COMPANIES IN THE BATTERY VALUE CHAIN IN **CATALONIA**

ACCIÓ
Catalonia Trade & Investment

Generalitat de Catalunya
Government of Catalonia

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Letter from the Director General of Industry

Greetings to all.

The catalog you have in your hands is not a mere inventory of companies and facilitators involved in the mobility battery value chain in some way. This document is a collaborative project between the Public Office for the Transformation of the Mobility and Automotive Industries (OPTIMA in its Catalan initials) and all those companies and agents who have wished to participate, explaining their specific projects for this emerging sector. This means that all the companies included in this first version, since it is a document as vibrant and dynamic as the sector itself, intend to participate in the search for suppliers, customers, partners, etc., and also hope to located by those companies with whom they can collaborate.

The General Directorate of Industry that heads the catalog has the firm objective of helping the industrial sector of electric mobility to complement its value chain in the region. It is clear that it will not be possible to manufacture all the components that are part of an electric vehicle, but our horizon is set on achieving the maximum number of components and industrial processes linked to electric mobility.

Catalonia is the region in Spain with the highest concentration of auto parts companies, as here we have more than a third of the total. In addition, it is the autonomous community where more vehicles are manufactured in Spain, which in turn is the second leading manufacturer in Europe. Therefore, Catalonia is fertile ground in terms of the automotive industry, which we currently support by means of all kinds of projects related to new mobility, which will be both electric and connected.

The transition towards electric and connected mobility has its risks for those companies that do not adapt their processes and products to the components electric vehicles require. That said, it also represents an opportunity for those who do carry out this enormous task of upgrading their systems. The Government of Catalonia, with the set of instruments it makes available to support the sector, wants to act as an enabler and companion throughout this process.

Apart from the instruments mentioned, we are also orienting part of our industrial policy towards attracting investments in those electric vehicle components that are not yet manufactured in Europe. This catalog is therefore part of the value proposition that we can offer to the world as an industrialized, dynamic region that is attuned to new trends and their effects on industry.

I hope that this document serves to illustrate everything that Catalonia can offer the electric mobility of the future.

Oriol Alcoba i Malaspina

Director General of Industry

The Battery Sector Ecosystem in Catalonia

This document is the first edition of the Catalog of Companies and Entities of the Battery Value Chain in Catalonia and represents a significant step in our commitment to fostering and consolidating an innovative ecosystem in the battery sector in Catalonia.

The European battery ecosystem is rapidly coalescing, driven by the need for sustainable energy solutions and technological advancement. This development opens up new opportunities for companies already established in other sectors that have not yet made the leap into this emerging market. In addition, it will also require the presence of new companies that will have to take root in Southern Europe to contribute to this growth.

In this first edition, we have identified and included companies with whom we have already established contacts and collaborations. However, our goal is to expand this catalog over time, adding new companies and entities as we come to know them and establish new synergies.

The information presented in this catalog has been shared directly by the companies themselves, with the aim of providing a useful resource for those interested in establishing possible collaborations. If you wish to contact any of the companies included, you can do so directly using the contact details provided. For other inquiries or to obtain more information, please contact the ÒPTIMA Office.

We hope that this catalog will be a valuable tool for all those interested in the development of the battery value chain in Catalonia.

COMPANIES IN THE BATTERY VALUE CHAIN IN **CATALONIA**


EBRO
FACTORY

TORROT

100
ANYS
TEISA 1920

EVARM

BOLD

Napptilus
Battery Labs

EMEA
Electro
Solutions

BEELECTRIC

COMEXI
Battery Solutions

neklar
DRIVEN BY PASSION

Gestamp

Farguell
GROUP

relats

HYPERION

Forminsa
Formin the future

PÀVER

TECALUM
Industrial

ILPEA
GALVARPLAST

JPM
matrices y moldes

SERTEK
SERRA GLOBAL TECHNOLOGY S.L.

ekologica
environment

TERREPOWER

ingedetec
Teamwork experience

Mobile
Knowledge

SYM
NAVAL

Circutor

floox

M4REFORMER

magnetika

bia
The Wireless Grid

Applus
IDIADA

ALBA

BATTECH
IREC
eurecat

eurecat
Centre Tecnològic de Catalunya

IREC
Shaping Energy for a Sustainable Future

LEITAT
managing technologies

Applus

UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

Agència de
Residus de
Catalunya

Generalitat
de Catalunya

Ebro Factory

Large company

www.ebro.es

Contact

+34 669 53 10 42

Company categorization:

Potential battery customer

Ebro Factory is a company dedicated to the re-industrialization of the former Nissan facilities in Barcelona, with two plants in Zona Franca and Montcada. Specializing in Contract Manufacturing, it offers customized vehicle production and assembly services, standing out for its flexibility and scalability, taking advantage of the facilities and accumulated experience.

Ebro Factory offers several services focused on the production and assembly of vehicles, including manufacturing, assembly and finishing. Its capabilities include stamping, welding, painting, cataphoresis, plastic injection and, in particular, the assembly of battery packs for electric vehicles, with a dedicated line in Zona Franca and manufacturing of metal casings in Montcada.

Ebro Factory is involved in several electric vehicle manufacturing and assembly projects, including the assembly of battery packs at its Zona Franca plant. Through its semi-automatic line, it offers advanced solutions for the production of battery packs, contributing to the growing demand for sustainable and technologically advanced solutions in the mobility sector.

TORROT

Mid-sized company

www.torrot.com

Contact

+34 972 40 61 15
info@torrot.com

Company categorization:

Potential battery customer

Torrot is a historic Catalan company with over 75 years of experience, dedicated to the design and manufacture of electric off-road and urban motorcycles. Founded in 1948, Torrot originally manufactured bicycles before moving into the production of mopeds and motorcycles.

