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Alliance for Batteries Technology, Training and Skills

2019-2023

Sustainability and Legacy

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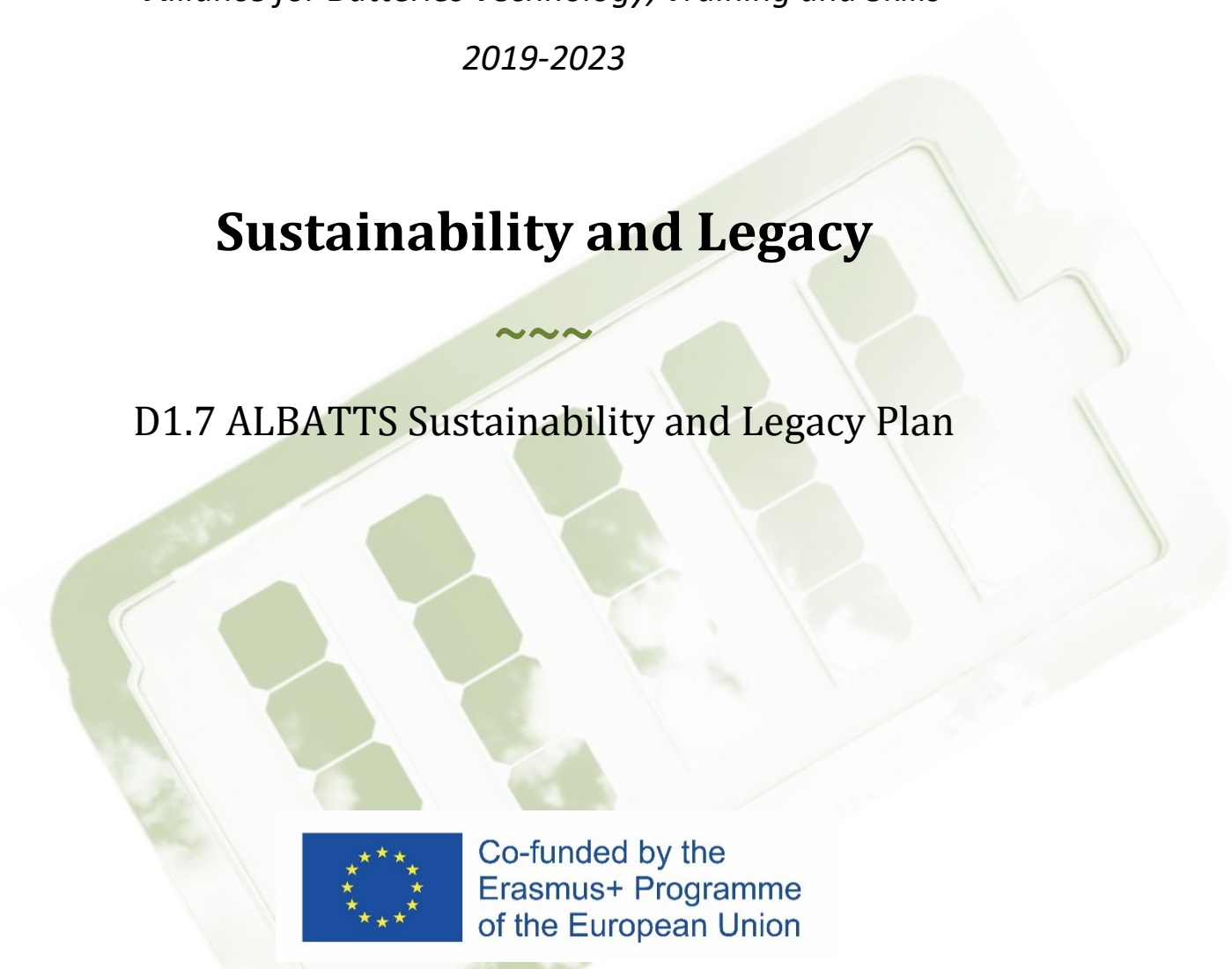
D1.7 ALBATTS Sustainability and Legacy Plan



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More information on:

[Project ALBATTS (project-albatts.eu)]

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Executive Summary

ALBATTS project followed dynamic development of the battery sector in the EU. The overall objective was to provide support with respect to the skills development in the emerging sector that plays a critical role in the EU decarbonisation agenda.

