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# EIT RawMaterials Lifelong Learning (LLL): Quality Objectives (QOS)

#### **EIT RawMaterials**

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For external use: Defines the quality objectives (QOs) for EIT RawMaterials Academy Lifelong Learning (LLL) to ensure alignment with EIT RawMaterials' strategic priorities, quality assurance requirements, and stakeholder expectations, while supporting continuous improvement in training design, delivery, and assessment.





# **Table of Contents**

DETAILED DESCRIPTION OF QUALITY OBJECTIVES	3
DIMENSION 1: PURPOSE AND SUSTAINABILITY	3
Standard 1.1: Purpose and Ambition	3
Standard 1.2: Financial and Resource Sustainability	4
Dimension 2: Alignment	4
Standard 2.1: Industry Relevance and Workforce Alignment	4
Standard 2.2: EIT OLO or Value Chain Alignment	5
Standard 2.3: EU and EIT branding	6
DIMENSION 3: TRAINING DESIGN AND IMPLEMENTATION	7
Standard 3.1: Training Co-creation and Knowledge Triangle Integration	7
Standard 3.2: Agreements and Shared Responsibilities	8
Standard 3.3: Selection, Admission and Tracking of Traines	9
DIMENSION 4: TEACHING, LEARNING AND ASSESSMENT	10
Standard 4.1: Appropriate Teaching and Learning Methods	10
Standard 4.2: Learner Centeredness	10
Standard 4.3: Assessment	11
DIMENSION 5: EQUALITY, DIVERSITY, AND INCLUSION	12
Standard 5.1: Gender Equality and Mainstreaming	12
Standard 5.2: Geographic Inclusion	12
Standard 5.3: Inclusion, Diversity, and Non-discrimination	13
APPENDIX A: DETAILED DESCRIPTION OF QO 2.2	15
Understanding Skills and Capability Levels in the Raw Materials Value Chain	
Understanding Skills and Capability Levels in the EIT Overarching Learning Outcomes (OLOs)	20





# **Detailed Description of Quality Objectives**

Each of the 14 Quality Objectives (QOs) are described below, including the short name of the standard, the definition of the standard, a rationale for inclusion in the QO framework. Some standards outline mandatory elements that need to be addressed in the self-evaluation report. The Education Content Team evaluate each of these elements separately. The standard can only be evaluated satisfactory if all mandatory elements are also satisfactory. The QMS provides detailed information on guidance for evaluation of each Quality Objective (QO) as well as the evidence used to support evaluation.

### Dimension 1: Purpose and Sustainability

#### Standard 1.1: Purpose and Ambition

Standard	EIT RawMaterials Academy trainings have clearly defined purpose and the ambition to contribute to workforce development.
Rationale	<ul> <li>EIT RawMaterials emphasizes the role of education in driving workforce development by addressing key challenges in the raw materials sector.</li> </ul>
	<ul> <li>A clearly defined training purpose ensures alignment with industry needs, technological advancements, and sustainability goals.</li> </ul>
	<ul> <li>Embedding workforce impact into training ambitions supports</li> <li>EU policies on innovation, circular economy, and workforce development.</li> </ul>
	<ul> <li>Flexibility in training design allows for adaptation to economic, technological, and workforce shifts, ensuring long-term relevance.</li> </ul>
	<ul> <li>Systematic evaluation of future developments enables proactive training adjustments, maintaining educational excellence and impact.</li> </ul>
	<ul> <li>Identifying key drivers and weak signals supports strategic foresight, helping trainings remain critical in a rapidly evolving landscape.</li> </ul>
Guidance for evaluation	EIT RawMaterials Academy trainings evaluate their purpose within the broader context in which they are embedded. The training's ambitions regarding workforce development are clearly outlined and defined. EIT RawMaterials Academy trainings are currently relevant and allow flexibility to adapt to constant economic, workforce, technological,





organizational, and cultural changes. A process is in place to identify possible future developments or changes that might affect the training. Key drivers, weak signals, and changes are mapped to determine their degree of influence on the training (very critical to non-critical).

