Smart Cities Vertical

Tagline

Sustainable urbanization is key to successful development. We focus on solutions that advance the smart technology of businesses and cities.

Vertical Description

Our goal is to maintain high quality of living and competitive advantage compared to international locations, while at the same time advancing smart technology solutions that increase the sustainability and resilience of local and global businesses and cities. Through their technologies and products, our startups solve specific Innovation Challenges defined by corporations and cities in different collaboration opportunities in Switzerland and beyond.

Partners

Coop
La Mobilière
AXA
Stadt Zurich
Axpo
BFE/SFOE
CSEM
Empa NEST
Credit Suisse
Climate Lab
Wien Energie
Atos

Technologies

BIM
Internet of Things (IoT)
Cloud Computing
Artificial Intelligence (AI)
Cognitive Intelligence
Conversational Interfaces
(Voice, Chatbots, etc)
Machine Learning (ML)
Augmented Reality (AR) / Virtual Reality (VR)
Big Data and Data Analytics
Sensors
Automated Decision Making
3D-Printing
Digital Twins
Other

Collaboration Areas

Building and Living

New and Sustainable Building Materials

Energy

Mobility

City Services

Net Zero

Collaboration Opportunities

Potential Sustainability Collaboration Opportunities **in bold** (including Circular Economy)

Building and Living

- **Which solutions implement BIM throughout the building lifecycle (e.g. planning, construction, operation, demolition)?**
- How can secure home solutions improve “safe living” (solutions with impact on insurance premiums)?

Energy

- **Which solutions can bring roof owners and investors together to build solar PV systems?**
- How can drones and robots measure radiation doses in nuclear power stations?
- How can imaging technologies capture and characterise radioactive waste items?
- **How can CO2 and energy saving potentials in retail processes and production companies be analysed and implemented?**

Mobility

- Which solutions offer parking space solutions (e.g. search, reservation, payment, parking lot data recording)?
- Which digital services, IT-solutions and platforms (incl. IoT, MaaS), or AI algorithms improve mobility, parking and logistics challenges in cities?
- What is the impact of autonomous vehicles on insurances?
- **How can a behavioural change towards CO2 neutral cars be reached?**
- What are new and innovative business models for EV charging?
- What is the best way to deploy and scale EV charging stations?
- What are best practices for installing smart charging solutions (incl. hardware, software, and end customer interface) in multi-tenant properties?
- How to predict mobility flows in public transport better?
- How to manage passenger crowds for speeding-up passenger exchange at stops?
- How to 3D print on broken parts of public transport vehicles to reduce material usage and repair times in maintenance?
- How can the quality of used EV batteries be certified?

City Services

- Which solutions digitalise city services for citizens (e.g. blended counselling, conversational interfaces) and/or employees?
- What are solutions for keyless access using biometric information instead of passwords?
- How to measure and reduce littering, optionally through public participation?
- How to use voice instructions for executing payments at home or in vehicles?
- How to make IoT most useful in city LoRaWAN infrastructure (esp. buildings, public places and living areas)?

Net Zero

- **How to communicate, summarize and report circular offers (e.g. reuse, reselling and upcycling of objects and goods) to citizens (citizen engagement) and employees (comparability, demand-based service procurement, etc.)?**
- **Which solutions support net zero CO2 emission goals of cities (e.g. city planning, management)?**
- **How to measure company overall CO2 footprints (Scope 1-3 on buildings, mobility, energy, products, processes, etc.)?**
- **How to measure and reduce resource consumption in insurance companies (e.g. paper, energy, etc.)?**
- **How to protect and learn from animals for more circular retail materials and products?**
- What are Green IT services and solutions to better assess, measure, and achieve CO2 reductions (esp. data centres, workplaces, IT-infrastructure)?

Digital Twins

- How can digital twins make retail stores more autonomous?
- How can digital twins be applied to urban planning, building construction and waste management?

kick» start

Overview of Collaboration Opportunities 2022 - Smart Cities

A. Building & Living	B. Energy	C. Mobility	D. City Services	E. Net Zero	F. Digital Twins
A1 - Which solutions **implement BIM throughout the building lifecycle** (e.g. planning, construction, operation, demolition)? A2 - How can **secure home solutions improve "safe living"** (solutions with impact on insurance premiums)?	B1 - Which solutions can **bring roof owners and investors together** to build solar PV systems? B2 - How can **drones and robots measure radiation doses** in nuclear power stations? B3 - How can imaging technologies **capture and characterise radioactive waste items**? B4 - How can **CO_2 and energy saving potentials in retail processes and production companies** be analysed and implemented?	C1 - Which solutions offer **parking space solutions** (e.g. search, reservation, payment, parking lot data recording)? C2 - Which digital services, IT-solutions and platforms (incl. IoT, MaaS), or AI algorithms **improve mobility, parking and logistics challenges in cities**? C3 - What is the **impact of autonomous vehicles on insurances**? C4 - How can a **behavioural change towards CO_2 neutral cars** be reached? C5 - What are new and innovative **business models for EV charging**? C6 - What is the best way to **deploy and scale EV charging stations**? C7 - What are **best practices for installing smart charging solutions** (incl. hardware, software, and end customer interface) in multi-tenant properties? C8 - How to **predict mobility flows** in public transport better? C9 - How to **manage passenger crowds** for speeding-up passenger exchange at stops? C10 - How to **3D print on broken parts of public transport vehicles** to reduce material usage and repair times in maintenance? C11 - How can **the quality of used EV batteries be certified**?	D1 - Which solutions **digitalise city services** for citizens (e.g. blended counselling, conversational interfaces) and/or employees? D2 - What are solutions for **keyless access using biometric information** instead of passwords? D3 - How to **measure and reduce littering**, optionally through public participation? D4 - How to use **voice instructions for executing payments** at home or in vehicles? D5 - How to **make IoT most useful in city LoRaWAN infrastructure** (esp. buildings, public places and living areas)?	E1 - How to **communicate, summarise and report circular offers** (e.g. reuse, reselling and upcycling of objects and goods) to citizens (citizen engagement) and employees (comparability, demand-based service procurement, etc.)? E2 - Which solutions **support net zero CO_2 emission** goals of cities (e.g. city planning, management)? E3 - How to **measure company overall CO_2 footprints** (Scope 1-3 on buildings, mobility, energy, products, processes, etc.)? E4 - How to **measure and reduce resource consumption in insurance companies** (e.g. paper, energy, etc.)? E5 - How to **protect and learn from animals for more circular retail materials and products**? E6 - What are **Green IT services and solutions to better assess, measure, and achieve CO_2 reductions** (esp. data centres, workplaces, IT-infrastructure)?	F1 - How can **digital twins make retail stores more autonomous**? F2 - How can **digital twins be applied to urban planning, building construction and waste management**?