Throughout the implementation time of the project, the overall economic and political environment changed significantly. COVID implications, Green Deal adoption, energy crisis as well as whole implications of the war in Ukraine speed-up the need for independent value and supply battery value chain in Europe to support European economic sovereignty and decarbonisation agenda. Suitable skills and competences are key with respect to green and digital transformation of the European economy.

ALBATTS project delivered several deliverables in a form of concrete studies, analysis and new course and trainings related to the battery value chain. It also proved that more initiatives are needed to further boost the availability of suitable labour force for new, emerging industrial sector in Europe. It also proved the need to continue with activities started by ALBATTS project.

The sustainability and enduring impact of ALBATTS are founded on eight key sustainability elements (see chapter 3). These elements will continue to be active after the completion of the ALBATTS project. All seven are linked to the Automotive Skills Alliance (ASA). It aims to connect stakeholders within the European automotive-mobility sector as well as batteries as one of the major topics, fostering collaboration on skills intelligence and re/up-skilling initiatives.

The initial segment of the report delineates these sustainability elements, providing descriptions, identifying target groups and potential beneficiaries, and offering insights into their lifecycle.

The document primarily focuses on potential future sustainability considerations.

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List of Abbreviations

ACEA	…	European Automobile Manufacturers Association
ALBATTS	…	The Alliance for Batteries Technology, Training and Skills
ASA	…	Automotive Skills Alliance
CaBatt	…	Capacity Building for Battery Teachers in Vocational Education and Training
CECRA	…	European Council for Motor Trades and Repairs
CLEPA	…	European Association of Automotive Suppliers
CO2	…	Carbon dioxide
CORAI	…	Committee of the Regions - Automotive Intergroup
COVID	…	Coronavirus disease 2019 (COVID-19)
DRIVES	…	The Development and Research on Innovative Vocational Educational Skills
EBA	…	European Battery Alliance
EBAA	…	European Battery Alliance Academy
EC	…	European Commission
ESCO	…	European Skills, Competences, Qualifications and Occupations
ETRMA	…	European Tyre & Rubber Manufacturers Association
EU	…	European Union
FLAMENCO	…	Forward Looking Approaches for Green Mobility Ecosystem Network Collaboration
IT	…	Information Technology
PASS	…	Project for Assessment and Support of Key Skills/Competences
TRAUTOM	…	TRAUTOM – Competence for 21. century
TRIREME	…	Digital & Green Skills Towards Future of the Mobility Ecosystem
VET	…	Vocational Education and Training

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1 Policy Context

The ALBATTS project was initiated to stimulate the growing battery sector, both for stationary as well as mobile applications. That reflected growing demand for a reduction in the European economy's environmental footprint, especially in road transport and the decarbonisation of the energy sector. Initial ideas were speeded up by the adoption of the Green Deal (see chapter 1.1) and, at the end of the project, by a significant change in the global landscape after the evasion of Russia to Ukraine and subsequent economic and political consequences. Reaching strategic autonomy in critical materials and products gave top priority to the need to establish a whole supply and production chains for products enabling green and digital transformation, including the batteries.

ALBATTS project contributed actively to the establishment of the value chain, with a particular focus on the mapping of the emerging sector, as well as launching several courses and trainings related to battery production, recycling, and use. With clear commitments of the EU towards environmental sustainability, ensuring strategic economic independence and the need to ensure competitiveness of the European industry, the project's outcomes need to be further disseminated, and further development ensured. That was why outcomes of the ALBATTS project are an essential part of the Automotive Skills Alliance and Skills Hub (see chapter 2.2), which will ensure continuous work on the dissemination and sustainability of the project results.

1.1 GREEN DEAL

The European Green Deal, as was presented in December 2019,[1] completely changed the industrial and political landscape of the European Union. The proposal's ambition is to make Europe the first climate-neutral continent in the world by 2050.

The European Green Deal set the blueprint for this transformational change. This change will bring many benefits, from creating new opportunities for innovation, investment, and green jobs to improving health and wellbeing. All 27 EU Member States committed to turning the EU into the first climate-neutral continent by 2050. They pledged to reduce emissions by at least 55% by 2030, compared to 1990 levels, to get there.