### Standard 1.2: Financial and Resource Sustainability

EIT RawMaterials Academy trainings have a clear plan for financial an resource sustainability.  Rationale  The European Raw Materials Alliance emphasizes the need for long-term investment and financial sustainability for skills and training initiatives.  EIT RawMaterials focuses on securing diversified funding sources, including external investors and membership fees, to sustain its trainings.  A financially sustainable education system ensures that resources, infrastructure, and personnel are available to continuously improve trainings.  The focus on resource sustainability aligns with EU priorities or education and research funding to enhance Europe's
<ul> <li>long-term investment and financial sustainability for skills and training initiatives.</li> <li>EIT RawMaterials focuses on securing diversified funding sources, including external investors and membership fees, to sustain its trainings.</li> <li>A financially sustainable education system ensures that resources, infrastructure, and personnel are available to continuously improve trainings.</li> <li>The focus on resource sustainability aligns with EU priorities or education and research funding to enhance Europe's</li> </ul>
sources, including external investors and membership fees, to sustain its trainings.  A financially sustainable education system ensures that resources, infrastructure, and personnel are available to continuously improve trainings.  The focus on resource sustainability aligns with EU priorities or education and research funding to enhance Europe's
resources, infrastructure, and personnel are available to continuously improve trainings.  The focus on resource sustainability aligns with EU priorities or education and research funding to enhance Europe's
education and research funding to enhance Europe's
competitiveness in the raw materials sector.
Description  EIT RawMaterials Academy trainings are planned to be sustainable from a financial perspective and the resources required for the (re-) design and continuous implementation of the training will be ensured. These might include but are not limited to key people, information/data, infrastructure (incl. physical infrastructure and software) and capital.

# Dimension 2: Alignment

### Standard 2.1: Industry Relevance and Workforce Alignment

Standard	EIT RawMaterials Academy trainings directly addresses skills gaps in
Standard	, , , , , , , , , , , , , , , , , , , ,
	the raw materials sector, preparing professionals for current and
	future industry demands.





#### Rationale

- Workforce upskilling and reskilling are essential to securing Europe's raw materials supply, as indicated in the Strategic Agenda.
- EIT RawMaterials aims to close skill gaps in the industry by providing market-driven education that ensures professionals remain competitive.
- The European Qualifications Framework (EQF) mandates competency-based learning models to improve industry alignment and employability.

#### Description

EIT RawMaterials Academy trainings are designed and implemented (incl. format and assessment) to align with the needs and demands of trainees (e.g. backgrounds, motivations, goals, learning preferences) as well as the needs and demands of market players, especially current and future employers (e.g. required skills and competences). EIT RawMaterials Academy trainings should differ from other educational offers in the market. Training-related needs assessment and market analysis are performed and the results are reflected in the training, especially in the learning objectives.

#### Standard 2.2: EIT OLO or Value Chain Alignment

#### Standard

EIT RawMaterials Academy trainings cover either (1) at least 3 of the EIT Overarching Learning Outcomes or (2) at least one stage of Raw Materials Value Chain.

#### Rationale

- The EIT's overarching education strategy promotes crosssectoral innovation by developing entrepreneurial, leadership, and sustainability competencies essential for driving Europe's knowledge economy.
- EIT RawMaterials Academy trainings that align with at least three of the six EIT Overarching Learning Outcomes (OLOs) ensure that trainees acquire transferable skills applicable across industries and sectors.
- Alignment with EIT OLOs contributes to the broader EIT mission of strengthening Europe's innovation ecosystem by fostering professionals who can think critically, adapt to change, and create workforce impact beyond the raw materials sector.
- Alternatively, EIT RawMaterials Academy trainings may align with at least one stage of the EIT RawMaterials Raw Materials Value Chain, ensuring a sector-specific focus that directly





- supports EIT RawMaterials' mission to secure raw materials supply, design materials solutions, and close materials loops.
- By covering at least one of the nine stages, EIT RawMaterials
   Academy trainings contribute to Europe's transition to a
   sustainable and circular economy, reinforcing the goals outlined
   in EIT RawMaterials' Strategic Agenda.
- The flexibility to align with either EIT-wide learning outcomes or EIT RawMaterials' sector-specific value chain ensures that EIT RawMaterials Academy trainings remain relevant both within and beyond the raw materials industry, maximizing their impact on innovation, workforce development, and sustainability.
- Mapping Intended Learning Outcomes (ILOs) to either EIT OLOs or the Raw Materials Value Chain enhances transparency and accountability, ensuring that EIT RawMaterials Academy trainings provide clear, measurable benefits to trainees and industry stakeholders alike.

EIT RawMaterials Academy trainings describe and evaluate how the training is aligned with at least 3 of the 6 Overarching Learning Outcomes (OLO) defined by the EIT (entrepreneurship skills and competencies, innovation skills and competencies, creativity skills and competencies, intercultural skills and competencies, making value judgments and sustainability competencies, Leadership skills and competencies).

#### OR

EIT RawMaterials Academy trainings describe and evaluate how the training is aligned with at least 1 of the 9 stages of the Raw Materials Value Chains defined by the EIT RawMaterials (exploration, mining, processing, raw materials, design, production, use/reuse, collection, and recycling).

EIT RawMaterials Academy trainings map the Intended Learning Outcomes (ILO) with the OLO.

