



**Compostilla II and its area
of influence.
Land with a future**

endesa



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History of the plant and overview of the area

- Brief history of the plant
- Area of influence
- Sociodemographic context

The Instituto Nacional de Industria (Spanish National Institute for Industry) created Empresa Nacional de Electricidad, S.A. (ENDESA) in 1944, which commissioned the Compostilla I power plant in 1949. In the late 1950s, ENDESA created a new thermal power plant in Cubillos del Sil, with a total of 5 groups. The coal supply was shipped in from lorries and the MSP railway (soft and anthracite coals from El Bierzo and Villablino mines).

For many years, ENDESA was the customer of reference for the coal produced in the area. In addition to direct employment, the company also indirectly brought about many jobs associated with industrial activities and complementary services.

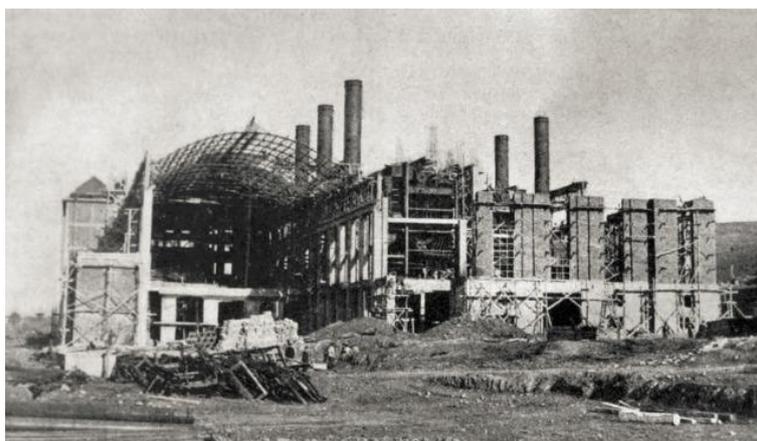
Compostilla II's current facilities cover an area of about 330 h, just 10 km from El Bierzo's capital city Ponferrada in the western part of the province of León.

This study includes the El Bierzo region and municipality of Villablino, encompassing 39 municipalities over 3,500 km² and a population of 134,072 inhabitants in 2018. A significant proportion of the territory's population structure is in the working age. The population has a high education and training level, substantially with degrees in the field of Architecture, Construction, Technical Training and Industry.

Brief history of the plant

The Compostilla II thermal power plant (Thermal Production Unit, in technical terms) stands on property that spans two municipalities: southern Cubillos del Sil and northern Ponferrada, though it mostly lies in Cubillos del Sil, with which it is always associated. These municipalities are in the middle of El Bierzo, a western region in the province of León.

The plant's owner ENDESA (ENEL) has had an extensive history with El Bierzo, as its matrix territory in terms of location. The company Empresa Nacional de Electricidad, S.A. (ENDESA) was created on 16 November 1944 as an offshoot of the Instituto Nacional de Industria (Spanish National Institute for Industry). This newly created company first appeared in the construction of the Compostilla I thermal power plant and the Fuente del Azufre reservoir with hydroelectric dam at the Sil River to the north of the city of Ponferrada. The power plant was commissioned in 1949 and its production of 167 MW brought a substantial part of the nation's thermoelectric generation in that era. The Compostilla I plant was strategically situated to thermoelectrically harness the anthracite and soft coals extracted from the Villablino and El Bierzo mines.



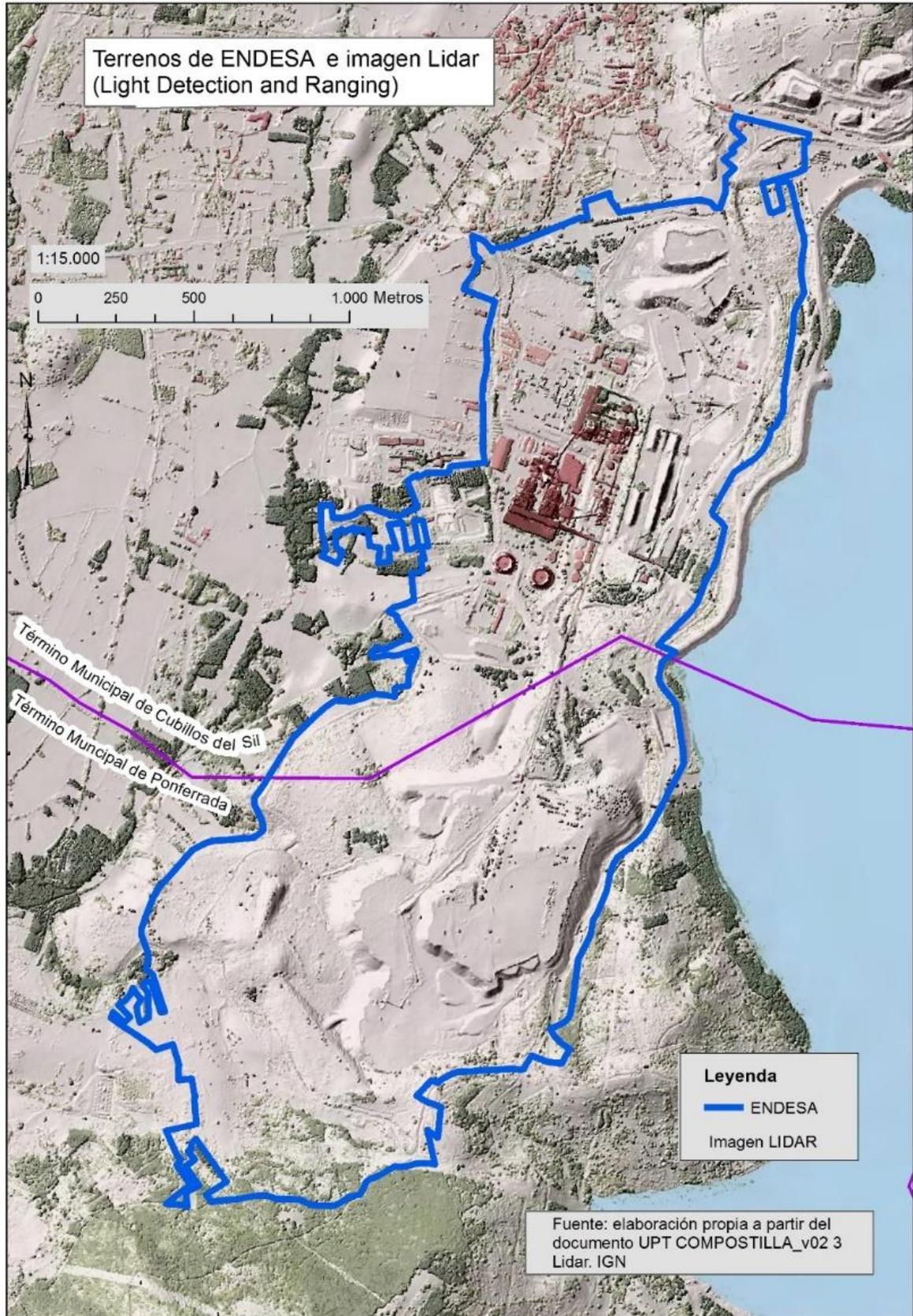
Compostilla I thermal power plant construction. Photo Endesa Archives

At this stage, ENDESA strengthened ties with Ponferrada and El Bierzo by building the town of Compostilla to accommodate the families of the thermal power plant workers. This construction was at the time a good example of grid urban planning, with detached housing and row house areas accompanied by green areas, sporting zones and service facilities. In 2003, ENDESA signed an agreement to hand over the town to the Ponferrada City Council.

At the end of the 1950s, and in light of the growing demand for energy, ENDESA decided to build a new and more modern plant near the urban centre of Cubillos del Sil. This new site benefited from the availability of water from the nearby Bárcena reservoir and easy access to the coal supply from the regional basins and Villablino mines, delivered by lorry and train via the Minero Siderúrgica de Ponferrada (MSP) at the Cubillos station. Baptised as Compostilla II, group 1 at this new plant began operating in 1961, followed by the successive commissioning of 4 new groups in 1965, 1972, 1981 and 1985. The plant thus attained an apogee in generation capacity in 1985, which lasted until 2018, as groups 1 and 2 were decommissioned. Groups 3, 4 and 5 still remain active.

Some significant investments were made at the plant throughout this period, particularly for the desulphurisation facilities in the 1990s and the advanced emissions reduction control system (2005). During all these years, ENDESA became the benchmark customer for all the coal produced in the area. At the same time, the demand for industrial activities and complementary services generated a significant volume of direct and indirect jobs.

The Compostilla II facilities are situated across an area of about 330 h, very close to the Bárcena reservoir, which provides a safe supply of water, 1 km from the centre of the town of Cubillos del Sil and just 10 km from the El Bierzo capital city of Ponferrada. The power plant stands in an area where coal energy mining and other associated industries have had great socio-economic importance in the past century. However, the progressive and eventual closure of mining in the past decade has enabled us to rediscover El Bierzo as a region of extraordinary natural wealth, heritage and beauty, with a substantial agrifood and tourism potential.





Compostilla II shortly after construction. Revista Obras Públicas Archives

After committing to the Kyoto Protocol (11 December 1997) and other subsequent international commitments such as the Paris Agreement (December 2015), Spain begins to limit its CO₂ emissions, focusing its efforts on thermal power plants for electricity generation. At the same time, the European Union-imposed gradual reduction of coal mining subsidies, which inevitably entailed the progressive closure of mines, culminated in December 2018, when virtually all national coal producers closed their doors for the last time. These events led to the decision by ENDESA's parent company, ENEL, to close the plant by June 2020.



ENDESA facilities from the Bárcena reservoir road, present day

Area of influence

Our study is centred in the region of El Bierzo and municipality of Villablino, in the western part of the province of León.

El Bierzo, as a regional entity or Comarca, was established by Law 1/1991 of 14 March (Official State Gazette publication No. 96 on 22 April 1991). Upon its creation, this Comarca encompassed 37 municipalities with powers that covered nearly the entire spectrum of local government responsibilities. However, not all the assigned powers were assumed with the same depth. The Comarca grew in size through Law 17/2010 of 20 December, incorporating the municipality of Palacios del Sil. The current regional configuration thus entails 38 municipalities.

For the purpose of the present report, we also include Villablino, given the close ties and functional relationship that this municipality has had with the city of Ponferrada. Our study thus focuses on these 39 municipalities, spanning a total of 3,500 km² and a population of 134,072 inhabitants according to the 2018 Register. As a whole, this report will refer to this area as "the region", "area" or "area of influence".

Turning to its internal structure, the Spanish National Statistics Institute (INE) defined a series of Urban Areas (UA) and Functional Urban Areas (FUA). The UA group includes the municipality of the city of Ponferrada and the FUA group includes nine others, namely Borrenes, Cabañas Raras, Cacabelos, Camponaraya, Carracedelo, Cubillos del Sil, Molinaseca, Priaranza del Bierzo and Toral de los Vados, which were selected because at least 15% of their population works in the central municipality, i.e., in the Ponferrada municipality in this case.

Table 1. Municipalities in our study area

Code	Municipality	Code	Municipality
24007	Arganza	24100	Molinaseca
24009	Balboa	24102	Noceda del Bierzo
24011	Barjas	24103	Oencia
24014	Bembibre	24109	Palacios del Sil
24016	Benuza	24110	Páramo del Sil
24019	Berlanga del Bierzo	24112	Peranzanes
24022	Borrenes	24115	Ponferrada
24027	Cabañas Raras	24119	Priaranza del Bierzo
24030	Cacabelos	24122	Puente de Domingo Flórez
24034	Camponaraya	24143	Sancedo
24036	Candín	24165	Sobrado
24038	Carracedelo	24169	Toreno
24041	Carucedo	24170	Torre del Bierzo
24049	Castropodame	24171	Trabadelo
24057	Congosto	24196	Vega de Espinareda
24059	Corullón	24198	Vega de Valcarce
24064	Cubillos del Sil	24206	Toral de los Vados
24070	Fabero	24209	Villafranca del Bierzo
24071	Folgoso de la Ribera	24202	Villablino (*)
24083	Igüeña		

(*) Not part of the El Bierzo region

Chart 1. Study area

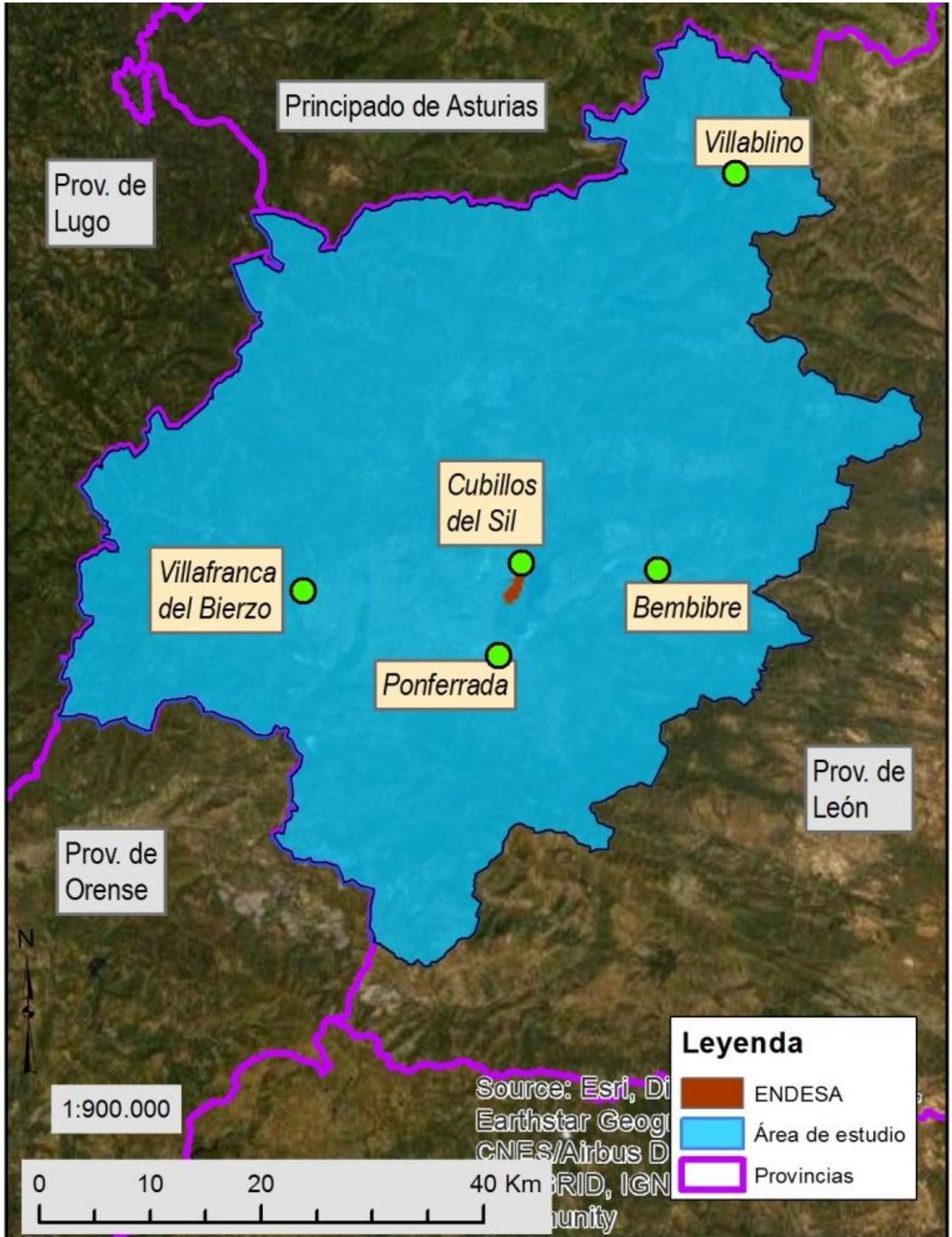


Chart 2. Study area in the peninsular northwest



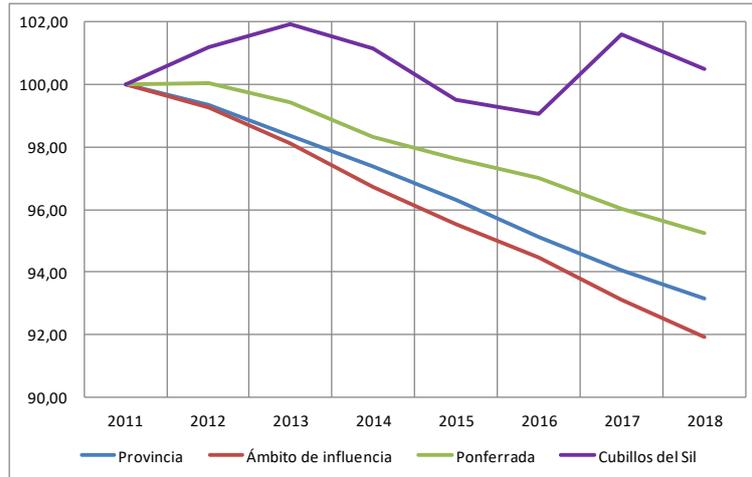
Sociodemographic context

This territory is no stranger to sociodemographic problems generally affect the whole of Spain and a good part of European countries, namely population reduction and aging.