The European Green Deal provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, stopping climate change, reverting biodiversity loss, and cutting

[1] https://ec.europa.eu/commission/presscorner/detail/en/ip_19_6691

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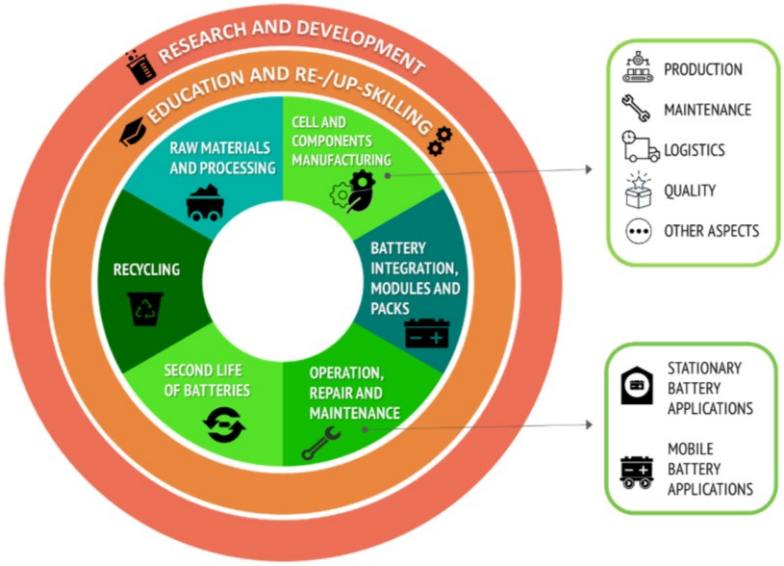
pollution. It outlines investments needed and financing tools available and explains how to ensure a just and inclusive transition. The European Green Deal covers all sectors of the economy, notably transport, energy, agriculture, buildings, and industries such as steel, cement, ICT, textiles, and chemicals.

To make this happen and fix the political ambition into the legislative framework, the European institutions agreed on a proposal for "European Climate Law"[2] (as of April 2020), which enables and mandates the adoption of concrete legislative acts to be adopted and implemented towards the objective of reaching climate neutrality by 2050. As a first step, a detailed legislative plan towards new emissions targets for 2030 has been prepared ("fit for 55"), enabling a realistic path towards the 2050 goal.

From a regulatory perspective, the most significant impact on the development of the battery sector – which also shaped the ALBATTS projects – were two legislative proposals: CO2 Regulation for cars and vas see chapter 1.2.) and the so-called proposal for battery regulation (see chapter 1.3.). Parallel to the legislative acts moving towards decarbonised Europe, the European Commission has initiated the European Battery Alliance (EBA)[3] to facilitate industrial cooperation between all parts of the emerging battery value chain and support the sector's development.



Obrázek 1: Battery Value Chain

[2] https://ec.europa.eu/commission/presscorner/detail/en/ip_20_335
[3] https://single-market-economy.ec.europa.eu/industry/strategy/industrial-alliances/european-battery-alliance_en

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As a part of that initiative, the European Battery Alliance Academy (EBAA) was established in February 2022[4], which focused on delivering particular trainings and courses for the battery sector. That reflected the growing importance of the skills agenda not only in the battery sector but in general in all industrial sectors concerning the decarbonisation and digital agenda (see more chapter 2.1.). The mission of the EBA is to train, reskill and upskill approximately 800 000 workers by 2025 to meet the demands of the skills shortages in the rapidly growing European battery value chain. A memorandum of understanding[5] on strategic cooperation between the Automotive Skills Alliance (also covering the ALBATTS project) and EBAA was signed in November 2022 to ensure coordination between both entities and also enable synergies between outcomes of the Erasmus+ projects, including ALBATTS, through the Automotive Skills Alliance on one side and EBAA on the other one.

1.2 CO2 REGULATION FOR CARS AND VANS

The CO2 Regulation for cars and vans represents a major legislative act for the automotive sector and the development of the battery value chain in Europe. The automotive sector is the biggest industrial sector in the EU. On the other hand, road transport emissions represent the highest share of CO2 emissions[6]. Decarbonising road transport is therefore a dominant priority of the Green Deal implementation.

