Fira Barcelona

SMART**CITY**
LIVE 2020
BY SMART CITY EXPO WORLD CONGRESS

REPORT 2020
November 17 - 18

SMART**CITY** LIVE 2020

CONTENT

SMARTCITY LIVE 2020

DRAFTING A NEW FUTURE FOR CITIES

The COVID-19 pandemic has upended lives around the globe, raising fundamental questions about sustainable and inclusive urban development and leaving an indelible mark on the outlook of urban areas. Yet, being at the forefront, cities have also played a central role in the global response to the ongoing crisis by reinventing essential services or reorganizing public space. And they are likely to see lasting changes from it. What will they look like after the pandemic? Why are they key to reinvestment and recovery?

These were some of the issues tackled at **Smart City Live 2020**, the two-day digital edition of **Smart City Expo World Congress (SCEWC)** organized by Fira de Barcelona.

The event, featuring top international experts, leading urban innovation companies and government officials from around the world, was completely redesigned to respond to the ongoing situation by going beyond the usual webinar format and becoming an outstanding televised event broadcast live on five continents.

Smart City Live was divided into two separate blocks: **a day-long live TV program** airing interviews and debates and a second day with **over 40 online side events** and workshops. The broadcast was structured around five key areas: Enabling Technologies, Mobility, Governance & Economy, Living & Inclusion, and Energy & Environment. The topics covered in these thematic areas included how to adapt urban mobility to safe and sustainable travel, the best technologies for addressing global urban challenges, how to redesign cities and urban living for everyone, how to ensure an inclusive economic recovery, how to create resilient infrastructures and urban environments to build back better, and the future of retail in a digital era.

Among the **more than 200 experts** analyzing these issues were **Parag Khanna**, Geopolitical strategist and founder of FutureMap; **Jeff Merrit**, Head of IoT, Robotics & Smart Cities at the World Economic Forum; **Carlo Ratti**, architect, engineer and director of the MIT Senseable City Lab; **Saskia Sassen**, Robert S. Lynd Professor of Sociology at Columbia University; **Brent Toderian**, urbanist and founder of Toderian Urban Works; and **Sameh Wabah**, Global Director for the World Bank's Urban, Disaster Risk Management, Resilience and Land Global Practice.

This impressive lineup of speakers, along with representatives from cities, regions, and countries from around the world —including Takuya Hirai, Minister for Digital Transformation, Social Security, Tax Number System and Information Technology Policy of Japan; Lori Lightfoot, Mayor of Chicago; Daniel Quintero, Mayor of Medellín; Mohamed Boudra, Mayor of Al Hoceima; Anne Hidalgo, Mayor of Paris; Michael Müller, Mayor of Berlin; Anna König Jerlmyr, Mayor of Stockholm; Teresa Ribera, Fourth Vice-President of the Spanish Government and Minister for Ecological Transition and Demographic Challenge; Núria Marín, Mayor of L'Hospitalet de Llobregat; and Ada Colau, Mayor of Barcelona— attracted an audience of **20,489 active users from 144 countries** who were simultaneously connected to the event's Tomorrow.City platform.

The **World Smart City Awards**, the annual competition organized by SCEWC, was also back this year in a groundbreaking format. The Awards recognize pioneering projects, ideas, and strategies for making cities around the world more livable, sustainable and economically viable. A total of **27 projects from the five continents** were selected as finalists in each of the seven categories: City, Covid-19 Innovation, Enabling Technologies, Urban Environment, Mobility, Governance & Economy and Living & inclusion. The decision on which was the smart city of the year was tough, as the quality of the proposals was high. In the end, **Shanghai** was awarded the top prize for its outstanding accomplishments.

All in all, Smart City Live 2020 was a major success and kept attendees thinking about formulating a new future for cities for a better tomorrow. The Smart City Expo World Congress is already working on its next edition, which will return **to Barcelona, from November 16 to 18 2021, to celebrate its important 10th anniversary through an enhanced hybrid cross-platform experience**. A milestone that is not to be missed.
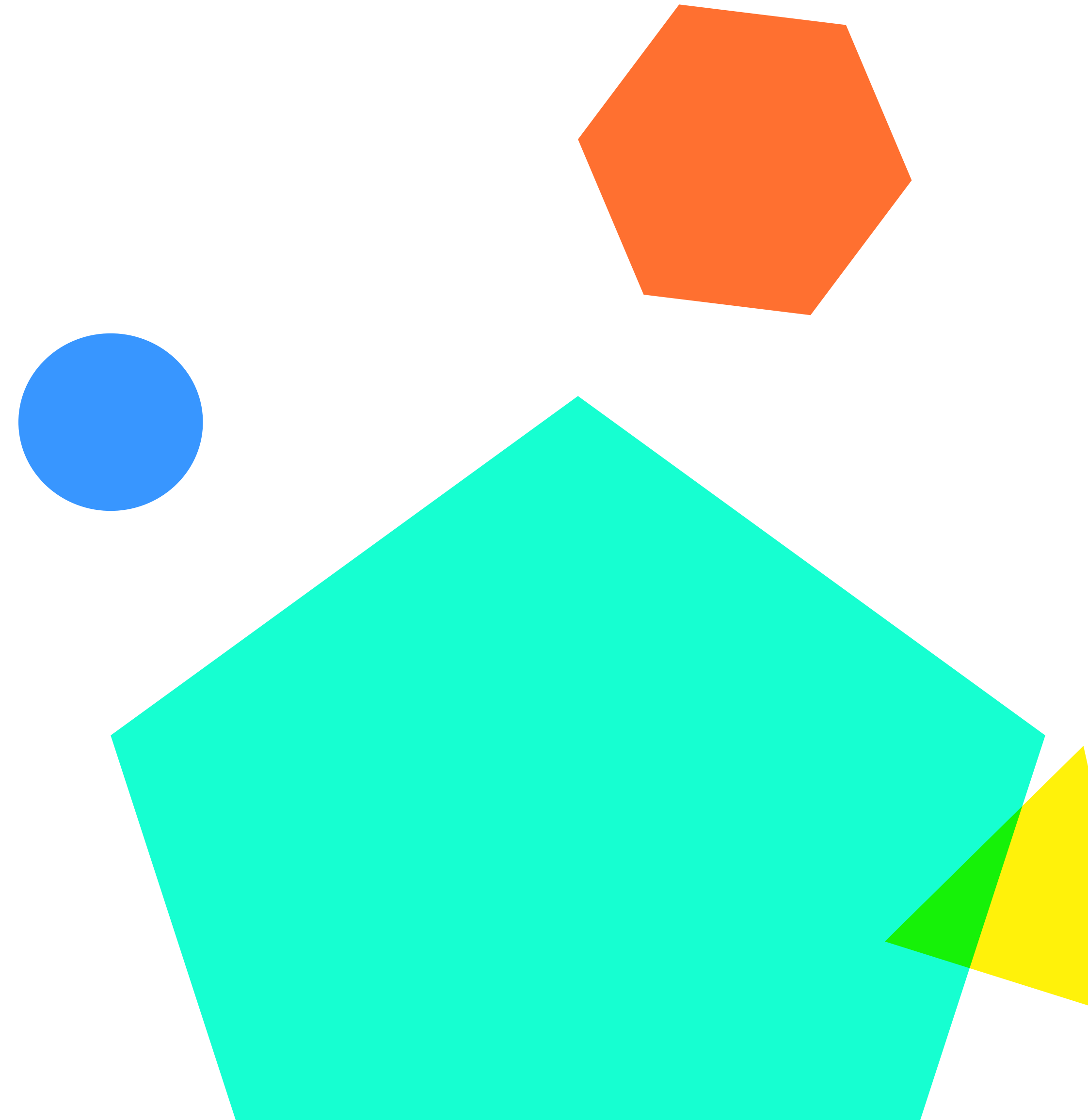
2
TOMORROW.CITY

A PERMANENT HUB FOR URBAN KNOWLEDGE

Leading innovation regarding event's formats and their translation to the digital world, this year Smart City Expo World Congress launched Tomorrow. City, a new platform that aims to become **a permanent hub for urban knowledge. It is** designed to offer companies and public administrations resources that combine research, technology and business insights throughout the year to accelerate sustainable and inclusive cities for all.

The services available on www.tomorrow.city include **Tomorrow.Radar**, a digital portfolio of the newest technologies, prototypes, and available market-ready solutions; **Tomorrow.Talent**, a flexible learning experience designed to guide professionals through first-class training on the key themes of innovation and smart cities; **Tomorrow.Podcast**, which features interviews and stories about critical city issues; **Tomorrow.Mag**, a magazine that seeks to raise awareness about the key challenges, solutions and strategies developed across the globe; and **Tomorrow.Observatory**, a daily roundup of the top international urban innovation sources, with a selection of the key insights and studies published worldwide.

Tomorrow.City was the platform through which Smart City Live 2020 was broadcast and will be the place to find and re-watch the content created during the two-day event. Moreover, the services it features make it even bigger and definitely unique within the smart city market, which is expected to grow from $410.8 billion in 2020 to $820.7 billion in 2025.

