

# FOR A SURE WIN **INVEST IN ANDALUCÍA**

*invest in*  
**Andalucía**  
SPAIN

  
Andalusia  
moving forward with Europe



**Junta de Andalucía**

Consejería de Transformación Económica,  
Industria, Conocimiento y Universidades

AGENCIA DE INNOVACIÓN Y DESARROLLO  
DE ANDALUCÍA IDEA



## INVEST IN ANDALUCÍA

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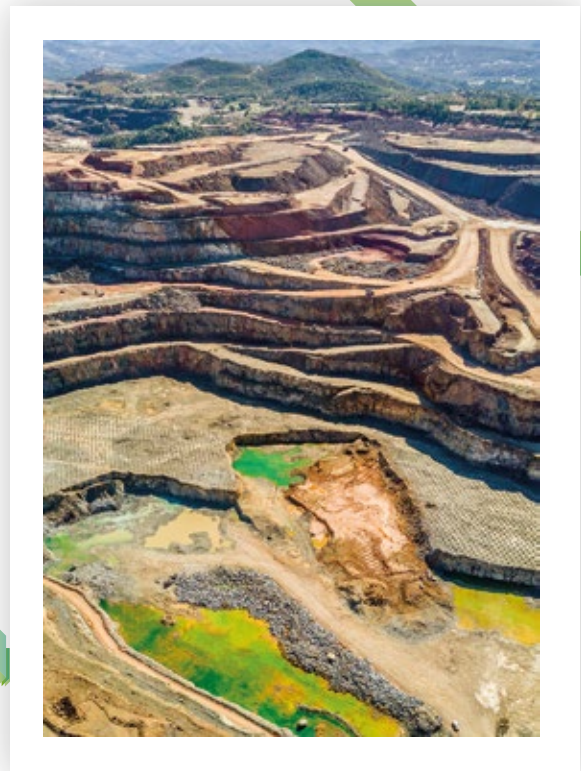
# INVEST IN ANDALUCÍA

The economic crisis caused by the COVID-19 pandemic and climate change have unearthed, more emphatically than ever, the imperative need to accelerate the industrial transformation that began to take shape in the last years of the 20th century.

The Andalusian community has laid the foundations in recent times to move towards this new production model; a model based on knowledge, innovation, sustainability and respect for the environment. Within this new paradigm, the mining sector, which constitutes one of Andalusia's major strengths to face the future, is called upon to play a fundamental role.

Andalusia is a prominent leader in the Spanish mining scene, especially in metal mining. Such is its domain that the region concentrates 90% of the national sales produced therein. The lead, silver, zinc and copper mined in this community leave the region towards the four cardinal points along with other especially appreciated raw materials, such as marble and plaster. And, along the same lines, local mining reaches a figure above 5.7 billion euros in sales abroad to become the undisputed leader in the chapter of exports in the Spanish scene within this industry.

The resurgence of the Andalusian mining industry in the last 15 years contributes decisively to the Community enjoying an excellent position with respect to the new economy of the 21st century. Mining continues to be essential for traditional sectors: it provides the raw materials necessary for construction, for heavy industry, for the manufacture of automobiles, for paving roads ... And it is equally essential for two areas that will undoubtedly star in the next century: ICT and the renewable energy sector.



Thus, the rich production of copper and zinc and the extensive reserves of these key metals for the energy transition and the electronic revolution generate excellent prospects for mining companies based in Andalusia. Even more so considering that many European Union countries, such as Finland, Portugal, Ireland, Italy, the Netherlands, France and Austria, have set an end date for coal: 2030.

Euromines, the leading European business association, also maintains that the EU produces only 40% of the mining raw materials it needs. This circumstance means that it has a significant dependence on the outside, especially on countries such as Canada, Australia, Japan, South Korea, Japan and those countries that are grouped in MERCOSUR.

Andalusia faces a challenge: to continue developing its extractive industry to satisfy national and European needs, especially in sectors with the most future, to continue generating wealth and employment.

For this, it has a solid and growing productive fabric, in which large companies play a leading role and which, as a whole, has found in technological innovation, respect for the environment and a commitment to occupational health and safety as the grounding of its activity.

## **A thousand reasons to invest in Andalusia**

This document offers an analytical overview of the myriad of reasons that exist to invest in Andalusian industry, with special attention to mining. Reasons linked to the talent of its citizens, the ability to generate knowledge and technology from this dynamic and entrepreneurial society in southern Europe, the mineral wealth of our territory, the excellent infrastructure and logistics networks in the region and the existence of a productive fabric of first-rate auxiliary companies.



All these factors represent competitive advantages of undoubted value for those who wish to invest and grow professionally from one of the places with the highest living standards worldwide.

To these competitive advantages the role of public institutions in the region must also be added. The Andalusian Government has embarked upon programmes that foster the development of productive sectors identified as strategic. One of them deals with the mining-metallurgist sector.

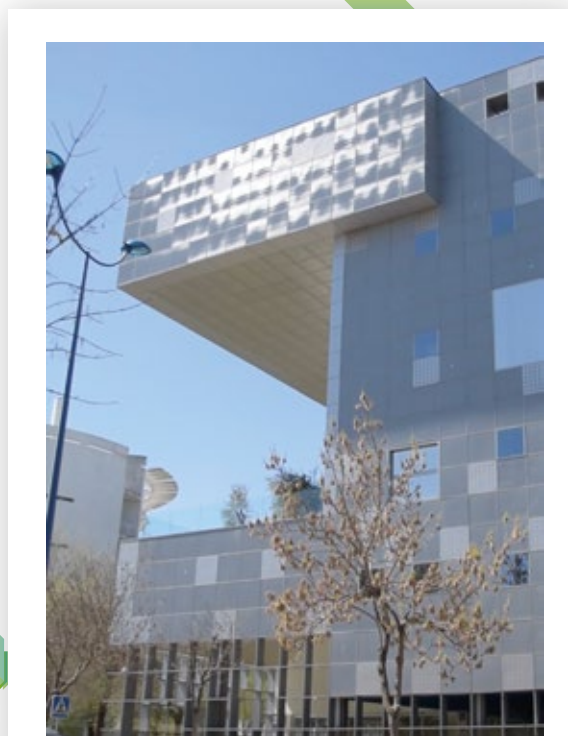
With this aim in mind, Invest in Andalucía was born, an initiative managed by the Andalusian Agency for Innovation and Development (IDEA Agency) that promotes, attracts and consolidates foreign investment in these strategic sectors.

This programme facilitates collaboration between foreign investors and Andalusian companies to increase and develop their businesses in the territory. The IDEA Agency is equipped with a team of highly qualified professionals in its investment attraction unit. This unit's mission is to advise companies and offer tailor-made support in each of the investment implementation phases through an extensive portfolio of services.

## Investor services

**PLANNING PHASE:** In this first phase, Invest in Andalucía provides information to the potential investor regarding sectorial regulations, the industry itself and markets. It advises on the search for a location for the project and facilitates meetings with potential partners, experts and business organisations. It also furnishes information on aid and financing sources on-hand.

**IMPLEMENTATION AND SOFT-LANDING:** in this second phase, the IDEA Agency professionals report on the workforce, employment costs, fiscal aspect, working and residency permits. Furthermore, they serve as a guide to establish contacts with other institutions and bodies. Finally, they guide and monitor the administrative procedures necessary for the activity's start-up and help to identify locally based suppliers.



## AFTERCARE

Invest in Andalusia's work does not end with the opening of the business, moreover it continues through the assessment of business development expansion plans.

### **Choose wisely, invest in Andalusia**

Invest in Andalusia also includes the mission of making the strengths and enormous potential of Andalusian industry known abroad; a fact that often goes unknown and is overshadowed by the enormous powerhouse of the Andalusian branding linked to history, culture, folklore and its breath-taking landscapes.

Andalusian companies and investors have in the IDEA Agency and in this programme, therefore, a tool with which to connect, to grow together in Andalusia and, from there, a window onto the world.

Against this backdrop...

**CHOOSE WISELY.  
INVEST IN ANDALUSIA.**







01

ANDALUSIA, A  
COMPETITIVE SOCIETY.  
AN INVESTMENT  
OPPORTUNITY



Andalusia is a land with a history dating back millennia. It is a corner of southern Europe with endless beaches and a privileged climate. Andalusia features a mixed culture, a small homestead of universal artists. It combines monuments with nature, a place for the solace of travellers from all corners of the world. But Andalusia is so much more...

It is a land brimming over with future prospects whose inhabitants take centre stage in a tale of effort, progress and innovation that has one of its most brilliant chapters in the current drive to foster industry.

The region has been undergoing intense economic and social transformation in recent years, based on private initiative and which receives the impetus of the Public Sector Administration.

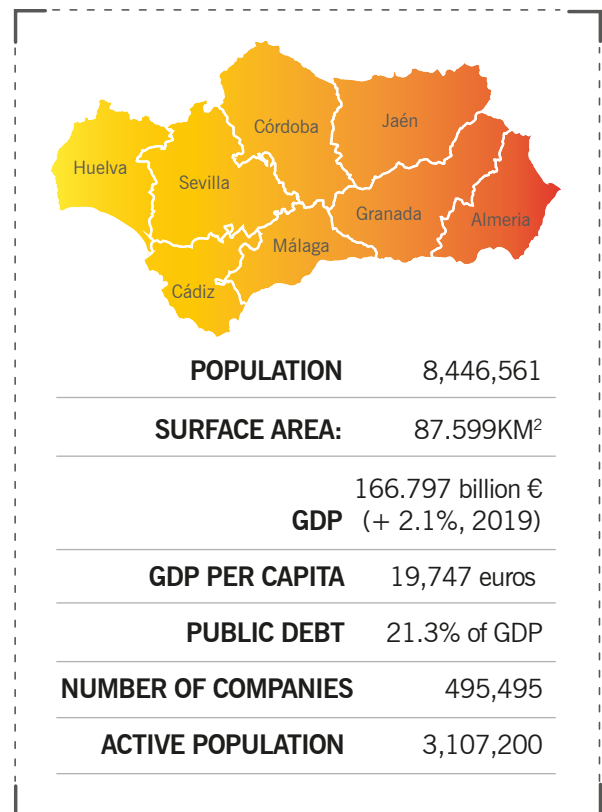
And it is here that international companies and investors enjoy the chance to develop their plans to, with Andalusian talent as an ally, advance in the global market.

Indeed, a significant number of large multinationals from different industrial sectors have already installed their production centres in the region: Atlantic Copper, Abbot, CEPSA, Bayer, REPSOL, Endesa, Heineken, Vida Farma, Acerinox, Cunext Copper, Naturgy, Valeo Iluminacion, Laboratorios Durbán, Danone, Renault, Airbus...

This is a land of opportunity. In fact, there are a thousand reasons to invest in it...

**It is the most populated region in Spain and the second in the European Union. It is a market with enormous scope for potential due to the high number of prospective consumers.**

Andalusia's population is higher than that of certain EU countries, such as Denmark (5,806,081), and similar to that of others, such as Austria (8,858,775).



### ANDALUSIA IS ...

European leader in organic farming production

Third ranked Spanish region in the ICT sector ranking

First ranked in Spain in biomass electricity generation with biomass

First ranked national power in sales in the aeronautical sector

Largest European reserve of non-ferrous minerals

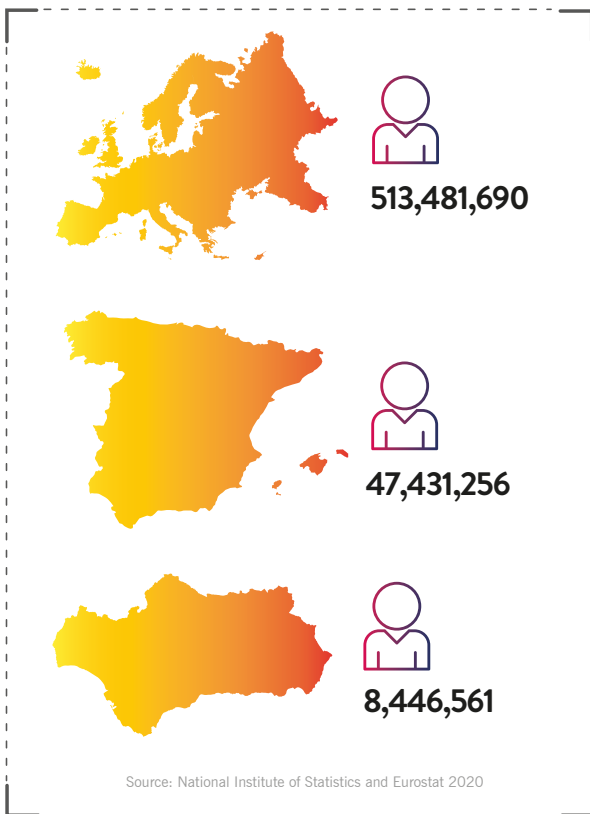
National leader in terms of energy production

Ranked second in Spain in oil refinery  
In the top 3 Spanish of the biotechnology sector

The leading Spanish power in the transformation of non-ferrous metals

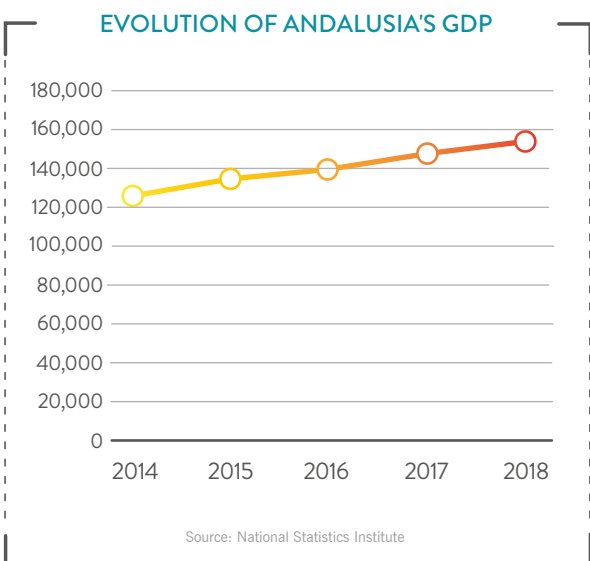
At the forefront nationally for cold generation within the metalworking industry.

Autonomous community featuring two of the main chemical poles in Spain

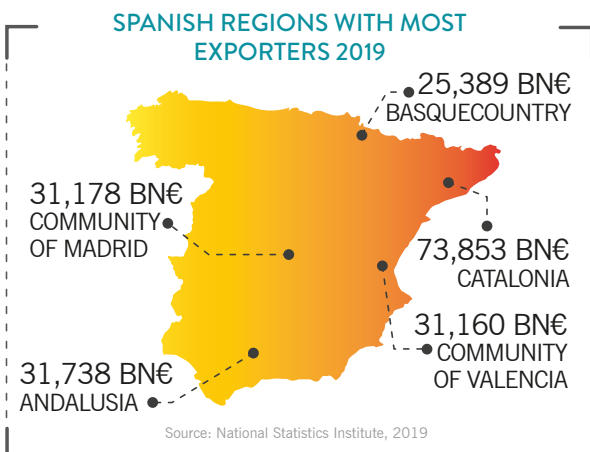


## ANDALUSIA IS THE THIRD RANKED SPANISH ECONOMY IN TERMS OF GDP VOLUME

- Andalusia is the Autonomous Community with the largest active population (3,943,800), ahead of Catalonia and the Community of Madrid.
- It is, among the 17 Spanish autonomous communities, ranked third in terms of contributions to Gross Domestic Product in Spain. Its economic activity accounts for 13.4% of the country's wealth.
- Andalusia has been undergoing hitherto unseen uninterrupted economic growth since 2014. Its GDP has since increased by 2.4% on a year-on-year average.
- The high-tech manufacturing companies in the community have an annual turnover of 16 billion euros (Andalusian Agency of Knowledge, 2017). R&D&i is a key factor in the development of the region.



## SECOND RANKED SPANISH COMMUNITY IN TERMS OF EXPORTS: 31.738 BILLION IN FOREIGN SALES



- Andalusia is the second ranked Spanish Community in terms of exports. The value of its sales abroad amounted to 31.738 BN euros in 2019, 6.808 BN€ more than in 2015.
- Andalusian foreign trade has a positive balance of 1.185 billion euros. This data contrasts with the dynamics of the country as a whole, which has a negative balance of 31.980 billion.

## AT THE FORE NATIONWIDE EN FOR ENERGY PRODUCTION

25,500 Andalusian companies exported goods in 2019. 5,808 of these companies have sold abroad in at least the last four years.

Andalusia had a total of 495,495 companies in 2018, 15,165 more than in 2015.