The proposal of the Commission as of July 2022 proposed for the first time a full 100% target for new vehicles to be registered in the EU as from 2035, which in principle implies full electrification of the new vehicles in the EU. This was confirmed by an inter-institutional agreement as from 19 April 2023, the European Parliament and the Council amended the Regulation to strengthen the CO2 emission performance standards for new passenger cars and vans and bring them in line with the EU's ambition to reach climate neutrality by 2050[7].

[4] https://eit.europa.eu/news-events/news/launching-european-battery-academy-reskill-thousands-industry-workers
[5] https://automotive-skills-alliance.eu/wp-content/uploads/2022/11/MoU_ASA_EBA.pdf
[6] https://climate.ec.europa.eu/eu-action/transport/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en
[7] https://climate.ec.europa.eu/eu-action/transport/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en

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Concerning the electrification of the road transport, this amendment:

- strengthened the emission targets applying from 2030 onwards for cars (reduction of 55 from the 2021 baseline, leading to average targets of 93,6 g CO2/km (2025-2029) and 49,5 g CO2/km (2030-2034) for cars;
- strengthened the emission targets applying from 2030 onwards for vans (reduction of 50% from the 2021 baseline, leading to an average of 153,9 g CO2/km (2025-2029) and 90,6 g CO2/km (2030-2034);
- from 2035 onwards, the EU fleet-wide CO2 emission target for both cars and vans is 0 g CO2/km, corresponding to a 100% reduction.

The above-mentioned decarbonisation targets represent a significant challenge for the automotive industry and an enormous challenge for the battery sector in the EU. Keeping in mind the changing global situation (see chapter 1.4), the emerging battery value chain in Europe should serve 100% of newly registered vehicles in just roughly 10 years' time. This represents a demand of about 12 million new cars and vans[8] [9]annually.

This should be further extended to the market of heavy-duty vehicles, where the Commission proposed in November 2023 a 90% target in 2040 for that vehicle segment[10], which will inevitably increase demand for the batteries serving the heavy-duty segment (around another 0,4 million vehicles annually).[11]

1.3 BATTERY REGULATION

The second key piece of legislation shaping the future battery requirements was a proposal to modernise EU legislation on batteries[12] as a part of the Circular Economy Action Plan from December 2020. The proposal of the Commission aimed at promoting competitive and sustainable production and use of batteries, especially for road transport.

[8] https://www.acea.auto/cv-registrations/new-commercial-vehicle-registrations-vans-14-6-trucks-16-3-buses-19-4-in-2023/
[9] https://www.acea.auto/pc-registrations/new-car-registrations-13-9-in-2023-battery-electric-14-6-market-share/
[10] https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_763
[11] https://www.acea.auto/cv-registrations/new-commercial-vehicle-registrations-vans-14-6-trucks-16-3-buses-19-4-in-2023/
[12] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52020PC0798

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According to the Commission[13], the batteries placed on the EU market should become sustainable, high-performing, and safe throughout their entire life cycle. This means batteries that are produced with the lowest possible environmental impact, using materials obtained with full respect to human rights as well as social and ecological standards. Batteries have to be long-lasting and safe, and at the end of their life, they should be repurposed, remanufactured or recycled, feeding valuable materials back into the economy.

The Commission also proposed mandatory requirements for all batteries (i.e. industrial, automotive, electric vehicle and portable) placed on the EU market. Requirements such as the use of responsibly sourced materials with restricted use of hazardous substances, minimum content of recycled materials, carbon footprint, performance and durability and labelling, as well as meeting collection and recycling targets, are essential for the development of more sustainable and competitive battery industry across Europe and around the world.

With this proposal, the Commission also aimed to boost the circular economy of the battery value chains and promote more efficient use of resources to minimise the environmental impact of batteries. To close the loop and maintain valuable materials used in batteries for as long as possible in the European economy, the Commission proposed establishing new requirements and targets on the content of recycled materials and collection, treatment, and recycling of batteries at the end-of-life part.

According to the proposal, the current figure of a 45% collection rate should rise to 65 % in 2025 and 70% in 2030 so that the materials of batteries we use at home are not lost to the economy. Other batteries – industrial, automotive or electric vehicles–must be collected in full. All collected batteries have to be recycled, and high recovery levels have to be achieved, particularly for valuable materials such as cobalt, lithium, nickel and lead.