#### Standard 2.3: EU and EIT branding

#### Standard

EIT RawMaterials Academy trainings are aligned with the EU and EIT requirements for the promotion and usage of their respective brands and logos.





Rationale	<ul> <li>EIT RawMaterials contributes to the development of the EIT Community brand by executing EIT Community (EIT RawMaterials) brand guidelines across the entire portfolio by ensuring consistent EIT Community and EU funding brand visibility by implementing best practices in all design work.</li> </ul>	
	<ul> <li>EIT RawMaterials mandates that web pages, advertising content, presentations, templates must be compliant with EIT branding requirements and provides complementary material for project branding in <u>Infocenter</u>.</li> </ul>	
Description	EIT RawMaterials Academy trainings are clearly branded, as the logos and visual identity of the EU and EIT are used in line with the institutions' requirements.	
Mandatory elements to address	<ul> <li>Usage of the EIT Community (EIT RawMaterials) Brand Book as the basis for the promotion of KIC's non-degree education, with the EU and the EIT emblems prominently displayed along with the EIT KIC logo.</li> </ul>	
	<ul> <li>Consistent communication of the EIT brand through EIT RawMaterials Academy training delivery.</li> </ul>	
	<ul> <li>Placement of the EIT and EIT RawMaterials logos on certificates received by the trainees who passed EIT RawMaterials</li> </ul>	

# Dimension 3: Training Design and Implementation

# Standard 3.1: Training Co-creation and Knowledge Triangle Integration

Academy trainings.

Standard	EIT RawMaterials Academy trainings are co-created and involve education and non-education partners in the further development and delivery of the training.		
Rationale	<ul> <li>The Knowledge Triangle Integration (KTI) model ensures a strong link between education, research, and industry.</li> </ul>		
	<ul> <li>The development of T-shaped professionals (broad skills with deep expertise) is central to Industry 4.0 transformation.</li> </ul>		





 Activities across the entire ecosystem of EIT RawMaterials leaners foster new ways of learning and teaching by connecting academia, industry, and research organizations.

#### Description

The design of EIT RawMaterials Academy trainings, learning outcomes, and teaching and learning strategies are based on co-creation, involving education providers, end users and reference customers (i.e. current and future employers) in order to ensure compliance with the market needs and learner-centric approaches. Internal and external individuals and organisations were engaged in the co-creation process and their insights and feedback shaped the training.

#### Standard 3.2: Agreements and Shared Responsibilities

#### Standard

EIT RawMaterials Academy trainings' design and delivery are governed by agreements and its responsibility is shared among partners.

#### Rationale

- All KIC LE and regional offices operations are designed to ensure that the activities carried implemented by partners and the KIC meet all the necessary legal obligations, such as imposed on EIT RawMaterials by the Grant Agreements, Horizon Europe and the Partnership Agreement signed with EIT.
- The IPR Strategy of EIT RawMaterials is based on the rules as defined in the Partnership Agreement following Horizon Europe Rules for Participation and in the Internal Agreement of EIT RawMaterials.

#### Guidance for selfevaluation

Please describe and evaluate the roles, responsibilities, and contributions of each partner. Describe how responsibilities are shared effectively and if partners are actively participating and fulfilling their agreed-upon roles. Outline the decision-making processes within the partnership and assess whether decisions regarding training design and delivery are made collectively, considering the perspectives and expertise of all partners. Illustrate if decision-making is transparent, fair, and aligns with the agreed-upon governance structure and if written agreements exist.

# Mandatory elements to address

Agreements on and management of Intellectual Property (IP)





#### Standard 3.3: Selection, Admission and Tracking of Traines

#### Standard

EIT RawMaterials Academy trainees have been selected and admitted through a transparent and fair process and are appropriately tracked after successfully completing the training.

#### Rationale

- EIT RawMaterials requires the tracking of trainees in educational initiatives from enrollment through alumni status to ensure compliance with prerequisites, support the financial sustainability of educational projects, and align outcomes with institutional goals.
- EIT RawMaterials Academy outlines that it is best practice to provide trainees with a certificate of completion.
- EIT RawMaterials mandates that projects must keep a record of participation in events, not only as supporting evidence for KPIs but to improve the attractiveness of the training and refine the marketing campaign.
- EIT RawMaterials maintains an active Alumni Network to foster global community of entrepreneurial thinkers, which facilitates continuous engagement and collaboration among alumni.

#### Description

The selection and admission for EIT RawMaterials Academy trainings ensure that the process is transparent and fair. Successful trainees are tracked after training completion, including but not limited to their employment outcomes, career growth and start-up activity. A system is used to track former trainees and specify the indicators, data sources, data collection methods and frequency of data collection. Data is shared with stakeholders and used in the continuous improvement process.

