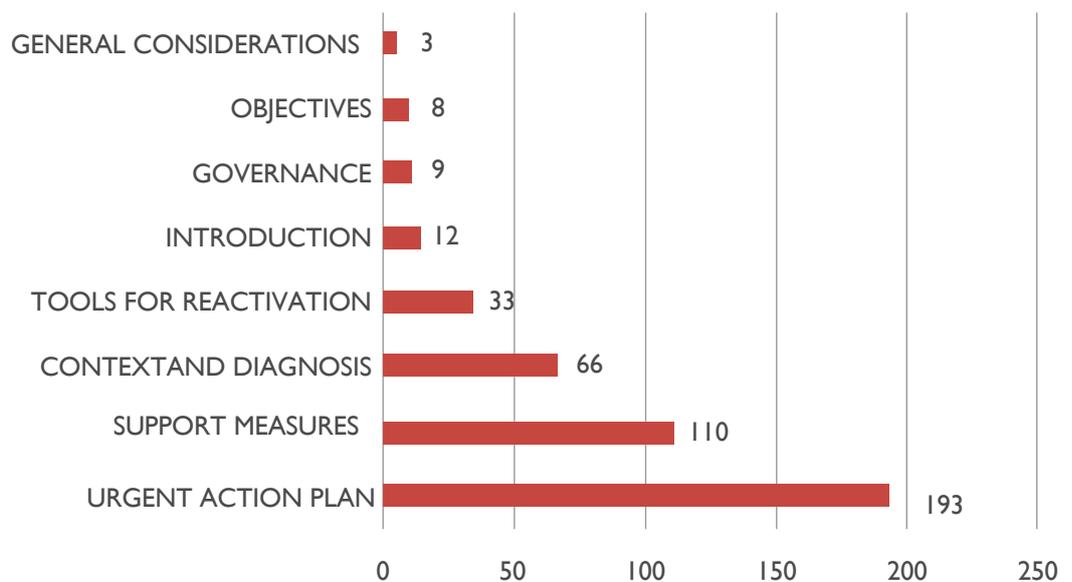
The largest group of allegations came from individuals, particularly from areas affected by mining closures, followed by social entities (NGOs, trade unions and associations, in that order), the business sector and other administrations (Autonomous Communities and Local Entities).

Figure 2: Number of allegations from entities by entity type



The section of the document that received the most allegations was the Urgent Action Plan. This section contained most of the allegations made by individuals.

Figure 3: Number of allegations by section of the ETJ



INTRODUCTION:
THE JUST
TRANSITION
FRAMEWORK

The continuous alerts and calls to action of the scientific community on the fragility of the ecological balance of the planet force us to adopt measures that enable an agile change in the economic model to avoid serious consequences on societies, ecosystems and economies.

The Paris Agreement of 2015 and the United Nations 2030 Agenda for Sustainable Development marked the beginning of a global sustainability agenda that entails the transformation of the economic model and establishes the basis for a new social contract of inclusive prosperity within the limits of the planet.

Combating climate change is fundamental to the Spanish economy. Spain is a highly vulnerable country to the effects of climate change. The impacts of rising 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.

We have an opportunity to improve production and transport systems, as well as the characterization of services, so that they are much more efficient in the use of resources and offer the solutions that a decarbonized world needs.

In addition, the transition to a greener economic model will generate significant employment opportunities.

These opportunities are especially important for Spain. For the transition to a greener economic model to be socially beneficial, in a country with high unemployment rates, this transition must be the engine for new quality jobs.

To promote these changes, it is necessary to accompany the economic sectors in their necessary transformation, supporting R&D&I and the adaptation of companies.

But while the transition will generate many opportunities and benefits in general, as the PNIEC shows, it can also have negative impacts in specific areas. For example, the abandonment of polluting energies for other renewable energies can have impacts on localised activities in areas and regions where such activities represent quality jobs with a significant pull effect and may have a negative demographic impact. Thus, the areas where extraction activity is concentrated (mining areas) are usually also areas of population decline.

Therefore, the design of policies and measures that set ecological objectives must achieve their socio-economic impacts, optimizing the beneficial effects and mitigating the negative ones.

In general, restructuring resulting from ecological transition will result in less than 1% of all workers having to change to another economic sector according to the International Labour Organisation (ILO)¹. Thus, the changes induced by climate change policies would be much smaller than, for example, the 20% job reallocation that OECD countries have experienced in the last two decades as a result of globalization, and possibly smaller than those that will occur due to current processes such as the digitization of the economy².

In order to maximize the benefits of the ecological transition for the economy and minimize the negative impacts on activity, workers and their communities, the International Labour Organization has proposed a framework that, under the concept of Just Transition, was agreed in 2013 at the 102nd International Labour Conference between governments, employers and trade unions from all around the world. This conference adopted a resolution and a set of conclusions on sustainable development, decent work and green jobs, recognizing their challenges and opportunities, and proposed concrete policies to guide change through the so-called "Just Transition"³.

¹ Sustainable development, decent work and green jobs. International Labour Office.

² Sustainable development, decent work and green jobs. International Labour Office.

³ Resolution concerning sustainable development, decent work and green jobs. http://www.ilo.org/wcmsp5/groups/public/-ed_norm/---relconf/documents/meetingdocument/wcms_223785.pdf

Subsequently, in 2015, the ILO Governing Body adopted the Guidelines on Just Transition to environmentally sustainable economies and societies. These Guidelines aim to guide the action of social partners with specific proposals to implement and monitor a national policy framework⁴.

“The greening of the economy offers many opportunities to achieve social goals: it can act as a new engine of growth in both advanced and developing countries, and as a net generator of decent and green jobs that can greatly contribute to poverty eradication and social inclusion. Greening the economy will improve our ability to manage natural resources sustainably, increase energy efficiency and reduce waste, while addressing inequalities and building resilience. The greening of jobs and the promotion of green jobs, in both traditional and emerging sectors, will promote a competitive, low-carbon and environmentally sustainable economy and sustainable patterns of consumption and production, and contribute to the fight against climate change.

If they are well managed, transitions to environmentally and socially sustainable economies can be an important driver of job creation, improved quality of employment, social justice and poverty eradication.”. The greening of all jobs and enterprises through the introduction of more energy and resource efficient practices, pollution prevention and sustainable management of natural resources leads to innovation, enhances resilience and generates savings, thus attracting new investment and activating employment.”

Resolution on sustainable development, decent work and green jobs, ILO 2013.

This commitment to incorporate just transition policies was again endorsed by the countries that are parties to the United Nations Framework Convention on Climate Change. In December 2015 and as a result of the COP21, they established that the implementation of the Paris Agreement should take into account the needs for a just transition that climate policies will bring to the world of work⁵.

In 2018, the Government of Spain and the ILO signed a strategic partnership agreement to implement the Just Transition Guidelines as a guiding framework and practical tool for action.

This Just Transition Strategy aims to build on the internationally approved framework and accompany the ecological transition in Spain, and thus achieve the best results in terms of employment generation and social and territorial justice and cohesion in our country.

While there are a variety of elements related to developing a more just and less unequal transition in the greening of economies, such as the fight against energy poverty or consumer protection, the Just Transition Strategy will focus primarily on elements related to supporting the transformation of economic sectors and generating and protecting employment. Energy poverty, for example, although noted here, is addressed in depth in the National Strategy against Energy Poverty 2019-2024⁶, approved on 5 April 2019 by the Council of Ministers. The rest of the elements, although they will be taken into account, are part of the different sectoral strategies of the Spanish government.

⁴ ILO 2015 Policy guidelines for a just transition to environmentally sustainable economies and societies for all http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432865.pdf

⁵ Decision of the 21st Conference of the Parties (COP21) which contained the adoption of the Paris Agreement. It includes in the preambular section of the agreement the "need to take into account the imperatives of a just transition of the workforce and the creation of decent and quality employment in line with nationally defined development priorities" See page 21

⁶ https://www.miteco.gob.es/es/prensa/estrategianacionalcontralapobrezaenergetica2019-2024_tcm30-496282.pdf

2.1. EMPLOYMENT DEFICITS OF THE SPANISH ECONOMY

GDP in 2018 was approximately 1.2 trillion Euros, making Spain the fifth largest economy in the EU ⁷.

The weight of the Spanish economy in the EU as a whole, as well as our natural resources and our climate, place Spain in a good position to aspire to become an international reference in the implementation of a more ecological economy. The key elements would be the promotion of green growth through business development linked to the optimal use of raw materials; and increased competitiveness. All this while reducing inequality and promoting balanced territorial development.

Boosting competitiveness is key to improving national employment performance. Unemployment, and particularly youth unemployment, represents one of the most pressing challenges in our country. The destruction of employment in Spain due to the economic crisis of 2008 and the creation of jobs in precarious conditions are the main source of the increase in inequality and the modification of the poverty and social exclusion profiles.

Although 2018 ended up chaining five consecutive years of job creation, with an increase in the number of employed people by 566,200, the challenges continue. The unemployment rate remains very high, 14.45% in December 2018⁸, with a high proportion of long-term unemployment. A large proportion of the unemployed have no training beyond compulsory secondary education. The early school leaving rate, although it has decreased significantly in recent years, remains well above the European average⁹.

In 2018 Spain continues to be the country in the European Union with the highest proportion of temporary contracts. 26.4% of Spanish workers have a temporary contract, compared with 13.2% of the European average⁹.

Female unemployment fell by 206,500 in 2018 and the unemployment rate dropped by two per cent. However, it is still three per cent higher than the male unemployment rate. Women have a higher incidence of long-term unemployment (43.7% compared to 39.6% of men) and are in the majority among those receiving unemployment benefits (53.6% of beneficiaries are women)¹⁰.

Inequality levels are also among the highest in Europe. Spain is the third European country in inequality and 26.1% of the population lives at risk of poverty or social exclusion¹¹.

⁷ <https://www.ine.es/daco/daco42/daco4214/cntr0418.pdf>

⁸ <https://www.ine.es/daco/daco42/daco4211/epa0418.pdf>

⁹ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Employment_statistics/es#Aumento_del_empleo_temporal_y_a_tiempo_parcial

¹⁰ Ministry of Labour and Social Economy. Situation of Women in the Labour Market 2018

¹¹ AROPE RATE Living Conditions Survey (LCS) Year 2018

2.2. THE ECOLOGICAL TRANSITION AS THE ENGINE FOR JOB CREATION

In the context of limited natural resources, the Spanish economy has to undertake an ecological transition that will allow it to better respond to environmental challenges at the national and global level.

The ecological footprint is an indicator of environmental sustainability that encompasses the set of impacts generated on the environment measured in terms of surface area required to produce the resources consumed and absorb the waste generated per inhabitant. According to the Global Footprint Network, the ecological footprint per inhabitant of Spain in 2016 (last data available) was 4 global hectares (gha)¹². Spain ranks 58th in the world in terms of ecological footprint per inhabitant and 20th in terms of global ecological footprint.

On the other hand, the Spanish economy must be transformed to contribute to the fight against climate change and achieve net zero emissions by 2050. However, to date, it has not succeeded in decoupling the growth of the economy from greenhouse gas emissions in absolute terms, which is a burden on the competitiveness of our economy. In 2017, emissions increased again by 4.2%¹³, which is above GDP growth. Between 2014 and 2017 Spain was the European Union country that increased its emissions the most.

Other environmental problems also deserve attention. Air pollution, for example, is a serious problem in some Spanish cities, forcing measures such as restricting road traffic in some periods of time because air quality limits and objectives are exceeded.

Similarly, progress must be made in treating, saving and reusing water, and to comply with European regulations and make more efficient use of a scarce resource.

The data on waste management and recycling also require a review of the policies developed to date. In 2017, Spain only recycled 36.11% of urban waste¹⁴.

As set out in the above-mentioned ILO Resolution, addressing these environmental problems through the ecological transition of the economy can be a significant source of job creation. In fact, most of the studies carried out by both this organisation and the European Commission show that ecological ambition offers returns in terms of job creation. Therefore, in addition to the fact that environmental protection is crucial for the well-being of the country and the planet as a whole, the transition to a green economy also means opportunities for the generation of new jobs and improvements in terms of job insecurity, technological dependence and environmental and social concerns.

The European Union, for example, has driven the economy's ecological transition forward also because of its potential to create more and better jobs. This approach has been intensified in recent years in order to mitigate the effects of the economic crisis. Two important European policy packages, the "Clean Energy for All Europeans" package and the two plans on the Circular Economy, have been proposed from the point of view of economic and employment growth in the EU.

¹² Global Footprint Network, in National Footprint Accounts 2019 (Year 2016); World Development Indicators, World Bank (2016); Food and Agriculture Organization of the United Nations (FAO).

¹³ National Inventory of ATMOSPHERE EMISSIONS MITECO https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/resumeninventariogei-ed2019_tcm30-486322.pdf

¹⁴ INE 2019

The Commission's proposal for the "Clean Energy for All Europeans" package is designed to show that the transition to clean energy is the growth sector of the future and aims to strengthen R&D&I to turn this transition into an industrial opportunity. It is estimated that the initial proposal could mobilise up to 177 billion Euros of public and private investment per year from 2021, generate an increase of up to one per cent of GDP over the next decade and create 900,000 new jobs¹⁵ across the European Union.

Likewise, the European Commission has indicated in its plans for the Circular Economy that the new model of circular economy proposed for the EU will not only have environmental benefits associated with the correct management of waste, the protection of soil, water, air, or the climate, but will also provide associated economic and social benefits.