The use of new IT technologies, notably the Battery Passport and interlinked data space, will be key for safe data sharing, increasing the transparency of the battery market, and ensuring the traceability of large batteries throughout their life cycle. It will enable manufacturers to develop innovative products and services as part of the twin green and digital transition.

[1313] https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2312

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1.4 GLOBAL CHALLENGES

The EU leadership in greening and digitalising the economy goes hand in hand with the global economic and political context. And that has radically changed during the ALBATTS implementation. The issue of energy and raw materials sovereignty has become a top political and economic priority since the Russian invasion of Ukraine and the consequent energy crisis in Europe. Ensuring sustainable and affordable energy prices for the industry and consumers is also crucial in ensuring the European industry's competitiveness, including the emerging battery value chain. This becomes more important when stressing the fact that battery production is very energy-intensive. Limiting the energy use for production on one side and promoting and supporting the circularity and recyclability of batteries to reduce the amount of critical raw materials become key driving forces for the legislative and non-legislative measures in the battery sector.

Considering strong decarbonisation targets for the road transport (see chapter 1.2. above), it also became obvious that Europe is dependent heavily on Chinese battery sector and critical raw materials sources either from China or politically unstable third countries. So-called "raw material diplomacy" is, therefore, one of the key pillars of the Critical Raw Materials Act as of March 2023[14] that the Commission proposed to one side stimulate the production of the batteries in the EU, as well as reduce dependency on imports of critical raw materials.

The Commission proposed clear benchmarks for domestic capacities along the strategic raw material supply chain and to diversify EU supply by 2030:

- At least 10% of the EU's annual consumption for extraction,
- At least 40% of the EU's annual consumption for processing,
- At least 15% of the EU's annual consumption for recycling,
- Not more than 65% of the Union's annual consumption of each strategic raw material at any relevant stage of processing from a single third country.

To create secure and resilient EU critical raw materials supply chains, the Act proposed reducing administrative burden and simplifying permitting procedures for critical raw materials projects in the EU. In addition, they proposed a procedure for Strategic Projects with supporting schemes for access to finance and shorter permitting timeframes (24 months for extraction permits and 12 months for processing and recycling permits). Member States will also have to develop national programmes to explore geological resources.

[1414] https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661

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A proposal accompanied the Critical Raw Material Acts on the Net Zero Industry Act, which at its final inter-institutional deal[15] also recognises batteries and electricity grid components (including batteries) as a "net-zero industry" with privileged treatment and support, which should further stimulate development of the battery value chain in Europe.

[15] https://www.consilium.europa.eu/en/press/press-releases/2024/02/06/net-zero-industry-act-council-and-parliament-strike-a-deal-to-boost-eu-s-green-industry/

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2 Project Context

The project followed a dramatically changing policy context in which the battery sector operates. The growing demand for batteries is associated not only with development and production facilities but also with a lack of skilled labour. The European Skills agenda has become more and more dominant throughout recent years concerning the green and digital transformation of the European economy.

As indicated above, the ALBATTS project followed the development of the battery value chain from the very beginning. In line with the Green Deal implementation and targets posed, several new initiatives started to target the education part of the transformation, both in high education and new curricula to be developed, but more and more in the area of vocational and life-long learning associated with upskilling and reskilling of the current employees.

2.1. PACT FOR SKILLS

A higher focus on the skills agenda associated with the green and digital transformation (in line with Greed Deal objectives) was materialised in a form of a Pact for Skills, established under the current Commission. The Pact for Skills was launched on 10 November 2020, and the automotive sector (including the ALBATTS project) was one of the first three partnerships that joined this new initiative.

The overall objective of the Pact for Skills is to support public and private organisations by maximising the impact of their investment in upskilling and reskilling so they can thrive through the green and digital transitions. Skills are central to building a resilient and competitive workforce and mastering digital and green transitions. Large and small businesses need skilled people to innovate and grow. The dynamic nature of the labour market can lead to skill mismatches and shortages, which can be major factors for unemployment. This is where the Pact for Skills comes in.

