

# The Future City

## The Core of the Green and Digital Transitions in Europe

15-16 June 2021 - Online

Urbanisation is an ongoing trend in the EU, with latest figures showing that 75% of Europe's population lives in cities. As the places where people live, work, learn, create, consume and socialise, **cities are major drivers of socio-economic growth**. Urban sprawl and increasingly growing populations have however created some major challenges within cities, impacting the environment, the delivery of public services, land management, infrastructure, resource consumption and has exacerbated inequalities. All of these challenges have been particularly put to the forefront during the Covid-19 crisis, with various levels of lockdowns and restrictions leading citizens to rethink the way they interact with their surroundings.

As the closest level of governments to people and as centres of economic growth, cities have the potential to play a major role in dealing with many of the critical issues faced in Europe today, by becoming key drivers of the "twin green and digital transitions". This conference will explore the innovative tools as well as the policy and financial support available to cities to respond to existing and pressing challenges and ask what more is needed. It will discuss the impact that digital technologies, combined with a strong focus on sustainability and a human-centric approach, can have to facilitate the transformation of cities into agile, efficient, green and resilient places, to improve the quality of life of their inhabitants and promote social cohesion. Featuring examples of cities that have unlocked significant economic, environmental and social benefits thanks to successful transformation strategies with green and digital aspects at their core, it will analyse the lessons learnt and highlight the importance of cooperation amongst governments at different territorial levels, and of collaboration between industry, universities, local businesses and citizens. Finally, it will ask how new ways of thinking about the design and planning of cities can be further promoted to sustain urban growth and to embed urban resilience and adaptation in the recovery planning in line with the goals of the EU Urban Agenda, with the plans outlined in the European Industrial Strategy, Data Strategy and the Green Deal, and in accordance with the Paris Agreement and the UN Sustainable Development Goals.

#### Themes covered over the two days will include:

- The role of tech and data for a human-centric and green digital transformation of the city;
- The computing power and connectivity infrastructure needed to achieve sustainable and resilient smart cities:
- The role of energy systems integration to lower emissions in the circular city;
- Smart and sustainable mobility, multimodality and the future of city planning;
- The role of the Renovation Wave Strategy for a circular and smart urban transformation;
- Achieving sustainable and resilient food systems in cities and strengthening their connection with peripheral rural communities;
- The future of urban development policies post Covid-19.

Throughout the duration of the event a "City Innovation Hub" will provide a virtual area for industry leaders, SMEs, start-ups, researchers and other stakeholders to showcase a product, project or idea that has the potential of positively impacting the green and digital transitions of cities in Europe and worldwide.

# Day 1

08:30 – 08:55 Virtual Platform and Networking area opening

08:55 – 09:15 Welcome by Forum Europe

09:15 – 10:00 Keynote Session and Q&A

Frans Timmermans, Executive Vice-President for the European Green Deal, European Commission (tbc)

Thierry Breton, Commissioner for the Internal Market, European Commission (tbc)

Svenja Schulze, Federal Minister for the Environment, Germany (tbc)

# 10:00 – 11:15 Reinventing life in European cities through Open Data and a human-centric approach

Data generated by and captured from connected local infrastructures, public services and citizens is often described as the lifeblood of a smart city - indeed, the collection and analysis of data on traffic, energy consumption, footfall, waste management and other aspects of city life can provide valuable insights into existing trends, and lead to solutions to many urban challenges such as housing issues, traffic and mobility, air and noise pollution, rising energy usage and inefficient use of urban space. A truly functioning Smart City can only be achieved if based on a dataset that is vast, heterogenous and accurate, and is a prime example of how the promotion of Open Data, data sharing and interoperability efforts can concretely strengthen evidence-based policymaking. In addition, it is recognised that Smart City initiatives can only be successful with the active participation of its citizens and that the green and digital transformation of urban environments must also follow a 'human-centric' approach that does not just consider residents as 'end-users' but that engage and empowers them, putting their intrinsic needs are at the centre of every objectives. This session will ask how challenges relating to data availability, data sharing and access, transparency and privacy, data repurposing and limitation can be addressed in the context of the Smart City in ways that truly serve and empower citizens, manage urban growth sustainably and in an environmentally friendly way, improve the delivery of public services, as well as enhance social inclusion and cohesion.

