Co-funded by the European Union

InnoEnergy Skills Institute

Transforming today's workforce for a sustainable tomorrow

June 2024, NZIA-Workshop/ HLF Education Conference

Who We Are...

EIT InnoEnergy

2010

EIT InnoEnergy is the leading innovation engine in sustainable energy, fostering collaboration between innovators, the industry, entrepreneurs, investors, graduates, and employers.

European Battery Alliance

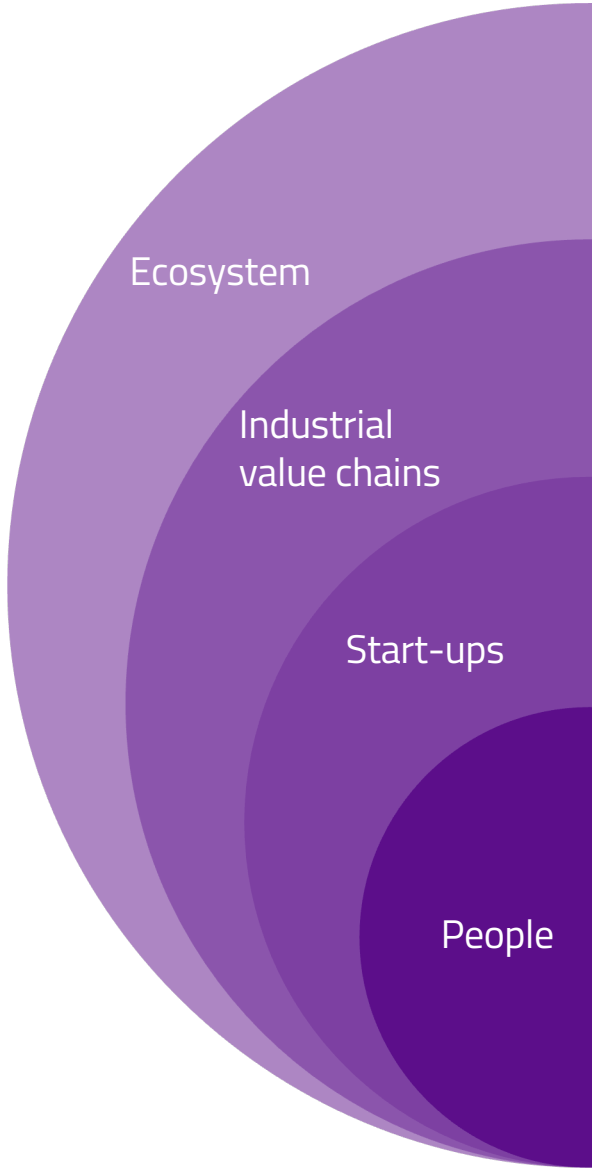
2017 & 2021

In 2021, InnoEnergy was entrusted by Maroš Šefčovič, European Commission Vice-President, to launch and operate **EBA Academy** – designed to upskill and reskill key workers across the continent.

InnoEnergy Skills Institute

2023

Informed by the clean energy ecosystem of InnoEnergy, we equip the global workforce with expertise and skills, distilling our unrivalled knowledge and know-how into relevant, applicable, and effective modular training courses.



We are transforming skills for a sustainable tomorrow

Our purpose is to equip the global workforce with the skills required to create a sustainable economy. How? By distilling our knowledge into know-how to deliver best-in-class intelligence and learning solutions.

InnoEnergy Skills Institute's agility and expertise transforms today's skills into those needed for a sustainable tomorrow.

Our offering covers the entire battery value chain

InnoEnergy Skills Institute offers an extensive training library, value added services, and skills certification – a holistic solution for successful workforce transformation.