TOMORROW.
CITY

THE NETFLIX OF SMART CITIES

Being able to rise to the occasion, being up to the task and willing to meet the difficult challenge of ensuring a smooth transition between the physical and the digital was not easy, but Smart City Expo World Congress and Fira de Barcelona found the best format to get their message across.
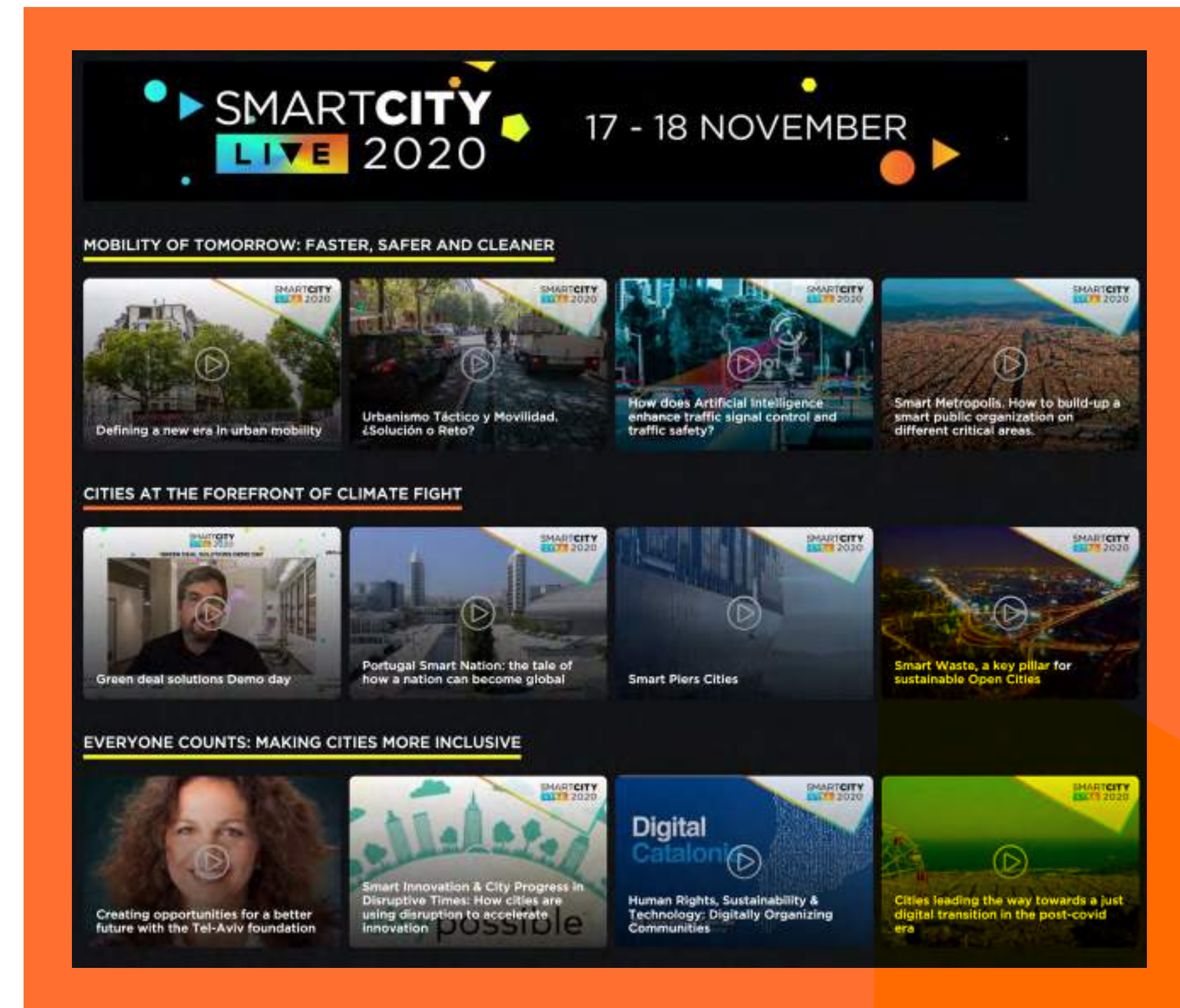
a) TV Program

On the first of the two days, the leading summit on smart cities and urban innovation brought top speakers and city representatives from all over the world to tackle the most pressing issues for the global urban ecosystem in the context of the COVID-19 pandemic and beyond. A 10-hour program combining TV studio interviews, debates, down-the-line interviews and remote interviews gave users an overview of how different cities in the world are addressing lockdowns, changes in mobility, and resilience issues, to name just a few. The program was hosted by three experienced TV presenters who delivered a steady and dynamic flow of content and enlivened the event.

b) Side Events and Workshops

Over 40 side events and an outstanding workshop were programed over the course of the event to reflect on the issues emerging from the COVID-19 scenario. These included an overview of the latest smart city technologies in Korea and Spain, how women in leadership positions in Mediterranean cities and regions are addressing COVID-19, how cities are focusing on a smart recovery, new visions for sustainable development, and what a just digital transition consists of.

Under this approach, Smart City Live and Tomorrow.City were turned into **the Netflix of Smart Cities** thanks to an easy-to-use platform that enabled users to not only to watch the live-streamed content programed for the two-day event but also to re-watch sessions and discover additional items related to the smart city industry. It will be updated on a regular basis as new trends emerge in the sector. As a result, SCEWC holds a leading position for setting trends in smart city content worldwide.

4
KEY FIGURES

SMARTCITY
LIVE 2020

THE SUCCESS OF AN INNOVATIVE FORMAT

41
TV Programs

44 hours
of Live Content

242
Speakers

1
Workshop

44
Side Events

86
Total Sessions

SMART**CITY** LIVE 2020

20,489
Active Users

144
Countries with Active Users

114,215
Total Number of Views*
*Plays that a unique user made and lasted a minimum of 30 seconds.
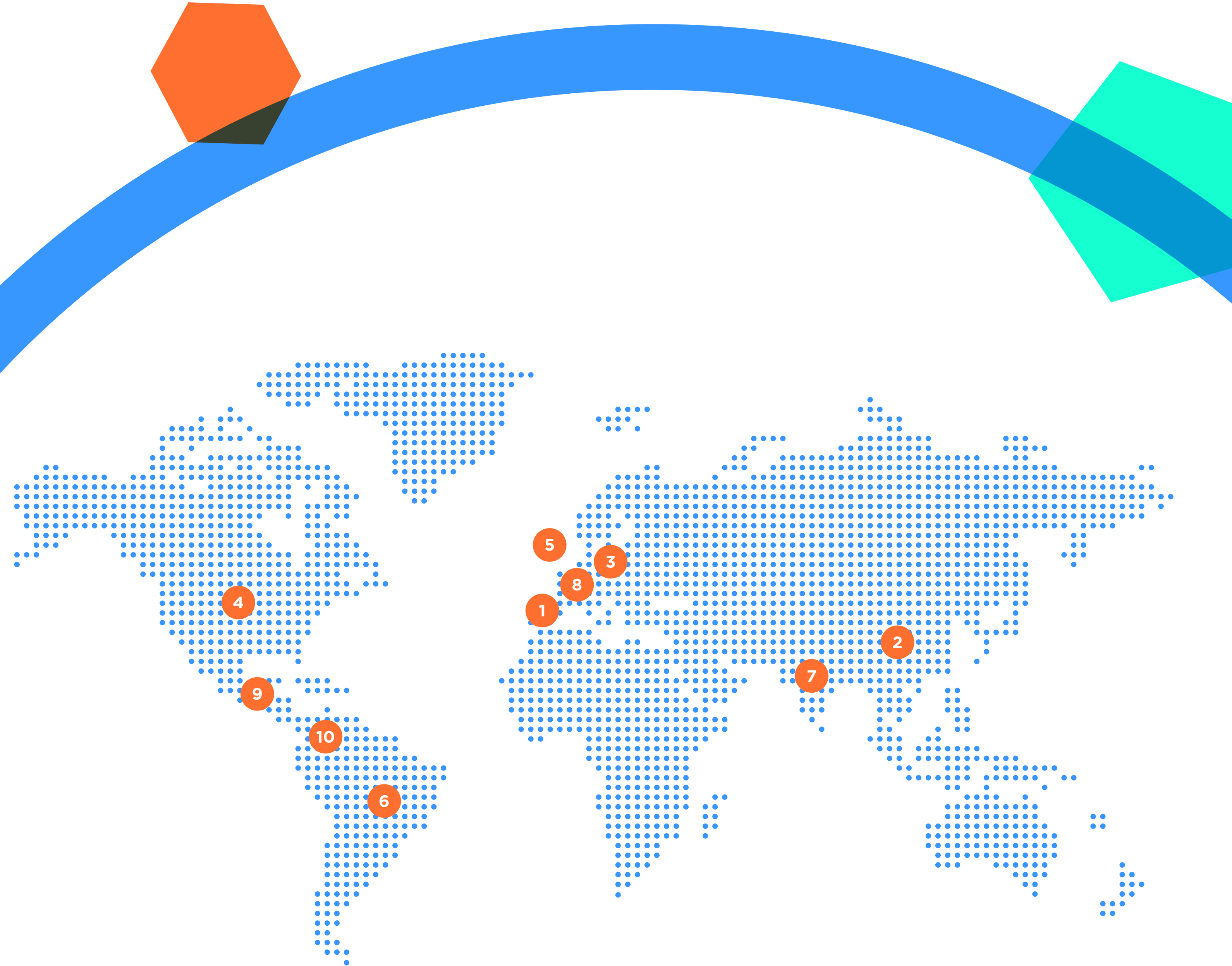
17 NOV
68,529

18 NOV
45,686

5,704 heavy users
Consumed more than 30 minutes live and on demand.

3.6 hours
Medium duration including live broadcasts.