## EXPORT ACCOUNTS FOR 19.7% OF ANDALUSIAN GDP

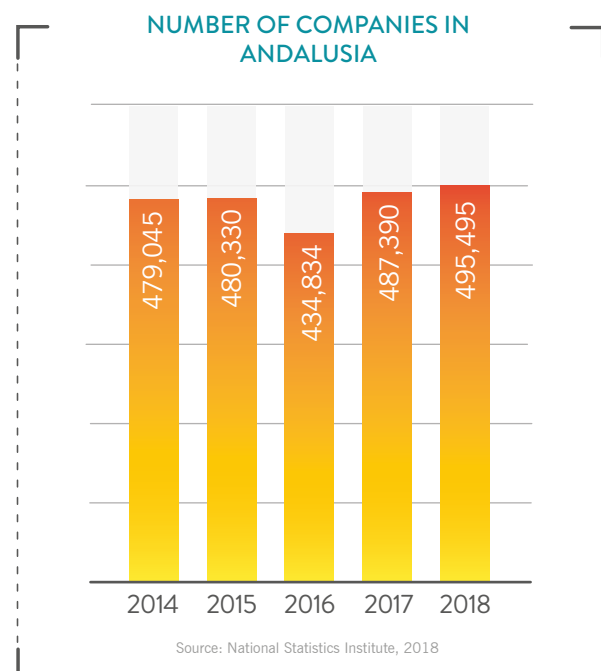
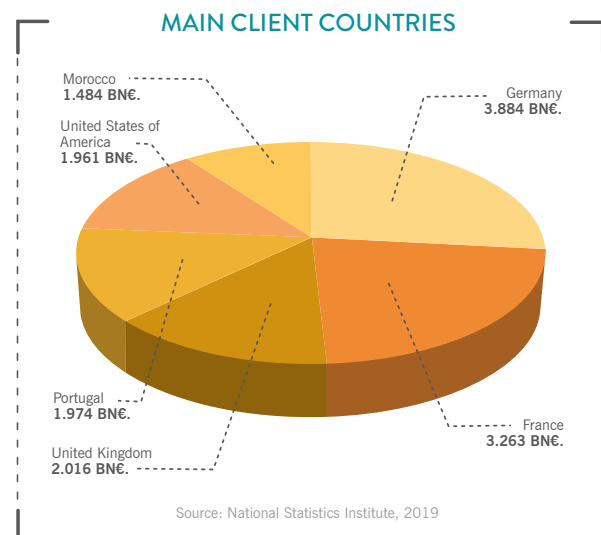
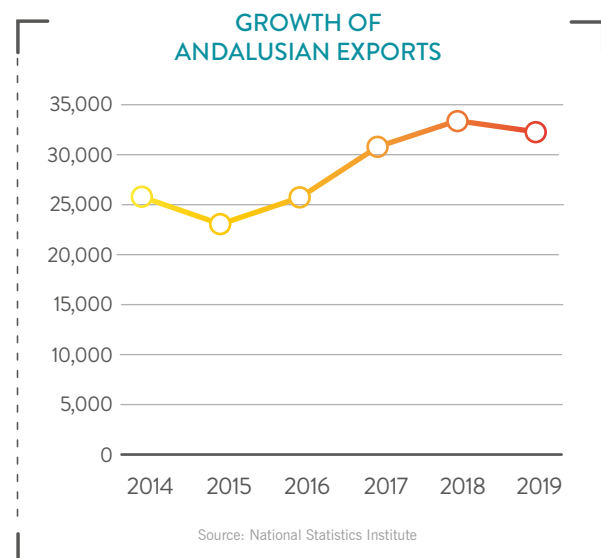
## SECOND RANKED SPANISH COMMUNITY IN FOREIGN INVESTMENT GROWTH

Andalusia is the second ranked Spanish Community with regard to international investment growth rates. In 2019, Andalusia attracted 836 million euros in foreign investment, 82% more than in 2018. 30% of these investments were concentrated in the chemical industry and 24% in the financial services sector. The countries with the highest investment stakes in the region in 2019 were Thailand (30%), the United States (27.1%) and the United Kingdom (4.5%).

For its part, Andalusia invested 65 million euros internationally, 13% more than the previous year. Thus, the region has a favourable net capital receipt balance in 2019 of 771 million euros.

## FIRST RANKED SPANISH REGION IN AERONAUTICAL INDUSTRY SALES

Andalusia occupies the third position in the ranking of the communities in terms of internal expenditure on R&D, with 1.479 billion euros. In fact, the Andalusian Community, Catalonia and the Community of Madrid account for almost 60% of total internal expenditure in Spain within this heading.



## A TERRITORY CONNECTED TO THE WORLD

Between Europe and Africa, between the Mediterranean and the Atlantic, Andalusia gazes onto the world from its privileged geographical location, while its modern and extensive network of infrastructures facilitates international connection by land, sea and air. A determining factor not only for the Community to be a world power in tourism, but also for it to enter the industrial markets on a domestic and international scale.



**AIRPORTS:** Andalusia has five international airports (Malaga, Seville, Jerez, Almería and Granada) and one national (Córdoba).



**PORTS:** there are ten commercial ports in the region: Huelva, Seville, Malaga, Bahía de Algeciras, Cádiz, Bahía de Cádiz, Tarifa, Motril, Almería and Carboneras. Between all of them, they transported more than 160 million tons of merchandise in 2018.



**ROADS:** a network of 2,850 kilometres of expressways and motorways extends throughout the territory.



**HIGH SPEED RAIL:** Granada, Malaga, Cordoba and Seville are linked together by high-speed train and with the cities of Madrid and Barcelona.

## COMPETITIVE ADVANTAGES OF ANDALUSIAN INDUSTRY BY CRISTÓBAL SÁNCHEZ MORALES, GENERAL SECRETARY OF INDUSTRY AND MINING

As is known, Andalusia stands out for its highly developed mining potential, which together with the Andalusian geo-diversity conditions the existence of an important diversity of deposits of mineral raw materials, a circumstance that has made the region a world-class mining power.

That is why Andalusia, in the mining field, is in an extraordinary situation to respond efficiently to the challenges posed by the European Commission, and particularly those posed through the European Green Pact or the well-known Communication with the title of Resilience of the fundamental raw materials: charting the way towards a greater degree of security and sustainability.



Regarding the contribution to the European Green Deal, the need to access resources is shared in order to accelerate the much sought-after ecological transition. In this sense, and as incorporated in said document, one of the prerequisites for making this transition a reality is to ensure the supply of sustainable raw materials by diversifying the supply from primary and secondary sources. Furthermore, among these raw materials, the so-called critical raw materials, which are precisely the subject of the aforementioned Communication, stand out due to their strategic interest.

Precisely, the COVID-19 health crisis is leading many parts of the world to critically review the organisation of their supply chains, especially in cases where the sources of supply of raw materials and intermediate products are highly concentrated and, therefore offer a greater risk of supply disruption. Improving the resilience of critical supply chains is also vital to ensure both the clean energy transition and energy security.

With regard to the foregoing, we share the need to develop resilient value chains for industrial ecosystems, to reduce dependence on original fundamental raw materials through the circular use of resources, the sustainability of products and innovation, being able from Andalusia strengthen the sustainable and responsible sourcing and transformation of raw materials internally in the European Union.

To respond to these challenges, and in order to maximise the effectiveness of public policies aimed at fostering those sectors that are being most affected by the situation resulting from the COVID-19 pandemic, the Government of Andalusia is offering a streamlined, direct and efficient response to the present and future needs that this difficult situation is generating in the regional economy.

Andalusian production within the Ministry of Economic Transformation, Industry, Knowledge and Universities is allowing us to further deepen connectivity between the industrial and business sectors, the scientific research that is developed in the universities and technological innovation with the aim of advancing towards a digital and more sustainable economy.

Furthermore, with the ultimate aim of offering the regional Administration a reliable environment for the development of industrial activity, aligned with the targets set out in the new European Industrial Strategy presented by the Commission for the 2030 horizon.

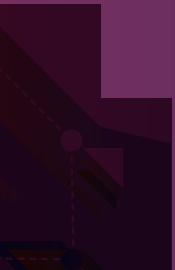
In relation to this environment that encourages investment, we understand that it is relevant to highlight the broad economic and social agreement existing in Andalusia regarding the promotion of the productive sectors, embodied in the Agreement for the Economic and Social Reactivation of Andalusia, of 30 July 2020, signed between the Regional Government of Andalusia and the most representative economic and social agents, which affects, among other aspects, the need to streamline procedures, as well as the need to promote research, development and innovation.

In this way, our resources are being directed to promoting a more sustainable and resilient mining activity model, oriented towards climate neutrality and digital leadership, which acts as a driver of change and innovation.



# 02

ANDALUSIA: TALENT +  
KNOWLEDGE + DECISION =  
LIVING STANDARDS



The Andalusian is a youthful society that enjoys the talent of its citizens as grounding for its growth. Its institutions have decided to back on the generation of knowledge as an engine of development. The foregoing, alongside a wide and excellent network of public services, makes Andalusia offer quality of life to those who wish to live and grow professionally in its territory.

Andalusia is a monument, it is history, a natural setting, a beach, a charming town, tradition, music... Yet it is also a region younger than the Spanish average (41.84 years compared to 44) in which more than 34,000 students graduate from its universities each year.

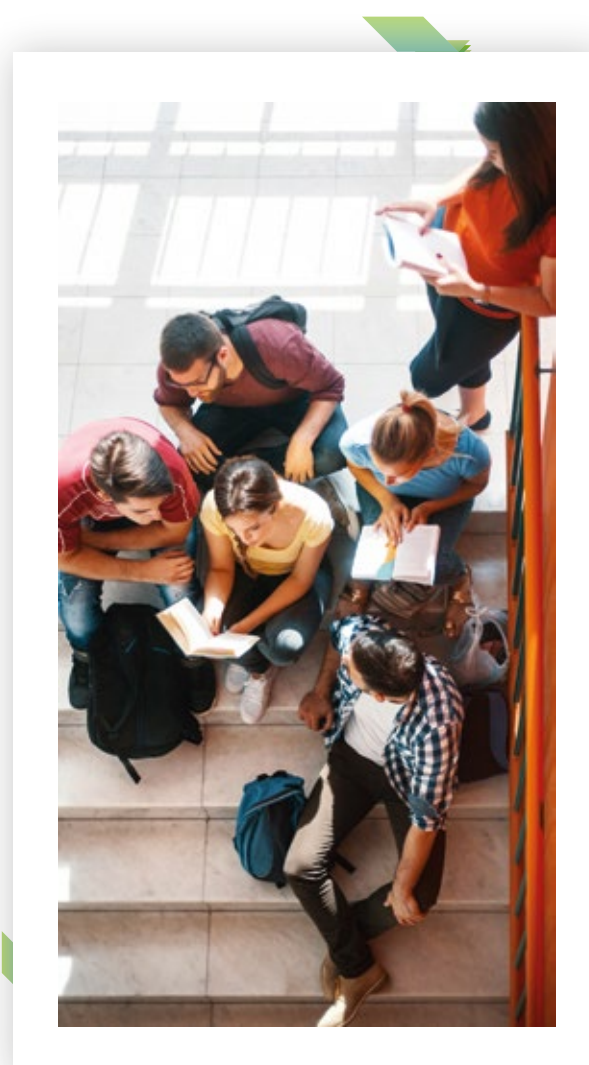
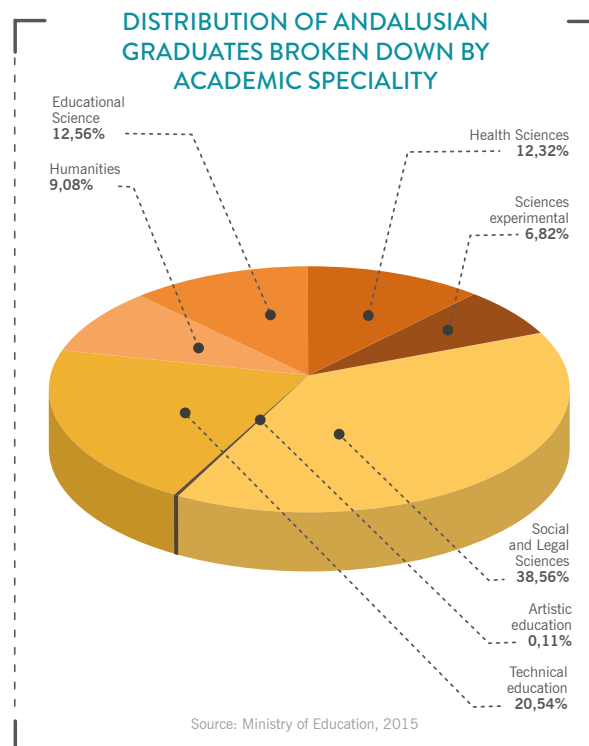
The decision to place talent and the generation of knowledge as bases for development is manifested in important public investments in the university and in the network of parks and technology centres that is spread throughout the region. Spaces, the latter, of cooperation between the Public Sector Administration, universities and the business fabric that are essential to foster knowledge transfer to the production system.

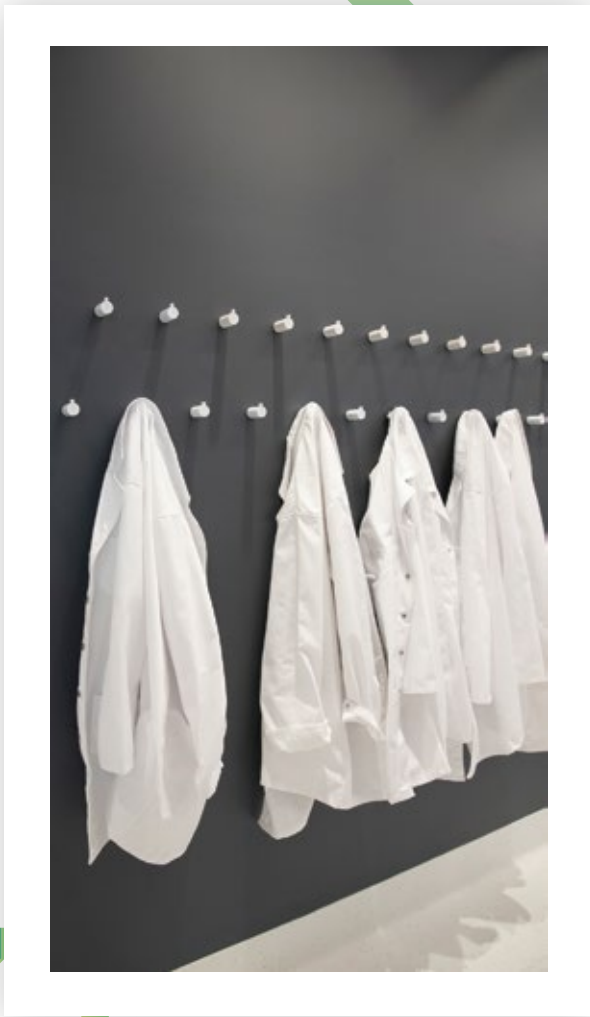
## University

The university plays a key role in the region's knowledge production system, a key ally and with colossal potential for those who invest in its production system.

## THE EIGHT ANDALUSIAN PROVINCES ARE THE SEAT OF AT LEAST ONE UNIVERSITY

In the territory there are 38 university campuses belonging to 11 universities, ten public (Almería, Cádiz, Huelva, Seville, Granada, Málaga, Jaén, Córdoba, Pablo de Olavide University, International University of Andalusia) and one private (Loyola University of Andalusia). Public universities offer 439 undergraduate degrees, 499 masters and 162 doctoral syllabuses in which 250,000 students enrol each year.





Almost 40% of graduates in Andalusia belong to the branches of study of Technical Teaching, Health Sciences, and Experimental Sciences.

Furthermore, universities comprise 86% of the 2,200 registered research groups in the Community.

Half of these 2,200 research groups carry out knowledge transfer to the business system.

## Technology Parks and Centres

Andalusia also has a modern and extensive network of technology parks centres in which companies committed to innovation are based.

### Technology parks:

These venues are innovation ecosystems from which regional strategies are promoted that foster knowledge transfer and technological innovation. They have business incubators and common infrastructure that facilitate cooperation between companies, which receive tax boost for relocating to them.

- Scientific-Technological Park of Almería (PITA)
- Tecnobahía (Cádiz)
- Scientific and Technological Park of Cordoba (Rabanales 21)
- Scientific and Technological Park of Jaen (GEOLIT)
- PCTH Science and Technology Park (Huelva)
- PTS Healthcare Technology Park (Granada)
- Andalusia Technology Park PTA (Malaga)
- Aerospace Technology Park of Andalusia, Aerópolis (Seville)
- Cartuja Science and Technology Park (Seville)
- Soland Business Innovation Park (Seville)

### ANDALUSIAN TECHNOLOGY PARKS IN FIGURES



  
**1,550**  
 COMPANIES AND FIRMS

  
**53,000**  
 EMPLOYEES

  
**321 M€**  
 INVESTMENT IN R&D

  
**6.701 M€**  
 INVOICING

Source: Association of Technology Parks of Spain, 2018

## Technology Centres:

### ALMERIA

- Association of Harvesters Exporters of Horticultural Products of the Province of Almeria
- Experimental station at Las Palmerillas / Fundación Cajamar
- Fundación Mediterránea Company - University of Almeria
- TECNOVA Foundation
- Almeria Solar Platform - PSA

### CADIZ

- Andalusian Centre for Wine-Growing Research
- Technological Skincare Centre-MOVEX
- Technological Agricultural Centre -CTAQUA
- Centre for Innovation in Advanced Manufacturing Technologies (CFA)

### CORDOBA

- Foundation Centre for Agri-foodstuffs Research and Quality of Valle de los Pedroches

### GRANADA

- R + D Free Software Foundation FIDESOL

### HUELVA

- Agroindustry Technology Centre ADESVA

### JAEN

- ANDALTEC Foundation
- Olive and Oil Technological Centre

- Ceramic Technology Centre - INNOVARCILLA

- Metalworking and Transport Technology Centre - CETEMET

### MALAGA

- Andalusian Centre for Nanomedicine and Biotechnology

- Andalusia Tourism Innovation Centre - ANDALUCÍA LAB

- Railway Technologies Centre - CTF

### SEVILLE

- Andalusian Industrial Research and Cooperation Association "F. by Paula Rojas"(AICIA)

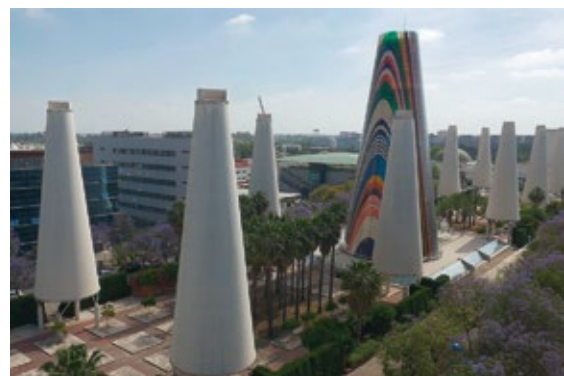
- Centre for New Water Technologies

- Andalusian Committee for Ecological Agriculture

- Technological Corporation of Andalusia

- Foundation for Research and Development of Information Technologies in Andalusia

- Advanced Centre for Aerospace Technologies - FADA-CATEC





# 03

## ANDALUSIA, INDUSTRY AS A MOTOR OF DEVELOPMENT



The primary sector and tourism have traditionally been the main sources of wealth in Andalusia. However, while these sectors continue to stand out for their quality and excellent business figures on a European level, **the community has diversified its economy in recent decades with a firm commitment to industrial development.**

The autonomous institutions have implemented a series of measures aimed at promoting competitiveness, innovation and productivity in the industrial fabric of the region, especially in certain sectors considered strategic due to their characteristics and position in the global economy of the 21st century. Some of them connect with the Andalusian industrial tradition and others are purely disruptive, receiving as a whole a strong modernising boost from within the Public Sector Administration.

