



STRATEGIC ERASMUS PROJECTS IN THE AUTOMOTIVE SKILLS AGENDA

Dr. Jakub Štolfa

Program Manager and Academic Staff at VSB-Technical University of Ostrava, Czech Republic

President of the Automotive Skills Alliance

js@skills-alliance.eu

**VSB TECHNICAL
UNIVERSITY
OF OSTRAVA**





AUTOMOTIVE
SKILLS
ALLIANCE

AUTOMOTIVE SKILLS AGENDA

THE ROAD UNTIL NOW

AUTOMOTIVE SKILLS AGENDA - BACKGROUND

- The **European automotive industry** is going through **massive transformation** caused by the impact of **digital and green transformation (Green Deal, Fit for 55)** and **post-covid recovery**.
- Impact to the workforce – **cca. 15 million people employed** in European automotive value-chain
- Impact to the overall Automotive Ecosystem and other related ecosystems (e.g. energy)
- **Skills Gap** - Jobs endangered VS. struggle to attract and recruit qualified people for new and emerging jobs
- **Geographical Gap** – new jobs arising in other locations than diminishing jobs



AUTOMOTIVE SKILLS AGENDA - BACKGROUND

Just Transition > Continuous Transition

How to find and assure stability and **stable environment** for workers in a business environment that **is and will be constantly and rapidly changing?**

Sustainable, massive and pragmatic approach towards education and training
(up-/re-skilling) is needed more than ever before

COLLABORATION IS THE KEY



AUTOMOTIVE SKILLS AGENDA - INITIATIVES

- High Level Group GEAR 2030 (2015 - 2017) - Final report on automotive competitiveness and sustainability
- New Skills Agenda for Europe (2016) with action **The Blueprint for Sectoral Cooperation on Skills**



Automotive Sector
Ongoing (2018 - 2021)



Batteries Sector
Ongoing (2019 - 2023)

- European Skills Agenda (2020) with action **Pact for Skills** (launched November 2020)



AUTOMOTIVE
SKILLS
ALLIANCE

Background Info: Overview of Blueprint Projects

- **automotive 2018** - <https://project-drives.eu>
- maritime technology 2018
- space - geo information 2018
- textile, clothing, leather and footwear 2018
- tourism 2018
- additive manufacturing 2019
- construction 2019
- maritime shipping 2019
- steel industry 2019
- bioeconomy, new technologies and innovation in agriculture 2021
- **batteries for electro-mobility 2020** – <https://project-albatts.eu>
- defence technologies 2021
- energy value chain – digitalization 2021
- energy-intensive industries/industrial symbiosis 2021
- microelectronic manufacturing & design 2021



AUTOMOTIVE
SKILLS
ALLIANCE

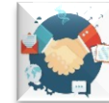


DRIVES Project

The Blueprint for Sectoral Cooperation on Skills



January 2018 to December 2021



Project assures cooperation between **24 full partners from 11 EU countries**



Steering Board has extra 10 associated partners, chaired by **ACEA**, co-chaired by **CLEPA, ETRMA**, as full project partners.

DRIVES DRIVES – Partnership



• Full Project Partners



European
Automobile
Manufacturers
Association



UNIVERSITY
OF TWENTE.



East Automotive Alliance



FH JOANNEUM
University of Applied Sciences



• Selected Associated Partners



Sectoral Intelligence

Analyse key trends in the automotive, covering the whole value chain

Define the skills and job roles needed in the future

Analyse existing training offer currently available for the trainings/upskilling

Identify skills gaps for foreseen changes

Recognition

Ensure **mutual recognition** of the skills and job roles **across the EU**

Create an EU-wide framework that can be used throughout the EU and implemented in the EU regions – based on commonly used definitions

Regularly **deliver policy recommendations** reflecting the needs of the automotive sector to the European Commission

Training Offer

Create trainings for selected skills and job roles in the automotive sector

Provide as a pilot 1100 trainings across the EU and across the education and training institutions

Provide clear guidance for the education and training providers on skills needs of the automotive industry