The Pact for Skills promotes joint action to maximise the impact of investing in upskilling and reskilling. It calls on national, regional, and local authorities; companies; social partners; cross-industry and sectoral organisations; chambers of commerce; education and training providers; and employment services to work together and make a clear commitment to invest in training for all people of working age in the EU. The Pact is the first of the flagship actions under the European Skills Agenda.

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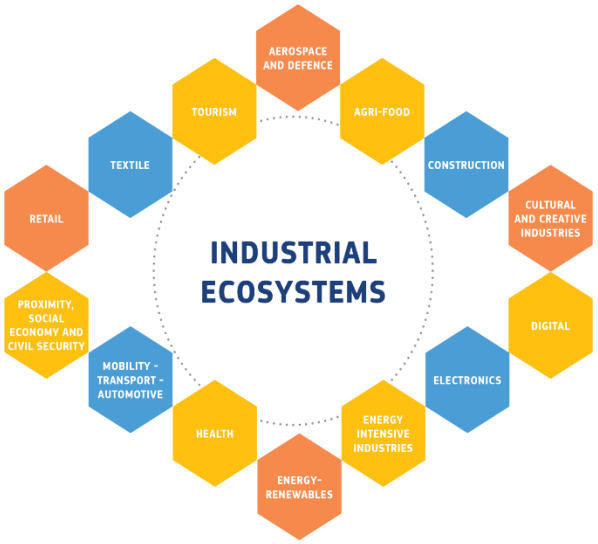
At this moment, the overall Pact for Skills large-scale partnership has grown from the three initial members to the whole, covering all industrial eco-systems and including regional skills partnerships focusing on a regional dimension of the labour force transformation.



Obrázek 2: European Industrial Ecosystems

As the ALBATTS project was involved from the very beginning in all activities of the Automotive Skills Alliance, the project's deliverables and outcomes were integral parts of the Pact for Skills formation and consolidation and served as an example of the blueprints that should be followed by other partnerships and Erasmus+ blueprints.

2.2. AUTOMOTIVE SKILLS ALLIANCE

Growing demand for coordinated upskilling and reskilling agenda in the automotive system and beyond (especially on the battery value chain, IT applications and services) led to the establishment of the Automotive Skills Alliance (ASA) in January 2023. ASA is a unique large-scale partnership that has the form of a legal entity – a non-profit organisation promoting and supporting the acceleration of the structural labour force transformation in the automotive and related sectors. The founding members of ASA are key automotive value chain associations ACEA, CLEPA, CECRA and ETRMA. In April 2024, it had a membership of more than 110 industrial members, social partners, and regions across the EU.

ASA reflects the sustainability pathway of the DRIVES project[16], the first Erasmus+ blueprint project for upskilling and reskilling, which was finalised in 2022. ASA inputs to the Pact for Skills agenda were, in

[16] https://www.project-drives.eu/en/home

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principle, based on the DRIVES outcomes as well as ongoing outcomes of the ALBATTS project (deliverables from the ALBATTS project were already immediately disseminated through the ASA network). From that perspective, the sustainability of the ALBATTS project is, from the very beginning, linked not only to the ASA but also to the whole Pact for Skills movement.

As already indicated, ASA is not only an automotive-focused partnership but also goes beyond that. This is apparent especially through active collaboration with other partnerships and involvement in a number of activities:

- Strategic cooperation with the European Battery Academy Alliance as signed in November 2023;
- Strategic cooperation with the Committee of Regions concerning the regional dimension of the skills agenda, as confirmed by the co-signature of "Navarra declaration" jointly with the Automotive Regions Alliance and CORAI in November 2023[17];
- Leadership and participation in a number of Erasmus+ projects on upskilling and reskilling (e.g. PASS[18], FLAMENCO[19], TRIREME[20]).

ASA is a strategic tool to ensure the sustainability of the ALBATTS project and the continuous delivery of the project's outcomes. ASA will ensure broad dissemination beyond the communication contacts of the project itself and accessibility of the project's outcomes (and updates) to a wider audience. For the future, the feedback from the ASA partnership would allow possible review of the outcomes of the ALBATTS projects vis-á-vis the changing environment.

The sustainability of the ALBATTS project through the ASA partnership is based on eight sustainability items, as described in Chapter 3.