For the year 2018, the population in the area of influence was 134,072 inhabitants (65,524 men and 65,548 women), representing 29% of the population of the province of León. In other words, an important proportion. The recent population trend that began in 2011 is much more positive in the region's large municipality (Ponferrada) and Cubillos del Sil than in the province as a whole.

In this regard, the municipality of Ponferrada has particular demographic significance with its 65,239 inhabitants, representing 48.66% of the region's population. In turn, the average population in the municipality of Cubillos del Sil, where the Compostilla II thermal power plant is situated, has held a steady trend of 1,841 inhabitants over the past eight years.

Chart 3. Recent population trend in the area of influence. 2011=100



Source: INE; inhouse

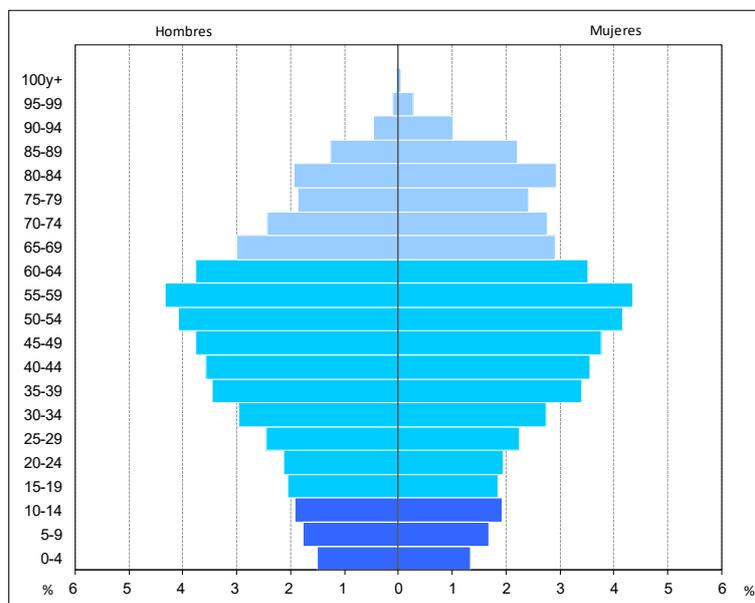
The age-related structure, however, is in line with a general pattern throughout Spain, namely an aging population. It is nevertheless essential to point out the elevated proportion of potentially active population in this structure (64.18%).

Table 2. Population structure in the area of influence

Ages	Men	Women	Total
Children 0-14	6,962	6,620	13,582
	5.19 %	4.94 %	10.13 %
Adults 15-64	43,685	42,359	86,044
	32.58 %	31.59 %	64.18 %
Elderly and least 65	14,877	19,569	34,446
	11.10 %	14.60 %	25.69 %
Total	65,524	68,548	134,072
	48.87 %	51.13 %	100.00 %

Source: INE; inhouse

Chart 4. Age pyramids in the area of influence



Source: INE; inhouse

The chart representing the population structure by age and gender, the population pyramid, reveals a familiar structure in the Spanish and European context, namely a large proportion of adult cohorts above the age of 35.

The population distribution is particularly significant in the municipality of Ponferrada, whose 65,239 inhabitants make up nearly 49% of the population in the area of influence. Within this municipality, the city itself, with 40,235 inhabitants in 2018, reaches 30.01% of the region's entire population.

For the rest, the distribution of the population and populated areas follows a pattern of preference tending towards the middle part of El Bierzo, following main arteries, in which regard municipalities within a radius of about two kilometres around the A-6 and N-6 contain 68% of the population in the area of influence.

The Ponferrada Functional Urban Area is particularly prominent, according to the Spanish National Statistics Institute (INE), and also encompasses some of the most demographically and economically dynamic municipalities in the region. This FUA is home to 84,945 people, representing 63.36% of the population of the area examined in this study.



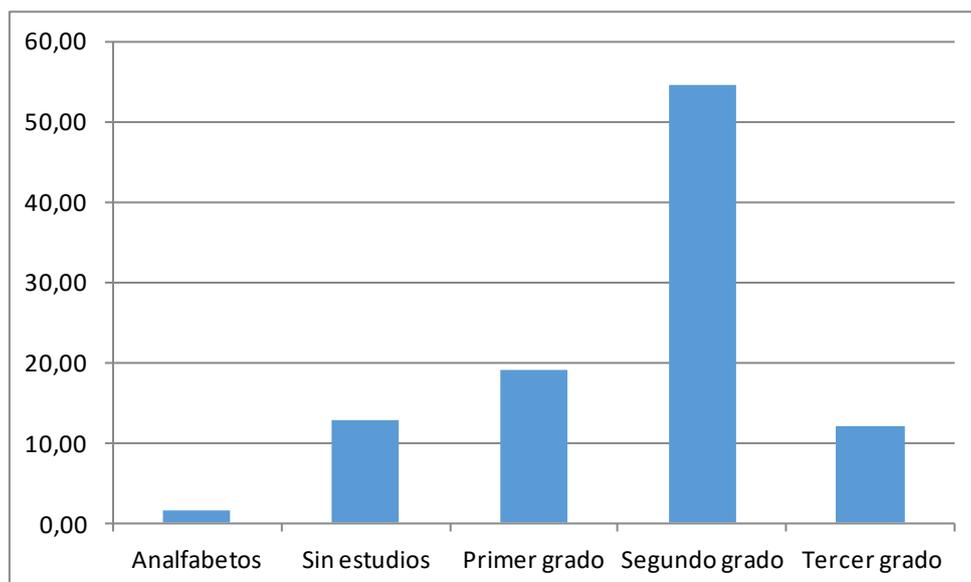
Training & Education

We consider education and training to be important, since they represent a key element for the quality of employment. However the most comprehensive data in this regard are based on the 2011 Census, so we must handle this information with caution. Taking into consideration a classification in five large groups, over half of the inhabitants in the area of influence completed graduate studies.

Table 3. Education of the population in the area of influence (2011)

	N°	%
Illiterate	1,925	1.52
No schooling	16,320	12.85
Undergraduate	24,300	19.14
Graduate	69,190	54.49
Post-graduate	15,245	12.01
TOTAL	126,980	100.00

Source: Spanish National Institute for Statistics (INE), 2011 Census; Endesa data

Chart 5. Education of the population in the area of influence (2011)

Source: Spanish National Institute for Statistics (INE), 2011 Census; Endesa data

Depending on the completed type of studies, the region can be considered as better positioned than other comparable areas.

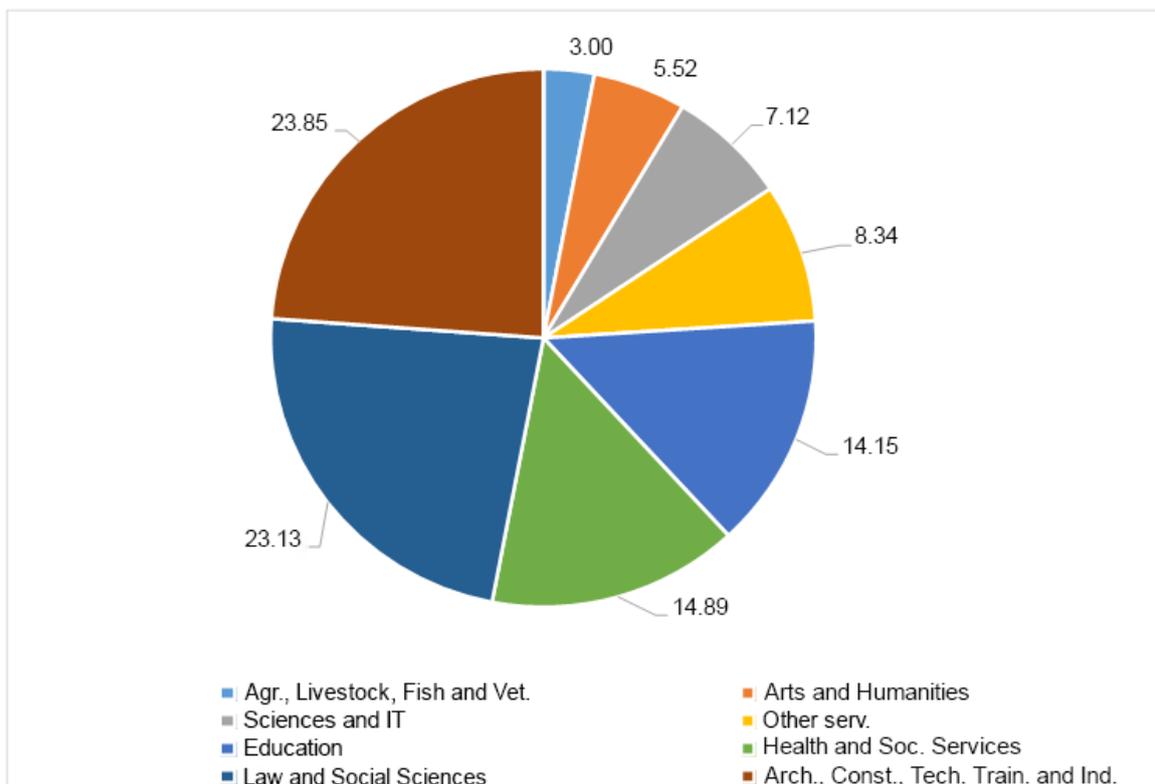
Table 4. Completed education type (2011)

	Area of influence		León		Castilla-León		Spain	
	Nº	%	Nº	%	Nº	%	Nº	%
Education	4,215	14.15	16,025	13.69	90,675	13.67	1,484,270	11.83
Arts and Humanities	1,645	5.52	7,520	6.42	45,735	6.89	916,390	7.30
Law and Social Sciences	6,890	23.13	28,925	24.70	156,950	23.66	3,301,295	26.31
Sciences and IT	2,120	7.12	9,245	7.90	56,920	8.58	1,197,270	9.54
Arch., Const., Tech. Train. and Ind.	7,105	23.85	25,170	21.50	147,630	22.25	2,661,175	21.21
Agr., Livestock, Fish and Vet.	895	3.00	4,280	3.66	23,525	3.55	269,920	2.15
Health and Soc. Services	4,435	14.89	17,235	14.72	92,600	13.96	1,701,135	13.56
Other serv.	2,485	8.34	8,690	7.42	49,440	7.45	1,016,920	8.10
TOTAL	29,790	100.00	117,090	100.00	663,475	100.00	12,548,375	100.00

Source: Spanish National Institute for Statistics (INE), 2011 Census; Endesa data

Within the more prominent completed studies in Law and Social Sciences branches, we can highlight as positive data that in our area of influence the studies of greater weight correspond to Architecture, Construction, Technical and Industrial Training. In addition, the percentage of this sector exceeds the figures for the province of León, the corresponding Spanish Autonomous Community and even Spain as a whole.

Chart 6. Completed education type (2011)



Source: Spanish National Institute for Statistics (INE), 2011 Census; Endesa data

The Spanish National Statistics Institute (INE) has the most recent training data (2017) but only for the areas defined as the City of Ponferrada and its Functional Urban Area (FUA). Given the large population of these two areas, they should certainly be taken into account.

Table 5. Education and training levels in Ponferrada and its FAU (2017; %)

Area	A	B	C	D
City of Ponferrada	52.01	43.46	21.00	35.54
Ponferrada AUF	52.43	44.90	21.15	33.95

A: Proportion of children aged 0-4 in child care versus the population aged 0-4 years

B: Proportion of population aged 25-64 with highest education level: Preschool; Primary; Lower secondary education

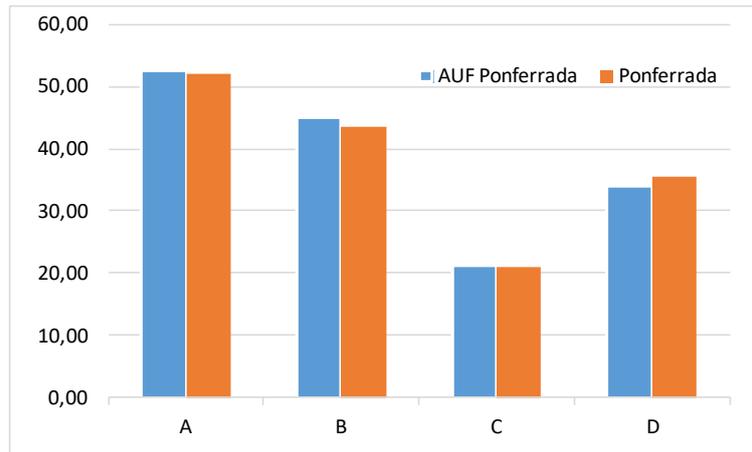
C: Idem: Upper secondary, post-secondary (not tertiary) education

D: Idem: Short-cycle tertiary education; University diploma or equivalent; Master's degree or equivalent; PhD or equivalent

Source: inhouse based on INE data

https://www.ine.es/ss/Satellite?L=es_ES&c=INEPublicacion_C&cid=1259944561392&p=1254735110672&pagename=ProductosYServicios%2FPYSLayout¶m1=PYSDetalleGratis¶m2=1254736268859¶m4=Mostrar

Chart 7. Completed education level



It is worth noting that in 2017, over one third of the inhabitants in the city and FUA had university studies.

Regional infrastructures and site accessibility

- Regional configuration
- Zone accessibility
- Zone accessibility by rail
- Zone accessibility by road
- Other regional infrastructures. Electrical connection
- Other regional infrastructures. Gas pipeline

El Bierzo stands as a mountainous border surrounding a basin, with the Sil River as the backbone. Its Mediterranean climate permits a lengthy cultivation period and very favourable conditions for garden crops, fruit trees and vineyards.

This territory is situated in the peninsular northwest quadrant, in the transit zone between western and northern Galicia and the rest of peninsular Spain. It is privileged as the nexus for Galicia, Castilla y León and Asturias, and for easy access to northern Portugal. This situation renders the Comarca particularly valuable as a logistics resource.

The region is well connected by rail and road alike, with links to Galician cities and ports, Asturian industrial areas and the port of Gijón (with a junction to the Gijón-Nantes seaside thruway), the inner Spanish Peninsula and northern Portugal.

The railroad is electrified in "Iberian width" for goods and passengers: inland, León links up with the high-speed train (AVE) and all destinations open from the Venta de Baños junction. Towards Galicia, reaching the ports of La Coruña and Vigo. The planned branch project to link the Villadangos Industrial Complex with this network is particularly noteworthy.

By road, communication is easy through expressways (A-6) national and Autonomous Community motorways (N-6, N-120, N-536; and CL-631). The area's internal network also fosters internal relations in this territory.