Torrot offers a children's electric off-road Motocross, Trial and Supermotard range for boys and girls aged 3 to 10. They have a removable battery, speed limiter and an app from which you can configure the bike's parameters, such as power or speed and activate or deactivate parental control. The electric urban range includes the MUVI electric model: a light moped manufactured with two cylinder capacities, 49 cc and 125 cc. It has two under-seat batteries to facilitate their extraction and charging, as well as an app to interact with the bike from the palm of your hand.

They are currently developing the 100% new MX3 youth electric off-road motorcycle for ages 9-14 at their facility. Like the vehicle itself, its battery has been designed entirely by its R&D department.

T.E.I.S.A. Transports Elèctrics Interurbans, S.A.

Large company

www.teisa-bus.com

Contact

+34 972 20 48 68
gestio@teisa-bus.com

Company categorization:

Public transport operator

Potential battery customer

TEISA Group is a mobility services company with over 100 years of experience contributing to the passenger mobility thanks to the efforts of an experienced and committed team with a high vocation for service. It has approximately 400 direct employees and a fleet of 250 coaches.

The TEISA group provides regular line services (urban and interurban), transport on demand, school transport, adapted transport, discretionary transport and employee shuttles. It also manages several bus stations in the province of Girona.

Currently three of the lines operated by TEISA are provided with electric vehicles; they also have recharging infrastructures in their garages and are producers of photovoltaic energy.

Evarm

Small company

www.evarm.com

Contact

+34 932 809 972
xribas@evarm.com

Company categorization:

Manufacturer of vehicles and retrofits

Potential customer of batteries

Evarm is a leading manufacturer of electric and hydrogen battery vehicles, specializing mainly in trucks and buses. With a pioneering vision in sustainable mobility, Evarm combines innovative technology with a clear commitment to reducing emissions and energy efficiency.

Evarm offers the transformation of internal combustion vehicles to battery electric vehicles (BEV) and fuel cell electric vehicles (FCEV). Its product line includes trucks and buses adapted for various urban and long-distance transport needs.

Evarm has participated in several significant projects in collaboration with initiatives such as IDAE and MOVES, dedicated to the development and deployment of battery and fuel cell electric vehicles. In addition, its efforts in technological innovation through the INNOTEC program have contributed to significant advances in the integration of high-capacity batteries and advanced energy management systems in the sustainable transport sector.

Bold

Small company

www.boldvaluable.tech

Contact

+34 934 10 09 46
sales@boldvaluable.tech

Company categorization:

Production processes

Supplier with own product

Bold Valuable is a company specializing in the development and manufacture of high performance electric batteries for sectors such as the automotive/ motor sports, aerospace and marine industries. With a strong commitment to innovation, they use advanced materials to improve the performance and reduce the weight of their products. Bold Valuable stands out for its excellence in the international market, exporting 100% of its products outside of Spain.

Bold Valuable offers a wide range of high performance electric batteries, adapted to the requirements of demanding sectors such as the automotive industry, motor sports, aerospace and the marine industry. Specializing in the use of advanced materials, their products offer a perfect balance between performance, efficiency and durability.

Bold Valuable devotes all its efforts to developing first-class electric batteries that meet the strict specifications of customers in Europe and the United States. Through their continuous innovation in materials and technologies, they contribute to the advancement of electric mobility and high-performance battery applications in key sectors such as the automotive industry, aerospace and the marine industry.

Napptilus Battery Labs

Microenterprise

www.napptilusbatterylabs.com

Contact

+34 932 15 77 35
info@napptilusbatterylabs.com

Company categorization:

Production processes

Napptilus Battery Labs (NBL) is a company dedicated to the development and production of advanced technologies for energy storage. It specializes in the creation of cells based on nano-carbon materials that offer significant advantages in terms of charging speed, durability and reduced costs compared to conventional lithium-ion battery cells.

At NBL they have developed an innovative battery for electric vehicles that is characterized by ultra-fast charging (less than 5 minutes) and an extended service life (up to 30,000 cycles). This technology not only significantly improves battery life, but also reduces production and operation costs, making it an ideal solution for electric mobility. Its cells are designed entirely in Catalonia, thus guaranteeing exceptional quality and minimal environmental impact.

Currently, they are working on the development of fast charging cells for electric vehicle applications and stationary storage at renewable energy sources. This project includes collaboration with institutions such as the Catalan Institute of Nanoscience and Nanotechnology and the Polytechnic University of Catalonia (UPC), with the aim of validating their technology in real environments and adapting it to the specific needs of each sector.

EMEA Electro Solutions

Small company

www.emeaelectrosolutions.com

Contact

+34 934 616 742
info@emeaelectrosolutions.com

Company categorization:

Production processes

Supplier of industrial equipment

EMEA Electro Solutions is a company specialized in the agency and supply of equipment for the production of cells and industrialization of battery packs. Their capabilities range from prototyping and design for manufacturing to the supply of automated lines for the production of battery packs.

Be Electrics Conversions, SL

Microenterprise

www.be-electrics.com

Contact

+34 619 75 59 23
daniel.quer@be-electrics.com

Company categorization:

Supplier with own product

Be Electrics Conversion is a company founded in 2007 and based in Llers (Girona), specialized in the design and manufacture of systems for the micro-hybridization of combustion vehicles. Initially focused on the manufacture of conventional racing cars, the company reoriented itself towards electric mobility in 2011. Currently, Be Electrics Conversion is a leader in the conversion and adaptation of existing vehicles to more sustainable and efficient technologies.

Be Electrics Conversion offers an innovative micro-hybridization system known as the Mild Hybrid system, which includes a motor generator, a control box and an energy storage system based on ultra-capacitors. This system is installed in authorized workshops in several Spanish cities, providing a solution that improves the energy efficiency of existing combustion vehicles.

