

# The flow of urban life



**The flow of urban life** (2020-2024) is a joint 50 M€ Veturi R&D program launched by KONE and co-funded by Business Finland. It focuses on sustainable people flow and new technologies for smoother and safer urban living. The new program will draw on expertise from a variety of companies and organizations, to address some of the key ecological, social and economic challenges and opportunities created by urbanization.



# The flow of urban life



The **research and development in The flow of urban life** program aims at producing new ground-breaking technologies and smart business concepts. It is divided into five themes:

KONE Partner Ecosystem

Sustainable  
innovations

Smart  
construction

Smart buildings  
and cities

Future  
living

Smart  
maintenance

*How can cities accommodate the next billion city dwellers over the next decade in a smooth and sustainable way?*

**The flow of urban life** program invites different stakeholders to join in building a world-leading innovation ecosystem to eventually commercialize new services and solutions and build sustainable businesses.

# Research, development and innovation focus points



## KONE Partner Ecosystem

- Innovate with KONE – co-innovation with ecosystem partners developing future solutions based on customer challenges
- Developing ecosystem further with ecosystem partners
- Gaining value through research

### Sustainable innovations

New innovative concepts to support sustainability, including but not limited to energy efficiency, materials, health and wellbeing, and inclusive and responsive buildings. New concepts and designs that foster sustainable behaviors.

### Smart construction

Solutions for higher productivity, quality, and safety in the construction processes together with lower environmental impact and increased sustainability, fitness-for-use and resilience in the resulting built environment.

### Smart buildings and cities

Smart building and cities solutions may be target for many use cases for offices, multiuse buildings, public spaces or even smart infra hubs such as metro stations. New innovative concepts utilizing people flow data, connectivity and AI.

### Future living

Solutions for future living to provide a seamless user experience in the residential buildings. New solutions to access and visitor management, but also to wider context of smart homes and future living.

### Smart maintenance

Solutions to support lifecycle-based approach - rethinking the way we maintain and operate buildings. Solutions may be linked among others to use IoT and AI to support preventive maintenance and to reduce the need of maintenance visits.

Future business models to enable sustainable success with customers

## Sustainability embedded into everything we do:

- Built for and with the people
- The way we live in the built environment becomes more sustainable
- Upskilling in competences of the existing workforce and attract new talents

Social impact



- Sustainable transition and modelling, simulating and measuring environmental & climate impact
- Tools and processes for designing sustainable services and solutions, circular-by-design
- Environmental & sustainability awareness increased throughout the value chains

Ecological impact



- Partner ecosystem development and management
- Integrated scalable services and business models, within a more integrated value networks and platform ecosystems
- Piloting and test-beds for new applications

Economical impact



# Specific topics for academia-led projects

The research in **The flow of urban life** program aims at producing ground-breaking multidisciplinary knowledge. It is divided into the following research themes:

## Towards sustainable success

Creating research-based **processes to guarantee sustainable success**

- Discovering and defining radical innovation opportunities/areas for sustainable urban transformation
- Developing new R&D&I frameworks, methods, tools and approaches
- Evaluating, modelling and simulating the developed frameworks, methods, tools and approaches

## Smart and sustainable lifecycle solutions

Producing **insights to create sustainable, viable and feasible lifecycle solutions for urban environments**

- Integrating, simulating and optimizing smooth people, material and data flows in all building lifecycle phases
- Modelling and assessing solution lifecycle impacts
- Prioritizing solutions and supporting strategic decision-making

## Sustainable, resilient and inclusive cities and communities

Creating and sharing actionable research based **state-of-the-art and foresight understanding of sustainable urban transformation**

- Identifying the present and future local and global trends shaping urban development
- Co-creating approaches for transforming cities into sustainable, inclusive and resilient urban communities
- Forecasting and producing local and global visions of urbanization

## Cross-cutting, emerging and enabling themes

### Technologies

Including e.g. data, connectivity, IoT and AI

### Business models

Including e.g. platforms, ecosystems and digital servitization

### Co-creation for and with people

Including e.g. stakeholder engagement, behaviour change, accessibility and wellbeing

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