El Bierzo is a crossing point for electricity production in the peninsular northwest (As Pontes and García Rodríguez and the Miño-Sil system), towards the rest of peninsular Spain. It also has an internal infrastructure associated with the generation of the region. These entail overhead power lines (220 kV and 380-400 kV), with single circuit and dual-circuit branches to guarantee a supply for domestic and industrial use.

There is also a connection point to the natural gas transmission and distribution network (ENAGAS) about 15 km away from the thermal power plant.

Regional configuration

The territory of the area of influence of the Compostilla II thermal power plant is situated in the west of the province of León; more generally, in the NW peninsular quadrant, in the forced transit zone between western and northern Galicia and the rest of peninsular Spain. Due to its geographical location, it can be considered as a nexus point for three autonomous communities, namely Galicia, Castilla y León and Asturias. It also boasts easy access to northern Portugal.

Physically, the mountainous border configuration has peaks of over 1,500 m and 2,000 m in some summits, and completely surrounds a natural sink, the basin in which altitudes are well below or around 500 m. The entire Comarca is fragmented and articulated by the Sil River network and its tributaries, with valleys of pronounced personality.

The Sil River is born south of the Cantabrian Mountains, nearly 2,000 meters away, and runs south through the municipality of Villablino and the entire region of El Bierzo before leaving the province of León. This water network feeds on snow and rain, with maximum flows in winter and spring. It is intensely used for generating electricity, urban and industrial consumption and irrigation, through hydropower dams (Rioscuro, 15 MW; Las Ondinas, 81 MW; Peñadrada, 38 MW; Santa Marina, 33 MW; Cornatel, 122 MW), reservoirs (Las Rozas, 28 hm³; Matalavilla, 65 hm³; Bárcena, 341 hm³; Campañana, 14 hm³) and pipelines (Canal Alto and Bajo del Bierzo, which irrigate approximately 11,000 ha).

The relative isolation generated by the mountains and the low average altitude of the basin translates into climatic conditions that, with nuances, have attenuated characteristics in terms of moderate temperatures and rainfall, with respect to the surrounding area, especially compared with the rest of the León province. There are variants associated with changes in altitude and the orientation of valleys, but we can define this climate as Mediterranean, entailing mild summers (according to AEMET) and even Oceanic-Mediterranean.

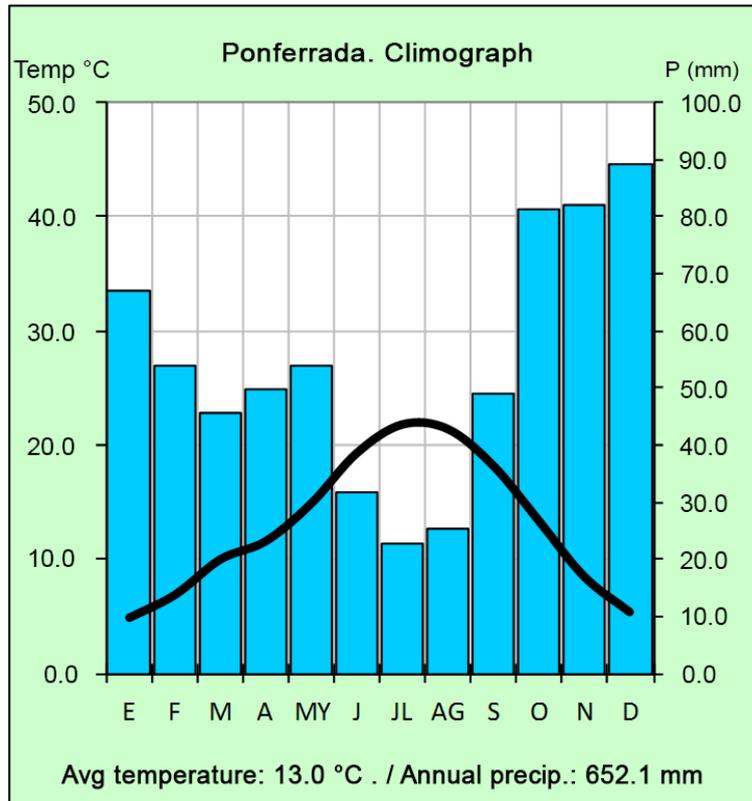
In Ponferrada, with an average annual temperature of 13°C, the summers are short and warm, with maximum temperatures that can soar up to 40°C, while the temperature during the coldest winters can reach -10°C. Rainfall is not abundant, and only reach 652 litres/m². Summer weather, according to the climograph, entails two dry months (July and August) and three dry months (these two months plus June). The region basks in over 2,100 hours of sun annually.

Table 6. Values of some climate elements. Ponferrada Observatory

	Monthly values												Annual values
	1	2	3	4	5	6	7	8	9	10	11	12	
Avg. Temp (°C)	4.9	6.9	10.0	11.6	14.9	19.3	21.8	21.4	18.2	13.4	8.5	5.4	13.0
Rainfall (mm)	67.0	53.8	45.7	49.8	53.8	31.9	22.9	25.4	48.9	81.4	82.2	89.3	652.1
Sun hours	85	102	156	187	196	268	307	287	217	156	109	63	2,133.0

Source: inhouse based on AEMET, 1981-2010 data.

Chart 8. Ponferrada Observatory Climograph



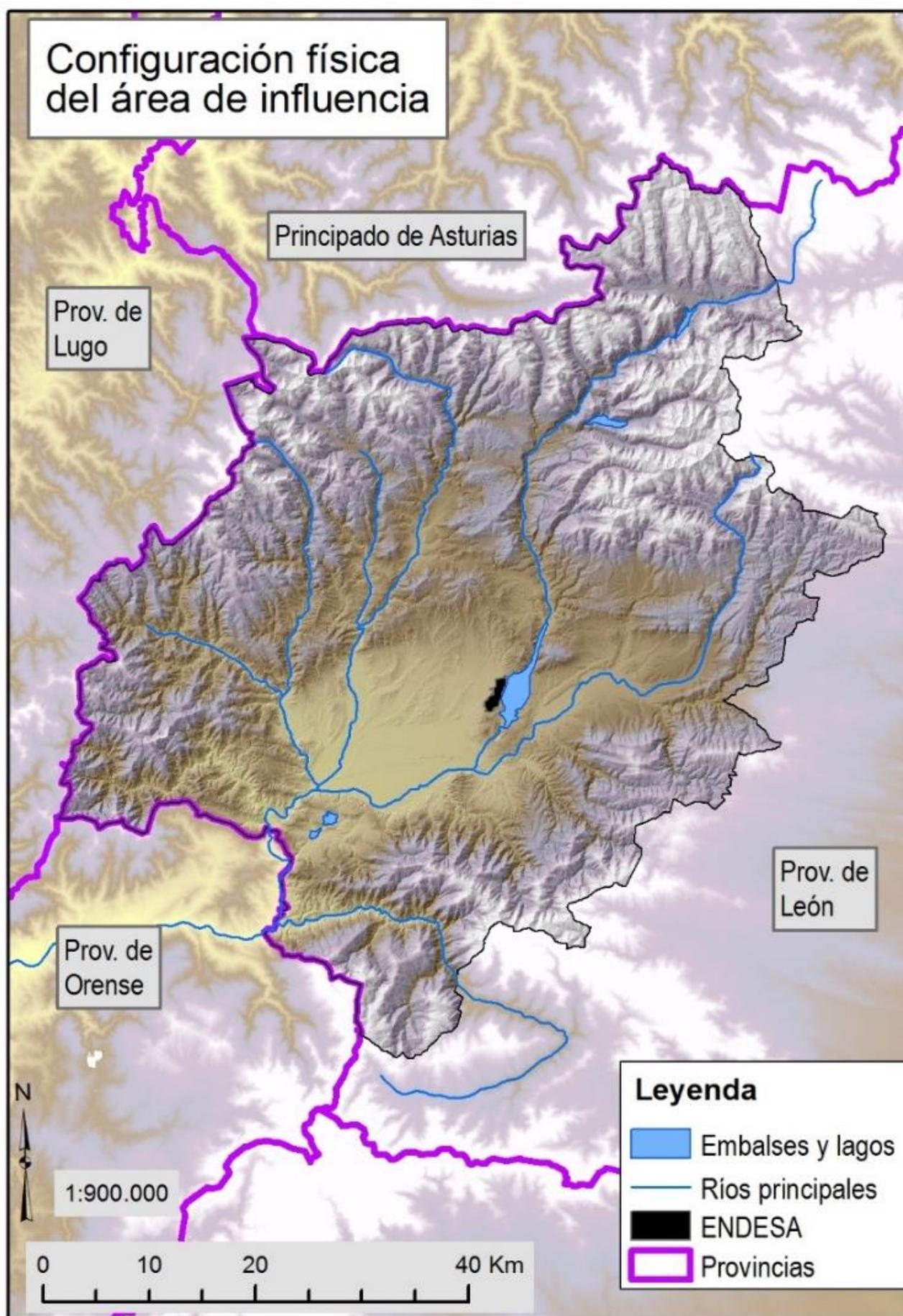
Source: inhouse based on AEMET, 1981-2010 data.

The characteristics of isolation in the basin, with low altitude territories and a benevolent climate, translate into very favourable conditions for agriculture, particularly for orchard crops, fruit trees and vineyards.

This climate of lengthy favourable weather entails conditions particularly suitable for farming that, according to some sources, could span, albeit approximately, from mid-March to early December. This is an average of 262 days, compared to the 204 days calculated for the city of León.

One sign that climatic conditions are indeed milder in El Bierzo than in the rest of the province are the average flowering dates: around 22 March in Ponferrada and 15 April in the city of León.

Chart 9. Physical configuration of the area of influence



Zone accessibility

Seen through a local lens, the Compostilla II thermal power plant stands just 6.5 km from Route A-6 or the Northwest Motorway linking Madrid and La Coruña. These 6.5 km run on a dual-lane urban road with a speed limit of 50 km/h. Driving from the plant exit to the expressway access takes about 8 minutes and passes through 3 roundabouts. These roads are well conditioned for lorries.

In its regional level structure, the road network resembles a road system with radial geometry, centred around the city of Ponferrada. This configuration gives added value to the regional capital, which could potentially serve as an intermodal logistics centre. This same network also serves as an interconnection and, in turn, increases the functional dependence of municipalities in the area of influence, with which a fluid relationship is maintained through this network.

To get to the city of **León**, it is necessary to take toll thruway AP-71 at Astorga, with the alternative of the N-120 between León and Astorga. There is a total of 115 km, which is virtually all expressways and thruways.

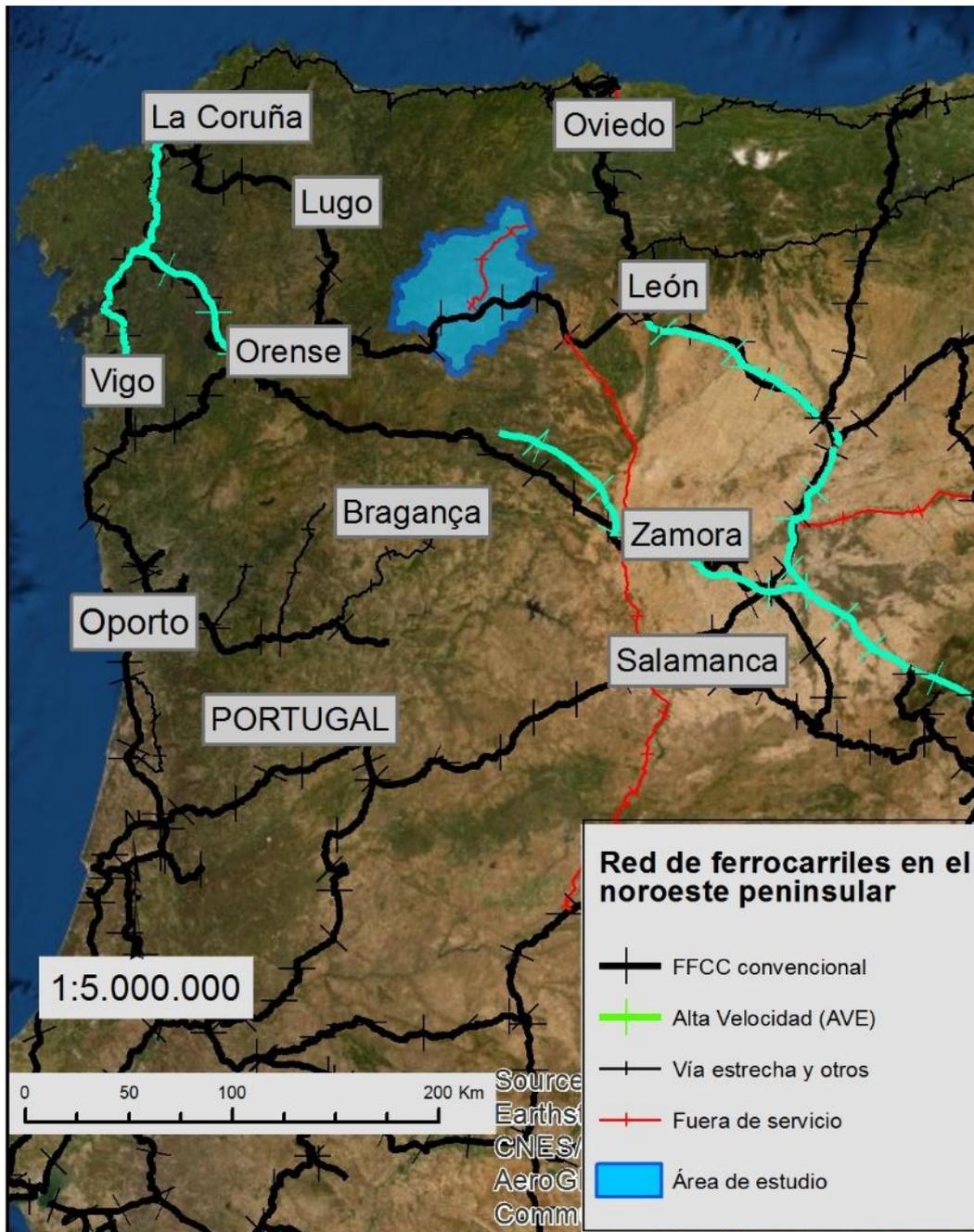
The A-6 connects the plant to **La Coruña** (209 km: in 2 hours and 7 minutes by car) and **Madrid** (397 km: in 3 hours and 57 minutes). **Valladolid** is only 243 km away, travelling entirely by expressways. **Lugo** is the nearest provincial capital (117 km by expressway). The access to **Ourense** (163 km) is via a national freeway, a route with several twins and a fast lane, which makes the journey last only 2h and 7min. To get to **Oviedo** by expressway and thruway, it is first necessary to pass through León, which lengthens the route to 223 km. An alternative would be to travel through Villablino, across the Comarcas of Laciana, Babia and Luna, a route lasting virtually the same duration despite the shorter distance (162 km).

The nearest airport is in León, with a connection to Barcelona. There are more connections at the airports in La Coruña (210 km and 2h 1min away), Santiago de Compostela (198 km and 2h 11min) and Valladolid (221 km and 2h 24min). Finally, the Aviles airport is 2 hours and 33 minutes away.

The nearest commercial port A Coruña, 2 hours and 4 minutes (208 km), while Gijón and Vigo are 2 hours 30 minutes (188 kilometres) and 3 hours 7 minutes (264 kilometres), respectively.

Accessibility by rail

Chart 10. Railway lines in the peninsular northwest



The region is well connected by rail, although the orographic configuration has been a handicap for developing access and communications, so much so that the entire Palencia-La Coruña sector was not finalized until 1883.

In this region we can not forget the train from Ponferrada to Villablino [1919; Minero Siderúrgica de Ponferrada, S.A (MSP)]. It is relevant because it simplified shipping of coal from Villablino and the basins along the Sil river to Ponferrada with RENFE railway access. In addition to coal, this railway line carried cargo, passengers and even mail. It became an essential cornerstone for growth in the zone. Coal transportation services between Cubillos del Sil an Ponferrada ceased in 1996 and the line stopped altogether in 2012. Part of the estate (station building, steam

locomotives, passenger wagons) are now in the Minero Museum in Ponferrada. Different associations and cultural movements are taking steps to recover part of the line for a tourism train, though despite a handful of years of good intentions, this dream has yet to become a reality.