Be Electrics Conversion has developed a pioneering system in micro-hybridization that improves the performance of combustion vehicles with an additional electric component. This system uses ultra-capacitor technology for energy storage, providing a boost of supplemental energy at start-up, simulating the functionality of a Mild Hybrid system. This innovation stands out for its ability to transform vehicles effectively and sustainably, contributing to the transition towards greener and more efficient mobility.

Comexi

Large company

www.comexi.com

Contact

+34 934 10 09 46
comexi@comexi.com

Company categorization:

Supplier with own product

Comexi is a family company founded in Girona in 1954. Focused on innovation and sustainability, Comexi is a world leader in machinery solutions for flexible packaging, with a global presence and a commitment to customer proximity.

Comexi designs, manufactures and distributes global solutions for the flexible packaging industry, specializing in processes such as printing, lamination, coating, cutting, laser and reel handling. With facilities in Girona, Brazil, and offices in Miami and Bangkok, Comexi offers an extensive range of machinery and services to meet the needs of customers in more than 100 countries.

Comexi is recognized for its advanced reel-to-reel solutions for the manufacture of lithium battery electrodes and supercapacitors. Its slitters-rewinders and automatic unwinding and rewinding equipment, integrated in coating and lamination machines, offer great flexibility and productivity.

Neklar

Large company

www.neklargroup.com

Contact

+34 937 36 31 31
commercial@neklargroup.com

Company categorization:

Supplier with own product

NEKLAR is a leading company in the automotive industry with 40 years of experience, specialized in the design, development and production of assemblies based on metal stamping applied to thermal, thermo-acoustic and electromagnetic insulation for vehicles. With an international presence and factories in Europe, China and Mexico, NEKLAR has a firm commitment to the transition towards cleaner mobility, standing out in this regard for its innovation in electro-mobility.

Neklar develops various metal stamping products. For internal combustion vehicles, they produce exhaust line heat shields based on smooth or corrugated aluminum and engine manifold encapsulation shields made of different thicknesses of stainless steel or aluminized steel. For electric vehicles, they produce electromagnetic shields made of smooth or corrugated aluminum and bipolar stainless steel panels.

In the area of batteries, they do the design, development and production of cooling plates for the fuel cell cooling systems and bipolar plates.

Gestamp

Large company

www.gestamp.com

Contact

+34 937 75 85 00
www.gestamp.com/Contacto

Company categorization:

Supplier with own product

Production processes

Gestamp is a leading company in the manufacture of automobile parts, standing out for its innovative processes and production efficiency. With several plants in Catalonia, it offers advanced solutions in sheet metal stamping, welding and shaping.

Gestamp offers a wide range of services and products for the automotive industry, including sheet metal stamping, welding, assembly and shaping. Its ability to design its own products allows it to produce personalized, high-quality solutions. In addition, it has several production centers in Catalonia, guaranteeing efficient and local production.

Gestamp is a leader in the field of batteries with R&D centers dedicated to new battery system processes and the production of battery cases and structural elements. Currently, it develops and produces covers for battery cases, innovating in efficient and safe solutions for the automotive industry.

Farguell Group

Large company

www.farguell.com

Contact

+34 934 98 71 71
info@farguell.com

Company categorization:

Production processes

Product development

Farguell is a company dedicated to the manufacture of metal products using stamping processes and flexible techniques. It has three companies in Catalonia and one in Slovakia, which has been manufacturing since 2008. It also offers welding, riveting, tapping services, and completes its supply chain with a powder coating line and component assembly. Its customers are both in the automotive and non-automotive industries, and they stamp parts directly for OEMs at the Rubí plant, acquired in 2023. They define themselves as a Full Service Supplier, offering a comprehensive service from design to the manufacture of prototypes and pre-series.

Farguell manufactures electric vehicle chargers for three of the main manufacturers in Spain and has collaborated in the design as a partner of its customers. In addition to metal parts they produce using laser cutting, breaking, welding and final paint finishes, they also provide final component assemblies.

Currently, Farguell produces parts for energy storage systems (battery racks) and Busbar type components for electrical systems.

RELATS S.A.U.

Large company

www.relats.com

Contact

+34 938 62 75 80
relats@relats.com

Company categorization:

Supplier with own product

Relats is a global leader in the manufacture of technical textile coating solutions. Our global presence includes manufacturing plants in Spain, China, Mexico, Morocco, Romania and Vietnam. We partner with companies that supply the main components for global brands across the automotive, mass transport, aerospace, electrical appliance, electric power, and renewable energy sectors.

In our HQ plant in Caldes de Montbui we design and manufacture flexible sleeves for a broad range of applications, including thermal insulation, electrical, mechanical, sound reduction, impact protection, electromagnetic shielding, and a new product range for EV, HEV, and PHEV.

They are developing a series of covers to protect the plates (Busbars) of the battery pack. These covers offer electrical insulation and protection against high temperatures of up to 1000ºC.

Hyperion Materials & Technologies Spain

Large company

www.hyperionmt.com

Contact

+34 935 71 76 00
vicenc.muntanyola@hyperionmt.com

Company categorization:

Production process

Supplier with own product

Hyperion Materials & Technologies is a leading global advanced materials company with decades of experience developing and manufacturing tungsten carbide powder, cemented carbide, industrial diamonds and cubic boron nitride.

Hyperion Materials & Technologies Spain offers a wide range of products focused on advanced solutions with hard materials. Its range includes high-precision cutting tools, superabrasive materials such as synthetic diamonds and cermets, wear-resistant components for industrial applications, drilling and mining solutions, as well as specialist products for the medical industry. This diverse product range allows Hyperion to meet the needs of various sectors, including the automotive industry, aerospace, and advanced manufacturing.