These strategic sectors have collaboration from the public in the form of aid, subsidies, financing, infrastructures and advice for attracting investment and internationalisation. In this way, facilitating its development, Andalusia continues on the path of progress and industrial growth to improve its position in the global market.

### **One of those strategic sectors is mining.**

The Andalusian community finds in the richness of its land one of the competitive advantages of this productive activity. **The Iberian Pyrite Belt**, which stretches from Cordoba to Huelva through the province of Seville, represents **the main European reserve of non-ferrous minerals on the European continent.**

This mineral wealth, known and exploited since the most remote antiquity, constitutes the basis on which today a **local metal mining industry is based that in 2019 had a turnover of 3.2 billion euros, 1.3 billion** more than the previous year, according to figures from the Yearbook of AMINER, the leading business organisation in this economic field in the region.





**Andalusia is home to 90% of the metallic mining business throughout Spain**, with copper, zinc, silver and lead as the main extracted materials. The above places the community in an unbeatable position for the current energy transition, in which, above all, copper and zinc are destined to be essential raw materials for the production of equipment and generators.

**In the whole of the mining activity, the Andalusian Community accounts for 38% of total sales**, ranking as the undisputed leader in the Spanish context. And to such an extent it is that it triples the figures of the community that occupies the second position in the ranking.



It is also a national leader in quarry products, thanks especially to the exploitation of marble and gypsum deposits in the province of Almeria, materials that are exported around the world from that corner of the western Mediterranean.

Sales abroad constitute the other factor on which Andalusia bases its leadership within the mining industry. According to EXTENDA figures, **mining in the region exported in 2018** (latest available data) **worth 5.7 billion**, with non-ferrous metal minerals, copper and basic iron, steel and ferro-alloy products as the main materials sold.

The potential nature of critical mineral resources such as cobalt, barite, or antimony and rare earths, now in exploration, or strontium and fluorspar, in exploitation, make this region attractive for investments in these materials with a high technological component.



## THE REST OF THE STRATEGIC SECTORS IN THE REGION

**Chemical.** Andalusia is the third ranked Spanish Autonomous Community in turnover of the chemical industry. It has two large production centres: the Huelva and Campo

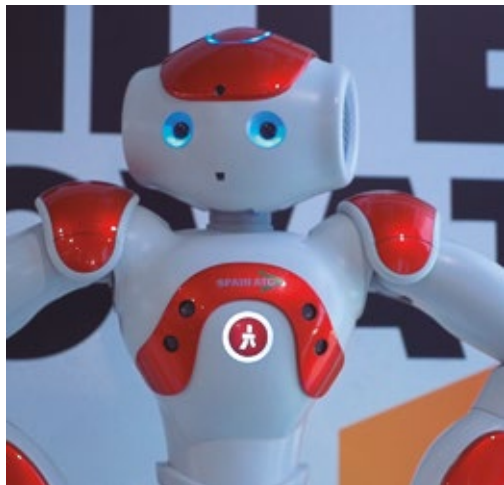
de Gibraltar chemical centres, are national benchmarks in the chemical and heavy industry. The sector generates in the region a business volume of more than 26 billion euros and close to 27,000 direct jobs.

☉ **Metalworking.** Its importance is vital as an auxiliary industry of other fundamental sectors, such as aeronautics, automotive and renewable energy. Its impact in the region translates into 75,000 and more than 9,000 companies that have a joint business volume of around 10 billion euros.

☉ **ITC.** Andalusia is one of the major Spanish powerhouses in the ICT sector. It occupies the third position in the ranking of communities by number of companies (3,300 companies) and by job creation (29,000 jobs) and the fourth place by turnover (3.265 billion euros). Andalusian companies are forging their path on the international market. Indeed, 1,200 companies in the region already export ICT products and services.

☉ **Agribusiness and nutrition.** The industry with the deepest-rooted tradition in Andalusia. Its figures leave no room for doubt about its enormous economic impact: it has a turnover of 17 billion euros, featuring 6,000 companies and generating 67,000 direct jobs. The region is the market leader in Spain in exporting fruits and vegetables and a leader in organic production.

☉ **Biotechnology** The community is the third ranked bioregion in Spain in terms of business volume and number of companies, with more than 600 million euros in turnover and 108 biotech companies in its territory. The Granada Health Technology Park is the catalyst for the significant growth of health biotechnology in Andalusia, which, a pioneer in the world in stem cell research, is consolidated at the international forefront.





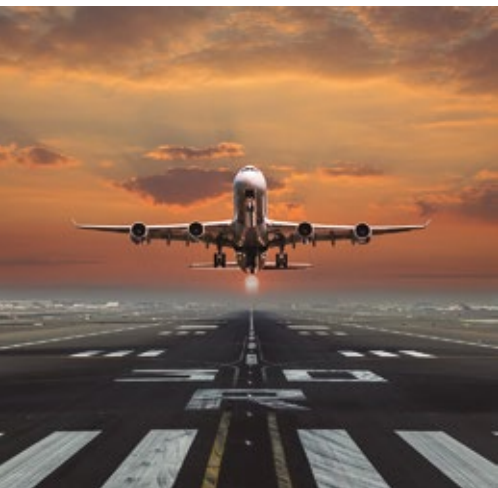
- **Renewable energies and sustainable construction.** The community is a trendsetter in solar thermal and wind energy and the first Spanish Autonomous Community in biomass electricity generation.

Sun, water and wind are abundant resources in the territory and allow us to support a commitment to the production of clean energy as an alternative to hydrocarbons. Andalusia is also promoting the transition towards a more environmentally friendly, more productive and more competitive construction model. These sectors, with more than 1,650 companies in the community, generate 43,000 direct jobs.



- **Logistics.** The Andalusian logistics network covers an area of 1,800 hectares. Its eleven centres interconnected by land and sea represent a sizeable business opportunity for companies in this industrial field.

- **Tourism.** The tourism industry, with revenue figures of 20.5 billion euros, represents 13% of GDP. The rich landscape, the historical and monumental legacy and the 2,800 hours of sunshine, attract 30 million visitors each year from the five continents who have the opportunity to enjoy a regulated accommodation offer of 546,000 beds.



- **Aerospace.** The aerospace sector enjoys more than a century's successful history in Andalusia. The manufacture and assembly of aircraft places Andalusia at the forefront of this industry. It generates a total business volume of 2.5 billion euros and employs almost 16,000 people. The presence of AIRBUS in the region, with the final assembly of the A 400-M and programmes related to the A-320 and the A-350, invigorates a sector of enormous importance in the present and the future.





# 04

## SNAPSHOT OF THE MINING SECTOR IN ANDALUSIA



## A MILLENNIAL HISTORY

The exploitation of mining resources in Andalusia **has its roots in its most remote history**, linked to the different peoples and civilisations that found in it one of the bases of their productive and commercial activity.

Plus, it is not surprising given the mineral wealth of the Iberian Pyrite Belt, a narrow strip of about fifty kilometers wide and 250 long that extends from the limits of the province of Cordoba and part of the province of Seville to Huelva to subsequently enter into Portugal. In this region an intense volcanic activity took place 350 million years ago that left an important mineral wealth in the subsoil.

The oldest sites date back to the third millennium BC. In the southwest of the community, in the current province of Huelva, remains of primitive copper and precious metal exploitations have been identified. In the southeast, in the province of Almeria, small silver mines have been located.

Phoenicians, Tartessians, Greeks and Carthaginians inherited this primeval legacy, although it was the Romans who later elevated mining to the status of true industry. They gave rise, for example, to the Linares-La Carolina mining district, the El Centenillo silver mine, the Riotinto gold and silver operations and the copper mine in Tharsis.

It was at the end of the eighteenth century and especially throughout the nineteenth and first half of the twentieth century, when the **extension of mining and its production took place at the pace set by the Industrial Revolution**.

In the mid-nineteenth century, the Linares-La Carolina mining district took over from the depleted mines of Almeria as the main driving force as a production centre, so that, at the beginning of the twentieth century, this area concentrated 90% of the extraction in Andalusia of an essential metal for the industry of the time.





Solely in that period, the mines of the province of Huelva would receive important foreign investments thanks to its pyrite wealth, a strategic mineral for obtaining copper.

**British financial investment played a central role in the industrial development of the Huelva area.** In 1873, the Riotinto Company Limited began its activity in Riotinto, at the height of the industrial transformation and economic power of the United Kingdom. The largest open pit mine in the world at the time was developed.

The arrival of the British brought profound sociodemographic shifts. The industry acquired an important role in an area until then eminently agriculturally based. Thanks to this, the province became part of the international trade networks with the implementation of the railway.



**The British presence lasted until 1953**, when the Riotinto Mines were returned to the hands of the Spanish State. The Riotinto Company Limited continues to be one of the world's leading mining corporations. And from that British activity there remains an important urban and architectural legacy, today fully integrated into the life of the capital of Huelva and the surrounding towns.

However, **we would have to wait four decades to see the mining industry flourish again in Huelva and in the rest of the Pyrite Belt:** a thriving, innovative sector that is committed to sustainability, respect for the environment and safety to promote development Andalusian economic.



## THE CURRENT ANDALUSIAN MINING-METALLURGICAL MAP

Most of the weight of the Andalusian mining industry falls on the western part of the community, especially in the province of Huelva and part of the province of Seville, where a robust metal mining industry is based, the most important in Spain and southern Europe.

There are currently six active metal extraction mining operations in three locations:

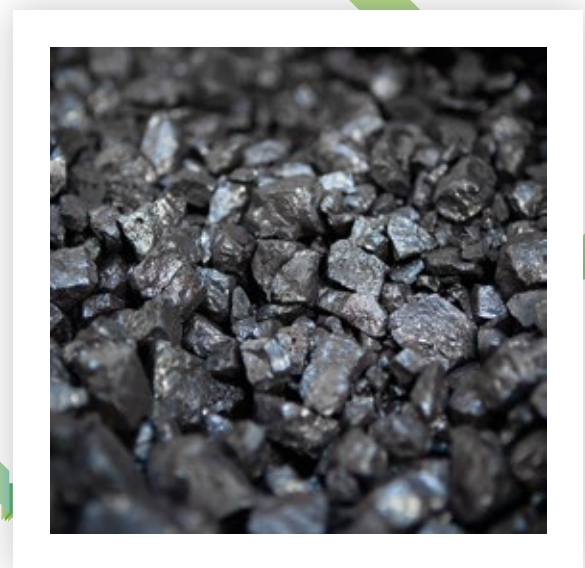
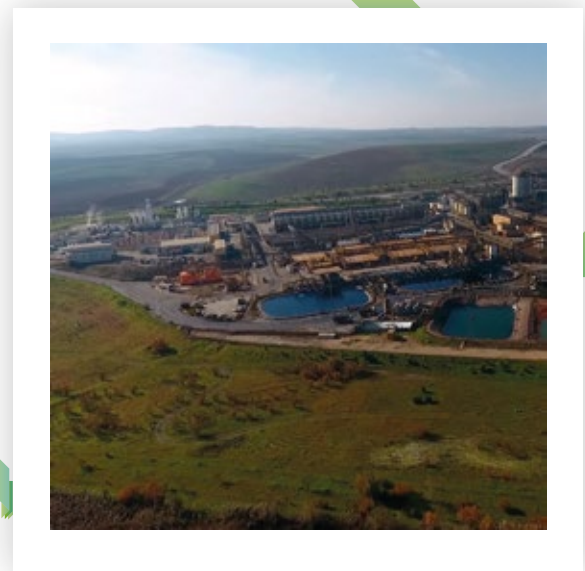
🔦 **Almonaster La Real (Huelva).** In this town in the north of Huelva there is a mining complex made up of the Aguas Teñidas, Magdalena and Sotiel deposits, from which copper, zinc and lead are extracted. The site corresponds to the company MATSA, which carries out a modern and sustainable management of its resources.

🔦 **Riotinto (Huelva).** Deposit located in the southeast of Sierra Morena. It has been declared a Site of Cultural Interest as a Historic Site by the Andalusian Regional Government. It is managed by Atalaya Mining, which extracts, purifies and transports iron, copper and silver from this historic mine, operating both open-pit and deep mining.

🔦 **Cobre las Cruces (Seville).** Located in the province of Seville, in an area that extends between the municipalities of Gerena, Guillena, Salteras and La Algaba. It is an open-pit complex dedicated to the extraction of copper and its treatment by hydrometallurgy, which in recent years has become a benchmark for safe, sustainable and environmentally friendly mining. The company that manages it (Cobre Las Cruces, SA) is owned by the multinational First Quantum Minerals.

🔦 **Alquife Mines (Granada).** The mining complex is located in the province of Seville, in the municipalities of Alquife, Lanteira, Aldeire, and Jerez del Marquesado. In 2020, it obtained the necessary authorisation to partially reopen the iron ore mining operation that was closed almost a quarter of a century ago. Behind this project is the German family Simon.

Furthermore, four other exploitation projects have their opening processes underway in the provinces of Seville, Huelva and Cordoba.



## MAIN ANDALUSIAN COMPANIES IN THE SECTOR BROKEN DOWN BY SALES FIGURES

In Andalusia, according to the Ranking of 1,200 Largest Companies in Andalusia, from the Andalucía Económica magazine, 8 of the 100 companies with the highest turnover in the region carry out activities related to Mining:

8  
RANKING

### ATLANTIC COPPER.

Copper extraction techniques  
Sales in 2019: 1.847 billion.  
Head Office: Huelva.

12  
RANKING

### CUNEXT COPPER INDUSTRIES.

Transformation of copper products. 2019 sales: 1.277 billion.  
Head Office: Córdoba.

13  
RANKING

### GRUPO COSENTINO.

Ornamental stone transformation. Sales 2019: 1.1 billion.  
Head Office: Cantoria (Almería)

29  
RANKING

### MATSA.

Mining.  
2019 sales: 538 million.  
Head Office: Almonaster La Real (Huelva)

65  
RANKING

### COBRE LAS CRUCES.

Extractive mining and copper production.  
2019 sales: 260 million.  
Head Office: Gerena (Seville).

68  
RANKING

### GRUPO ITURRI.

Industrial supplies.  
Sales: 250 million.  
Head Office: Seville.

79  
RANKING

### ATALAYA RIOTINTO MINERA, SA. (ATALAYA MINING).

Mining. Production of copper concentrates.  
2019 sales: 232 million.  
Head Office: Minas de Riotinto (Huelva)

98  
RANKING

### INSERSA.

Public works and extraction of metallic minerals.  
Sales 2019: 179 million.  
Head Office: Minas de Riotinto (Huelva)

The current metal mining map is completed by several projects in the exploration phase:

- **Tharsis** (Huelva).
- **La Zarza-Perrunal** (Huelva).
- **San Telmo** (Huelva).
- **Escacena** (Huelva).

In the last ten years, 127 Metal Mining Research Permits have been granted, which has meant an investment rate in excess of 70 million euros.

## Metalwork

- **Huelva.** One of the flagship companies of the regional industry has its head office in Huelva. It is Atlantic Copper, a firm engaged in the production and refining of copper and which is closely linked to the development of the area. From its facilities on the banks of the Odiel river, it had a turnover of 1.847 billion euros in 2019.
- **Cordoba.** Here is the other great enclave of Andalusian metallurgy. Here is located Cunext Copper Industries, a corporation specialising in the transformation of copper and aluminium for sectors related to the transmission of energy, data or signals, electric motors, the automotive and railway industry, wind farms, industrial motors, electrical appliances, telecommunications, construction, etc. In 2019 this company reached the figure of 1.277 billion euros in sales.

Beyond metal mining and metallurgy, quarry deposits also have special relevance in Andalusia. Plus, in this sub-sector there are two fundamental enclaves, both in the province of Almeria:

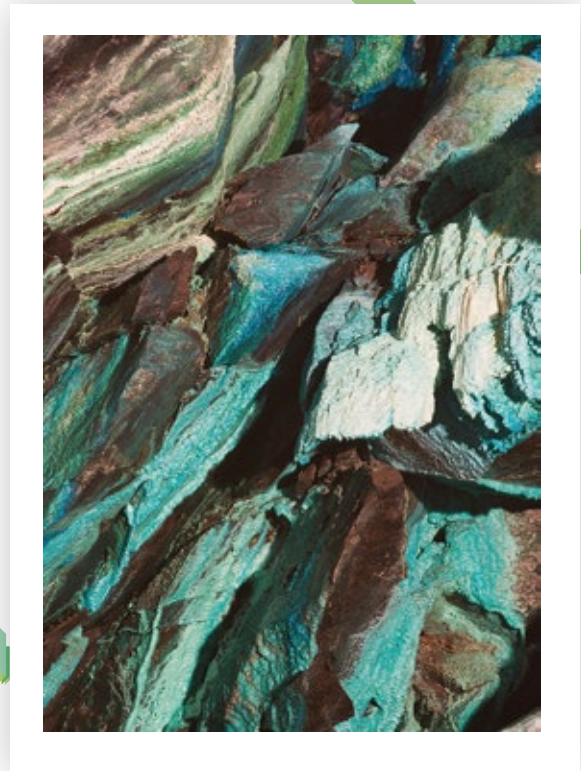
- **Macael.** White marble production centre. Its 120 quarries spread over an area of 6,600 hectares in the Sierra de Los Filabres extract material that reached sales worth 1.142 billion euros in 2019.

- **Sorbas.** Town around which the most important gypsum quarries in the world are located. Of these, 40% of this material is extracted in Spain and 20% of the European plaster.