In the main network, rail traffic runs along the Iberian width line of the Palencia-La Coruña section. It is electrified and provides passenger and freight services.

This line links the Comarca towards the east with the inner peninsula. In this regard, the León station has the high-speed line (AVE) for the León-Madrid section and also links with the León-Gijón section, accessing the industrial area in central Asturias and port of Gijón, which for a time served as a point of connection of the sea highway between Gijón and Nantes-Saint Nazaire, currently awaiting to reopen. The connections in Palencia links with the section towards Santander and, in the Venta de Baños node, with the lines towards the Basque Country, Irún-Hendaye and Zaragoza, and Barcelona through the Ebro valley.

Facing westward, towards Galicia, the railway runs to the city and port of La Coruña and, through the Monforte railway node, with the port of Vigo and northern Portugal.

The Ponferrada (ADIF) railway station is the station closest to the thermal plant. The station has active passenger and freight services.

It is also worth mentioning the planned construction of a branch running between the Palencia-La Coruña line and the Villadangos Complex (León) after the company Network Steel Resources (NSR) took up operations in this complex at buildings previously used by Vestas and, as part of the Castilla y León regional government's commitment of support industrialisation.

Accessibility by road

Motorway and road accessibility is good in the region and, therefore, the thermal power plant, both towards the interior of peninsular Spain and from the north and northwest (Asturias and Galicia) and northern Portugal.

At the base of this accessibility is the passage through the region of the Northwest Expressway (A-6), National Motorways N-VI, N-120 and N-36, and Autonomous Community Motorway CL-631. As we will see in each one, this permits successive links capable of reinforcing the value of its position in the Spain's northwest quadrant.

Route A-6. Expressway A-6 or the Northwest Expressway (Madrid-La Coruña) is one of the main arteries in Spain, since it links the peninsular northwest with the interior.

This expressway is vitally important for the peninsular northwest, since it allows, firstly, access from northern Galicia to the interior of Spain, and, secondly, it is an easy route for access from El Bierzo to the north, to Asturias (through AP-66 and N-630) and Portugal (via the A-52, Rías Bajas Thruway).

At El Bierzo, it plays the role of traffic distribution axis in and through the region along a route of about 83 km. It is the main artery of communication between our area of influence and everything else, and good proof of this lies in the Average Daily Traffic (ADT) of over 19,000 vehicles from the vicinity of Ponferrada headed in the direction of Madrid.

National Motorway N-6. National Motorway N-VI (Madrid-La Coruña) was a vital artery for motorway traffic to northwest Spain. Greatly important for El Bierzo, it crosses this Comarca along 110 km of its path. It was the main traffic distributor in the Comarca until the construction of expressway A-6. From the N-6, there are links to Orense through national motorways N-120 and N-536; and CL-631 provides access to the north, towards western Asturias.

National Motorway N-120. Route N-120 (Logroño-Vigo) runs along the region in common with the N-6, except for a small section. It has mostly light vehicle traffic (ADT: 6,719). It serves to connect our province with the neighbouring region of Valdeorras. On another scale, until the construction of some expressways, this motorway articulated communications in the peninsular north, linking southern Galicia with the Ebro valley and, along the way, Catalonia.

National Motorway N-536. This route is the alternative to the N-120, as it links Ponferrada with La Rúa (Orense). The motorway is an important entry route to Galicia and, fundamentally, to Las Médulas and the neighbouring region of La Cabrera. Despite its importance, its average daily traffic is still no heavier than 1,500 vehicles.

Motorway CL-631. This motorway belongs to the infrastructures of the greater Autonomous Community, the section of Ponferrada to Villager de Laciana, where it connects with the N-626. These combinations lead to Route AP-66 (the so-called Silver Thruway, towards Asturias).

On the northbound route, the section between km 6 and Cubillos del Sil has widened lanes, but also speed limits (40-50 km/h), traffic lights and roundabouts. The section between Cubillos and Toreno (approximately 12 km) is an expressway.

This route (CL-631) gives access to the A-6 from south to north and is the main route communicating the El Bierzo basin and the city of Ponferrada with the region of Laciana and Villablino, while also providing a lateral link with other important locations.

Figures reveal high traffic to Cubillos, with an ADT exceeding 11,000 vehicles nearby this town, which are drastically reduced to the north, which shows that its functionality is fundamentally linked to the relationship between Ponferrada and Cubillos del Sil.

Motorways LE-711 and LE-715. Other road sections should also be kept in mind since they articulate traffic between Ponferrada and the towns of Vega de Espinareda and Fabero, which were thriving during the coal mining period. They are provincial roads with a slightly lower ADT capacity of 1,500 vehicles, yet they still have an important role in structuring this territory.

Traffic capacity. For the main routes mentioned in this study, the 2017 Average Daily Traffic (ADT) data of the main network indicate that the most traffic in the studied area (on the A-6 and N-6) occurs in the section of Ponferrada towards the east, i.e., in the direction of Bembibre and Torre del Bierzo. In other words, heading towards Madrid.

Chart 11. Main motorways in the peninsular northwest

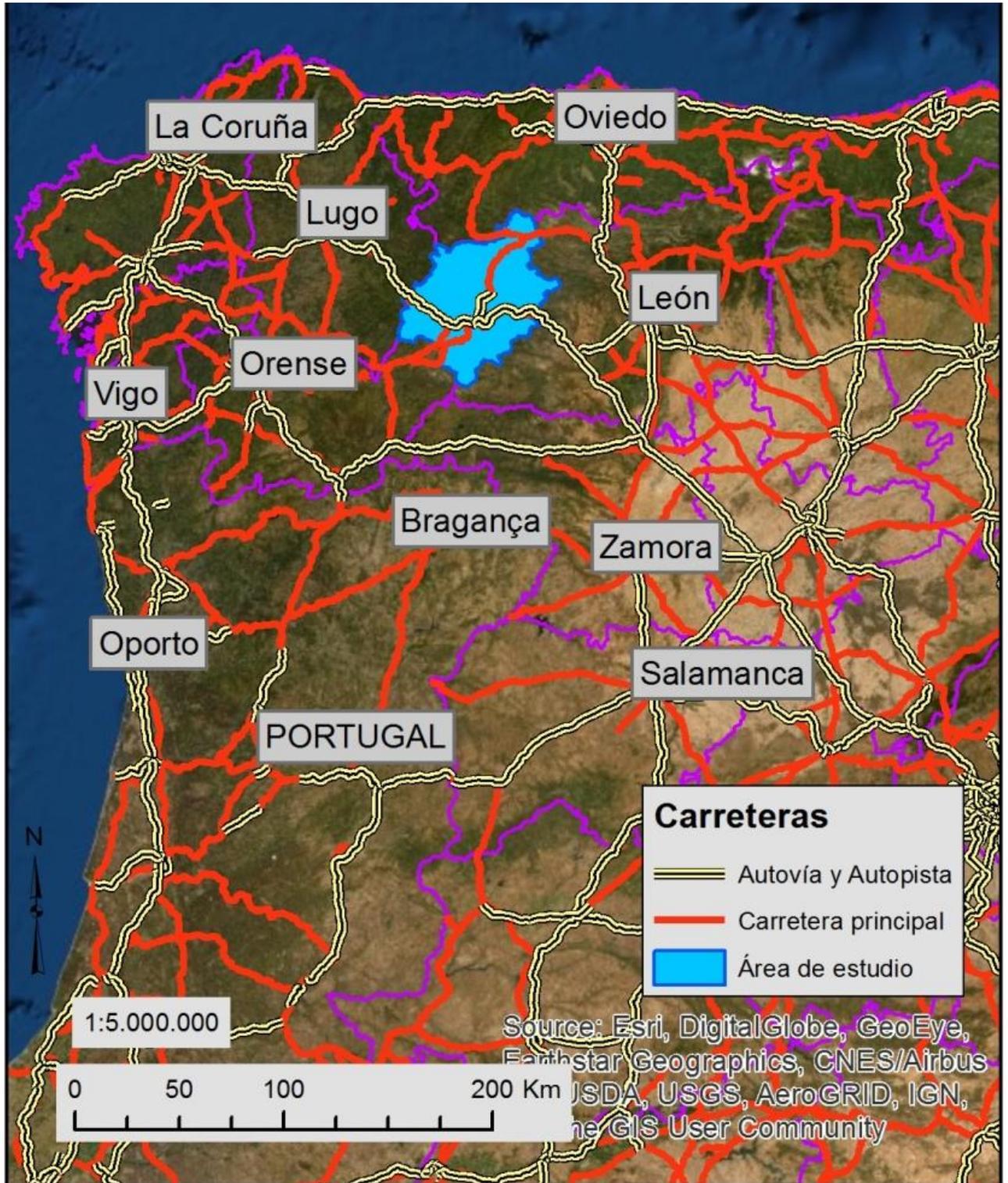
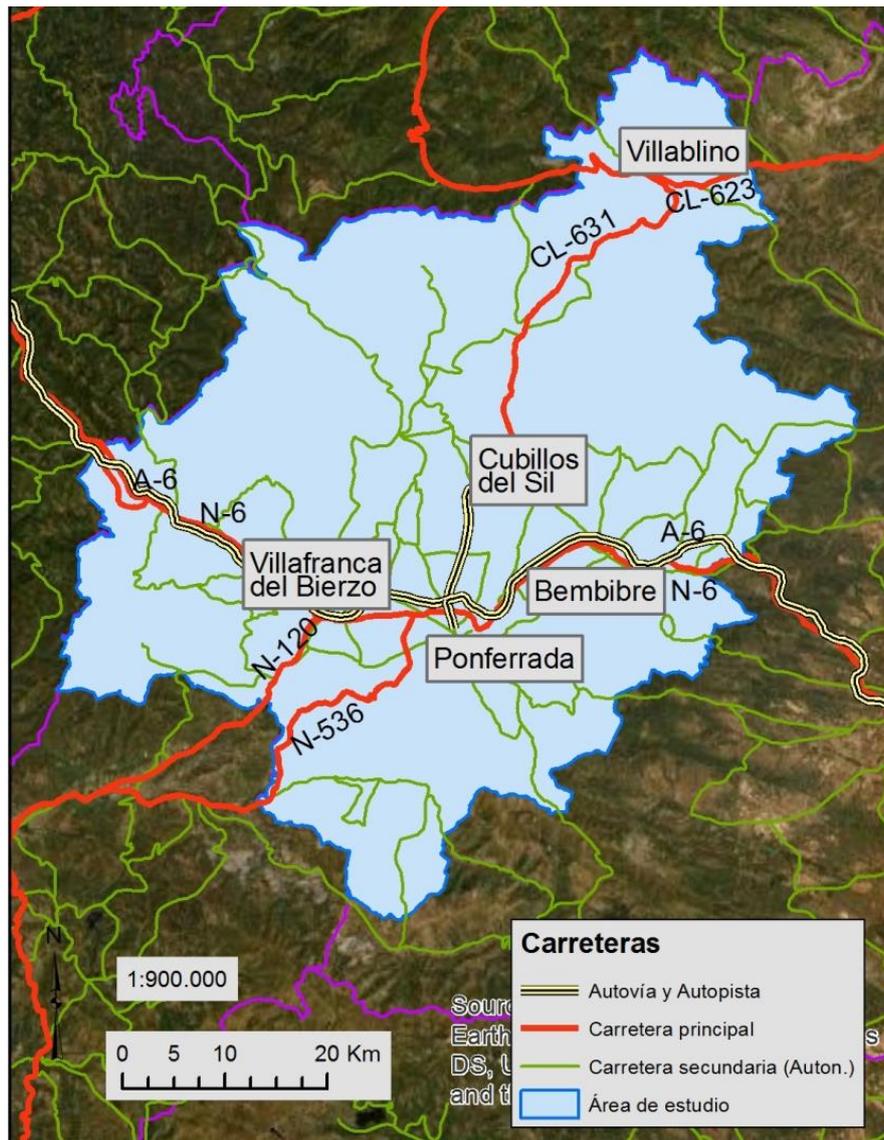


Chart 12. Main motorways in the area of influence**Table 7. Traffic capacity figures at selected points along the main motorways in the area of influence.**

Section	Road	Capacity
Bembibre Zone	N-6	7.058
	A-6	13.394
East of Ponferrada (km 382, climb to Montearenas)	N-6	13.015
	A-6	19.160
To the west of Ponferrada (km 394, exit to Camponaraya and Cacabelos)	N-6	6.659
	A-6	10.614
Pereje Zone (km 412)	A-6	9.791
Puerto de Piedrafita	N-6	2.602
	A-6	8.575
Villamartín de la Abadía	N-120	6.719
Santalla del Bierzo	N-536	1.686
Salas de la Ribera	N-536	1.486

Fuente: Ministerio de Fomento, 2017. Junta de Castilla y León, 2017. (Localizaciones aproximadas)
https://www.fomento.es/recursos_mfom/comodin/recursos/maprovin_2017.pdf
<https://carreterasyttransportes.jcyl.es/web/jcyl/CarreterasTransportes/es/Plantilla100Detalle/1284349710614/1284810670863/Redaccion>

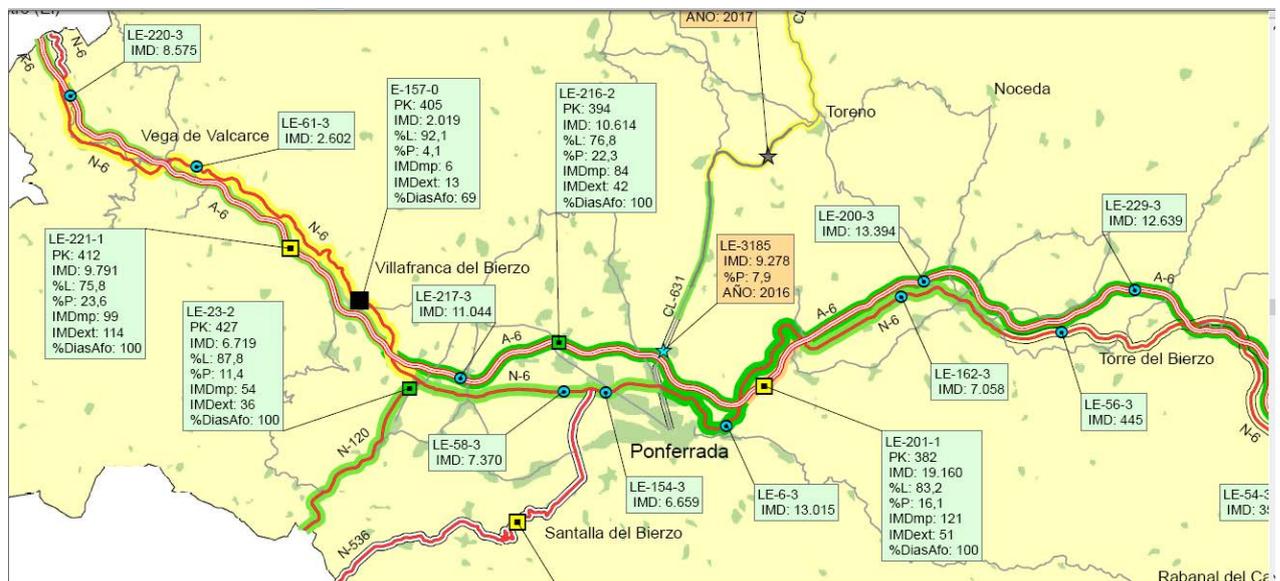
At the section near Montearenas heading towards Ponferrada, heavy vehicles make up 16.1% of the traffic, though this figure rises to 22.3% at the Camponaraya exit and reaches 23.6% in the Pereje area (section between Villafranca del Bierzo and Vega de Valcarce). In other words, freight traffic along this route becomes proportionally heavier as we head west towards Galicia, which makes it a vitally important artery for El Bierzo.

