



Co-creating skills ecosystems

30 September 2025, Arnhem

Jan Cromwijk, Educational Technologist



**CENTRAAL
REGISTER
TECHNIEK**

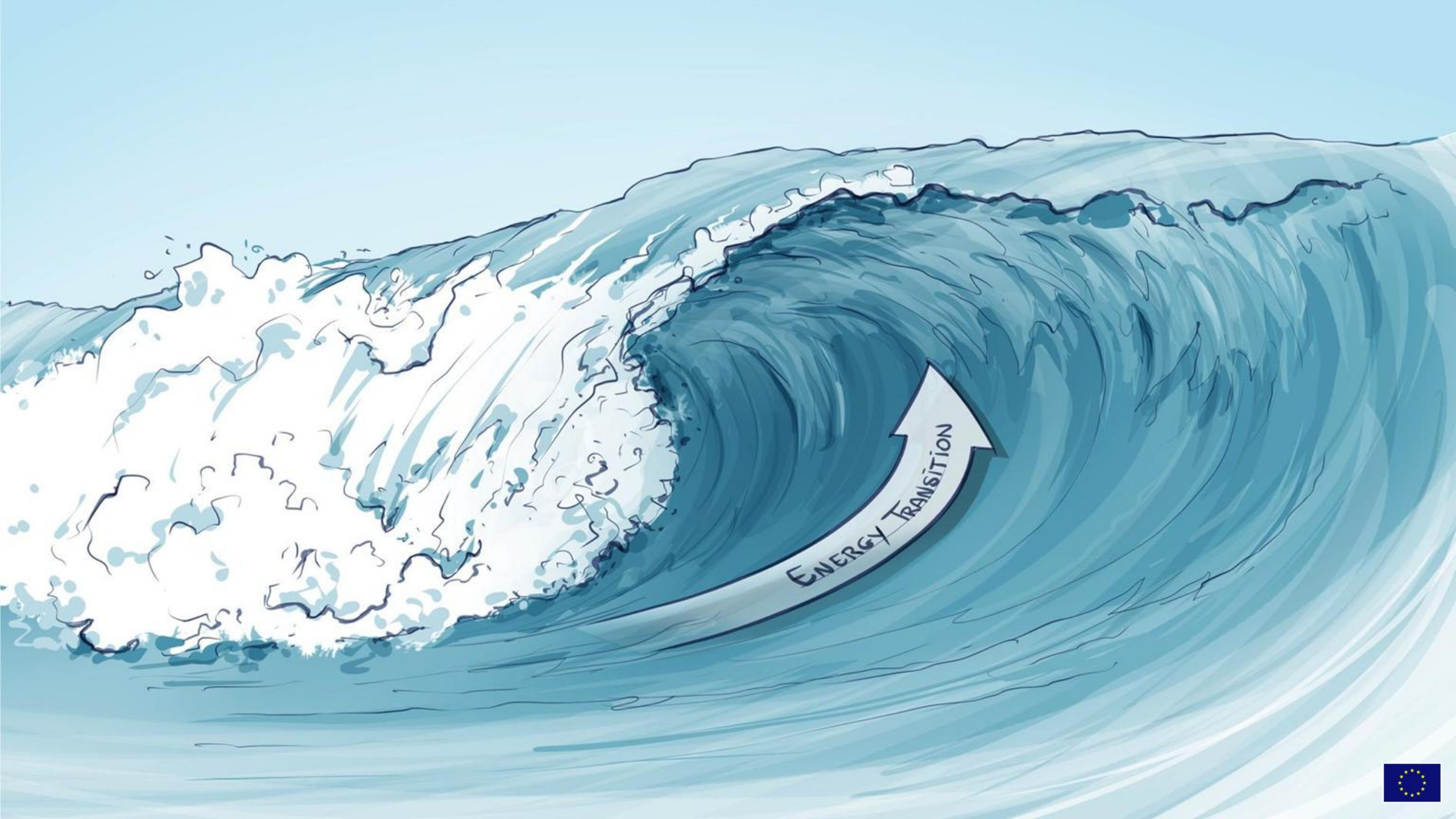


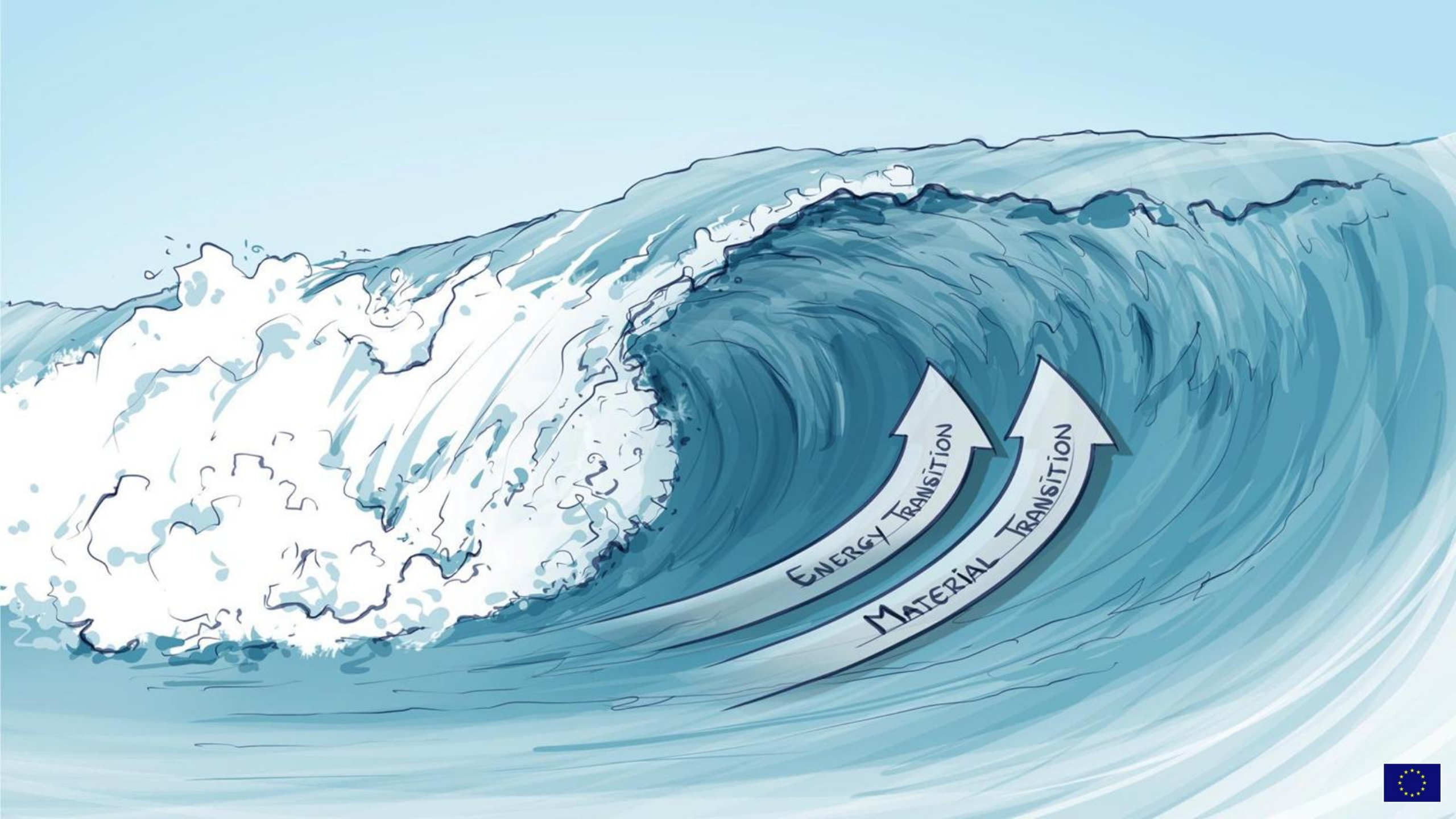
Why Life Long Learning...