## COMPETITIVE ADVANTAGES OF THE SECTOR IN THE REGION

Mining in Andalusia finds a series of competitive advantages on which it has built the spectacular growth it has experienced in the last decade and which make future expectations go through even greater development:

- **Mineral wealth.** Andalusia is characterised by the richness of its subsoil, especially in the so-called Pyrite Belt, an area 50 kilometres wide and 250 kilometres long that stretches between the provinces of Cordoba, Seville and Huelva before entering Portugal. More than 300 million years ago, intense volcanic activity took place in this area, which ended up leaving the largest European reserve of non-ferrous minerals and a concentration of sulphides unique in the world.
- **Solid tradition.** Andalusian mining activity boasts five thousand years' history. The different peoples and civilisations that have passed through this land have had a fundamental base of their economic and commercial activity in mining. During the Industrial Revolution of the 19th century, Andalusia became an important enclave for the production of copper and lead. That flourishing period continued until 1953, when British business ceased its activity in the region. However, in the 70s the exploration of the subsoil of the Pyrite Belt began again. That interest has later been transformed into the gradual reopening of previously abandoned projects and the beginning of extraction in new deposits until reaching the current splendour.
- **Resources to be developed.** Mining activity is intense in the community. However, there is still sizable margin for its development. Indeed, as of 2017, only in the province of



Almeria there are a hundred unexploited deposits, with an area of 88,000 hectares and rich in gold, gypsum, baryte, topaz, kaolin, garnet and bentonite, among other materials.

As many as 127 Metal Mining Research Permits have been granted, which has meant an investment rate in excess of 70 million euros.

🔸 **Socio-political backdrop for the industry.** Andalusia is characterised by its political and social stability and by favourable tax structures for the development of large industrial projects.

🔸 **Institutional support.** The Andalusian Government has classified mining as a strategic sector for the community. That is why the Andalusian Regional Government, as the competent administration to regulate the research and exploration of mining resources, promotes innovation, productivity and competitiveness of the companies established in the territory through a programme of aid, subsidies and financing. There are also public bodies, such as the IDEA Agency and Extenda, that support companies in attracting investments and in the internationalisation of their business. All this institutional action responds to the aims set by the 2020 Andalusia Mining Strategy. Such is the importance that the Andalusian Regional Government grants to this industry that since 2012 it has granted 1,140 mining rights over a total area of 730,000 hectares.

The support and commitment to the Andalusian Government sector is also transferred to the desire to simplify, telematise and streamline administrative procedures and streamline the authorisation procedures for mining projects with respect to environmental and urban regulations.

🔸 **Privileged location.** Between Europe and Africa, between the Mediterranean and the Atlantic, the mining industry from this region has easy access to the markets of Europe, Africa and America, hence the excellent results in exports.

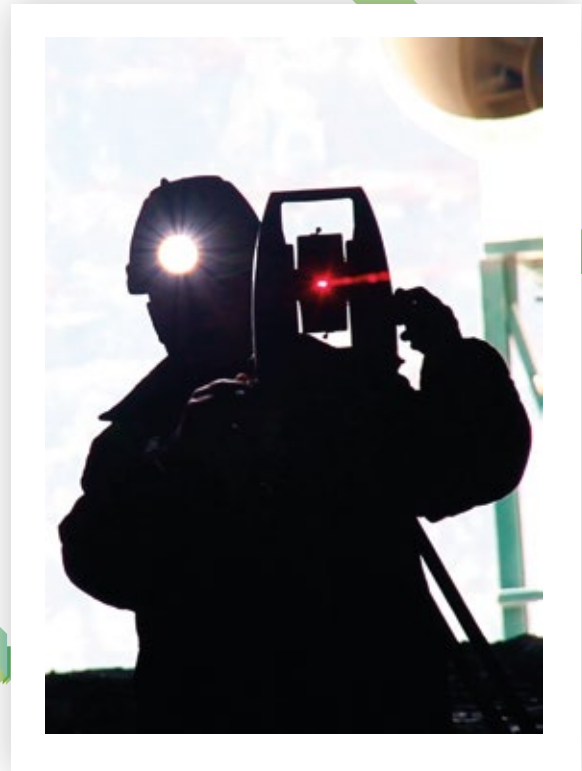


● **Solid infrastructure network.** Andalusia is characterised by its fine logistical endowment and infrastructure for transport, a fact that, together with its excellent geographical location, makes it one of the top exporting communities in Spain. The Ports of Huelva and Algeciras, two of the most important in Spain, represent by themselves a great competitive advantage for the mining industry, which finds in them the starting point to distribute its production nationally and internationally. Both added traffic rates of 46 million tonnes for export in 2018.

● **Marked productive fabric.** Large companies in the industrial mining scene have found in Andalusia an ideal place to continue expanding their horizons. This is the case of First Quantum Minerals, Trafigura or Grupo México, amongst others. These corporations act as a development engine for the sector as a whole and play a decisive role for the consolidation and subsequent growth of an important network of medium-sides service companies, which add value to the sector and generate employment and wealth. To these large firms must be added two other metallurgical companies that also act as boosters to the Andalusian economy: Atlantic Copper (Freeport McMoran) and Cunext Copper Industries.

● **Andalusia is committed to innovation.** It is the third ranked community in terms of allocation of internal spending in absolute terms to innovation: 1.479 billion euros, 644 of this amount being contributed by universities and 549 by companies. Source: National Statistics Institute, 2018). This innovative capacity actually permeates the mining activity that takes place in the region. Several of its development are world benchmarks for the technology they apply to production processes in search of greater efficiency, safety and sustainability.

● **Marked business fabric.** The most important companies in the Andalusian mining sector are organised around an entity, the Association



of Research, Extraction, Transformer, Mining metallurgical, Auxiliary and Service Companies of Andalusia (AMINER).

AMINER's aim is to defend the interests of this industrial sector, the dissemination of the importance of sustainable mining and dialogue with Public Administrations.

All these competitive advantages make Andalusia a mining showcase for the worldwide and major investors that have set their sights set on it. In fact, large international corporations have already settled in the community to manage major projects.

## MAJOR INTERNATIONAL FIRMS PRESENT IN THE ANDALUSIAN MINING SECTOR

**FIRST QUANTUM MINERALS.** Canada-based multinational dedicated to metal mining that is listed in Toronto and London stock markets. 80% of its income comes from copper. It has been involved in projects in Zambia, Turkey, Mauritania, Argentina, Peru and Canada, amongst other countries. It is present in Andalusia with 100% ownership of Minas Las Cruces SA, which in 2019 had a turnover of 260 million euros thanks to its activity in this mining complex in the province of Seville.

**FREEMPORT MCMORAN.** It is the parent company of Atlantic Copper, engaged in copper metallurgy and one of the companies with the highest turnover in the community. Atlantic Copper, based in Huelva on the banks of the Odiel river, had a turnover of 1.847 billion euros in 2019. Freeport is one of the largest natural resource groups in the United States. Based in Phoenix, it is one of the world's largest producers of copper, gold, and molybdenum.

**GRUPO MÉXICO.** Aztec conglomerate dedicated to infrastructure, mining and transportation that, only in the first nine months of 2020, obtained a net profit of 880 million euros. With projects in Argentina, Ecuador, Peru, the United States, Mexico and Chile, it is present in Andalusia



through Minera Los Frailes, a company entrusted with exploring this significant deposit in Aznalcóllar (Seville) and of which it holds 97% of the ownership. Grupo México is the fourth largest copper producer in the world and boasts the largest reserves of this mineral on the planet. It also produces, nonetheless, gold, silver, zinc and selenium, amongst others. Its mining division, Americas Mining Corporation, obtained sales of 5 billion euros from January to September 2020.


**MUBADALA.** Holding investor belonging to the Government of Abu Dhabi and main shareholder, among others, of the giant CEPSA. In 2019 alone, it obtained profits worth more than 12 billion euros. It shares 50% with the Swiss firm Trafigura the ownership of MATSA, Minas de Aguas Teñidas, SA, one of the main companies in the metal mining sector in Andalusia, which in 2019 sold for 538 million euros. Mubadala has expressed its intention to continue committing its presence in this community with the presentation of a project for the development of Mina Concepción, in Huelva, with an investment forecast by the corporation that amounts to 120 million euros.

**TRAFIGURA.** Headquartered in Singapore, it is one of the world's leading logistics and raw materials firms. What is more, it is a leader in the private oil and metals trade. With 80 offices in 41 countries, it is present in Andalusia through MATSA, which it shares 50% ownership with Mubadala. Trafigura has experienced exponential growth in the last two decades. Meaning it has gone from 12 billion dollars in revenue in 2003 to more than 171 billion in 2019.

## ANDALUSIAN SERVICE COMPANIES FOR THE MINING INDUSTRY

An entire ecosystem of auxiliary companies has developed around the industry and mining and the activity of companies specialising in the extraction and processing of minerals that provide their services to them and that contribute to giving robustness to the sector in Andalusia. It is worth mentioning these standout firms:





**ABB.** A benchmark in terms of energy and automation for various industrial sectors, it offers products and services for complete primary production in mining and mineral processing.

**ALS ESPAÑA.** Subsidiary of the international company ALS, a world leader in analytical services, founded in Australia and currently employing 14,000 professionals in 65 countries: This subsidiary was created in Seville in 2005 and offers analysis services for, amongst other sectors, mining.

**CODIMAR.** Flagship Spanish manufacturer of rollers for the mining industry. It is a wholly Andalusian firm with activity since 1995 that exports to Europe, Latin America, the Middle East and the Maghreb.

**CUBICOFF.** Located in Salteras (Seville) and with a delegation in Madrid. Specialist in stress calculation, structural calculation and civil works. It operates in the mining sector, in water desalination and civil works.

**DITECSA.** Comprehensive industrial and environmental solutions, which guarantee the full operation of your facilities: engineering, industrial assembly, maintenance, waste management, cleaning, decontamination, etc.

**MRO SOUTH.** Company located in Seville from where it serves clients from all over the Peninsula. It is engaged in the production of materials for the manufacture and maintenance of machinery earmarked for use in the mining sector, amongst others. It also offers vibration analysis, laser alignment and thermography services.

**NUBE MAQUINARIA.** Company based in Alcalá de Guadaíra (Seville) that offers technical solutions to the industry, manufactures custom machinery and makes modifications for its optimisation.

**ALLERES UMACO.** Company with headquarters in Huelva and a branch office in Seville. It was founded in 1988 to serve the petrochemical and



chemical industry in the installation and repair of industrial vehicles. However, today its main areas of activity are the water and mining sectors.

**TINGEO.** 100% Andalusian company with two decades' experience in the national and international market. Its field of expertise is safe containment through the use of geo-synthetics.

### ASSOCIATION OF RESEARCH, EXTRACTOR, TRANSFORMER, MINING-METALLURGICAL, AUXILIARY AND SERVICES COMPANIES OF ANDALUSIA (AMINER)

This is the leading business organisation in the mining sector in Andalusia. AMINER is a non-profit entity that represents the main companies in the metal mining sector and its associated auxiliary fabric in the community. It is a member, in addition to CONFEDEM, of the National Confederation of Mining and Metallurgy Entrepreneurs.

The entity's purpose is to defend the interests of this industrial sector; disseminate the importance of sustainable mining in the general economic development and particularly of Andalusia, and act as an interlocutor with the Public Administrations, other sectoral and professional organisations and civil society itself.

In compliance with these objectives, as a sample, it acts together with the Andalusian Regional Government as a driving force behind the Andalusian Mining Strategy 2020, the axis around which the policies of the regional government for this industry have been articulated.

Amongst the main activities carried out by AMINER, is the 'Aminer Forum', a meeting place for the different actors involved in the mining-metallurgical sector, which is held biannually and in which the situation and trends of this industrial activity. Plus, alongside this, with special repercussion, the 'Metallic Mining Hall', the International Metal Mining Exhibition, an already consolidated and benchmark meeting



that places Andalusia under the focus of the main international mining companies.

The Metallic Mining Hall held its third edition in November 2019. It was in the Palacio de Congresos de Sevilla and was attended by 900 attendees of 17 nationalities, 150 companies with stands and more than 10,000 visitors. The meeting served to showcase the new horizons of modern-day mining, an industry committed to sustainable development and environmental protection called to play a fundamental role in the future through technological innovation.

### **AMINER business partners**

**AGQ MINING AND BIOENERGY.** This is a research centre located in Burguillos (Seville). It is dedicated to research and the search for innovative solutions in mining and metallurgy to reduce environmental impact. It carries out environmental geochemistry tests and characterisation of mining waste: it carries out analyses of soils, rocks, minerals, discharges, concentrates, and surface and groundwater.

**ATALAYA RIOTINTO MINERA.** This is listed in the London and Toronto stock markets and is wholly owned by Atalaya Mining. It had a turnover of 177 million in 2019 with a total of 400 workers on the staff. Its main asset is copper production in the historic Riotinto mine. The Riotinto Project is currently an open pit deposit that produces 36,000 tonnes of copper annually. It restarted its activity in 2016 after an investment by the company amounting to 200 million euros. The project has generated 500 direct jobs. The forecast is for a working life as far as 2032 exploiting the 153 million tonnes of mineral reserve.

**ATLANTIC COPPER.** With 50 years' history, it is an industrial benchmark in Andalusia and on the international scene. Indeed, it is the leading producer of refined copper in Spain and the third in Europe. It is also at the fore domestically in the production of sulphuric acid, used in mining. Based in Huelva capital, it obtained a turnover of 1.847 billion euros in 2019. It is a true economic



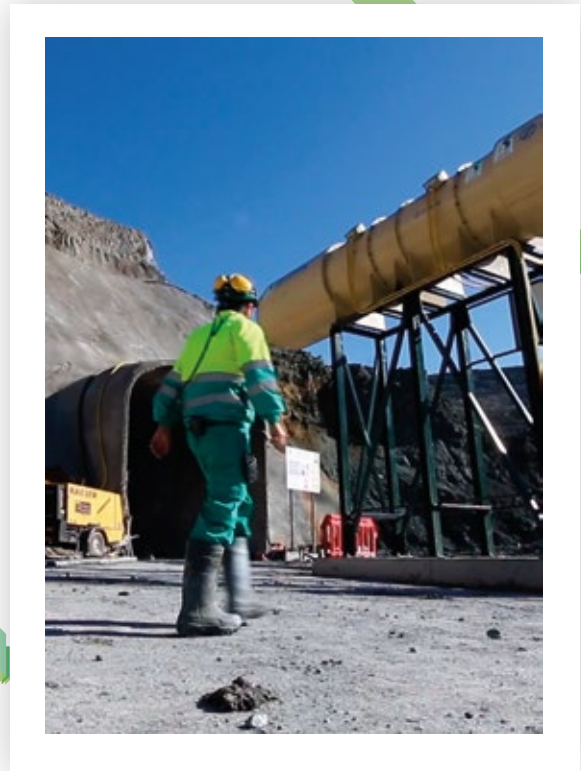
engine for the Huelva province, since it generates purchase and sale operations with 650 companies in the province. It generates a total of 3,000 jobs (direct, indirect and induced).

**AYESA.** Technology services company in the field of engineering, consulting and computer systems. With a turnover of more than 200 million euros per year, it participates in projects in 25 countries and has 4,000 employees. It features a specific division for mining, with which it carries out infrastructure, environment and water projects. It has worked both with the main Andalusian extractive companies and in deposits in Peru, Mexico, Russia and Panama.

**AYMA MINING SOLUTIONS.** Company based in Mairena del Aljarafe (Seville) and specialised in advisory services on design and exploitation operations: safety, productivity, efficiency..... AYMA has collaborated with major firms on the Andalusian mining scene such as MATSA and Aguas Teñidas, amongst others.

**CAUCHOS SAN DIEGO.** Originally a family-run business, this firm with a production centre in Almonte (Huelva) has four decades of history in the supply of rubber and polyurethanes for the mining and chemical industry both nationally and internationally. It provides technological solutions in aspects of design, manufacture and maintenance control to companies in the Pyrite Belt.

**COBRE LAS CRUCES, SA.** This company is owned 100% by Canada's First Quantum Minerals, one of the world's copper leaders. Its turnover reached 260 million in 2019. Cobre las Cruces is a national and international benchmark for its technological innovations and for its contribution to the resurgence of metal mining in Andalusia, today a leading sector for the regional economy. The deposit that it runs is located between the municipalities of Guillena, Salteras, Gerena and La Algaba, in the vicinity of the capital of Seville and west of the Iberian Pyritic Belt. One million tonnes of copper cathodes characterised by their great purity are extracted from it annually.



## **COLEGIO OFICIAL DE INGENIEROS DE MINAS DEL SUR.**

As a Public Law corporation, it collaborates with the Administration, as main tasks, in the management of the regulated profession of mining engineering and on project approval. Furthermore, it arranges activities and events for the dissemination of knowledge of this professional field, as well as for the promotion and social prevention of its members.

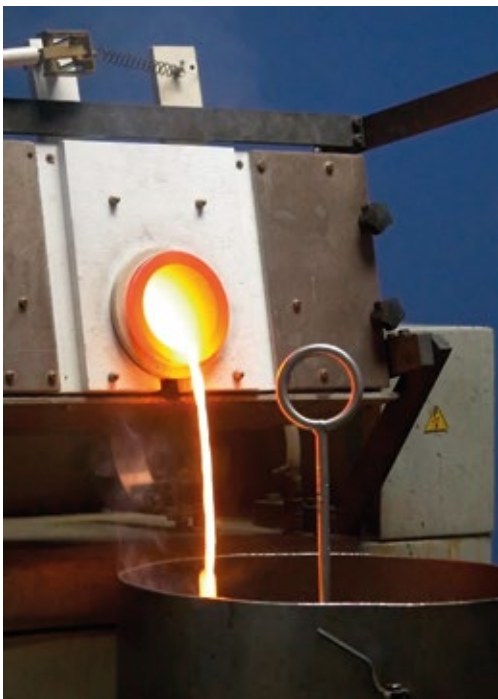
**CONDISEVAND.** Company founded in Guillena (Seville) in 2012. Its main activity is the cleaning of hydrometallurgical products and transportation. Its main client is Cobre las Cruces.

**ERM.** With its head offices in Madrid, Barcelona and Lisbon, it offers solutions oriented to new challenges in sustainability, environment and healthcare. Since 1993, it has been a member of the World Business Council of Sustainable Development (WBCSD), an organisation devoted to encouraging a sustainable future for business, society and the environment in the global community.

**EXPLORACIONES MINERAS DEL ANDÉVALO.** Company whose main activity is the investigation of massive sulfides at great depths using high technology. Most of its projects are undertaken in the Pyrite Belt.

**FL SMIDTH.** Multinational founded in 1882 with headquarters in Copenhagen (Denmark) and 80 offices around the world. It is engaged in the manufacture of equipment for mining and cement plants. It has a global workforce of 10,000 employees.