As set out in the new Circular Economy Plan¹⁶ presented in March 2020, based on a recent study¹⁷, applying the principles of the circular economy to the entire EU economy could lead to an increase in EU GDP by a further 0.5 percentage points by 2030 and the creation of some 700,000 new jobs.

On the other hand, policies to promote green jobs must also ensure that women can take advantage of the opportunities provided by this transformation. Improving the gender-sensitive functioning of the labour market for the transition to a green economy is considered by the ILO to be a key element in its progress.

Finally, we must take into account that all these changes will occur within a broader process linked, for example, to the advance of robotics and artificial intelligence. Both elements, technological progress and protection of the environment through the care of our resources, which are finite and limited, are going to have an impact and direct effect on the labour market and therefore on the professional qualifications and training needs of the working people in our country. It is therefore necessary for the training offer to respond to these imbalances and it is necessary to carry out an analysis to explore and detect the training needs required by the labour market.

It should also be noted that the benefits of green policies to society extend beyond the gains to growth and employment; for example, the social benefit of avoiding premature deaths from air pollution should not be neglected. This is why ecological transition policies must be considered within a broad framework of costs and benefits.

In this sense, the measures contained in the PNIEC, for example, manage to reduce both greenhouse gas emissions and those of the main atmospheric pollutants. Primary PM_{2.5} emissions are reduced by 33% by 2030, as a result of the use of cleaner technologies. In addition, sulphur dioxide (SO₂) and nitrous oxides (NO_x), the main pollutants causing the formation of secondary PM_{2.5}, are reduced by 38% and 35% respectively in 2030 due to a reduction in the use of coal in the electricity sector, and improved efficiency in internal combustion engines and electrification. As a result, premature deaths from air pollution by 2030 are reduced by about 2,400 people compared to the trend scenario, or about 27%.¹⁸

¹⁵ <https://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>

¹⁶ COM(2020) 98 final. New Action Plan for the Circular Economy for a Cleaner and More Competitive Europe

¹⁷ Cambridge Econometrics, Trinomics, and ICF (2018), Impacts of circular economy policies on the labour market.

¹⁸ Economic, employment, social and public health impact of the Draft National Integrated Energy and Climate Plan 2021-2030 https://www.miteco.gob.es/es/cambio-climatico/participacion-publica/3impactoeconomicodeempleosocialysobrelasaludpublicadelborradorpniec2021-2030_tcm30-487298.pdf

2.3. THE ECOLOGICAL TRANSITION OF THE LARGE ECONOMIC SECTORS IN SPAIN

There is little up-to-date information on the current path of greening of the sectors of the economy and its impact on employment generation. Studies on employment generation projections for different environmental measures at the national level are also scarcer than they were a decade ago and make it difficult to provide better diagnostic information here. One objective of this Strategy will therefore be to improve the information available through different instruments.

In any case, the ecological transition of the economy will require the transformation of the country's major economic sectors. Some of these are also economic sectors that are highly dependent on natural resources and climate stability and therefore vulnerable to the impacts of climate change.

Tourism

Tourism is one of the sectors most vulnerable to the effects of climate change. It is a cross-cutting sector with a high impact on other sectors of the economy (transport, trade, suppliers to other sectors) and is labour intensive. It has been the main driver of employment in the recovery from the 2008 crisis. Employment in this sector accounts for 12.7% of total employment and its contribution to GDP is 12.3%¹⁹.

In 2018, 82.6 million tourists arrived in Spain. Six autonomous communities (Catalonia, Balearic Islands, Canary Islands, Andalusia, Valencia and Madrid) receive 91% of these tourists²⁰. The spatial and seasonal concentration of this activity in many cases causes different pressures to be exerted on ecosystems and communities.

The competitiveness of the tourism sector is closely related to its sustainability, since the quality of tourism destinations depends largely on their natural and cultural environment²¹. The development of sustainable or responsible tourism is an opportunity for Spain to maintain and improve employment in the sector, through a new model based on the differentiated natural and cultural values of the destinations and on the equitable distribution of the benefits and burdens of tourism and improvements in competitiveness and profitability.

Progress in this direction requires attenuating seasonality and concentration on traditional destinations in order to generate new opportunities for territories with unmanaged tourism resources that are likely to be valued and to contribute to the well-being of the citizens of those territories and to the fight against depopulation²². The valorisation of the environment and cultural heritage can support the commitment to the promotion of sustainable tourism and the rural tourism platforms included in the General Guidelines of the National Strategy to face the Demographic Challenge.

Construction

Construction is another major Spanish sector that will have to be transformed in 2018, representing 5.7%²³ of GDP, employing more than 1.2 million people²⁴, more than 6% of the working population.

¹⁹ https://www.ine.es/prensa/cst_2018.pdf

²⁰ OPEX, 2017. Sustainable Tourism in Gipuzkoa: challenges and opportunities, Madrid: Fundación Alternativas.

²¹ The European Tourism Indicator System ETIS Tool for Sustainable Destination Management EC. March 2016

²² https://www.mptfp.gob.es/dam/es/portal/reto_demografico/Estrategia_Nacional/directrices_generales_estrategia.pdf.pdf

²³ https://www.ine.es/prensa/cna_pa_2018.pdf

²⁴ <https://www.ine.es/daco/daco42/daco4211/epa0418.pdf>

In Europe, the building sector is responsible for 40% of CO₂ emissions, 30% of raw material consumption, 20% of water consumption, 30% of waste generation and a significant part of land use.

In Spain, the Spanish housing stock consists of 25 million dwellings: 90% of them built before the last technical building code, and 60% before any energy efficiency regulations existed²⁵. The need to transform the sector can become one of the greatest employment opportunities in the ecological transition.

The areas with more opportunities in this regard could be the actions on the thermal envelope of the buildings, the optimization of the manufacturing processes, the recovery, assessment and reuse of the materials, the implementation of renewable sources in the buildings, the audits and evaluation of energy efficiency, the devices for monitoring and controlling the facilities of the buildings, or the construction of new builds with almost zero energy consumption.

The transition will require specific professional training and new profiles throughout the chain: architects and engineers, energy auditors, manufacturing industry of sustainable building products, developers and inspectors, among others.

Industry

Industry is a sector for which opportunities should be seized as soon as possible. The manufacturing industry accounted for 12.7% of GDP and 12.8% of employment in 2018. If extractive activities, energy supply, sanitation and waste management are also included, the gross value added by this sector increases to 16.1% of GDP²⁶.

Over the last decade, the industrial sector has followed a similar cycle to that of the economy in general, but with a more volatile behaviour. Since 2015, growth has been clearly higher than that of the economy in general, but more recently with a tendency to slow down, something that has also occurred in other EU countries such as France and Germany.

Employment in the sector continued to rise in 2018, being of proportionately better quality, less temporary and better paid than other economic sectors. In addition, its high productivity serves as a boost to the economy as a whole.

At corporate level, a modern industrial policy should give particular support to the greening of industries and the promotion of new green industrial sectors. Industrial renewable self-consumption, thermal uses of renewable energies, or green hydrogen for industry present significant opportunities. The penetration of energy-saving technologies in final energy consumption, mainly in small and medium-sized enterprises, will make it possible to improve the energy efficiency of industrial processes and ensure energy savings. In addition, increases in the price of raw materials make greening economically interesting: recycling is becoming increasingly more profitable than the disposal of materials and waste.

²⁵ IDAE 2015

²⁶ <https://www.mincotur.gob.es/es-es/gabineteprensa/notasprensa/2019/documents/docu%20directrices%20generales%20de%20la%20pol%C3%ADtica%20industrial%20espa%C3%B1ola.pdf>

Transport

Transport is an activity with important environmental effects, especially due to the emission of polluting gases, noise and land occupation. However, it is a basic activity for economic development and territorial structuring. The mobility of passengers and goods in Spain accounts for 27% of total greenhouse gas emissions²⁷, which makes it a key sector in the country's decarbonisation process.

Transport and logistics activity (not including the transport manufacturing industry) accounted for 4% of GDP in 2017, with 197,100 companies and 890,000 jobs.

In 2018, the gross value added by the transport and storage sector had a 5.2% increase, higher than that experienced by the Spanish economy as a whole in that year (2.4%). Likewise, the total number of Social Security affiliates in the transport and storage sector was 925,469 in 2018, 4.4% more than in 2017²⁸.

Transport in Spain has a notable industrial component through the automotive sector, which accounts for around 10% of GDP and is also the country's leading sector in the export of goods. The greening of the automotive industry involves the development of zero or low-emission vehicles for uses where decarbonized technologies do not currently offer solutions. And while this transition, coupled with changes in mobility towards the use of collective transport or active mobility, presents challenges, it also offers opportunities for maintaining employment in the sector.

The need to adapt to these changes, together with the new models of mobility and logistics, must be an incentive to improve the efficiency of the transport sector and its companies, as well as the working conditions of its workers and self-employed collaborators.

Waste management

The waste management sector is among those offering the most opportunities for creating new local jobs in the transition to sustainability, including eco-design and reuse, separate collection, preparation for reuse and recycling, although the starting point must be prevention in the generation of waste.

It is important to analyse the type of policies with the most potential and environmental improvements. In general, the literature²⁹ demonstrates that applying the waste hierarchy offers employment improvements, for example recycling generates more jobs than incineration or landfill.

Spain's low levels of recycling in relation to the European average open up significant short-term opportunities for job creation through the acceleration of measures to put the country on track to meet European targets.

Agriculture, livestock, fisheries and forestry

Spain is the third most important country in the EU-15 in terms of agricultural production. For agriculture, the sector's ecological transition is not only an opportunity for job creation, but also a factor in improving the health of workers and in the transition to an agri-food system that generates more well-being.

²⁷ https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/resumen-inventario-gei-ed2020_tcm30-486322.pdf

²⁸ https://observatoriotransporte.mitma.es/recursos_otle/informe_otle_2019_1.pdf

²⁹ EEA Report No 8/201

Spain has the highest water stress levels in the OECD due to the high water footprint of the agri-food production chain³⁰. However, it is worth noting the improvements in recent years in Spain in the modernization of irrigation systems, thus reducing their water and energy footprint. On the other hand, the ecological transition of the sector requires a plan to reduce emissions and to improve efficiency of agricultural fertilization that tends to favour the promotion of organic fertilization.

Extensive livestock farming, artisanal fisheries or forest management are green employment niches that can be supported by appropriate policies. Sustainable artisanal fisheries, for example, would bring opportunities to rural fishing communities with severe unemployment problems. This is particularly important given that the Spanish fishing sector, one of the most important in Europe, is seeing a clear decrease in catches and a significant reduction in the number of jobs.

Forest cover occupies 55.2% of the territory³¹. Spain is the second largest forest country in the EU (after Sweden), covering 15%³² of the forest area of the whole European Union. This situation can be better exploited for job creation. Adequate management of forest land, while generating jobs, will increase the resilience of the forest to old threats such as forest fires or new ones such as those arising from climate change, forest abandonment and rural depopulation.

It should be noted that, although the impacts of climate change on agriculture, livestock, fisheries or forestry will be very significant, there is little information on the impacts on employment. The abandonment of family-run farms, livestock and forestry produces a lack of opportunities in the rural environment and the subsequent loss of human capital, displacing its inhabitants to urban areas in search of better opportunities and decapitalizing the opportunities offered by the rural environment. Hence, the importance of promoting active population strategies in the rural environment, such as the generational relay that promotes a sustainable exploitation model, generating employment and added value. Without it, the abandonment of the environment also leads to forest mass structures that are more susceptible to the advance of diseases, pests, forest fires and forest decay processes, so that the environmental values of forests can be compromised in the absence of forest management. In addition to jointly employing more than 800,000 people³³, all these sub-sectors are key to sustaining rural communities, fighting depopulation, and the links between employment and adaptation to climate change should be studied urgently.

Water management

It is clear that climate change will significantly affect water resources and therefore the way in which these are managed must be profoundly changed, forcing changes in water policies and management systems. The water management sector can generate employment opportunities linked to climate change adaptation measures, improved efficiency, new governance systems and the digitalisation of the sector.

³⁰ OECD Economic Studies Spain March 2017. OVERVIEW

³¹ Spanish Inventory of Natural Heritage and Biodiversity 2017

³² https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-espanol-patrimonio-natural-biodiv/informe-anual/Informe_2017_IENB.aspx

³³ INE 2017, Q4

Financial sector

In the financial sector, various initiatives are being carried out to incorporate sustainability and environmental aspects in general, as well as those related to the fight against climate change in particular, into decision-making processes.

The PNIEC's economic report estimates that some 8,000 jobs will be created annually in the financial and insurance sector. Financial market participants should have sufficient and qualified personnel to meet the new demands of investors and regulation with regard to the sustainability aspects of their investments. The processing of information, the design of strategies and their integration at all levels in financial operators will require a comprehensive training effort and will generate employment opportunities in economic, environmental and governance risk assessment (loans and projects, sustainable businesses); even more so if the work of this sector is combined with that of information and communication technologies.

In addition to the sectors mentioned here, the ecological transition will be extended to each and every other economic sector. Identifying the challenges and opportunities of each of them sufficiently in advance will be necessary to optimize the effect of the ecological transition on the Spanish economy.

2.4. CHANGES IN EMPLOYMENT DUE TO ENERGY TRANSITION

Within the ecological transition, the energy transition is the one that is pushing the greatest productive change in recent years and the one that is set to accelerate in the coming years due to the need to fight climate change. Complying with the Paris Agreement implies having an energy system based on renewable energies, an increase in the electrification of energy uses (mainly transport and thermal), the improvement of energy efficiency and the abandonment of fossil fuels by the middle of the 21st century.

