

PROJECT

IMAGE

Innovative Manufacturing Routes for Next Generation Batteries in Europe

Funding: European (Horizon 2020)

Duration: Nov 2017 - Apr 2021

Status: Complete

Total project cost: €4,948,026

EU contribution: €4,948,026



[CORDIS RCN : 212374](#)

Objectives:

As of today, Europe remains not competitive in terms of Lithium battery cell development and especially manufacturing. This lack of competence and competitiveness could quickly spiral down into a complete loss of this key technology for electrification in the EU.

Thus, IMAGE will significantly contribute to sustainably develop the European Li-battery cell manufacturing competence and capability by creating a competitive, production-oriented research & development framework within Europe. A realistic and well-documented roadmap towards the manufacturing of cost-effective and competitive battery cells within Europe will emerge. This will be enforced by establishing a distributed battery cell production base that will be able, after careful upscaling of production, to supply the now burgeoning electric vehicle industry. From this context, the main goal of IMAGE is to push European's Li-battery industry and academia to take over a leading role in the development and manufacturing of Next Generation Li-Ion cells. IMAGE has the following major objectives:

1. Develop generic production techniques for next generation battery cells based on high specific energy Li-metal battery cells. This will include a modular development approach that will be easy to up-scale while remaining flexible and safer to replace in case of any contingencies and market/manufacturer configuration changes.
2. Identify energy and resource efficient cell manufacturing technologies and assets tailored to the existent European industrial infrastructure. This will include the identification of bottleneck factors and challenges that could be addressed in the present European industrial context.
3. Develop a progressive, multiple-tier technological and production framework that is able to cope with the inherent technological changes and advancements characteristic to this dynamic field. Thus, there will be several technologies covered by IMAGE, each having different technological maturity levels.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Avl List Gmbh

Address:

Hans-List-Platz
8020 Graz
Austria

Organisation Website:

<http://www.avl.com>

EU Contribution: €394,200

Partner Organisations:**Varta Storage Gmbh****Address:**

NURNBERGER STRASSE 65
86720 NORDLINGEN
Germany

EU Contribution: €238,250

Technische Universitaet Graz**Address:**

Rechbauerstrasse
8010 Graz
Austria

Organisation Website:

<http://www.tugraz.at>

EU Contribution: €370,563

Rheinisch-Westfaelische Technische Hochschule Aachen**Address:**

Templergraben
52062 Aachen
Germany

Organisation Website:

<http://www.rwth-aachen.de>

EU Contribution: €299,920

Varta Microbattery Gmbh**Address:**

DAIMLERSTRASSE 1
73479 ELLWANGEN JAGST
Germany

Organisation Website:

<http://www.varta-microbattery.de>

EU Contribution: €380,250

Vrije Universiteit Brussel**Address:**

Pleinlaan
1050 Brussel
Belgium

Organisation Website:

<http://www.vub.ac.be>

EU Contribution: €495,375

Centro De Investigacion Cooperativade Energias Alternativas Fundacion

Address:

CALLE ALBERT EINSTEIN 48 PARQUE TECNOLOGICO DE ALAVA
01510 MINANO
Spain

Organisation Website:

<http://www.cicenergigune.com>

EU Contribution: €375,750

Arkema France

Address:

Rue Estienne D Orves 420
92700 Colombes
France

Organisation Website:

<http://www.arkema.com>

EU Contribution: €576,250

Manz Italy Srl

Address:

Via San Lorenzo 19
40037 Sasso Marconi
Italy

EU Contribution: €345,000

Fundacion Cidetec

Address:

PASEO MIRAMON 196 PARQUE TECNOLOGICO DE MIRAMON
20014 SAN SEBASTIAN
Spain

Organisation Website:

<http://www.cidetec.es>

EU Contribution: €499,375

Umicore

Address:

Broekstraat 31
1000 Brussel
Belgium

EU Contribution: €352,250

Hydro-Quebec

Address:

75, Boulevard Rene-Levesque Ouest
MONTREAL, H2Z1A4
Canada

Organisation Website:

<http://www.hydroquebec.com>

EU Contribution: €339,594

Bayerische Motoren Werke Ag

Address:

Petuelring 130
80809 MUNICH
Germany

Organisation Website:

<http://www.bmwgroup.de>

EU Contribution: €281,250

Technologies:

Noise testing, modelling and reduction
Aircraft noise measurements

Development phase: Research/Invention

Noise testing, modelling and reduction
Aircraft noise reduction at source

Transport

STRIA Roadmaps: electrification

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Environmental/Emissions aspects, Decarbonisation

Geo-spatial type: Other