50,000+

workers trained and upskilled

29

certificates & growing

80+

courses and programmes

400+

hours of content

10

languages our training is available in

InnoEnergy Skills Institute Solution

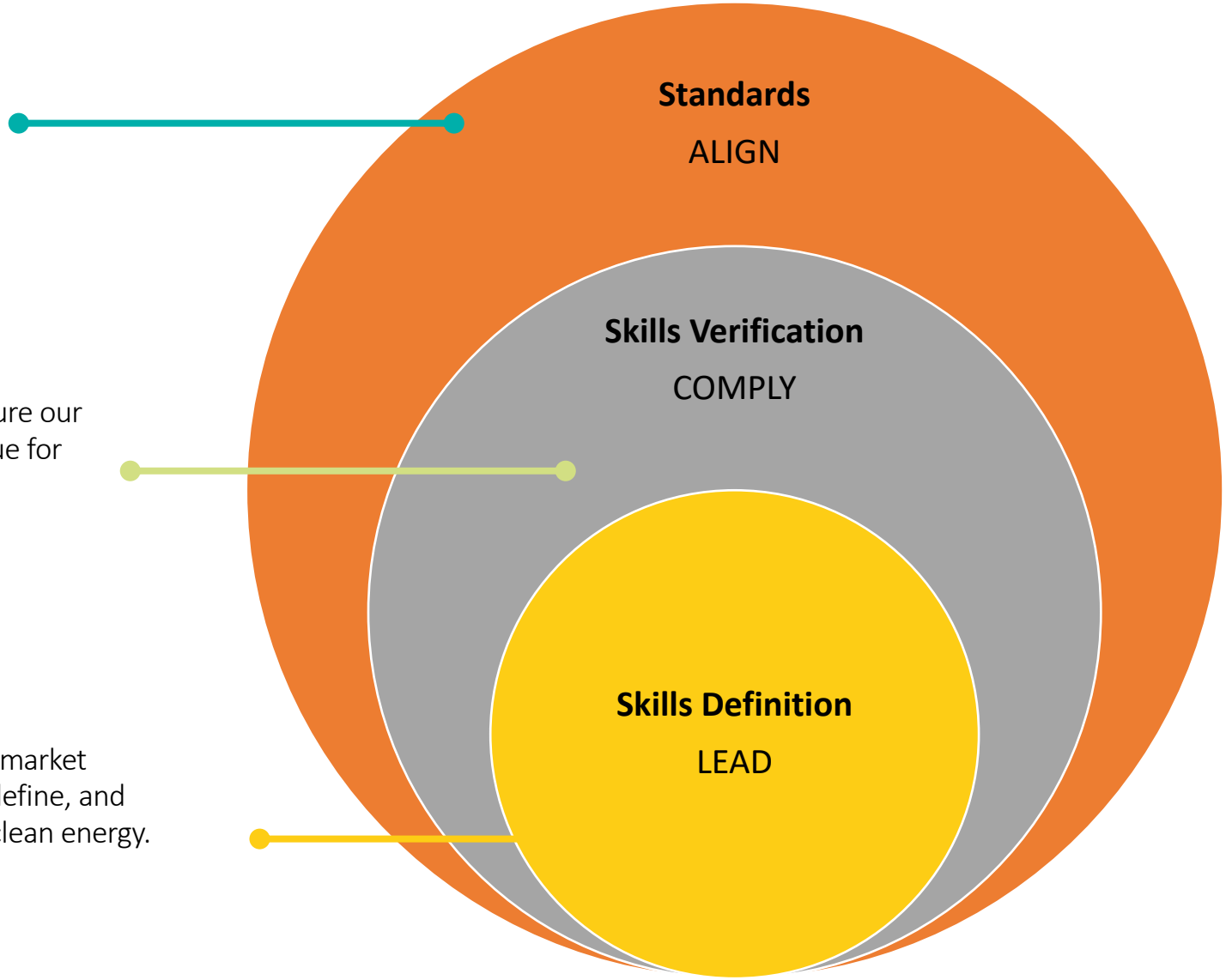
InnoEnergy Skills Institute Sustainable Energy Skills Framework ™

Key Message

ALIGN to existing and emerging interoperability standards to enable workforce mobility and data-based insights for employers and governments.

COMPLY with existing and emerging assessment and credentialing frameworks and accrediting bodies to ensure our brand has credibility in the market and broad-based value for learners and employers.

Use our expertise, industry network, and labor market intelligence to LEAD the effort to understand, define, and update skills definitions aligned to job roles in clean energy.