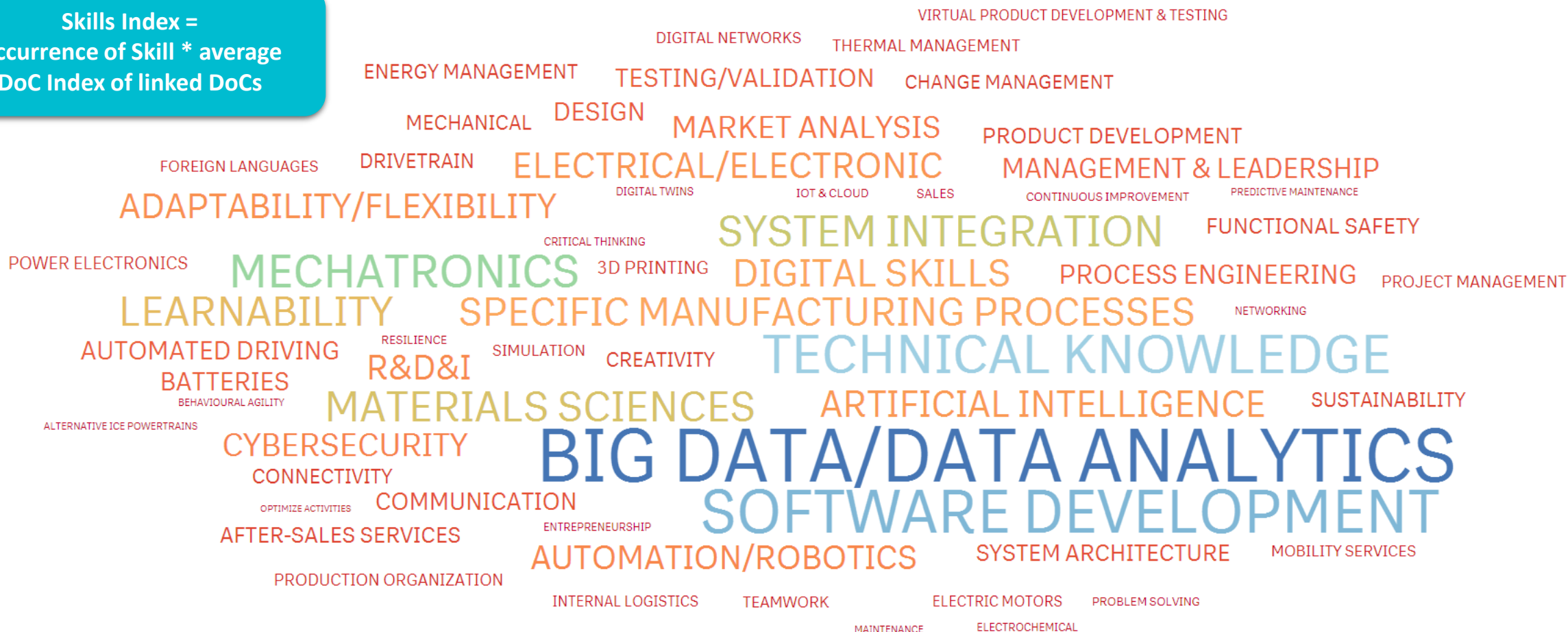
DRIVES Sectoral Intelligence

Sectoral Intelligence

DRIVES-D2.7

Insights to Automotive Sector

Skills Index =
Occurrence of Skill * average
DoC Index of linked DoCs

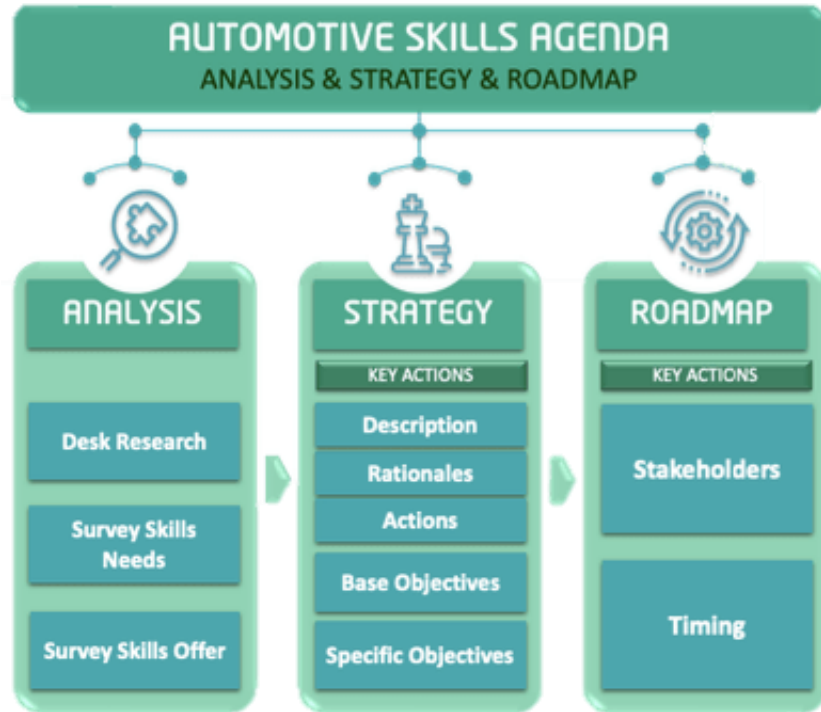


Automotive Skills Agenda – Strategy & Roadmap

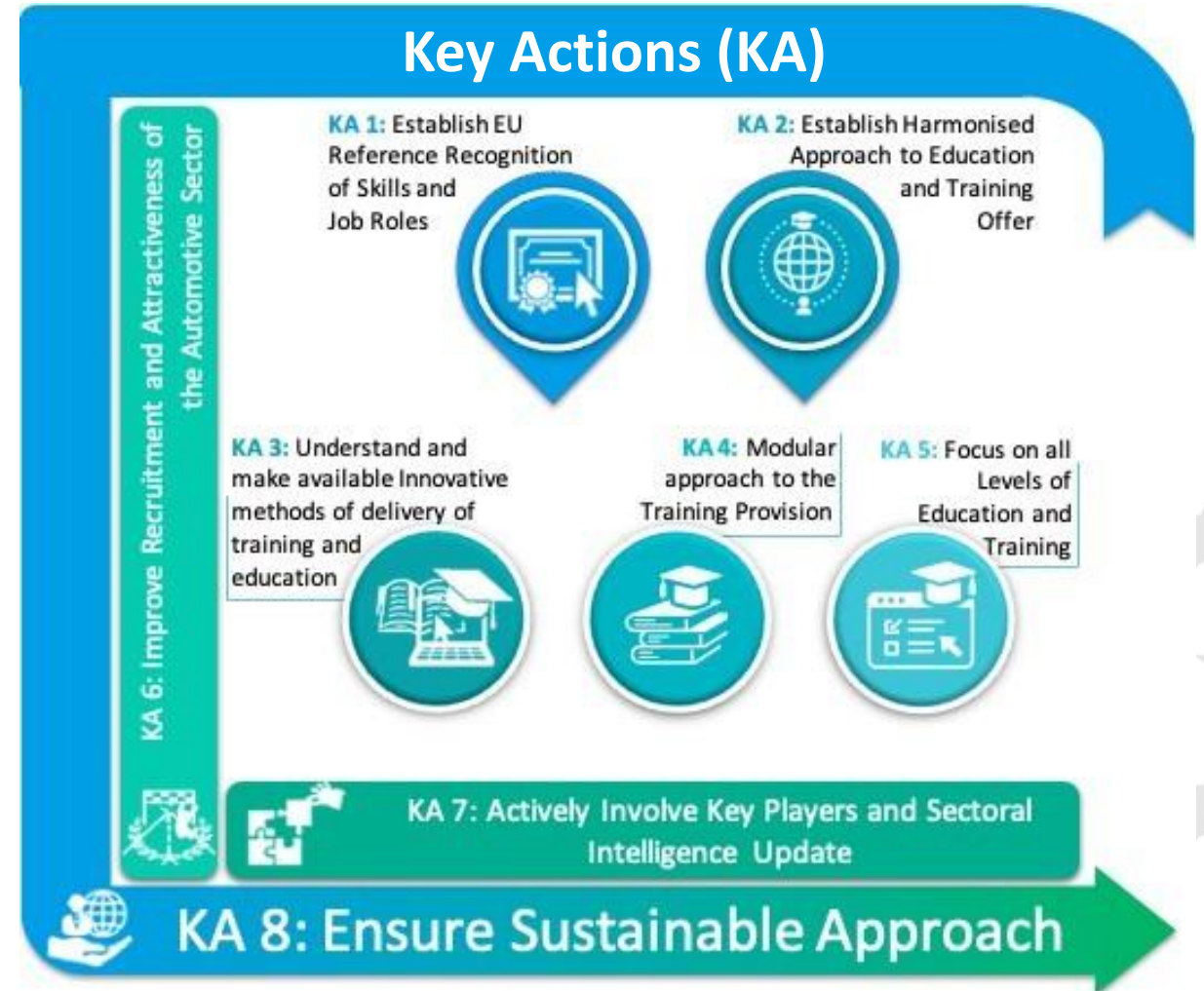
Sectoral Intelligence



DRIVES-D2.10
Automotive Skills Agenda Strategy & Roadmap



- The **analysis** led to the **strategy** and **roadmap** for the Automotive sectoral skills agenda
- **Second release in December 2020**
- **Update in December 2021**



DRIVES Training Offer

Emerging Job Roles Definition

Training Offer



Job Role Descriptions

- Based on the **needs of industry identified via Survey Demand**, DRIVES project partnership is **worked on the definition of set of Job Roles**
- Each Job Role has [publicly available](#)
 - Short fact sheet