Engineering, design and manufacture of tools for the manufacture of battery cells.

Formin, SA

Mid-sized company

www.forminsa.com

Contact

+34 938 34 05 28
forminsa@forminsa.com

Forminsa®
Formin' the future

Company categorization:

Production processes

Supplier with own product

FORMIN, S.A. is a company founded in 1985, with corporate headquarters in Sant Fruitós del Bages and a 10,000 m² production plant. It offers technical metal stamping products, meeting the quality, service and cost expectations of its customers. In addition, it provides technological collaboration in the field of engineering to industrially rationalize products and progressively increase added value.

FORMIN, S.A. manufactures complex and precise metal parts, automating operations such as threading and joining, and operates in automotive industry, construction, medicine and other sectors.

FORMIN, S.A. manufactures electrical connectors or busbars, essential and complex elements for electric cars. Responsible for the interconnection of the different electrical components in electric cars, there are an average of 80 busbars in every car.

Pàver

Mid-sized company

www.relem.com

Contact

+34 938 61 50 40
paver@paver.es

Company categorization:

Production processes

Páver is a company located in Granollers that is dedicated to stamping, cold drawn steel, the construction of dies, and the manufacture and shaping of all kinds of metal tubes for the automotive industry. Founded in 1967, it has managed to expand its presence in the international market, with customers all over the world and a solid reputation for excellence in the manufacture of quality metal parts.

Its services could be divided into three sections: stamping, metal tube forming and engineering and design. Stamping is the process of cold shaping of materials for the manufacture of highly technical parts with small tolerance levels. The forming of metal tubes includes bending, end shaping, cold drawing and stretching and can be applied to air conditioning systems and structures in the automotive industry. Among others, they produce busbars for inverters, covers for electronic switchboards or contact tracks for high-voltage heaters.

They are currently manufacturing battery components from “TIER 1” manufacturers in the automotive industry. In particular, they manufacture busbars from copper raw material due to the conductivity of electrical mobility. They also produce connectors for the temperature control system of the batteries themselves that allow the flow of liquid drawn by tubes between the modules that make up the vehicle batteries. This system regulates the temperature to keep it at ideal levels and thus extend the range and life of the batteries.

Tecalum

Mid-sized company

www.tecalum.com

Contact

+34 972 68 75 12
tecalum@tecalum.com

Company categorization:

Production processes

Tecalum is a company dedicated to transforming aluminum products for different sectors such as lighting, the automotive industry, energy and sustainable mobility. In particular, they extrude aluminum profiles and do the machining and other finishing operations (lacquering, anodizing, bending, welding, assembly) to deliver the finished piece to the customer.

In relation to the field of batteries, they are producing different types of battery packs or aluminum battery casings, intended for of light industrial vehicles, electric bicycles and motorcycles.

ILPEA Galvarplast

Mid-sized company

www.ilpeagalvarplast.com

Contact

+34 938 61 50 40
sales.galvarplast@ilpea.com

Company categorization:

Production processes

Supplier with own product

ILPEA is a company found all over the world, and has more than 60 years of experience in the automotive industry and in the development of thermoplastics. They manufacture custom assemblies for the top companies in the automotive industry in Europe and America, with the aim of solving their problems as quickly and efficiently as possible. At ILPEA Galvarplast we develop pipes for electrified vehicle battery cooling systems, based on quality, the use of sustainable materials and getting the maximum efficiency from the thermal management system.

Its product range provides solutions for various areas such as Thermal Management (cooling systems, degassing), washing systems (windshield wipers, headlight cleaning, sensor cleaning), profiles (sealing of car doors and windows) and management of fluids (fuel lines, SCR lines, vacuum lines) for electric, hybrid and combustion vehicles.

They are currently working on fluid transmission lines to transfer coolant to the electric car battery.

Matrices y moldes, J.F.M.

Small company

www.jfmnet.com

Contact

+34 934 21 07 10
administracion@jfmnet.com

Company categorization:

Production processes

Matrices y moldes JFM is a family company that has been dedicated to the construction of dies, metal part stamping, part welding and product assembly since 1954. The company is not only oriented toward product production but also customer service, from the adaptation to the customer's specific needs to high flexibility when it comes to product delivery.

Its product portfolio includes washers, electrical contacts, threaded sheets made from progressive die stamping or at a later phase, metal inserts for the injection of plastic and rubber, springs made from strip metal, metal parts for plastic and rubber injection, among others. As for services, they offer consulting, prototype manufacturing and series manufacturing services.

Currently, they manufacture heat sinks for batteries/insulators, battery-to-vehicle fastening systems and busbars.

Sertek

Small company

www.sertekglobal.com

Contact

+34 935 60 34 20
sertek@sertekglobal.com

Company categorization:

Battery materials distributor

Sertek is a company dedicated to the sale and distribution of technical adhesive tapes, technical labeling, special films, electrical insulating laminates, thermal pads for heat sinks, and thermal insulating materials. At Sertek we provide personalized service by adapting the product to the customer's specifications.

They work on various projects for electric mobility such as urban or mountain bikes, battery assemblers for boats and other vehicles. Currently, they have three customers that manufacture electric motorcycles, who use Sertek materials such as thermal conductors in the battery management electronics. Finally, one of Sertek's customers has approved its materials as thermal conductors for a new battery that will go to market in 2025.

In batteries, they offer electrically insulating and/or thermally conductive adhesive tapes, heat transmission parts, thermal and electrical insulation materials, electrical insulation films and fire protection/insulation materials.

Ekologica

Microenterprise

www.ekologica.es/

Contact

+34 935 60 34 20
administracio@ekologica.es

Company categorization:

Circular economy

EKOLOGICA is a company specialized in the recovery and recycling of advanced components such as airbags and batteries, with a strong commitment to the circular economy and sustainability. With a precise focus on the recovery of valuable materials, EKOLOGICA contributes significantly to the responsible management of electronic waste.