InnoEnergy Skills Institute

Transforming skills for a sustainable tomorrow

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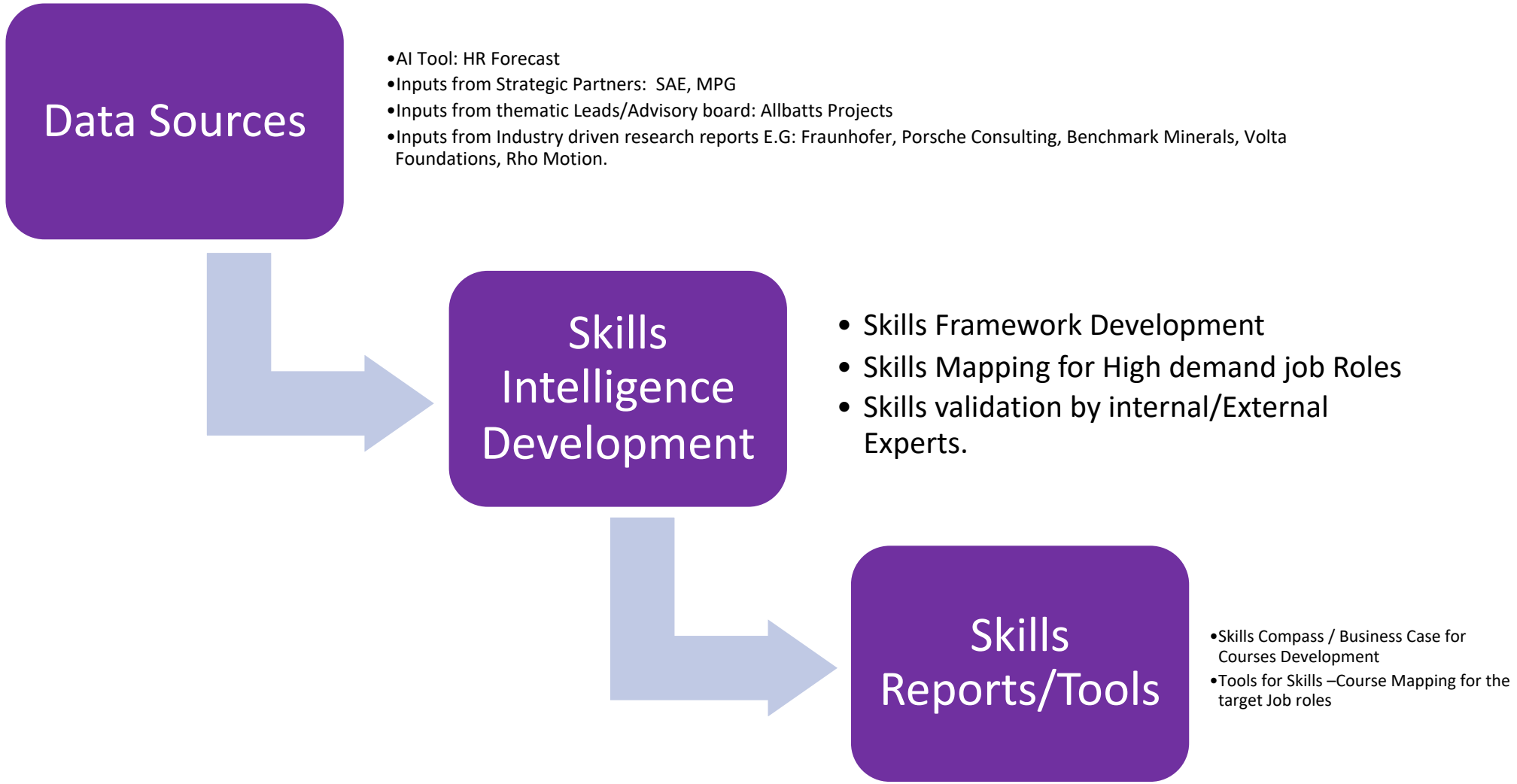
Identifying Skills Needs



Identifying Skills Needs (Methodologies)

