

Gathering25
Realising vision, advancing automation

CITA25
*Driving Digital Construction
for 25 years*



ARISE: Catalysing Sustainable Energy Skills Development

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EU Context and Policy Landscape: Green Deal and Skills Gap



The Green Skills Gap In Europe

Climate-Neutral Economy Goal

The European Green Deal aims for a climate-neutral economy by 2050, requiring extensive upskilling across industries.

Construction Skills Shortage

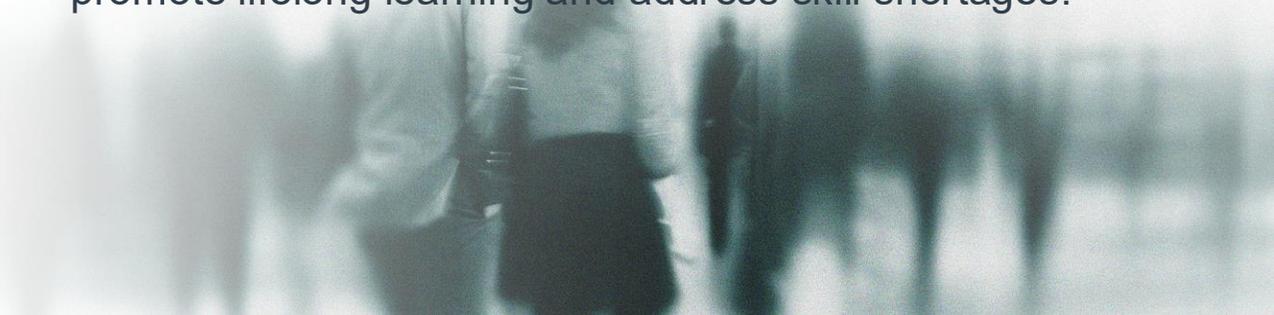
The construction sector faces a labour shortage and low youth interest, impacting critical roles like engineers and carpenters.

New Skills for Decarbonisation

Workers must learn digitalisation, energy efficiency, and technologies such as heat pumps and solar systems.

EU Support and Policies

EU initiatives like the Skills Agenda and Renovation Wave promote lifelong learning and address skill shortages.



EU Context and Policy Landscape: Supporting EU Policies

EU Directives on Energy Skills

EPBD, RED, and EED directives set competency standards for skills in zero-emission buildings and energy efficiency.

BUILD UP Skills Initiative

BUS initiative supports upskilling in construction, integrating energy efficiency, circularity, and digitalisation priorities.

GreenComp Sustainability Framework

GreenComp framework guides sustainability competencies for educators and learners across the EU.

ARISE Project Alignment

ARISE promotes innovative upskilling and supports BUS priorities to meet national and continental green transition needs

THE KEY AREAS OF FSC® ACTIVITY UNDER THE EUROPEAN GREEN DEAL



ARISE Framework and Methodology: Project Origins and Consortium



Project Origin and Alliance

The ARISE project began in 2018 through the BIM Energy Performance Alliance to improve sustainable energy in construction.

Consortium Partners

Partners from eight European countries formed a consortium to advance digital training in construction energy performance.

Training Framework Steps

The training framework includes harmonising competencies, digital CPD system, mobile training portal, and blockchain accreditation.

Benefits of Collaboration

This approach supports skill recognition, career mobility, and raises standards in the construction sector.



ARISE Platform: Task-Based Qualification Framework

PARTNERS

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 This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 785155 and No 101033864.

arise

RELEVANT - INNOVATIVE - SCALABLE - SECURE

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Framework Purpose and Scope

The framework enhances skills in renewable energy, energy efficiency, and building performance using BIM technology.

Stakeholder Engagement

It supports diverse stakeholders including training providers, certification bodies, professionals, and public authorities.

Modular Learning and Micro-Credentials

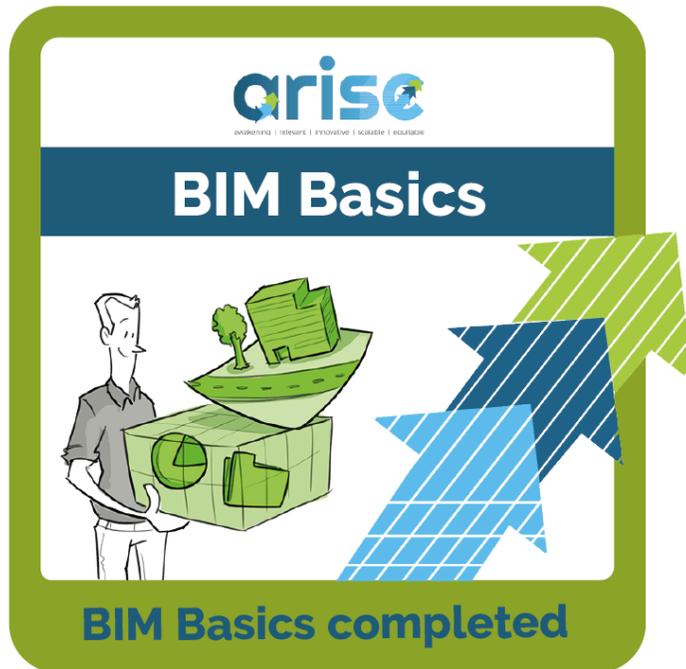
Learning units enable micro-credentials accumulation for continuous professional development and broader qualification certificates.