# Mandatory elements to address

- Trainee selection
- Trainee admission
- Tracking of successful trainees





# Dimension 4: Teaching, Learning and Assessment

### Standard 4.1: Appropriate Teaching and Learning Methods

Standard	EIT RawMaterials Academy trainings utilize teaching and learning methods are appropriate for achieving the learning outcomes, and incorporate digital tools, hybrid learning, and modular training structures to increase accessibility as necessary.		
Rationale	<ul> <li>EIT RawMaterials mandates that the selection of the educational method is a key step in planning the legacy contribution of the project, its financial sustainability and its continuation after the end of the funding period.</li> </ul>		
	<ul> <li>EIT RawMaterials mandates that trainings provide both the information and the skills to enable the trainee to meet the learning objectives.</li> </ul>		
	<ul> <li>EIT RawMaterials mandates that educational activities should be evaluated to monitor their effectiveness and identify those portions that require modification, including that trainees should be surveyed immediately following each training session to gather specific feedback on about the training organization, and the content and quality of instruction.</li> </ul>		
Description	Trainings utilize teaching and learning methods that enable trainees to achieve the learning objectives. Trainings employ measures to promote trainee engagement (e.g. with trainers or fellow trainees) and practical learning / learning-by-doing. Trainings use a digital-first approach whenever appropriate, leveraging e-learning platforms,		

#### Standard 4.2: Learner Centeredness

Standard	EIT RawMaterials Academy trainings promote learner-centric		
	approaches and use activating teaching and learning methods that are		
	appropriate irrespective of the mode of learning, whether face-to-		
	face, online, or blended.		
Rationale	<ul> <li>EIT RawMaterials mandates that a variety of educational methods should be considered in training delivery and the approaches should match the training content to the needs of</li> </ul>		
	the trainees and to the available resources.		

virtual labs, and interactive content within EIT RawMaterials Academy.





Trainings put trainees at the centre of the training and gives primacy to the trainees' needs and experiences. Active learning is used and teaching and learning methods are appropriate for face-to-face, online, and blended learning environments.

# Mandatory elements to address

- Assessment and recognition of prior learning
- Enabling of flexible study paths
- Ability of trainees to take an active role in the learning processes, and receive feedback on their learning
- Support for trainees at different stages of their studies

#### Standard 4.3: Assessment

#### Standard

EIT RawMaterials Academy trainings utilize assessments fit for the trainings' purposes regarding the content and mode of learning and competencies, allowing feedback from trainees.

#### Rationale

- Assessment of learning is an essential element of all education projects whenever clear learning objectives have been defined and can reveal whether trainees have acquired the required knowledge and skills, with assessment potentially required as supporting evidence of specific KIC KPIs.
- As defined by EIT RawMaterials Academy, a well-designed assessment provides the opportunity to evaluate the training, the educational outcomes and impact and can reveal training strengths, potential limitations, and recommend improvements
- EIT RawMaterials mandates that partners should design the assessment during the training development and while defining the learning objectives which can include a variety of options which should be adequate to the defined learning objectives and audience (e.g., training-embedded assignments, quizzes and exams, projects, professional presentations).

#### Description

Assessment methods used by the trainings allow trainees to demonstrate the advancement of their skills and competencies related to the learning objectives. Feedback opportunities are presented to trainees.





# Dimension 5: Equality, Diversity, and Inclusion

### Standard 5.1: Gender Equality and Mainstreaming

Standard	EIT RawMaterials Academy trainings promote gender equality and mainstreaming in line with the EIT policies, including targets and monitoring mechanisms.		
Rationale	<ul> <li>At global scale, EIT RawMaterials is committed to contribute to and fully comply with the UN Sustainable Development Goals (UN SDGs) in any activities we do, including EIT RawMaterials contributions to SDG 5 Gender Equality.</li> </ul>		
	<ul> <li>The strategic objectives as well as KIC procedures, activities and educational trainings maintain the purpose to achieve gender balance in full alignment with the prevailing EU legal and policy framework.</li> </ul>		
	<ul> <li>EIT RawMaterials reviews its impact KPIs and aligns them with its strategic objectives and overall workforce impact, including improving gender balance in the raw materials sector and specifically women graduating from raw materials-related trainings.</li> </ul>		
Description	For EIT RawMaterials Academy trainings, gender equality and mainstreaming is reflected in recruitment and enrollment policies, alternative pathways, and recognition of prior learning, amongst others. EIT RawMaterials Academy trainings promote a balanced		

### Standard 5.2: Geographic Inclusion

Standard	EIT RawMaterials Academy trainings promote the participation of trainees and trainers from diverse geographical backgrounds and support workforce development across the EU and beyond, in alignment with the strategic interests of industry and EIT RawMaterials partners.
Rationale	<ul> <li>EIT RawMaterials aims to strengthen Europe's workforce by</li> </ul>

gender representation among trainees and trainers.