EKOLOGICA offers specialized services in the recovery and recycling of various types of batteries, including lead and lithium batteries. This includes the recovery of components for a second service life, as well as advanced recycling projects for the efficient separation of valuable materials.

EKOLOGICA is currently involved in several innovative projects in the lithium battery sector. In addition to the recovery of lithium batteries for conversion into stationary charging batteries, they are developing a recycling plant dedicated to the effective separation and recovery of lithium battery materials. This commitment to sustainable innovation reinforces its role as a leader in the field of battery recycling and e-waste management.

TerrePower (BBB Industries)

Small company

www.bbbind.com/terrepower

Contact

+34 608 99 14 46
jojimenez@bbbind.com

Company categorization:

Circular economy

BBB Industries, LLC is an industry leader in the sustainable manufacturing of starters, alternators, hydraulic and air disc brake calipers, hydraulic and electronic power steering products, and turbochargers for the OEM vehicle, passengers, industrial and commercial aftermarket industries. Through the new TerrePower division, BBB Industries brings its sustainable manufacturing process to the electric vehicle and renewable energy sectors, with re-manufacturing and applications in second-life batteries.

The main activity of Terrepower, the branch of BBB Industries, LLC in Europe, is the manufacture and development of second-life batteries for photovoltaic installation storage systems and the re-manufacturing of high-voltage electric vehicle batteries.

Currently, they have several energy storage system solutions for domestic use ranging from 5kWh to 15kWh. As a project in development, they are designing modular systems for more industrial environments with a capacity between 100kWh and 200kWh.

Ingedetec

Mid-sized company

www.ingedetec.com

Contact

+34 937 76 92 00
ingedetec@ingedetec-group.com

Company categorization:

Engineering

Ingedetec is an engineering services company mainly for the automotive industry, in addition to working with the rail, aviation and energy systems sectors. Specializing in the development of wiring, packaging, lighting, plastic parts, testing and experimentation, their team of professional engineers and designers has proven experience from working in environments with strict deadlines and large-scale projects.

Ingedetec offers engineering services for project development, with particular emphasis on the design of lighting components with 3D, optical, thermal and electronic technologies. In addition, it develops plastic parts and other materials for the automotive, rail and aviation industries. The company also focuses on the development of vehicle electrical systems, including routing, packaging, testing and validation, as well as the regulatory management of wiring components. Finally, it offers testing and validation services for all car systems and uses the Strak “Icem Surf” system.

At Ingedetec, they have infrastructure in place for the battery analysis and testing: a battery and electrical component test lab in a climate chamber and power bank, a programming room and a workshop for testing electric vehicles.

MobileKnowledge

Small company

www.themobileknowledge.com

Contact

+34 663 62 38 63
contact@themobileknowledge.com

Company categorization:

Engineering

Supplier with own product

MobileKnowledge is a hardware, software and systems engineering firm, specializing in smart, connected and secure technologies for the automotive industry, IoT and mobile ecosystems. Regarding BMS, we are leaders in the research, definition and development of completely innovative solutions on a global scale for the replacement of physical wiring in the internal communication of a BMS for wireless communication based on ultra-wideband technology (UWB), where we are experts in a multitude of applications in the world of IoT.

They develop a wireless connection system between the main BMS control unit (BMU - Battery Management Unit) and the battery control modules (CMU - Control Management Unit), using UWB (Ultra Wide Band) technology. They are in the research and development phase of the technological solution.

Sym Naval

Small company

www.sym-naval.com

Contact

+34 934 91 04 50
comercial@sym-naval.com

Company categorization:

Engineering

Supplier with own product

Sym Naval is an international ship building, conversion and repair company. Its activity focuses on providing technical assistance to cruise ships and merchant ships around the world through mobile equipment, steel ship construction and ship repair and maintenance in dry docking and wet docking.

They work in different activities such as developing customized projects in naval port solutions, construction, navigation tests and maintenance.

They also do software development for the control of marine electric propulsion systems, zero emission marine propulsion systems and batteries.

Circutor

Large company

www.circutor.com

Contact

+34 937 45 29 00
www.circutor.com/contacto

Company categorization:

Charging infrastructure

Potential customer of batteries

Circutor is a leading manufacturer of electrical equipment with a wide range of business lines focused on energy efficiency, energy measurement and electric vehicle charging infrastructures. With a global presence, Circutor is a leader in technological development for smart energy management.

Circutor offers an extensive range of products and services including energy efficiency systems, advanced energy measurement equipment and integrated solutions for recharging electric vehicles. As a manufacturer of charging infrastructure for V.E. and user of storage batteries, Circutor provides innovative technologies to optimize energy consumption and promote sustainability.

Circutor is in the process of developing a new line of lithium batteries in two technological variants: LiFePO4 and LiNMn. In addition, they are working on an energy management system (EMS) that will be applied to energy flow solutions related to recharging electric vehicles, storage batteries and photovoltaic generation. This initiative underscores its commitment to innovation and meeting the challenges of renewable energy and sustainable electric mobility.

Floox

Small company

www.flooxpower.com

Contact

+34 932 22 82 82
info@flooxpower.com

Company categorization:

Charging Infrastructure

Floox is a company that designs, develops and manufactures fast chargers for electric vehicles in Catalonia. Its mission is to contribute to the planet's decarbonisation by promoting the use of renewable energy sources and the transition towards a sustainable economy and society. To do this, they improve the electric vehicle charging experience by adapting their solutions to the needs of each project (vehicle fleets, shopping malls, service stations, parking garages, hotels and restaurants, etc.). Founded in 2022, Floox started as an entrepreneurial project of the company Premium PSU, which has more than 40 years of experience in power electronics.