Top-Down Methodology

The target personas/job roles that are not mapped

Identify the priority job roles – a concise list of 5-10	Map the Skills – identifying the pre-requisites and skills needed for upskilling	Update the Skills Framework for the Solar Jobs	Identifying the Existing Courses from IESI Catalog to address the Skills gap.	Course Development proposal that would cover the highest number of personas.	Developing Skills Compass Report/White Paper/gated contents/Internal reports
•Inputs from industry experts within InnoEnergy Ecosystem, senior advisors & strategic partners. •Inputs from the industry driven reports	•Using the AI based tools HR Forecast & AG5. •Cross Referencing with the Job Postings •Inputs from the industry experts for verification	•Populate the framework with the data of Skills mapped •Update the mapped skills in the visualization tool (AG5)	•Extracting the core Skills that can be developed from the course. •Map the Skills to the target job roles & find the highest match and the lowest	•Based on the Skills gap •Based on Highest Market Coverage •Online deliverability	•Skills Compass for the clients •Business Case for the Course Development & identifying potential customers. •White Paper/gated content for marketing

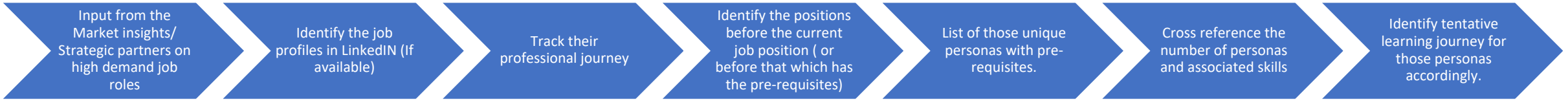
Bottom-Up Methodology for Business Case development for courses development

If not

Courses currently Existing	The skill that we can address with this current catalog (IESI & ALBATTS)	What are the jobs that are covered by a combination of these skills	Additional/target skills that could be delivered online	What are the new jobs that could be addressed by these additional skills into our catalog?	Addressable market for these jobs?	Suggest development of the courses that contains the target group of skills.
	•Finding the keywords from the Course name, descriptions, ILOs, & Course contents.	•Finding the common skills that are already mapped through current list of job roles and map the potential ones.			•High on demand or not? •Validate the Findings.	

Identifying Skills Needs (Methodologies)

Methodology To Identify Target Personas for Upskilling



Upskilling example

Target personas for Upskilling:
Electrical Engineer
Mechanical Engineer
System Integration Engineer

The job roles that are common and have the necessary pre-requisite knowledge to be upskilled into the “target job role”.

IESI Courses

Upskilling/ Reskilling

Target Job role E.G.
Battery System Engineer

- Jobs that are on high demand but has limited qualified personnel.