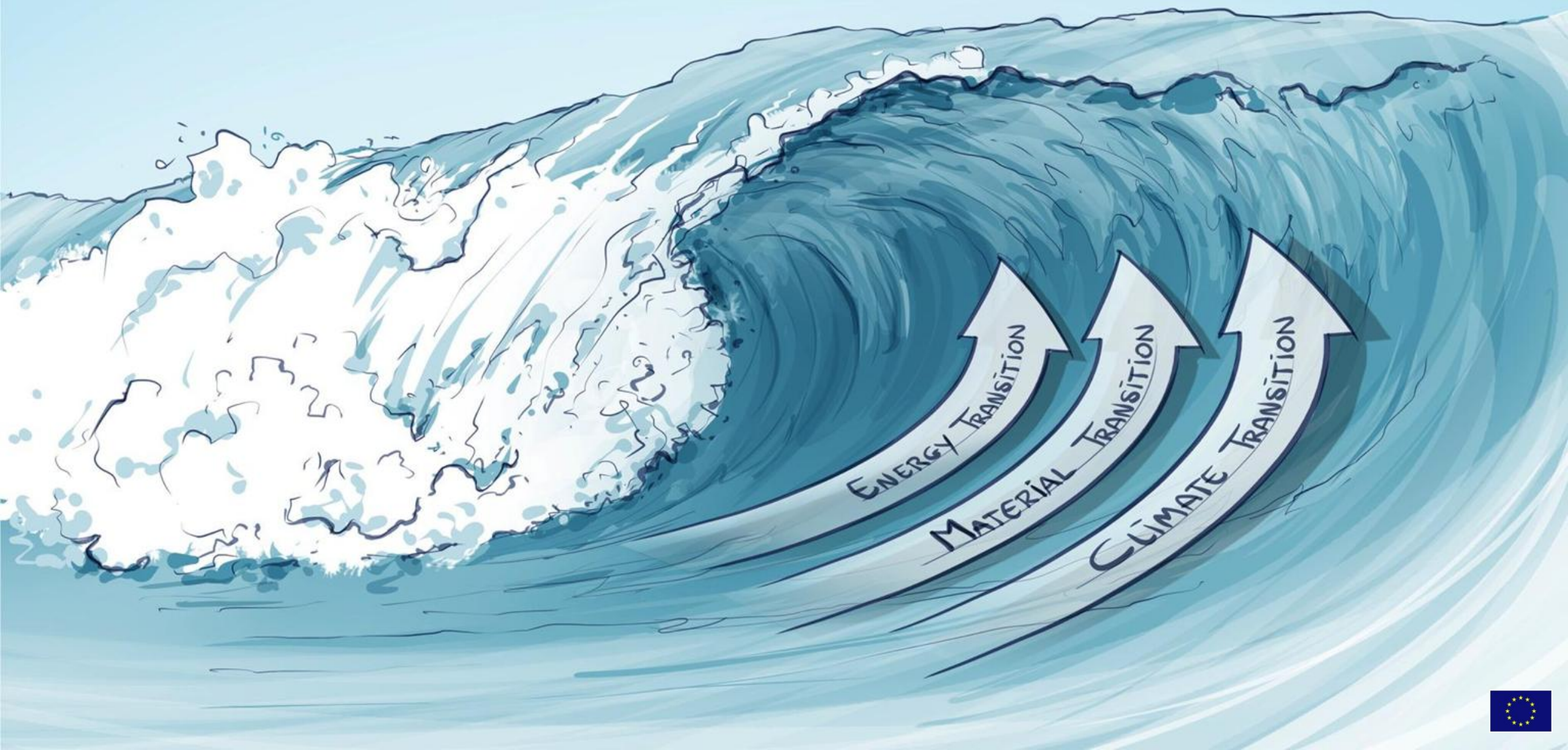
- Professions are changing
- Diploma is a start – continuous professional competence is necessary – Retain employees
- Methods for qualification are diverse
- Mobility of workers is needed
- Therefore, insight into where someone stands is required