 EIT RawMaterials aims to strengthen Europe's workforce by addressing critical skills gaps across the EU and developing strategic partnerships globally where they align with industry priorities.





- Geographic inclusion helps to disseminate knowledge, build innovation capacity, and create resilient value chains for raw materials.
- Initiatives such as the Critical Raw Materials (CRM) Facility highlight the importance of training programs that extend beyond Europe, especially in cooperation with non-European countries central to raw materials supply and sustainability.

Trainings aim for geographic inclusion, the European dimension and targeted global engagement. This includes recruitment, training content development and partner selection strategies that support EU workforce needs and enable strategic collaboration with global actors. Special efforts are made to enhance participation from regions critical for raw materials value chains, whether within the EU or internationally.

# Mandatory elements to address

- Recruitment of trainees from diverse geographic backgrounds within the EU and globally, where aligned with strategic goals.
- Participation of trainers with experience relevant to the European workforce and strategic global raw materials partnerships..
- Training content that builds competencies for EU industry needs and supports capacity building in global regions of strategic interest.
- Inclusion of partners and stakeholders contributing to EU workforce development and/or the goals of initiatives such as the CRM Facility.

#### Standard 5.3: Inclusion, Diversity, and Non-discrimination

#### Standard

EIT RawMaterials Academy trainings enhance inclusion, diversity, and non-discrimination, including targets and monitoring mechanisms.

#### Rationale

EIT RawMaterials mandates adherence to diversity and inclusion policies, explicitly stating that all projects must comply with EIT RawMaterials policies, including those on diversity and inclusion, to ensure that projects align with the organization's values and contribute to an inclusive ecosystem.





Trainings promote inclusion, diversity, and non-discrimination beyond the gender and geographic dimensions (Standard 5.1 and 5.2). For example, how people irrespective of social and ethnic background, disability, social status, or specific needs are embraced. Strategies, policies, processes, and procedures, amongst others, aim to give equal access and eliminate discrimination. Plans and guidelines aim to resolve conflicts among trainees and/or trainers arising from differences. Multiculturality and diversity are fostered in the training activities / how the training activities are designed to foster a multicultural environment with a diversity of backgrounds, cultures, etc.

Beyond trainees, trainings promote inclusion, diversity and nondiscrimination with respect to the core training team, external trainers (i.e. guest lecturers and mentors) as well as non-educational partners.





# Appendix A: Detailed Description of QO 2.2

# Understanding Skills and Capability Levels in the Raw Materials Value Chain

The Skills and Capability Levels (A-D) in this appendix correspond to the European Qualifications Framework (EQF) levels, which classify learning outcomes based on knowledge, skills, and autonomy.

Each EQF level can be grouped into pairs, distinguishing between theoretical knowledge and factual/practical knowledge. The table below illustrates how the Skills and Capability Levels (A-D) align with EQF levels:

Skills and Capability Level	Corresponding EQF Levels	Description
A (Expert)	Levels 7-8	Highly specialized or cutting-edge knowledge, leadership in innovation, and strategic decision-making, and the ability to train and mentor others in these domains.
B (Advanced)	Levels 5-6	Comprehensive knowledge, ability to lead projects, and apply advanced problem-solving skills.
C (Intermediate)	Levels 3-4	Solid understanding, ability to analyze data, suggest improvements, and apply basic principles with some autonomy.
D (Basic)	Levels 1-2	Foundational understanding, ability to carry out simple tasks under supervision.

This framework ensures that each stage of the Raw Materials Value Chain is aligned with progressive learning levels, supporting the development of sustainable resource management, circular economy principles, and industry best practices.

Raw Materials Value Chain	Description	Skills and Capability	Description
Stage		levels	
Stage 1 - Exploration	The ability to conduct geological investigations to identify mineral deposits and undertake resources and reserves assessments, ensuring responsible sourcing principles and championing ESG aspects.	A (Expert)	The trainee has mastered geological assessment techniques, integrating field work, geochemical and geophysical investigations with ESG and economic factors into resource exploration. They can develop exploration policies and strategies, optimize raw material discovery and report results according to industry standards, including PFS and FS, and train others in applying these methods and standards.





