Smart Built Environment
Impact Logic 2.0
Activities 2019–2021

INNOVATIONS, NEW AREAS OF APPLICATION

Initiate strategic investments 2019
Calls 2019–2021

Short-term effects 2021

- Improved information flow
- Increased integration of BIM-GIS used in software
- Improved continuous information flow
- Data openly accessible for construction, use and maintenance
- Object-based information has contractual status
- New industry practices and legislation that support digital data sharing
- Solutions for liability, ownership & use rights of digital information

- Streamlining
  - Increased productivity in the sector
  - Reduced resource consumption and process waste

- Lifecycle perspectives
  - Digital data, analysis and optimisation, and industrialisation result in less greenhouse gas emissions and lower energy use
  - CO2 and energy declared in EPDs
  - Reduced environmental and building product declarations available and used in digital format

- Knowledge-building and renewal
  - 5 innovations based on open data
  - Research results are used for validation and risk assessments different thematic areas
  - Research-based knowledge in the programme areas
  - Multiple R&D environments established with increased integration between society and the economy

- Digital transformation
  - Integration of digitalisation and industrialisation tested by business sector and authorities in construction projects
  - Business models based on digitalisation & industrialisation in a life-cycle perspective
  - Changed work approaches, processes & organisation
  - Learning organisations
  - New organisational forms for construction projects, stakeholders and skills
  - Known economic, technical and skills risks in changing structures
  - Methods for assessing risks

- Cross-thematic
  - 4 calls completed, address all thematic areas
  - X projects granted and implemented
  - X published scientific articles

- Value chains, business models

Initiate strategic investments 2020
Calls 2019–2021

Short-term effects 2024

- Increased open-access data for construction, use and maintenance
- Industry practices and legislation support digital data sharing
- Clarity around liability, ownership and use rights for digital information
- Improved ability to use AI

- Streamlining
  - Increased productivity in the sector
  - More efficient use of energy and materials
  - Shorter processing times at the authorities

- Cross-thematic
  - 4 calls completed, address all thematic areas

- Information infrastructure

Initiate strategic investments 2019
Calls 2019–2021

Short-term effects 2021

- Improved information flow
- Improved continuous information flow
- Data openly accessible for construction, use and maintenance

- Streamlining
  - Increased productivity in the sector
  - More efficient government processes

- Lifecycle perspectives
  - Digital data, analysis and optimisation, and industrialisation result in less greenhouse gas emissions and lower energy use

- Knowledge-building and renewal
  - 5 innovations based on open data
  - Research results are used for validation and risk assessments different thematic areas

- Digital transformation
  - Integration of digitalisation and industrialisation tested by business sector and authorities in construction projects
  - Business models based on digitalisation & industrialisation in a life-cycle perspective
  - Changed work approaches, processes & organisation
  - Learning organisations

- Cross-thematic
  - 4 calls completed, address all thematic areas

- Knowledge and skills

Initiate strategic investments 2020
Calls 2019–2021

Short-term effects 2021

- Increased innovation capacity in the sector
- R&D environments established for increased interaction among the sector’s actors, higher education institutions and research institutes

- Knowledge-building and renewal
  - New services or products available on the market

- Digital transformation
  - Construction projects carried out in industrial processes supported by digitalisation
  - Business models at the actors are based on life-cycle benefits

- Cross-thematic
  - 4 calls completed, address all thematic areas

- Cross-thematic

Initiate strategic investments 2019
Calls 2019–2021

Short-term effects 2024

- 33% shorter time
- 33% reduction in costs
- 40% reduction in climate impact

Renewed business logic