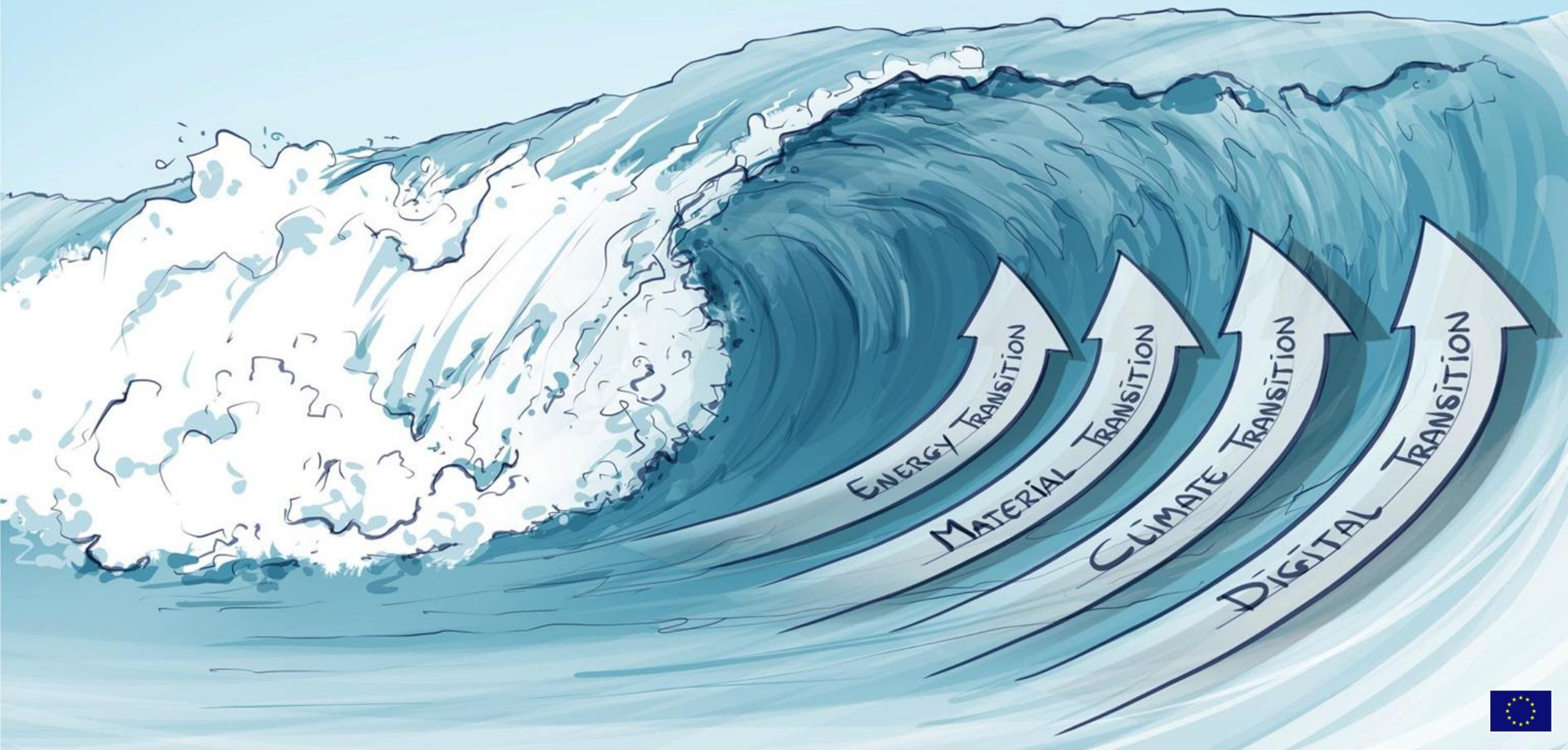


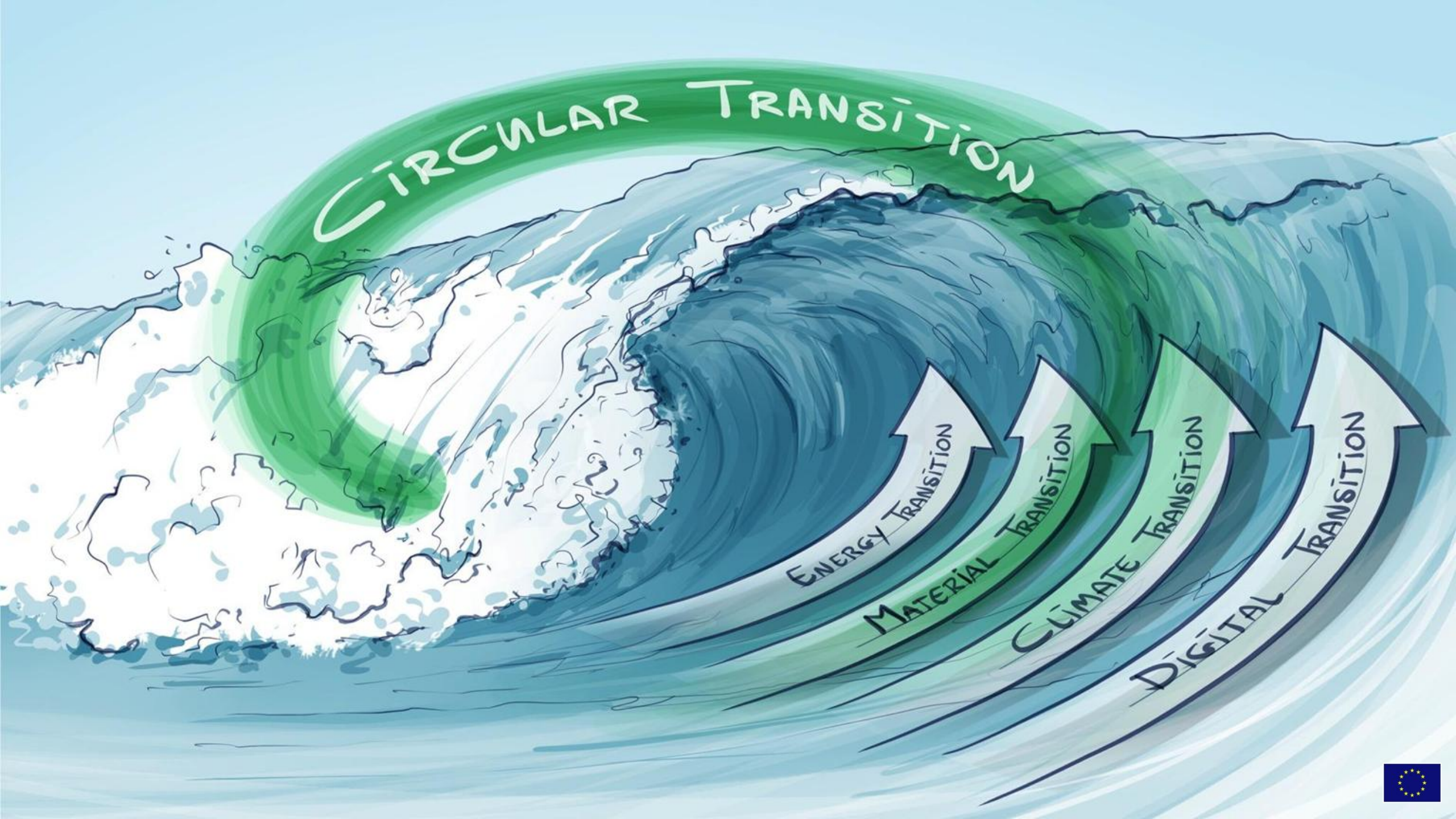


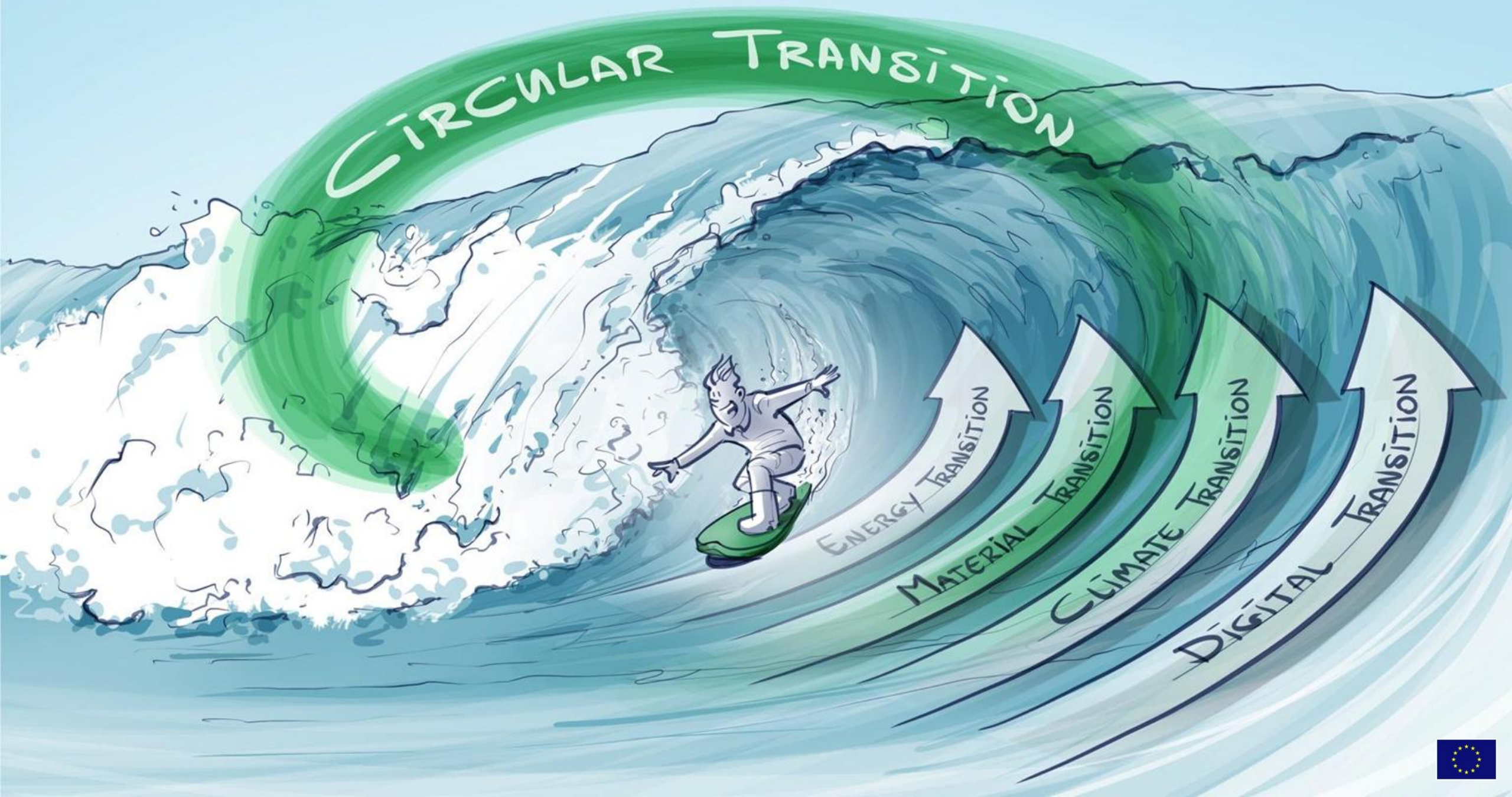








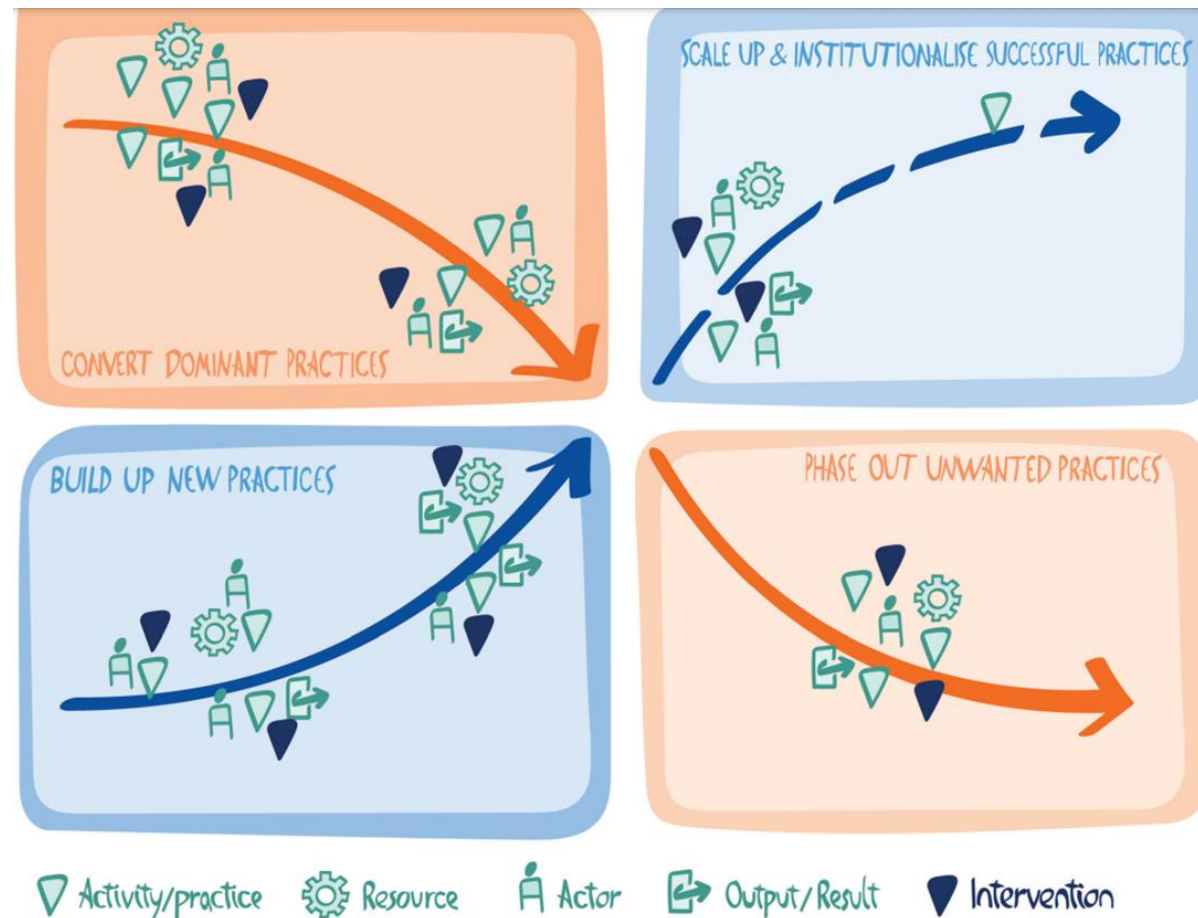
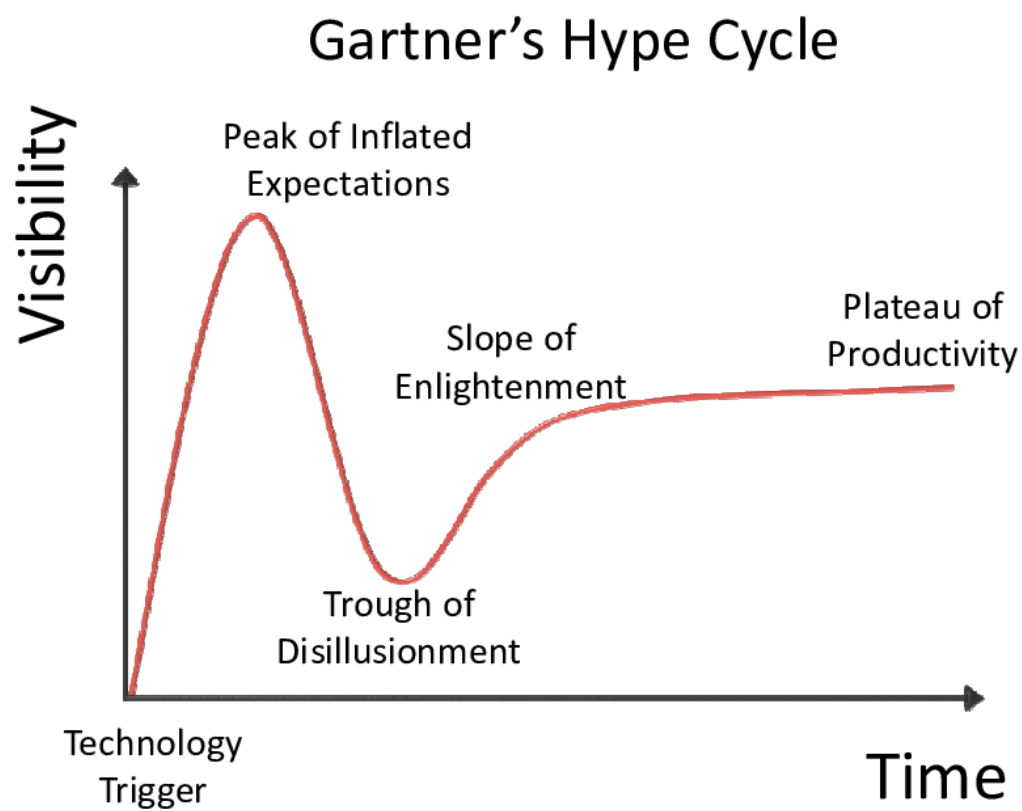






