

## **#7 Quarterly Newsletter** December 2022

### Welcome back!

## ARTICLE



In this issue, we published an article by **Henrique Burnay**, **Senior Partner at Eupportunity.** 

If Europe aims to reduce its energetic dependence, it is utterly evident that batteries play a key role in this process. As such, the whole battery value chain topic is highly regarded under the von der Leyen presidency.

Read the full article here.

## **ALBATTS NEWS**

#### Sectoral intelligence

We published the <u>D3.9 Desk Research and Data Analysis – Release 3</u>, which provides a summary of other battery applications that were analysed during the desk research throughout 2022 to provide state-of-the-art information about several areas and battery applications. Furthermore, this report offers insights into the collected information and data on the "skills transition", which aims to identify the changes in the battery sector in the context of current or upcoming trends, and how the workforce and needed competences will be affected.

We have also been working on the sectoral intelligence and strategy report for the whole sector, which will be published soon. It includes the relevant intelligence insights for the whole battery value sector with relevant data on skills needs as well as strategical recommendations on how to approach re-/up-skilling within the sector.

Other major milestone will be reached by the release of the first version of job role definition, which will be available to all stakeholders for consultation and feedback.

#### Intelligence in Stationary and Industrial Battery Applications

In September 2022, we published <u>D4.7 - Desk Research and Data Analysis for sub-sector</u> <u>ISIBA - Release 3</u>. The research covered the use of batteries in data centres, renewable power farms, heavy work machines, and the use of battery energy storage in residential applications. The primary aim was to identify further battery-related skills, competencies, and job roles. We also published <u>D4.8 - Sectoral Intelligence definition for sub-sector ISIBA -Release 2</u>. It comprises the information yielded by the research and work conducted during the past year. In addition, we have started the third round of webinars with an interview about the second-life application of used electric bus batteries followed by a workshop about battery management and control systems. The webinars will continue in January with topics such as addressing skills transition.

#### Intelligence in Mobile Battery Applications

In August 2022, we released a third desk research report (D5.7) analysing job roles and skills relevant to the application of batteries in trucks, buses, vans, motorcycles, e-bikes, drones, satellites, trains and micro mobility devices, such as scooters. Another report (D5.8) on Sectoral Intelligence, summarising the main findings on job roles and skills needed in the battery value chain, was published in October. The third round of webinars has been launched – we had two interviews on the R&D sector and a webinar on heavy-duty vehicles. Other webinars will follow in the second half of January 2023.

#### Training and Education: BaTT - Batteries Teachers and Trainers Forum

We have launched the Batteries Teachers & Trainers Forum (BaTT Forum) with the aim of gathering current and future teachers and trainers to share ideas and good practices, work together and deepen their knowledge about the batteries sector.

The first BaTT forum was held in Skellefteå, Sweden from the 25<sup>th</sup> to the 27<sup>th</sup> of October 2022. A total of 22 teachers from Sweden, Finland, Norway, Germany, Czech Republic, Slovenia and Portugal gathered together with ALBATTS staff for a first meeting.



During the three-day event, participants were given an introduction to the battery industry, a presentation of Northvolt and visited the VUX adult education centre that has upgraded its premises to also serve the battery industry.

There were workshops based on the partners' good practices, and discussions on the need for upskilling of trainers and the challenges they face when a battery factory "comes to town". Soft skills were also one of the addressed topics, as they are highly valued by the industry. We would warmly like to thank all the participants for their active participation and we hope to see them all again.

With the improvement of education and training in the sector in mind, the forum will in the future promote different kinds of activities, such as visits to battery industrial locations and webinars dedicated to teachers and trainers.



The forum has a LinkedIn group where members can share and discuss practices around teaching and training for the battery sector: the **BaTT Forum LinkedIn Group**. Welcome to join!