SMARTCITY LIVE 2020

TOP 10 USER COUNTRIES

1. SPAIN
2. CHINA
3. GERMANY
4. UNITED STATES
5. UNITED KINGDOM
6. BRAZIL
7. INDIA
8. FRANCE
9. MEXICO
10. COLOMBIA

SMART**CITY** LIVE 2020

UNIQUE ACTIVE REGISTERED USER PROFILES

COUNTRY	USERS
Spain	21.23%
China	17.29%
Germany	4.11%
United States	3.96%
United Kingdom	3.32%
Brazil	3.01%
India	2.84%
France	2.75%
Mexico	2.67%
Colombia	2.27%
Others	33.64%

JOB TITLE	USERS
High Level Management & Top Public Representative	27%
Technical Profile	22%
Consultant	19%
Specialist	16%
Senior Manager	11%
Others	5%

COMPANY TYPE	USERS
Local Companies & SMES	21%
Large & Global Companies	18%
Academia	15%
Governments	13%
Institutions & Other Entities	11%
Startups	11%
Inter-governmental Organizations	6%
Media & Culture	4%
Investors	1%

SMARTCITY LIVE 2020
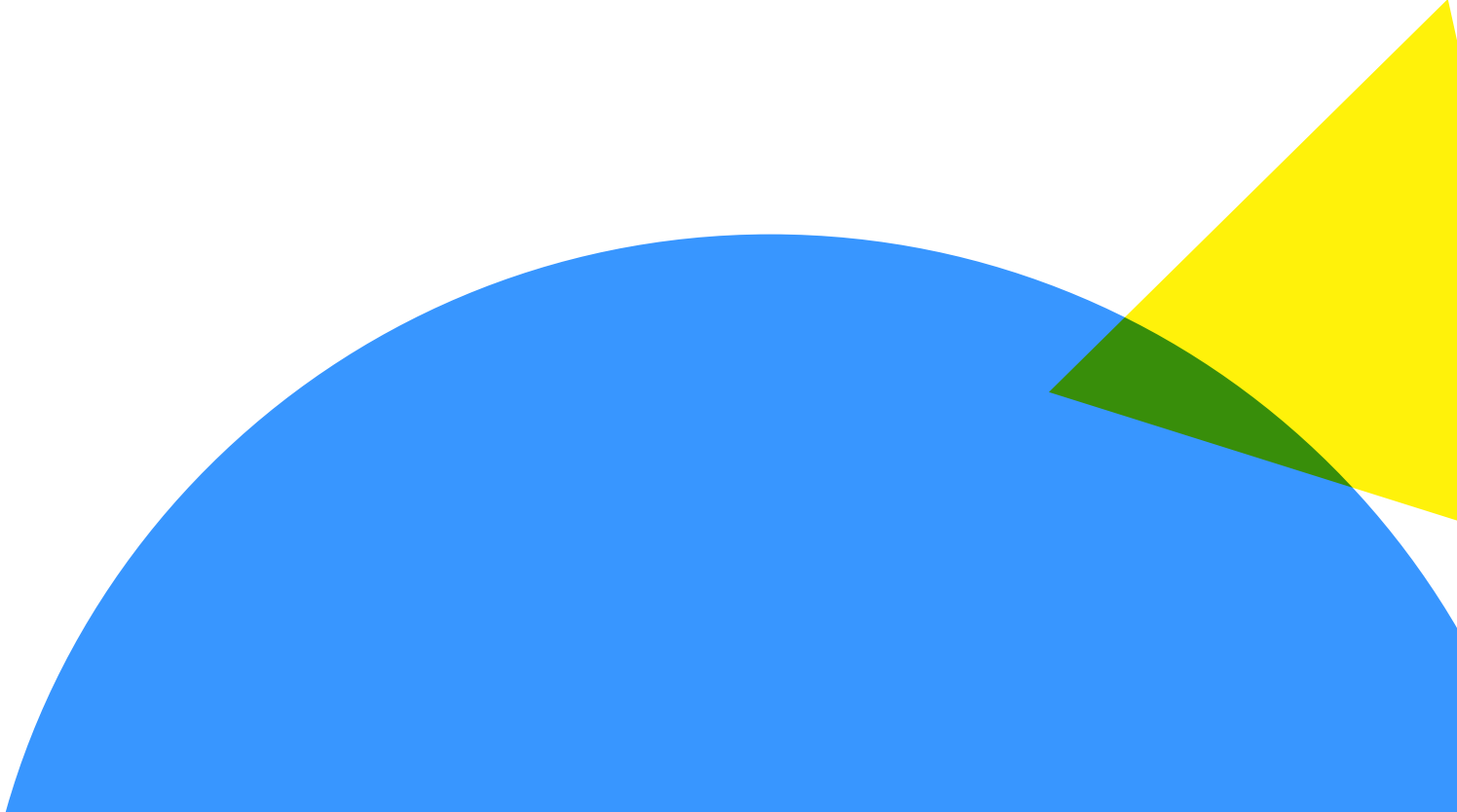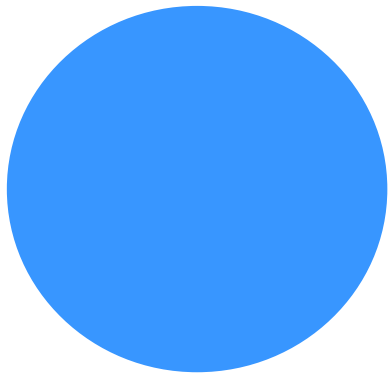
A HIT ON SOCIAL MEDIA
(September-November)

150,340
Followers

5,452,854
Impacts

1,307
Publications

944/1,000
Kred Influence

Social scoring system that rates contacts based on their influence in specific online communities or groups. Top score is 1000.
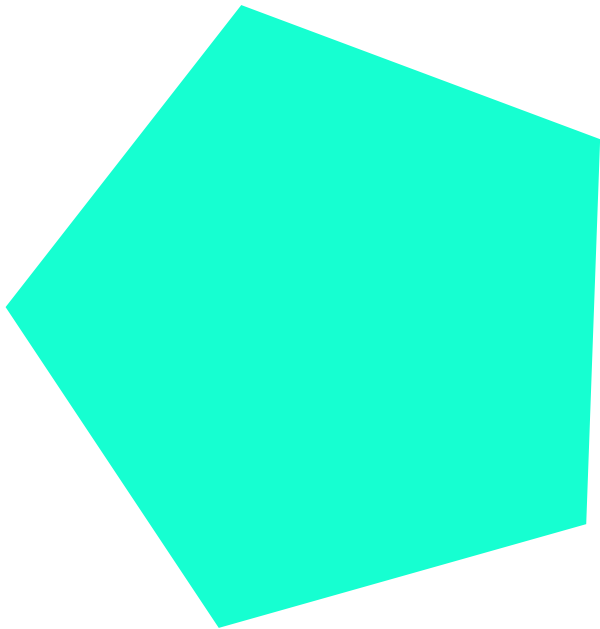
SMARTCITY LIVE 2020

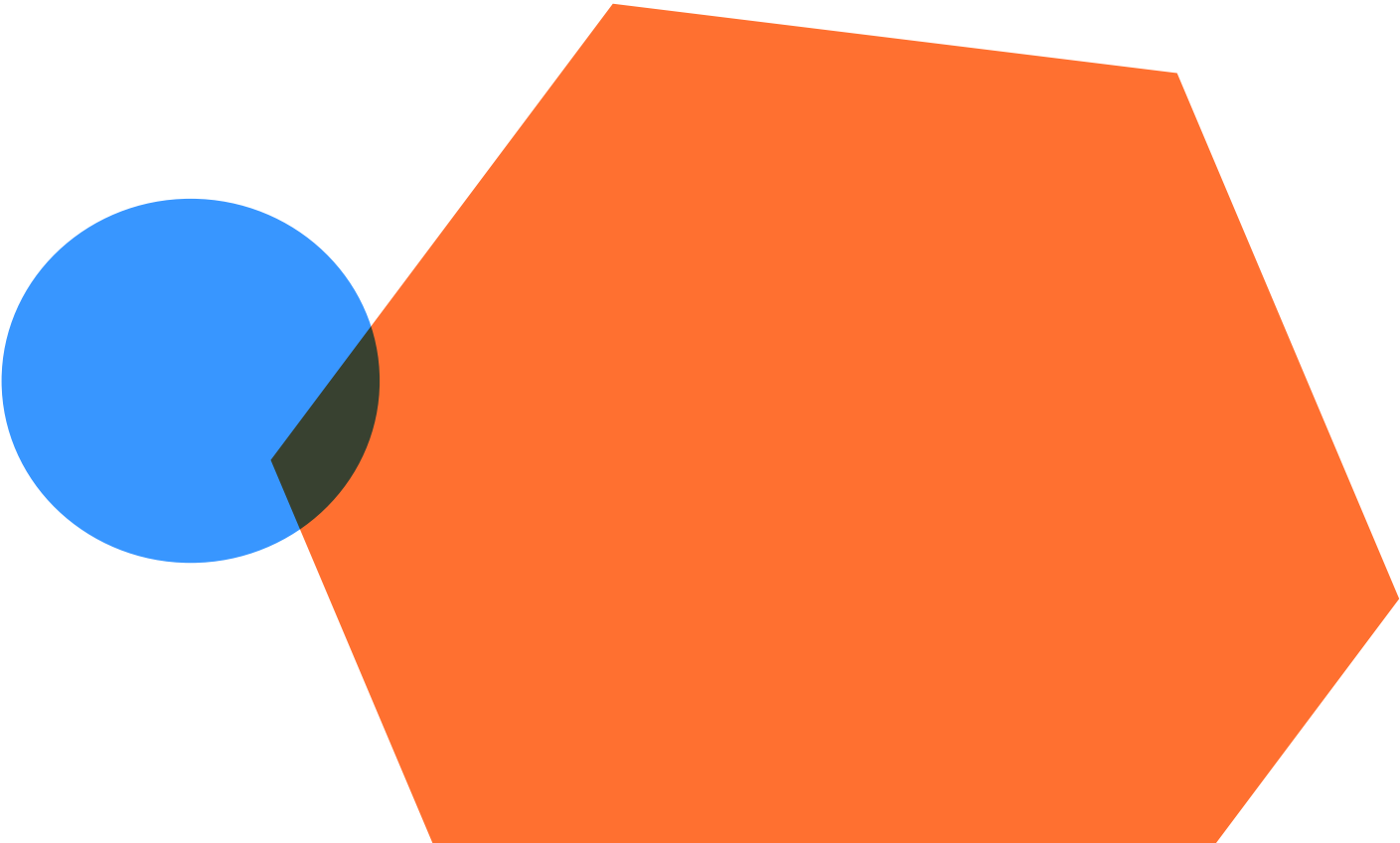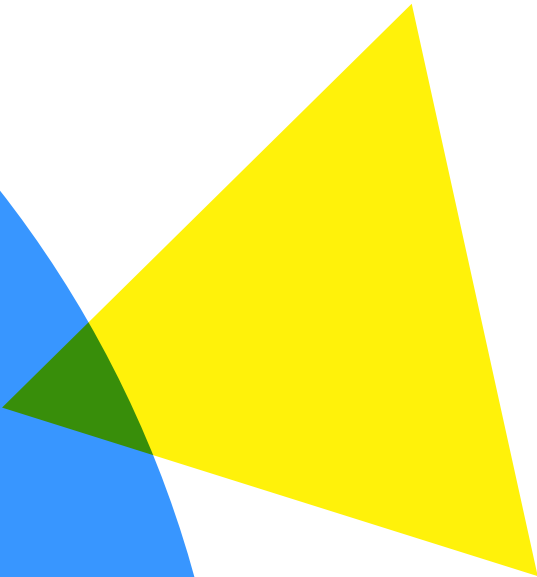# SOCIAL IMPACT REACH

Twitter
3,262,100

LinkedIn
503,226

Facebook
680,662

Instagram
1,006,866

5,452,854
Total Social Impact

5
BARCELONA DIGITAL CITY

Barcelona holds one of the top global positions as a smart city and is a pioneer in providing solutions to new urban challenges of inclusion and sustainability. In the face of the Covid-19 crisis, the city is pushing forward with digital transformation, digital innovation and digital empowerment to improve the quality of life of its citizens in a collaborative, plural, and participatory way.