			The trained can evaluate avalantian start = :
		D (A )	The trainee can evaluate exploration strategies,
		B (Advanced)	resource assessment, and lead projects that
			improve responsible mining practices.
		С	The trainee can analyze geological data,
		(Intermediate	identify potential raw material sources, and
		(intermediate	apply basic exploration principles.
			The trainee understands the fundamentals of
		5 (5 )	geological exploration, resource assessment,
		D (Basic)	and the role of raw materials in industrial
			applications.
			The trainee has mastered advanced mining
			methodologies, integrating technical,
			environmental, ethical, and safety
		A (Expert)	considerations into large-scale extraction
			processes, and is able to use circular economy
			principles in mining waste valorisation, and can
			train others in the application of these
	The ability to apply		practices
	responsible and innovative		The trainee can assess mining operations,
Ct 2 Mining	mining techniques that	D (A di d)	implement responsible extraction strategies,
Stage 2 - Mining	minimize environmental	B (Advanced)	and lead projects that improve resource
	impact, ensure worker safety, and optimize resource efficiency.		efficiency and safety.
			The trainee can evaluate mining techniques,
		C (Intermediate	identify sustainability challenges, and propose
			basic improvements to reduce environmental
			impact.
			The trainee understands the core concepts of
			responsible mining, including resource
		D (Basic)	efficiency, safety, environmental impact, and
			regulatory compliance.
	The ability to optimize material processing and refining techniques to increase efficiency, reduce waste, and enhance circularity in the raw materials supply chain.		The trainee has mastered advanced refining
			techniques, integrating energy-efficient
Stage 3 - Mineral Processing			processes, waste reduction strategies, and
			continuous improvement practices in material
		A (Expert)	processing. They are skilled in optimizing
			operations to increase yield and enhance
			overall process efficiency, and are capable of
			training others in these techniques and
			strategies
			The trainee can design and evaluate refining
		B (Advanced)	methods, optimize material efficiency, and
			implement sustainable processing innovations.
			The trainee can assess processing techniques,
		С	apply basic principles of refining efficiency, and
		(Intermediate)	identify opportunities for sustainability
		(intermediate)	
			improvements.





		D (Basic)	The trainee understands fundamental material processing and refining concepts, including efficiency, sustainability, and regulatory requirements.
Stage 4 - Materials Processing	The ability to process raw minerals in a safe, competitive and sustainable way.	A (Expert)	The trainee has mastered sustainable material transformation techniques, integrating waste minimization as well as water and energy consumption efficiency into processing workflows. They can develop and implement sustainability-driven strategies (e.g., industrial symbiosis) to enhance operational performance, and can train others in applying these approaches.
		B (Advanced)	The trainee can assess material transformation processes, propose improvements in processing efficiency, including water and energy consumption, and implement sustainability-driven strategies (e.g., industrial symbiosis).
		C (Intermediate	The trainee can evaluate processing workflows, identify areas for improvement, and apply basic efficiency principles.
		D (Basic)	The trainee understands the fundamentals of materials processing, including refining steps, energy use, and efficiency considerations.
		A (Expert)	The trainee has mastered sustainable product design and LCA methodologies, ensuring minimal resource waste and integrating circular economy principles into manufacturing, and is able to train others in these methods and principles.
Stage 5 - Product Design	The capability to integrate sustainable materials into product design, optimizing material efficiency, durability, and recyclability.	B (Advanced)	The trainee can assess material selection, design for sustainability, and optimize manufacturing processes to reduce environmental impact.
		C (Intermediate	The trainee can apply basic sustainable design principles, identify material efficiency improvements, and evaluate lifecycle impacts.
		D (Basic)	The trainee understands the fundamentals of sustainable product design, including material selection, durability, and recyclability.
Stage 6 - Manufacturing	The ability to produce finished goods from raw materials while optimizing material use and reducing	A (Expert)	The trainee has mastered sustainable manufacturing methodologies, ensuring minimal resource loss and integrating circular economy principles.



	waste through innovative and		The trainee can assess production workflows,
	evolving technologies and	B (Advanced)	optimize for material efficiency, and lead
	techniques.	b (Advanced)	projects that reduce environmental impact.
	·		The trainee can analyze manufacturing
		C	processes, identify areas for improvement, and
		(Intermediate)	apply basic efficiency strategies.
			The trainee understands the fundamentals of
		D (Basic)	manufacturing, including material use, energy
		, ,	consumption, and sustainability considerations.
			The trainee has mastered circular economy
			strategies, leading large-scale implementation
		Λ / Γ a . mt \	efforts to maximize product lifespan and
		A (Expert)	minimize waste, and is capable of training
			others in the development and execution of
	The ability to extend product		these strategies.
	lifecycles, enhance resource		The trainee can develop sustainability
Stage 7 -	efficiency, and integrate	D (Advanced)	initiatives, assess circular economy
Product Use	circular economy principles	B (Advanced)	frameworks, and implement resource-efficient
and Reuse	into industrial and workforce		strategies at scale.
	systems.		The trainee can evaluate sustainability metrics,
		C (Intermediate)	identify circularity opportunities, and propose
		(intermediate)	improvements in material use.
			The trainee understands fundamental
		D (Basic)	sustainability principles, including waste
		D (Basic)	minimization, resource conservation, and
			lifecycle thinking.
			The trainee has mastered advanced collection
	The ability to design, implement, and optimize efficient collection and recycling systems to enhance raw material recovery, reduce	A (Expert)	and recycling techniques, integrating efficiency
			improvements, sustainability strategies,
			material recovery, and waste reduction into
			operational processes, and can train others in
			implementing these techniques effectively.
			The trainee can design, evaluate, and
			implement collection and recycling programs,
Stage 8 - 9		B (Advanced)	optimize material flows, and apply
Collection/			sustainability-driven strategies to enhance
Recycling	waste, and promote		efficiency and circularity.
	circularity in the supply chain.		The trainee can assess collection and recycling
		C (Intermediate)	workflows, identify efficiency improvements,
			and apply basic principles of material recovery
			and waste management.
		D (Basic)	The trainee understands fundamental
			collection and recycling principles, including
			material recovery, waste management, and
			regulatory requirements.