**IDOM.** Founded in 1957 in Bilbao, it operates steel, mineral processing, energy production and refining plants, while also providing consultancy services. It has a workforce of 4,000 professionals spread over 125 countries on five continents. Amongst the projects carried out by IDOM in the mining sector, the feasibility study of the Los Frailes Mine Project in Aznalcóllar, devoted to the extraction and production of copper, zinc and lead through a differential flotation process is particularly noteworthy. In 2019 it reached 330 million in turnover.



**INSERSA.** Company established in 1988 based in Minas de Rio Tinto (Huelva). Currently its main business areas are mining, tunnels, construction and quarrying. It has delegations in Seville and Madrid, and a subsidiary, Sodira. It has gone from invoicing 22 million in 2012 to 150 million euros in 2019. This growth in less than a decade is based on its permanent workflow in the main mining deposits of the Andalusian community: Rio Tinto, Aguas Teñidas, Magdalena and Sotiel, in Huelva, and Aznalcóllar and Cobre las Cruces, in Seville, although it undertakes prospecting tasks throughout the region and carries out projects in other countries, such as Morocco, France, Portugal, Chile and Panama. It has one of the largest machinery parks for tunnels and mining in Spain. It has a total of a thousand professionals and operates 16 aggregate quarries through its subsidiary.

**IPH.** Huelva company that offers technological solutions for mining, industry and civil works. In the mining sector, it focuses on the digital transformation of the activity. Along these lines, it offers a unique Wi-Fi system in the world inside the mines and the computerisation of the entire process through its own software platform.

**ITURRI.** Seville-based company that was originally dedicated to the manufacture of naval effects. Today its activity is oriented towards the production of industrial supplies, such as footwear, clothing, vehicles, etc. with a workforce of 1,000 employees and operating on four continents. Within the mining sector, it offers solutions in the field of safety, the protection of people, processes and the environment. In 2019, it had a turnover of 240 million euros.

**MATSA.** 50% owned by MUBADALA INVESTMENT COMPANY and TRAFIGURA GROUP, Minas de Aguas Teñidas SA operates three underground mines of great mineral wealth: Sotiel (Calañas), Aguas Teñidas and Magdalena (both in Almonaster La Real). With them, the company has managed to reactivate this industry in the province of Huelva, historically mining. It obtains lead, copper and zinc concentrate from them. It had a turnover of 538 million euros in 2019.

**MAXAM.** Global company with more than 80 industrial facilities, sales in 100 countries and 140 subsidiaries in more than 50 countries. Devoted to the manufacture of explosives, it achieved a turnover of 1.129 billion euros in 2019



## MECWIDE ENGINEERING CHALLENGES.

Portuguese-owned company that operates in the mining, hydrocarbons, cement and energy sectors: It is at the forefront in the development of engineering, procurement and construction solutions.

**MINAS DE ALQUIFE.** This company has the exploitation rights of the so-called Minas del Marquesado, located in Alquife, Lanteire, Aldeire and La Calahorra, in the province of Granada. The one in Alquife is an important open pit deposit of iron oxides (hematite, goethite). This project, after 22 years of closure, has received the Unified Environmental Authorisation and exploitation concessions, meaning that extraction activities are expected to begin in the short term. One of the most important iron deposits in Europe will then be reopened, with an estimated production of four million tonnes per year.

**MINERA LOS FRAILES.** Located in Aznalcóllar, (Seville). It is 97% owned by Grupo México, one of the world's leading companies in the mining industry, the fifth largest international copper producer and holder of the largest reserves of this mineral in Spain. The remaining 3% of the shares are owned by MAGTEL, an Andalusian technology-based company that, apart from the mining industry, also operates in telecommunications, energy, the environment and railways. The company plans to invest 300 million euros in this copper, zinc, silver and lead deposit. With a potential of a thousand jobs for the next three decades, Minera Los Frailes is destined to be the engine of development in this area of the province of Seville.

**MINESUR.** Specialist company from its headquarters in Valverde del Camino (Huelva), among other activities, in the management, advice and execution of mining projects, both open pit and deep, civil works, drilling and blasting support. It operates together with the rest of the companies belonging to the same group (Qualifica2, Geognosia and Perforaciones Noroeste) throughout Spain, Morocco, and Latin America.

**PAN GLOBAL RESOURCES.** Company of Hispanic-Canadian origin that focuses its activity on the mining exploration of mineral resources, especially in its earliest stages. It is immersed in several projects that are currently being developed in Andalusia: Águilas Project (Cordoba) and Escaceña Project (Huelva and Seville).



**SAN MARTÍN CONTRATISTAS.** The company offers mining operation, construction and infrastructure services. Founded in 1990, it has 1,000 professionals and offices in Peru, Colombia and Spain, this one in the town of Guillena in the province of Seville. SANDVIK Swedish multinational company that boasts among its specialties the manufacture of drilling, crushing, loading, cutting and demolition machinery.

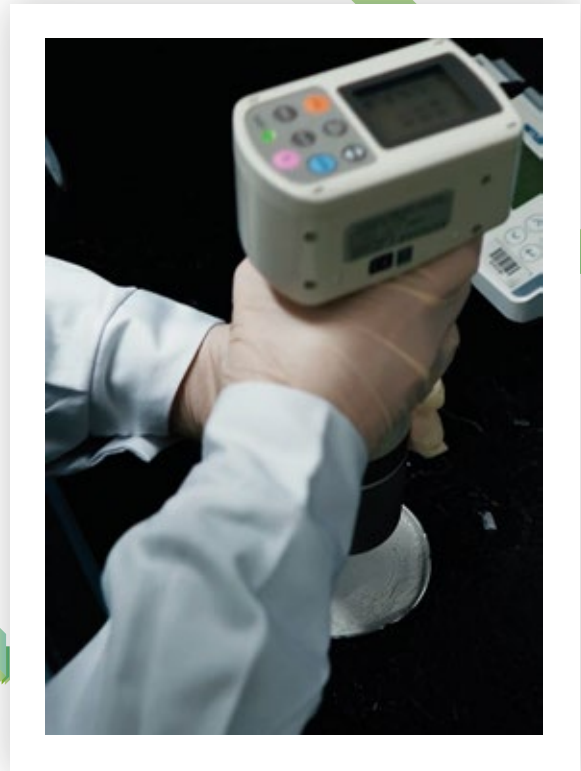
**SSAB.** Swedish multinational engaged in the production of high-strength steel. It has plants in Sweden, Finland and the United States. It has a presence in 150 countries and has 14,000 employees around the world. With a line specifically dedicated to mining, it has announced the short-term start-up of a new industrial project in Huelva.

**SUBTERRA.** With offices in Colombia, Chile, India, Peru and Spain, it is a benchmark in the field of underground works and in tunnel engineering consulting: In addition to the mining sector, it also includes the civil works and energy sector.

**THARSIS MINING & METALLURGY.** It is a consortium formed by two companies: Minera La Hispalense and Nueva Tharsis. It holds an administrative licence to research into an area of 2,000 hectares exploited by ancient civilisations in Paterna del Campo: called the Angeles Research Licence. The companies that make up this company also operate in Mina San Telmo, in the case of Minera La Hispalense, and in Tharsis and La Zarza, in the case of Nueva Tharsis.

**TORSA.** Malaga-based company focused on the design and production of equipment and technological systems with a specific line in mining. It has created, therein, a platform for the centralisation of all operations and a system to prevent accidents and collisions.

**URVA FLUIDOS INDUSTRIALES.** Its head office is located in Seville. Its area of expertise is fluid control in industries such as chemical, agricultural, oil, energy and also the mining industry itself. It has amassed wide-ranging experience in the extraction, transportation and washing of mineral parks (coal, iron, uranium, phosphates, limestone, etc.)





## ANDALUSIA, LAND OF THE FUTURE FOR METALLIC MINING

**LUIS VEGA,**  
PRESIDENT OF AMINER

Metallic mining has been omnipresent in Andalusia. Phoenicians, Tartessians and Romans started the first operations and today our land has become a power, on a European and global scale, in the production of polymetallic sulphides (especially copper, silver, zinc and lead).

In Andalusia, we have the minerals the world needs to meet a demand that will surely continue to grow exponentially in the next three decades. Population growth, the world, urbanisation and development of Electric

vehicles are factors that will increase the use and transformation of metals around the world and we are primed to respond to these expectations.

The exploration, extraction and production processes have advanced notably in recent decades thanks to the new techniques applied in our operations, which have made us an international benchmark in management and innovation of mining-metallurgical processes. The mining activity that takes place in Andalusia is responsible, safe and sustainable, committed to the conservation of ecosystems and their biodiversity and the fight against climate change, in line with the United Nations SDG 2030.

The Covid-19 pandemic has shown our strength and resilience, while, in the face of such unexpected and adverse circumstances, metal mining has revealed its essentiality as a supplier of raw materials for the health, pharmaceutical and energy fields. The mining industry has not stopped during all these months to serve priority and essential sectors of society meaning now, we are facing a new global challenge, that of the energy and digital transformation of the sector, which we also want to lead from Andalusia. The mining industry is a great economic engine in our land, generating wealth and quality employment, offering opportunities that have allowed the population to settle in the territory and providing hope for the future to younger generations. With an annual production that exceeds 17 million tonnes of processed mineral, our industry had a total turnover of 3.2 billion euros in 2019, of which just over half was destined for export, generating around 10,000 direct and more than 30,000 indirect and induced employment posts.

There are currently 6 mining operations operating in Andalusia: Mina de Riotinto, Mina Aguas Teñidas, Mina Magdalena and Mina Sotiel (Huelva), Cobre Las Cruces (Seville) and Minas de Alquife (Granada). Likewise, the opening process is underway for Los Frailes Mine (Seville) and numerous projects under exploration in Tharsis, La Zarza, San Telmo, Escacena, Paterna, Paymogo, La Toscana, Concepción, Valverde del Camino, Beas, El Berrocal, Villanueva de los

Castillejos, Alosno, El Almendro and San Bartolomé de la Torre, amongst other municipalities in Huelva and Seville, as well as in Los Pedroches in Cordoba.

These are mining projects that display the potential of the sector in the productive system of the autonomous community, a territory whose geological wealth still has large and important areas to explore. We are a safe value that will continue to grow in the coming years with investments that will find in our land a safe and trustworthy environment where we can develop cutting-edge mining projects with the most cutting-edge technology available.

In the last decade, our companies have made investments worth 2 billion euros. It is a strident effort, which provides an important return in terms of turnover, but if we want to continue advancing to be more competitive, we must also become more efficient.

That is the path that marks the energy and digital transformation in which we are immersed. Our industry is already incorporating new processes to guarantee the sustainability of operations through continuous improvement in the management and efficient water consumption, implementing new viable and sustainable solutions for mineral treatment, developing even cleaner technologies capable of recovering residue metals and promoting circular economy projects that minimize the environmental footprint.

The health crisis has opened a serious crack in world economic development and recovery will require courage and commitment from everyone, from companies and also from public powers. In Andalusia, we have an ally in the regional administration that has always been sensitive to our demands and needs, maintaining a fluid dialogue with the sector and developing initiatives aimed at boosting the regional productive fabric.

Furthermore, also from the Association of Research, Extraction, Mining-Metallurgical, Auxiliary and Service Transforming Companies, AMINER, we wish to reach out to all those initiatives that intend to develop a project in Andalusia, a land of future for metallic mining.





05

THE ANDALUSIAN MINING  
INDUSTRY IN FIGURES



The AMINER 2019 Yearbook, the leading business organisation within the sector in the community, provides data related to this exercise that reflects the enormous power of Andalusian metal mining:

**METALLIC MINING INVOICING:**

3.2 billion euros (2019)

**EMPLOYMENT:**

10,000 direct jobs.

30,000 indirect and induced jobs.

**EXPORTS:**

1.7 billion euros.

**PRODUCTION:**

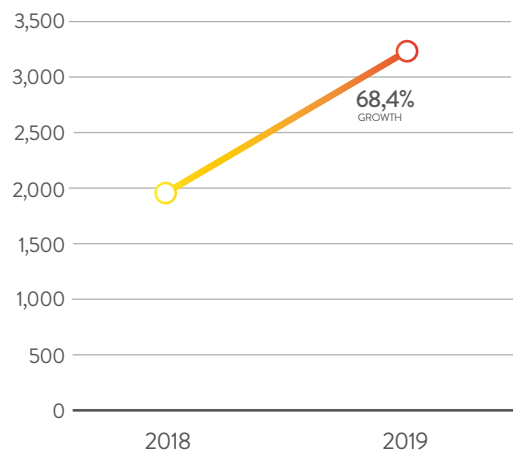
17 million tonnes of processed mineral ore (2019).

**INVESTMENT IN METALLIC MINING:**

250 million euros (2019).

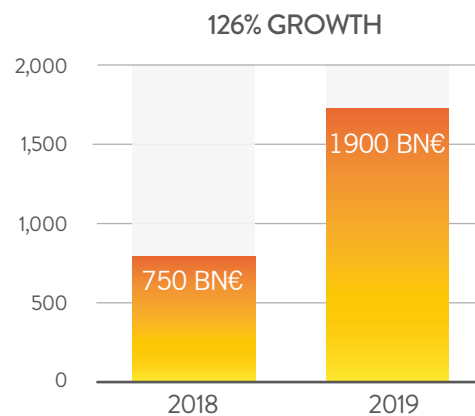
2 billion euros in accumulated investment over the last 10 years.

**INCREASE IN TURNOVER IN THE 2019 FINANCIAL YEAR**



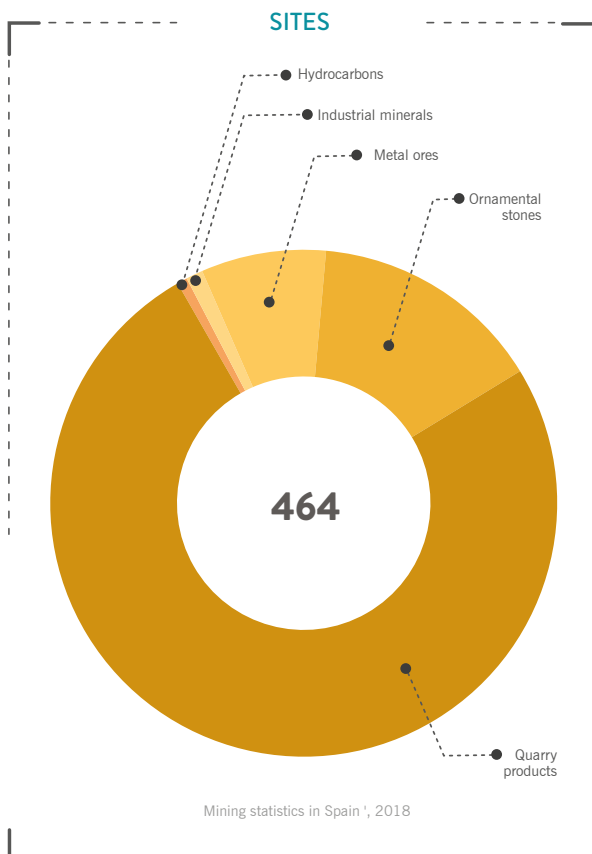
SOURCE: AMINER Yearbook 2019

**EXPORTS GROWTH IN 2019 COMPARED TO THE PREVIOUS YEAR**



SOURCE: AMINER Yearbook 2019

**SITES**



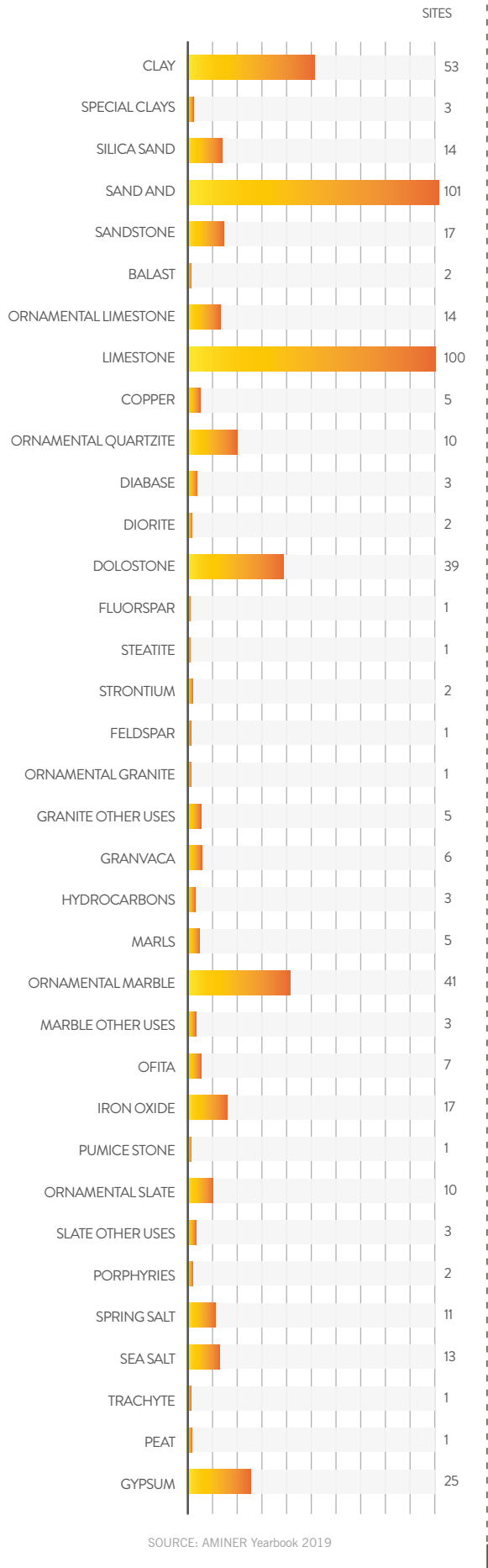
Mining statistics in Spain', 2018

**MAIN MINERALS EXTRACTED IN ANDALUSIA**

1. Copper
2. Zinc
3. Lead
4. Silver
5. Sea salt
6. Marble
7. Plaster

Source: Mining Statistics in Spain 2018 (Ministry of Ecological Transition)

## RAW MATERIALS EXTRACTED IN ANDALUSIA

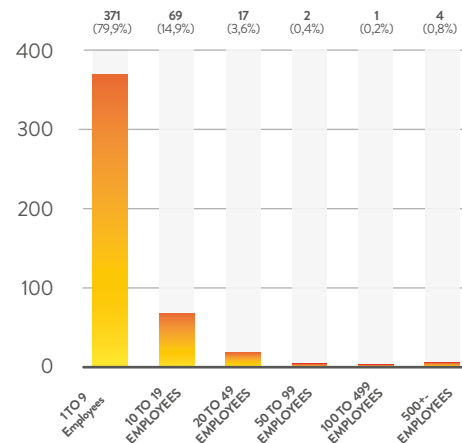


## PROVINCIAL DISTRIBUTION OF MINING OPERATIONS IN ANDALUSIA

Almeria: 101  
 Cadiz: 49  
 Cordoba: 37  
 Granada: 63  
 Huelva: 51  
 Jaen: 56  
 Malaga: 40  
 Seville: 67

Source: Mining Statistics in Spain 2018 (Ministry of Ecological Transition)

## CHARACTERISATION OF ANDALUSIAN SITES BY NUMBER OF EMPLOYEES



SOURCE: AMINER Yearbook 2019

## METAL MINING OPERATIONS IN ANDALUSIA:

In the region there are five large active metal mining operations, generating 58% of mining employment in the region:

- Riotinto Mine (Huelva).
- Teñidas Waters (Huelva).
- Magdalena Mine (Huelva).
- Sotiel Mine (Huelva).
- Cobre las Cruces (Seville)

## ACTIVE OPERATIONS AND THOSE WITH OPENING UNDERWAY IN METAL MINING IN ANDALUSIA

- **RIOTINTO MINES.** It is located in the province of Huelva, specifically in the municipality called, precisely, Minas de Riotinto. It is a renowned site whose origins date back to the Copper Age, which was developed by Tartessians and Phoenicians and reached great splendour in Roman times. It has been managed since 2016 by the Atalaya Mining company, one of the most important firms in the region within the mining sector. It produces 36,000 tonnes of copper per year. It has a forecast of activity until 2032 to value the 153 million tonnes of mineral reserve available. It generates 500 direct jobs.