Along these lines, the Barcelona City Council participated in the Smart City Live event and highlighted that Digital Inclusion, Democracy and Digital Rights as well as Urban Justice will be a priority in the new normal scenario.

Here are the topics explored in different sessions:

HOW TO ACCOMPLISH THE RIGHT TO HOUSING

Interview with Mayor Ada Colau.

INCLUSIVE TECHNOLOGY AND DIGITAL RIGHTS

Round table on digital inclusion and the role of technology in face of the Covid-19 pandemic, with the participation of Michael Donaldson, Commissioner for Digital Innovation, Electronic Administration and Good Governance.

TOWARDS A JUST DIGITAL TRANSITION FOR THE POST-PANDEMIC

Round table with Laia Bonet, Deputy Mayor of Barcelona. The debate was moderated by Renata Ávila, Executive Director of Fundación Ciudadanía Inteligente.

CIOS AS LINKING PINS: BRIDGING IT AND EUROPEAN DIGITAL POLICY FOR SMART CITIES

A discussion, organized by the EUROCITIES network, on the relationship between the evolution of European digital policy and the role of ICT executives in European cities. Participants included Michael Donaldson, CTO and CIO of the Barcelona City Council, and Marijn Fraanje, CIO of The Hague.

Moreover, the **Cities Coalition for Digital Rights**, which aims to promote, protect and uphold human rights on the Internet at the local and global level, took part in Smart City Live 2020 with two organized **side events** in which Barcelona was one of the driving forces of this partnership:

CITY2CITY DIALOGUES: HOW DO CITIES PROTECT THE DIGITAL RIGHTS OF CITIZENS?

A one-to-one dialogue between the CIOs of the cities that promoted the coalition (Barcelona, Amsterdam and New York) and the CIOs from other cities around the world, such as Toronto and Milan, on the application of digital rights.

ANNUAL ASSEMBLY OF THE COALITION OF CITIES FOR DIGITAL RIGHTS

An event for defining the coalition's future lines of action.

CITY CIOS FORUM

An annual meeting, held as part of the Smart City Expo World Congress since 2014, which brings together key global leaders in urban technological innovation to define the challenges of the future and discuss how to meet them. The topics of this edition revolved around Digital Inclusion, Digital Rights and AI, Urban innovation, as well as data-based policy formulation.

SMART CITY WEEK

All the aforementioned meetings were a continuation of **Smart City Week**, held in a digital format from **November 9-15**, aimed at reflecting on **the intertwining links between people, technology and cities** to answer a critical question: How to move towards a more inclusive, resilient and sustainable urban environment in the post-COVID-19 scenario?

Along with more than 40 activities organized with 20 local entities over the same days, keynote speakers such as Audrey Tang, Taiwan's Digital Minister; David Weinberger, Technologist and Speaker; Nicol Turner-Lee, Director for Technology Innovation at the Brookings Institution; and Thembiso Magajana, Founder of Social Coding, came forward with their views on these issues and made it clear that "inclusion is not just a question of technology, but one of dignity."

With all these activities, the Barcelona City Council demonstrated its strong commitment to fighting the digital divide and moving towards a better future for everyone.

All the Smart City Week sessions are available on the Barcelona City Council's YouTube Channel.
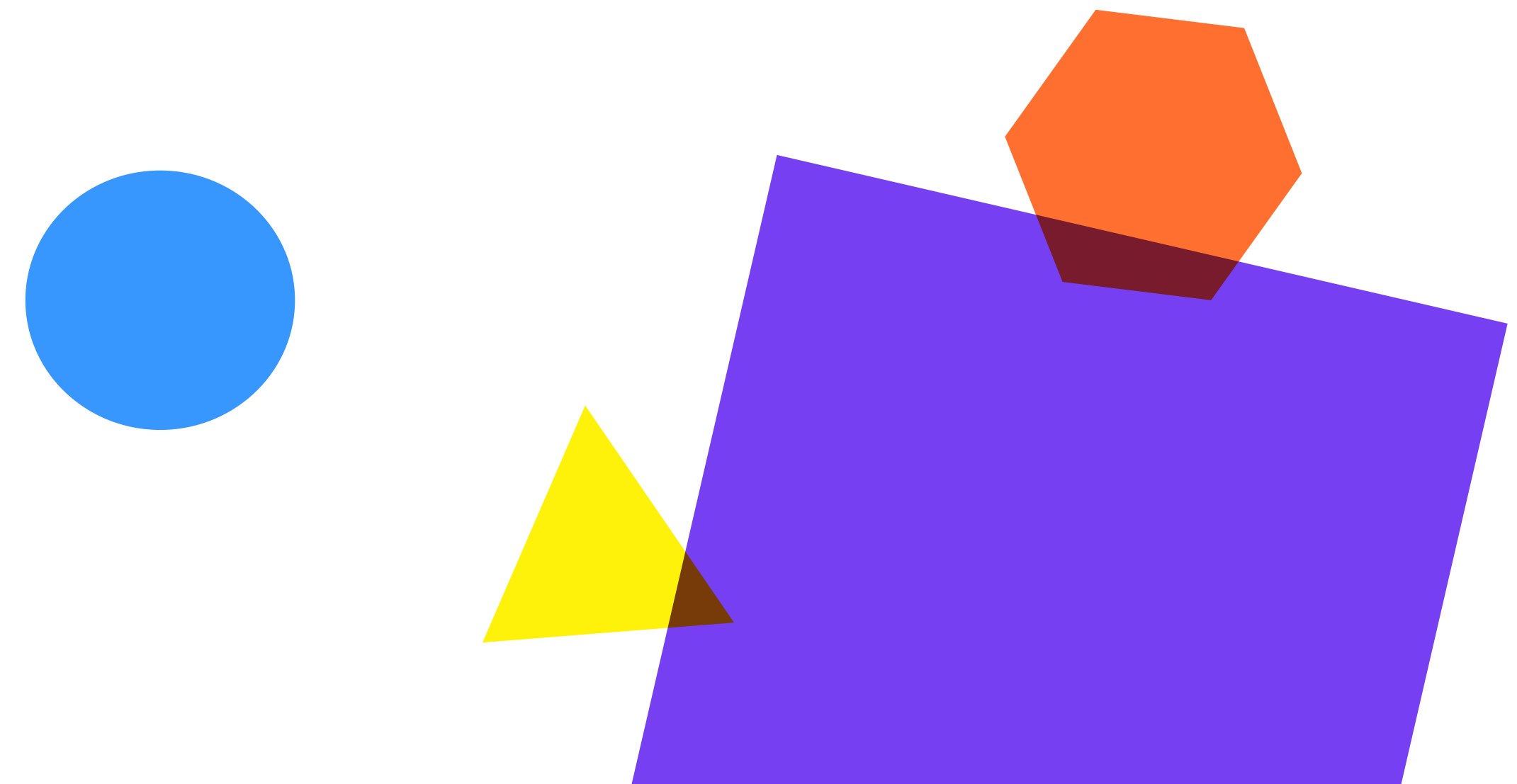
6
PARTNERS

Smart City Live was made possible by a **powerful community of corporate and institutional partners** willing to work together on the event towards more sustainable, resilient and inclusive post-COVID-19 cities. **All their sessions are available free of charge on the www.tomorrow.city**.

China Electronics Technology Digital & Smart Technology Co., Ltd., located in Shanghai, China, is a subsidiary company of China Electronics Technology Software Information Services Co., Ltd. belonging to China Electronics Technology Group Corporation (hereinafter referred to as CETC). Since the establishment of the company, it has been engaged in providing comprehensive architecture designs of Smart City, specific industry digital solution and municipal information planning & consulting. CETC has been pursuing to be a reliable construction operator of next generation information infrastructure in digital economy era, build a 100 billion-level industrial ecological chain, set up a leading enterprise in software and information service industry for the National Smart Society and Digital China Strategy.

" *Together with capital and labor, data has become the new production factor. Everything revolves around data generation, storage, application and analysis. In this context, we have launched the "Unified management of Shanghai by one network" to solve problems in the city such as inadequate operation and maintenance management, as well as incomplete data and insufficient sharing.* **"**

Jiang Bo, Researcher, Doctoral Advisor and Board Chairman, China Electronics Technology Digital & Smart Technology Co.

SEE CONTENT

China United Network Communications Corporation limited ("China Unicom") has subsidiaries in 31 provinces (autonomous regions and municipalities) across China and many countries and regions around the world. It owns a modern communication network with nationwide coverage and global reach, and operates a wide range of services, including fixed communication services, mobile communication services, domestic and international communication facilities services, data communication services, network access services, telecom value-added services, and system integration related to information and communication services. As a basic communications enterprise supporting various trades and industries, and the people, China Unicom has the basic, pillar, strategic and leading functions, statuses and roles in the national economy, and has the characteristics and attributes of technology-intensiveness, end-to-end services, nationwide network, economy of scale, and serving economy, society, and people's livelihood.

" *The combination of 5G and AI will bring about revolutionary changes in people's lives. By using these two technologies, we will be able to capture, store and manage much more data in a more efficient way than ever before. Through the development of these two technologies, smart connections will reach all walks of life, bringing great changes and development opportunities.* **"**

Yanfen Chen, Director, Shanghai Unicom Smart City Research Institute

SEE CONTENT

City Possible is Mastercard's partnership and co-creation framework for cities. Since its inception, City Possible has facilitated a community for members to draw on the collective expertise and resources of all stakeholders in order to scale innovative solutions that address urban challenges. Through our City Possible network of more than 180 members, Mastercard is fostering collaboration and co-creation, driving inclusive economic development, and building resilient communities.

