

The future of Construction: Digitalisation for Sustainability

European Construction Sector Observatory

Webinar
08th June 2021



Agenda

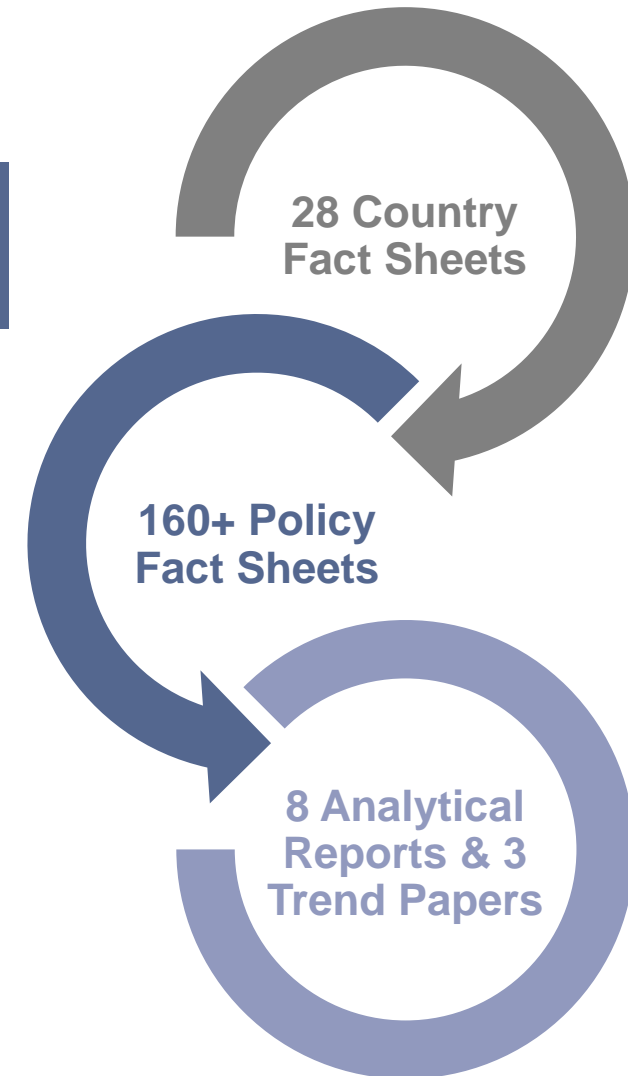
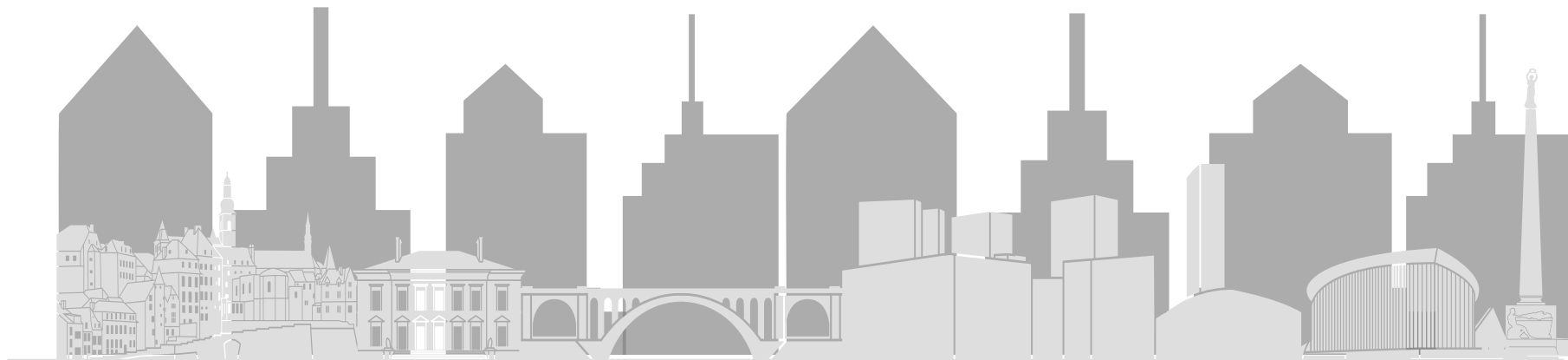
- 01 **Presentation of ECSO**
- 02 **State of play of digital technologies: benefits and challenges**
- 03 **European policies**
- 04 **Member States' digital policies**
- 05 **Lessons learnt**