One of the characteristics of this mine is the high purity of the copper that is obtained, around 5%, when the average purity in the sector does not exceed 1%. The company that owns the site is developing the PMR (Poly Metallurgical Refinery) Project through technological innovation, with which it intends to obtain copper, zinc, silver and lead in the same plant, a technological milestone with the possibility of being applied in the whole of the Pyrite Belt and that could extend the useful life of Cobre las Cruces until 2032.
- **AGUAS TEÑIDAS, MAGDALENA Y SOTIEL.** There are three nearby sites located in the province of Huelva: Sotiel (Calañas), Magdalena (Almonaster la Real) and Aguas Teñidas (Almonaster la Real). MATSA (Minas de Aguas Teñidas, SA) is the company that runs these three underground mines. Copper, lead and zinc concentrate is obtained from them, products that are distributed throughout the world from the ports of Huelva and Algeciras.
- **MINA LOS FRAILES.** Located in the province of Seville, in the town of Aznalcóllar. It is a zinc, copper, silver and lead deposit in the process of opening. It is 97.3% owned by Grupo México, one of the leading companies in the global mining sector, the fifth largest copper producer in the world and holder of the largest reserves of this mineral in Spain), and, with 2.7%, of MAGTEL, an Andalusian technology-based company that operates in the telecommunications, energy, environment and rail sectors. The Los Frailes Mining Project will involve a direct investment of 300 million euros with the forecast of generating 1,000 direct jobs for the next three decades.
- **COBRE LAS CRUCES.** The firm is located between the municipalities of Gerena, Guillena, Salteras and La Algaba, all in the province of Seville. This deposit, with an estimated useful life until 2025, is a benchmark for its technological investments and for its role in the resurgence of metal mining in Spain. The company that manages it, Cobre Las Cruces SA, has been 100% owned since 2013 by the Canadian multinational First Quantum Minerals, one of the world leaders in copper.
- **MINAS DE ALQUIFE.** These are located in the province of Granada, between the municipalities of Alquife, La Calahorra, Lanteira and Aldeire. It is an important open pit iron oxide deposit. The project has received environmental authorisation and a development tender. After 25 years of closure, it will be reopened and run by the company Minas de Alquife.

## TOP EXPORTER COMPANIES IN ANDALUSIA

Amongst the top 10 companies selling abroad from within Andalusia, there are four that belong to the mining or metallurgy section that form this list published in the 'Ranking of the top 1,200 Andalusian exporting companies in 2019', published by the renowned magazine Andalucía Económica:

1. CEPSA (Madrid). 3.1 billion euros
2. ACERINOX (Los Barrios, Cádiz). 926 million euros
3. ATLANTIC COPPER (Huelva). 897 million euros.
4. GRUPO CONSENTINO (Cantoria, Almería). 876 million euros.
5. RENAULT ESPAÑA (Sevilla). 727 million euros.
6. AIRBUS DEFENCE AND SPACE (Sevilla). 718 million euros.
7. MIGASA (Dos Hermanas, Sevilla). 650 million euros.
8. VALEO ILUMINACIÓN (Martos, Jaén). 620 million euros.
9. CUNEXT COPPER INDUSTRIES (Córdoba). 560 million euros.
10. MATSA (Almonaster La Real, Huelva). 538 million euros.

There are a further two sites awaiting authorisation to commence operations:

- Minera Los Frailes (Sevilla)
- Minas de Alquife (Granada)

There are seven in the exploration stage:

- Tharsis (Huelva).
- La Zarza (Huelva).
- San Telmo (Huelva).
- Escacena (Huelva).
- El Berrocal (Sevilla y Huelva)

**ANDALUSIAN MINING EXPORT FIGURES:**  
5.697 billion euros (2018) (Andalusian Foreign Promotion Agency, EXTENDA)

With a year-on-year growth rate of 2.6%, the community has tripled the exporting figures of its mining industry since 2009.

### MAIN DESTINATIONS OF ANDALUSIAN MINING EXPORTS



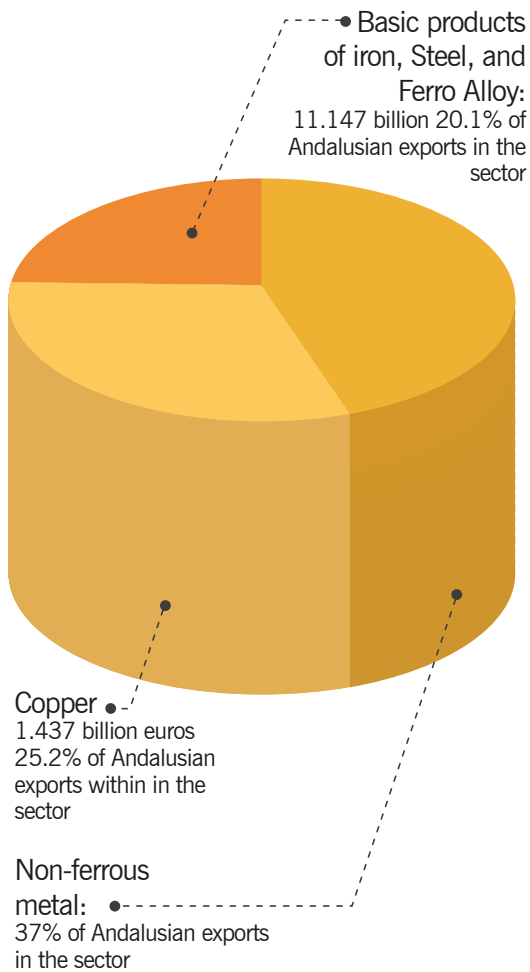
<b>CHINA</b>	1,102 billion / 19.3%
<b>BULGARY</b>	866 million / 15.2%
<b>ITALY</b>	414 million / 7.3%
<b>PORTUGAL</b>	307 million / 5.4%
<b>MAROCCO</b>	252 million / 4%
<b>UNITED KINGDOM</b>	232 million / 3.9%
<b>GERMANY</b>	225 million / 3.9%
<b>U. STATES</b>	220 million / 3.8%
<b>TURKEY</b>	215 million / 3.7%
<b>MALAYSIA</b>	192 million / 3.3%

### SPANISH COMMUNITIES WITH LARGEST MINING EXPORTS FIGURES



(Source: 'Mining Statistics in Spain 2018' Ministry of Ecological Transition)

### MOST EXPORTED MINING PRODUCTS FROM ANDALUSIA



(Source: 'Mining Statistics in Spain 2018' Ministry of Ecological Transition)

### MINING EXPORTS BY PROVINCE IN ANDALUSIA 2018

Huelva:  
2.87 billion euros

Cadiz  
992 million euros

Cordoba  
789 million euros

Almeria:  
548 million euros

Seville:  
346 million euros

Malaga:  
61 million euros

Granada:  
28 million euros

Jaen:  
25 million euros

(Source: 'Mining Statistics in Spain 2018' Ministry of Ecological Transition)



06

ANDALUSIA IN THE  
SPANISH MINING  
OVERVIEW



Andalusia stands firm at the forefront in the Spanish context in the mining sector, an activity of strategic importance for the economy and industry as a whole. The foregoing is by no means throwaway, since Spain is one of the countries with the greatest wealth in its subsoil of the entire continent and its extractive industry is characterised by the development and use of the most cutting-edge technology.

Thus, according to the 'Mining Statistics 2018', a document from the Ministry of Ecological Transition that is a reference in this sector at the national level:

- Andalusia is the home to 90% of the value of the Spanish metal mining production.
- It provides 38.8% of the total production value of the mining as a whole, occupying the first place in this section with a lot of difference compared to the rest, to the point that it triples to the second community in this section, Catalonia.
- With 22% of the total production output, it is also a leader in quarry products.
- Andalusia is the autonomous community that generates the most employment in the mining sector, 7,424 jobs (24% of the total in Spain), more than double that of the second ranked region, Catalonia, with 3,465.
- The Andalusian is also among the communities with the highest production of mineral water (922 million litres per year and 11% of national production) and hydrocarbons (3.6% of Spanish production) and leads the national production of sea salt.

## SPANISH MINING IN FIGURES

**Output value:  
3.485 billion euros.**

- Distribution:
  - Quarry products:  
924 million (25%)
  - Ornamental stones:  
369 million (11%)
  - Energy products:  
152 million (4%)
  - Metal ores  
1.218 billion (35%)
  - Industrial mineral ores:  
821 million (25%)

**Employment:  
29,890 employment posts.**

**Number of operational sites: 2,731**

- 75% quarry products
- 17% Ornamental stones
- 6.6% industrial mineral ores
- 0.7% energy products,
- 0.3% metal mining

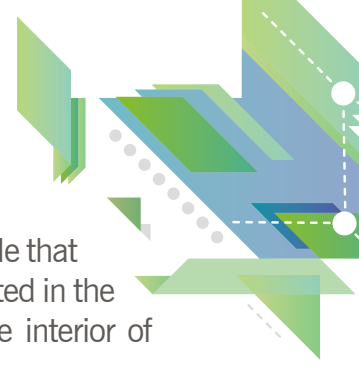
**Potassium chlouride is the industrial mineral with the greatest clout in the total output value of the Spanish mining sector (30%). Glaubertite and thenardite follow (19%).**

**In Spain, 187,000 tonnes of copper, 106,000 of zinc and almost 1,000 of lead were extracted in 2018.**

**The national output level of crude oil is 89,500 tonnes per year. While gas output stands at 93,000mNm<sup>3</sup>.**

**Within the ornamental rocks' sector, Spain produces 800,000 tonnes per year of slate and limestone and 700,000 of granite.**

Source: Mining Statistics in Spain 2018 (Ministry of Ecological Transition)



### THE VALUE OF SPANISH MINING OUTPUT BROKEN DOWN BY COMMUNITIES



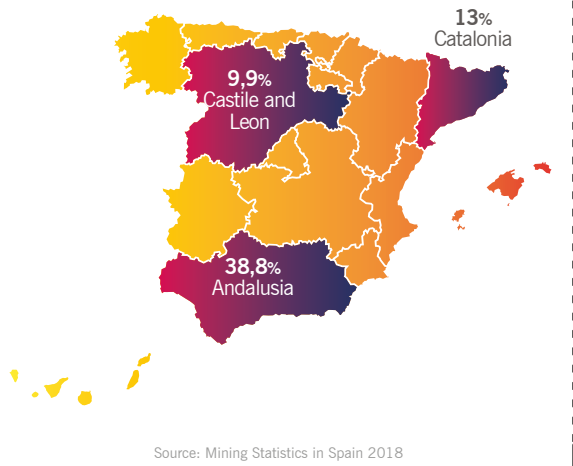
### MACAEL MARBLE

To such an extent, the white marble that is extracted from the quarries located in the vicinity of this municipality in the interior of the city is appreciated.

Almeria province that this material is also known as “the white gold of Macael”.

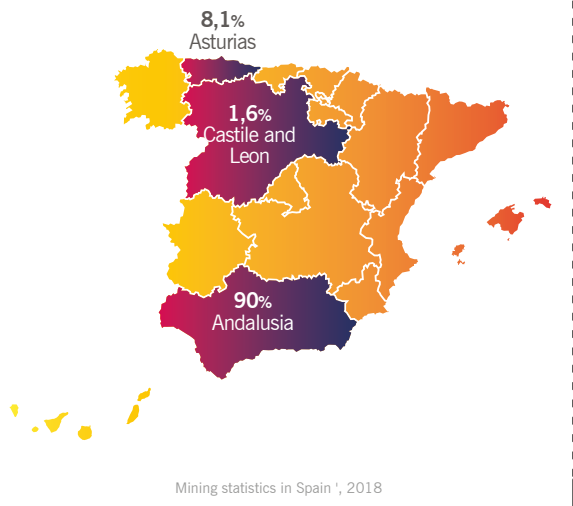
The development of the deposits of the Sierra de Los Filabres dates back to 2,700 BC. It was formerly a material already highly appreciated by the Phoenicians, although it was in Roman times that the Macael marble industry began to develop in the region. Macael marble was an especially popular choice for the architects of the Empire. Evidence of this is that the columns of the Roman Theatre in Merida are built from it. That splendour would perdure into the Andalusian era. The Alhambra and Medina Azahara owe in part their exceptional beauty to this material from Almeria. In Nasrid times, it began to be exported to as far away as Senegal and Niger. Thus, it is not surprising the attraction that it aroused even then, given the composition of Almeria white gold, which gives it its special characteristics: 83% calcite, 16% dolomite, 1% muscovite.

### COMMUNITIES SPEARHEADING SPANISH MINING



Yet Macael marble is not only part of Andalusian history, it is an inherent part of the economic development of this area. Indeed, its 120 quarries, which occupy 6,600 hectares, generate 4,700 direct jobs, sales worth 1.142 billion euros, of which 880 correspond to exports, with the United States, Japan and the United Kingdom among the main recipient countries (data from the Andalusian Marble Business Association corresponding to 2018).

### COMUNIDADES LÍDERES EN MINERÍA METÁLICA ESPAÑOLA



## THE PLASTER OF ALMERIA

The gypsum extracted from the province of Almería is a benchmark, both for quantity and quality. Furthermore, its purity makes it considered an ecological plaster. Since it does not generate dust pollution during transportation.

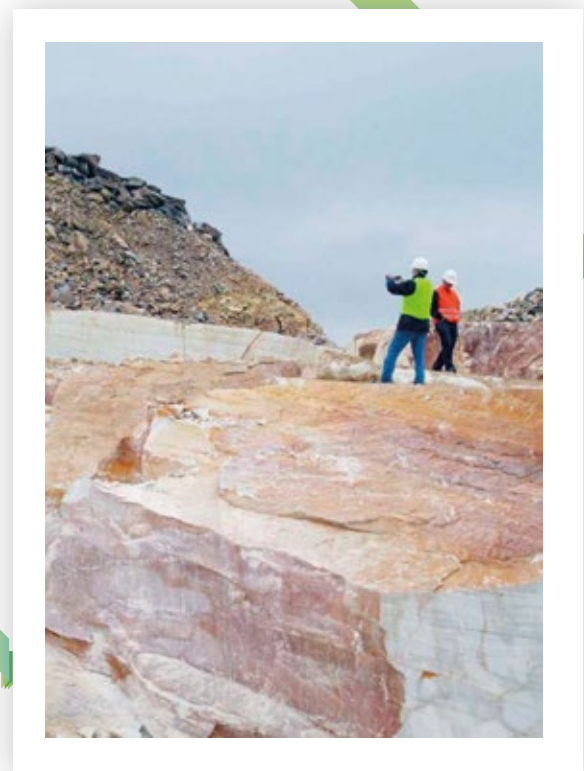
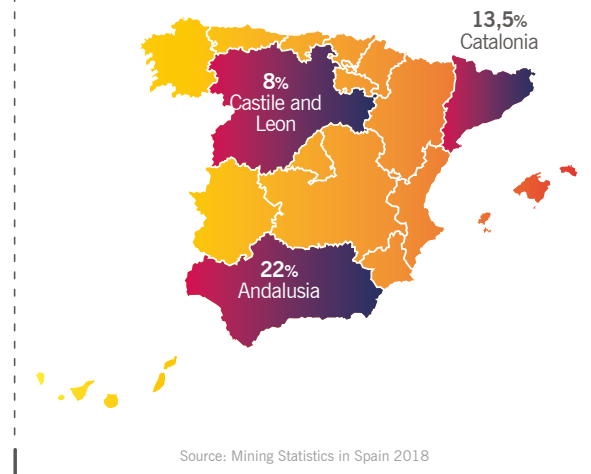
According to ATEDY, the Technical and Business Association of Gypsum, in this area 5 million tonnes are produced per year, which represents 40% of Spanish production and 20% of European output.

The quarry in the municipality of Sorbas, operated by the French corporation Placo Saint Gobain, is considered the largest gypsum deposit in the world, with a direct and indirect employment figure of 1,200 jobs.

From the nearby ports of Garrucha and Almería, the plaster of this area leaves in the direction of the United States, Africa and the European continent itself. 1,800 trucks leave the quarries every day in the direction of these port facilities.