IESI Courses

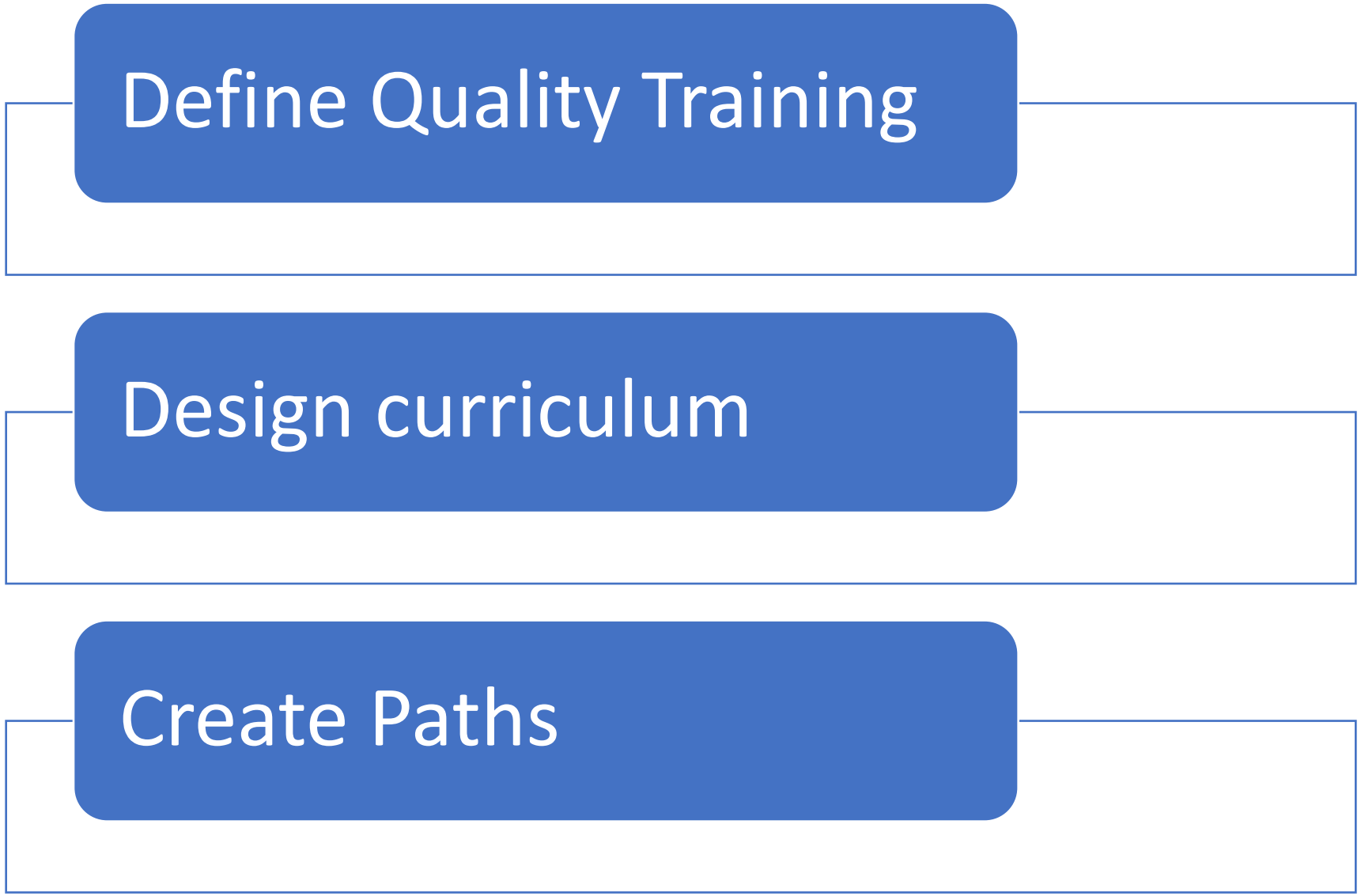
Upskilling

Possible future upskilling
Senior BMS Engineer/Specialist

Jobs that we can help upskilled into, at present or in the near future.