 - Skill cards documents describing the learning outcomes
 - Online browsing possibility

Job Roles Titles	Leaflet	Skills Cards	Portal
ADAS/ADF TESTING AND VALIDATION ENGINEER	pdf	pdf	Browser
ARTIFICIAL INTELLIGENCE Technician	pdf	pdf	Browser
COMPUTER VISION EXPERT	pdf	pdf	Browser
MACHINE LEARNING Engineer	pdf	pdf	Browser
SENSOR FUSION EXPERT	pdf	pdf	Browser
AUTOMOTIVE ENGINEERING CAD, CAE, CAM	pdf	pdf	Browser
PRACTITIONER IN AUTOMOTIVE SPICE®	pdf	pdf	Browser
CONNECTED VEHICLES EXPERT	pdf	pdf	Browser
CONNECTED VEHICLES TECHNICIAN	pdf	pdf	Browser
AUTOMOTIVE CYBERSECURITY ENGINEER	pdf	pdf	Browser
AUTOMOTIVE CYBERSECURITY TESTER	pdf	pdf	Browser
AUTOMOTIVE CYBERSECURITY MANAGER	pdf	pdf	Browser
RUBBER TECHNOLOGIST - BASIC LEVEL	pdf	pdf	Browser
ADVANCED POWERTRAIN ENGINEER	pdf	pdf	Browser
FUNCTIONAL SAFETY MANAGER STRATEGY LEVEL	pdf	pdf	Browser
FUNCTIONAL SAFETY PROJECT MANAGER	pdf	pdf	Browser