On the other hand, the municipality of Sorbas is an example for having managed to turn its main economic activity into a real tourist and leisure attraction. Thus, the natural area of the Karst de Yesos, with 2,300 hectares, is a protected area, with more than 1,000 excavated cavities through which thousands of visitors pass each year.

### COMMUNITIES SPEARHEADING QUARRY PRODUCTS IN SPAIN





07

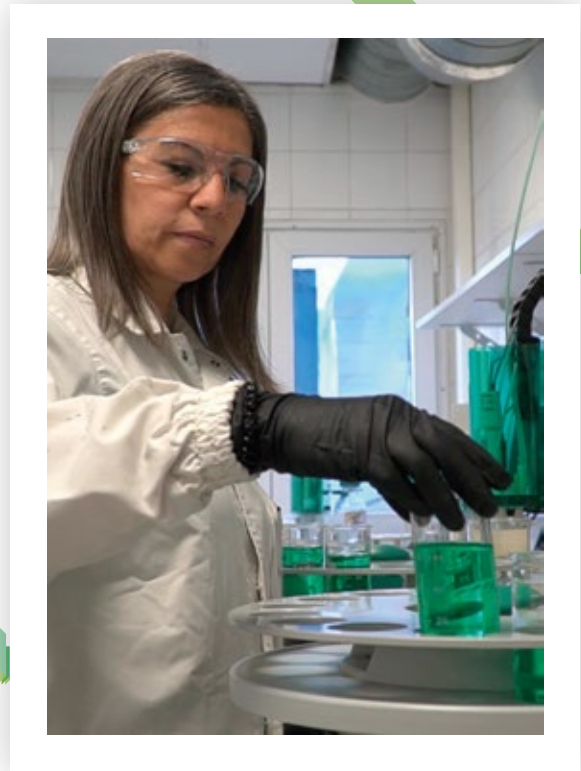
INNOVATION FROM  
ANDALUSIA FOR THE  
MINING INDUSTRY



## POLYMETALURGICAL REFINERYA

This is the basis for an innovative mining project devised by Cobre Las Cruces. It is called Project PMR (Poly Metallurgical Refinery). It is intended to obtain silver, copper, zinc and lead in a unique refining plant, of new design, pioneer and unique in the world, capable of processing both its own material and external raw materials. It represents a technological milestone that could extend the life of the mine until 2032 and that is potentially replicable in the rest of the Andalusian Pyrite Belt.

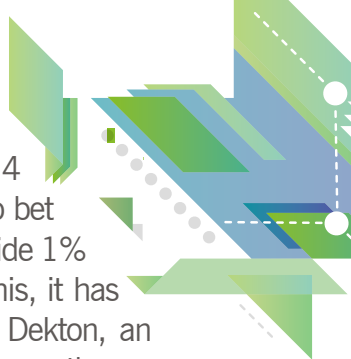
For its part, Atalaya Riotinto Minera has successfully completed complex sulphide treatment trials in a pilot plant at its facilities using the innovative E-LIX system. This system achieves an effective leaching of copper, lead and zinc from the polymetallic sulphides of the Pyritic Belt and, through extraction and electrolysis (hydrometallurgy), allows obtaining very high-grade metal cathodes. The company is in the feasibility study phase, after tests in a pilot plant to determine the economic viability of the process, within its current mining operation



## THE COSENTINO GROUP, A SUCCESS STORY BASED ON INNOVATION

This company, founded in 1979 by Francisco Martínez-Cosentino, son of a Macael stonemason, came into being as a family business. Four decades later, it has a turnover of 900 million euros a year, sells in more than 100 countries and generates 4,800 jobs in its 150 branches spread over 32 countries.

The outstanding international success of this firm is the result of its commitment to innovation. In 1990, after some unsuccessful attempts to develop new materials, Cosentino released Silestone, a registered trademark that gives its name to a compound made up of 94% natural quartz and of great resistance and hardness. Today, nine out of every ten euros invoiced by the company are due to this material, present in the kitchens, floors, bathrooms and walls of buildings in many countries on five continents. It is part of the construction of emblematic buildings such as the Wembley Stadium, in London, the Torre Agbar, in Barcelona, and the Hotel Barj, Al Arab, in Dubai.



The group, which manages 14 natural stone quarries, continues to bet on opening new horizons. It sets aside 1% of its sales to R&D&i. Thanks to this, it has created four other new materials: Dekton, an ultra-compact surface that mixes the raw materials used; to manufacture glass, last generation porcelain and quartz surfaces; Sensa, composed of granites with stain protection, Scalea, made up of natural stones, limestone, marble, quartz and slate, and Prexury, a material made with semi-precious stones and natural materials.

With all of these materials coming from Almeria. The Cosentino Group is based in the town of Cantoria. It focuses the entire production process in this province, with the exception of that obtained in a workshop located in Brazil and the twelve that it has in the United States.

## HIGH PRECISION ANTI-COLLISION SYSTEM

This is the brainchild of the Malaga company TORSA, specialising in the design and production of technological equipment and systems. It is an innovative security system implemented in Antamina, in Peru, considered one of the largest mines in the world. The TORSA system avoids collisions and accidents of machinery and vehicles involved in the exploitation of open pit deposits. It reduces the possibility of human error and avoids visibility dead spots. It has received the Innovation Award from the National Society of Mining, Oil and Energy of the Andean country.



## ANDALUSIAN METALS TO BUILD NEXT GENERATION BATTERIES

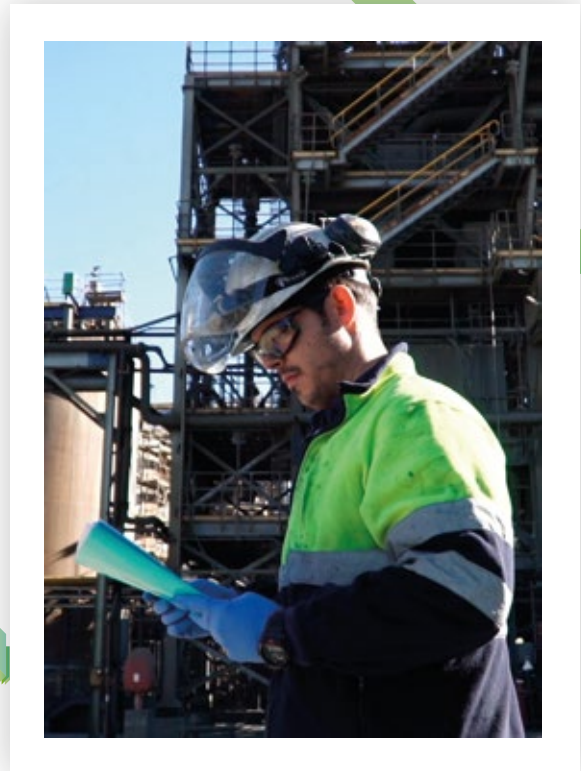
Cobre Las Cruces is spearheading this project, which will be undertaken from the future CIU3A Innovation Centre, promoted by the University and the Port of Seville. Its aim will be to use metals from the Andalusian Pyrite Belt to build new generation batteries for the efficient storage of renewable energy.

## WIFI INSIDE UNDERGROUND MINES

The Huelva company IPH has developed a Wi-Fi system for underground mines that is unique worldwide, which increases the safety of its workers. It allows real-time positioning of people and vehicles in the mine and offers the possibility of carrying out remote operations.

## SMART LIFE SAVER HELMETS

This is a creation of the inventor and entrepreneur from Huelva Darío García. Its name is 'Angel Helmet', and it provides location by RFID and RTLS via satellite and radio, sending SOS, it has gas sensors, impact, movements, inclination, speed, zone alarms, communication by text messaging and hands-free voice, possibility of multi-conferencing, route calculation, information screen, black box, interactive computer and photo-luminescent helmet for ten hours. All this technology allows the worker to be monitored and in contact with the control room in real time.



## INNOVATIVE MINING EXPLORATION: INFAC T PROJECT

During the last 3 years, innovative mining exploration technologies have been tested in the mining areas of Río Tinto (ATALAYA) and Las Cruces (CLC) as reference sites and trials of the European project H2020 INFAC T: Innovative, non-invasive mining exploration technologies and completely friendly.

The possibility of having a history of geological, geophysical, mining and social knowledge of both areas has made it easier for them to serve as test areas for techniques, technologies, equipment, interpretation programs, air transportation systems (manned and unmanned) and relationship procedures with local communities, which have aroused the interest of various companies to come and test drive their technology in the aforementioned testing-sites.



08

# PUBLIC BOOSTER POLICIES



## ANDALUSIAN MINING STRATEGY 2020

The Andalusian Regional Government is the empowered administration in the territory of the community to manage the mining domain. As such, it has indicated as strategic the investigation and exploitation of mineral resources and that these activities are carried out in a sustainable, efficient, safe way while respecting the environment.

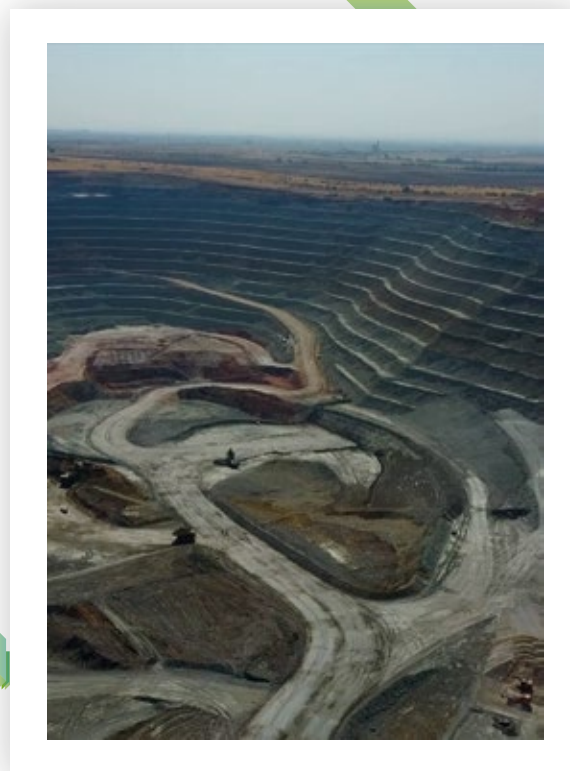
Thus, the regional government approved in 2013 the Andalusian Mining Strategy 2020, the instrument for planning mining activity according to the social and economic interests of the region.

This document establishes four fundamental aims:

1. Taking advantage of the mining potential of the Andalusian territory, creating jobs and improving the competitiveness of mining.
2. Improvement of public services linked to the mining sector, adapting administrative management to the needs of the sector.
3. Environmental integration of mining activity and enhancement of Andalusian mining heritage as a tourist, cultural, social and economic resource that helps the sustainable development of the territory.
4. Promote and develop the appropriate framework for industrial relations with special attention to occupational health and safety in the sector, increasing the training and adaptation of personnel to their job.

To achieve these aims set by the Andalusian Mining Strategy 2020, the Autonomous Administration has developed various actions. These include:

- Review and publication of available geological information.



- Support for mining activity with the organisation of events to disseminate the economic and social importance of this in collaboration with the sector.
- Communication and dissemination actions to attract investment for the sector.
- Research support by releasing available lands.
- Research support, development and implementation of technologies for the extractive and processing industry.
- Support for business cooperation projects.
- Support for business innovation projects.
- Support for financing through reimbursable funds.
- Support for internationalisation through advice and information, as well as for the presence in international events of the mining sector (fairs, missions and sectorial campaigns)



The funding that has made it possible to develop these actions have been of both regional and European origin; in this second case through FEDER funds.

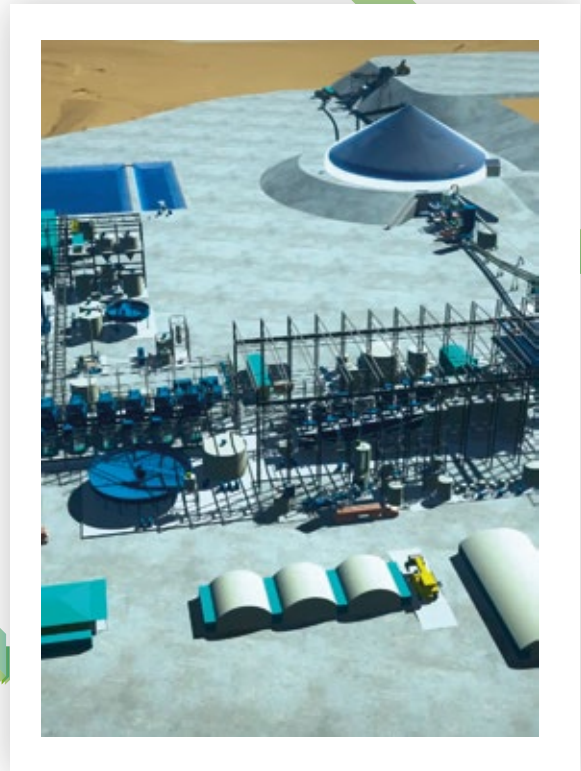
## AGREEMENT FROM THE ANDALUSIAN REGIONAL GOVERNMENT AND THE OECD TO BOOST THE REGION'S MINING SECTOR

In July 2020, the Autonomous Government and the Organisation for Economic Cooperation and Development signed a collaboration agreement aimed at fostering the ideal conditions in the following decade to promote the development of mining and encourage activity in the business fabric that the latter surrounds.

Based on this agreement, the Andalusian Regional Government and the OECD will work in a coordinated manner to undertake actions and programs for innovation, technological development and modernisation within the sector as an inherent part of the economic and social development of the community.

These are the main axes marked by the agreement:

- Updated assessment of the extractive sector and industry in Andalusia and its role in the regional and national economy.
- Assessment of the Andalusian Mining Strategy 2020.
- Recommendations on a local, regional and national level that allow the autonomous community to coordinate actions that maximise the benefits of this industry.
- Creating opportunities for knowledge sharing and learning between experts from the OECD, other mining regions, the private sector and local authorities.



## STRATEGIC GUIDELINES FOR THE DEVELOPMENT OF THE MINING SECTOR IN ANDALUSIA

The Andalusian Regional Government is working on the development of guidelines that will be the standard for mining policy in Andalusia in the coming years. It is an effective policy aimed at bolstering and expanding the mining sector throughout the value chain, reinforcing its competitiveness through:

- Support for the internationalisation of Andalusian mining and mining companies.
- The promotion of the investigation of available mineral resources.
- The promotion of research, innovation and business cooperation projects.
- Progress in regulatory development for streamlining, administrative simplification and elimination of regulatory obstacles
- The attraction of new investments.



09

DIRECTORY



Below is a list of those companies whose main activity is mining and their headquarters in Andalusia, and, in addition, an overview of national and international companies in the mining sector that contain working centres in our region.

**AGQ MINING AND BIOENERGY.** Research and search for innovative solutions in mining and metallurgy to reduce environmental impact  
BURGUILLOS (SEVILLA)  
[www.agqmining.com](http://www.agqmining.com)

**ALS LABORATORY GROUP SL.**  
Technical trials and analysis  
CAMAS (SEVILLA)  
[www.alsglobal.com](http://www.alsglobal.com)

**ANDALUZA DE OBRAS Y MINERÍA, SL.**  
Earth movements in civil works and mining  
SEVILLA

**ANGEL HELMET SL.**  
Manufacture of smart helmets for mining and industry  
SEVILLA  
[www.angelhelmet.com](http://www.angelhelmet.com)

**ANTONIO JOSÉ Y LUIS BLANCO GALLARDO C.B.**  
Extraction and preparation of metalliferous ore  
SANTIPONCE (SEVILLA)

**ANTONIO MATAS SL.**  
Mining of other non-ferrous metal ores  
RUTE (CÓRDOBA)  
[www.grupomatas.com](http://www.grupomatas.com)

**ARIDAN SA (GRUPO TEJERA).**  
Operation of mines and quarries, gravel pits and deposits of aggregates and / or other materials for construction or industry  
ALMERÍA  
[www.grupotejera.com](http://www.grupotejera.com)

**ÁRIDOS ANFERSA SL.**  
Extraction and preparation of aggregates of all types of minerals. Manufacture of concrete  
FREILA (GRANADA)

**ÁRIDOS CARRATRACA SA.**  
Operation of gravel and sand pits; mining of clays and kaolin  
MÁLAGA

**ÁRIDOS DEL GENIL SCA.**  
Operation of gravel and sand pits; mining of clays and kaolin  
HUÉTOR TAJAR (GRANADA)

**ÁRIDOS DEL RONQUIO SA.**  
Operation of gravel and sand pits; mining of clays and kaolin  
JAÉN

**ÁRIDOS EL PINAR SA.**  
Sand and gravel extraction for construction  
MÁLAGA  
[www.aripisa.com](http://www.aripisa.com)

**ÁRIDOS LOS COINOS SL.**  
Extraction, crushing and commercialization of aggregates and quarry material  
COÍN (MÁLAGA)  
[www.prodoyde.com](http://www.prodoyde.com)

**ÁRIDOS LOS LINOS SL.**  
Operation of mining deposits  
PADUL (GRANADA)  
[www.loslinos.es](http://www.loslinos.es)

**ATALAYA RIOTINTO MINERA SA.**  
Mining. Production of copper concentrate  
MINAS DE RIOTINTO (HUELVA)  
[www.proyectoriotinto.com](http://www.proyectoriotinto.com)

**ATARFIL, SL.**  
Manufacture of geo-membranes and waterproofing solutions  
ATARFE (GRANADA)  
[www.atarfil.com](http://www.atarfil.com)

**ATLANTIC COPPER SLU.**  
Copper metallurgy  
HUELVA  
[www-atlantic-copper.es](http://www-atlantic-copper.es)

**AUXILIAR DE SEÑALIZACIONES Y BALIZAMIENTOS SL.**

Metal structures for mining. Safety signage  
TOMARES (SEVILLA)  
[www.asebal.com](http://www.asebal.com)

**AYESA.**

Technology services company in the field of engineering, consulting and computer systems  
SEVILLA  
[www.ayesa.com](http://www.ayesa.com)

**AYMA MINING SOLUTIONS.**

Assessment on design and exploitation operations: safety, productivity, efficiency, etc.