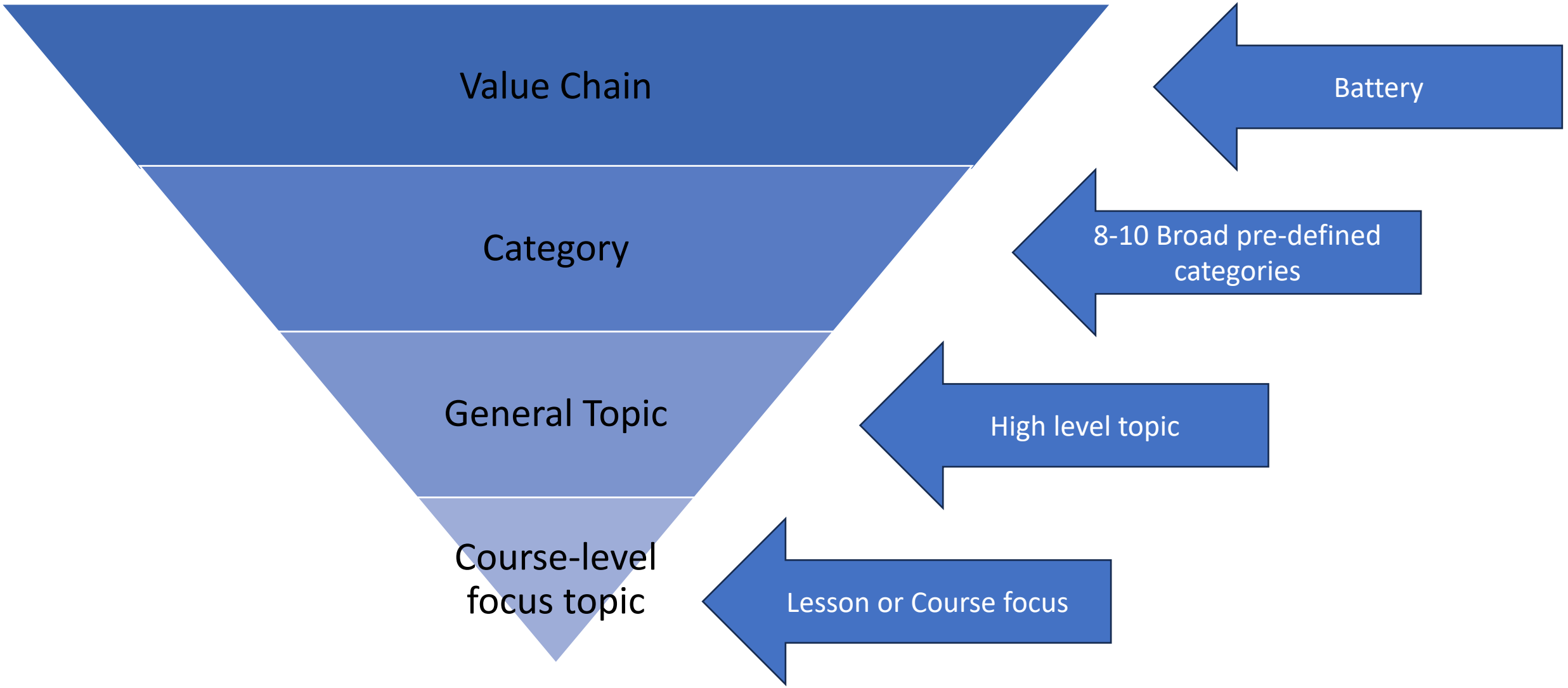
Enablers and Disablers

Enablers	Disablers
• Persona Mapping Using Linked-in worked well. • Data From HR Forecast (AI tool) is good quality raw data. • HR Forecast provides data on tentative future Skills needs (Skills that are increasing in demand).	• Companies' proprietary information
• Skills Compass reports/Business Case reports are significantly actionable. • Granularity is important. It is useful to categorise skills into, “pre-requisite (minimum qualification)”, “essential (mandatory upskilling required)”, “good to have (upskilling is beneficial, but not mandatory)” , “Digital skills (programming, configuring digital tools in the industries” etc. • A lot of processes are being automated (e.g. cell assembly in giga factories). Therefore, the skills required for the technicians working in those area will have a significant shift, which can be upskilling using online resources. • Rapid evolution of the job roles and blend w/ digital	• Regional, local fragmentation across the EU - access to the local labour market is defined based on local defined skills in national languages and only available based on national/regional • Rapid evolution of the job roles and blend w/ digital