#### **Training and Education: Future Courses**

During the next quarter, partners will start piloting the ALBATTS Basic Course on Batteries, which is built upon 10 different learning units dedicated to the development of basic knowledge around batteries and the battery sector, namely:

- Introduction to the battery sector
- Battery fundamentals
- Types of batteries
- Future trends
- Policies and Regulations

- Raw Materials, Mining and Refining
- Components and Manufacturing
- Integration Process
- Operation/Applications
- Recycling and 2<sup>nd</sup> Life

After validation, the learning units will become available to all interested parties at the Automotive Skills Alliance learning platform. In the same time frame, a new course on safety will also be developed, integrating intermediate knowledge around Overall Risk Mitigation, Safety on Mobile Applications and Safety on Recycling and Second Life of Batteries.

All training courses will be made available to the teachers and trainers registered on the **<u>Batteries Teachers & Trainers Forum LinkedIn group</u>**, among other cooperation activities and opportunities.

# ALBATTS at the 'Transport Research Arena', the largest European research and technology conference on transport and mobility

The Transport Research Arena (TRA) is the European transport event covering all transport modes and all aspects of mobility. This year, TRA was held in Lisbon under the theme '**Moving together – reimagining mobility worldwide**', and brought together experts from around the world to discuss the newest innovations and future of mobility and transport.



Upon invitation of Wouter Ijzermans, the Executive Director of the <u>Batteries European</u> <u>Partnership Association</u>, we participated in the session named "Electrification of mobility – EU R&I community efforts".

The overall goal of the 'Electrification of mobility – EU R&I community efforts' session was to present the ongoing work in the European Battery Research community to support the electrification of mobility and invite players from the mobility sectors to contribute to the

ongoing processes to make sure that the research done on batteries fits the needs of the sector.

The session was an enthralling discussion where 'skills and education' was the hot topic, as everyone was well aware of the huge challenge ahead of us all regarding the 'batteries' theme. Other interesting technical topics were discussed, such as electrification in aviation, battery management systems, data, the Battery Passport, recycling, second use of batteries and the need for standardisation.

ALBATTS participation in this event had the purpose to broaden and consolidate our network in the batteries sector and related training needs. Furthermore, we envisaged to strengthen the cooperation and collaboration with stakeholders beyond our project, and to share and coordinate training and education materials.

#### Bridging the skills gaps across the European battery value chain



In November, the Automotive Skills Alliance and European Battery Alliance Academy, backed by EIT InnoEnergy, which is supported by the European Institute of Innovation and Technology (EIT), <u>signed</u> a Memorandum of Understanding on a strategic partnership that will upskill and provide additional skills to the current mobility and battery industry to meet the demands of the growing sector.

ALBATTS has established significant synergies with recognised battery education fora and reinforced cooperation with EBA Academy on sectoral intelligence, skills cards, learning material development and train-the-trainer solutions. Yet, getting into a formal relationship is complex due to the fact that ALBATTS project has no legal personality. This is the case of interactions entailed with BEPA, EIT InnoEnergy or Batteries Europe.

In its longer-term strategy, ALBATTS has already created ties with the Automotive Skills Alliance by committing its members to the Pact for Skills and the ASA Batteries working group. To this end, the legacy of achievements will be transferred to ASA and, being ASA a legal entity in Belgium, and an associate member of BEPA, the future formal relations regarding sharing or joint development of learning and education materials for the battery ecosystem will be facilitated.

### WHAT IS NEW IN EUROPEAN POLICY



Following the proposal in the State of the Union address, where European Commission's President von der Leyen stressed the value of professional education and skilled workers, 2023 will be the **European Year of Skills**.

#### You can access the full report here.

### **BATTERY SECTOR NEWS**

## Italvolt aims to build Italian EV battery plant in spring 2023

Lars Carlstrom, CEO of Italvolt and Statevolt and cofounder of Britishvolt, has revealed more details about Italvolt – the announced 45 GWh battery cell factory in the north-western Italian region of Piedmont. Carlstrom expects to receive the building permit in spring 2023.

#### BMW considers producing fuel cell SUVs from 2025

According to a media report, BMW wants to produce fuel cell SUVs in large series from 2025. BMW had previously only confirmed that it intended to offer the iX5 Hydrogen in small series this year.