The N-120 in turn supports a high volume of traffic on the stretch of the N-6 to the provincial limit of Orense, with over 6,700 vehicles per day, of which 87.8% are light and 11.4% are heavy. N-536 (Ponferrada-La Rúa) contributes with less traffic, mostly light vehicles (94.6%).

Using the city of Ponferrada as a reference, there are a series of roads around the city with an ADT constantly above 1,000 vehicles and sections that can even reach values above 11,000. Here we have cases of 1,386 on LE-713 near Camponaraya; 9,480 on the same motorway between Fuentes Nuevas and Camponaraya; 5,016 on the LE-142 at the Ponferrada exit heading towards Molinaseca, 4,235 on the LE-711 at the A-6 junction; or 11,447 registered at the end of the widened sector of the CL-631.

In this regard, we can point to an area of influence concerning the city of Ponferrada, which integrates the main locations of the basin and, more importantly, the locations of the main production centres with their corresponding industrial complexes.

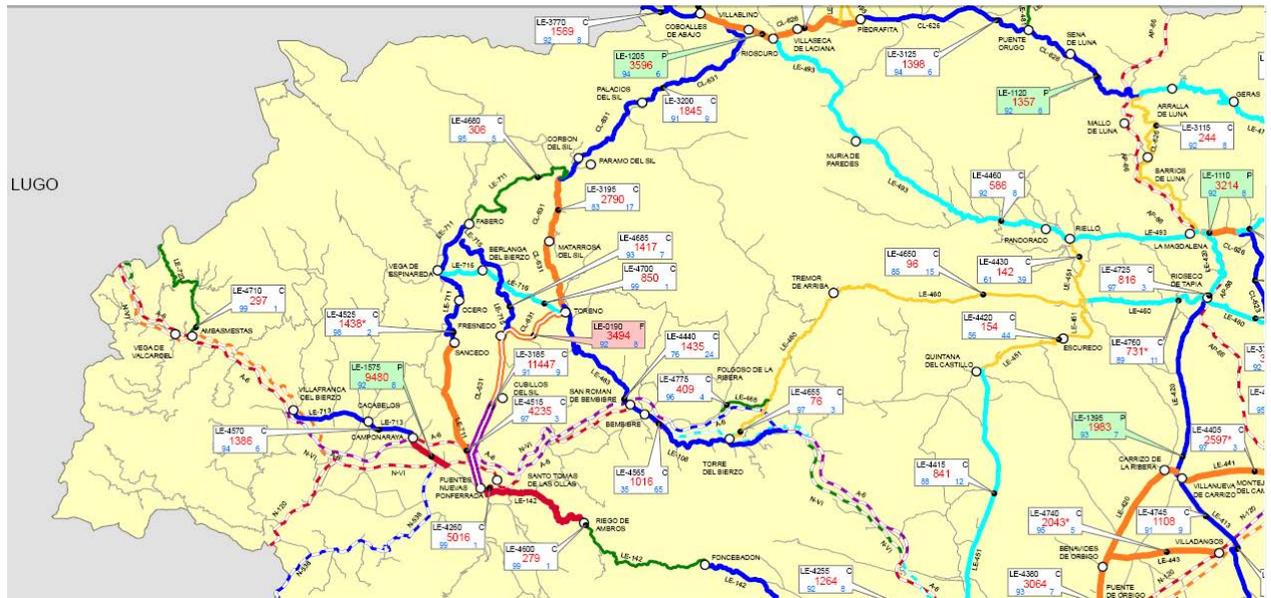
Chart 13. Traffic capacity figures in the middle of the area of influence. National roads and motorways



Source: Castilla y Legón regional government

<https://carreterasymtransportes.jcyl.es/web/jcyl/CarreterasTransportes/es/Plantilla100Detalle/1284349710614/ /1284810670863/Redaccion>

Chart 14. Traffic capacity figures in the middle of the area of influence. Regional and local roads



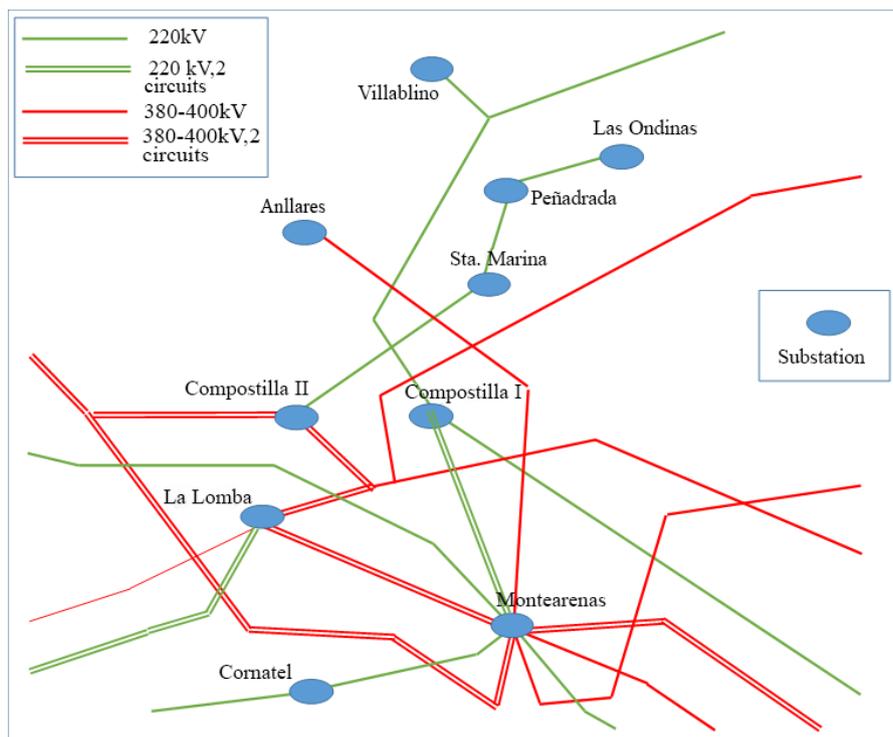
Source: Ministry of Public Works and Transport

https://www.fomento.es/recursos_mfom/comodin/recursos/mapprovin_2017.pdf

Other regional infrastructures. Electrical connection

Given its situation as a crossroads for exporting electricity produced in the peninsular northwest, primarily from As Pontes de García Rodríguez and the Miño-Sil system, to the rest of peninsular Spain.

Chart 15. Diagram of electrical connection infrastructures



Source: ENTSO-E; inhouse; <https://www.entsoe.eu/data/map/#5.73/41.88/2.457>

There is also an infrastructure in place for exporting the power generated by the now inactive thermal power plants Anllares (Naturgy) and Compostilla II (Endesa), and hydroelectric dams Rioscuro, Las Ondinas, Peñadrada, Santa Marina, Bárcena and Cornatel

El Bierzo is thus criss-crossed by a series of overhead power lines (220 kV and 380-400 kV), with some single circuit and other dual-circuit branches to guarantee a supply for domestic and industrial use.

Other regional infrastructures. Gas pipeline

Among the infrastructure of the territory, we cannot fail to mention the gas pipeline in the area of influence we are studying.

Chart 16. Diagram of the natural gas supply



Source: inhouse; <https://www.enagas.es/stfs/ENAGAS/Transporte%20de%20Gas/Documentos/mapaInfrTransporte.pdf>

ENAGAS owns a connection point to the transmission and distribution network in Castropodame, approximately 15 km away from the thermal power plant. This connection point has a nominal capacity of 30,260 m³/h with a guaranteed delivery pressure of 30 bar according to GTS Standard.

There has been an ongoing project in place since 2002 to continue the pipeline to Villafranca del Bierzo on its way to the connection with Mugardos (Ferrol). The projected route would pass through the Compostilla II plant after travelling 565 m in the Castropodame transmission and distribution network, 5,354 m from Congosto and approximately 3,000 m from Cubillos del Sil. This project has already secured

the Environmental Impact Statement in 2010, although its execution has met repeated delays. The pipeline's transmission and design conditions contemplate a 16" (406.4 mm) pipe with an 80 bar design pressure.

While the supply has not reached the Compostilla II facilities just yet, it is nevertheless no large infrastructure and requires no large investment to do so.

Excellence in the territory and local economy

- Introduction
- Economic context. General values
 - Dynamics of the Ponferrada Urban and Functional Urban Areas
 - The region according to the Economic Activities Tax
 - Workers and establishments according to contribution accounts
 - Contracts and unemployment
- Sectors with a potential for growth
 - Agrifood sector
 - Secondary sector
 - Industrial spaces
 - Tertiary sector: tourism
 - Logistics

The area's economic history has been linked to mineral mining for many decades, particularly coal but also iron and slate, and energy production, with hydroelectric dams and thermal power plants.

According to economic activities, we are looking at tertiary region, particularly rich in retail, hospitality and repairs. The industrial sector is also particularly anchored, specifically in activities related to the transformation of metals and mechanics.

Most of all these activities are concentrated in the municipality of Ponferrada and the city of Ponferrada stands as the functional, commercial and service centre. The Ponferrada Functional Urban Area combines industrial production, namely metallurgy, carpentry and metal structures, machinery and mechanical equipment, auto parts, food and beverages, wood, clothing and graphic arts, as the most prominent activities.

Although the region is affected by unemployment, recent developments have been positive, with a 34% reduction between 2012 and 2018. In terms of hiring, the trend has also been positive and fosters optimism.

The region's future passes through the sum of several factors that include the industrial, agrifood and tourism sectors. Agrifood and tourism in particular were identified in a 2016 report as sectors with growth potential.

Good weather conditions and the presence of 7 quality figures are the basis of a promising future for agrifood. New initiatives such as the "Bierzo Hub" Comprehensive Growth Programme or land bank seek to revitalise the sector. Wine, fruits, Botillo and vegetable preserves are the most well known products with the best prospects.

Tourism has a diversified base that entails the Camino de Santiago, cultural and natural resources (including Biosphere Reserves) and sporting activities. In short, it has a long yet very promising path ahead.

Industry is reinventing itself with the entry of export-oriented companies committed to new technologies. The region also has an important supply of industrial land.

In light of the rising international prices, the future prospects for industry include iron, tungsten and zinc mining activities.

In terms of logistics, El Bierzo's situation is a very positive aspect to consider.



Introduction

Throughout at least the past century, the area's economic history has been rooted in mining mineral resources, mainly coal (anthracite and soft coal), but also iron and slate, as the most important products.

Coal had once been the economic, demographic and social cornerstone and driving force of El Bierzo and Laciana (municipality of Villablino), leading to vertiginous population spikes. This growth made Ponferrada a thriving centre for industry, commerce and services that earned it the nickname of "city of the dollar". This coal fed thermal power plants MSP, Compostilla I, Compostilla II and Anllares.

The founding of Minero Siderúrgica de Ponferrada (MSP) in 1918 also owed a lot to coal but also the construction of the narrow-gauge railway between Ponferrada and Villablino. This steel mining company would spend decades as a leading benchmark in the sector. The company was not alone, however, as many others sought to exploit coal resources.

For decades, mining brought jobs and wealth to our area. However, this sector had been reinventing itself throughout history until it came to an end in 2018. Today mining belongs to the past.

Electricity generation has also been one of the bases of this economy, with 6 hydroelectric dams in production and, albeit no longer in service, two thermoelectric plants.

Additionally, the region's climate and fertile soil have always been an important resource in the Comarca for agriculture, though not as much in Villablino, given the temperature limitations.

The 1960 construction of the Bárcena reservoir and subsequent irrigation infrastructure (El Bierzo canals Alto and Bajo) completely transformed the appearance of the basin's landscape. Where cereals had been grown in dry land, now farming yields an abundance of high quality vegetables and fruit trees. However, a very divided and small-scale structure, together with the shortage of young farmers, takes away potential from the sector.

Within the margins of the region, chestnut groves are undergoing a remarkable renaissance, through the commercialization and recognition of their value and quality with the "Castaña del Bierzo" certification mark. Despite the threat of wasps and a spreading blight fungus, prospects remain positive in this regard.



Economic context. General values

Dynamics of the Ponferrada Urban and Functional Urban Areas

The data associated with Urban and Functional Urban Areas let us better characterise our scope and make a comparison with the provincial capital León and its functional area.

Table 8. Some socioeconomic parameters (%)

	León	Ponferrada	León FUA	Ponferrada FUA	Spain
Unemployment rate (1)	12.44	13.96	11.51	13.71	15.20
Proportion of employed in 20-64 age group over active population (1)	87.67	86.20	88.62	86.43	82.94
Activity rate (1)	49.93	53.34	53.08	52.99	58.24
Proportion of employment in services (NACE Rev.2 G-U) (2)	88.89	76.45	84.15	70.61	77.12
Proportion of employment in industry (NACE Rev.2 B-E) (2)	4.72	13.30	8.13	17.67	12.37

Notes:

In light of the level of provincial disaggregation, the data are INE estimates

INE estimates based on data from the Central Companies Directory (CCD)

All data are expressed in percentages. The data are from 2018, except for the proportion of employment in services and industry, which are from 2017

Source: inhouse;

https://www.ine.es/ss/Satellite?L=es_ES&c=INEPublicacion_C&cid=1259944561392&p=1254735110672&pagename=ProductosYServicios%2FPYSLayout¶m1=PYSDetalleGratis¶m4=Ocultar#top

In comparative terms, industrial employment in the Ponferrada Functional Urban Area is particularly prominent, doubling the figures for the León FUA and above the national value by five points.

The industrial heritage of El Bierzo somehow continues to shine, with the most prominent including metallurgy, metal products (metallurgy, carpentry and metal structures, machinery and mechanical equipment, auto parts), mechanical workshops, food and beverage, wood, clothing, graphic arts, etc.

The region according to the Economic Activities Tax

In this economic context, the 2017 Economic Activities Tax (EAT) figures show 12,729 licenses in the area of influence, mostly corresponding to economic activities (11,471; 90.12%) versus professionals (1,258; 9.88%). Its structure helps us to know and understand, albeit only to a certain extent, the structure underlying the economic dynamics of the area we are studying.

Table 9. Business and professional activities according to the Economic Activities Tax (EAT)

ACTIVITIES	Subtotal	%	Total	%
INDEPENDENT LIVESTOCK	49	0.38	49	0.38
ENERGY AND WATER	144	1.13		
EXTR. AND TRANSF. NON-ENERGETIC MINERALS	177	1.39		
METAL PROCESSING INDUSTRIES, PRECISION MECHANICS	245	1.92		
OTHER MANUFACTURING INDUSTRIES	492	3.87		
CONSTRUCTION	1,430	11.23	2,488	19.55
COMMERCE, CATERING AND HOSPITALITY; REPAIRS	5,390	42.34		
TRANSPORT AND COMMUNICATIONS	397	3.12		
FINANCE AND INSURANCE	1,864	14.64		
OTHER SERVICES	1,283	10.08	8,934	70.19
Total partial activities	11,471	90.12	11,471	90.12
PROFESSIONALS	Subtotal	%	Total	%
AGRIC., LIVESTOCK	38	0.30	38	0.30
OWN ACTIVITIES	3	0.02		
AERONAUTIC INDUSTRIES	3	0.02		
OTHER MANUFACTURING INDUSTRIES	33	0.26		
CONSTRUCTION	125	0.98	164	1.29
RETAIL AND HOSPITALITY	62	0.49		
TRANSPORT AND COMMUNICATIONS	0	0.00		
FINANCIAL ACTIVITIES, ...	563	4.42		
OTHER SERVICES	411	3.23		
ARTISTIC ACTIVITIES	20	0.16	1,056	8.30
Total partial professionals	1,258	9.88	1,258	9.88
TOTAL	12,729	100.00	12,729	100.00

Source: Statistical Information System of the local government of Castilla y León; inhouse

Together as a whole, they show us a tertiary region, with 78.48% of the licenses in the tertiary sector (9,990), especially concentrated under the broad heading of "Commerce, restaurants and hospitality; repairs" (5,390; 42.34% of the total).