Currently, its product is based on Floox fast chargers ranging from 30 to 240 kW, with three different models on the market: the Lyra Lite 30-40, the Lyra 60-80 and the modular Lynx 120-240. All three have been designed and produced in Catalonia and stand out for their compact design and size, remote software updates, the use of recycled steel for their manufacture and their user experience.

Methanol Reformer

Small company

www.methanolreformer.com

Contact

+34 673 57 33 78
info@methanolreformer.es

Company categorization:

Engineering

Cargo infrastructure

Methanol Reformer is a company that supplies electric vehicle charging solutions, refurbishment solutions of current service stations with low capex and opex. It even provides mobile solutions for areas without the necessary power, but with the need to have charging points. Its solution is designed to facilitate its transport, since it can also be integrated within the same structure of the service stations. The technology of the charging solution is based on the reformation of methanol and through a fuel cell, supplying electric power of between 150 – 250 kw as modular and scalable system.

Its product portfolio covers from strictly hydrogen generators to containerized solutions for the supply of high-purity hydrogen or the electrical energy to charge electric vehicles. The solution is mobile, scalable, and can be integrated into current structures supplying from 150-250 kw of power per container. The system consists of a hydrogen generator connected to a fuel cell in order to supply the energy to charge vehicles through high-purity hydrogen.

They are working on several projects related to vehicle charging, but the project called e-NOMAD should be highlighted. In this project, a container is being developed for charging machinery without having to move either the batteries or the vehicles. The system is mounted on a trailer that moves to each work area and charges the machinery without having to connect to the electrical network.

Magnetika

Microenterprise

www.magnetika.tech

Contact

+34 932 15 77 35
hello@magnetika.tech

Company categorization:

Charging infrastructure

Supplier with own product

Magnetika is a Catalan company specialized in the development and production of advanced magnetic systems, with a particular focus on power electronics and wireless charging technologies. Its product portfolio includes innovative solutions for the automotive industry, robotics, and other emerging technological sectors. With a consolidated experience in electrical and magnetic engineering, Magnetika stands out for its ability to customize products according to the specific needs of its customers, providing a high level of efficiency and reliability.

Magnetika produces wireless charging systems for electric vehicles, including light vehicles, drones and mobile robots. These systems allow for the efficient recharging of batteries without the need to physically connect the vehicles to an energy source, offering a practical and advanced solution for sustainable mobility.

Magnetika is currently working on the development of new battery management and charging systems for electric vehicles, focused on improved energy efficiency in battery charging. These projects include both research into new wireless charging technologies and the optimization of current ones, with the aim of making them more accessible and efficient for the Catalan and international market.

Bia Power Grid, S.L.

Microenterprise

www.biapower.io

Contact

hello@biapower.io

Company categorization:

Charging optimization software

Bia presents a software solution for optimized battery recharging, through its artificial intelligence and machine learning technology, whose primary purposes include the conservation of electric vehicle batteries. Different charging strategies and the use of data analysis are employed to reduce the impact of these processes on battery deterioration as well as issuing alerts referring to preventive battery maintenance.

Software for optimizing recharging and maintenance of the condition of electric vehicle batteries

Optimization software and Smart Charging. This software does focus some of its customization possibilities on extending the battery's service life and we are working on the possibility of including warnings for its preventive maintenance, helping electric vehicle fleet operators to extend the service useful life of their batteries.

Applus+ IDIADA

Engineering

www.idiada.com

Contact

+34 977 16 60 00
info@idiada.com

Company categorization:

Facilitator

Applus+ IDIADA is a company serving the international automotive industry with more than 30 years of experience in vehicle development, offering design, engineering, testing and standardization services. IDIADA's success is based on the combination of highly experienced engineers, state-of-the-art testing facilities and a constant commitment to innovation. The company has more than 3,200 professionals and an international network of subsidiaries and branches in 22 countries, globally offering high added-value solutions adapted to customer needs.

Global design, engineering and validation capabilities for development projects for safe and sustainable mobility. Specifically, IDIADA has specialists and facilities in the fields of electronics, alternative and conventional propulsion and transmission systems, connected and autonomous vehicles, driving assistance systems, passive safety, vehicle body development, chassis development, reliability, comfort and NVH.

Battery development has been conducted at IDIADA for a solid 8 years, first and foremost from the development of tests and validation of components and sub-components of the energy storage system. IDIADA's capabilities in this field range from functional and durability validation to tests outside the usual limits of operation or abusive tests, where system safety is validated in cases of failure. In addition to testing and validation services, battery engineering and development services focus on battery case design and thermal management systems, development of battery management systems or BMS, and the integration of storage systems within the vehicle.

ALBA synchrotron

Technological research center

www.albasynchrotron.es

Contact

+34 935 92 43 00
industrialoffice@cells.es

Company categorization:

Facilitator

The **ALBA Synchrotron**, located in Cerdanyola del Vallès (Barcelona), is the only synchrotron light source in Spain. Managed by the public Consortium for the Construction, Equipment and Exploitation of the Synchrotron Light Laboratory (CELLS) and co-financed by the Government of Spain and the Generalitat of Catalonia, ALBA is recognized as a unique scientific and technical infrastructure (ICTS), contributing significantly to scientific and industrial progress.

The ALBA Synchrotron offers eleven operational light lines and three under construction, used for experimentation in fields such as biomedicine, nanotechnology, materials science, historical and artistic heritage, physics, environmental sciences and chemistry. It provides advanced tools for structural and compositional analysis of samples, improving scientific understanding across multiple disciplines.