European Construction Sector Observatory

A tool for policy-makers, running since 2015

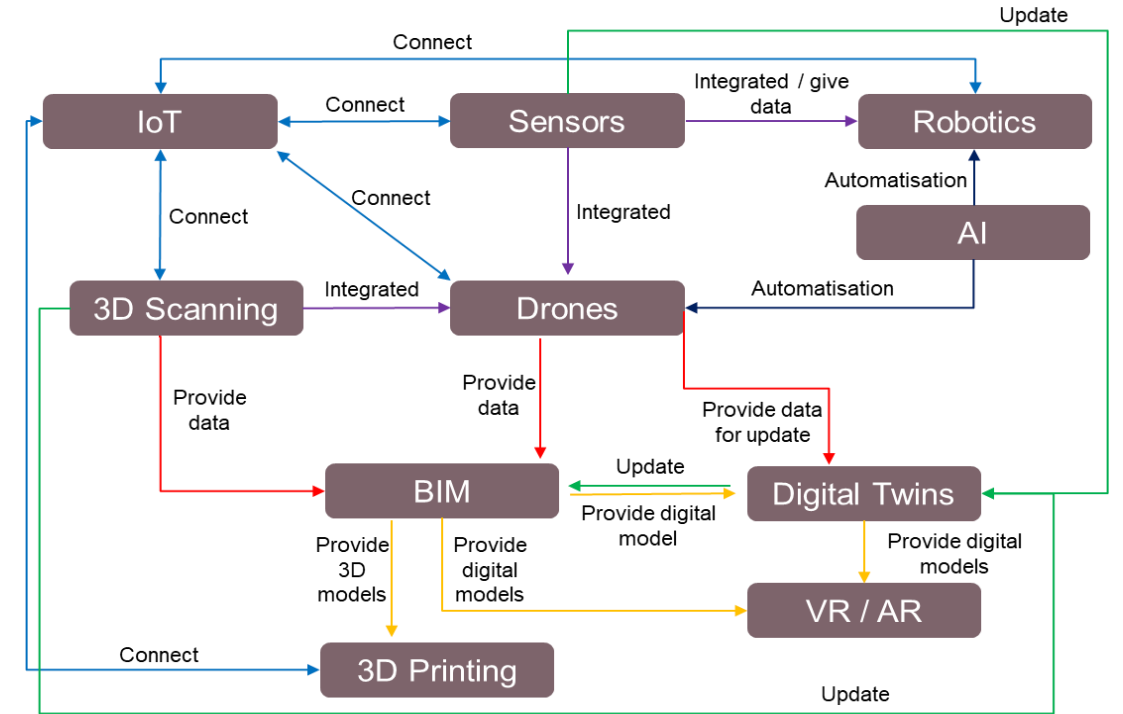
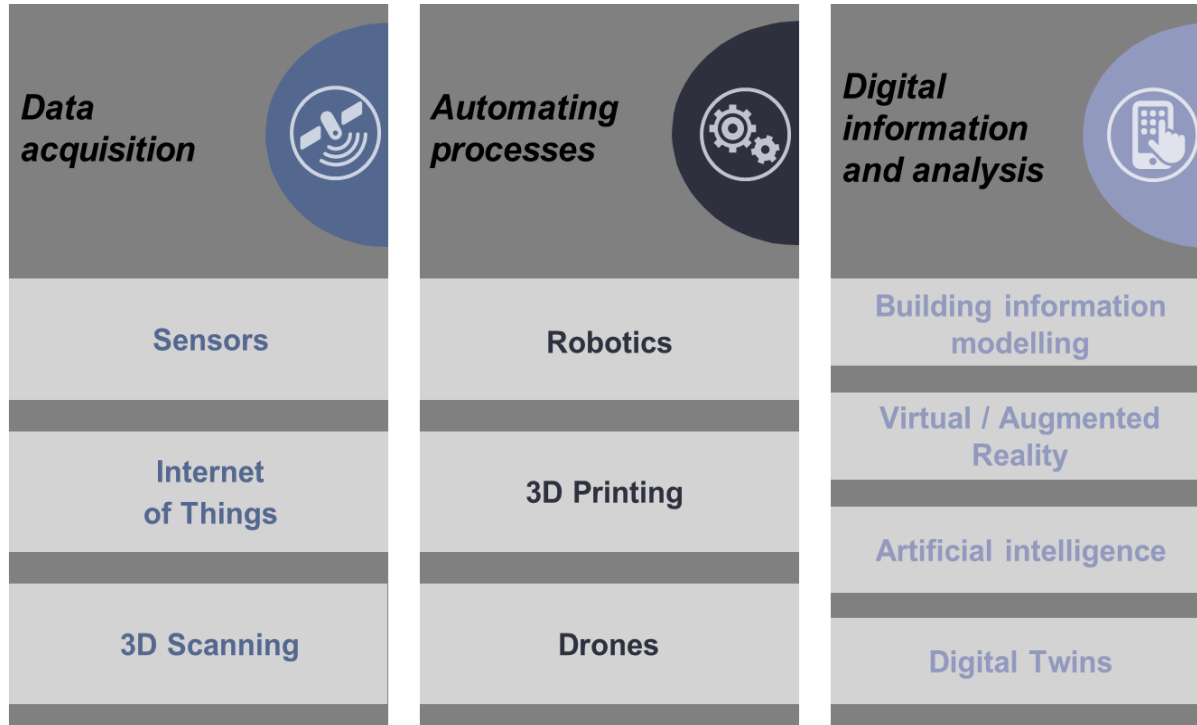