[17] https://automotive-skills-alliance.eu/strategic-cooperation-of-european-automotive-regions-a-working-agreement-signed-between-the-asa-the-automotive-regions-alliance-and-the-cors-intergroup-for-the-future-of-automotive-industry/
[18] https://project-key-competence.eu/
[19] https://project-flamenco.eu/
[20] https://project-trireme.eu/

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3 ALBATTS Sustainability Items

This section describes the following eight sustainability items in more detail.

ALBATTS Sustainability Item/s
General
Collaboration on Battery and Automotive-mobility Skills Agenda (Stakeholder Network)
Skills Intelligence
Sectoral Skills Intelligence and Strategy (Reports and Data)
Skills Cards and Concepts
Webinars and Workshops
Education and Training
Training Courses
Education and Training Framework
Training and Teachers Forum
Dissemination
Website

3.1. COLLABORATION ON BATTERY AND AUTOMOTIVE-MOBILITY SKILLS AGENDA

Scope:

Networking, raising awareness, discussion, sharing of best practices, challenges, new topics, financial aspects, and triggering new projects or initiatives because of the overall project ALBATTS work and stakeholder network and collaboration.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; and policymakers.

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Stakeholders will and are collaborating in the Automotive Skills Alliance (ASA) as a Europe-Stakeholder-wide partnership focusing on collaboration in the Automotive-Mobility Sector as well as the European Battery Sector. Several working groups provide a framework for further collaborations after the ALBATTS project duration – those that are already running or may be established according to the ASA framework developed under the FLAMENCO project.

The challenge is to engage partners to be actively involved due to the lack of direct finances. However, partners understand that collaboration brings many benefits, such as know-how, best practices, the possibility of being involved in the following initiatives and projects, and so on.

Another opportunity is seen in the already-started TRIREME project, where several partners from ALBATTS are active. Among other automotive-mobility-oriented topics, the battery topics will be further elaborated on.

3.2. SECTORAL SKILLS INTELLIGENCE AND STRATEGY (REPORTS AND DATA)

Scope:

Update of the skills intelligence; update of the concepts; update of the sectoral skills strategy, monitoring of actions.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; and policymakers.

Deliverables in scope:

WP3, WP4 and WP5 Sectoral Skills Intelligence and Strategy; survey results, desk research reports and webinar/workshop reports.

The skills intelligence about the European battery eco-system is updated partially in the Automotive Skills Alliance (ASA) and spin-off projects, such as TRIREME. Partners will discuss and update needed job roles and skills. A regional working group will spread the results on the regional level through the TRIREME or Voltage projects.

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All this also leads to possible future initiatives/projects in the EU and at regional and national levels (those bring/mainstream the results back to ASA).

3.3. SKILLS CARDS AND CONCEPTS

Scope:

Update the skills cards; update the competence concepts (competence matrix); continuously update and plug in the ASA Skills Hub, monitoring usage.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners.

Deliverables in scope:

Under **WP3** with no direct deliverable. **WP6** recognition of job roles.

ALBATTS developed 26 reference definitions in the form of skills cards: 15 skills cards for HE and 11 for VET. Companies can use the Skills Cards to identify the needed competencies to 1) readjust/improve employee selection and recruitment, 2) train employees according to the latest sectoral needs, and 3) set up their businesses within the battery sector. Training providers, such as VET providers or universities, will find them useful to 1) create training opportunities and 2) improve existing curricula or training programmes. National agencies can use the Skills Cards to readjust national education plans, whereas the public may use them to learn more about the jobs in the battery sector.

Skills Cards we developed based on the large amounts of data which were collected during the project duration in the form of a competence matrix containing lists of occupations and competencies. These concepts were also used to update the ESCO database.

Sustainability actions which are planned:

- Extension and further use of reference skills and job role definitions - through the work of the ASA. Where the ASA is using the tool and expert view of the platform, which allows an update of the job roles and skills definitions (ASA Skills Hub);
- Usage of the concepts – through related future projects and initiatives of ASA partnership and usage by ASA members. This is already being done, and there are new

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projects and initiatives beyond ALBATTS. Examples could be the TRIREME or Voltage projects which will be using the concepts for further work. Concepts were also used in various countries and regions.