The ALBA Synchrotron is a leading center for research into advanced materials for electric vehicle batteries and car catalysts. The aim is to improve the battery efficiency and sustainability, developing technologies to reduce emissions. The structural and chemical characterization of materials such as lithium ion cathodes (NMC, LCO, LMO), graphene anodes, silicon, among others, is essential for the development of more efficient and durable batteries, playing a key role in the transition towards cleaner and more sustainable mobility.

Battech

Technological research center

www.battechbatteryhub.org

Contact

Eurecat: +34 935 94 47 00
and IREC: +34 933 56 26 15
info@eurecat.org

Company categorization:

Facilitator

BATTECH is a joint research unit in the field of batteries, promoted and established by the Energy Research Institute of Catalonia (IREC) and the EURECAT technology center. BATTECH promotes and participates in research, development, testing and innovation projects with the aim of improving the transfer of knowledge to the industry in the field of electrochemical batteries, always from a perspective focused on the circular economy and sustainability. A total of 17 research groups and technological units from IREC and Eurecat form part of BATTECH, which provide it with broad cross-disciplinary and multi-sectoral capacity to face the biggest industrial scientific-technological challenges in the field of electric battery storage, from TRL 2-4 to TRL 6-8 (TRL: Technological Readiness Levels) thanks to more than 50 fully dedicated researchers and technologists.

BATTECH covers the entire value chain from the development of the materials that make up the cells, as fundamental parts of the batteries, through the assessment and validation testing of new developments in cells, modules and battery packs. From working with eco-design tools, developing hybrid storage systems, generating SOx models to improve management systems (BMS), doing data analytics and incorporating artificial intelligence into algorithms to the integration of batteries in electric mobility or large batteries in energy systems that support the electricity grid, their second life and automated recycling is always taken into consideration.

Currently, BATTECH is leading two major European projects in the new generation of cells and batteries: Cobra and Marbel. Coordinated by IREC and Eurecat respectively, the unit is also participating in more than 10 European H2020 and HE research projects, in other national R+ D projects and supporting many companies in their research, development and innovation projects and worker training.

Eurecat Centre Tecnològic

Technological research center

www.eurecat.org

Contact

+34 932 38 14 00
info@eurecat.org

Company categorization:

Facilitator

The Eurecat Foundation was established in 2013 with the merger of several specialized technology centers, consolidating a deep accumulated knowledge in key technological areas. With highly specialized facilities and laboratories, Eurecat is recognized for its multidisciplinary capacity and its outstanding contribution to strategic sectors such as the automotive industry, food, health and energy.

Eurecat offers a wide range of services focused on knowledge transfer and technological innovation. This includes applied research, technological development, specialized consulting, training, valorization of results and the dissemination of knowledge, aimed at improving business competitiveness and promoting sustainability.

Eurecat leads several innovative projects focused on sustainable development and advanced battery research. Projects such as MARBEL, FREE4LIB, RECIBIL and COBRA exemplify the engineering of modular and reusable batteries, the recovery of critical materials in lithium battery cycles, and the development of cobalt-free batteries for future automotive applications, consolidating its position as key player in the transition towards sustainable mobility.

Fundació Institut de Recerca en Energia de Catalunya

Technological research center

www.irec.cat

Contact

+34 933 56 26 15
ktt@irec.cat

IREC
Shaping Energy for a Sustainable Future

Company categorization:

Facilitator

Fundació Institut de Recerca en Energia de Catalunya (IREC) is a foundation dedicated to research and development in the field of energy. Founded with the aim of promoting innovation and sustainability, IREC works to promote advanced energy technologies. It collaborates with companies, institutions and public bodies for the creation of efficient energy solutions. Its mission is to contribute to the energy transition by researching cutting-edge technological solutions.

IREC offers a wide range of services that include renewable energy research, energy efficiency and energy systems integration. It also develops applied research projects in collaboration with the industrial and academic sector. In addition, it provides consulting services and advisement on energy policies and sustainable technologies. IREC facilitates the transfer of knowledge through training and scientific dissemination.

In the field of batteries, IREC stands out for its research into advanced materials for lithium batteries and other emerging technologies, focusing on improving efficiency, durability and reducing production costs. It works on battery recycling and second life projects, contributing to the circular economy, and develops batteries for stationary and mobile applications and energy storage systems for smart grids. Currently, it has 20 active projects financed with European and national funds, highlighting areas such as new solid-state batteries, new materials, recycling, control and monitoring, second life, hybrid systems and integration of electric vehicles in energy systems. In addition, it participates in international consortia to promote innovation in the field of batteries.

Leitat

Technological research center

https://projects.leitat.org/

Contact

+34 602 67 49 47
havireddy@leitat.org

Company categorization:

Facilitator

LEITAT, founded in 1906, is a leading Spanish Research and Technology Organization (RTO) that specializes in various technological and industrial sectors. LEITAT's portfolio includes 500+ industrial projects and a significant involvement in European research initiatives, such as Horizon 2020 and Horizon Europe. The company operates across 11 sites and focuses on five interconnected areas: Digital Industry, Health & Biomedicine, Circular Economy & Decarbonization, Advanced Technology Services, and Applied Chemistry & Materials. LEITAT is renowned for delivering comprehensive solutions through a collaborative model that connects teams, projects, and clients to foster innovation and technological advancement.

LEITAT assesses End-of-Life (EoL) electrical components and sorts or deactivates packs, modules, or cells for repair, second life or recycling, focusing on raw material recycling from mines. Their activity includes the digitalization of manufacturing, recycling, and digital twin processes. They automate disassembly processes using collaborative robotics and AI and develop additive manufacturing prototypes for disassembly tools and recyclability-focused pack design. LEITAT achieves high-purity black mass through AI-coupled optical sorting and uses various technologies for leaching, separation, and recovery of precursor Cathode Active Material (pCAM). Additionally, they synthesize Cathode Active Material (CAM), manage solid and liquid electrolytes, assemble cells, and perform comprehensive characterizations including electrical, thermal, mechanical, and abusive post-mortem analyses.