https://ec.europa.eu/growth/sectors/construction/observatory_en



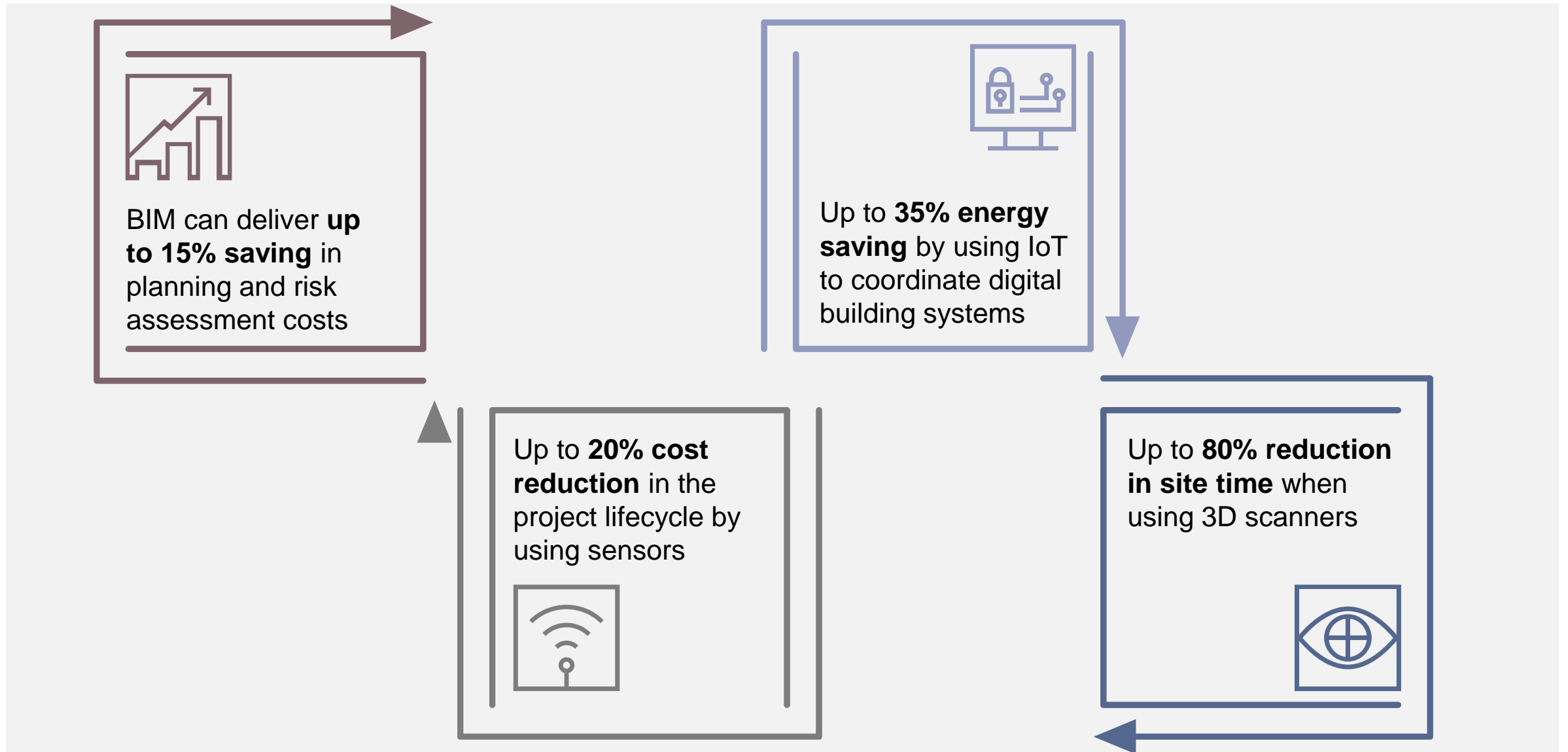
State of play of digital technologies

- **Sensors, drones and BIM** are the technology the most utilised in the construction sector
- **AI, Digital Twins, and VR/AR** are gaining increasing importance and attention

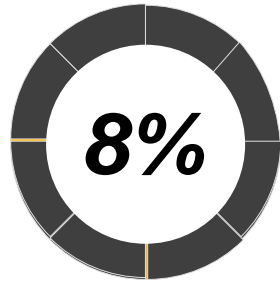


- **Robotics, 3D printing, and AI** are the least used technologies, but their potential was recognised
- All these technologies are **deeply interconnected**, and thus the maturity and adoption of one is often highly dependent on the adoption and maturity of others