- For DRIVES defined job roles the DRIVES partnership is providing **free of charge**
 - Set of online trainings in form of **MOOCs (28 online training)**
 - Courses with **trainer interaction** with specific date and capacity in 2021
- DRIVES Learning Platform learn.drives-compass.eu
- Trainings are **free of charge** and could be used **directly by companies** or **by training providers** in their trainings

DRIVES Recognition of Skills and Job Roles

EU-wide Framework for the Automotive Ecosystem

Recognition of Skills and Job Roles



www.drives-compass.eu



Reference Description of Competences/skills and Job Roles

- Across the whole EU Automotive Ecosystem



EU Wide Database of Training Courses for Automotive Ecosystem

- Advertisement on the whole market, One-single-point to find the required training and training path



Harmonized Approach to Recruitment and Mobility of Workforce Across the Sector

- Digital Badge for skill/competence level achievement in form of Micro-credentials

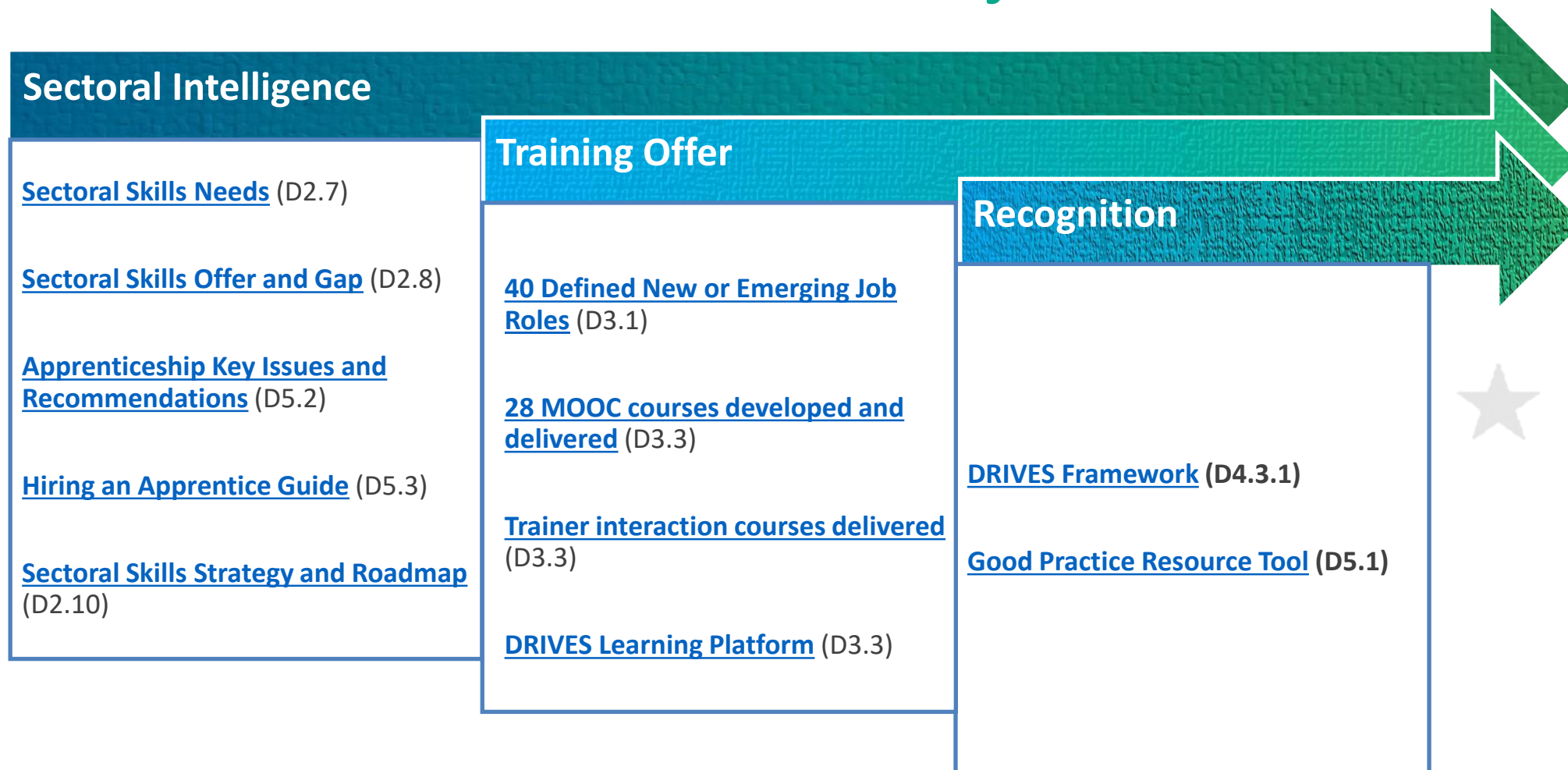


Quality Pledge of the Training Courses

- Assured by mapping exercise of the course

www.drives-compass.eu

DRIVES – Selection of Main Project Results



See more at <https://www.project-drives.eu/en/results>



AUTOMOTIVE
SKILLS
ALLIANCE

albatts Project

The Blueprint for Sectoral Cooperation on Skills

What is **ALBATTs**?



