

# Smart Built Environment Impact Logic 2.0

2020-06-25

## Activities 2019–2021

### INNOVATIONS, NEW AREAS OF APPLICATION

Initiate strategic investments 2019

Calls 2019–2021

### VALUE CHAINS, BUSINESS MODELS

Initiate strategic investments 2020

Calls 2019–2021

### INFORMATION INFRASTRUCTURE

Initiate strategic investments 2019

Calls 2019–2021

### KNOWLEDGE AND SKILLS

Initiate strategic investments 2020

Calls 2019–2021

## Results 2021

### CROSS-THEMATIC

4 calls completed, address all thematic areas

X projects granted and implemented

X published scientific articles

### INNOVATIONS, NEW AREAS OF APPLICATION

Strategy for strategic initiatives developed and initiatives initiated

“Building innovation 2”, method developed and 3-4 calls completed

Projects with disruptive elements

### VALUE CHAINS, BUSINESS MODELS

Strategy for strategic initiatives developed and initiatives initiated

Projects that address operators across the value chain – a holistic perspective

Projects that develop new competencies or new forms of collaboration

### INFORMATION INFRASTRUCTURE

Strategy for strategic initiatives developed and initiatives initiated

Completed roadmap for Swedish standardisation initiatives

Projects that address testing of standards in a real-world environment

### KNOWLEDGE AND SKILLS

Strategy for strategic initiatives developed and initiatives initiated

Three measurements in the measurement project completed

Projects with compilations and syntheses

Established forum/arena for knowledge-building

Blue text: organisation-related results  
Black text: theme-related results

## 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

More efficient government processes

### Lifecycle perspectives

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

CO2 and energy declared in EDPs

Robust 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

Research-based knowledge in the programme areas

Multiple R&D environments established with increased integration between society and the economy

5 new services/products

New entrants in academia and the business community

Increased innovation capacity in the sector

### 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 roles

Known economic, technical and skills risks of changing structures

Methods for assessing risks

## Short-term effects 2024

### Improved information flow

Unified structures for BIM and GIS

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

More efficient decision-making processes at the authorities

### A climate change perspective

Reduction of climate impact throughout the life cycle

Climate impact (CO2) is declared in digital environmental product declarations (EPDs) to enable analysis and decision support at different stages of the construction process

### Knowledge-building and renewal

New services or products available on the market

R&D environments established for increased interaction among the sector's actors, higher education institutions and research institutes

Increased innovation capacity in the sector

### Digital transformation

Construction projects carried out in industrial processes supported by digitalisation

Business models at the actors are based on life-cycle benefits

Changed organisation of work, processes and skills

Learning organisations

## Long-term effects 2030

33% shorter time

33% reduction in costs

40% reduction in climate impact

Renewed business logic