Benefits of digital technologies in construction



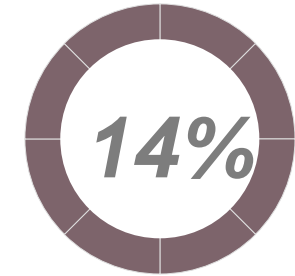
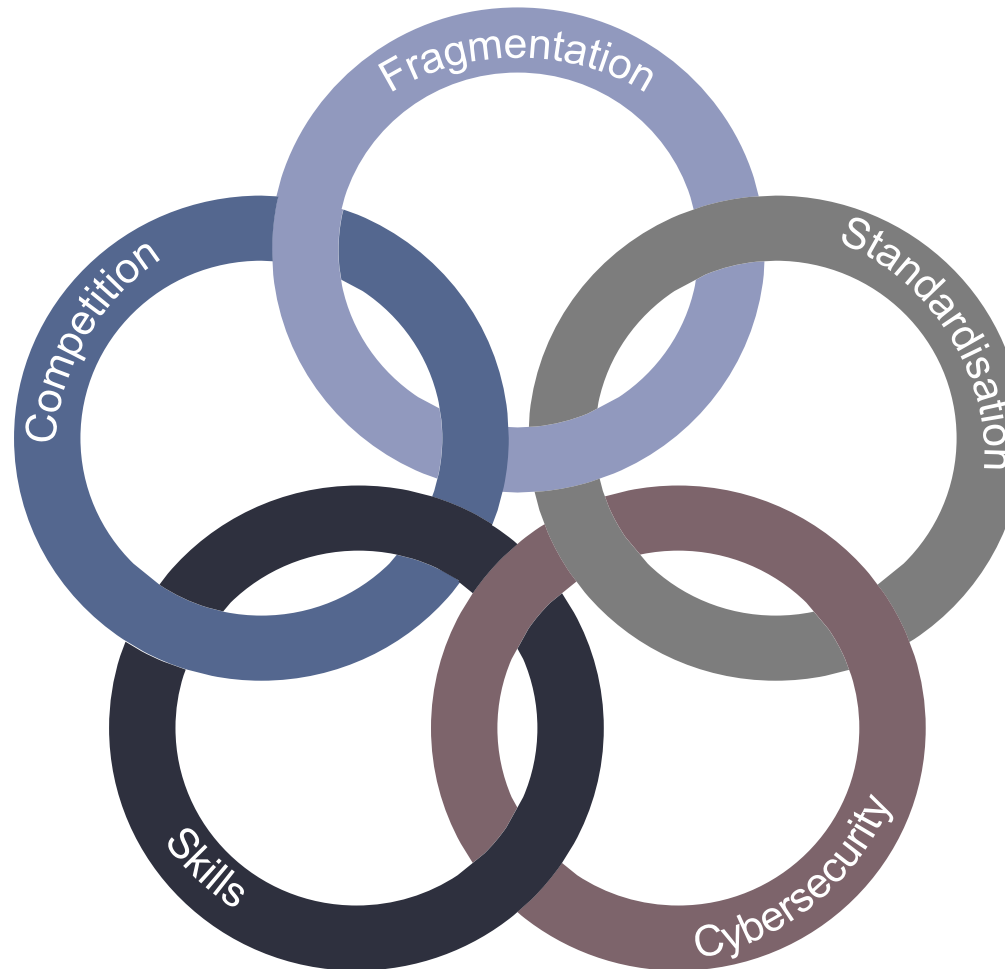
Challenges



of construction companies employ ICT specialists, **compared to 19%** on average of other European companies