The Strategic Framework for Energy and Climate sets the long-term goal of making Spain a carbon-neutral country by 2050. In this direction, the medium-term objective of the PNIEC is to achieve at least a 23 per cent reduction in emissions by 2030 compared to 1990 levels. Since three out of four tons of greenhouse gases originate in the energy system, their decarbonization is the cornerstone on which to develop the ecological transition and the decarbonization of the economy.

Within the Spanish energy system, the two key areas for work are transport (26% of total emissions in 2017) and electricity generation (20% of total emissions in 2017). Emissions from the transport sector have increased by 41% since 1990, well above the average for the economy as a whole. Emissions from the electricity sector have been marked by the weather, with years in which they have fallen considerably (as a result of good water years) and then risen abruptly.

The decarbonisation of the energy system in the 2050 horizon is a formidable challenge for the Spanish economy and society. In thirty years' time, there should be a qualitative transformation in the way the different actors save, generate and consume energy. This will have a direct impact on the traditional business model of the electricity sector; on the mobility of people and the transport of goods; on the air conditioning of homes; on the type of energy that moves people; and on the use of energy in commerce, services, and the industrial and primary sectors, among others.

This transformation offers the opportunity to reduce Spain's high energy dependence, 74% in 2018, which is more than 54% of the European average. Agreements on energy transition.

A recent study by the ILO Spain based on interviews at different levels of government and public institutions, the business sector, trade union organizations, development and environmental organizations details a common core, a set of elements on which there is broad agreement and which therefore constitute a significant basis for progress in discussions and agreements. We highlight the following:

 *Climate change is the most important challenge for humanity and has environmental, economic and social consequences. It also has ethical and moral considerations because it affects the most vulnerable population to a greater extent.*

³⁴ National Inventory of ATMOSPHERE EMISSIONS MITECO https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/resumeninventariogei-ed2019_tcm30-486322.pdf

- ▶ *Climate change is caused by an energy model based on fossil fuels and, to stop it, it must be radically transformed into a model based on energy efficiency, energies with renewable sources and the incorporation of intelligence into energy consumption.*
- ▶ *The energy model of the future will be supported 100% by renewable sources because the technologies are already available, although their development is still continuing, they have environmental advantages and are, in the medium term, more competitive in terms of costs.*
- ▶ *Technological change in energy generation from renewable sources is very rapid and in the last five years has made previously unfeasible decarbonisation scenarios feasible.*
- ▶ *Digitisation will be a key support for the energy transition both because it creates new opportunities for access to energy sources and because of lower generation and distribution costs.*
- ▶ *The energy transition must be framed in line with other processes that are being very well accepted by citizens and companies, such as the circular economy, the collaborative economy aimed at sharing services among users, or social innovation.*
- ▶ *Internationally, the transfer of investment funds from fossil to renewable energies marks a clear trend in favour of the new energy model and favours the availability of financing to undertake the investments required in the transition.*
- ▶ *The energy transition is based on progress in some main areas such as: energy generation, sustainable mobility and energy efficiency in buildings. There is wide agreement that the transition in power generation is already initiated and advanced, while in sustainable mobility and rehabilitation it is still in very early stages. However, each area will require specific transition plans because they must respond to very different economic and institutional realities.*
- ▶ *The energy transition must be carried out on the basis of a broad agreement between the actors involved and on the basis of social dialogue.*

Application of ILO guidelines on just transition in the context of the Spanish energy transition (Fundación CONAMA, ILO November 2018).

The opportunities for the Spanish economy are numerous. Spain, due to its meteorological and geographical characteristics, is in a privileged position to develop renewable sources. Its economy is well positioned to take advantage of opportunities from these renewable sources, distribution networks, energy efficiency, building rehabilitation or desalination. It has a business network, human resources and specialized and competitive research centres. On the other hand, there is a significant number of actors, large and small companies, and investment funds that are waiting for a stable regulatory scenario to plan and make the necessary investments.

These changes will have a significant impact on employment, both directly and indirectly, at both sectoral and geographical levels. In some cases, changes will be negative, especially in areas dependent on polluting sectors, where no alternative economic sectors exist. The loss of employment opportunities leads to the displacement of the population, particularly young people, and with it the loss of human capital. However, the biggest problem of the energy transition is not the decrease in the total number of jobs. The conventional energy sector has been losing jobs for decades due to productivity increases or restructuring needs due to loss of overall competitiveness (as in the case of coal). Indeed, if well managed, the transition of the energy sector to renewables can be an engine for job

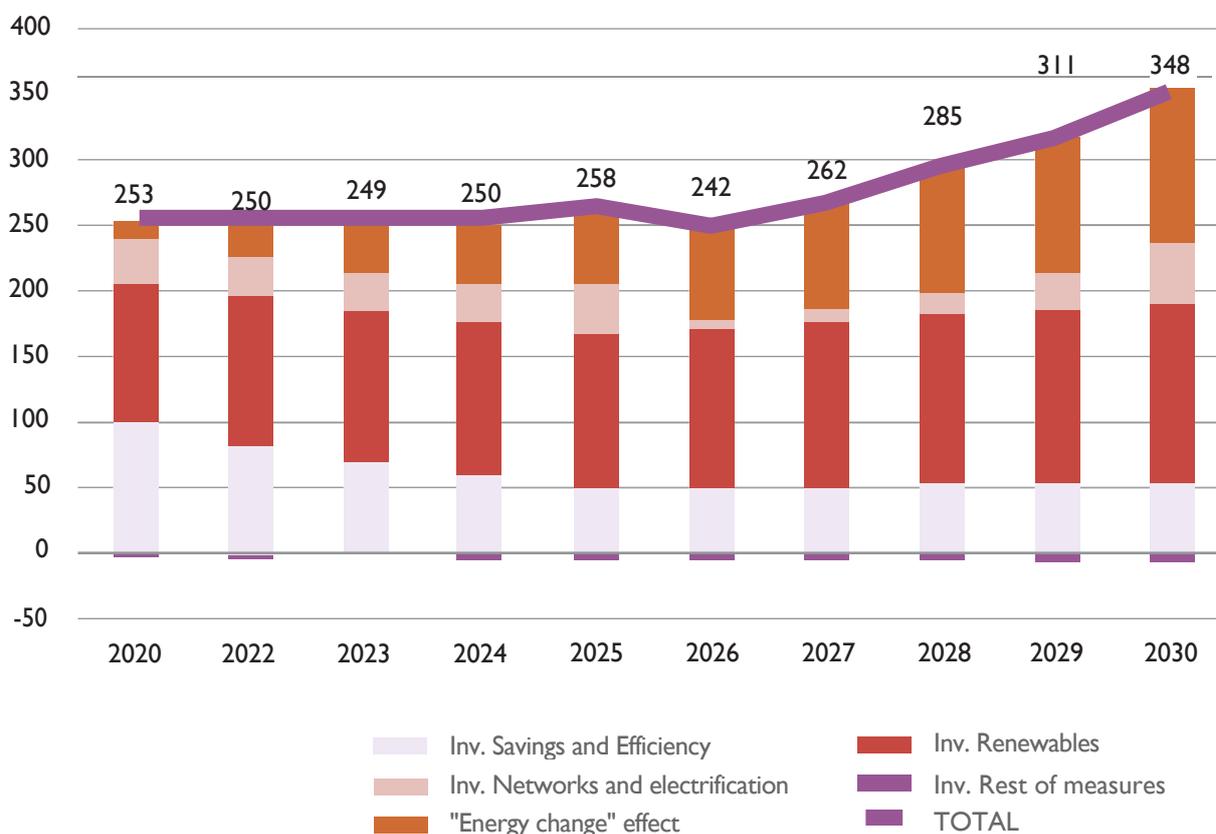
creation. In general, renewables require more jobs per MW, although the ratios are linked to productivity and differ greatly by country.

According to the ILO, in the short and medium term, the energy transition faced by countries in meeting their specific commitments under the Paris Agreement would mean a ratio of four jobs created in renewable energies for every one lost in fossil fuels by 2030. According to the same organization, this relationship would also apply to the specific case of Spain.

The increase of employment in the PNIEC

The PNIEC generates a net increase in employment of between 253,000 and 348,000 people per year (1.7% increase in employment in 2030). The unemployment rate would be reduced, compared to the Trend Scenario, by between 1.1% and 1.6%.

Figure 4: Employment impact by type of measure (thousands of persons/year), PNIEC 2021-2030

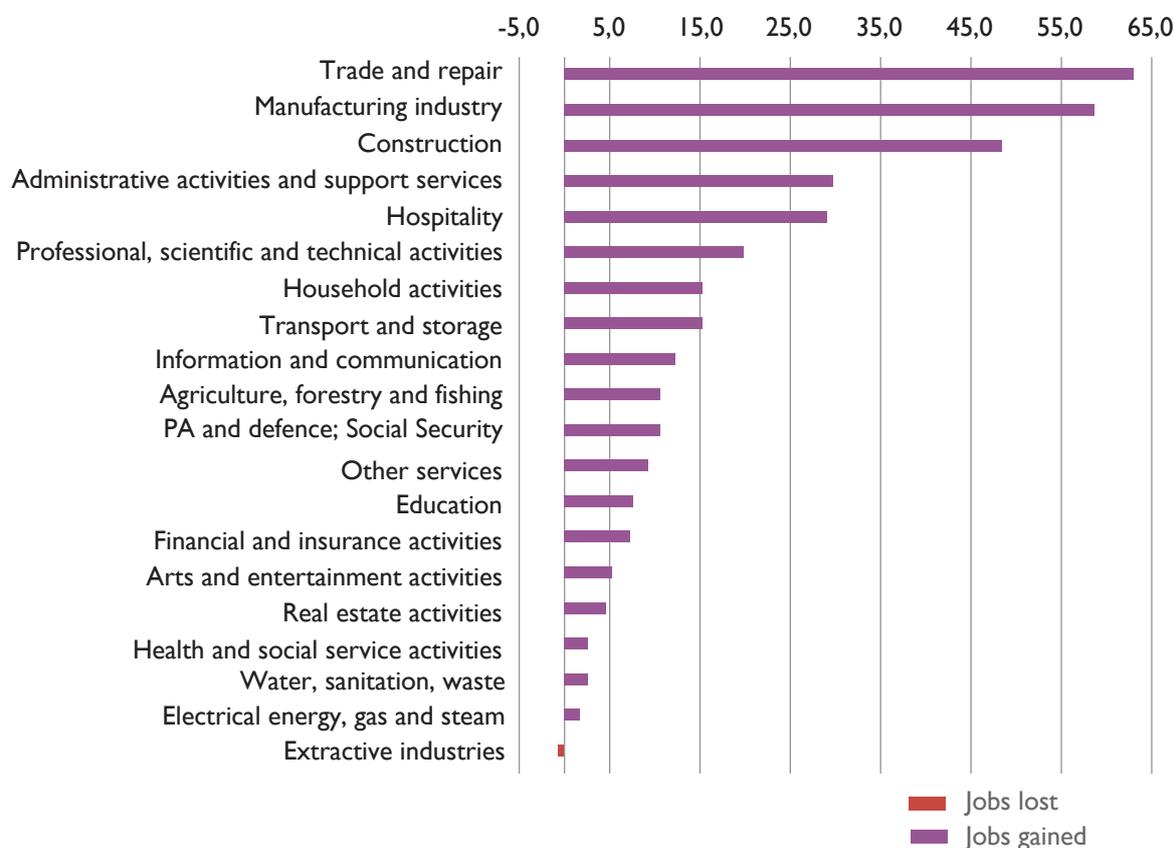


The same analysis of the macroeconomic impacts of the Integrated National Energy and Climate Plan 2021-2030 shows that Spain has much to gain from this process of decarbonisation and provides projections of great opportunity for the country.

Investments in renewables would generate between 107,000 and 135,000 jobs/year, while investments in energy savings and efficiency would generate between 52,000 and 100,000 jobs/year in 2030. The energy shift indirectly up to 118,000 jobs/year in 2030. Finally, there is also a slight negative impact associated with the planned divestments in nuclear and coal plants from 2025 onwards and with respect to the trend.

If we consider the impact on employment in 2030 (Figure 5), according to branches of activity of the National Accounts (CNAE classification, to 20 sectors), the branches of activity that would generate most employment would be Trade and repair (62,300 jobs), Manufacturing (57,800 jobs) and Construction (48,100 jobs).

Figure 5: Impact on employment by branches of activity (thousands of persons/year), PNIEC 2021-2030



The electricity sector would have net job creation (1,700 jobs), including job losses associated with the reduction of activity in coal and nuclear plants. According to this aggregation, the only area that obtains a net loss of employment is the Mining and quarrying industry, due to the reduction of activity in coal mining.

Therefore, the main obstacles do not seem to be related to the number of jobs, but to the concentration of polluting activities in certain areas for which support measures will have to be proposed. The problem is that employment gains and losses do not occur in the same places, or in the same sectors.

On the other hand, although the progressive entry of renewables into the energy mix will tend to lower energy prices, it cannot be overemphasized that, in order for the impacts of the energy transition to be beneficial on the competitiveness of economic activities and industry (and therefore on employment), measures must be put in place to ensure affordable prices for citizens and businesses and to protect against any specific negative impacts in the short term, for example, in the electro-intensive industry. For this reason, price developments must be estimated and monitored and appropriate measures taken for the business and industrial fabric and for the protection of domestic consumers.