- Promotion and usage of digital skills badges through ASA. Engage providers to issue badges. The stakeholders recognise the badge in the ASA and the eco-system as such. ALBATTS concepts will be further recognised by the ASA badges even after the project ends;
- The competence matrix serves and will serve as an example tool on the regional level in the ASA network, for example, in the Moravian-Silesian Region, where the matrix is used in the TRAUTOM project.
- The TRIREME project will consider further possible adjustments to the ESCO update of ALBATTS concepts.

3.4. WEBINARS AND WORKSHOP

Scope:

Sustainability of the ALBATTS-held webinars and connected reports.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; public.

Deliverables in scope:

Under **WP3, WP4, and WP5** – future needs.

Project ALBATTS organised various events (more than 35), webinars and workshops on future needs and sectoral needs regarding skills intelligence and more. These events are available on the website Project ALBATTS (project-albatts.eu). Each event contains a recording that can be used further as a learning opportunity. Events were summarised in the connected deliverables.

Sustainability actions which are planned:

- The event recordings are planned to be sustained on the website and further maintained via ASA.

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- The framework for the organisation of events will be re-used in various projects, such as TRIREME, etc.

3.5. TRAINING COURSES

Scope:

Developed training courses and units and stored them on the ASA Learning Platform.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; the public; EC.

Deliverables in scope:

WP6 training courses, materials, and units.

Training courses and units developed under the ALBATTS are hosted on the ASA Learning Platform to sustain it after the project ends. Courses cover the whole value chain as awareness courses and more in-depth topics on automotive battery system engineering, safety, etc. Soft skills and English are also covered. Micro-credentials are issued through ASA Skills Hub for the completion of the courses.

Sustainability actions which are planned:

- Maintain the courses on the already maintained ASA Learning Platform by ASA;
- Further update or re-use the training material in other projects – TRIREME, Voltage and others;
- Further issue micro-credentials;
- Combine the units into elaborated learning pathways and combine them with other courses;
- Spread the training material broader.

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3.6. EDUCATION AND TRAINING FRAMEWORK

Scope:

Developed training framework with all pillars on recognitions, quality, and other. Reports on the ALBATTS piloting, development of the Blueprint report.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; EC.

Deliverables in scope:

All **WP6** deliverables and reports.

The education and Training Framework is based on the deliverable 6.2. It connects all other deliverables from WP6, such as EU-wide recognition, curriculum analysis, validation, training development, and piloting.

Sustainability actions which are planned:

- The ASA will maintain knowledge so it can be re-used in other projects or by other stakeholders;
- Aspects of training and education framework will be re-used in the projects, such as TRIREME;
- EU-wide recognition strategy will be further improved and re-used in other projects;
- Blueprint and strategy will be further re-used and promoted.

3.7. TRAINING AND TEACHERS FORUM

Scope:

Developed Training and Teachers Forum concept.

Target groups:

Education and training providers on VET level; regions and municipalities; EC.

Deliverables in scope:

All **WP6** deliverables on train the trainers.

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The concept on the organisation of Train the Trainers, mainly for VET teachers, piloted under the ALBATTS project and further spinned-off by the project CaBaTT.

Sustainability actions which are planned:

- Further continue with the concept under the ASA community, mainly in the associated project CaBaTT[21];
- Further, implement the concept of the teacher's forum in other domains and other target groups. Example is the Hydrogen forum and study visits under ASA.

3.8. WEBSITE

Scope:

The ALBATTS website, including all deliverables, is uploaded there: www.project-albatts.eu.

Target groups:

Industry (companies irrespective of size); education and training providers on all levels; regions and municipalities; social partners; the general public; and policymakers.

Deliverables in scope:

All public project deliverables.

The project website will run after the end of ALBATTS for a certain period of two years. Then, all results and project descriptions will be transferred to the DB of project/initiative results on the ASA website, so they are still fully available. Domain for the project ALBATTS (www.project-albatts.eu) will be redirected to ASA website results.

[21] https://vamia.fi/en/projects/cabatt-capacity-building-for-battery-teachers-in-vocational-education-and-training/

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References

Footnote	Reference
1	ALBATTS project. Charging Batteries of Electric Vehicles and Other Electric Means of Transport & Job Roles and Skills. ALBATTS Project Website. Retrieved 20 November, 2023, from Publications_91_20231010_74042.pdf (project-albatts.eu)

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