43%

of construction companies have difficulties in accessing finance



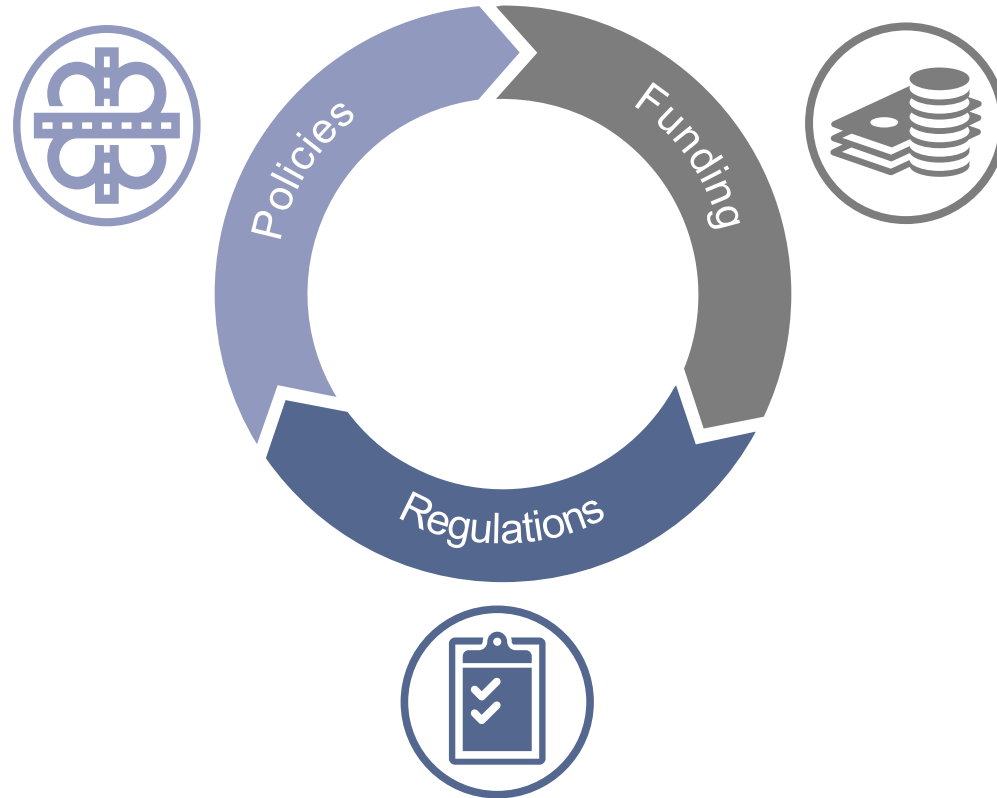
of construction companies invested in upskilling, **compared to 23%** on average of other European companies