#### It will also:

- Analyse the unique challenges around Smart City Data and explore solutions to these challenges.
- Discuss the impact that the goals and provisions of the European Data Strategy and Data Governance Act can have, if and when applied at local level, and examine how local authorities can work together with national and European policymakers, industry representatives and research entities to unleash the power of data in cities.
- Highlight example of cities that have create successful models of data sharing and citizen engagement through which residents can share their data for public benefit and the extent to which data-driven innovation has helped strengthen evidence-based policymaking.
- Emphasise the importance of interoperability, cross-sectorial standardisation efforts and future-proofing of various data systems and models, and showcase good practices of the use of Urban Digital Twins.
- Ask how successful the provisions of the European 'Open Data Directive' that entered into force in July 2019 has been, and what shortcomings, if any, have been identified in the context of the digitisation of public services delivery.
- Debate what more can be done to promote citizens' awareness, trust and participation in data
  collection processes especially from the groups that are the most difficult to reach and engage withto create a city that is inclusive, supports social cohesion, promotes democratic participation in local
  initiatives, improves the delivery of public services as well as allow for new 'green' data-enabled
  businesses and social innovation models to emerge.

#### Speakers:

**Eddy Hartog**, Head of Unit, Technologies for Smart Communities, DG CONNECT, European Commission **(confirmed)** 

Theo Blackwell, Chief Digital Officer for the Mayor of London (confirmed)

Representative, Tech Industry (tbc) Representative, Vertical Sector (tbc)

#### 11:00 – 11:15 **Keynote Speech:**

Nadia Calviño, Minister of Economic Affairs and Digital Transformation, Spain (tbc)

# 11:15 – 12:30 Connectivity, computing power, digital infrastructure and domain integration: Building the digital backbone of the smart and green city

The potential of Smart City data can only be truly leveraged with the adequate digital infrastructure and network connectivity in place, allowing large volume of information coming from various sources to move quickly and securely as well as enabling a safe real-time response. The use of advanced technologies such as AI, cloud and edge computing, HPC as well as IoT in conjunction with 5G, local-area networks and other connectivity technologies, can play a crucial role in the functioning of smart cities, supporting the creation, collection, sharing, and analysis of huge amounts of data being constantly generated by sensors and smart devices. With data coming from multiple sources however, integration between domains that would normally be isolated from each other is needed to get a clearer understanding of how our cities function, identify areas for improvement and ultimately enable more efficient and sustainable decision-making processes to transform existing urban infrastructures as well as enhance the quality and performance of public services. This session will reflect on how best European cities can harness advanced technologies and connectivity to transform themselves in more efficient, more pleasant and green-friendly places to live as well as to make strategic decisions that are better adapted to the urban space and to their citizens habits and needs.

#### It will also:

- Discuss the most suitable tech solutions to ensure a continuous and reliable connectivity and to meet the requirements of data-intensive innovations in smart cities
- Explore the cybersecurity and reliability implications linked to the smart city as well as the technological and non-technological solutions currently available to address security challenges and future vulnerability
- Review the extent to which the provisions outlined in the European Industrial Strategy and in the
  European Data Strategy allow for AI capacity to be enhanced and to boost the value created by IoT/IoE
  and 5G deployments, in the specific context of the Smart City
- Ask what is needed so that cities can successfully facilitate integration between different domains therefore maximising the potential transformative power of all data available. How can a cross-sectoral approach be ensured for the development of an open smart city ecosystem?
- Debate the reforms needed in terms of investment to promote smart city technologies deployment in cities across Europe and support cutting-edge research into HPC technologies.
- Ask what can be done to address the significant demand for energy and critical raw materials for these technologies and to reduce their digital carbon footprint
- Examine what a successful smart city ecosystem look like and what the best practices are

#### Speakers:

**Cristina Martinez,** Deputy Head of Unit, Technologies for Smart Communities, DG CONNECT, European Commission (tbc)

Miapetra Kumpula Natri, MEP, European Parliament (tbc) Mikko Rusama, Chief Digital Officer, City of Helsinki (tbc) Representative, Tech Industry (tbc)

### 12:30 – 13:15 Showcase sessions

Parallel discussions, presentations, live demos organized and hosted by conference sponsors.

#### 13:15 – 13:45 <u>Lunch break and Visit of the City Innovation Hub</u>

### 13:45 – 14:00 Keynote Speech

Matthew Baldwin, Deputy Director General, DG MOVE, European Commission (Confirmed)

# 14:00 – 15:15 <u>Sustainable and Smart Mobility – Achieving a more sustainable and efficient</u> transport ecosystem in the city

Mobility is central to the functioning of our societies, and with population density greater than ever before in urban areas, transport systems in European cities increasingly need to be transformed to lower carbon emissions, reduce road congestion, improve safety, drive efficiencies and become more adapted to citizens' needs. The use of data and digital technologies can play a key role in rethinking urban transport and in meeting the CO2 emissions reduction targets set out in the European Green Deal, by making driving behaviours more efficient, helping real-time traffic management, informing city planning and spatial use in urban areas, and supporting the development of truly integrated multimodal transport systems that include public transport, active modes of transport and new mobility services and are based on the needs and expectations of the citizen of the 21st century and of the post- Covid-19 era.