MAIRENA DEL ALJARAFA (SEVILLA)  
[www.aymaming.com](http://www.aymaming.com)

**BARITAS Y OXIDOS METÁLICOS SL.**

Extraction and sale of iron ores, exploitation of mines and quarries  
VILLAVICIOSA DE CÓRDOBA (CÓRDOBA)

**BC CONDADO SALAS S.L.**

Extraction, management, commercialisation and distribution of all types of aggregates  
BOLLULLOS PAR DEL CONDADO (HUELVA)

**CALES DEL SUR SA.**

Manufacture, purchase and sale of lime  
DOS HERMANAS (SEVILLA)  
[www.calesdelsur.es](http://www.calesdelsur.es)

**CANTERA SILLERO SA (GRUPO SANDO).**

Sand and gravel extraction for construction  
MÁLAGA  
[www.sando.com](http://www.sando.com)

**CANTERAS DE ORCE S.L.**

Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate  
OULULA DEL RÍO (ALMERÍA)

**CAMBRIDGE MINERIA ESPAÑA SL.**

Mining of ferrous resources  
VALVERDE DEL CAMINO (HUELVA)

**CAMPOS MOGUER SCA.**

Mining of uranium and thorium ores  
HUELVA

**CANTERAS PUNTILLA-LOS PINOS SL.**

Extraction of rocks, construction slate, ceramic clays, kaolin marl and other clay substances  
MACAEL (ALMERÍA)

**CANTERAS REUNIDAS DE HUELVA SL.**

Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate  
GIBRALEÓN (HUELVA)  
[www.crhsl.es](http://www.crhsl.es)

**CATRASUR SL.**

Sand and gravel extraction for construction  
LAS CABEZAS DE SAN JUAN (SEVILLA)  
[www.catrasur.com](http://www.catrasur.com)

**CAUCHOS SAN DIEGO.**

Provision of rubbers and polyurethanes for the mining and chemical industry both nationally and internationally.  
Technological solutions in design, manufacture and maintenance control  
ALMONTE (HUELVA)  
[www.cauchossandiego.com](http://www.cauchossandiego.com)

**COBRE LAS CRUCES, SA.**

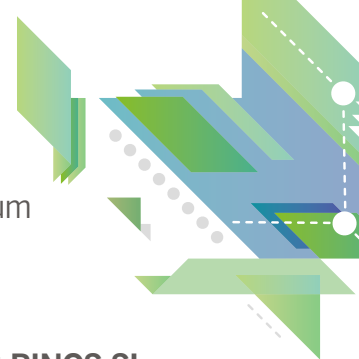
Open pit copper mining and hydrometallurgy treatment  
GERENA  
GERENA (SEVILLA)  
[www.cobrelascruces.com](http://www.cobrelascruces.com)

**COMPAÑÍA GENERAL DE CANTERAS SA.**

Extraction and sale of aggregates, as well as manufacture, distribution of concrete and cement  
MÁLAGA  
[www.fym.es](http://www.fym.es)

**CONDISEVAND.**

Cleaning of hydrometallurgical products and transport  
GUILLENA (SEVILLA)  
[www.codisevand.es](http://www.codisevand.es)



**CORPORACION DOVENTIS SL.**  
Iron ore extraction and preparation  
CÓRDOBA

**CREMA DORADO SL.**  
Operation of marble quarries  
CANTORIA (ALMERÍA)

**CUBICOFF INGENIERIA ABIERTA SL.**  
Management engineering consulting in the  
renewable energy, construction and mining  
sectors  
SALTERAS (SEVILLA)  
[www.cubicoff.com](http://www.cubicoff.com)

**CUNEXT COPPER INDUSTRIES.**  
Transformation of copper products  
CÓRDOBA  
[www.cunext.com](http://www.cunext.com)

**DITECSA.**  
Comprehensive management of industrial  
plants, from the design, development,  
operation, maintenance and industrial  
cleaning, to the management and  
disposal of waste products  
SEVILLA  
[www.grupoditecsa.com](http://www.grupoditecsa.com)

**EJECUCIONES PAHUL SL.**  
Open mining of coal and lignite (coal)  
SANTA OLALLA DEL CALA (HUELVA)

**ESTRATEGICA DE RECURSOS  
GEOLÓGICOS SL.**  
Location of non-ferrous mineral resources  
and extraction  
ÉCIJA (SEVILLA)

**EXPLORACIONES MINERAS MARTEÑAS  
SL.**  
Extraction and preparation of ferrous  
minerals  
MARTOS (JAÉN)

**EXPLORACIONES MINERAS DEL  
ANDÉVALO.**  
Research into massive sulfides at great  
depths using high technology  
MATALLANA DEL TORÍO (LEÓN)

**EXPLORACIONES RIO DE AGUAS SL  
(GRUPO TORRALBA).**  
Mining and quarrying, as well as crushing,  
classifying and preparing minerals  
SORBAS (ALMERÍA)  
[www.torralbagroup.com](http://www.torralbagroup.com).

**FORJAS GUADALQUIVIR SL.**  
Manufacture of grinding bodies  
LA RINCONADA (SEVILLA)  
[www.sabo.es](http://www.sabo.es)

**GEOGNOSIA SL**  
Consultoría y realización de estudios  
geofísicos para minería, aguas y medio  
ambiente.  
[www.geognosia.com](http://www.geognosia.com)

**GEOMATEC PROYECTOS SL.**  
Preparation, assessment, start-up,  
management and evaluation of mining  
projects  
VALVERDE DEL CAMINO (HUELVA)  
[www.geomatec.es](http://www.geomatec.es)

**GGEOWORK PERFORACIONES AGUA Y  
MINERÍA, SL.**  
Geological study, wells, boreholes and  
drilling. Rental, assembly, design,  
construction, services mobile and fixed  
cranes. Geotechnical studies  
GRANADA

**GESTION DE RECURSOS HIDRAULICOS  
DE LA CUENCA MINERA SL.**  
Management of hydraulic and mining  
resources  
SEVILLA

**GRUPO COSENTINO.**  
Extraction and transformation of natural  
stone. Production and distribution of  
innovative surfaces for architecture and  
design  
CANTORIA (ALMERÍA)  
[www.cosentino.com](http://www.cosentino.com)

**GRUPO DRAMB IBÉRICA.**  
Mining of other non-ferrous metal ores  
GRANADA

### **GRUPO PEREA MORANTE SL.**

Extraction and preparation of aggregates for construction, manufacture and sale of construction materials, earthworkss  
SANTISTEBAN DEL PUERTO (JAÉN)

### **GRUPO TORRALBA.**

Extraction and commercialization of plasters  
SORBAS (ALMERÍA)  
www.torralbagroup.es

### **HERMANOS DEL MORAL CANTERA AÑORETA SL.**

Extraction and preparation of metallic and non-metallic minerals  
BAILÉN (JAÉN)  
www.aridoshermanosmoral.es

### **HERMANOS SALGUERO MARIN SL.**

Extraction of non-metallic minerals  
ALCALÁ DE GUADAÍRA (SEVILLA)  
www.hnossalguero.com

### **HYBREKOR CIALGRUP SL.**

Marketing of mining machinery  
ALCALÁ DE GUADAÍRA (SEVILLA)

### **HY-TECH DRILLING ESPAÑA SL.**

Performing drilling and boring works in mines and other locations, both from the surface and underground  
VALVERDE DEL CAMINO (HUELVA)  
www.hy-techdrilling.com

### **IMERYS TALC SPAIN SA.**

Extraction and preparation of metalliferous ore  
MIJAS (MÁLAGA)  
www.imerys.com

### **INGENIERÍA DE SUELOS Y EXPLOTACIÓN DE RECURSOS SA (INSERSA).**

Extraction of metal ores, construction and public works  
MINAS DE RIOTINTO (HUELVA)  
www.insersa.com

### **INPROHUELVA SL.**

Engineering, surveying and drafting of specialized projects in sectors such as mining or industry  
HUELVA  
www.iph.es

### **ITURRI.**

Industrial supplies, such as footwear, clothing, vehicles, etc.  
Within mining, it offers solutions in the field of safety, the protection of people, processes and the environment.  
SEVILLA  
www.iturri.com

### **LINERMAN SL.**

Site preparation Test drilling and boring  
Wholesale of mining, construction and civil engineering machinery  
MINAS DE RIOTINTO (HUELVA)

### **MAGTEL.**

Engineering, construction and operation of projects in various sectors: telecommunications, energy, environment, railways and civil works and building  
LA RINCONADA (SEVILLA)  
www.magtel.es

### **MARBLE ORTEGA STONE SL.**

Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate  
CANTORIA (ALMERÍA)

### **MÁRMOLES CERRILLO SL.**

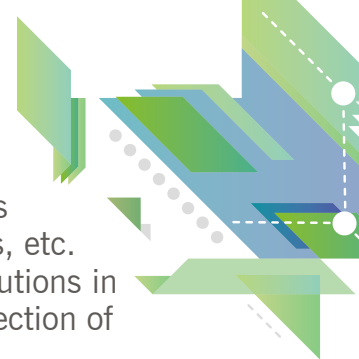
Exploitation of marble quarries and their commercialisation  
MACAEL (ALMERÍA)  
www.cheymacgroup.com

### **MÁRMOLES EL TRANCO SA (GRUPO COSENTINO).**

Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate  
MACAEL (ALMERÍA)  
www.cosentinogroup.net

### **MÁRMOLES Y PIEDRAS MIRÓN SL.**

Sale and processing of marble, transformation, exploitation  
PULULA DEL RÍO (ALMERÍA)



**MAXAM EUROPE SA.**

Manufacture of explosives  
EL GARROBO (SEVILLA)  
[www.maxamcorp.com](http://www.maxamcorp.com)

**MECWIDE ENGINEERING CHALLENGES.**

Engineering, procurement and construction solutions in energy, mining and cement  
MAIRENA DEL ALJARAFE (SEVILLA)  
[www.mecwide.com](http://www.mecwide.com)

**METALES HISPANIA SL.**

Extraction of iron minerals  
CALAÑAS (HUELVA)

**MINAS DE AGUAS TEÑIDAS SA.**

Mineral extraction  
ALMONASTER LA REAL (HUELVA)  
[www.matsamining](http://www.matsamining)

**MINAS DE ALQUIFE SL.**

Promotion, management, development of mining and environmental projects.  
Exploration, research, extraction, treatment, transformation and commercialisation of mineral resources  
ALQUIFE (GRANADA)  
[www.minasdealquife.es](http://www.minasdealquife.es)

**MINAS DE HERRERIAS SA.**

Mining of non-ferrous metal ores  
SEVILLA

**MINAS DE SIERRA MORENA, SL .**

Exploration, research, exploitation, treatment, transportation, commercialization and exploitation and transformation of mineral deposits, mineral resources and substances, rocks, studies, projects  
LA CAROLINA (JAÉN)

**MINERA LA HISPALENSE SA.**

Non-metallic mining services  
ALOSNO (HUELVA)

**MINERA LOS FRAILES SL.**

Exploration, research and exploitation of all types of mineral deposits and other geological resources  
SEVILLA  
[www.mineralosfrailes.es](http://www.mineralosfrailes.es)

**MINERA SABINA SL (PAN GLOBAL RESOURCES).**

Iron ore extraction  
VALVERDE DEL CAMINO (HUELVA)

**MINERA ESCACENA SL.**

Mining of non-ferrous metal ores  
VALVERDE DEL CAMINO (HUELVA)

**MINERALES MIVICO SL.**

Construction materials extraction  
PEDRERA (SEVILLA)  
[www.mineralesmivico.com](http://www.mineralesmivico.com)

**MINERÍA LA NUEVA, SA.**

Extraction of stones from quarries  
PEDRERA (SEVILLA)

**MINERÍA ORNAMENTAL, SL.**

Exploitation of stone, marble or granite quarries, as well as their production and national and international marketing  
OLULA DEL RÍO (ALMERÍA)

**MINERÍA SINGULAR, SL.**

Research and mining projects  
CENES DE LA VEGA (GRANADA)

**MINERIA SONDEOS Y MEDIO AMBIENTE 2002 SL.**

Technical mining engineering, environmental impact studies, legalisation of quarries, mines, wells, drilling, in general everything related to mining projects, the environment, drilling and blasting  
JAÉN

**MINERÍA TREND MONTANA, SRL.**

Salt extraction CHAUCHINA  
CHAUCHINA (GRANADA)

**MINESUR.**

Direction, advice and undertaking of mining projects, both open pit and at depth, civil works, drilling and blasting support  
VALVERDE DEL CAMINO (HUELVA)  
[www.minesur.es](http://www.minesur.es)

**MINORBIS.**

Exploration, research, exploitation and industrial treatment of mineral deposits and other geological resources

LA RINCONADA (SEVILLA)

**MONTANA MINERÍA, SL.**

Extraction of salt

CHURRIANA DE LA VEGA (GRANADA)

**MRO SUR.**

Maintenance, repair and operations of industrial components

SEVILLA

[www.mrosur.e](http://www.mrosur.e)

**NUBE MAQUINARIA.**

Technical solutions to the industry, custom machinery manufacturing, adaptations, modifications for better performance and optimization as well as subsequent start-up and maintenance

SEVILLA

[www.nubemaquinaria.com](http://www.nubemaquinaria.com)

**ÓXIDOS FÉRRICOS SA.**

Extraction, concentration, marketing and sale of ferric minerals

GUADIX (GRANADA)

**PAN GLOBAL RESOURCES.**

Mining exploration of mineral resources, especially in its earliest stages

CÓRDOBA

[www.panglobalresources.com](http://www.panglobalresources.com)

**PLACO SAINT GOBAIN**

Extraction and transformation of plaster

ALMERÍA

[www.placo.es](http://www.placo.es)

**PIEDRAS Y PIZARRAS MACAEL SL.**

Natural stone industry extraction, crafting, sale of marble and ornamental rocks in general and their derivatives

MACAEL (ALMERÍA)

[www.canu.es](http://www.canu.es)

**PIEDRAS NATURALES DE LA SERENA SL.**

Extraction of non-metallic minerals and construction materials. Treatment, crafting and carving of natural and artificial stone

POZOBLANCO (CÓRDOBA)

**PRODUCTOS DOLOMÍTICOS DE MALAGA SA.**

Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate

COÍN (MÁLAGA)

[www.prodomasa.com](http://www.prodomasa.com)

**RODAMIENTOS Y SERVICIOS, S.L.**

Bearings supply and today it is a reference in the distribution of spare parts and solutions in MRO for the industry, specialising in mining

SEVILLA

[www.rodamientos.net](http://www.rodamientos.net)

**RODILLOS CODIMAR SL.**

The manufacture, repair and marketing and assembly of industrial machinery, rollers, conveyor belts and products derived from rubber and their spare parts

PUENTE GENIL (CÓRDOBA)

[www.rodilloscodimar.com](http://www.rodilloscodimar.com)

**RODILLOS TECNOLÓGICOS DE MINERÍA Y MANUTENCIÓN, SL.**

The manufacture of bearings, bushings, rollers for mining, etc. and other machinery for specific uses, as well as their upkeep

PUENTE GENIL (CÓRDOBA)

**SAN MARTIN CONTRATISTAS GENERALES ESPAÑA SL.**

Construction activities and support for extractive industries

SEVILLA

[www.sanmartin.com](http://www.sanmartin.com)

**SAN CARLOS BUILDING INDUSTRY SL.**

Operation of gravel and sand pits; mining of clays and kaolin

ALBOX (ALMERÍA)



**SANDO MATERIALES Y SUMINISTROS SL.**

Operation of gravel and sand pits; mining of clays and kaolin  
MÁLAGA  
[www.sando.com](http://www.sando.com)

**SILICES DE FUENTES SL.**

Exploitation and marketing of aggregates  
CÓRDOBA  
[www.gruposifusa.com](http://www.gruposifusa.com)

**SOCIEDAD PROMOTORA DE LA MINERÍA ORNAMENTAL ONUBENSE, SL.**

Research, quarrying. Manufacture, crafting, commercialization and distribution of stones  
HUELVA

**SOLVAY MINERALES SA.**

Acquisition and operation of mines, mineral deposits, mining concessions, research permits and manufacture of mineral products  
ESCÚZAR (GRANADA)  
<https://www.solvay.com/en/>

**SPI WEST ANDALUCIA SL.**

Prospecting, drilling, exploration, research, exploitation, use, storage, transportation, supply and sale of all kinds of deposits, resources, mineral substances and precious metals  
SEVILLA

**SWICK DRILLING PORTUGAL UNIPERSOAL (SUCURSAL EN ESPAÑA).**

Provision of soil drilling and mining extraction services  
HUELVA

**TALLERES UMACO SL.**

Representation of trademarks of machinery, the manufacture of parts and steel products of all kinds.  
HUELVA  
[www.umaco.es](http://www.umaco.es)

**THARSIS MINING SOCIEDAD LIMITADA.**

Exploration, research, operation and industrial treatment of mineral deposits and other geological resources  
ALOSNO  
ALOSNO (HUELVA)  
[www.tharsismining.com](http://www.tharsismining.com)

**TINGEO SA.**

Assessment and construction of safe containment systems through the use of geo-synthetic materials  
ATARFE (GRANADA)  
[www.tingeo.com](http://www.tingeo.com)

**TORSA GLOBAL SL.**

Design and production of technological equipment and systems with a specific line in mining  
MÁLAGA  
[www.torsa.es](http://www.torsa.es)

**TRATAMIENTO DE MINERALES DEL SUR SL.**

Limestone and any other mineral quarrying  
ESTEPA (SEVILLA)  
[www.tramisur.com](http://www.tramisur.com)

**URVA FLUIDOS INDUSTRIALES.**

Limestone and any other mineral quarrying  
Its area of expertise is fluid control in industries such as chemical, agricultural, oil, energy alongside the mining industry itself  
SEVILLA

**VALERO Y ALARCON SL.**

Operation of gravel and sand pits; mining of clays and kaolin  
CUEVAS DEL ALMANZORA (ALMERÍA)  
[www.valeroyalarcon.es](http://www.valeroyalarcon.es)





**Junta de Andalucía**

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 [@IDEAJunta](https://twitter.com/IDEAJunta)