83%

of survey respondents said that EU **standardisation** would foster digitalisation

Digital policies and initiatives in the EU

Construction 2020, **Renovation Wave**, Digital Strategy, Digital Innovation Hubs, European Skills Agenda, European Strategy for Data, BUILD UP Skills initiative.



7.5 bn

for Digital Europe

95.5 bn

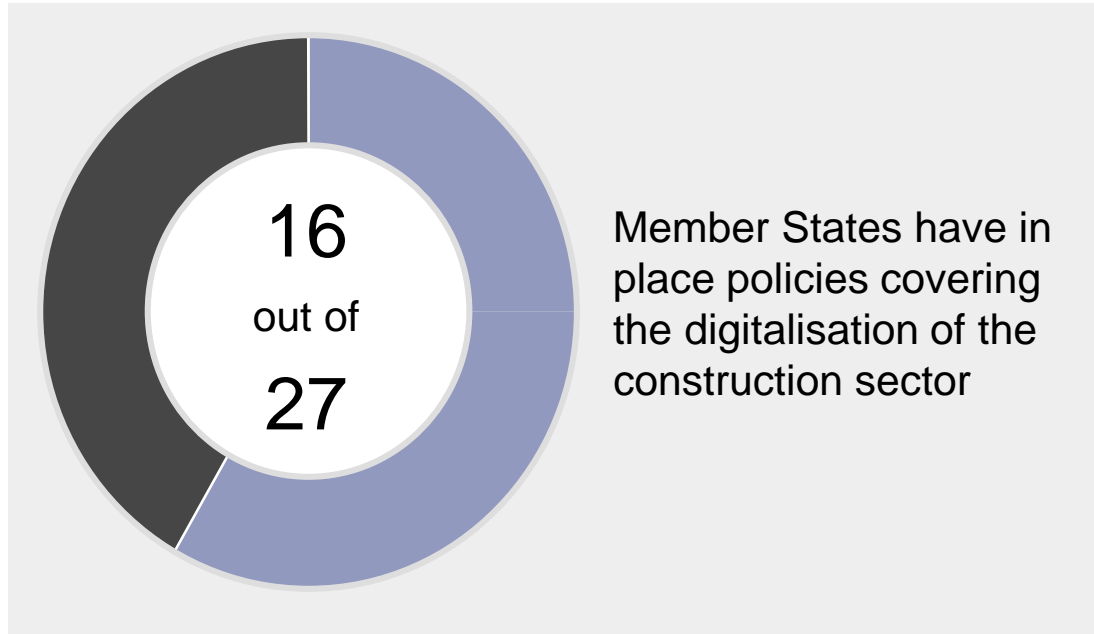
For Horizon Europe

+ other funding streams such as the Recovery and Resilience Facility or InvestEU

Directive on Public Procurement, Regulation on unmanned aircraft systems, GDPR, Technical committee for Standardisation.