- ⚡ **20 Partners in 4-year (2019-2023)**
Erasmus+ funded project
- ⚡ **Blueprint for Sectoral Cooperation on Skills in Battery sector**
- ⚡ **Focus on demand and supply sides of competences in the battery value chain**



In short – **ALBATTIS** is answering two big questions



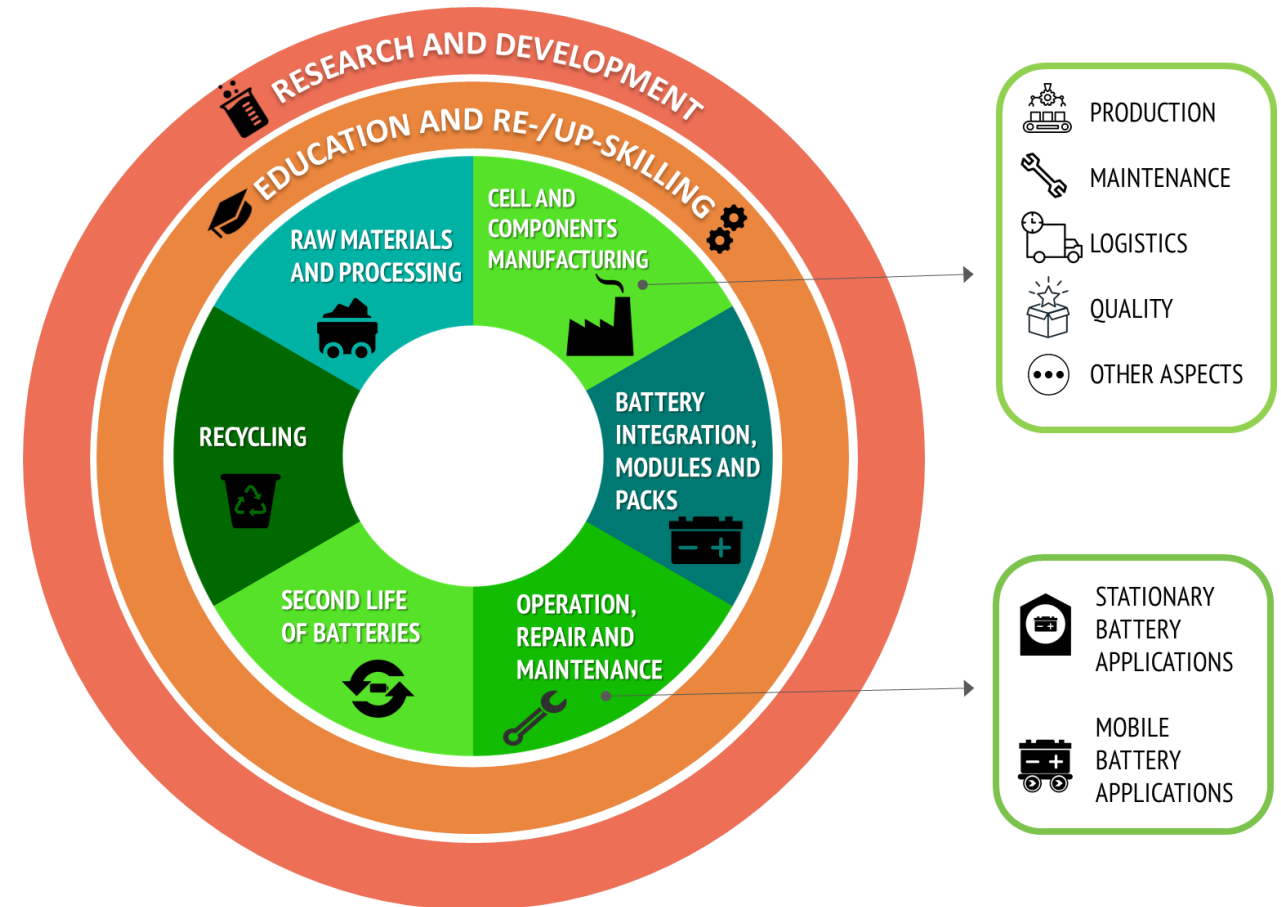
Q1: What is going on? (Answered by WP3,4,5, Sectoral Intelligence)

Q2: How can we address the identified education and training needs? (WP6, Education and Training)

Sectoral Intelligence in **Battery Sector**



- ⚡ Identification of **skills and job roles needs**
- ⚡ Set up clear [sectoral skills strategy](#)
- ⚡ Covers the **battery life cycle** - batteries developed for and used in both **stationary and mobile applications**
- ⚡ Enabling education sector to **provide** [education and training](#) for the future workers and specialists needed by **the battery sector**