" *Online working, education and access to services is a trend that will last beyond the duration of the pandemic. Providing an excellent internet connection to the whole world will be a priority in urban design. This unlocks a wide range of public-private partnerships.* **"**

Miguel Gamiño, Executive Vice President and Head of Global Cities, Mastercard

SEE CONTENT

Deloitte.

Deloitte is the brand under which tens of thousands of dedicated professionals in independent firms throughout the world collaborate to provide audit and assurance, consulting, financial advisory, risk advisory, tax, and related services to select clients.

" *This new decade, which began in 2020, has to be a period of action. The sustainable development goals for 2030 will not be achieved until 2080 if we do not advance faster in areas such as gender equality, reducing social inequalities or environmental care. The role that cities play in achieving these goals is crucial.* "

Deborah Sills, Global Consulting Government and Public Services Leader, Deloitte

SEE CONTENT

enel X

Enel X is leading the energy transformation all over the world. By making the complex simple, Enel X enables its clients to use technology to transform energy into new opportunities for growth and progress . It is a company with strong roots in the energy sector combined with an open strategy that is geared towards digitalization, sustainability and innovation. With its eCity division, Enel X aims to be partner of choice for Public Administrations, communities, citizens and urban development stakeholders in the transition towards a new city model by offering solutions that make energy use more efficient and that introduce innovative urban services. Be ready for the future with Enel X.

" *Energy efficiency has a dual benefit for cities: it allows them to be more sustainable while optimizing their economic resources. To achieve this efficiency, it is important that cities electrify their vehicle fleet and digitize their public transport services.* "

Valerio Vadacchino,Head of Marketing Global e-City, Enel X

SEE CONTENT

HUAWEI

Founded in 1987, Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. It has more than 194,000 employees, and operates in more than 170 countries and regions, serving more than three billion people around the world. Its vision and mission are to bring digital to every person, home, and organization for a fully connected, intelligent world. To this end, it will drive ubiquitous connectivity and promote equal access to networks; bring cloud and artificial intelligence to all four corners of the earth to provide superior computing power where you need it, when you need it; build digital platforms to help all industries and organizations become more agile, efficient, and dynamic; redefine user experience with AI, making it more personalized for people in all aspects of their life, whether they're at home, in the office, or on the go.

❝ *We have a responsibility to make the benefits of the smart city accessible to all the population, regardless of age or technology familiarity. To achieve this goal, we need to combine the real and virtual worlds simply so that everyone can understand this.* **❞**

Kun Yue, President, Global Government Business Dept, Huawei

SEE CONTENT

Microsoft

Microsoft (Nasdaq "MSFT" @microsoft) can help cities with their economic recovery by transforming government services through data and AI, and enable remote government access for city services, empower cross agency collaboration, and deliver trusted and secure services.

❝ *Through the use of information and technology, cities can improve their decision-making process and operational efficiency. The ultimate result of this is that cities are able to increase their resilience, environmental sustainability and the quality of life of their inhabitants.* **❞**

Julia Glidden, CVP, Worldwide Public Sector, Microsoft

SEE CONTENT

RACC Mobility Club

RACC is an institution that provides coverage and high-quality services to meet the needs of more than 10 million people worldwide. As a Club of Services for Mobility, RACC promotes a new, safer and more environmentally-friendly mobility culture, and encourages innovation by creating new products and services for people who combine all modes of transport. At the same time, the Club fosters research through the RACC Mobility Institute, a knowledge center that analyzes the new mobility models and trends at international level. The aim of this business community, which is made-up of both public and private entities, is to create useful knowledge for multiple sectors that, today, need information about the mobility of people and goods in order to optimize their activity and their business plans.

" *Mobility is a fundamental part of social and economic progress. In this respect, mobility must evolve by leveraging the opportunities offered by technology and moving towards an environmentally sustainable model, but, above all, it must seek to address people's needs.* **"**

Josep Mateu, President, RACC Mobility Club

SEE CONTENT

SEAT

SEAT is the only company that designs, develops, manufactures and markets cars in Spain. SEAT employs over 15,000 professionals and has three production centers and SEAT:CODE, its software development center located in Barcelona. The multinational has its headquarters in Martorell (Barcelona) and sells vehicles under the SEAT and CUPRA brands, while SEAT MÓ covers urban mobility products and solutions, such as the recently launched motorbike-sharing service in Barcelona.

" *Mobility is evolving in cities, but it is still a fundamental right. As a result of the COVID-19 pandemic, services such as rented e-scooters and shared bikes are now a crucial part of the transport mix in many cities. In our view, micro-mobility solutions are not competition for the car but rather a complementary solution.* **"**

Lucas Casasnovas, Director, Seat Mó

SEE CONTENT

Smart Ports: Piers of the Future is an event organized by Port de Barcelona and joined by some of the most innovative ports of the world: Antwerp, Hamburg, Los Angeles, Montreal, Rotterdam and Busan. During the event, the port community shared projects and knowledge related to different areas: digitalization, cybersecurity, sustainability, and others, with the main objective of offering innovative solutions to present and future challenges that ports face. Due to the global Covid-19 pandemic, the event was held online and live-streamed on the Smart Ports TV digital platform. The digital platform will be active for 365 days and new content related to smart ports will be uploaded.

" *Our mission is to create prosperity among our citizens in an economically, socially and environmentally sustainable way. The history of ports and cities runs in parallel, and the symbiosis between the Smart City and the Smart Port is noticeably clear in today's world.* **"**

Santiago Garcia-Milà, Deputy Manager of the Port of Barcelona and President of the International Association of Ports and Harbors

SEE CONTENT

SMART**CITY**
L**I**VE 2020
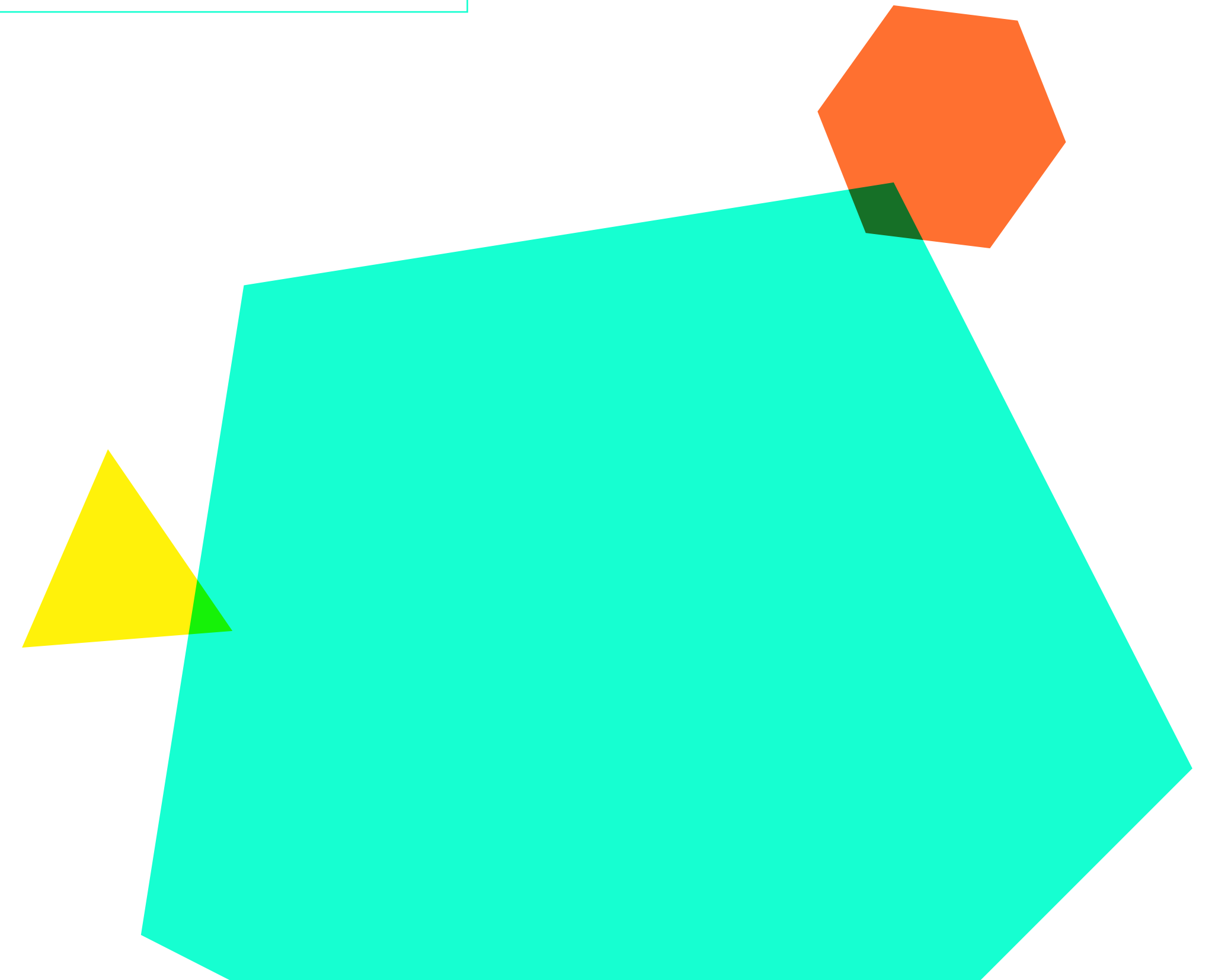
HOSTED BY

Ajuntament de Barcelona

BROADCASTED BY

**TOMORROW.
CITY**

ORGANIZED BY

SMART**CITY**
EXPO WORLD CONGRESS

Fira Barcelona

SUPPORTING INSTITUTIONS

ICEX Spain Trade and Investment is a public corporation at the national level that aims to promote the internationalization of Spanish companies to support their competitiveness and add value to the economy, as well as to attract foreign investment to Spain. ICEX Spain Trade and Investment provides its services through a network of 31 Provincial and Regional Divisions in Spain along with nearly 100 Economic and Trade Offices around the world. It also boasts 16 Business Centers worldwide, offering Spanish companies temporary infrastructure and acting as incubators for internationalization. Every year, ICEX organizes around 1,200 promotional activities in foreign markets and responds to over 90,000 inquiries regarding internationalization.