Transition needs Timing & Skills

drift
for transition





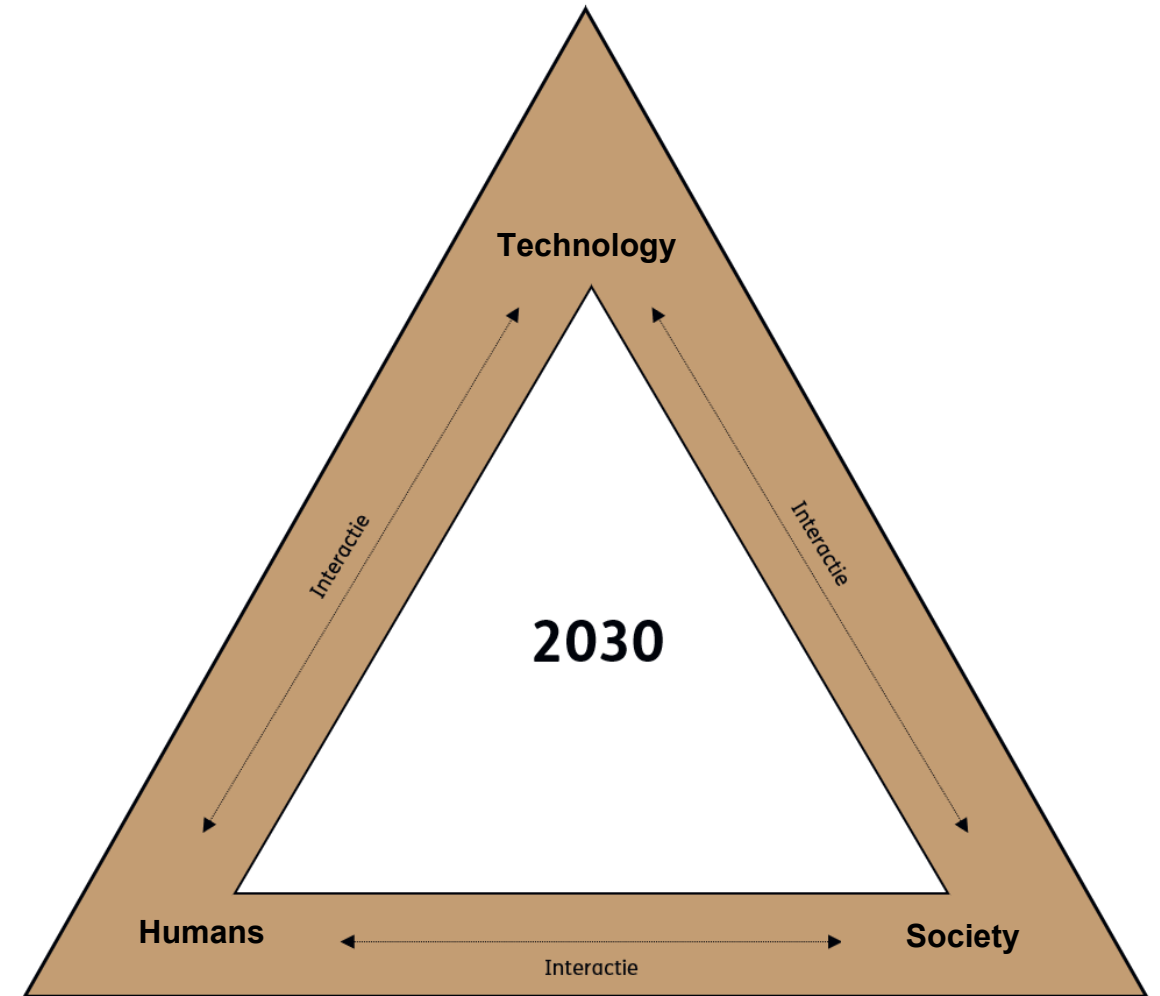
https://www.researchgate.net/figure/A-dynamic-representation-of-the-multi-level-perspective-on-transitions-This_fig1_277142921

[accessed 14 Oct 2024]



The World in 2030

- Technological progress
- Societal changes
- What happens to people and their expertise





The impact of technology

The installation sector plays a key role in keeping the Netherlands prosperous and healthy. The energy transition, circular economy, urbanization, digitization are all developments with far-reaching consequences for the way we live and work.

The Innovation Committee of Techniek Nederland studies and explores future trends and developments, so that the sector can respond to them in time. Techniek Nederland does this in close coordination with the other knowledge organizations in the installation sector, namely Wij Techniek, ISSO and TVVL.

Previous studies were published in 2004 and 2010, under the name Radar. In 2018 the third study into the future outlook for the Netherlands and the installation sector was published: CONNECT2025.