2.4.1 The decarbonization of buildings

The transformation of the building sector, as well as being key to meeting the decarbonisation targets, is one of the major employment opportunities offered by the energy transition. The renovation of the stock and the construction of new buildings under new passive use standards can significantly reduce emissions, as well as the use of new materials with low or no carbon footprint or materials from waste.

Housing rehabilitation policies that have aimed to optimize this potential, combining job retention and emissions reductions in the sector, have been the norm in many countries, especially since the economic crisis of 2008. Austria, Germany, Belgium, Hungary and Slovakia launched rehabilitation programmes with the aim of creating and maintaining construction jobs. In Spain, the job creation opportunity of the sector's progress towards greater sustainability has not been consistently seized so far.

In spite of this, refurbishment is taking on a very important weight in total turnover, accounting for 45.49 billion Euros, which represents 53.15% of the total turnover of the construction sector dedicated to buildings³⁵. The rehabilitation of the housing stock is relevant in both urban and rural environments, as stated in the Programme for the Promotion of Energy Efficiency and Sustainability in Housing³⁶, which includes the size of the municipality as a variable to be considered in the granting of aid.

The areas with more opportunities for creating jobs could be the actions on the envelope of the buildings, the optimization of the manufacturing processes, the recovery, assessment and reuse of the materials, the implementation of renewable sources in the buildings, the audits and evaluation of energy efficiency, the devices for monitoring and controlling the facilities of the buildings, or the construction of new builds with almost zero energy consumption.

2.4.2 Employment in the electricity sector

The direct weight of the electricity sector is currently around 2% of GDP, with a contribution to gross fixed capital formation slightly above 1%³⁷. The employment is also significantly more stable (15% of temporary workers versus 26% of total workers³⁸), more qualified and with higher than average pay. This volume of employment, moreover, was hardly affected by the 2008 crisis.

The electrification of the economy that has taken place in recent years has generated extensive benefits, such as reduced dependence on oil. In the next few years, the process of electrification will have to be intensified, and the electricity sector is also set to undergo a major transformation in generation sources due to the gradual withdrawal of coal-fired plants and the nuclear fleet that will reach the end of its useful life.

³⁵ https://www.mitma.gob.es/recursos_mfom/listado/recursos/ec2018.pdf

³⁶ <https://www.mitma.gob.es/arquitectura-vivienda-y-suelo/programas-de-ayudas-a-la-vivienda/programa-de-fomento-de-eficiencia-energetica-and-sustainability-housing>

³⁷ Data for 2015: INE, Spanish National Accounts base 2010 <http://www.ces.es/documents/10180/4509980/Inf0417.pdf>

³⁸ Data for 2015: INE, Spanish National Accounts base 2010 <http://www.ces.es/documents/10180/4509980/Inf0417.pdf>

Digitization will also create growth opportunities for the economy and employment. In the energy system, renewable generation forecasting systems and their sales, home automation and energy management systems, systems to optimize the transmission capacity of existing lines, intelligent network management systems by network managers, new smart meters or systems that allow the management and control of active demand elements, will result in new employment niches.

Employment in the renewable sector

Renewable energy sources created more than 120,000 new jobs in Spain in 2009. However, the crisis of 2008 and the measures to slow down the energy transition from that year, and to freeze it from 2012 to 2016, had a high impact on employment in the sector, with Spain being the only country in the world where the sector lost jobs drastically. In 2018, jobs in the sector are estimated at around 75,000 throughout the renewables value chain (industry, installation, operation). Although some of the associated industrial jobs were maintained through exports, many others were lost as production moved closer to markets and by the collapse of jobs related to the shutdown of new renewable power installations.

Within renewables, there are various employment opportunities: the number of jobs per MW created in the solar energy sector is significant, although in Europe it is mainly linked to installation; wind power generates fewer jobs per MW, but it leads to a greater extent to the generation of industrial employment in Spain; and biomass, developed with sustainability criteria, offers interesting opportunities for rural employment and possibilities of supplementing agricultural income and thus making the maintenance of farms more attractive, which can help put a brake on the depopulation process.

Spain has important advantages to avail of the opportunities in local employment generation. The employment gains of the energy transition are reduced if imports are a significant part of new technologies. However, Spain continues to be Europe's second largest producer of wind energy and is currently the fifth largest country in the world in terms of installed wind power capacity. It has advanced technological institutions and centres such as the IDAE (Institute for Energy Diversification and Saving), CENER (National Centre for Renewable Energies), CIEMAT (Centre for Energy, Environmental and Technological Research) and CECRE (Control Centre for Renewable Energies), created and managed by the company Red Eléctrica de España (REE), in addition to centres or public entities attached to different Autonomous Communities. Likewise, a group of national companies has managed to stand out on the international energy scene for its leadership capacity and absorption of new technologies, creating its own R&D&I units.

The PNIEC's goal of achieving 74% renewable electricity generation by 2030 will be a major boost to job creation in this sector.

Employment losses in coal-fired and nuclear power plants

Gains in renewable technologies will lead to job losses in coal and nuclear after the progressive closure of plants. Part of this transition is already underway in our country and its effects will be discussed in more detail in section 7.

It should be borne in mind that some of the job losses resulting from the closure of operations are in some cases not immediate. Dismantling activities of polluting plants can lead to significant levels of employment. However, these are temporary jobs and sometimes require a different specialization for which the local labour force is not trained.

Another fact to take into account is that, due to the multi-technological nature of electricity companies, the companies that close installations and those that open them may be the same, so the possibilities of relocating staff are much greater than in other ecological transformation processes. While this prevents worker unemployment, as relocation

often occurs in different locations, it does not prevent impacts on municipalities and regions. It is therefore important to anticipate the demographic impact in both the areas of origin and destination, trying to compensate for possible decapitalization in the areas of closure and facilitating relocation to places in the process of depopulation as a measure to reverse the impact.

In the case of nuclear power plants, the decommissioning phase may entail a significant need for highly qualified employment, which requires urgent provision of the necessary professional training plans to ensure that no bottlenecks occur in the process.

In summary, the negative impacts on employment resulting from plant closure, although in some cases not fully felt until the medium term (when decommissioning operations have been completed), will be highly concentrated locally. If anticipation and accompanying measures are not taken, these closures could reduce economic activity and consequently employment (induced and indirect) in the areas concerned.

2.4.3 The decarbonization of transport

The decarbonization of transport and its digitalisation will mean a very significant transformation of mobility.

The PNIEC estimates that 35% of the passenger-kilometres currently performed in conventional vehicles will be shifted to non-emitting modes and that there will be 5 million units of electric vehicles, including cars, vans, motorcycles and buses.

Meeting these objectives requires urban planning and design that favours accessibility and sustainable mobility, minimisation of transport needs, promotion of pedestrian areas and collective transport, and the use of bicycles. The definition of low-emission zones in cities of more than 50,000 inhabitants, together with Sustainable Urban Mobility Plans, will drive this change, improving air quality and the health of city dwellers.

This major modal shift will also involve a shift in employment from conventional combustion vehicle production to collective transport, carpooling and non-emitting modes and vehicles. Public transport is already a major employer in the Spanish economy and offers interesting growth opportunities. For public transport to be a real alternative to the private vehicle, it is important that its planning is carried out taking into account those municipalities where connectivity and accessibility are deficient.

On the other hand, the automobile sector is a very important sector in Spain (10% of the GDP)³⁹, intensive in technological innovation, with a large number of small and medium enterprises and with hundreds of thousands of jobs in the whole value chain that represent an important part of all industrial employment in some regions, with shares close to 30% in Aragon, Castile and Leon and Navarre; and around 20% in Madrid, Galicia and Valencia. Special attention will have to be paid to the impacts on the auxiliary industry, which is composed of a significant number of SMEs.

Accompanying Spanish plants to benefit from electric vehicle production is key, as is the deployment of public charging infrastructure. With regard to domestic demand, the current trend is not optimal and the figures are low. The transition of this strategic sector of the Spanish economy will have to be properly accompanied, analyzing the possible impacts on the need for labour.

Along with electric vehicles, other technologies such as hydrogen from renewable sources or biomethane may also have a growing place in the decarbonization of transport.

It is expected that companies in the automotive sector will progressively transform themselves also into companies providing advanced mobility services, combining zero emission vehicles with connectivity, autonomous vehicles, shared services offerings, etc. This will also affect other companies in the value chain such as dealers and workshops. Also, the component supplier industries will have to redefine their activity.

³⁹ 2016 Annual Report of the Spanish Association of Car and Truck Manufacturers

It is expected that companies in the automotive sector will progressively transform also into companies providing advanced mobility services, combining zero emission vehicles with connectivity, autonomous vehicles, shared services offerings, etc. This will also affect other companies in the value chain such as dealers and workshops. Likewise, the component supplier industries will have to redefine their activity.

Many of these transformations and impacts on employment will not be related to the energy transition. Autonomous driving, for example, will impact on the employment of various types of transporters, just as production automation has affected staffing needs for decades.

The transport of passengers and goods will be transformed, and it will be necessary to increase rail transport on the one hand and to transform road transport with more efficient and less polluting vehicles and energy sources on the other. Short sea shipping and its emission reduction potential can also be better exploited.

In the medium and long term, the hydrocarbon industry and its distribution network will be affected by the reduction in the use of fossil fuels in transport. In the case of retail, to take advantage of the opportunities of the transition, the adaptation of infrastructure for other uses has to be accelerated.

2.4.4 The decarbonization of the industrial sector

Industrial processes (including in addition to manufacturing industries, construction, mining and agriculture) are a major source of carbon dioxide emissions. Either by using fossil fuels to obtain the heat and steam needed for the different stages of their production, or by being large consumers of electricity.

The manufacturing industry, (especially the paper, mineral-based products, food, oil refineries, metal and chemical industries), is the largest contributor to CO₂ emissions produced in this sector, as well as the production of cement, iron and steel, among other industrial processes.

Advancing in the decarbonization of industry is fundamental to generating a sustainable industry that maintains and expands industrial employment in Spain. The PNIEC estimates that the industrial manufacturing sector is the second fastest growing sector benefiting from emission reduction measures.

Furthermore, the progressive lowering of the price of electricity brought about by renewables and the development of industrial self-consumption may put Spain's industry (with better renewable resources than other countries) at a significant competitive advantage for its maintenance and development.

The introduction of renewable energies in industry is an essential challenge if progress is to be made towards the decarbonization of the economy. The possibility of developing self-consumption of electricity in the industrial sector, although hardly exploited to date, has an interesting future forecast.

With regard to thermal uses in industry, it should be borne in mind that final energy demand in the industrial sector accounted for around 23.4% in Spain in 2017. Only 7.3% of this demand was covered by renewable energy sources (mainly biomass). There is significant potential for biomass, hydrogen and other renewable energy sources (especially biogas and solar thermal) to contribute more significantly to the decarbonisation of the industrial sector.

The transition of industry, in particular the electro-intensive industry, and the energy sector requires a cross-sectoral approach, as they require exponentially higher amounts of climate-neutral energy, including electricity and gas (e.g. renewable hydrogen).

2.4.5 The most immediate negative impacts on vulnerable areas

Both in the short and long term there will be difficulties for specific sectors, groups and territories. In the medium and long term, support is easier to plan and allows for effective solutions to create opportunities associated with the transition. But if this action has not been planned and anticipated, in the short term it will force urgent action. For example, the closure of coal mines at the end of 2018 has had a direct impact on areas in the process of depopulation, such as León or Asturias.

This strategy identifies territories where these conditions of vulnerability exist in the very short term and proposes an Urgent Action Plan for Coal Regions and Power Plants in closure in section 7.

The Just Transition Strategy is the state-level instrument aimed at optimizing activity and employment opportunities in the ecological transition to a low greenhouse gas emission economy. Through it, measures will be identified and adopted to ensure equitable and supportive treatment of workers and territories in this transition.

This first Strategy proposes the following strategic objectives.

- ▶ **SO1.** Enabling the exploitation of employment opportunities and improving competitiveness and social and territorial cohesion generated by the ecological transition of the economy.
- ▶ **SO2.** To ensure equal distribution of opportunities, on the one hand, through gender equality measures that reduce labour inequalities for women in the ecological transition and, on the other hand, through measures for groups with special difficulties.
- ▶ **SO3.** To provide public administrations and Spanish society with a dynamic and forward-looking observation capacity on the situation and trends of the labour market regarding the transformations that are taking place in it due to the effect of the ecological transition.
- ▶ **SO4.** To make the ecological transition a vector for slowing down depopulation, by developing a model that takes into account the specific characteristics of rural areas and bets on their dynamism, in a sustainable and integrating framework.
- ▶ **SO5.** To promote sectoral participation forums for a better understanding among economic and social actors of the possibilities of ecological transformation.
- ▶ **SO6.** To identify, by implementing sectoral plans in the main economic sectors, the challenges, opportunities, threats and measures necessary to carry out their transformation, anticipating the possible negative effects of some transformations related to greening, both at a sectoral level and concentrated on specific territories, in order to accompany them.
- ▶ **SO7.** To evaluate the current instruments of the National Government and its business support bodies for R&D&I activities, such as financing, loans, guarantees, training, advice, etc., and propose their adaptation or improvement to ensure that they support the ecological transition.
- ▶ **SO8.** To propose industrial, research, development, innovation, digitalisation, economic activity promotion, investment promotion and required funding, active employment and vocational training policies for coordinated work of the General State Administration, the Autonomous Communities, the Local Entities and the social agents with the aim of taking advantage of the transition to achieve the best employment results and the improvement of competitiveness.
- ▶ **SO9.** To minimize the negative impacts on vulnerable areas through Just Transition Agreements, technically and financially supporting their implementation and with the participation of the different administrations, agents and social organizations of the territory.
- ▶ **SO10.** To promote the elaboration of Just Transition Agreements for strategic sectors and affected groups and to support their implementation.
- ▶ **SO11.** To propose an Urgent Just Transition Action Plan for coal regions and territories and groups affected by the closure of power plants.