#### CATL to build battery factory in Hungary – with Mercedes as major customer

The Chinese battery cell manufacturer CATL will build another cell factory in Europe. The second location after Erfurt is Debrecen in Hungary. CATL already has an important customer on its hands: the cell factory is to supply the Mercedes-Benz vehicle plants in Germany and Hungary with batteries.

#### Gigagreen consortium designs future battery cell factories

The recently launched EU project Gigagreen aims to develop sustainable processes for the production of lithium-ion battery cells for electric vehicles. 16 partners from eight European countries are working on creating the "gigafactory of the future" as part of the project.

#### SVOLT confirms 2nd battery cell plant in Germany

SVOLT has confirmed building another cell factory for the European battery industry in Germany. The new site at Lauchhammer, Brandenburg, is a former wind turbine plant owned by Vestas. The company aims to repurpose it fast, by early 2025.

## Fraunhofer Institutes receive €80 million for fuel cell production

A consortium of 19 Fraunhofer institutes has received a funding decision of 80M euros from the German Ministry of Digital Affairs and Transport for the project 'H2GO – National Fuel Cell Production Action Plan'. With this, the BMDV wants to promote the ramp-up of fuel cell production for heavy-duty transport in Germany.

#### Energy prices may delay construction of Northvolt Drei

The high energy prices are probably slowing down the construction of Northvolt's planned battery factory in Germany. Northvolt CEO Magnus Carlsson confirmed this in an interview. A decision has not yet been made, but Northvolt is already considering an alternative location.

## Battery prices rise for the first time since 2010

In its current analysis of battery prices, *BloombergNEF* has recorded the first increase since the start of the evaluations in 2010. The experts attribute this to the increased prices for raw materials and battery components as well as high inflation.

#### Biden threatens Europe's car batteries

The US Inflation Reduction Act could suck cell factory investment out of Europe.

#### The raw truth of Europe's raw materials

Biden's 'Buy America' plans are unnecessarily restrictive, but the EU can still reap benefits from partnering with North America to diversify its supply chains.

#### <u>VW exec says high energy prices will</u> <u>kill car battery production in Europe</u>

'Europe is not cost-competitive in many areas,' said head of Volkswagen brand.

#### The sustainable future of batteries in Europe rests on a developed recycling industry

The energy transition requires a massive deployment of batteries for energy storage solutions – allowing the increase of renewables in the electricity mix – and also for electric mobility.

## A domestic raw material supply chain is essential for Europe's battery ambition

Europe can proudly and accurately call itself a climate leader in a number of spheres. The Fit for 55 package is the latest boost to Europe's green ambitions, confirmed regarding the transport sector by a positive vote of the EU Council for increased CO2 reduction targets for new cars and new vans.

#### German car giants and Asian battery kings chose Hungary for multi-billion deal

German automakers and Asian battery suppliers are getting together in Hungary in a multi-billion-dollar marriage of convenience to drive their electric ambitions.

#### Chinese battery plant to start operations in Portugal by 2025

Aviation Lithium Battery Technology, wants the battery factory for electric vehicles in Sines to start operating by 2025.

## Will Europe's new battery regulation give it pole position?

The EU's upcoming battery regulation aims to position the bloc as a major player in the global battery value chain. Despite positives, there are still some areas to resolve before the legislation becomes law.

## **EVENTS CORNER**

#### Battery Recycling Europe 2023 1 - 2 March 2023

2nd Electrification, Fuel Cell & Battery Development for Marine Vessels 30 March 2023

World Energy Storage 2023 Exhibition and Forum 10-11 May 2023 <u>The Battery Show Europe</u> 23 - 25 May 2023

EUROBAT Forum 2023 6-7 June 2023

IARC 2023 21-23 June 2023

**Become an ALBATTS Stakeholder** to receive regular information about the findings of the project (quarterly newsletters, invitations to webinars, surveys) and to help define the new EU Sectoral Skills Strategy for the Battery sector.

To know more about the ALBATTS project visit our channels by clicking on the links below.



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