Industry and the construction sector, with 2,488 licenses (19.55%), have their highest concentration in this second activity, with a notable weighting for "Metal processing industries, precision mechanics (245; 1.92%) and "Other manufacturing industries" (492; 3.87%).

We cannot forget the 144 activities registered in this source under "Energy and water", which, while representing only 1.13% of the total activities, nevertheless prove the character that this activity has impressed on the area of influence under study.

The municipality of Ponferrada takes most of all the activities included in this tax, 56.30%. This concentration is consistent with the role of a functional centre in commerce and services, especially in the field of reference. The municipality of

Ponferrada thus concentrates 53% of commercial, repair and hospitality activities, with special relevance in retail, with 2,604; 234; 43 and 1,086 activities, respectively.

The municipality of Cubillos del Sil in turn is hardly relevant in the region if we only looked at the commented EAT values, since its 161 activities only has a proportional value of 1.26% of the total area of influence. Of these activities, one third (52) corresponds to "Commerce, restaurants and hospitality, repairs", of which 15 are dedicated to retail.

The numbers linking retail shops to population reveal a ratio of 1.66 per 100 inhabitants for the municipality of Ponferrada and 0.82 for Cubillos del Sil. Their individual weight is much clearer in the analysed context.

Workers and establishments according to contribution accounts

Another way to assess and compare the economic development of the El Bierzo Comarca and municipality of Villablino is through the data on workers and establishments according to contribution accounts provided by the Statistical Information System of the local government of Castilla y León based on data from the General Social Security Treasury.

Table 10. Average workers and establishments according to contribution accounts

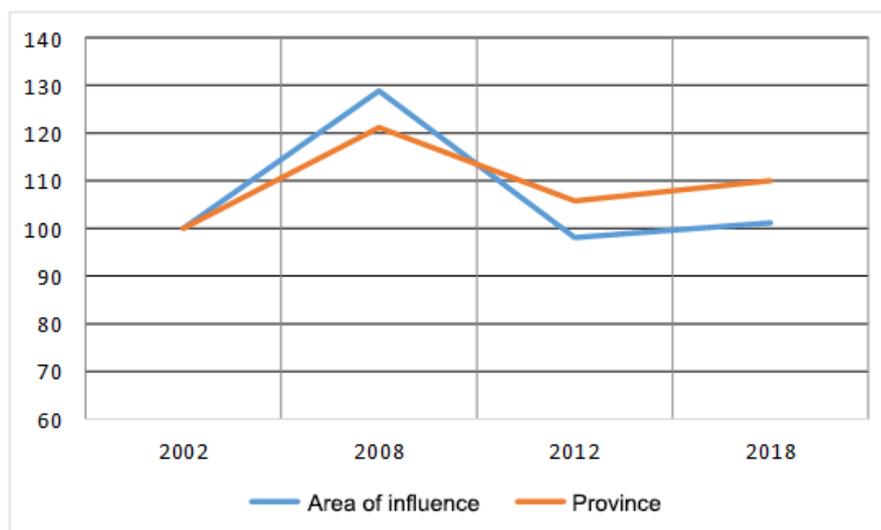
	Employees			Establishments		
	2012	2018	Diff. %	2012	2018	Diff. %
Area of influence	102,954	106,352	3.30	20,001	19,814	-0.93
León Province	462,320	481,362	4.12	75,123	74,394	-0.97

Source: inhouse; <https://www.jcyl.es/sie/v2/cuentascotizv2irAmodulo.html>

With the economic crisis relatively over, the region began its recovery between 2012 and 2018, especially in the number of workers, though not in the amount of establishments.

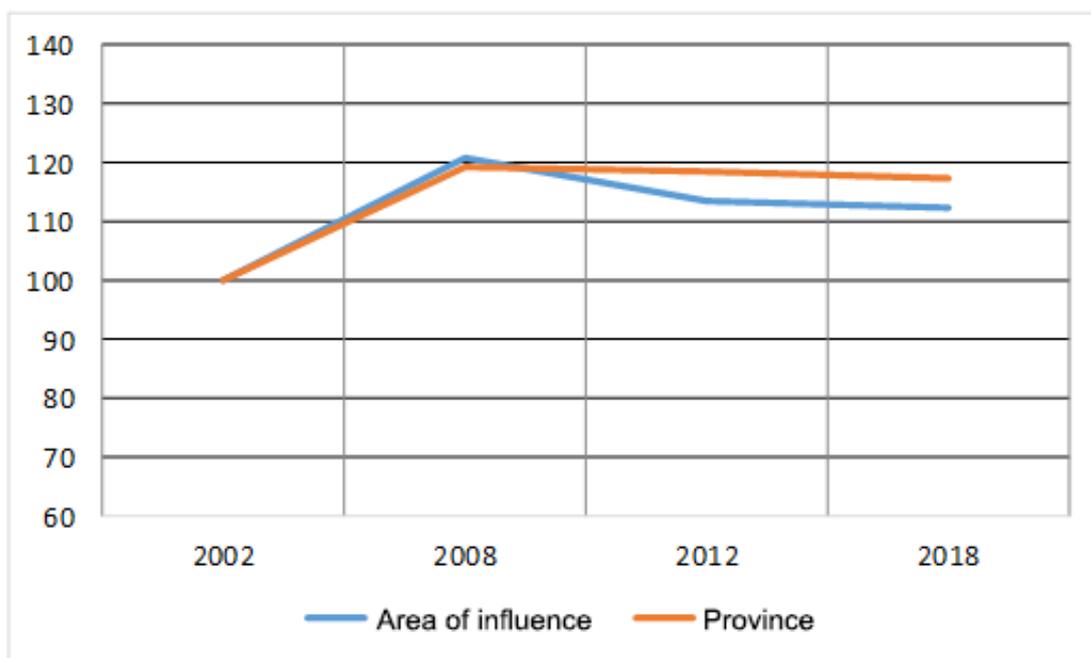
The weight of the area we are studying is important in the province as a whole, especially in the number of establishments. In this regard, our area of influence had 22.09% of the provincial workers and 26.63% of the establishments in 2018.

Chart 17. Trend for average workers according to contribution accounts (2002=100)



Source: inhouse; <https://www.jcyl.es/sie/v2/cuentascotizv2irAmodulo.html>

Chart 18. Trend for average establishments according to contribution accounts (2002=100)



Source: inhouse; <https://www.jcyl.es/sie/v2/cuentascotizv2irAmodulo.html>

Contracts and unemployment

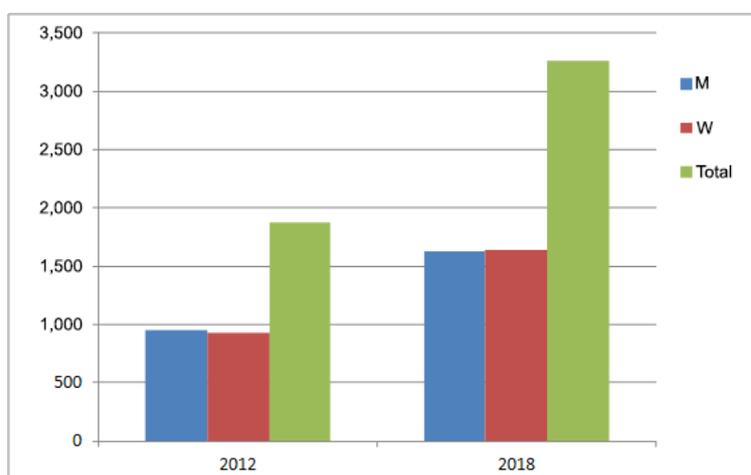
As for the registered contracts, we are looking at a strong recovery between 2012 and 2018. The proportion of hiring in the last reference year is higher than the provincial average and its positive evolution introduces a dose of optimism.

Table 11. Recent contract trend (annual average)

	2012	2018	Diff. %
Area of influence	1,875	3,260	73.87
Prov. de León	7,660	11,765	53.59

Source: inhouse based on State Employment Service data

Chart 19. Recent contract trend (annual average in the Comarca)



Source: inhouse based on State Employment Service data

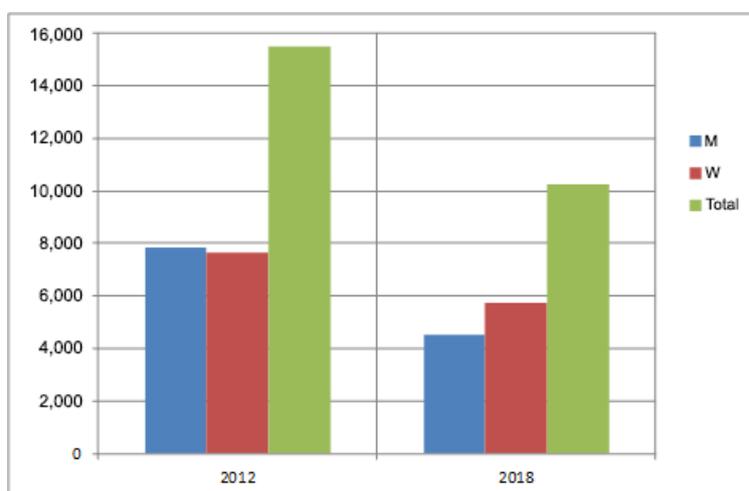
Of course, unemployment affects our region, though this is a common problem throughout Spain. However, a recent positive trend appears when comparing the annual averages of 2012 and 2018, evincing a nearly 34% reduction in the past six years.

Table 12. Recent unemployment trend (annual average)

	2012	2018	Diff. %
Area of influence	15,481	10,250	-33.79
Prov. León	44,012	30,630	-30.41

Source: inhouse based on State Employment Service data

Chart 20. Recent unemployment trend (annual average in the Comarca)



Source: inhouse based on State Employment Service data

Sectors with a potential growth

Many indicators clearly show that the El Bierzo Comarca is weathering economic difficulties. Acknowledging reality is the first step in facing it on the path to recovery. The local character in El Bierzo has historically been entrepreneurial, which should be viewed as an opportunity to see that the future is about to be written by opening up to new opportunities for progress while protecting and respecting the environment.

The region's future development clearly passes through the sum of several factors that include the industrial, agrifood and tourism sectors.

A 2016 report (Executive Summary drawn up by KPMG for Endesa) identified the agrifood industry and the tourism sector as having growth potential through interviews conducted with the different stakeholders that year.

Three years later, we can confirm that the agrifood sector has assumed a greater role due to, firstly, the abandonment of other economic sectors such as mining and energy, and, secondly, the settlement and implementation of some of the quality figures that were only incipient back in 2016.

Moreover, the tourism sector is gradually gaining traction in the region's economy but still has a long way to go.

It is also worth noting how new companies are opening up in the secondary sector while already established ones in this sector have begun to grow and expand, and the common denominator is a commitment to new technologies and export to ensure business success.

Agrifood sector

The agrifood sector is particularly substantial in the region and is gaining ground as the basis of local development. This sector is bolstered by uniquely favourable climate conditions that differ from the rest of the province. This factor has entailed quality production, recognised by seven figures: 2 Denominations of Origin, 2 Protected Geographical Indications and 3 Guarantee Marks. In fact, El Bierzo has more quality labels than any other European Comarca.

Even so, there are structural problems, namely the lack of generational renewal, though the trend appears to have been shifting in recent years; the scarcity of farmers and ranchers on a primary basis and many as a complementary activity; smallholding, another problem keeping farms from being competitive; abandonment of farmland (currently nearly half); pending modernisation of irrigation. The Bajo del Bierzo canal is currently undergoing remodelling with a budget of €57 million to make the change from gravity irrigation to pressurised irrigation, which would save 30% of the water and entail a land consolidation process to improve farm competitiveness.

The region is also facing risks, specifically in the chestnut sector, where wasps can damage 50-60% of the 19,000 hectares and cause annual losses of €10 million according to Roberto Rubio of CESEFOR and secretary of the El Bierzo Chestnut Panel (Mesa del Castaño). Chestnut groves are also threatened by the spread of the blight fungus.

Chart 21. Quality figures in El Bierzo



Quality figures broken down by turnover volume: El Bierzo Wine Denomination of Origin. El Bierzo Conference Pear Certification Mark El Bierzo Botillo Protected Geographical Indication El Bierzo Reineta Apple Denomination of Origin El Bierzo Roasted Pepper Protected Geographical Indication. El Bierzo Chestnut Certification Mark El Bierzo Cherry Certification Mark.

The agrifood sector consists mainly of small family-run businesses, though some have significant turnover and are slowly growing and consolidating.

Table 13. Agrifood companies with the highest turnover in El Bierzo

	Turnover (M€)		Employment	
	2016	2018	2016	2018
Embutidos Pajariel	12.4	15	78	90
Campelo	10.0	8.4	25	34
Industrias del Bierzo SA (IBSA)	5.3	6.5	33	42
Pharmadus Botanicals	3.3	3.7	35	36
Prada a Tope	2.3	2.3	39	39

Regional agrifood is led by the highly consolidated wine sector, with 79 wineries in the D.O. This activity has recently went through a boom and expansion with the entry of wineries contributing to increasing the prestige and selling prices of increasingly internationalised wines. The region's fruit sector ranks second and is characterised by the quality and variety of products in an increasingly globalised world. These leaders are followed by the meat industry, with its star product "Botillo", and canning and preserves, in which preserved roasted peppers is a prominent product. A significant part of the commercialisation of products such as chestnut and, albeit to a lesser extent, cherries, is carried out outside the quality figures.

Tabla 14. Productos por volumen de facturación bajo los sellos de calidad y en total en la comarca Berciana

Rank	Under quality mark	Total
1	Wine	Wine
2	Conference Pears	Conference Pears
3	Botillo	Chestnuts
4	Reineta Apples	Reineta Apples
5	Roast peppers	Cherries
6	Chestnuts	Botillo
7	Cherries	Roast peppers

In addition to these seven quality figures, there are other products such as honey, beer, tonic, gin, cheese, oil, vegan products and organic products that expand the horizon for agrifood-related entrepreneurship.

The forests cannot be overlooked. This sector must involve villagers in mountain management to so that they identify themselves with the land and thus help stamp out the "fire culture". This takes place through investments in forest management and cleaning projects.

The government of the Autonomous Community, aware of the strategic importance of the agrifood sector in the region, created the El Bierzo Agrifood Dynamisation Platform for the region's 38 municipalities (the economic revitalisation plan for mining municipalities covers 19 locations). The plan conceived for the 2016-2020 period (with a budget of €15.8 million) entailed 24 measures targeting three links in the value chain (production, processing and marketing), focused primarily on quality figures

with objectives such as reassessing the agricultural productions of agrifood companies, promote their productivity by taking advantage of the potential of the primary sector in the region, focusing on people living in the rural environment, favouring generational renewal, improving marketing and seeking new markets, boosting innovation and using the Tierra de Sabor brand to promote local products in national markets, the European Union and third countries.

The 24 measures on the platform are grouped into three axes corresponding to the most important links in the agrifood chain:

- Producer sector: Understanding production-related aspects and improving agricultural structures
- Processing sector: Comprising activities developed for handling, processing and transforming products, conducting training activities and professionalising the human resources in the industries and carrying out Research, Development and Innovation actions (RD&I)
- Marketing sector: Including actions to improve commercial strategies, engagements in logistics and agrifood promotional activities

In addition to these measures, the Bierzo *Hub* Comprehensive Growth Programme contains further tools in this regard (<http://www.bierzohub.com/>):

- Chain entrepreneurship
- Project accelerator
- Financial instrument
- Expert advice/consulting
- Investment partners
- Other tools

A total of 14 sector-specific *hubs* have already been carried out. Following the first one, a presentation in Canedo on 14 November 2017, the ensuing hubs were held in different locations in the region and addressed various issues: sensory analysis; beekeeping; innovation; ecology; winegrowing; beef cattle; wood; horticulture; mycology; field day on physiopathies and phytosanitary problems in pepper farming; land consolidation; enterprising woman; and aromatic and medicinal plants. In reality, this program affords no new lines of aid, but brings together all existing lines under a single concept.