# Understanding Skills and Capability Levels in the EIT Overarching Learning Outcomes (OLOs)

The Skills and Capability Levels (A-D) used in this appendix align with the European Qualifications Framework (EQF), ensuring that learning outcomes correspond to recognized levels of knowledge, skills, and autonomy.

Each EQF level can be grouped into pairs, distinguishing between theoretical knowledge and factual/practical knowledge. The table below illustrates how the Skills and Capability Levels (A-D) align with EQF levels:

Skills and Capability Level	Corresponding EQF Levels	Description
A (Expert)	Levels 7-8	Highly specialized or cutting-edge knowledge, leadership in innovation, and strategic decision-making, and the ability to train and mentor others in these domains.
B (Advanced)	Levels 5-6	Comprehensive knowledge, ability to lead projects, and apply advanced problem-solving skills.
C (Intermediate)	Levels 3-4	Solid understanding, ability to analyze data, suggest improvements, and apply basic principles with some autonomy.
D (Basic)	Levels 1-2	Foundational understanding, ability to carry out simple tasks under supervision.

This alignment ensures that the EIT Overarching Learning Outcomes (OLOs) reflect progressive learning levels, supporting the development of entrepreneurial, technological, intercultural, sustainability, and leadership competencies in a structured and measurable way.

EIT OLOs	Description	Skills and Capability levels	Description
ELO 1 - Entrepreneurship Skills and Competencies	epreneurship and opportunities and ideas to create social, cultural and financial value for	A (Expert)	The trainee has mastered entrepreneurial strategy, can develop and execute scalable and sustainable business models, and lead high-impact ventures that create economic, social, and cultural value. They can navigate funding, investment, and policy landscapes to drive innovation.
	and oneself.	B (Advanced)	The trainee can assess market opportunities, evaluate risks, and develop business plans that align with sustainability and innovation.





			They can identify and act an new value
			They can identify and act on new value-
			creation opportunities in real-world business
			and social contexts.
			The trainee can analyze entrepreneurial
			challenges, recognize potential business and
			social innovation opportunities, and apply
			basic principles of business development,
		С	including resource allocation, customer needs,
		(Intermediate)	and risk assessment.
			The trainee understands fundamental
			entrepreneurial concepts, including
			opportunity recognition, value creation, and
			financial risk assessment. They can identify
			early-stage ideas with potential for impact but
			require further guidance to develop them into
		D (Basic)	viable ventures.
		,	The trainee has mastered the application of
			emerging and advanced technologies, leading
			R&D initiatives and complex projects to drive
			breakthrough innovations across industries
			and society. They can develop and implement
			system-level innovations, integrate effective
	The ability to use		project management practices, solve complex
	knowledge, ideas and		problems, and critically evaluate their long-
	technology to create		term impact while mitigating unintended
	new or improve existing	A (Expert)	consequences.
	products, services,	Α (Ελρείτ)	The trainee can assess, adapt, and implement
	processes as well as		innovative technologies to improve existing
	policies, business		products, services, or processes. They can
ELO 2 - Innovation	models and jobs.		identify scalable innovations, lead projects,
and Technology Skills	Where relevant, the		apply structured problem-solving methods,
and Competencies	ability to mobilise	D / A   1)	and contribute to technological, economic, and workforce advancements.
	system innovation	B (Advanced)	
	for broader workforce		The trainee can evaluate innovation
	change, while		opportunities, propose technological
	evaluating the		solutions, and contribute to development
	unintended		projects by enhancing efficiency and
	consequences of		effectiveness. They can apply basic project
	innovation and		management principles, recognize the role of
	technology.		business models and policy frameworks, and
		С	use problem-solving techniques to address
		(Intermediate)	challenges.
			The trainee understands fundamental
			innovation processes, including ideation,
			prototyping, technology adoption, and
		D (Basic)	problem-solving. They can describe how new