Red.es is a public corporate entity attached to the Ministry of Economic Affairs and Digital Transformation through the Secretary of State for Digitalization and Artificial Intelligence (SEDIA). Its main areas of responsibility include empowerment of innovation and entrepreneurship, training young people and professionals, and stimulation of the digital economy (with a particular emphasis on digitalization of SMEs) through efficient and intensive use of Information and Communication Technologies (ICTs). Red.es also carries out technological implementation of digital public services for the Administration (especially in healthcare, justice, and education) and the development of smart cities projects.

SmartCAT is the strategy of the Government of the Generalitat de Catalunya for extending the smart city concept to a country-wide level to carry out a program that integrates and coordinates local initiatives and supralocal support companies and deploys smart initiatives throughout the territory. SmartCAT aims to turn Catalonia into a "Smart Country" of international reference that takes advantage of the use of digital technology and information to innovate in public services, drive economic growth and promote a smarter, more sustainable and inclusive society.

Diputació Barcelona

The Diputació de Barcelona (Barcelona Provincial Council) is a local public authority that provides technical, economic and technological support to the 311 municipalities in the province of Barcelona to provide quality local services throughout the region. Its mission is to ensure progress and well-being for all the citizens in the territory by providing services to people, either directly or, above all, in cooperation with the municipalities themselves. To this end, Diputació de Barcelona is determined to become a Smart Region: a community of Smart Villages and Smart Cities in which technology and citizens are the main drivers of change to achieve social, environmental and economic development for all, in line with the Sustainable Development Goals (SDGs).

AMB : Metròpolis Barcelona

The Barcelona Metropolitan Area (AMB) is the public administration of the metropolitan area of Barcelona, which occupies 636 km^2 and encompasses 36 municipalities with over 3.2 million inhabitants. The metropolitan area is a territorial, social, demographic, economic and cultural entity formed during the last century as a product of the growth and connection of urban systems around the city of Barcelona. This is the largest metropolitan conurbation in the western Mediterranean, and it generates half of Catalonia's GDP. The new public metropolitan administration replaces the three entities that existed until 2011: the Union of Municipalities of the Metropolitan Area of Barcelona, the Environmental Agency and the Metropolitan Transport Agency. This new AMB rationalizes and simplifies metropolitan governance by creating a single administration.

EURO CITIES

EUROCITIES is the network of major European cities, with over 140 members across 39 countries, representing more than 130 million people. It works in all areas of interest for cities, from culture to mobility, environment to social affairs, economic development to smart cities. It facilitates learning experiences between cities and represents cities' interests before the European Union. EUROCITIES is committed to working towards a common vision of a sustainable, democratic future in which all citizens can enjoy good quality of life.

The effects of rapid urban growth combined with the impact of climate change are creating new challenges for cities, which require more effective information use. To manage these challenges and deliver improved urban services, cities need to better leverage technology, people and processes. IDB works to improve lives in Latin America and the Caribbean through financial and technical support to countries working to reduce poverty and inequality. It helps improve health and education and to develop more advanced infrastructure. As the leading source of development financing for Latin America and the Caribbean, it conducts extensive research; provide loans, grants and technical assistance. IDB is committed to achieving measurable results and the highest standards of increased integrity, transparency, accountability and sustainability.

Metropolis is a global network of major cities and metropolitan areas, bringing together the governments of 141 urban agglomerations worldwide. With over 35 years of history, the association today is the focal point for expertise on metropolitan governance. Raising the voices of metropolises to the global agenda and building capacity to deliver public policies and services, Metropolis contributes to finding common answers to the challenges of metropolization. Metropolis has also served as the metropolitan section of the World Organization of United Cities and Local Governments (UCLG) since its founding in 2004.

United Cities and Local Governments (UCLG) is the world organization of local and regional governments and their associations, representing and defending their interests on the world stage. UCLG's network of members represents 70% of the world's total population and is present in all world regions: Africa, Asia-Pacific, Europe, Eurasia, Latin America, the Middle East and West Asia, and North America; organized into seven regional sections, one metropolitan section and one Forum of regions. This network includes over 240,000 towns, cities, regions and metropolises, and over 175 associations of local and regional governments in 140 countries. Among UCLG's key areas of political interest are: local democracy, climate change and environmental protection, the achievement of the Sustainable Development Goals, local finance, urban development, and city diplomacy in peace building.

UN-Habitat is the United Nations program working towards a better urban future. Its mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all. In October 2016, at the UN Conference on Housing and Sustainable Urban Development – Habitat III – member states signed the New Urban Agenda. This is an action-oriented document which sets global standards of achievement in sustainable urban development, rethinking the way we build, manage and live in cities. By drawing together cooperation with committed partners, relevant stakeholders and urban actors, at all levels of government as well as in the private sector, UN-Habitat is applying its technical expertise, normative work and capacity development to implement the New Urban Agenda and Sustainable Development Goal 11 – to make cities inclusive, safe, resilient and sustainable.

The World Bank Group has set two goals for the world to achieve by 2030:
1) End extreme poverty by decreasing the percentage of people living on less than $1.90 a day to no more than 3%, and
2) Promote shared prosperity by fostering the income growth of the bottom 40% for every country.
The World Bank Group comprises five institutions managed by their member countries. Established in 1944, the World Bank Group is headquartered in Washington, D.C. It has more than 10,000 employees in more than 120 offices worldwide. The World Bank is a vital source of financial and technical assistance to developing countries around the world. It is not a bank in the ordinary sense but a unique partnership to reduce poverty and support development.

The World Economic Forum is the International Organization for Public-Private Cooperation. The Forum engages the foremost political, business, cultural and other leaders of society to shape global, regional and industry agendas. It was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland. It is independent, impartial and not tied to any special interests. The Forum strives in all its efforts to demonstrate entrepreneurship in the global public interest while upholding the highest standards of governance. Moral and intellectual integrity is at the heart of everything it does.

SMARTCITY LIVE 2020

STRATEGIC ORGANIZATIONS

FNP FRENTE NACIONAL DE PREFEITOS

MERCOCIUDADES

OASC OPEN & AGILE SMART CITIES

OSGP ALLIANCE

Union for the Mediterranean
Union pour la Méditerranée
الإتحاد من أجل المتوسط

WeGo World Smart Sustainable Cities Organization
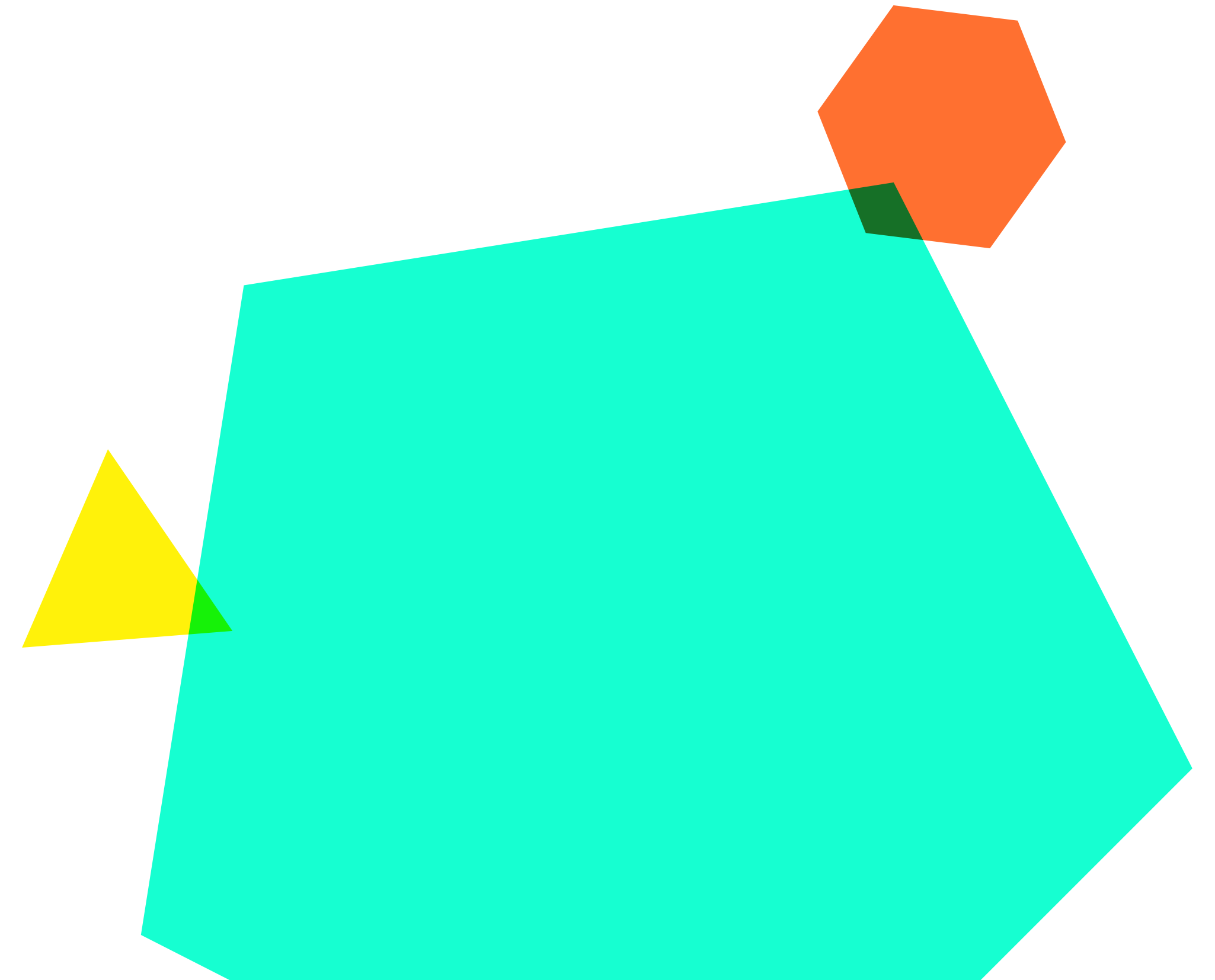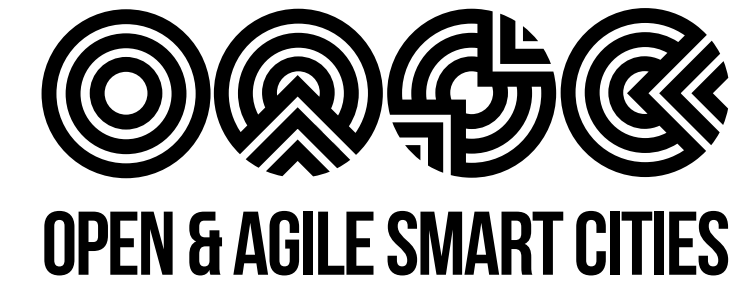
COLLABORATING ORGANIZATIONS

SMART**CITY** LIVE 2020

IPMI — International Parking & Mobility Institute

IPWCA — Int'l Pneumatic Waste Collection Assoc.