The government of Castilla y León in turn continues backing the transformation and commercialisation of agricultural, forestry and food products of the 2014-2020 Castilla y León Rural Development Program, co-financed by the FEDER for €19.5 million in 2019.

The EI Bierzo Regional Council launched an initiative referred to as Land Bank (<http://www.bancodetierrasdelbierzo.es/>), a free service to connect owners of abandoned farms with young entrepreneurs eager to continue in the activity with the aim of revitalising the EI Bierzo countryside and thus rural and local development. It seeks to reactivate the region's agricultural economy, also taking into account the benefits provided in terms of environment and tourism. Given that the agrifood industry is a strategic sector in the EI Bierzo economy, agricultural activity is the main pillar for rural development because of its impact on economic activity, job creation and keeping the population in the area. The goal is to strengthen the role of farmers

as entrepreneurs, to ensure a generational handover, which is key to creating jobs and avoiding depopulation in rural areas.

There has also been a five-route quality-related program in place in El Bierzo since 2017. It was conceived as an initiative seeking to use a series of guided tours to share the values and characteristics of the farms operating under the El Bierzo guarantee marks. In each route, the technical directors of each quality seal explain the characteristics of each crop on site (<http://www.bancodetierrasdelbierzo.es/rutas-ferias/>).

Secondary sector

Industry has great growth potential in El Bierzo. This is attested by the presence of companies setting down roots in El Bierzo for over 60 years together with others of recent and strong implementation.

Some of the more prominent recent arrivals include LM Wind Power (Industrial Complex at La Llanada de Ponferrada), which opened a third production line in 2018 and has gradually created jobs for 180 workers in 2019, contributing with over 700 direct jobs in the region, ranking 3rd in the provincial ranking with a turnover of €158.02 million.

There are companies that have been in the region for many years, such as the steelworks company Roldan, S.A. (Acerinox) in Santo Tomás de las Ollas, bordering Ponferrada. The company recently made investments to adapt to market demands and to digitise its processes in the context of Industry 4.0. The company has a turnover of €210 million and 400 employees.

Cementos Cosmos is another company that has been in El Bierzo for over 60 years. Located in Toral de los Vados and part of Votorantim Cimentos since 2012, the company maintains 150 direct and approximately 600 indirect jobs. It is immersed in a change to replace part of its fuel, substituting coke oil with used tires and, in doing so, is in the focus of environmental groups.

Since its arrival at the El Bayo Industrial Complex (Cubillos del Sil), the company TVITEC System Glass has increased its turnover to reach a ranking of 8th in terms of invoicing at the provincial level (€125 million). It acquired the old Comonor warehouses in 2018 to install a 20,000 m² factory specialised in manufacturing curved glass with an investment of over €20 million. In 2019, the company secured salient contracts such as one for 15,000 m² in architectural glass for the dome of the new Google headquarters in Mountain View, California. Its business lines continue growing as it is set to open a new window and facade factory that will create between 50 and 100 jobs and entails an investment of €15 million.

Forestalia is another example of a company with good prospects. This biomass plant expect to create 50 direct and 400 indirect jobs when it begins running in 2020, with a capacity of 49.9 MW. It is currently in the project execution phase. The plant could be a revolutionary spark for the forestry sector in the region and neighbouring areas, since it will consume 280,000 t/year of biomass from an environment of 150 km.

In this context of using an indigenous resource such as biomass, which contributes to maintaining the mountains and preventing wildfires, the Castilla y León Public Infrastructure and Environment Company (Somacyl) is handling the installation and

maintenance of a biomass-based heating network in Ponferrada. The project contemplates the supply of hot water and heating to 13 municipal buildings, University Campus and UNED centre, thus eliminating over fifty fossil fuel boiler rooms. This work was met with certain civil response in the Compostilla community, very close to where the plant is being built.

Chart 22. Progress of construction of the biomass plant for the heating network. Sign protesting against the biomass plant in the Ponferrada neighbourhood of Compostilla.



STAC (Sistemas Técnicos del Accesorio y Componentes SL) is a company specialised in manufacturing products for the aluminium enclosure sector. Originally based in Padrón (La Coruña), the company began setting up in 2017 with 50 workers and an investment €20 million, and now has 152 workers.

Further companies with less turnover include Europlastic Inyeccion, a company that has been operating in El Bierzo for over 20 years that has gone from billing €6,000 in its initial year to €5 million. In recognition of this success, the FELE-Bierzo organisation named Pedro Jorge Fuertes, manager at Europlastic Inyeccion, as the EL Bierzo Businessman of the year in 2019.

It should be noted that the reform of the Castilla y León Urban Planning Act (Law 5/1999 of 8 April) opened the door for authorising mining and quarrying activities, which together with the rise in international metal prices, has generated some interest in a region rich in mineral deposits. In this regard, the projects are mostly based on old iron, tungsten or zinc mines. These activities increased mining, quarrying and related activities already existing in El Bierzo and slate extraction in the neighbouring region of Valdeorras.

Industrial spaces

Further prominent initiatives of administrations to support the secondary sector include the project by the El Bierzo Regional Council that combines the offer of 350 ha in 17 industrial complexes to make them available to entrepreneurs, seeking to centralise empty industrial spaces for advertising at a single website: <https://www.elbierzosueloindustrial.com/>.

Based on information from the El Bierzo Regional Council and León Provincial Council, we can ascertain the availability of industrial land in our study area.

Table 15. Industrial complexes and areas in the area of influence

Complex	Municipality	Location
P.I. del Bierzo Alto, S.A. (PIBASA)	Bembibre	San Román de Bembibre
P.I. Cabañas Raras	Cabañas Raras	Cabañas Raras
Parque de la Pequeña Industria / P.I. de Cacabelos	Cacabelos	Cacabelos
P.I. Camponaraya Fase I	Camponaraya	Camponaraya
P.I. Camponaraya Fase II	Camponaraya	Camponaraya
P.I. Camponaraya Fase III	Camponaraya	Camponaraya
P.I. Camponaraya Fase IV	Camponaraya	Camponaraya
Zona Industrial de Carracedelo	Carracedelo	Carracedelo
P.I. de La Pradela	Carracedelo	Carracedelo
P.I. La Mata	Carracedelo	Villamartín de la Abadía
P.I. de El Bayo	Cubillos del Sil	Cubillos del Sil
P.I. de El Campón, Fabero	Fabero	Fabero
P.I. Cantalobos, Ponferrada	Ponferrada	Fuentesnuevas
P.I. de La Barca, Ponferrada	Ponferrada	Carretera de Molinaseca
P.I. de La Llanada, Ponferrada	Ponferrada	Ponferrada
Zona Industrial de Montearenas	Ponferrada	Ponferrada
Parque Industrial de el Bierzo (P.I.B)	Ponferrada	Cuatrovientos
P.I. de Dehesas	Ponferrada	Dehesas
P.I. dela Martina	Ponferrada	La Martina
Zona Industrial Valderreguera	Torre del Bierzo	Torre del Bierzo
Parque Industrial de Laciana	Villablino	Villager
P.I. del Bierzo	Toral de los Vados	Villadecanes
P.I. de Vilela	Villafranca del Bierzo	Vilela
P.I. El Bayo	Cubillos del Sil	Cubillos del Sil

Source: El Bierzo Regional Council and León Provincial Council

<https://www.elbierzosueloindustrial.com>

https://www.dipuleon.es/Ciudadanos/Desarrollo_Rural_y_MA/Programa_de_formacion_y_empleo/Documentacion_de_intereses/Insercion_laboral/Poligonos_industriales/

This section would be incomplete without mentioning the City of Energy (Ciuden), which currently aspires to become an element for developing coal mining regions participating in local economic, social and employment transition processes while facing uncertainty caused by the ecological transition. It presently manages the environmental recovery of areas degraded by mining activities and could become a regional platform for research and business fabric.

Tertiary sector: tourism

The El Bierzo tourism sector has a substantial potential for cultural, rural and nature tourism, bolstered by the expansive beauty the valleys in the region that shape the Comarca's intrinsic heritage: culture, nature, landscape.

First, the Camino de Santiago, a World Heritage Site, crosses the region from east to west. In 2018, 327,000 pilgrims walked through the Comarca, of which 7,200 began the Camino in Ponferrada (9th route starting point by number of pilgrims), thus

making it a privileged national and international exhibitor. While the Camino Francés still tops the rank as most popular with pilgrims, alternative routes are gradually growing in value, namely the Camino Olvidado, the Camino de Invierno or even the Camino del Manzanal, as associations are being created to promote them, some in partnership with the Autonomous Community of Galicia. The actual path has some issues, such as false indicators, but issue is being resolved with new unified signals.

Chart 23. Diagram of Camino de Santiago (Camino Francés) in El Bierzo with its variants Camino de Invierno and Camino del Manzanal.



In addition to the Camino de Santiago and the wine growing sector, wine tourism seems to be booming. An association based in Cacabelos (<http://bierzoenoturismo.com/>) for developing this activity in El Bierzo seeks to group all the region's tourism possibilities concerning the world of wine.

Second, Las Médulas, UNESCO World Heritage Centre, which celebrated its 20th anniversary in 2018 by tallying over 100,000 visitors.

Tebaida Berciana, site of the famous Valley of Silence, was declared as an Asset of Cultural Interest back in 1969, has been revitalised with the start of the last phase to restore the Mozarabic church of Santiago de Peñalba (horizon of 2020) and the partial restoration of the monastery of San Pedro de Montes, where the initial theatrical visits have met substantial success. They are currently waiting for investors to create a hotel in the monks' cells of the monastery. However, tourism can only work with good access to the place. In this regard, public investments are necessary; likewise improving access to the Compludo Forge; all with the final objective of presenting a medium-term candidacy for UNESCO World Heritage classification.

The *Ponfeblino* mining train between Villablino and Ponferrada strikes the century mark. This train could be a tourist showcase for El Bierzo and the Laciana Comarca, similar to others existing in Riotinto (Huelva), Samuño Valley (Asturias), etc. In recent years, the government of Castilla y León recovered the infrastructure concession, which is already being transferred to the Ponfeblino Consortium. In addition, part of the heritage of this railway is part of the Ponferrada Mining Museum, namely the station building, steam locomotives and passenger wagons.

El Bierzo boasts a rich and "relevant" mining and industrial heritage. Ciuden placed the Energy Museum in a building (rehabilitated in 2011) that was formerly the first thermoelectric plant built by MSP in Ponferrada nearby the Sil River that was in operation between 1920 and 1972. The museum tells the story of coal's relationship to energy from technological and social points of view. Ciuden has a second museum phase pending with the Carboniferous Forest project that will be located in the former Compostilla I thermal power plant.

The Fabero mining basin is set to being declared an Asset of Cultural Interest with the category of Ethnological Complex (Official Castilla y León Gazette Issue No. 128 of 5 July 2019). Work was carried out a few years ago to reassess the Julia Well in the municipality and steps are now being taken to expand the former Hospital of the company Antracitas de Fabero.

While describing every single element is beyond the scope of this report and, with the risk of omitting some element of abundant cultural and historical-artistic value for the heritage of the Comarca, the following is a list of assets (many declared as Assets of Cultural Interest or other recognition) and museums in no particular hierarchy or chronological order.

Table 16. Selection of the historical-artistic cultural heritage of El Bierzo

Pinturas prehistóricas (Sésamo, Librán)	Castros de Chano (Peranzanes)	Castro Ventosa (Pieros)
Las Médulas, Patrimonio de la Humanidad (UNESCO), con sus explotaciones y red de canales	Rollo de Justicia (Toreno)	Iglesia mozárabe de Santo Tomás de las Ollas
Valle del Silencio, donde San Fructuoso y San Genadio fundaron sus cenobios (al sur de Ponferrada)	Iglesia de Santiago de Peñalba, mozárabe (Peñalba de Santiago)	San Pedro de Montes (Montes de Valdueza), cuyo origen se remonta al siglo VII
Santa María de Vizbayo, románico (Ponferrada)	Iglesia de san Esteban, románico (Corullón)	Herrería de Compludo (Compludo) y otras herrerías (valle del Selmo)
Iglesia de la Anunciada (Villafranca del Bierzo)	Iglesia de san Nicolás (convento de los Padres Paúles), barroco (Villafranca del Bierzo)	Monasterio San Andrés (Vega de Espinareda)
Castillo de los Templarios (Ponferrada)	Castillo de Cornatel (Villavieja, Priaranza del Bierzo)	Castillo de Villafranca del Bierzo
Castillo de Sarracín (Vega de Valcarce)	Museo del Ferrocarril (Ponferrada)	Museo de la Energía (Ponferrada)
Museo de la Radio (Ponferrada)	Museo del Bierzo Alto (Bembibre)	Lago de Carucedo
"Medulillas" de La Leitosa (Paradaseca) y Yeres (Puente de Domingo Flórez)	Pallozas (Ancares, Campo del Agua)	Localidad de Colinas del Campo de Martín Moro Toledano

Nature tourism has a privileged role in the region, in the Biosphere Reserves (UNESCO) of the Laciana Valley and Ancares Leoneses. The recognition of this category is a guarantee of the existence of important natural and cultural values born from the sustainable use and management of these spaces over centuries. The Comarca also has the Sierra de Ancares Nature Reserve and the Las Médulas Natural Monument; The Natura 2000 Network includes numerous areas in the region as Special Bird Protection Zones and Sites of Community Importance.

Sport tourism has been gaining followers and, in this regard, El Bierzo has held races and events for years, including the prominent 101 km Peregrinos (held in April with over 3,000 participants), Alto Sil (limited to 490 participants), Crossing of the Aquilianos Mountains (over 500 participants) or the 21 Moons, which attracts over 500 runners in every June.

The city of Ponferrada also charms tourists with its prominent castle. In 2018, the city tallied 130,000 visitors, and holds attractive celebrations such as Templar Night, which is now in the declaration phase to be recognised as a festivity of Regional Tourist Interest.

Finally, the new Planeta Sound project is set to be launched in July 2019. Ponferrada will host this Indie music festival from 19 to 21 July as El Bierzo's premiere showcase event.

The National Statistics Institute reports that tourism in Ponferrada remains virtually steady in terms of amount of travellers and overnight stays, though there are slightly less foreigners compared to Spanish visitors. Hotel establishments and employed staff also follow this trend. The seasonal peaks centre around Holy Week (Easter) and summer months.

Table 17. Tourism in Ponferrada. Amount of travellers and overnight stays. Estimated hotel establishments and employed staff

	2016	2017	2018
Travellers	118,000	109,994	-
Overnight stays	182,000	171,000	-
% Spanish visitors	78.3	81.9	-
% foreigners	21.7	19.1	-
Overnight stay per traveller	1.54	1.55	-
Estimated hotel establishments	27	-	20
Employees	151	-	146

Source: INE, 2019; inhouse

Within the context described above, in 2019, the National University of Distance Education (UNED) is partnering in a consortium with the government of León, El Bierzo Regional Council and the City Council of Ponferrada to promote the creation of a Chair of Sustainable Tourism and Rural Development. An office based in Ponferrada to shore up the territory, seeking to strike a balance between the different sectors of economic activity that can be exploited in the region and thus take advantage of the enormous potential of El Bierzo's fertile richness.

The regional administration has a 2019-2023 Castilla y León Strategic Tourism Plan, aiming to establish a tourism policy management tool adapted to the new reality of the destination and demand trends, with an annual budget of over €65 million. The Department of Culture and Tourism awards grants to promote the quality of the tourism sector. In 2019, €1.5 million has been allocated for tourist accommodation and catering establishments, active tourism companies and travel agencies, establishing priority action areas for various socio-economic and/or production circumstances; thus broadening the areas of action of the Economic Dynamisation Plan for Mining Municipalities. In 2019, this Department gave €2 million in subsidies

to Local Entities with a population of less than 20,000 inhabitants to improve the quality of their tourism infrastructures.

Logistics

In different economic and political areas, this regional territory is considered to have great potential in the logistics sector because of its location and communication infrastructures.