CONNECT2025 is intended as a guideline and inspiration for

- our own industry
- politics
- government
- education and science
- customers

Download report
CONNECT2030

Download report
CONNECT2025

Download report
SCENARIO2040

General
CONNECT2025
SCENARIO2040
Techathon
CONNECT2030



From Innovation to Skills



New developments in sight

Connect
Departments
TechniekNL TVVL



Research for new skills

Erasmus and EU
research
Fieldlabs, learning
communities



Marktmonitoring

Specialist committees
ISSO research
Developing learning
objectives



Translating skills to professional competences

End terms
Learning outcomes
Competence
requirements



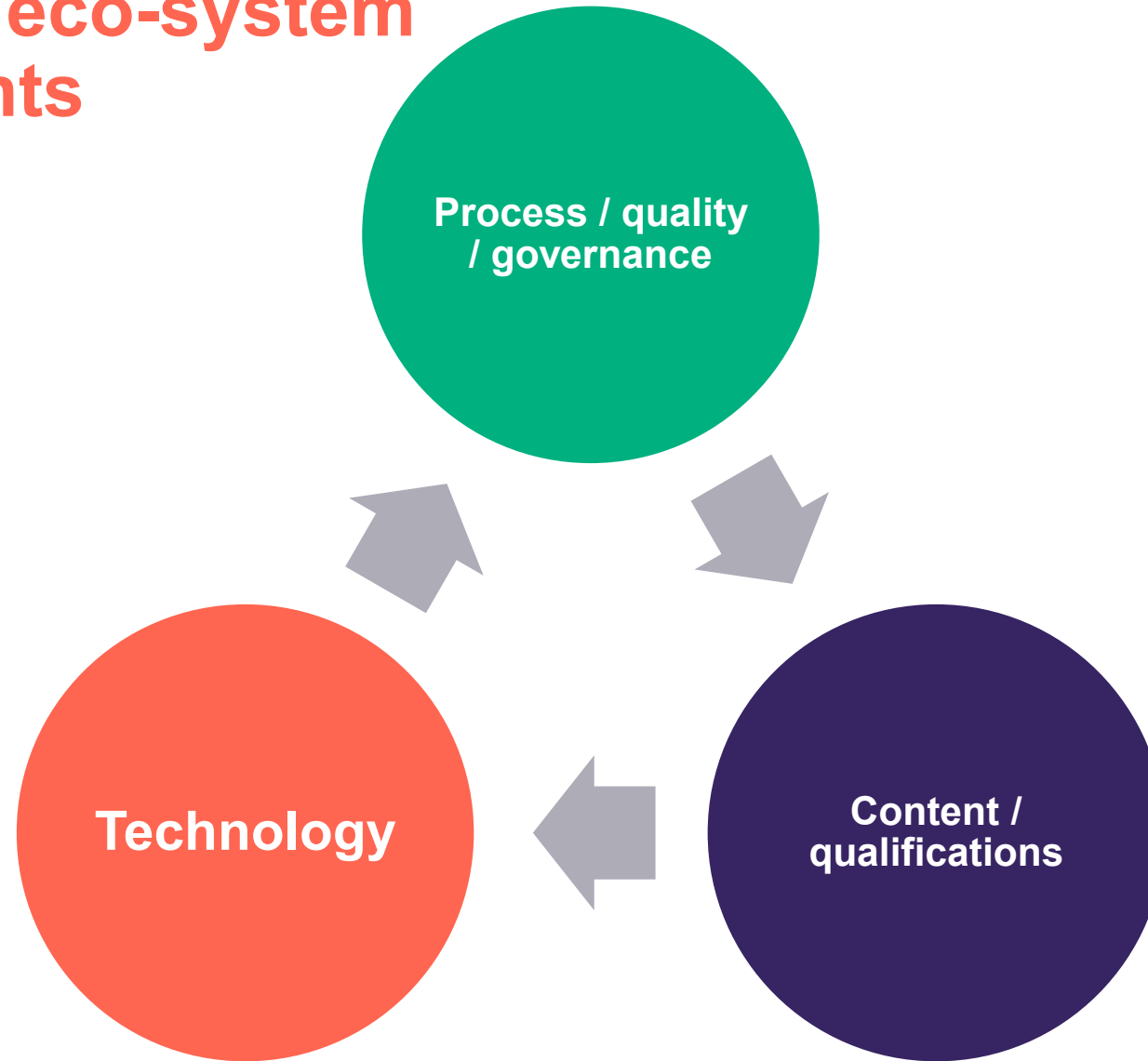
To validation and training

In certifications, in
formal and informal
training



The industry eco-system

Three elements

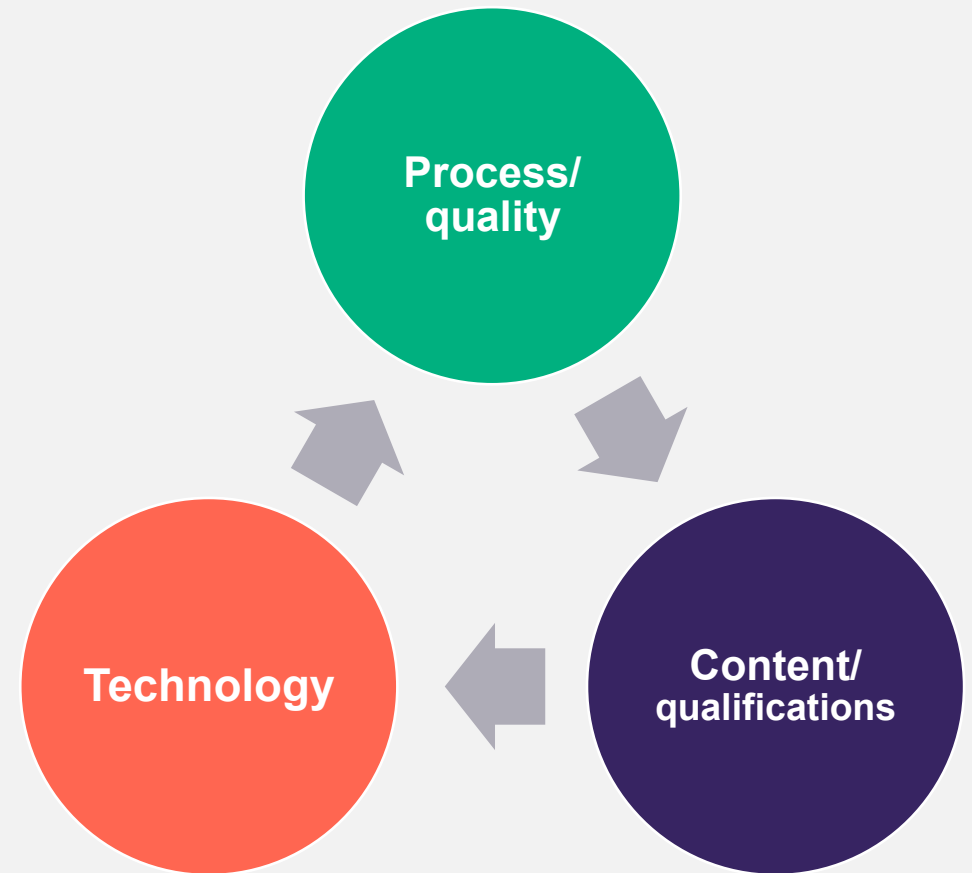




Content – Industry qualification

Content/
qualifica
tions

- Industry structure of qualifications
- Professional profiles
- Taks defined (objectives – learning outcomes)
- Uniform defined
- Linked – to formal qualification if necessary
- Linked to Dutch developed taxonomy for skills CompetentNL
- Linking skills and training > private training institutes

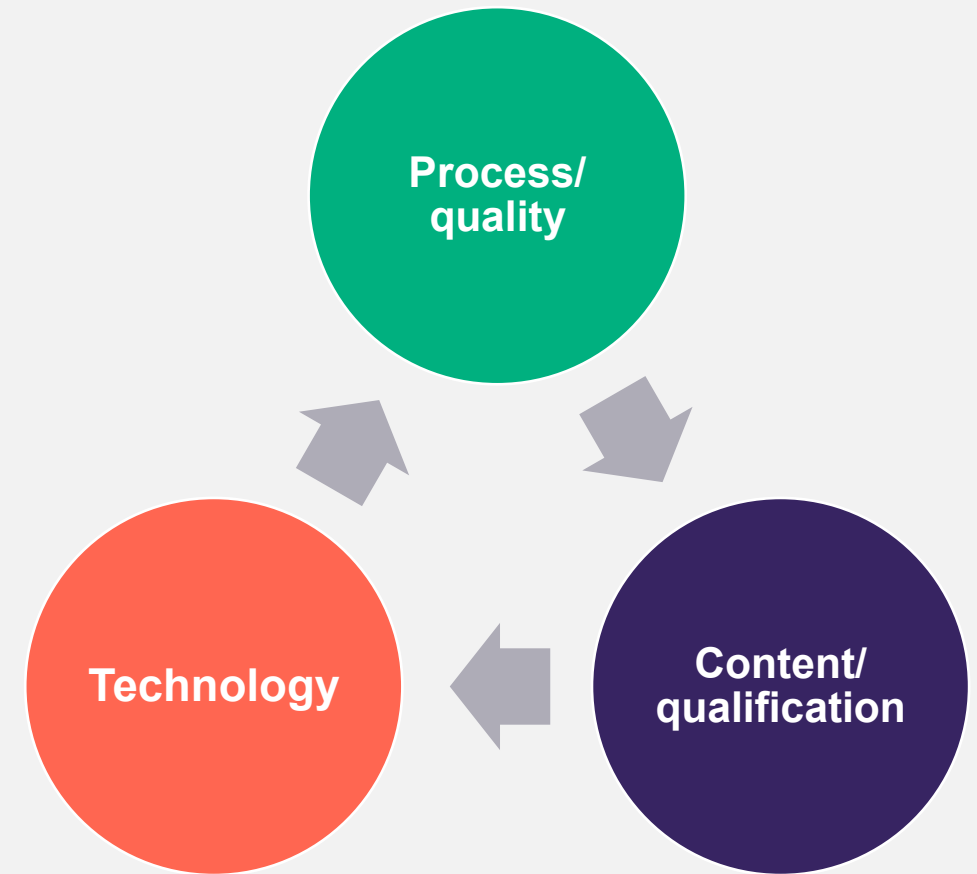




Process – quality

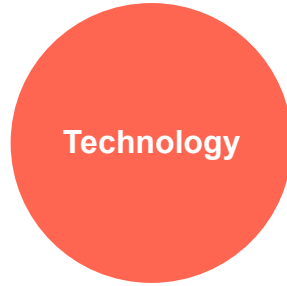
Process/
quality

- Quality system for managing, defining, legitimating and commitment
- Central exam committee
- Process for maintaining professional profiles (job descriptions)
- Establish industry qualifications
- Agreement about assessments and validation