LEITAT's projects focus on several key areas. These include developing advanced battery technologies, such as solid-state, lithium-ion, and lithium-sulfur batteries, as well as optimizing battery recycling processes to enhance sustainability. Many of its projects feature additive manufacturing and automation in battery production, while others explore energy storage solutions using innovative materials like aluminum-ion and metal-air batteries. The principles of the circular economy are a core value, particularly in recycling End-of-Life battery packs and raw materials. Its projects also integrate new energy solutions into industrial applications, from electric vehicles to grid storage.

Applus +
Engineering

www.applus.com

Contact

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james.steele@applus.com

Company categorization:

Facilitator

Applus+ is a leading company in the field of inspection, certification and testing, established on a global scale. Founded in Spain, its activity focuses on offering tests to validate the quality, safety and sustainability of products and processes in sectors such as the automotive industry, aviation, energy, cybersecurity, infrastructure and construction and telecommunications. It has a global network of laboratories and inspection teams distributed in more than 70 countries.

Applus+ provides a wide range of services including quality certification, industrial inspection, equipment and facility verification, as well as technical testing and calibration services. The company also provides technological advisement and energy audits, covering various sectors with the aim of improving the efficiency and safety of its customers.

In the field of batteries, Applus+ participates in the validation and testing of safety and performance of electric vehicle batteries. It also collaborates on technological innovation projects related to lithium-ion batteries and alternative configurations/materials, ensuring they meet international quality standards. Its services include, among others, the assessment of the durability and sustainability of batteries within the electric mobility chain.

Universitat Politècnica de Catalunya - BarcelonaTech (UPC)

University

www.upc.edu

Contact

+34 934 13 76 28
suport.rdi@upc.edu

Company categorization:

Facilitator

The Universitat Politècnica de Catalunya - BarcelonaTech (UPC) is a public research and higher education institution in the fields of engineering, architecture, science and technology, and is one of the leading polytechnic universities in Europe. Currently, it has nearly 150 research groups, 23 research centers and R&D revenues of more than 118M euros during 2023.

The following services are offered: R&D of new battery technologies and mobility systems, advisement and consultancy for sector companies (system integration, energy optimization, decay, etc.), specialized battery/electric mobility courses/ workshops, collaboration and transfer programs, simulation and modeling of battery systems, service testing and validation of battery technologies and mobility systems, software and algorithm development for Battery Management Systems (BMS), and battery life cycle eco-design and assessment.

They are currently at work on different projects: Decarbonization of transport using hybrid energy storage systems with lithium-ion batteries and super-capacitors, development of modular and scalable battery packs for urban electric vehicles, integrating innovative materials and technologies, bidirectional on-board charger (integrated traction systems), electric vehicle charging centers (EV-Hubs), hydroelectric plants with second-life batteries and energy storage in molecules.

Agència de Residus de Catalunya

Public Administration

residus.gencat.cat/ca/inici

Agència de Residus de Catalunya

Generalitat de Catalunya

Contact

+34 935 67 33 00
residus.gencat.cat/ca/contacte/

Company categorization:

Circular economy

The Agència de Residus de Catalunya (Waste Management Agency of Catalonia) is a public company with jurisdiction over the waste generated and managed in Catalonia. It is committed to improving the quality of life of citizens and protecting the environment through various waste management initiatives and policies.

The Waste Management Agency of Catalonia promotes the sustainable waste management with measures such as the minimization of hazardous waste, selective collection and the valorization of waste. It is also responsible for the assessment of activities and the granting of licenses to waste management facilities, as well as the authorization and control of the extended responsibility of the producer of battery waste. In addition, it promotes circular economy projects through subsidies for the improvement of prevention, reuse and recycling processes.

The Waste Management Agency of Catalonia participates in initiatives for the sustainable management of batteries, including the promotion of recycling practices and valorization of battery materials to reduce the environmental impact. It contributes to the implementation of policies that facilitate the collection, recycling and proper treatment of batteries, thus promoting a more efficient and environmentally-friendly circular economy.

SECTOR OEMs IN **CATALONIA**

Customers from the battery value chain

SEAT

Hybrid and electric cars:
https://www.seat.es/compra-tu-seat/hibridos-electricos

León e-HYBRID

León Sportstourer e-HYBRID

Tarraco e-HYBRID

CUPRA

Hybrid and electric cars:
https://www.cupraofficial.es/gama-electrificada

León e-HYBRID

STARK

Electric motocross bikes:
https://starkfuture.com/es-ES/varg/stock-bikes

Stark VARG

EBRO FACTORY

Hybrid and electric vehicles:
https://ebro.es/

EBRO S700

EBRO S800

SILENCE

Electric motorcycles and nanocars:
https://www.silence.eco/es

S01+

S01

S02

S04

RIEJU

Electric motorcycles:
https://rieju.com/es/electric

E-TANGO

E-City 3KW*
*Also in 1.2KW model.

Nuuk Urban 6

Ray 7.7

AUSA

Electric industrial vehicles:
https://www.ausa.com/es-pa/gama-electrica

Dumper D151AEG

T164E Telescopic Handler

AYATS

Electric double-decker tourist bus: https://ayats.es/en/first-electric-double-decker-in-spain

Barcelona City Tour Bus

TORROT

Electric motocross and urban motorbikes:
https://torrot.com/es

MOTOCROSS MX1
MX2

TRIAL TR1 TR2

SUPERMOTARD SM1
SM2

MOTOCROSS MX3

MUVI

This catalog has been prepared by
the ÒPTIMA office and the participating companies.
You can contact us at **oficinaauto.accio@gencat.cat**.