KNX NATIONAL SPAIN

MAJOR CITIES OF EUROPE IT USERS GROUP

MOBILITY INSTITUTE RACC — En asociación con **Deloitte**

railgrup

SIMUS

SMACCs

Smart Space

SMARTECH CLUSTER

sta — Smart Transportation Alliance

telecos.cat — enginyers de telecomunicació, electrònica i multimèdia-audiovisual

Transprime

UCCLA
UNIÃO DAS CIDADES CAPITAIS
DE LÍNGUA PORTUGUESA

Universidad
Francisco de Vitoria
UFV Madrid
*Escuela de Postgrado y
Formación Permanente*

★URBACT
ESPAÑA

SMARTCITY LIVE 2020

MEDIA PARTNERS

SMART**CITY** LIVE 2020

Smart Cities World

statescoop

tni)
tecnonews
la tecnología a un click

The Exclusive
Lebanese Investment Guide

TMTPOST
钛媒体

Transporte
XXI
El periódico del transporte y la logística en España

vía libre
La revista del ferrocarril

Xataka

7

WORLD SMART CITY AWARDS

In a year marked by the COVID-19 pandemic, the need to advance towards a more inclusive, technological and sustainable model for cities has become more evident than ever. **The 10th edition of the World Smart City Awards** recognized initiatives that enable cities to be more resilient and respectful of the environment to, ultimately, improve the quality of life of their citizens.

- City Award: Awarded to cities for developing global strategies combining projects, initiatives and policy implementations for their citizens.

- COVID-19 Innovation Award: To recognize projects with the potential to contribute to the success of our cities in the COVID-19 pandemic or any other that may occur in the future.

- Enabling Technologies Award: To reward the most innovative and successful projects being developed in the fields of data and technology.

- Urban Environment Award: Awarded to the most innovative and successful projects being implemented in relation to urban environments.

- Mobility Award: To recognize the most innovative and successful projects to better move around the city.

- Governance & Economy Award: To reward the most innovative and successful projects being implemented and developed in the fields of governance and finance.

- Living & Inclusion Award: To reward the most innovative and successful projects being implemented and developed in relation to inclusive and sharing cities.

The winners were selected from among projects submitted from 46 different countries. All the candidates were evaluated by a panel of prominent experts based on the projects' innovation, potential impact and feasibility.

The winners were announced on November 18 within the Smart City Live event, which attracted 20,489 unique users from 144 countries around the world.

SEE CONTENT

KEY FIGURES

10th edition   7 categories   Proposals from 46 countries

URBAN ENVIRONMENT AWARD
MindSphere City Graph, a platform developed by Siemens and Microsoft. Microsoft and Siemens, Munich, Germany.

Microsoft and Siemens received an award for developing MindSphere City Graph. This platform enables contextual integration and analysis within cities, districts or campuses. Graph-based, it builds digital twins of real entities in a city and optimizes city operations step-by-step using IoT and advanced analytics.

MOBILITY AWARD
Using technology to convert fixed-route public transit to on-demand transit during COVID-19. | Pantonium Inc., Toronto, Canada.

Pantonium was recognized for developing software that adapts public bus routes according to the needs of the moment. Pantonium increases the efficiency of urban public transit through its on-demand service. This technology has already been tested successfully in Belleville (Canada).

LIVING & INCLUSION AWARD
A New Life in the Grotas: evidence-based slum improvement and urban development. | Government of the State of Alagoas, Maceió, Brazil.

The Government of the State of Alagoas in Brazil received an award for its program to revitalize the city of Maceió, particularly its "grotas." The project was supported by UN Habitat and focuses on mobility, the adaptation of public space, and various housing development initiatives.

GOVERNANCE AND ECONOMY AWARD
Zencity: Data-driven decision-making for local government. Zencity, Tel Aviv, Israel.

Zencity was recognized for developing an artificial intelligence platform that helps local governments make data-based decisions. To achieve this, Zencity's technology analyzes millions of anonymous data points gathered from the opinions expressed by citizens online.

ENABLING TECHNOLOGIES AWARD

Digital City - Technology Makes a Better City. | Government Services Data Bureau of Shenzhen Municipality, Shenzhen, China.

Shenzhen was recognized for improvements introduced in services and city governance capabilities that have helped the city move towards a more modern and international version of itself. Some of the specific actions include strengthening of digital infrastructures, various smart policing initiatives and pandemic prevention management.
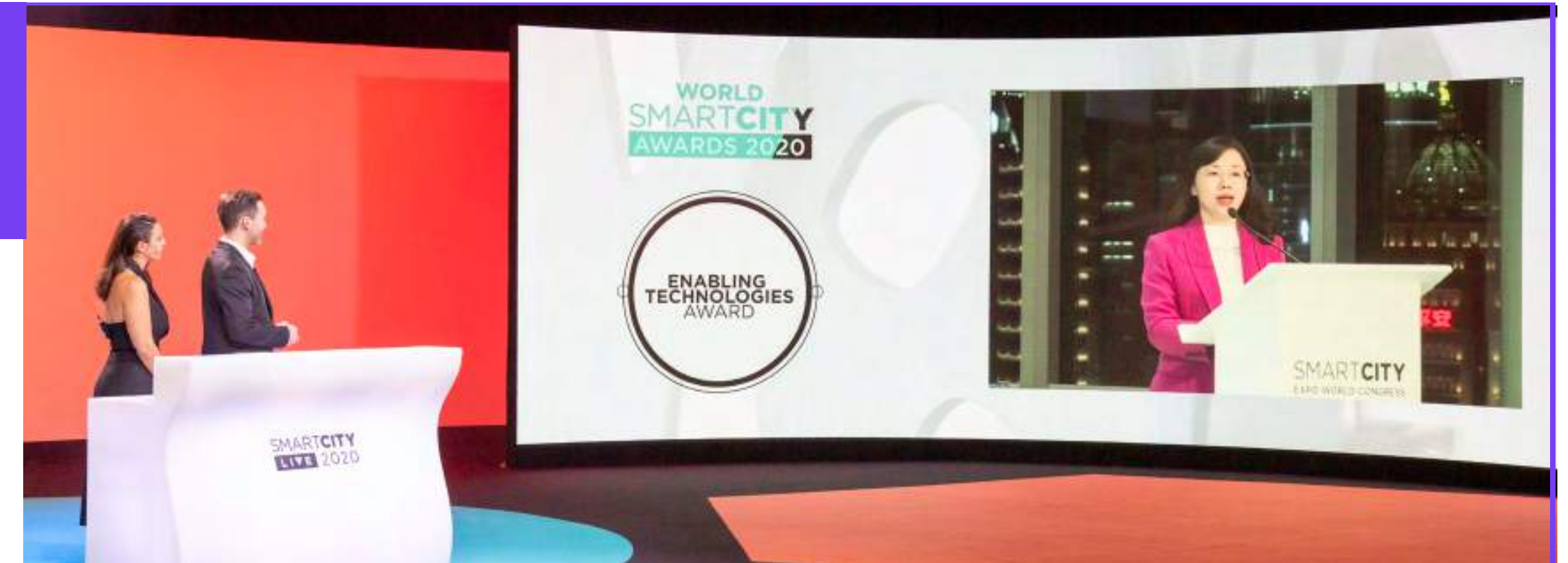
COVID-19 INNOVATION AWARD

Innovative adaptations to the future of work within the global digital marketplace in Zambia. | Werkit, New York, United States.

Werkit was recognized for creating a digital ecosystem that connects people with jobs and financial services. There are 1.42 billion young people in Africa, but only one in six has a full-time job. The situation has been exacerbated by the COVID-19 pandemic, and Werkit's goal is to help reduce unemployment and low-income rates on the continent.

CITY AWARD
Smart Shanghai - People-Oriented Smart City. | Shanghai Municipal Commission of Economy and Informatization, Shanghai, China.

Shanghai received an award for successful implementation of its smart city plan: The Shanghai Smart City Plan (2016-2020). The city has focused on digital infrastructure construction, e-government, City Brain, Integration technology and industry and environmental strategy. It is an e-government initiative that already has 14.56 million registered users, which accounts for 73% of the total population.

8

CONTENT

A) OVER 40 TV SESSIONS

Smart City Live 2020 TV program was organized around five verticals —Enabling Technologies; Mobility, Governance & Economy; Living & Inclusion; and Energy & Environment— to address the most pressing issues facing cities: how to adapt urban mobility to safe and sustainable travel, technologies to address global urban challenges, how to redesign cities and urban living for all, how to ensure an inclusive economic recovery, how to create resilient infrastructures and urban environments to build back better, and the future of retail in a digital era.

SESSIONS

Welcome to Smart City Live!

Tuesday, November 17
9:30 a.m. - 9:41 a.m. (GMT +1)

Speaker:

Ugo Valenti / Business Unit Director - Fira Barcelona
- Barcelona - Spain

The COVID-19 outbreak made 2020 an unusual year. Smart City Live, the two-day digital edition of the Smart City Expo World Congress (SCEWC), organized by Fira de Barcelona, was created in this context, with the aim of being much more than just a virtual encounter. Indeed, the audience experience was completely different from previous digital events.