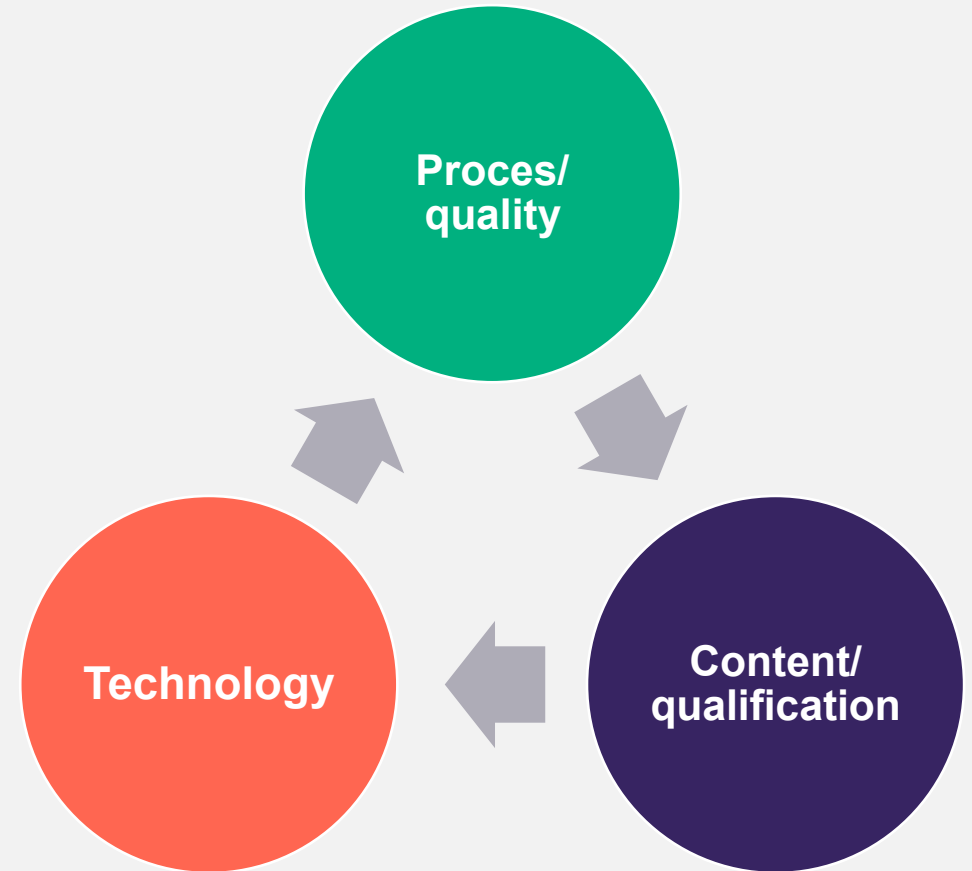




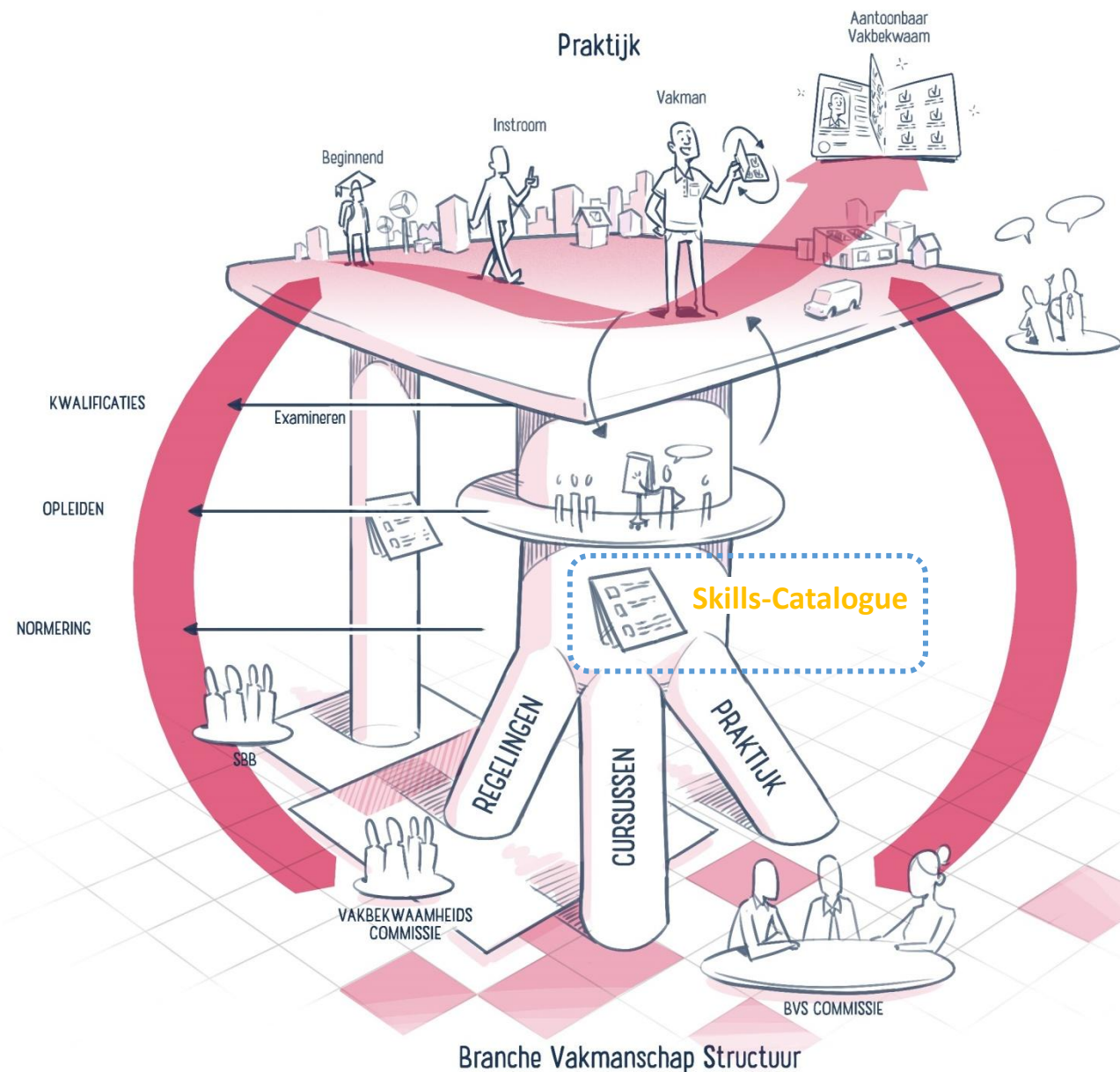
Technology



- Insight in qualifications and learning outcomes
- Skills database
- Portfolio/skillspass
- Qualification register
- Publishing system (front end)
- Developing a wallet function
- Person driven system – industry ID

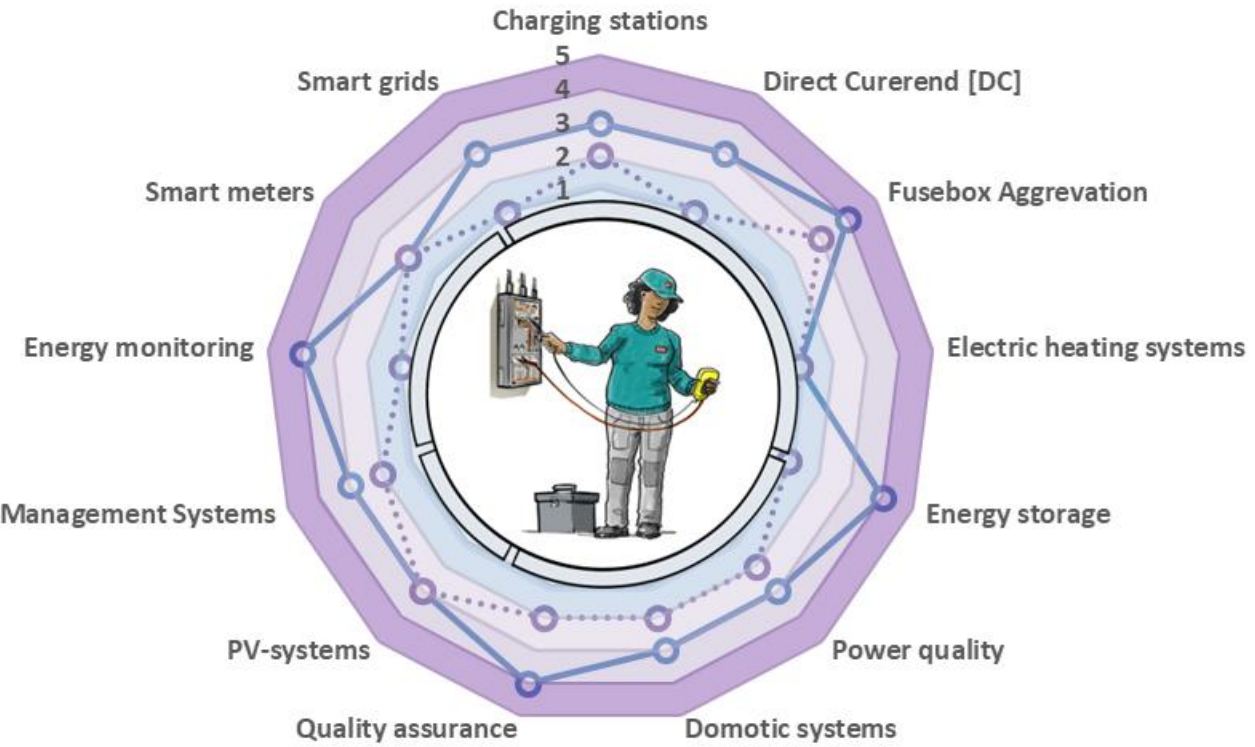
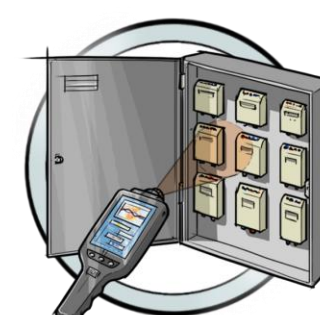
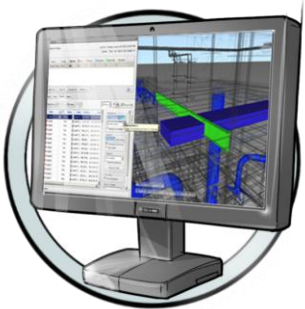
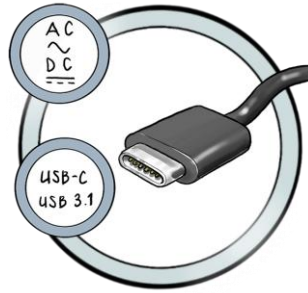
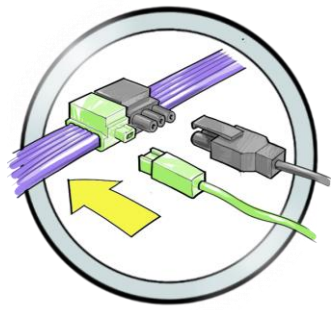