Project results: <https://www.project-albatts.eu/en/results>



Co-funded by the
Erasmus+ Programme
of the European Union

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein

Education & Training

- Analyse new job roles/skills
- **Suggest learning objectives**
- Develop course plans
- **Develop learning material**
- Try out adaptive learning
- **Pilot-test innovative courses**
- **Train-the-trainer guidelines**
- Network!
- Use European instruments
- Implement results





**AUTOMOTIVE
SKILLS
ALLIANCE**



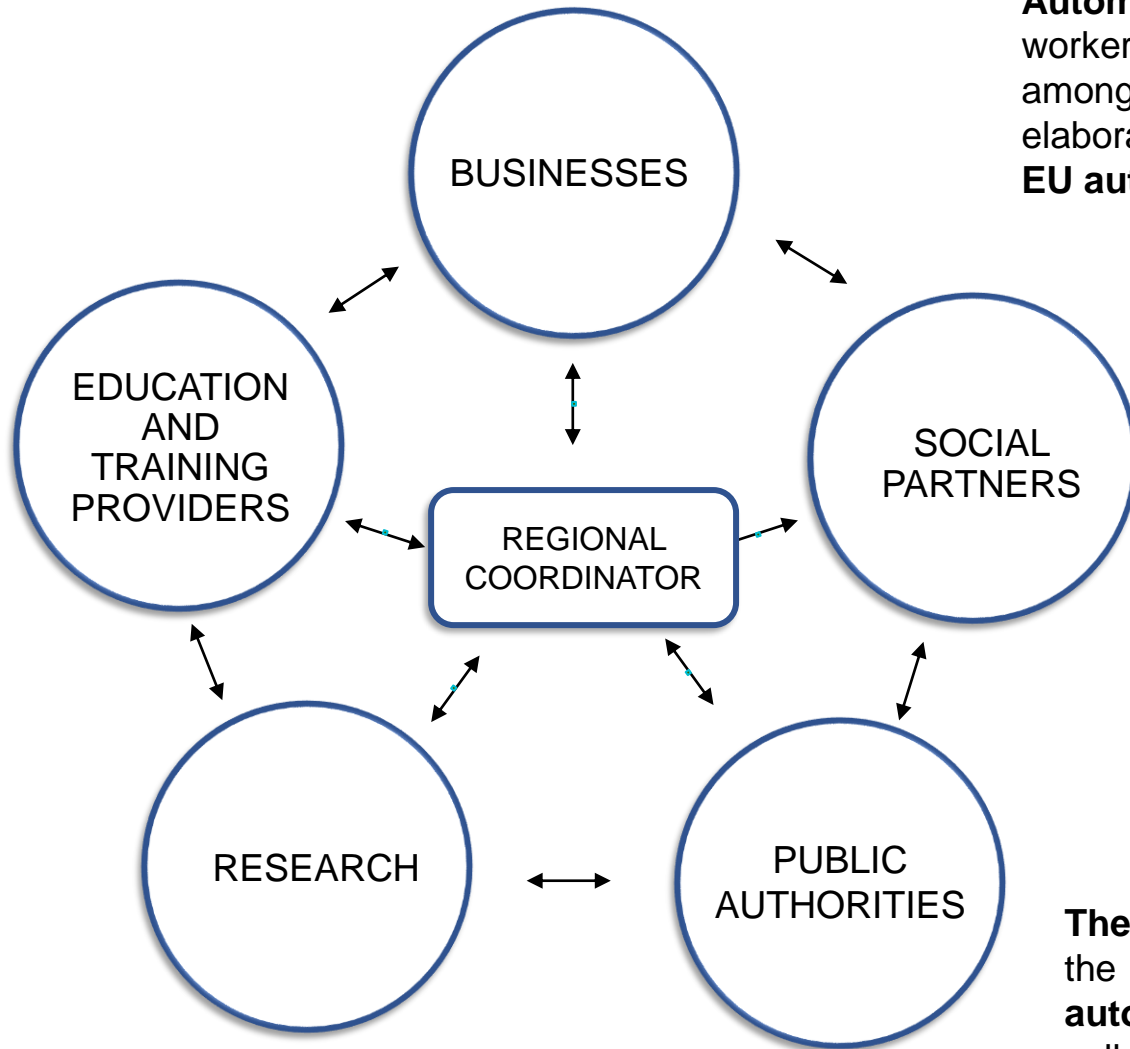
**AUTOMOTIVE
SKILLS
ALLIANCE**

PACT FOR SKILLS PARTNERSHIP INTRODUCTION

BACKGROUND – EUROPEAN SKILLS AGENDA – PACT FOR SKILLS

- **Pact for Skills** is the first flagship action of the **European Skills Agenda**, firmly anchored in the principles of the European Pillar of Social Rights. It also **supports the EU Industrial Strategy** and the goals of the **Green Deal** and the **digital transformation**.
- The goal of the Pact is to **mobilise and incentivise private and public stakeholders to invest and take concrete action for the upskilling and reskilling of people of working age**.
- It is a **shared engagement and approach to mobilise all stakeholders to invest in skills** for the growth and sustainable development of private and public businesses of all sizes.
- The Pact facilitates the **launch of skills partnerships**, in particular it aims to **build large-scale multi-stakeholder skills partnerships** addressing the needs of the **14 industrial ecosystems** identified in the EU Industrial Strategy.