Member States' digitalisation policies

There is a lot of interest among policymakers in digitalisation, including in the construction sector.



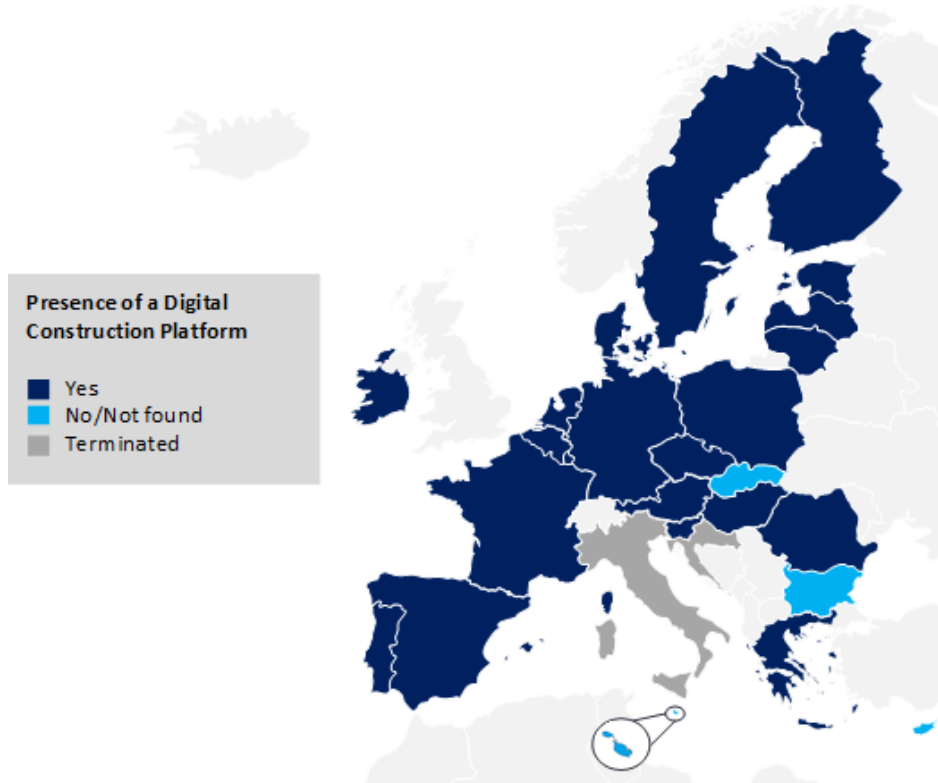
Sweden



- Focus on future buildings and renovations
- Dissemination of new opportunities and business models across the sector
- Objectives:
 - Reduce the environmental impact by 40%
 - Reduce planning and construction time by 33%
 - Reduce total construction costs by 33%

Digital Construction Platforms

Most platforms adopt a broad approach on digitalisation, and 25% of them focus on BIM