From Skills-Intelligence to actual upskilling & recognition



Branche Vakmanschap Structuur

RENEWABLE ENERGY SYSTEMS INSTALLER



- Desired
- Current
- Basic knowledge
- Basic skills
- Skilled/competent
- Experienced
- Expert



Taskbased Unit of Learning Outcomes

Following [CEDEFOP](#) Guidelines in working paper 21



Practical
perspective on
required skills



Increased
recognition of
learned skills

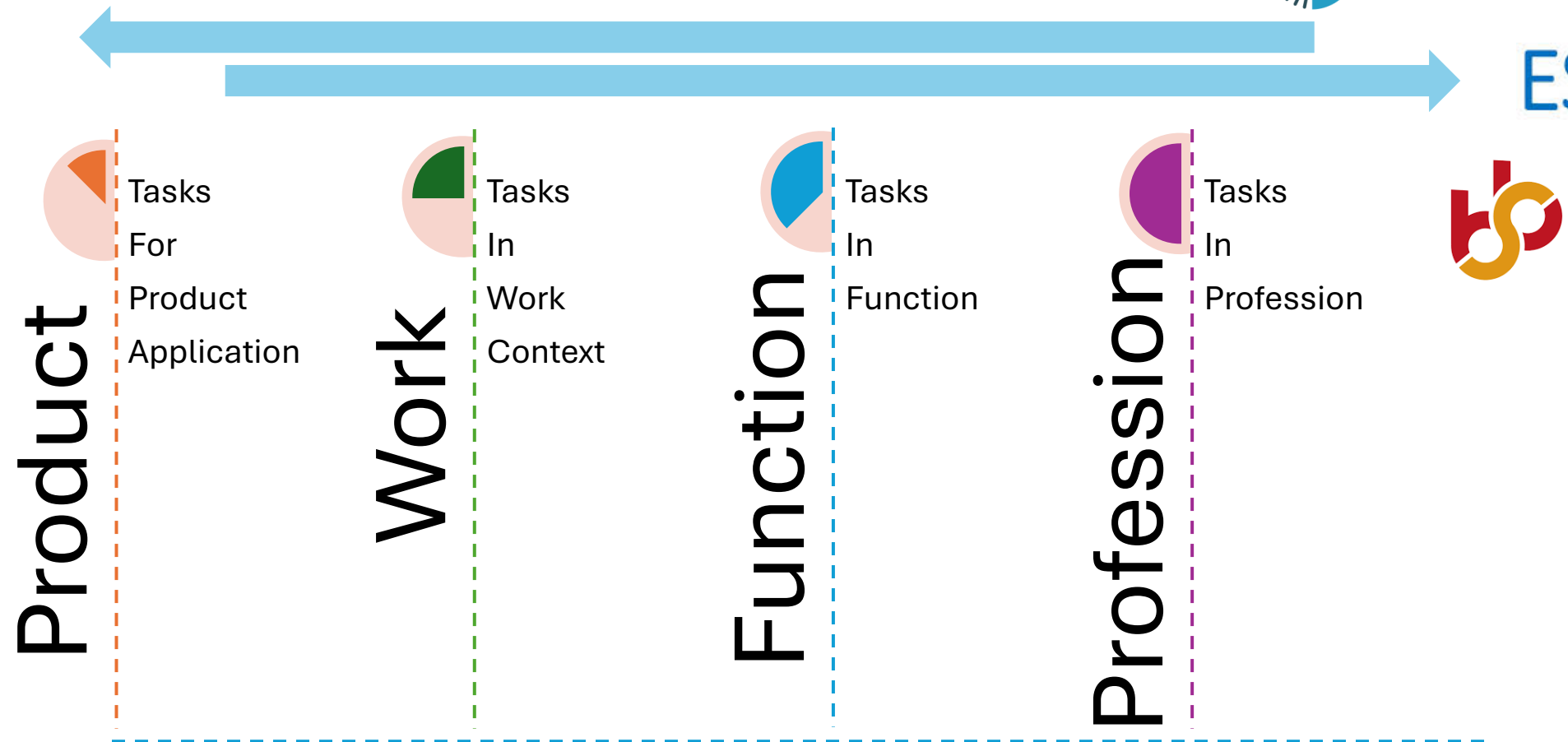


Learning outcomes
for development of
training



Provides flexibility
for updates and
changes

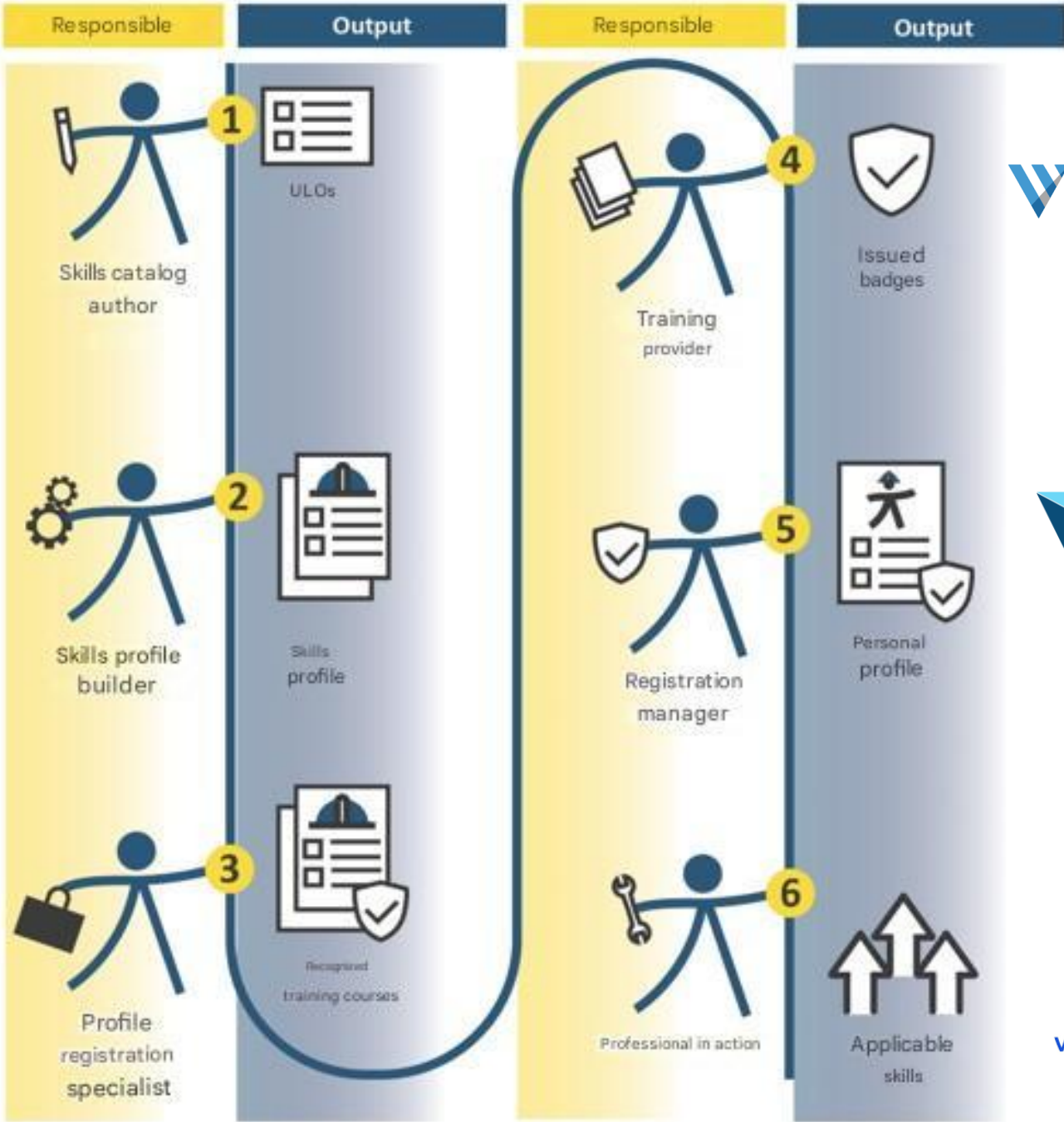
European guidelines for the development
and writing of short, learning-outcomes-
based descriptions of qualifications