			and eviction to should size and by the second to
			and existing technologies can be used to
			improve products, services, or processes and
			can participate in structured projects with
			guidance.
			The trainee has mastered creativity in
			problem-solving, leading cross-functional
			teams in designing disruptive innovations.
			They can systematically apply advanced
			creativity methodologies to push beyond
			conventional thinking and drive
		A (Expert)	transformational change.
		, ,	The trainee can apply design thinking, lateral
			thinking, and structured ideation techniques
			to generate novel and impactful solutions.
	To ability to think		They can challenge existing models, iterate
ELO 3 - Creativity	beyond boundaries and		rapidly, and refine ideas into viable
Skills and	systematically explore	B (Advanced)	innovations.
Competencies	and generate new	2 (riaraniesa)	The trainee can recognize creative
	ideas.		approaches, propose original ideas, and
			contribute to collaborative innovation
			projects. They can use structured
		С	brainstorming and problem-framing
		(Intermediate)	techniques to improve idea generation.
		(intermediate)	The trainee understands fundamental
			creativity principles, including brainstorming,
			conceptual thinking, and exploring alternative
			perspectives. They can participate in ideation
		5 (5 : )	sessions and contribute new perspectives to
		D (Basic)	discussions.
			The trainee has mastered intercultural
			leadership, effectively managing global teams
	The ability to engage		and integrating diversity and inclusion
	and act internationally		strategies into business and organizational
	and to function		policies. They can mediate complex
	effectively across		intercultural interactions, resolve conflicts,
	cultures, sectors and/or	A (Expert)	and develop inclusive policies and practices.
ELO 4 - Intercultural	organisations, to think		The trainee can navigate cultural differences,
Skills and	and act appropriately		communicate effectively in international and
Competencies	and to communicate		cross-sector environments, and lead cross-
	and work with people		cultural collaborations. They can apply
	from different		intercultural intelligence to improve team
	cultural and		dynamics, partnerships, and stakeholder
	organisational	B (Advanced)	engagement.
	backgrounds		The trainee can analyze intercultural
		С	challenges, adapt to diverse environments,
		(Intermediate)	and apply cultural awareness strategies in





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			professional settings. They can recognize
			biases, address misunderstandings, and
			contribute to a more inclusive work
			environment.
			The trainee understands fundamental
			intercultural concepts, including cultural
			sensitivity, communication norms, and
			workplace diversity. They can identify key
			cultural differences and participate in cross-
		D (Basic)	cultural interactions with basic awareness.
		D (basic)	The trainee has mastered sustainable
			decision-making, designing policies and
			strategies that balance economic,
			environmental, and social factors. They can
			anticipate long-term consequences,
			implement systemic change, and drive
			sustainability at an organizational,
		A (Expert)	governmental, or global level.
			The trainee can assess sustainability
	To ability to identify the		challenges, evaluate environmental and social
	consequences of plans		trade-offs, and implement responsible
ELO 5 - Making Value	and decisions and to		business practices. They can develop and
Judgments and	merge this into a		advocate for long-term sustainability solutions
Sustainability	solution-focused	B (Advanced)	in industry, policy, or community initiatives.
Competencies	approach that moves	,	The trainee can analyze ethical dilemmas,
	towards a sustainable		identify sustainability-driven improvements,
	and green society.		and engage in responsible decision-making.
	,		They can apply basic sustainability principles
		С	to develop practical solutions in professional
		(Intermediate)	settings.
		(intermediate)	The trainee understands the fundamental
			principles of ethics, sustainability, and
			corporate responsibility. They can recognize
			the potential consequences of decisions and
		- (- · · ·	apply basic sustainability considerations in
		D (Basic)	daily activities.
			The trainee has mastered leadership in
	To ability make		complex environments, implementing
ELO 6 - Leadership	decisions and provide leadership based on a		strategic visions and driving organizational
			transformation. They can integrate education,
Skills and	holistic understanding		research, and business to develop innovative,
	of the contributions of		value-driven strategies at local, national, or
Competencies	education, research and	A (Expert)	global levels.
	business to value		The trainee can manage teams, make
	creation.		
	creation.		strategic decisions, and drive innovation





		to leverage research and education to
		enhance business and social impact.
		The trainee can take initiative, solve problems,
		and support decision-making processes within
		teams. They understand the role of leadership
	С	in bridging research, education, and business
	(Intermediate)	to create practical value.
		The trainee understands fundamental
		leadership principles, including team
		dynamics, problem-solving, and decision-
		making. They recognize the interconnection
		between education, research, and business in
	D (Basic)	leadership roles.