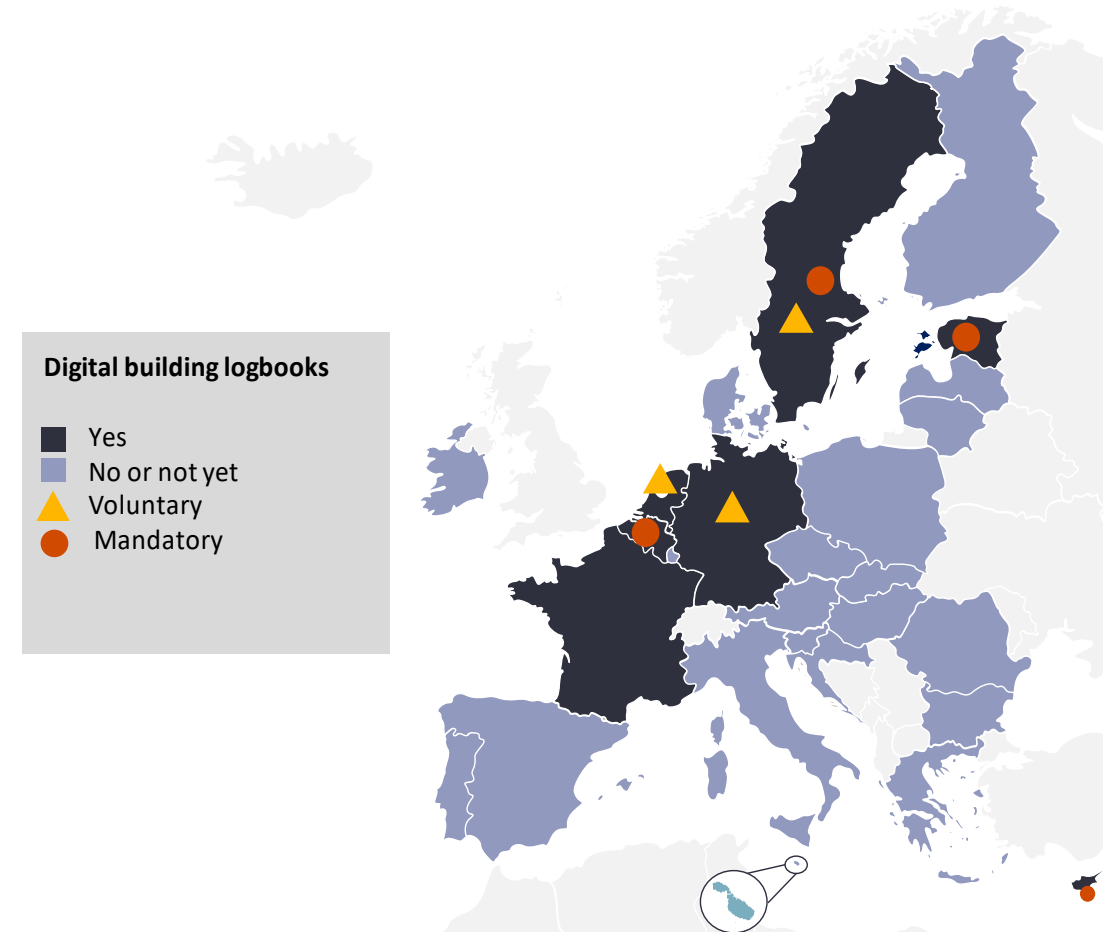
Finland



- Non-profit association gathering stakeholders from the public and private sector
- Builds on Government's project "KIRA Digi"
- The Objective is to bring together different ideas, goals and perspectives on how to make the construction sector digitalised and sustainable

Digital building logbooks

- **14 EU Member States have at least one digital logbook**, and the number is expected to increase.
- Logbooks gather information on Building Renovation Passports, Smart Readiness Indicators, Energy Performance Certificates, etc.
- **The Commission has recognised the relevance of Digital Logbooks** (Renovation Wave, Circular Economy Action Plan, EU framework)



Lessons learnt



Digitalisation is an integral part of the future of the construction sector. A more digitalised sector means a more efficient and more competitive sector.

Digitalisation and Sustainability are two twin challenges that can strengthen each other for the European economy, construction sector included.



The COVID-19 pandemic even further highlighted the need for more digitalisation. It is not anymore a question of “if”, but rather a question of “when” and “how”.

Thank you

www.pwc.lu



grow-construction@ec.europa.eu



Giovanni Signorini
@: giovanni.signorini@pwc.com

© 2021 PricewaterhouseCoopers, Société coopérative. All rights reserved.

In this document, “PwC” or “PwC Luxembourg” refers to PricewaterhouseCoopers, Société coopérative which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity. PwC IL cannot be held liable in any way for the acts or omissions of its member firms.