Professional Competences – proces



Customer Journey





Vakmanschaptechniek.nl

Platform to achieve demonstrable registered craftsmanship

- ✓ Registration (link CRT)
- ✓ Baseline measurement
- ✓ E-learning (refresher)
- ✓ Online theory exam
- ✓ Registration practical exam
- ✓ Referral of training courses
- ✓ Issue of proof of craftsmanship

Craftsmanship routes

www.vakmanschapco.nl

www.vakmanschapinregelen.nl

www.vakmanschapzonnestroom.nl

www.vakmanschaptechniek.nl

25

020 - 304 31 33 | helpdesk@vakmanschap.nl [Check je vakgebied](#) [In](#)

[Carrière mogelijkheden](#) [Informatie](#) [Examen training](#) [Vraaggestelde vragen](#) [Over ons](#) [Contact](#)

Vakmanschap koolmonoxide preventie

[Ik ben werknemer](#) [Ik ben zelfstandige \(zzp\)](#) [Ik ben werkgever](#)

Vakmanschap erkennen... wachten hoeft niet meer!

Vanaf **1 oktober 2020** mogen installatiemonteurs, als onderdeel van de [wettelijke certificeringsregeling](#) voor bedrijven, uitsluitend werkzaamheden verrichten aan gasverbrandingsinstallaties wanneer zij ook daadwerkelijk beschikken over het Bewijs van Vakmanschap!

Op deze website vind je het speciaal ontwikkelde examenprogramma dat leidt tot erkenning van Vakmanschap voor werkzaamheden aan gasverbrandingsinstallaties, onder accreditatie van [InstalQ](#). Ben je een installatiemonteur of werkgever? Laat je kennis en vaardigheden of die van je medewerkers tijdig bij ons vaststellen en erkennen.

Voordat je begint...
Voorafgaand aan het traject adviseren wij je de beschikbare informatie over het proces en de diverse profielen goed door te nemen. Hiermee voorkom je verrassingen.

[Meer informatie over het proces vind je hier!](#)

Techniek Nederland
Techniek
InstalQ

Een initiatief van

[Wij Techniek](#) [InstalQ](#) [CNV](#) [Techniek Nederland](#) [De Unie](#) [FNV Metaal](#)

Nieuws

[Vernieuwing geldigheid Bewijs van Vakmanschap!](#)

[Gasketelwet per 1 oktober 2020 in werking!](#)

Het Coronavirus (COVID-19): Zo gaat Vakmanschap CO er mee om! 29-09



9:41

Kaarten



H. K. de Vries
01 januari 1989

Bedrijfsinformatie

Kwalificaties

✓ BRL 6000-07
H.K. de Vries

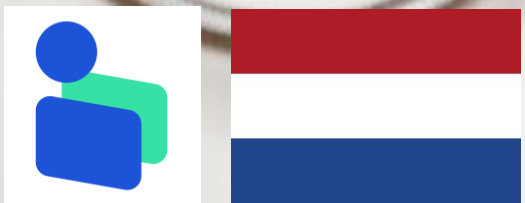
ISSO
KVINL
Certificaat
ISSO

H.K. de Vries
Janssen Installatiebedrijf
Afgifte legitimatiebewijs
14-07-2023

CO
nl

Delen

+ Toevoegen



BUILD UP Skills - Timeline



2011-2012

Initial analysis
and strategy
(National
Platforms and
Roadmaps)

2012-2013

Training +
qualification
(national)

2014-2018

Training +
qualification
(national + EU)

2019-2020

Demand-side
measures
(procurement,
campaigns...)

2021

Updating
the strategy
& roadmaps

2022-2023

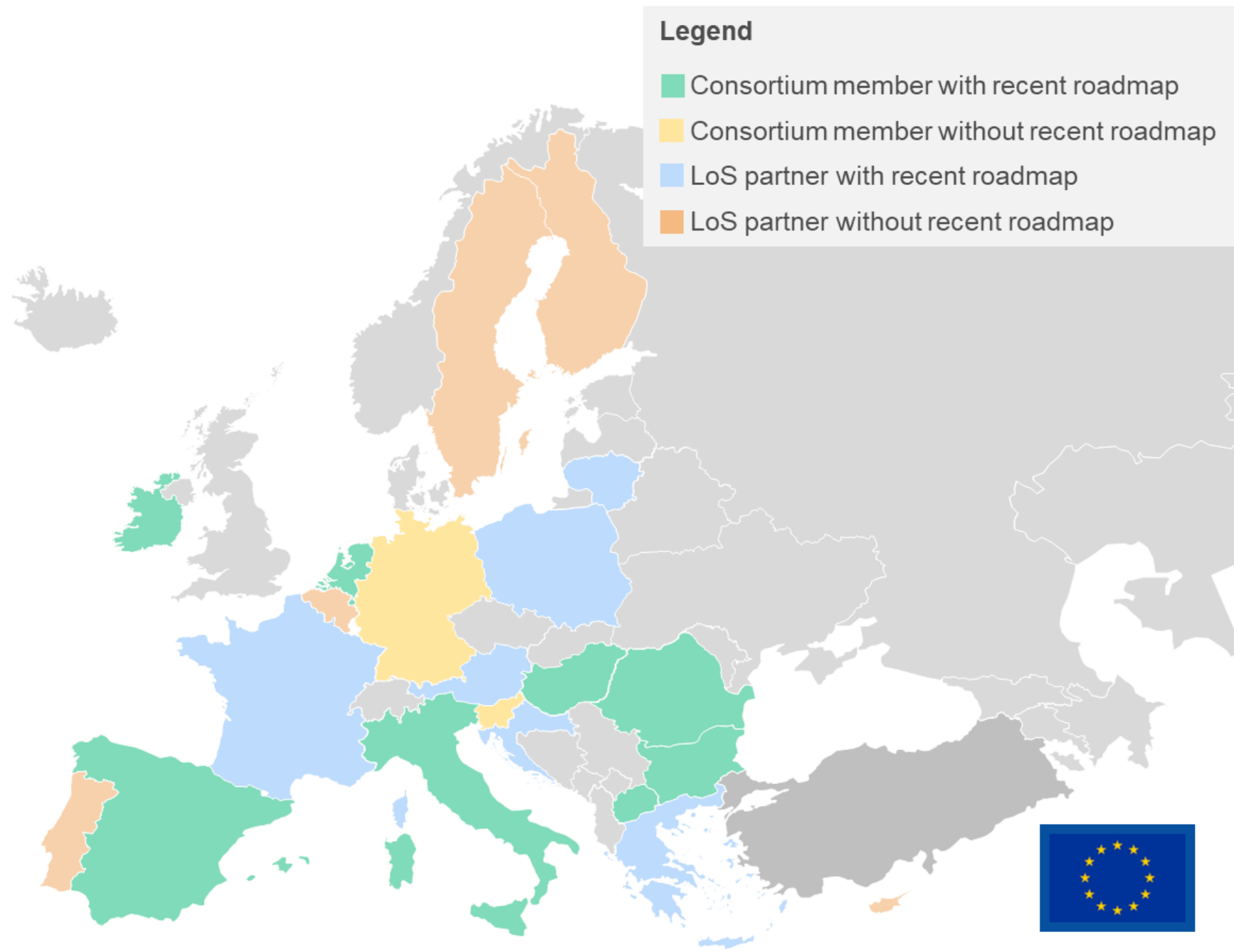
Training
interventions

2024-2030

Training
interventions
& Community
of Practice

BUSUnited

BUILD UP Skills
Community of Practice



BUSUnited mission

- 1. Initiate and establish Communities of Practice**
- 2. Create synergies at EU level**
- 3. Create synergies at National level**
- 4. Develop effective communication actions**
- 5. Sustain and enable growth of the BUSUnited-CoP's**

CoP 1: Sectoral skills needs		Facilitator: UKIM Co-facilitator: CRT
Mission statement: Clear insight into transition enabled timely and targeted upskilling		
CoP participants: TUS, UKIM, CRT, GBC Italia, iiSBE, ACE, JER and 56 from LoS.		
Challenge 1: Create Transition Outlook		Challenge lead: ISSO
Challenge 2: Determine Skill gap		Challenge lead: iiSBE
Challenge 3: Exploitation of methods		Challenge lead: UKIM



CoP 4: Skills recognition	Facilitator: CRT Co-Facilitator: iiSBE
Mission statement: Targeting common EU approach in skills recognition	
CoP participants: CRT, UKIM, TUS, JER, GBC Italia and 50 from LoS.	
Challenge 1: Overview of different existing frameworks for skills recognition	Challenge lead: UKIM
Challenge 2: Setting the quality mechanisms for recognition framework	Challenge lead: CRT
Challenge 3: Tools for skills recognition	Challenge lead: UKIM



Future policy scenarios Towards 2040



CEDEFOP

European Centre
for the Development
of Vocational Training