Supporting Sustainable Construction

The framework promotes sustainable construction through efficient training delivery and skill recognition.



ARISE Platform: Gamified Digital Learning Approach



Gamification and Rewards

The platform uses experience points and digital badges to motivate and engage users in their learning journey.

Open Badges 3.0 Standard

Adoption of Open Badges 3.0 enables secure, GDPR-compliant verifiable credentials for skills recognition.

Multi-Device Accessibility

The platform is accessible via web browsers on PCs, tablets, and smartphones supporting blended learning.

Adaptive Learning and Micro-Modules

Adaptive assessments and choice of tailored micro-modules provide personalised and flexible learning experiences.

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Pilot Implementation and Results: Pilot Objectives and Methodology

Validation of Competences

The pilot validated a competence matrix aligned with market demands and confirmed training content and methods.

Survey-Based Skill Assessment

Surveys before and during engagement identified skill gaps and measured training effectiveness.

Interactive Training Approach

Workshops and modules used digital tools, live and recorded sessions, with completion surveys for certification.

Building Market Capacity

The pilot fostered understanding among market drivers about benefits of digitalisation and certification.

MY MODULE LIST

Module Title	Progress	Completion %
Welcome (Trainees)	10% Complete	10%
Digital Construction - Benefits to AEC Industry	0% Complete	0%
BIM Requirements - EIR	0% Complete	0%
What is Digital Construction?	0% Complete	0%
BIM Requirements- Software & Hardware I	11% Complete	11%
ARISE_BIM Modelling_UI Navigation (Revit)	0% Complete	0%
BIM Standards I	14% Complete	14%
BIM Requirements -CDE	0% Complete	0%
BIM Information Management & Application I	0% Complete	0%
ARISE_BIM Modelling_UI-Hierarchy & Elements (Revit)	8% Complete	8%
BIM Maturity Stages	0% Complete	0%
What is BIM - BIM Fundamentals	0% Complete	0%

Pilot Implementation and Results: Engagement and Outcomes



TRAINING PLAN - TRIALS

Please use this training plan which includes a sample of modules to be tested during the first phase of the ARISE trials.

Module list:

- 1 BIM Terms & Definitions - Intro**
Implementing BIM? Then, knowledge of some essential key terms is essential! Get past the jargon and learn some of the basic important terms to allow progress in your BIM journey.
- 2 Overview of BIM Benefits - Intro**
4.0 revolution-digitalisation is changing the AEC industry's workflows, methods, processes and tools. BIM is often in the center of this. What benefits adopting BIM brings to the industry and its professionals? Why? How it improves the way AEC professionals are used to work? This is a quick overview of benefits of BIM (and digitalisation) implementation.
- 3 BIM Dimensions - Intro**
What are BIM Dimensions? You probably already heard about BIM levels or stages, but what about these Dimensions? Learn how many are there; what do they mean and how they apply into your role and workflow. From 2D to 7D, we will cover them all.
- 4 BIM Tools for Energy Efficiency - Intro**
BIM offers digital solutions to enable and help the AEC industry to achieve low-energy building stock. Learners will know and be able to:
Illustrate how BIM can be utilised to reduce energy loss

[Learn More](#)

Upskilling Achievements

ARISE pilot upskilled 1,939 individuals, exceeding the 1,000 target, with high training completion rates and badges awarded.

User Engagement and Outreach

Strong platform engagement with 3,361 users registered, especially in Europe and Portugal, showing effective outreach efforts.

Collaborative Involvement

Pilot involved 20 SMEs and 10 public authorities, enhancing the project through broad collaboration and support.

Validated Deliverables and Impact

Validated competency matrix, learning outcomes, and training models underpin continuous improvement and digital skills promotion.



Educational and Industry Impact



awakening | relevant | innovative | scalable | equitable

Competency-Based Learning Framework

ARISE introduced a tailored, competency-based framework focused on construction industry needs, enhancing practical skills development.

Flexible Microlearning Modules

Microlearning modules provide professionals with flexible, bite-sized learning experiences for continuous skill enhancement.

Digital Skill Recognition

Open Badges enable digital, portable recognition of skills, supporting career mobility and continuous learning culture.

Cross-Border Skill Recognition

The framework facilitates cross-border skill recognition within the EU, reducing employment barriers and enhancing mobility.



Environmental and Employment Benefits

Energy Efficiency in Construction

ARISE promotes energy-efficient construction practices, resulting in significant energy savings and reduced waste.

Renewable Energy Generation

The platform supports renewable energy generation, contributing 2.25 GWh/year to sustainable power production.

Employment and Skills Recognition

ARISE enhances job opportunities by recognising BIM and energy-efficiency competencies, boosting professional demand.

Cross-border Mobility and Market Demand

Mutual recognition and engagement with SMEs and public authorities expand employment pathways and stimulate market demand.



6th November 2025



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Thank you