Automotive Skills Alliance is focused on the re-skilling and up-skilling of workers in the automotive sector, developing intelligence and fostering dialogue among all relevant partners and stakeholders in the sector and supports the elaboration of **specific plans for re- and upskilling, training of workers in the EU automotive sector.**



The ASA mission is to contribute to a better **coordination of relationships** at the **European level** of all the **relevant national or regional stakeholders** in **automotive ecosystem**, in order to ensure and develop a common platform for collaboration and best practice sharing across borders. In this regard, ASA intends to ensure **continuous, pragmatic and sustainable cooperation on the skills agenda in the ecosystem.**

Collaboration in the **skills partnership** for the automotive ecosystem

- Support collaboration on the regional and European level
- Initiate new projects and initiatives
- Mainstream the existing projects and initiatives
- Execute up-/re-skilling activities

Updated intelligence about the automotive ecosystem and its development, as well as guidance to education and training bodies leading to continuous skills needs updates.

- Know & share the trends, needed job roles, needed skills

**ENABLE AND SUPPORT
MASSIVE WORKFORCE
UPSKILLING AND RESKILLING
ACROSS THE AUTOMOTIVE
ECOSYSTEM**

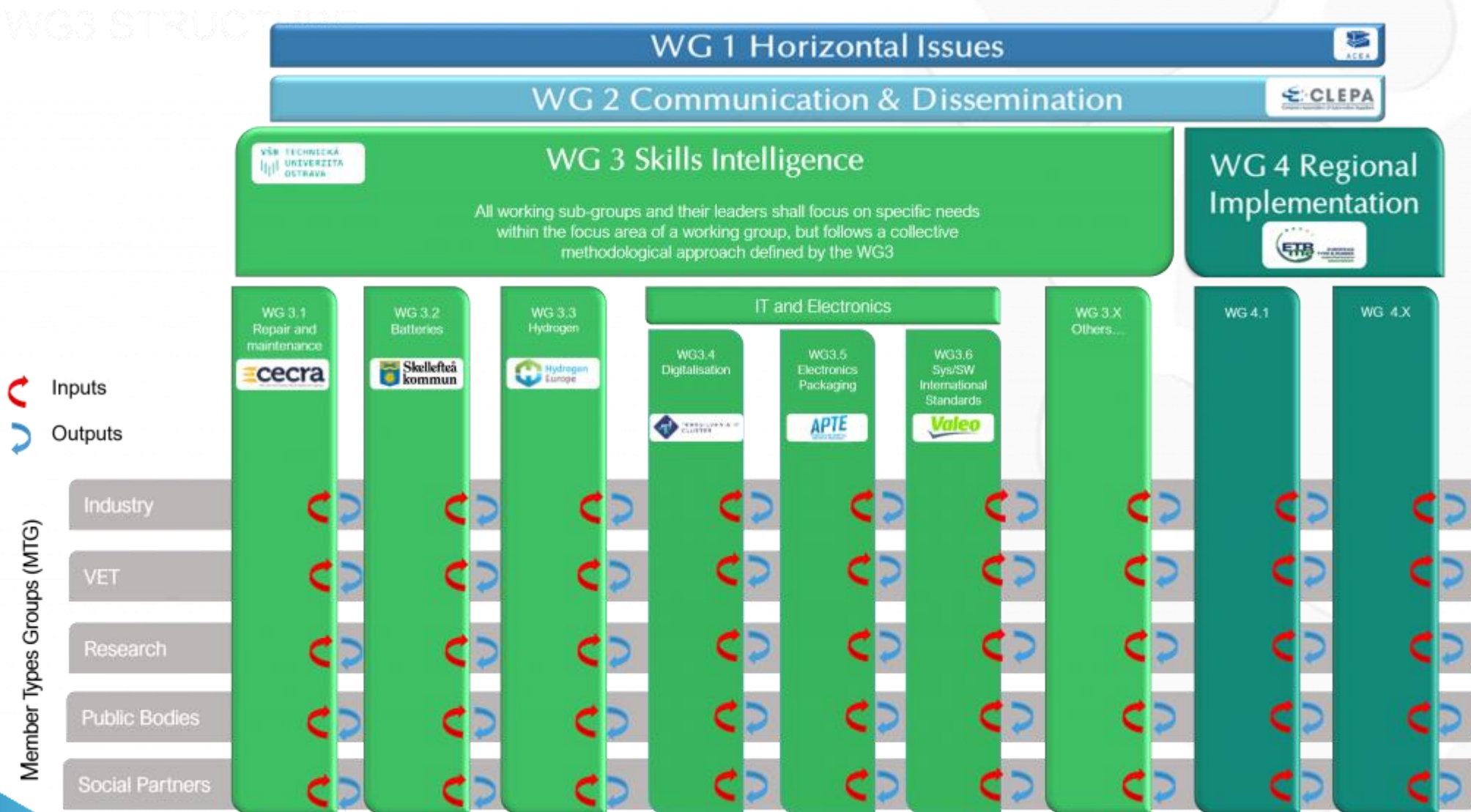
EU-wide framework for skills and job roles, as well as shared experience and best practices.