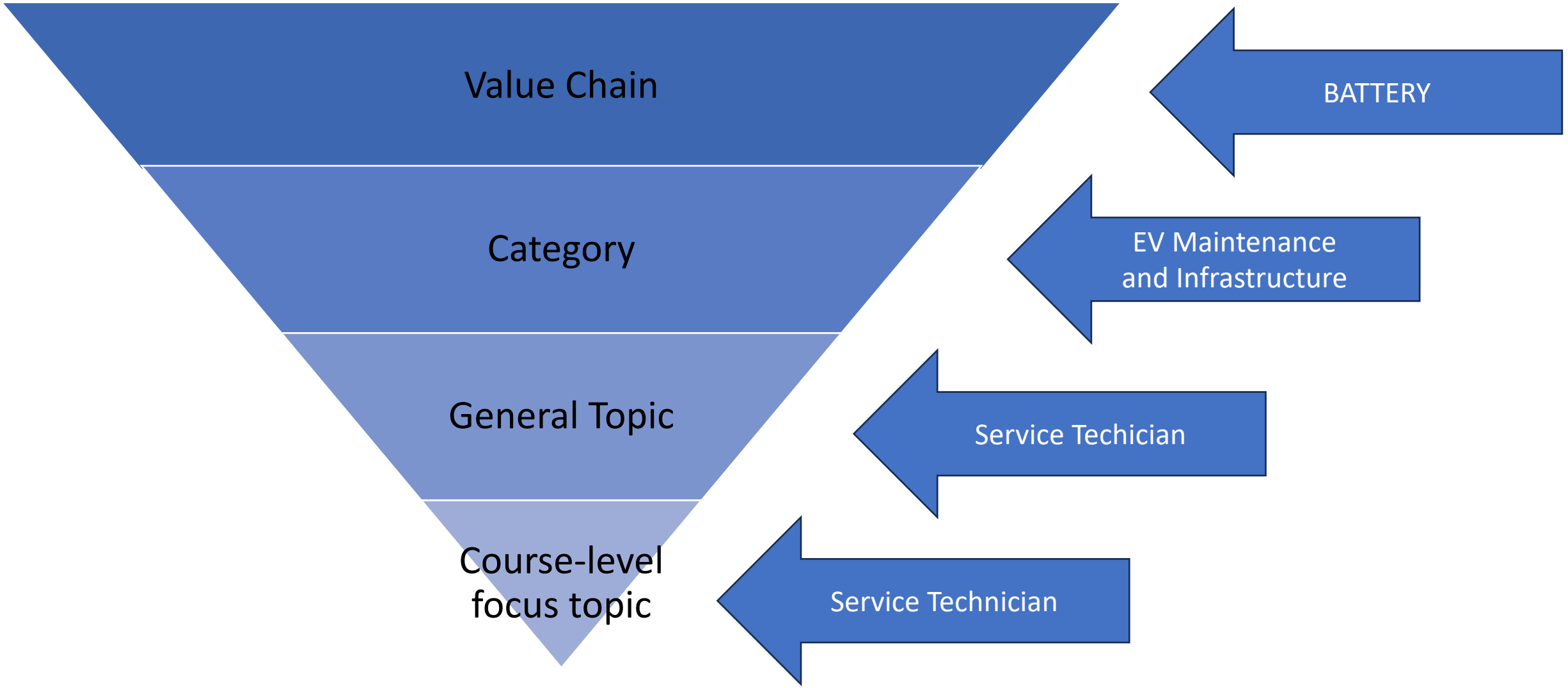

Define Quality Training
Design curriculum
Create Paths

Content Management Structure

Content strategy recommendations require a business case to move down each level



Example: Service Technician



Developing and delivering the joint vocational training content: lesson learned - enablers and disablers

Expand to Reduce. In-house team focus on automated effiency of design, development.

Design is eating production

Panel 3: Quality Assuring

Quality Assuring Framework : label for EIT non degrees labels

Embedding EIT InnoEnergy in the future, professional certification landscape.

- *Certifications reaching businesses and employees alike.*

Companywide certification (e.g., B2B), employees of different businesses (B2B2C), and businesses complying with government (B2G) policies for nationwide skills and competencies strategies.

- *Validating workforce training excellence*

An EIT quality mark part of EIT InnoEnergy's educational and training environment excellence, creating an international, corporate wide recognized label.

- *Cornering the European and International non-degree space*

High-quality non-degree labels are gradually being adopted in professional society. A sector specific non-degree label is very rare, and by using a Europe-wide EIT InnoEnergy non-degree label we strengthen EIT's position to corner the European and International non-degree certification landscape.

- **Strategic placement of the first EIT non-degree labels within an existing business network that is at the forefront of innovation (in this case starting with the EBA Academy)**
- Strengthening EIT InnoEnergy's EBA Academy that disperses EIT non-degree certification
- **Create an EU-wide network of local training providers that comply with the EIT label requirements for training delivery**

European Certification and Qualification

InnoEnergy is producing two proof-of-concept ECQA certificates that align with existing training content

Introduction to Battery Fundamentals 1

Participants will prove their knowledge of the differences between primary energy sources and energy storage technologies, the main characteristics of energy storage technologies, and the role of batteries in achieving a zero-emissions environment.

Electrodes to Cells

Successful learners will demonstrate skills related to the design, formulation, and assembly of lithium-ion batteries, inlcuding the different geometries of lithium-ion batteries, the components used in a typical lithium-ion battery electrode slurry, the process of applying the slurry coating onto a metal current collector, and the purpose of drying and calendaring.

ECQA Recommends InnoEnergy not pursue accreditation

- it is not worthwhile to pursue national accreditations for InnoEnergy or any vocational training organization
- Accreditation on a country-by-country basis is a protracted and expensive process that must be redone when the training is updated or changed in any way.
- The European Union and DG-EMPL currently have efforts in progress to support transferability of credentials across national frameworks with the goal of mobilizing the European workforce.
- It is recommended that InnoEnergy stay connected to those efforts rather than seek accreditation.