AXIS A. BOOSTING THE ECOLOGICAL TRANSITION OF ECONOMIC SECTORS

Realizing the job creation opportunities of the economy's ecological transition requires coordinated policies, supported by regulatory measures, including planning and management mechanisms.

Measures that can be offered to sectors include incentives for sub-sectors and activities with an interest in green transition with predictability and transparency, measures to boost demand, use of public procurement and development of markets for green products, training of workers or support for research to generate opportunities in resource-efficient and circular economy activities.

Support can be extended to the entire economy: from promoting the development of new businesses, to public support for the transition of small and medium-sized enterprises or the promotion of transition plans in large companies.

Along these lines, actions are proposed to boost the ecological transition, which constitute the framework on which to implement measures to ensure a just transition:

- ▶ **A1.** To promote the development of new production systems and processes based on the use of biological, renewable resources, guaranteeing the sustainability of natural resources and their efficient use and the conservation of biodiversity.
- ▶ **A2.** In coordination with the social agents, promote the holding of sectoral forums on ecological transition for the improvement of competitiveness, the attraction of investment, the generation of green employment and the adaptation of economic activities to climate change.
- ▶ **A3.** To promote product transparency so that consumers can base their purchasing decisions on the necessary information, whether through the use of the European eco-label, voluntary certification schemes, life-cycle analysis or environmental product declarations.
- ▶ **A4.** To promote green public procurement as a vector of transformation. Public procurement represents a significant part of GDP both in Spain and in the EU (more than 13% in the case of the EU⁴⁰).
- ▶ **A5.** To support environmentally friendly technologies and products through green taxation measures.
- ▶ **A6.** To accelerate the Energy Transition through the development of the National Integrated Energy and Climate Plan 2021-2030 and other energy policy instruments. To this end, work will be done in different areas and sectors considered particularly important for the generation of associated employment:
 - ▷ **A6.1.** Elaboration of a Plan of Integral Rehabilitation of Buildings, 2021-2030, with the objective of rehabilitating 1,200,000 homes by the end of the period, integrating decarbonisation and circular economy objectives.
 - ▷ **A6.2.** Measures for the renovation and improvement of energy efficiency in buildings belonging to the General State Administration, the Autonomous Communities and Local Administrations, ensuring the renewal of at least 3% of the built area per year.
 - ▷ **A6.3.** Call for procedures for the granting of economic rights to promote the construction of at least 3,000 MW of renewable facilities each year that generates certainty for investors and the continuity of business activities in the sector.

⁴⁰ European Commission. Eurostat, February 2019 data.

- ▶ **A6.4.** Technological renovation plan in existing projects to take advantage of the infrastructures, as well as the lesser environmental and territorial impact derived from developing new projects in locations already destined for energy generation.
 - ▶ **A6.5.** Measures to promote energy efficiency in all sectors, especially in industry and the building sector.
 - ▶ **A6.6.** To approve a National Strategy for Self-consumption (individual and collective) of renewable energy from domestic and industrial consumers, as well as others such as the agricultural sector.
 - ▶ **A6.7.** To approve a National Storage Strategy with a section of measures aimed at meeting Just Transition goals.
 - ▶ **A6.8.** Support for the penetration of final energy-saving technologies, mainly in small and medium-sized enterprises (SMEs) and large industrial enterprises.
 - ▶ **A6.9.** Industry technology development measures associated with the storage needs of a progressively renewable energy system, including batteries and recycling systems to promote the circular economy.
 - ▶ **A6.10.** Measures for the take-off of electric mobility in collective and individual transport in order to guarantee a fleet of 5 million electric vehicles in 2030 and the installation of recharging points and the necessary measures to support the national automobile industry.
 - ▶ **A6.11.** Promotion of biomethane, hydrogen and other synthetic fuels using only renewable raw materials and energy, ensuring consistency with waste legislation, principles and targets.
 - ▶ **A6.12** Energy saving, efficiency and diversification measures in the various modes and means of transport.
- ▶ **A7.** To approve a Mobility Strategy, Safe, Sustainable and Connected, that guarantees, taking into account the challenge of climate change, mobility to all citizens and that includes social and labour aspects of transport and mobility.
 - ▶ **A8.** Elaboration of an Industrial Plan for Renewable Energies so that the penetration of renewables leads to the creation of employment in the industrial fabric throughout the value chain, with territorial balance and within the requirements of the circular economy.
 - ▶ **A9.** To approve a Spanish Strategy for the Circular Economy (EEEC) and the corresponding action plans covering economic, environmental, social and R&D&I aspects in order to make the principles of the circular economy in Spain effective, and to accelerate actions in the area of waste prevention and management by approving a new waste law so that the European objectives introduced in the revision of Community regulations (including that relating to single-use plastics) can be met and the opportunities for job creation linked to the first options in the waste hierarchy (prevention, reuse, recycling) can thus be materialised.
 - ▶ **A10.** To adopt a plastics action plan along the lines set out by the European Commission in its plastics strategy and in the framework of the 1st EEEC Action Plan.
 - ▶ **A11.** To support the creation of green jobs in the rural world by contributing to the National Strategy to face the Demographic Challenge and following the General Guidelines established by it, with particular attention to the promotion of youth and women's employment and entrepreneurship.
 - ▶ **A12.** Development of specific measures for the generation of rural employment linked to renewable energy opportunities such as biomass or biogas, under sustainability criteria. The energy transition must be an opportunity for the rural world and energy policies must be articulated with rural development measures.

- ▶ **A13.** Elaboration and adoption of a digitization agenda for the agri-food, forestry and rural sectors, which will define the strategic lines to promote the digital transformation of these sectors, as well as the instruments needed for its implementation.
- ▶ **A14.** Recognition and support to figures such as the active foresters to maintain the mountains at an adequate level of conservation and to generate renewable resources.
- ▶ **A15.** Boosting the Bioeconomy Strategy to generate economic value by using resources of biological origin as fundamental elements, in an efficient and sustainable manner, activating local markets for products and by-products.
- ▶ **A16.** To approve the Spanish Strategy for Green Infrastructure and Ecological Connectivity and Restoration, and to promote the full implementation of the management plans for the Natura 2000 Network and the strategies for the conservation of threatened species and the fight against invasive alien species in order to boost the creation of green jobs in biodiversity conservation.
- ▶ **A17.** To continue with the implementation of the National Rural Development Programme, as a necessary tool to support a balanced territorial development of our rural areas.
- ▶ **A18.** Revision of the Spanish Forestry Plan (2002-2032) with specific measures on forestry taxation and economic activities in the rural environment that promote the use of forests and avoid their abandonment.
- ▶ **A19.** To promote measures in the context of the Business and Biodiversity Initiative to strengthen biodiversity considerations in companies' business strategies, both in minimizing negative impacts and in generating positive impacts.
- ▶ **A20.** To support the creation of jobs in water management through the Plan for Water Treatment, Sanitation, Efficiency, Energy, Saving and Reuse.
- ▶ **A21.** To approve a Sustainable Tourism Strategy 2030 that deseasonalises tourism and encourages tourism of nature and biodiversity, culture, history and art for the promotion of tourism that generates income and employment, that showcases biodiversity, ensuring the correct conservation of the natural values of the territory and contributing to its sustainable use.
- ▶ **A22.** To prepare a Plan for the Adaptation of the National Government's Business Support Instruments to ensure their effectiveness for the ecological transition. All ministries and dependent bodies with any of these supports will be involved. The Interministerial Commission for Climate Change and Energy Transition will agree on the documents to be reviewed and will be aware of the modifications incorporated, analysing the sufficiency of the measures and actions taken, and proposing, where appropriate, new support instruments to be developed.
 - ▶ **A22.1.** Support for R&D&I through fiscal aid or instruments, investment financing, loans, guarantees, training aid, etc., will be evaluated, adapting their bases, objectives and scope so that they include direct action to support the transition of the economy.
 - ▶ **A22.2.** State plans, strategies, programmes and strategic documents promoted by these ministries, agencies or bodies, within their competence, will be adapted to make the appropriate references and include the appropriate measures and actions so that these strategic documents provide support to companies in the ecological transition.

- ▶ **A23.** Adaptation of EAFRD rural development programmes to include Just Transition proposals.
- ▶ **A24.** Reorientation of the ICO as an instrument of economic policy and a body for the promotion of SMEs, encouraging especially those activities related to the ecological transition and with respect to the principle of budgetary balance.

AXIS B. SPECIFIC SUPPORT TO STRATEGIC INDUSTRIAL SECTORS

- ▶ **B1.** Approval of the Strategic Agreement for the Automotive Sector to set out the roadmap for the work to be carried out in public-private collaboration to promote the sector and attract new investments with instruments such as working groups to discuss the necessary proposals with all the agents involved, instruments to support productive investments that the sector can use to undertake its R&D&I projects or the acquisition of new assets, support for the rejuvenation of workforces and professional training.
- ▶ **B2.** Elaboration of a Sectoral Transition Plan for Transport which, within the Mobility Strategy, Safe, Sustainable and Connected for all, identifies the challenges of the ecological transition and proposes the necessary accompanying and support measures to advance in the decarbonisation of transport and the internalisation of costs.
- ▶ **B3.** Approval of the Statute for Electro-intensive Consumers, which will characterise these consumers in a stable and predictable framework and will establish the necessary measures in the short and long term (maximisation of budgetary resources, promotion of bilateral contracts) for the maintenance and reinforcement of the competitiveness of the electro-intensive industry, the maintenance of employment and the promotion of R&D&I projects.
- ▶ **B4.** Establishment of a transition framework for high efficiency cogeneration using renewable fuels or natural gas, ensuring self-consumption of the facilities and providing flexibility in their operation with regard to the electricity system.
- ▶ **B5.** Elaboration of a Sectoral Transition Plan for Industry that identifies the challenges and opportunities of the ecological transition for industrial sectors and sub-sectors that will facilitate the achievement of the objective of the industrial sector reaching 20% of the GDP and that proposes the necessary accompanying and support measures in the areas of R&D&I, financing of investments in adaptation of processes and products, energy efficiency, use of new raw materials and energy sources, support for the renewal of capital goods and technology, maintenance and creation of employment, training of workers, etc. For the identification of these measures, the results of the National Government's Plan for the Revision of Business Support Instruments will be taken into account.

AXIS C. CONSUMER SUPPORT AND REDUCTION OF INEQUALITY

For the ecological transition to be socially just, instruments must be designed and promoted so that the transition serves social objectives such as the reduction of inequality and poverty, through measures for access to basic resources and services or better consumer protection. This is particularly important for Spain, where energy poverty is a structural problem and affects especially consumers with fewer resources and economic capacity.

- ▶ **C1.** To conduct impact analysis on inequality, vulnerable groups and health of the proposed ecological transition policies.
- ▶ **C2.** To approve an Energy Poverty Strategy that will improve the understanding of energy poverty, the current response to the problem and create a structural change for the mitigation of this problem. The Strategy, which will be drawn up with the help of the Autonomous Communities and Local Entities, consumer associations, representatives of the third sector and energy companies, will make a diagnosis and characterisation of the problem, design official measurement indicators, establish objectives for the reduction of energy poverty on a medium and long-term horizon and propose specific measures for the achievement of these objectives, as well as their financing channels. The measures envisaged in the Strategy will include performance mechanisms, structural measures, to improve the energy efficiency of vulnerable households, as well as consumer protection measures.
- ▶ **C3.** To conduct a study of the distributive impact of the measures proposed in the National Integrated Energy and Climate Plan and design the instruments to optimize the positive impact shown in the first analysis.

AXIS D. REACTIVATION

As discussed above, economic restructuring and related changes in labour markets driven by environmental factors may be economic in scope or concentrated in certain sectors, regions and communities. In general they are permanent, but there are also cases of important temporary adjustments.

Since a transformation due to greening can be anticipated to some extent, work must be done to identify possible pressures to facilitate transition processes, measuring the impact on employment and depopulation. The proposed actions are as follows:

- ▶ **D1.** To develop ecological transformation plans with clear timetables, agreed and respected by the parties, so that all actors can anticipate adaptation and transformation measures.
- ▶ **D2.** To promote Just Transition Agreements to boost the economic reactivation of sectors or territories especially vulnerable or affected by the effects of the transition to a decarbonized model through participatory frameworks.
- ▶ **D3.** To support the diversification of the companies themselves in difficulty due to the transition, so that they can diversify their activity, incorporate new production lines and technological solutions that will allow them to maintain quality jobs in the same areas.
- ▶ **D4.** To promote the implementation of Just Transition Plans in strategic companies or groups of companies, especially in those that are going to undergo significant transformations in the short term due to policies of decarbonisation and greening of the economy.

AXIS E. ACTIVE GREEN EMPLOYMENT AND SOCIAL PROTECTION POLICIES

Active employment policies, aimed at vulnerable groups and territories, are key to promoting the employability and inter-sectoral mobility of workers from sectors undergoing restructuring to sectors that are driving change, including the training and qualification of labour groups with retraining needs. Always keeping the territorial perspective, these policies must avoid the human decapitalization of areas in demographic depression.