Thus, for example, in 2007, the government of Castilla y León developed the CyLoG model with a Regional Logistics Strategy, therein defining a series of corridors and enclaves with the ultimate goal of having this sector help make the autonomous territory more competitive. In this Comarca, this model proposed a centre in Ponferrada that was not developed. A similar fate occurred with the planned Toral de los Vados Multimodal Logistics Platform, formulated in 2009-2011. Thus, the logistics potential has not materialized in effective projects.

Power plant área in planning instruments: rules and scenarios

- Cubillos del Sil. Urban planning legislation
- Ponferrada. Urban planning legislation
- Distribution of land categories in the Compostilla II area
- ENDESA. Valid authorisations

The planning legislation for the municipalities where the thermal power plant is located (Cubillos del Sil and Ponferrada) is drawn up according to the Castilla y León Urban Planning Act (Law 5/1999 of 8 April) (Official Castilla y León Gazette of 15 April 1999).

Cubillos del Sil has Municipal Planning Standards, and Ponferrada has a General Urban Planning Plan.

The Cubillos del Sil Municipal Planning Standards were approved in 2004. Industrial use is considered within Urban Land and, with 79,103 ha, is constituted by the Endesa facilities. The development of three sectors was planned in the Industrial Urbanisable Land, namely: El Bayo, El Canal and El Cachón. These standards include the authorisation, in the industrial land occupied by Endesa, of conservation, maintenance, consolidation, repair, rehabilitation, restructuring, reconstruction and replacement of facilities, demolition or earthworks.

In Ponferrada, the General Urban Planning Plan approved in 2007 is the result of the revision of the 1989 General Plan and focuses primarily on urban issues, with a broad development of these regulations. As industrial land, the Plan contemplates La Barca, Montearenas, Bierzo Industrial Park, Cantalobos and La Llanada. It adds a sector for the expansion of the steelworks company Roldán and a space for the possible implementation of a logistics centre.

The Compostilla II thermal power plant is located in two municipalities: southern Cubillos del Sil and northern Ponferrada. It therefore participates in two territory management instruments.

The regulations in both cases respond to Castilla y León Urban Planning Act (Law 5/1999 of 8 April) (Official Castilla y León Gazette of 15 April 1999), whose article 33.2 specifies the categories of General Urban Planning Plans that must be drawn up for municipalities with a population equal to or greater than 20,000 inhabitants and Municipal Planning Standards, mandatory in municipalities with a population equal to or greater than 500 inhabitants that do not have a General Urban Planning Plan.

Ponferrada therefore has a General Urban Planning Plan, while the regulations of Cubillos del Sil still remain in the category of Municipal Planning Standards.

In both cases, these planning figures were developed in a context in which the government of Castilla y León had proposed the creation of Territorial Planning Guidelines that, while serving as a framework, were never approved. In the case of El Bierzo, these Guidelines resulted in a thorough study of the territory. Given that

they were not approved, the work was published as a White Paper with the title of “El Bierzo. Dynamic space, complex territory”.

The cited Guidelines defined headings for functional areas, followed in the hierarchy by the hubs of territorial interest and intermediate service hubs. Ponferrada thus appeared as a regional seat, as an urban node, while Cubillos del Sil was considered in the work proposal as part of a single urban area with Ponferrada, along with other municipalities, for the purpose of coordinating its urban, transport plans, infrastructure development, activity and residential spaces.



Cubillos del Sil. Urban planning legislation

Cubillos del Sil's Municipal Planning Standards have an agreement date of 27 August 2004 and approval date of 8 October 2004. These standards contemplate 11 classes or types of land: Urban Land (Consolidated and Unconsolidated); Urbanisable/Buildable (Delimited and Not Delimited); Rural (Common, Urban Environment, with Traditional Settlement, Agricultural Protection, Infrastructure Protection, Natural Protection, Special Protection)

This approach does not expressly indicate the figure of industrial land, which was included under Urban Land. As such, the space occupied by “the facilities of Endesa (industrial urban land)” is described on page 26 of the report. With this category, the Industrial Building on Urban Land occupies 79,103 h.

This report indicates that the SUC-I Industrial essentially comprises “Endesa facilities, specifically the zones consolidated by buildings and facilities” (p. 113), corresponding with the cited 79,103 h.

The legislation include the authorisation, in the industrial land occupied by Endesa facilities, of conservation, maintenance, consolidation, repair, rehabilitation, restructuring, reconstruction and replacement of existing facilities, and demolition or earthworks. For extension or new plant works, justification must be given, substantiating the suitability and adequacy of the adopted solution, including compliance with applicable sector legislation” (Report, p. 129), and extensions or modifications to industrial urban land are subject to Article 58 of the Castilla y León Urban Planning Act (Law 5/1999 of 8 April).

In the category of Industrial Urbanisable Land, this legislation contemplated the development of three sectors: El Bayo (237,460 h), El Canal (13,544 h) and El Cachón (13,664 h). One of them was developed to a certain degree of success.

We must also take into account that the legislation per se allows for industrial use in the Common Rural Land category, though it is expressly prohibited in the rest of the categories.

The planning indicated so far has undergone some partial modification. A significant amendment was made in 2008 (18 December) to reclassify a total of 89,967 m² in the Campo Corrales site, in the immediate vicinity of the thermal power plant facilities, from Rural Agricultural Protection Land to Delimited Urbanisable Land with predominantly industrial use. The purpose is to fulfil the corresponding agreement to streamline the installation of the CO₂ Capture and Storage Technology Research Centre promoted by the Fundación Ciudad de la Energía (CIUDEN).



Ponferrada. Urban planning legislation

The effective General Urban Planning Plan is the result of a revision of the 1989 General Plan, which was approved on 22 May 2007 (Official Castilla y León Gazette Issue of 29 May 2007). The records state this revision as “Ponferrada General Urban Planning Plan: revision and adaptation. Consolidated document of final approval”.

The Cubillos del Sil Standards were drawn up according to the cited legislation of the Autonomous Community, namely the Castilla y León Urban Planning Act (Law 5/1999 of 8 April) (Official Castilla y León Gazette of 15 April 1999). The Ponferrada Plan has the same categories that we have commented for Cubillos del Sil, differing in its addition of Rural Land of Cultural Protection.

Although it is a very large municipality, with much of its territory in rural areas, the Plan mainly focuses on urban issues, with a broad development of regulations in this regard. The Plan has had partial and some substantial amendments over the years, such as the amendment associated with the development of the “Energy Museum” in 2011, with the assignment of land and facilities of the erstwhile Compostilla I thermal power plant and the installation of Energy Museum in the erstwhile thermal power plant of Minero Siderúrgica de Ponferrada (MSP).

As generic industrial land according to the Plan report, Ponferrada had five industrial complexes, namely La Barca, Montearenas and Bierzo Industrial Complex in Ponferrada; Cantalobos in Fuentesnuevas; and La Llanada in Santo Tomás de las Ollas (p. 114).

In addition to the foregoing, the cited report contemplates the La Llanada Industrial Sector as industrial occupation (p. 35), a sector for the expansion of the steelworks company Roldán (p. 65) and addresses a space with partial industrial use in the “Energy Technology Park” as a “reserve of opportunity” in Non-Delimited Urbanisable Land (Rural), and the possible implementation of a Logistics Centre (p. 68) that meets the needs of the project of the CyLog Network of the government of Castilla y León. Reference is also made (p. 69) to the El Bayo Complex bordering the municipality, particularly in the Cubillos del Sil municipality.

The space occupied by ENDESA in the municipality of Ponferrada is on Rural Land designated as “Common Non-Urbanisable Land” with Grades 2 and 3, and a sector of “Mountain Summit Ecosystems” and another small area of “Riverside Vegetation”.



Distribution of land categories in the Compostilla II area

We, in turn, digitised the “Perimeter plots owned by ENDESA Generación” and the land use assignments of the two municipalities from the pdf document “UPT COMPOSTILLA_v02 3”, delivered by ENDESA. This digitisation may be subject to errors inherent in the method used.

The digitalisation of the space encompassed by the perimeter and the uses assigned in the planning give us a total area of just over 348 ha; approximately 46.99% in the municipality of Cubillos del Sil and the remaining 53.01% in the municipality of Ponferrada. There is thus a discrepancy with the data provided by ENDESA when

they indicate an area of 330 ha. The uses assigned in the planning of the two municipalities are divided into 7 categories.

Table 18. Distribution of the land occupation of Compostilla II in the municipalities of Cubillos del Sil and Ponferrada, according to land types

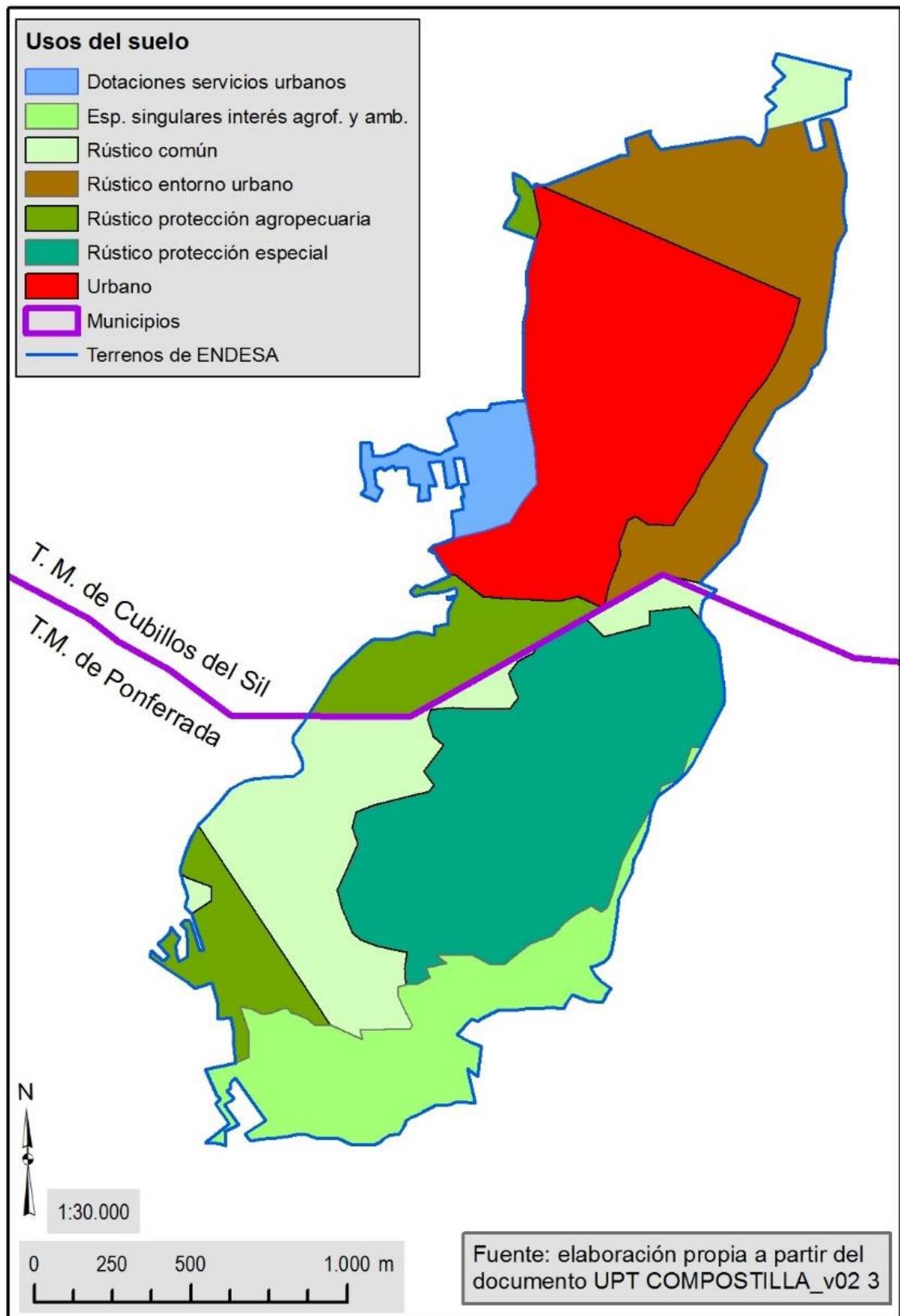
	Area (ha)			Percentages		
	Cubillos	Ponferrada	Total	Cubillos	Ponferrada	Total
Special protection rural	0	83,170	83,170	0.00	23.89	23.89
Urban	78,577	0.000	78,577	22.57	0.00	22.57
Common rural	4,345	46,123	50,468	1.25	13.25	14.50
Urbanised rural	49,160	0,000	49,160	14.12	0.00	14.12
Singular spaces of agro-forestry and environmental interest	0	41,060	41,060	0.00	11.79	11.79
Rural agricultural protection	19,629	14,199	33,828	5.64	4.08	9.72
Allocated urban services	11,904	0.000	11,904	3.42	0.00	3.42
TOTAL	163,615	184,553	348,168	46.99	53.01	100.00

Source: inhouse digitised based on UPT COMPOSTILLA_v02 3.pdf

Chart 24. ENDESA lands in Cubillos del Sil and Ponferrada



Chart 25. ENDESA enclosure land categories



As regards the municipality of Ponferrada, Rural Land occupies most of the surface, in different categories, namely Rural Land of Special Protection, which occupies 24% of the total entirety corresponds to the municipality of Ponferrada. We see that there are landfills and dumpsites on this land type; another part of these facilities is located in Common Rural Land and in Singular Spaces of Agroforestry and Environmental Interest.

According to this spatial analysis, Urban Land occupies most of the part in the municipality of Cubillos del Sil, with the main facilities of the plant: power generation groups, transformation units and annexed facilities (buildings, chimneys, cooling towers, distribution station, unloading zone and coal deposit, etc.). Coal reception and deposit facilities are on Urbanised Rural Land. Turning to the other categories, there is a significant occupation of nearly 12 ha by Urban Services Endowments, i.e., the Compostilla II water treatment plant.

There are thus three clearly separate areas:

- a) Carbones Park, almost entirely on urbanised Rural Land (Cubillos del Sil)
- b) Area with generation groups and annexes on Consolidated Urban Land, with the category of Industrial Urban Land (Cubillos del Sil)
- c) Dumping zone with various subcategories of Rural Land (Ponferrada)

Upon examination, we see that the report on the Cubillos del Sil Planning Standards contains guidelines for the “Industrial Building” on industrial urban land with a series of characteristics of buildable, occupation, heights, etc.

Expressly, these Cubillos del Sil Standards state that “in the existing industrial urban land occupied by Endesa facilities, authorisation may be given for conservation, maintenance, consolidation, repair, rehabilitation, restructuring, reconstructing and replacement of existing facilities, and demolition or earthworks. For extension or new plant works, justification must be given, substantiating the suitability and adequacy of the adopted solution, including compliance with applicable sector legislation”.

For any extension or modification of industrial urban land, Article 58 of the Castilla y León Urban Planning Act (Law 5/1999 of 8 April) shall apply (p. 129-130)

What does this mean? To answer that question, insofar as Cubillos del Sil is concerned, almost any action on the land occupied by ENDESA is permitted by urban regulations. In any case, there may be interventions that, in the current legislation, and above the planning regulations, are bound by other types of authorisations, such as those related to Environmental Impact Studies.

In the case of the Ponferrada Plan, we found no references in the reports to possible interventions and/or changes in use in the lands occupied by ENDESA.

ENDESA. Valid authorisations

Finally, ENDESA currently holds the following authorisations for carrying out its activity (brief overview):

- a) Urban Compatibility Report for the municipality of Cubillos del Sil.
- b) Commissioning Certificate for Groups 3, 4 and 5 from the Ministry of Industry and Energy, León Industry Division.

- c) Water concession, with resolution in this regard by the Northern Hydrographic Confederation for the use of 17,370 l/s from the Sil River.
- d) Greenhouse gas emission authorisation from the General Directorate of Environmental Protection and Land Planning.
- e) Integrated Environmental Authorisation from the Department of Public Works and the Environment of the regional government of Castilla y León for discharges and non-hazardous waste.