### This session will:

- Discuss the plans set out in the recently released Sustainable and Smart Mobility Strategy and explore the opportunities and challenges that may arise in the context of urban transport.
- Provide lessons learnt from cities that have successfully integrated digital technology into existing transportation hubs leading to smarter, safer transport systems as well as to GHG emissions cuts and better air quality.
- Explore how sustainable alternatives to conventional transportation within cities can be further incentivised
- Consider how vehicle manufacturers, tech and energy companies can work together with city officials to design transport solutions that are fit-for-purpose, run on clean fuels, promote multimodality and meet citizens' expectations.
- Highlight the policy and financial support needed to promote innovation in this area, as well as discuss the role of PPPs.
- Explore the role of C-V2X technology in the future city, its potential to reduce greenhouse gas emissions and to solve the 'last-mile issue' as well as the steps to be undertaken to future-proof roads and city infrastructure for the integration of connected vehicles into the wider European transport network.
- Address what is required to deliver the adequate digital infrastructure for aggregated, anonymized and privacy compliant geolocation and mobility data and ask how well plans to establish 'Transport Data Spaces' to promote data sharing and interoperability respond to these requirements
- Debate what updates will be needed to the Intelligent Transport Systems Directive, that is currently being revised and due to be adopted in the second half of 2021, to truly create efficient transport systems in cities.
- Explore the impact that the Covid-19 pandemic has had on urban mobility, the positive lessons that can be drawn from the steps implemented by cities that have transformed their urban space for shared use between different mobility modes including active mode of transport.

## Speakers:

Matthew Baldwin, Deputy Director General, DG MOVE, European Commission (Confirmed) Ctibor Košťál, Director of the municipality of Bratislava (tbc)
Representative Tech Industry (tbc)
Representative Transport Industry (tbc)
Representative NGO (tbc)

15:15 – 16:00 End of Day 1 and Networking

# Day 2

### 09:15 – 09:45 Platform opening and visit of the virtual City Innovation Hub

## 09:45 - 10:15 Keynote Speeches

Lilyana Pavlova, Vice-President, European Investment Bank (confirmed)

Pedro Nuno Santos, Minister for Infrastructure and Housing, Portugal (tbc)

Nadia Hai, Minister Delegate for the City, Ministry of Territorial Development, France (tbc)

## 10:15 -11:30 The role of the Renovation Wave Strategy for a Circular and Smart Urban Transformation

The Renovation Wave Strategy released in October 2020 is thought to have the potential to play a significant role in cities climate change initiatives and overall green planning strategies: stating that "buildings are responsible for about 40% of the EU's total energy consumption, and for 36% of its greenhouse gas emissions from energy" the strategy sets out ambitious plan to improve the energy efficiency of existing buildings through renovation and make the construction of new ones with low-carbon construction materials more sustainable. This session will discuss the benefits that technology, sustainable procurement strategies, R&D and cross-sector collaboration can bring to make the Renovation Wave Strategy a success in cities by cutting emissions, creating green jobs, revitalising districts, tackling energy poverty and, ultimately, improving citizens' quality of life.

- To what extent are the provisions of the Renovation Wave Strategy adequate to decarbonise buildings in cities and encourage the modernisation and revitalisation of certain urban areas? To which extent can EU initiatives such as the European Smart Cities Marketplace, Horizon Europe R&D projects and the upcoming revision of the Energy Performance in Buildings Directive, amongst others help achieving cities planning objectives?
- Based on lessons learnt during the current pandemic, what opportunities does renovation offer in order to rethink the urban space and manage flows of people?
- How are constructions project requirements evolving based on the impact of the pandemic, on technological trends and citizen demands?
- What needs to be done to enhance the circularity of low-carbon construction materials throughout the entire value chain (in order to develop climate-neutral buildings and infrastructures? How can R&D in this area be further promoted?
- How can data applications, cross-sectoral data-sharing and the use of advanced digital solutions, such as Digital Twins and Building Information Modelling, help with the design, planning and delivery of energy-efficient buildings and with their integration to smart energy distribution systems?
- How can it be ensured that the regulatory support, the right incentives and financing instruments are in place to achieve these goals? What can be done to enhance collaboration between the public and private sector in this area and what role can public procurement play to create a valid business case guaranteeing ROI and boosting demand for sustainable constructions products and solutions?