Active employment policies refer to the direct intervention of the government or the autonomous communities in the labour market to develop programmes and measures to improve its functioning. They consist of measures for integration, training and policies to promote job creation that must be developed taking into account, among other things, the needs of job seekers and the requirements of the respective labour markets. If recovery policies are anticipated, the work of these services will be facilitated by a better match of supply and demand.

Both the labour legislation and the Spanish Strategy of Activation for Employment are configured as principles of the active employment policies, of the promotion of self-employment and entrepreneurship, especially in the framework of the sustainable economy and the new sources of employment. This includes attention and support to entrepreneurs in the implementation of their business initiative, as well as the adaptation of actions to the characteristics of the territory, taking into account the reality of the labour market and local and sectoral particularities.

In some cases, especially in situations where transitions to the new model could not be anticipated in time, or do not take place within the same enterprises, social protection will be key to ensuring a transition that guarantees social cohesion.

The proposed actions are as follows:

- ▶ **E1.** To improve integration of the variable on greening of the economy in the Annual Employment Policy Plans.
- ▶ **E2.** To ensure the incorporation of women into green economy employment opportunities through gender mainstreaming.
- ▶ **E3.** To ensure that the ecological transition of the economy is incorporated into the European Social Fund initiatives or operational programmes and strengthening existing initiatives.
- ▶ **E4.** To promote, from the State Public Employment Service, its Network of National Reference Centres, and in collaboration with the Autonomous Communities and social agents, the improvement of the performance of employment services and the development of specific programmes in those territories identified as vulnerable to ecological transition processes.
- ▶ **E5.** To develop specific training plans for CNER teachers and trainers on ecological transition.
- ▶ **E6.** To promote employment, self-employment and entrepreneurial initiatives with collective formulas of social economy (cooperatives, non-profit companies) through specific calls for the promotion of green jobs in vulnerable areas through, among others, the calls of the Fundación Biodiversidad. These calls may be linked to specific groups, such as unemployed young people without qualifications.
- ▶ **E7.** Participation of the Ministry for Ecological Transition and Demographic Challenge in the calls of the State Public Employment Service for the granting of subsidies in the area of collaboration with bodies of the General State Administration that hire unemployed workers for the performance of tasks and services of general and social interest.

- ▶ **E8.** To implement the Employment Plan for the long-term unemployed and the Youth Employment Shock Plan 2019-2021 whose objectives, among others, are to reduce youth unemployment, increase the activity rate, reduce the gender gap and increase permanent hiring through measures to facilitate access by these groups to new opportunities, such as those arising from the ecological transition and the fight against depopulation.

AXIS F. GREEN VOCATIONAL TRAINING

Green vocational training, although part of active employment policies, must receive specific attention due to the changes that the greening of the economy will bring about in professional profiles. Therefore, a clear response must be given from the Vocational Training side of the Education System and the active employment policies.

Green sectors are important niches for job creation, the growth of which requires a labour market with the right qualifications for its needs. The sectoral debates to be promoted from the Just Transition Strategy should make training a key element. In this regard, the proposed actions are as follows:

- ▶ **F1.** To promote training for employment in the productive sectors of the so-called green economy and to promote the retraining of workers in vulnerable sectors or those undergoing restructuring.
- ▶ **F2.** To continue the revision of the primary, compulsory secondary, high school and university education curricula, as well as the National Catalogue of Professional Qualifications and the Catalogue of Vocational Training Qualifications, and to encourage the development of Specialisation Courses linked to the sectors related to ecological transition and the development of digital competences.
- ▶ **F3.** To elaborate a diagnostic study of the training needs of the ecological transition in the different sectors.
- ▶ **F4.** To develop joint programmes for young people between the Ministries of Education and Labour for the implementation of an offer to promote degrees and certificates of professionalism in sectors linked to ecological transition and to promote quality Dual Vocational Training between companies in green sectors and young people in training. Specific programmes will be carried out for a minimum of 12 months, linked to certificates of professionalism in demand. To use the tables and sectorial dialogues to optimize the possibilities of this instrument.
- ▶ **F5.** To combine these measures with those aimed at reducing the information technology and digital skills training gap; to boost local entrepreneurship and fight the territorial gap and depopulation as proposed by the Spain Entrepreneurial Nation Strategy and the General Guidelines for the National Strategy on the Demographic Challenge.
- ▶ **F6.** To support companies' planning of programmed training needs for ecological transition, as well as access to existing bonuses, with particular emphasis on access to appropriate training for workers in small and medium-sized enterprises.
- ▶ **F7.** To promote the inclusion of training clauses for the ecological transition of the economy in the sectoral agreements signed by companies and trade unions and the inclusion of these contents in the institutions responsible for their provision.
- ▶ **F8.** To promote just transition in Higher Education (Higher Education Training Cycles and University Education) and to draw up a professional training plan that will make it possible to have the qualified personnel required to ensure the safety and dismantling of nuclear power plants within an orderly and flexible nuclear shutdown plan.

AXIS G. R&D&I MEASURES

To avail of the opportunities of the transition, it is essential to generate scientific and technical knowledge and cutting-edge knowledge for solving problems and modernizing and transforming production processes.

- ▶ **G1.** To promote innovative public procurement for the greening of the economy. This measure is also aligned with the strategies of intelligent specialisation to improve the exchange of knowledge between political agents and stakeholders, favouring, above all, the participation of micro-SMEs and SMEs.
- ▶ **G2.** To support innovation and development of technologies for the achievement of a 100% renewable energy system through storage, hybridization, digitalization and integration of networks and sustainable mobility solutions.
- ▶ **G3.** Inclusion of a Strategic Action on Energy and Climate Change in the future Spanish Strategy for Science and Technology 2021-2028 and in the future Plan for Scientific, Technical and Innovation Research 2021-2024 so that the necessary instruments and modalities of participation can be accommodated in order to comply with the international and European commitments made.
- ▶ **G4.** To support the development of unique or demonstration public-private partnership projects through the IDAE and the Centre for the Development of Industrial Technology (CDTI), as well as projects for island territories and municipalities affected by the energy transition as a testing ground for technologies or policies.
- ▶ **G5.** Evaluation of the current State Plan for Scientific and Technical Research and Innovation, and of the Spanish Strategy for Science and Technology and Innovation 2013-2020, as well as updating the documents to fit the needs demanded by Spanish companies in support of their R&D&I activity for their adaptation during the transition.
- ▶ **G6.** Program for the development of a Network of Technological Centers of Excellence. This programme seeks to promote applied research and innovation through collaboration between Technology Centres and SMEs in priority technologies.
- ▶ **G7.** Integration of Just Transition policies in the thematic platforms of intelligent specialization to intensify cooperation between regions, and facilitate the industrial and ecological transition of regions with vulnerabilities.
- ▶ **G8.** Implementation of the EU's SET (Strategic Energy Technology) plan to accelerate the development and deployment of low carbon technologies.
- ▶ **G9.** Implementation of the innovation support measure in the National Rural Development Programme, which contributes to the funding for the creation of supra-autonomous task forces and the implementation of innovative projects in the rural environment, including the dissemination of innovation results in relation to the circular economy and the bio-economy, climate change and other relevant environmental aspects with an impact on the rural environment generated through the European Association for Innovation (AEI-AGRI) and the creation of local groups.
- ▶ **G10.** Support and promotion of new funding approaches to support high-risk, high-impact innovation in the field of clean energy to encourage entrepreneurship and market uptake of innovative, energy-efficient low-carbon solutions.

AXIS H. IMPROVING KNOWLEDGE ABOUT THE IMPACT OF THE ECOLOGICAL TRANSITION ON EMPLOYMENT

Tools for dynamic observation of employment, in addition to in-depth analysis of specific sectors, are needed in order to be able to adopt anticipatory policies. The development of many of the policies will be facilitated by access to adequate diagnostic and monitoring information.

The Public Employment Service's Observatory of Occupations can contribute greatly to this analysis, through two of its lines of action aimed at knowledge and prospecting of the labour market: prospecting and detecting training needs in the productive system and studying the economic sectors and activities with the greatest potential and best prospects for generating employment.

The measures to be included in this axis are the following:

- ▶ **H1.** To present a periodic analysis of the ecological transition of the economic sectors in order to know the situation, trends and evolution, their possibilities of generating employment, the economic activities and occupations with the best employment prospects, the skills most in demand by companies and the training needs, etc. The information will include data segregation by sex in order to propose appropriate gender strategies
- ▶ **H2.** To present an analysis of the vulnerabilities in specific sectors or areas in order to implement policies of anticipation.
- ▶ **H3.** A full diagnostic report with the launch of each Just Transition Strategy every 5 years and a follow-up report at the mid-point of the development period. This report shall also include an analysis of the opportunities and vulnerabilities linked to the demographic field and especially to rural depopulation.
- ▶ **H4.** To prepare studies of impacts on employment and social vulnerability as part of the National Plan of Adaptation to Climate Change 2021-2030. Work will be done on the development of qualitative and quantitative indicators of social vulnerability and adaptation to climate change in those areas where particularly vulnerable groups or communities have been identified.
- ▶ **H5.** To promote the improvement of statistical sources through the adaptation of the National Classification of Economic Activities for monitoring the greening of the economy.

THE JUST
TRANSITION
AGREEMENTS AS A TOOL
FOR IMPLEMENTING THE
STRATEGY

5. THE JUST TRANSITION AGREEMENTS AS A TOOL FOR IMPLEMENTING THE STRATEGY

In the territories where the energy and ecological transition could create difficulties for businesses and economic activities, Just Transition Agreements will be established to propose a comprehensive territorial action plan based on the objectives and criteria of the Just Transition Strategy. The regulation of these agreements will be included in the future Law on Climate Change and Energy Transition, which will determine the content of the agreements, as well as their maximum duration, which is expected to be seven years, renewable.

The Just Transition Agreements will be signed by the Ministry for Ecological Transition and the Demographic Challenge (following a report from the Ministry of Labour and Social Economy, the Ministry of Inclusion, Social Security and Migration, and the Ministry of Industry, Tourism and Trade) and the other public administrations, including Local Entities in geographical areas vulnerable to the transition to a low carbon economy. Companies, organisations from the business sector, trade unions, universities, educational centres, environmental non-governmental associations and organisations and other interested or affected entities may also participate in these agreements.

Just Transition Agreements shall include:

- ▶ An assessment of the state of vulnerability of the affected geographical area or group.*
- ▶ Commitments of the parties to the agreement, including companies benefiting from transition support measures.*
- ▶ Measures in the fields of taxation, financing, support for R&D&I, employment, social protection and training activities to encourage the adaptation of workers, subject to compliance with the objectives set out in the agreement.*
- ▶ A timetable for action, with measurable targets and monitoring mechanisms.*
- ▶ They may also include priority access to some or all of the electricity generation capacity, as well as priority rights to the use and volume of water of those concessions that are terminated after the closure of electricity generation facilities in accordance with Royal Decree-Law 17/2019, of 22 November, adopting urgent measures for the necessary adaptation of remuneration parameters affecting the electricity system and responding to the process of ceasing the activity of thermal generation plants.*

The Just Transition Agreements will have as a priority objective the maintenance and creation of activity and employment in the area through the support of sectors and groups at risk, the establishment of population in rural territories and the promotion of diversification and specialization consistent with the socio-economic context. These will take advantage of the endogenous resources of the territory, whether economic, social or environmental, and will attract exogenous investment, giving priority to those sectors that also present better results in terms of environmental, economic and social sustainability. National and regional research and innovation strategies for smart specialisation will be important tools to consider.

The Just Transition Agreements, when carried out for territories at risk of depopulation, will take into account the development of initiatives included in the National Strategy to face the Demographic Challenge: promoting the deployment of very high speed telecommunications networks (fixed broadband, 5G, 4G) and digital platforms, development of intelligent territories, support for start-ups, etc.

The identification of these strategic regions, sectors or groups of companies affected should be carried out together with the diagnosis of each five-year Just Transition Strategy, and corrected or adjusted, if deemed necessary, at the mid-point of the development period.

Based on this information, the list of areas that may be targeted by the support framework for the five-year period of the Strategy and a timed proposal for the development of transitional agreements will be drawn up.

For those areas that present urgent vulnerabilities, a first Urgent Action Plan will be developed.

Urgent Action Plans may exceptionally be drawn up in the event of new situations not foreseen in each Fair Transition Strategy and there are strategic sectors or groups of companies and areas particularly affected by the transition.