- Become part of an EU-wide accepted system
- Access to an overview of education/training providers across Europe through the ASA database

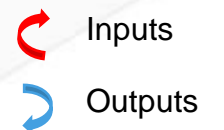
Platform for the **exchange of best practices and one-stop-shop guidance** for the financial instruments available on European and national level for financing skills agenda

- Take advantage of new EU financial resources

STRUCTURE – MEMBERS PARTICIPATION



- **Members of ASA participate in Working Groups in which they are interested in**
- **The leaders of Working Groups are indicated in the structure**
- The structure of Working Groups combines, in principle, **a horizontal and vertical approach**. Working groups are of a vertical nature and ASA member types groups represent a horizontal perspective. Each working group has clearly defined inputs and outputs to particular ASA member types groups.



COLLABORATION OF ASA MEMBERS TROUGHT PROJECTS

ASA builds upon the work carried out by strategic projects in the skills agenda for the ecosystem & **promotes and facilitates initiation of new projects/initiatives** or support **mainstreaming the existing once**

EU Funding > Public Funding > Private Funding



Automotive Sector
(Jan 2018 – Mar 2022)

The Blueprint project on Strategic Sectoral Skills Collaboration in Automotive Sector. Focused on skills needs & offer, training recognition and training developments in the **automotive sector**



Batteries Sector
(Dec 2019 – Nov 2023)

The Blueprint project on Strategic Sectoral Collaboration in Batteries for Electromobility Sector. Focused on skills needs & offer, support of training developments in the **battery sector**.

An opportunity to build on the best practices and initiate new projects and collaborations

Skills Needs and Gaps
in the Ecosystem

Development of New
Training Courses

Centers of Vocational
Excellence

Up-/Re-skilling Projects
on regional/national or
European level

Forward Looking
Projects

...any existing/new
project or initiative

Platform for up- and reskilling Stuttgart Region in the Automotive and Manufacturing Sector: one-stop-shop for SMEs to answer all question in the field of up- and reskilling. The companies receive information, platform offers and guidance to the different services and offers from the entire partner network.

ASA allows us to gain a lot of knowledge and expertise, to raise the profile of our region on the European level, enlarge or network and most of all, work with skilled and very dedicated experts in this field.

Collaboration and sharing best practices how to deal with the regional transformation. Get skills that are not in local environment through ASA collaborations. Recognition of the regional up-re skilling project, activities and skills achievements

Moravian-Silesian region: The goal is to up-/re-skill 5000 people up to year 2026 in Mobility ecosystem. The project will support regional transformation from coal mining and related activities to modernized and green mobility industry and ecosystem.

Auvergne-Rhône-Alpes : First phase of the project: study to identify the needs of H2 skills of 100 enterprises of the sector. Second phase: action plan, creation of Hydrogen training modules (initial or vocational training) for enterprises or unemployed.

- *Promote regional stakeholders' initiatives and projects*
- *Exchange good practices with other stakeholders at EU level and identify funding and project opportunities*
- *Participate to a dialogue with representatives from economic and VET sector to identify common challenges & solutions.*

EXAMPLES OF COLLABORATION OF ASA MEMBERS TROUGHT PROJECTS/INITIATIVES

- Examples of ERASMUS+ Projects submitted and/or in preparation
 - National Levels
 - AI/Machine Learning Expert training course
 - Central Projects
 - Forward Looking projects, CoVEs, etc.
- Example of cluster excellence projects
 - Facilitation of ASA network, collaboration and tools ([EU-Wide DB of training courses & microcredentials](#), and [ASA Open Learning Platform](#))



EXAMPLES OF COLLABORATION OF ASA MEMBERS TROUGHT PROJECTS/INITIATIVES

- Example of Projects/Initiatives at Regional Level
 - **TRAUTOM, Moravian-Silesian Region, Czech Republic (Just Transition Fund Mechanism)**
 - Expected size **20M EUR** (80% directly to the training courses execution – covering also salary of the workers)
 - Target is to have 5000 People up-/re-skilled till 2026
 - Builds **Ecosystem** for continuous education and training on the regional level (industry, education and training providers, regional authorities, social partners)
 - Builds regional **Ecosystem** for continuous skills intelligence gathering and update in relation to the regional and European view
 - **Implements and connects with the European layer (ASA)** – best practices sharing & education and training providers network



Thank you for your attention !!



**AUTOMOTIVE
SKILLS
ALLIANCE**



@ASA_MobilityEU



info@skills-alliance.eu