### Speakers:

Hans van Steen, Acting Director, Just Transition, Consumers, Energy Efficiency and Innovation

Representative, City of Seville (tbc)

Representative, Construction Industry (tbc)

Representative, Tech Industry (tbc)

11:30 – 12:45 Sustainable and resilient food systems in cities

With 70 % of the global food supply estimated to be consumed in cities, and in the context of a continued increase in urban population and the expansion of metropolitan areas, cities play a crucial role in the broader food ecosystem. In addition to explore lessons learnt regarding food production, storage, distribution and consumption patterns during the pandemic, this session will examine how strengthening food systems would allow cities to not only address issues regarding food poverty, food security, health and nutrition, but also to respond to challenges linked to the protection of biodiversity, land use, food waste and job creation. It will analyse the role that tech innovation can play in strengthening the connection between urban and peripheral rural communities, how citizens can actively participate in efforts to improve food systems and what more is needed, within the urban context, to fulfil the ambitions of the EU Farm to Fork Strategy to create more sustainable and resilient food systems.

### Opening Speeches

**Claire Bury,** Deputy Director General for Food sustainability, DG SANTE, European Commission (tbc) **Anna Scavuzzo**, Deputy Mayor of Milan (tbc)

#### Panel:

Claire Bury, Deputy Director General for Food sustainability, DG SANTE, European Commission (tbc)

Anna Scavuzzo, Deputy Mayor of Milan (tbc)

Representative, Agri-Tech Industry (tbc)

Representative, Consumer organisation (tbc)

### 12:45 -13:30 Showcase sessions

Parallel discussions, presentations, live demos organized and hosted by conference sponsors.

13:30 – 14:00 <u>Lunch break and Visit of the City Innovation Hub</u>

14:00 – 14:15 Keynote Speech:

Dan Jørgensen, Minister for Climate, Energy and Utilities, Denmark (tbc)

# 14:15 – 15:30 <u>Decarbonisation in the Circular City: Lowering emissions through renewable energy and system integration</u>

Increasing energy demands and the concentration of emissions in urban areas remains a major challenge for cities despite ongoing efforts to make energy supply more secure, clean and sustainable. If Europe is to be climate neutral by 2050 as per the plans set out in the Green Deal, meet the objective of having 100 climate-neutral cities by 2030, and reach the 55% emission reduction target by 2030, boosting the deployment of sustainable solutions for energy production and consumption within cities are urgently needed. This session will look at what such solutions can be, the investments needed, and discuss how the use of green energy can be best promoted and incentivised at local, regional, national and European levels. It will discuss the role that energy systems integration can play in both meeting rising energy demands in cities and in making it cleaner and more sustainable, as well as explore the extent to which the twin use of renewable sources with smart technologies can lead to a successful energy transition.

This session will also ask

- What concrete role European cities can play in achieving the goals set out in the EU Strategy for Energy System Integration and its three main pillars - a more circular energy system, greater direct electrification and the promotion of clean fuels - to put the EU on track to be climate neutral by 2050?
- What can be learnt from cities that have implemented renewable energy systems and successfully transitioned to a circular energy generation-consumption model?

- What more can be done at national and European level to promote further incentives for regional-based green energy investments, and how collaboration between cities and regions can be best promoted and engagement with local communities ensured?
- What role does digital technology play in enabling more intelligent and efficient energy generation, storage, load shifting and consumption? To which extent does the use of innovative solutions such as Virtual Power Plants or DHC grids help optimise the match between energy generation and demand?

Paula Pinho, Head of Unit, Renewables and Energy System Integration Policy, DG ENER, European Commission (tbc)

Lasse P. N. Olsen, Mayor of Environment and Energy, Aalborg Municipality (Denmark) (tbc)

Representative, Energy Provider (tbc) Representative, Tech Industry (tbc)

15:30 – 15:45 Keynote Speech: The 15-minute city

Anne Hidalgo, Mayor of Paris (tbc)

# 15:45 – 16:45 <u>Looking ahead: What should future urban development policies post Covid-19 in Europe look like?</u>

Based on the outcome of the discussions and the content of the City Innovation Hub that featured throughout the duration of the event, this final session will look into what is needed in both the short and longer term for cities to truly drive the European twin green and digital transitions and the role they can play in unlocking economic, environmental, and social benefits during the pandemic recovery. Attention will be drawn to the financial and collaborative tools that should be leveraged to help European, national, regional and urban authorities to drive sustainable urbanisation across different territorial levels, as well as to the roles the private sector, researchers and citizens can play in rethinking the post-Covid 19 cities to not only be greener and smarter but more adaptable to changes, resilient to climate-related or public health hazards, equitable and cohesive.

### Speeches and High-Level Fireside Chat:

**Elisa Ferreira,** European Commissioner for Cohesion and Reforms (tbc) **Apostolos Tzitzikostas,** President, European Committee of the Regions (tbc) **Anne Hidalgo,** Mayor of Paris (tbc)

16:45 – 17:15 Networking and end of conference