5.1. THE SUPPORT FRAMEWORK OF JUST TRANSITION AGREEMENTS

The General State Administration, in coordination with other administrations and social actors, will provide the following support for the implementation of the Just Transition Agreements:

- ▶ **A.** Technical and financial support so that each vulnerable area can have its own Just Transition Agreement.
- ▶ **B.** In the case of sectors, companies or strategic or collective groups of companies in difficulty, consideration will be given to the possibility of using the Community guidelines on State aid for rescuing and restructuring, in good time for the adoption of the appropriate decisions and their communication to Brussels, taking into account the long deadlines for approval of these temporary measures aimed at restructuring activities and production processes into new profitable and sustainable lines.
- ▶ **C.** The new activities promoted within the Just Transition Agreements must incorporate, as a priority, projects that accelerate the ecological transition: renewable energy and energy efficiency, sustainable mobility, building rehabilitation, the circular economy, eco-innovation, ecosystem restoration, biodiversity, adaptation to climate change, environmentally sustainable agriculture and livestock farming (such as ecological or rain-fed agriculture or extensive livestock farming) and sustainable tourism, among others, although other employment niches of particular interest to the affected areas will be considered.
- ▶ **D.** The agreements may include the proposal to support one or more tractor projects, whether public, private or social economy initiatives, which promote transformation through innovation. The agreements may also include the support, launch or reinforcement of smaller business initiatives that, together with the tractor projects, form a coherent and sustainable territorial development and specialisation plan. The various initiatives to be supported should form a single conversion plan.
- ▶ **E.** When the result of the evaluation of the situation leads to the closure of production lines, production activities or unsuitable services, a line of work will be established with the companies affected by the cessation of these activities or processes so that they can develop new activities in the same territories and support their diversification. In this way, we intend to take advantage of their knowledge of the business reality of the territory to build new initiatives with a smooth transition between the closure of the facilities and the possible opening of new ones. Work will also be carried out with these enterprises on the retraining needs of direct and indirect employment, in order to jointly build the best frameworks for continuing training.

► **F.** The tools for supporting the conventions will be of various kinds:

▷ **F.1.** Technical and legal support

- The Just Transition Institute will provide specialized and continuous technical support to projects from their development phase, providing technical and social engineering tools. This work will be coordinated with the Autonomous Communities, Local Entities and other parties to the Fair Transition Agreements.
- Through collaborative frameworks with the State Employment Service, comprehensive support will be provided to workers in the area to equip them with the appropriate vocational training, employment services and social protection. Employment services for workers affected by the closure of activities should be considered in a broad context, identifying solutions that, in addition to direct workers, can also be applied to indirect workers and the general population in the affected areas. Anticipating active employment policies for sectors in decline is important for the population to disconnect from the world of work and to provide specific attention for the most vulnerable population.
- Technical support for project monitoring, in order to correct any unforeseen events in time, will seek to ensure that objectives are met and to generate dynamic synergies, so that projects can incorporate advances made in other regions and Autonomous Communities.
- In the dissemination and visibility of the agreements, the Institute for a Just Transition will disseminate the objectives and results of the agreements, facilitating the exchange of best practices, but also improving the visibility of market opportunities for products and services of business activities in the territories. To this end, the participation in networks of experiences and activities already existing, both at European and national level, will be used.

▷ **F.2.** Financial support

- The agreements will evaluate and establish the financial support necessary to develop the projects that will be incorporated in it. Once the specific financial support needs of each agreement have been evaluated, the amounts and tools to be used will be determined.
- The agreements will offer assisted access, as quickly as possible, to windows of financial support available from the various institutions and bodies of the National Government: subsidies to companies and research projects, risk capital instruments, guarantees for undertakings, etc. To this end, work will be done with the various ministries and relevant bodies through the advisory service of the Institute for Just Transition.
- The agreements will provide this same technical assistance for European funding windows such as the Just Transition Facility, the European Social Fund or the other European Structural and Investment Funds (IEE fund), as well as other Community financial instruments adopted in the context of the next post-2020 budget cycle. For the European funds, projects that can jointly finance the actions of several Just Transition Conventions in different regions will be considered.
- Possible prioritization in the different lines of existing aid or that can be called for projects to be developed in areas in transition and / or areas in demographic depression, giving them an additional score (linked to the location) to that obtained in accordance with the general assessment criteria. The aim is not only to facilitate access but also to improve the possibilities of these territories' projects in the processes of competitive concurrence.
- Energy policy tools may also be considered for the implementation of business initiatives of an energy

- nature in the area, with the possibility of holding specific auctions of renewable energies for these territories.

5. 2. METHODOLOGY FOR THE ELABORATION OF JUST TRANSITION AGREEMENTS SOCIAL PARTICIPATION AND INNOVATION

As already mentioned, the agreements will promote the understanding of the administrations present in the territory (Autonomous Communities and Local Entities), and will encourage the participation of companies, organizations from the business sector, trade unions, universities, educational centres, environmental non-governmental associations and organizations, development agencies, Local Action Groups and other interested or affected entities.

The number and diversity of the parties involved will depend on the social contexts of the territories, and on the areas of the projects to be supported, but the methodology for their elaboration must be participatory and inclusive in all its phases: elaboration, monitoring and evaluation.

Participatory forums are an important part of successful restructuring, local development and industrialization policies. They offer opportunities for the exchange of different fields, science, economy or civil society, with political representatives. The objective of such processes is typically to create a long-term policy framework to ensure planning and investment security. Technical aspects, identification of potentialities or evaluations will also require specialized equipment.

Just Transition Agreements must include roadmaps with agreed-upon transformation schedules. Concrete actions will be included, within a common strategic framework with coherence. It should not only be a list of initiatives to be financed but also their interrelationship in a common project that generates innovation and sustainability over time.

The Just Transition Agreements will therefore require territorial coordination, analysis and the establishment of synergies and collaborations. Territorial social communication tools should be considered as part of them, to maintain the cohesion of the initiatives and facilitate their visibility in order to improve knowledge and therefore access to markets for products and services offered in the territory.

The Just Transition Agreements will propose an inclusive and equitable development in the territory, taking into account the need to improve the employability and working conditions of women and groups with problems of access to the labour market, such as the long-term unemployed, people with disabilities or people at risk of exclusion.

The Transition Agreements will require the achievement of measurable objectives of an economic nature (number of jobs created and maintained, number of companies created supported in their transformation or that have increased their activity), of an environmental nature (environmental improvement of the area, reduction of greenhouse gas emissions, etc.).

The roadmaps will be evaluated and readjusted to possible contingencies and changes. The evaluation, which will include the reasons for non-compliance, will be a key element that will serve to maintain the responsibility of the parties, the actors in the territories and the administrations involved, including the General State Administration.

The conditions for financing, implementation and justification of each agreement shall be laid down therein and shall be adapted to the project submitted.

The process of developing Just Transition Agreements will include:

- ▶ Delimitation of the geographical scope of the Convention based on methodology and criteria to be set.
- ▶ Elaboration of a document of characterization and diagnosis of the area of the Convention.
- ▶ Carrying out of a public participation process that allows the involvement of the different agents of the territory in the elaboration of the Agreement, with special interest in their contributions to the characterization and diagnosis document and their proposals on possible projects and investments for the area.

- ▶ Identification of potential investments and projects in each territory, based on the proposals made within the framework of the public participation process, analysis of their viability and selection on the basis of the indicators to be established.
- ▶ Identification of funding sources and other forms of support to enable the implementation of the selected projects.
- ▶ Elaboration and signature of the Convention, including the selected projects, commitments and supports of the different signatory parties and evaluation tools.

5. 3. ACCOUNTABILITY

The Agreements will be equipped with measurable indicators that will allow for the correction of possible deviations from the initial plan, the correction of possible weaknesses in their initial design and the easy communication of achievements.

Monitoring will be essential for joint learning between different economic sectors and territories.

The Just Transition Institute will prepare an annual report to monitor all the agreements that are implemented. In addition, the obligation of active advertising will be complied with.

The communication of results can also serve as useful information to make local products and enterprises visible.

For the governance, implementation and monitoring of the Strategy is necessary:

- ▶ To generate a government framework aimed at including the contributions of the different actors, both from ministerial departments with related functions, such as Local Bodies, Autonomous Regions and social agents, in order to be able to optimise its results.
- ▶ To generate a governance framework with emphasis on monitoring results and transparency.
- ▶ To generate an administrative structure that allows for the rapid processing and implementation of the Just Transition Agreements, and in particular the Urgent Action Plan, as soon as possible.

For monitoring policies and their results, the participation of social agents is key. Spain has experience in using the social dialogue roundtables to monitor the impact of decarbonization policies on jobs. In 2006, in order to meet and ensure compatibility between the objectives of reducing emissions and those of social cohesion and economic development, the Social Dialogue Tables on the Effects of Compliance with the Kyoto Protocol on Competitiveness, Employment and Social Cohesion were established.

This strategy aims to relaunch this instrument, extending its scope to the greening of the economy and seeking more integrated discussions around the most important issues for the country's economic sectors. In addition, other key agents will be involved, such as local entities, regional administrations and other relevant social actors by theme.

For the implementation of the Just Transition Agreements, the Institute for Restructuring Coal Mining and Alternative Development of Mining Regions (IRMC) will be strengthened and converted into the Just Transition Institute, extending its mandate to more sectors and areas in transition.

6.1. THE INSTITUTE FOR THE JUST TRANSITION

The IRMC is an Autonomous Body, currently attached to the Ministry for Ecological Transition and the Demographic Challenge, as provided for in Royal Decree 864/2018 of 13 July, which develops the basic organic structure of the Ministry for Ecological Transition and the Demographic Challenge, chaired by the Secretary of State for Energy. It was created by Law 66/1997 of 30 December 1997 on Fiscal, Administrative and Social Order Measures.

With legal status and full capacity to act, it is the managing body of the "aid scheme for coal mining and alternative development of mining areas". All its activity has revolved around achieving two main objectives:

- ▶ To implement the policy of restructuring the coal industry.
- ▶ To develop and implement measures to promote the economic development of areas considered to be coal-mining municipalities.

This Just Transition Strategy will, however, require additional support for restructuring and economic development to other areas that are identified as vulnerable to the impact of ecological transition through the reports that will be produced every two years.

That is why the technical, financial and legal assistance tasks required by the Transition Agreements will be carried out by the Institute for the Just Transition, for which purpose Section One of Chapter II of Law 66/1997, of December 30, on Fiscal, Administrative and Social Order Measures, will be amended in order to adapt the purpose of the IRMC to its new functions, as well as to carry out its change of name.

Once this legal amendment is done, the Charter of the Institute for the Just Transition will be approved by Royal Decree in order to adapt the current IRMC Statute (regulated by Royal Decree 492/1998 of 27 March) to the new name and functions of the autonomous body. An Advisory Council will be set up with the participation of representatives from various administrations and social agents.

6.2. ITJ ADVISORY BOARD

The ITJ Advisory Board is the body that coordinates and monitors the implementation of the Just Transition Strategy.

The Advisory Board is a body integrated in the Institute for the Just Transition, formed by representatives of most of the ministerial departments, as well as of the Autonomous Communities, the Local Entities, the most representative trade union and business organizations, among others.

The Advisory Board will work on the development of the scorecard for this Strategy, which will subsequently be managed by the Just Transition Institute. This scorecard shall provide the appropriate information for decision making within the framework of this Strategy.

Specific working groups may be set up to analyse, implement and monitor specific measures.

6.3. STRATEGY FOLLOW-UP AND EVALUATION

A first monitoring report on the Strategy, covering the years 2020 and 2021, will be made during the first six months of 2022. This report shall be public and shall include:

- ▶ Monitoring of the objectives and policies defined in the framework of the Advisory Board.
- ▶ Monitoring of the results obtained by the Just Transition Agreements on the basis of the indicators included therein, with a summary of preliminary results of the Urgent Action Plan.

On the basis of this monitoring report, the Strategy will be adapted to work better. The Strategy will have a duration of 5 years, after which it will be evaluated and a new Strategy will be launched to fit the updated context of opportunities and vulnerabilities at that date.

The final report will also be made during the first six months of 2025.

6.4. TEMPORARY STRATEGY FRAMEWORK

This strategy will be implemented from 1 January 2020 until 31 December 2024.

URGENT ACTION
PLAN FOR COAL
REGIONS AND CLOSING
POWER STATIONS
2019-2021

7.1. MAIN SHORT-TERM VULNERABILITIES

Many of the negative effects on employment that are being experienced, and which will be suffered in the short term in some territories, have been known for a long time due, for example, to the need to comply with Community regulations or to the existence of a known timetable for the closure of the useful life of installations. Although they will have an effect on the ecological transition, they are not caused by it.

Unfortunately, the fact of having a schedule, in many cases has not served to develop sufficient support measures for the closure of facilities. This is due either to a lack of political will, or to the negative effects of the Spanish economic crisis on the implementation of some of the initiatives, or to a lack of commitment on the part of some of the parties to the agreed timetable. All of these circumstances have blurred the focus on revival in favour of negotiating extensions to closures, which have proved to be impractical.

Therefore, since no or insufficient measures have been taken so far, it is necessary to implement a set of specific and urgent actions for those areas affected by the closure of coal mining on 31 December 2018, of coal-fired power plants or of nuclear power plants without a conversion plan. These areas eligible for inclusion in this Plan may vary in number as the time frame of the Plan progresses.

Figure 6: Phases of Just Transition Agreements in the Urgent Action Plan



Coal mining

The coal mining sector has been subject to various conversion programmes since the 1970s. National coal, like European coal, has had difficulty competing on the international market and has required state support in various ways. Both the frameworks for national coal aid and their completion have been largely determined by European funds.

A new regulatory framework was established by Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines. This change of focus was specified in the Kingdom of Spain's Closure Plan, which included all those non-competitive mining units for an orderly cessation of mining activities that would not reach break-even point by 31 December 2018.

The transformation of the last decades has had very important impacts on employment. In 1990, mining companies employed 45,212 workers, in 2012 3,400 workers and by the end of 2017, the companies' own workforce is around 1,700 workers. These losses have been accompanied by social plans to support workers, through early retirement or compensation for loss of employment, to support the generation of infrastructure and business

projects in the affected areas. It must be taken into account that the local labour markets in the mining regions share some weaknesses that have made the reconversion experiences difficult: relatively isolated municipalities, rapid tendency to depopulation or the professional qualification of mining, which does not allow an easy incorporation to other jobs. There are also some cultural aspects that still remain, such as the absence of women from the labour market, who cannot find alternative employment in these municipalities, or the limited success of self-employment programmes due to the concept of work as an activity for others and the lack of an associated business fabric that can support entrepreneurs.

On the other hand, although many of the projects supported in the conversion are still in place, the economic crisis has damaged the sustainability of many of them and contributed to the failure of some of them. Two sectors were particularly impacted: construction and renewable energies.

At the beginning of 2018, the indigenous coal mining industry affected by the closure processes under the 2010 Community Decision comprised 9 companies with a total of 13 production units, and 4 areas in Spain: Asturias, Leon, Palencia and Teruel. These companies employed a total of 1,833 people as their own staff, of which 1,056 belonged to the public company HUNOSA and 777 to private companies. The subcontractors employed, on the same date, a total of 565 people, 171 in HUNOSA and 485 in the other companies.

The impact has not only been on employment, but also on demographics: Castilla y León and Asturias were the Autonomous Communities that lost the most population between 1998 and 2018.

Coal-fired power plants

Spain has 15 coal-fired power plants, which represent 31 thermal groups and a total power of 10,619 MW, approximately 10% of the installed power at national level.

In recent years, the prospects for the operation of thermal power plants have been adversely affected by a number of technical, economic and regulatory factors, the following being particularly noteworthy:

- ▶ The Paris agreement reached in 2015 and ratified by the European Union in 2016 and by Spain in 2017, thus establishing a starting point for energy policies aimed at decarbonizing the economy.
- ▶ The growing incorporation of renewable energies has substantially reduced the participation of these plants in the electricity generation mix and, therefore, their income from the sale of energy.
- ▶ The need to undertake investments to reduce the emission of atmospheric pollutants (denitrification and desulphurisation), resulting from EU environmental regulations. As their income has fallen, the possibility of making these investments has become more difficult. Plants that do not undertake these investments must close down in 2020, due to the application of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010.
- ▶ The orientation and approach of the new European energy directives that make up the EU's so-called "Winter Package".
- ▶ The increase in the price of CO₂ on the emissions allowance market.
- ▶ Other market factors and business decisions to divest.

In this context, many of the owner companies have already requested the closure of some of these plants. The situation as of December 2018 is summarized below:

- ▶ The authorisation for the closure of the Anllares plant (Leon) was granted in November 2018.
- ▶ The company that owns the Lada (Asturias) and Velilla (Palencia) plants has submitted a request for the closure of these facilities.

- ▶ The company that owns the Andorra (Teruel) and Compostilla (León) plants has submitted a request for the closure of these facilities.
- ▶ The company that owns the Narcea (Asturias), La Robla (León) and Meirama (La Coruña) plants has submitted a request for the closure of these facilities.
- ▶ The company that owns the Puente Nuevo (Córdoba) power plant has submitted a request for the closure of this installation.

These facilities mean around 1800 jobs between own and auxiliary workers and are the main source of income for the municipalities where they are located.

Some of the coal-fired power stations that could be closed are located near the mines that supplied or are supplying the coal that fed them and were technologically adapted to their consumption, so the impacts occur in the same territories where the mines have been closed.

An additional effect of the closure of mines and thermal power plants using coal (both domestic and imported), which requires detailed analysis and assessment for inclusion in the Action Plans, is the loss of activity (freight traffic associated with coal transport) and income and jobs that this entails for some road and rail transport companies and infrastructure managers.

Some of these areas are already in progressive socio-economic decline, since the destruction of jobs resulting from the restructuring of the coal industry has led to the depopulation of many municipalities, and there is a shortage of projects supporting conversion to profitable activities.

The nuclear power plants

The closure of nuclear power plants, in general, is conditioned by known and agreed upon timetables, so that reconversion and employment protection policies can be anticipated to ensure their success. This possibility of anticipation has not been taken advantage of in Spain, where there is currently one plant completing the dismantling process (José Cabrera nuclear power plant, known as Zorita) and another in which closure has been decided (Santa María de Garoña nuclear power plant, known as Garoña). However, none of them has a recovery plan, so it is necessary to include them in this Urgent Action Plan.

The employment of the Garoña plant between direct and auxiliary employment is around 540 workers and that of the Zorita plant is 333. Many municipalities in its areas of influence receive tax revenues and will be affected in the medium to long term by its closure.

This situation can be avoided in the future, and indeed progress has been made recently to do so. The companies that own the nuclear plant and the National Radioactive Waste Company (Enresa) - the public company responsible for managing nuclear waste and the work of decommissioning and dismantling the reactors - have unanimously agreed on an orderly and staggered timetable for closing the seven nuclear reactors that remain active, an agreement that has been approved by the Government.

Following the consensus reached between the different actors involved, four reactors will be closed in stages during the period of validity of this PNIEC. The remaining three will do so before the end of 2035.

The orderly and gradual closure of the nuclear power plant is compatible with the full guarantee of the electricity supply, as accredited in the reports of Red Eléctrica de España.

This closure schedule is also fully compatible with the key objective of the PNIEC to achieve at least 20% emissions mitigation by 2030 compared to 1990.

Likewise, as a result of the aforementioned agreement between the parties, there is a sufficiently wide time scale for the process to be carried out under ideal conditions, both technically and in terms of the availability of human teams, and in anticipation of a just transition in the areas where the plants are located. Finally, it should be pointed out that the agreed timeframe will make it possible to duly capitalise the existing Enresa fund for closure and dismantling work at the facilities.

7.2. OBJECTIVES OF THE URGENT ACTION PLAN IN MINING REGIONS AND CLOSING POWER STATIONS

The first action plan of the Just Transition Strategy will propose to work in those areas covered by this Urgent Action Plan to provide an agile response to situations of urgent vulnerability.

This Urgent Action Plan will have the following objectives:

- ▶ 1. To guarantee that workers who lose their jobs in mining companies will be adequately compensated.
- ▶ 2. To maintain employment for the mining regions in the short term through the Mine Restoration Plan, the Renewable Energy and Energy Efficiency Plan, and other plans to be developed with the mining municipalities.
- ▶ 3. To offer, during the time frame of the Plan, the implementation in the areas subject to mine closure on December 31, 2018, at the closure of coal or nuclear power plants, the aspiration of Just Transition Agreements with the objective that the closures do not generate impacts on employment and population at the end of the process.

7.3. CHARACTERISTICS OF THE URGENT ACTION PLAN

As explained above, in the short term the impacts of mine closure by Council Decision 2010/787/EU, and of coal plants by Directive 2010/75/EU, will create additional vulnerabilities over the next four years in mining districts where the adverse effects of previous reconversions have already been felt. Some of these effects are already being felt in mines that have recently closed or are in a bankruptcy situation. On the other hand, there are plants that have already requested their closure, the consequences of which will affect the same areas. This Plan aims to give urgent attention to areas with mines and power plants with known closure schedules. On the other hand, there are two nuclear power plants in different phases of closure and dismantling (Zorita and Garoña), which could also be the subject of concerted reconversion actions.

Although the aim of the Just Transition Agreements is to anticipate, through development and transformation processes, the generation of employment and activity in a way that is in line with the processes of closing down activities, this first plan will respond to urgent problems with little margin for anticipatory work.

On the other hand, in the last decades, in many of the mentioned areas, reconversion processes have already been promoted with different types of results. For example, in many of the mining regions the working population has been considerably reduced, and although for years social protection measures guaranteed income and therefore, consumption

and maintenance of services for some time, there has been less success in promoting an alternative business fabric. Therefore, transition agreements for areas where there have been previous experiences will have to start from learning what has worked best and with providing solutions for the challenges that may be caused by the scepticism of the different parties who have already experienced previous unsuccessful actions. If previous experiences can serve as important learning points about the suitability of initiatives to economic and social contexts, the lack of confidence in processes must be compensated for by more agile and results-oriented action.

7.4. STARTING POINT

The starting point for the Urgent Action Plan is the Framework Agreement for a Just Transition in Coal Mining and Sustainable Development of the Mining Regions for the Period 2019-2027, signed by the Government of Spain, the trade unions Comisiones Obreras (CCOO), Unión General de los Trabajadores (UGT) and Unión Sindical Obrera (USO), and the Federación Nacional de Empresarios de Minas de Carbón (Carbounion) on Wednesday 24 October 2018.

The measures agreed on in this framework have been developed in a normative way through the Royal Decree-Law 25/2018 of 21 December on urgent measures for a fair transition of coal mining and the sustainable development of mining regions. This Royal Decree-Law 25/2018 guarantees the immediate support measures for mining workers, the amendments necessary for the granting of aid to mining municipalities under the 2013-2018 framework and the necessary short-term financing.

7.5. MEASURES PLANNED IN THE URGENT ACTION PLAN

- ▶ **I.** To support and finance the short-term development of Just Transition Agreements for the mining regions and territories affected by the closure of power plants in order to ensure their structural transformation, economic recovery and social welfare. The Just Transition Agreements will aim to ensure that the closure of facilities does not impact on employment and depopulation at the end of their implementation.
 - ▶ **I.A.** 130 million Euros will be allocated to the implementation of urgent Just Transition Agreements through the various aid lines of the new Just Transition Institute in the 2019-2021 framework.
 - ▶ **I.B.** The Just Transition Agreements will offer assisted and as agile as possible access to windows of financial support available in the different institutions and bodies of the National Government: subsidies to companies and research projects, venture capital instruments, guarantees for undertakings, etc.
 - ▶ **I.C.** For the territories concerned, the agreements shall include priority access to part or all of the electricity transmission capacity, as well as priority access to the use of water under concession for projects included in the agreements, which shall be awarded through appropriate procedures such as competitive tendering, taking into account from the outset both technical and economic benefits and environmental and social benefits, including the generation of employment.
 - ▶ **I.D.** Energy policy tools may also be considered for the implementation of business initiatives of an energy nature in the area, with the possibility of holding specific auctions of renewables for these territories.
 - ▶ **I.E.** Among the lines of financing or subsidies established by the General State Administration, those that are susceptible to being applied to these territories will be determined, and the corresponding regulatory bases will establish priority or assessment criteria that may benefit them in fair transition.

- ▶ **I.F.** All those measures that can be co-financed with EU funds will be included in the corresponding programming of the State and/or the Autonomous Communities. To the same end, the necessary collaboration mechanisms will be established between the State and the Autonomous Communities to optimize the use of the available resources.
- ▶ **I.G.** Selection of projects to be submitted to the EU's Just Transition Mechanism.
- ▶ **2.** To request from companies that require the closure of their facilities a reactivation plan in order to achieve:
 - ▶ The development of other activities in the same territories, taking advantage of their possibilities for the installation of other businesses and their knowledge of the business reality of the territory to build new initiatives with a smooth transition between the closure of their facilities and the opening of new initiatives.
 - ▶ The relocation of workers to other company facilities or subsidiaries, and the maintenance of employment of own workers and workers from auxiliary companies in associated decommissioning activities or in other renewable projects, where possible.
- ▶ **3.** To develop a framework of agreement between companies requesting closures, trade unions and the Administration to accompany the closure of thermal power plants that incorporate the necessary elements to develop a just transition.
- ▶ **4.** To speed up the granting of subsidies for the economic promotion of the coal-mining areas of the framework 2013-2018 and extension of the deadline for the recognition of the aid until 31 December 2023.
- ▶ **5.** To implement urgent measures to maintain employment and social protection in the regions affected by the closure of mining companies.
 - ▶ To ensure that workers in mining companies subject to closure in compliance with Council Decision 2010/787/EU can have access to financial benefits and compensation as a result of losing their jobs.
 - ▶ Support plan for the professional training and labour insertion of workers in the affected areas. Actions for employed workers will be programmed in the annual general call and the corresponding training specialities will be given in the National Reference Centres in the field of Vocational Training.
 - ▶ Creation of an job bank for redundant workers from mining and auxiliary companies to guarantee employment opportunities for them.
 - ▶ Plan for the restoration of mines to ensure the environmental and social restoration of areas degraded by mining and the maintenance of local employment, in particular of redundant workers from mining and auxiliary companies. This restoration is intended not only to maintain short-term employment for redundant workers, the safe closure of mines, the best results for the environment and the recovery of biodiversity, but will also be a catalyst project for scientific innovation.
 - ▶ Support Plan for Renewable Energies and Energy Efficiency in coordination with the IDAE for the territories targeted by the urgent action plan.
- ▶ **6.** Launch of the first call for aid under the Empleaverde (*Green Employment*) programme with special attention to areas in transition for their regeneration

- ▶ **7.** Approval of a new Strategic Plan for the Fundación Ciudad de la Energía (CIUDEN) to play a significant role in the reactivation of mining areas in the energy transition R&D&I.
- ▶ **8.** Launch of the Just Transition Institute to provide the necessary technical support and access to funding.
- ▶ **9.** Creation of a decommissioning and reactivation guide for nuclear power plants that optimises the results on employment, activity and social cohesion in the areas involved in the processes of decommissioning installations. In creating the guide, consideration will be given to the recommendations of the Nuclear Safety Council (CSN), Enresa and other stakeholders, such as the social agents and municipalities affected.
- ▶ **10.** Launch of the Country Team of the European Platform for Coal Regions in Transition for the presentation of joint activities to facilitate better access to European funds for strategic projects, including those specifically earmarked for this Platform.

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STRATEGIC ENERGY AND CLIMATE FRAMEWORK