"Our main goal this year is to provide a platform to reconnect and rebuild ecosystems and accelerate the recovery of metropolises with a new model that enables us to connect and reach every actor in our industry through the digital medium," highlighted Ugo Valenti. The Business Unit Director at Fira de Barcelona talked about the future of cities and presented Tomorrow.City, the new platform that aspires to become a permanent hub of urban knowledge designed to provide companies and government agencies with resources that combine research, technology and investment throughout the year.

" *The smart city ecosystem is remarkably diverse. Two years ago, we began thinking about how to expand the event, and now it's becoming a reality.* **"**

SEE CONTENT

SMART**CITY** LIVE 2020

A Conversation with Minister Takuya Hirai: a New Digitalization Strategy for Japan

Tuesday, November 17,
9:41 a.m. - 9:54 a.m. (GMT +1)

Speaker:

Takuya Hirai / Minister for Digital Transformation, Social Security, Tax Number System and Information Technology Policy - Government of Japan

As a technologically advanced country, Japan has recently focused a large part of its efforts on ensuring that the benefits of digitalization reach all citizens, especially those living in rural areas. Minister Takuya Hirai explained that the work carried out over the last few years to strengthen digital infrastructures has allowed many people to move to villages to work and avoid the crowds in cities during the COVID-19 pandemic. He also highlighted that one of the goals of the government is "to build a digital society where people can experience the advantages of digitalization seamlessly" to achieve better productivity and a better quality of life "regardless of their age or where they live."

❝ *The time we save by working from home can be invested in new socioeconomic activities.* **❞**

SEE CONTENT

Parag Khanna: Cities Reshaping the World Order

Tuesday, November 17
9:54 a.m. - 10:15 a.m. (GMT +1)

Speaker:

Parag Khanna / Global strategist and best-selling author, founder - FutureMap - Singapore

In recent years, Asia has begun to challenge the global leadership of the United States and Europe. Will this trend continue after COVID-19? As Parag Khanna explained, "Asian countries have not been hit as hard by the pandemic" due to their economic and demographic idiosyncrasies.

The expert forecasted that rebuilding social structures and deploying digital infrastructures (if they are not already in place) will be a priority for governments in the post-pandemic world. He also predicted that "digital immigrants," that is to say workers who move to countries where the epidemic is better under control in order to telework normally in a safer environment with fewer restrictions, will become a trend.

In this context, he said that over the coming months, immunity passports may be introduced to allow travelers to move freely around Asia.

❝ *Immunity passports to travel freely in Asia will soon become a reality.* **❞**

SEE CONTENT

Fireside Chat: Exploring the Future of Cities After COVID-19

Tuesday, November 17
10:15 a.m. - 10:28 a.m. (GMT +1)

Speakers:

Victor Mulas / Senior Urban Specialist - Task Team Leader of Tokyo Development Learning Center (TDLC) - World Bank - Tokyo - Japan

Ryosuke Toura / Executive General Manager of Shibuya Development Division - Tokyu Corporation - Tokyo - Japan

The preference for living close to the workplace in better equipped apartments with better services and in more environmentally friendly and energy efficient buildings will grow. These are some of the urban trends identified by the Tokyu Corporation after the pandemic, according to Ryosuke Toura. The expert stressed that COVID-19 is an opportunity to "think about the resilience of towns" and about how people can move around in a simpler way. In this light, he talked about the Shibuya response to the pandemic and said that he was confident that the iconic Tokyo district "will manage to get back on its feet again."

" *After COVID-19, citizens will want to live close to where their offices are and have better technologically equipped homes.* "

Ryosuke Toura

SEE CONTENT

Empowering the City Being with Intelligence and Vitality

Tuesday, November 17
10:28 a.m. - 10:43 a.m. (GMT +1)

Speaker:

Kun Yue / President, Global Government Business Department
- Huawei - China

Huawei has been developing and implementing smart city technologies for over 12 years, making it one of the companies with the greatest expertise in this area in the world. Drawing on the company's experience in this field, Kun Yue highlighted that it has reached the conclusion that rather than having vast quantities of data, what really matters for a smart city to work well is "capturing important data, processing it properly and taking informed decisions" based on the information it provides.

The Huawei executive added that the capacity to combine analogue and virtual reality efficiently in cities and to create simple systems so that the whole population, regardless of their technological capabilities, can leverage innovations are other key aspects of smart city projects.

❝ *When we talk about data applied to smart cities, quality is more important than quantity.* **❞**

SEE CONTENT

Chicago's Inclusive Response to COVID-19

Tuesday, November 17
10:43 a.m. - 10:49 a.m. (GMT +1)
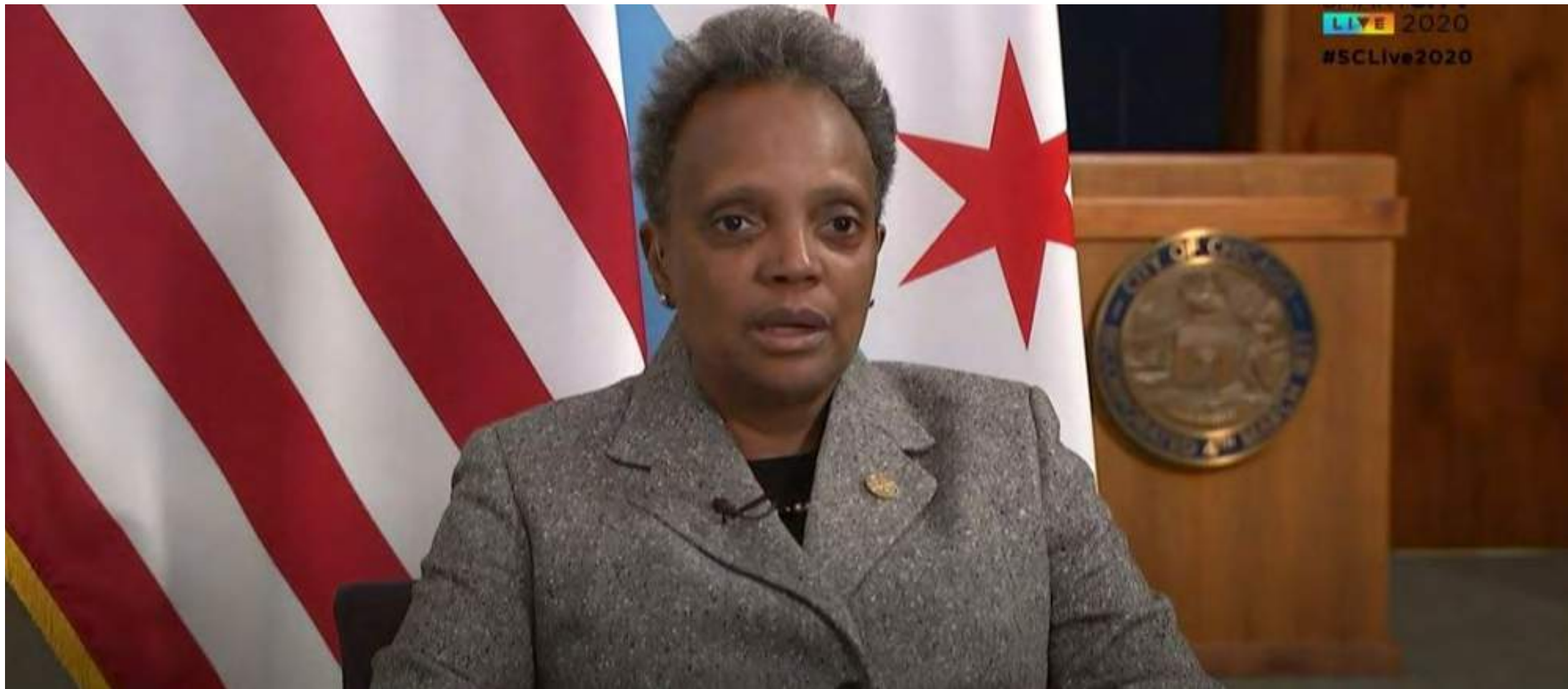
Speaker:

Lori E. Lightfoot / Mayor - City of Chicago – United States

In Chicago, the pandemic has hit hardest in neighborhoods where the majority of residents are people of color, where families also tend to have lower incomes and households comprise many members who have to expose themselves daily to the virus at work. That is the reason why the city has created an initiative to provide connectivity to families in need. "Remote learning has been a good solution to reduce the COVID-19 spread," said Lori Lightfoot. The mayor of Chicago also explained why the city is accelerating initiatives for residents to move forward, making sure people feel ownership, retaining new talent and ensuring equal opportunities for all.

❝ *Low-income households do not have the luxury of working from home and are much more exposed to the virus.* **❞**

SEE CONTENT

How will the Combination of 5G and AI Empower Smart City Development?

Tuesday, November 17
10:49 a.m. - 11:06 a.m. (GMT +1)

People and machines managing cities together. This is the reality that we will be able to experience in the coming years by applying AI and 5G, according to Yanfen Chen. "The combination of these two technologies will accelerate the development of smart cities and enable us to collect much more data and manage it more efficiently," this manager at Shanghai Unicom Smart City Research Institute said. Everything in the city is intelligence now, she added. But there are still a lot of problems to solve.

" *Through 5G and AI development, intelligent connections will penetrate all walks of life, bringing great changes and development opportunities for cities.* **"**

Speaker:

Yanfen Chen / Director - Shanghai Unicom Smart City Research Institute - Shanghai - China

SEE CONTENT

SMART**CITY** LIVE 2020

Digitalization Trends in Africa

Tuesday, November 17
11:06 a.m. - 11:17 a.m. (GMT +1)

Speaker:

Lacina Koné / Director General - Smart Africa - Kigali - Rwanda

Digital tools have become powerful allies for combatting the pandemic. Creating mobile apps to track and trace people infected with the virus and their contacts has proved successful in some of the countries that have controlled the spread of COVID-19 better, such as South Korea. Also, Big Data has enabled governments to take data-based decisions and consider information rather than rely on perceptions and intuition. However, these innovations are difficult to implement in Africa, where 61% of the population lacks internet access. Lowering the cost of communications, providing accessible devices, and training the population should be priority policies for African countries in coming years, in Koné's view.

" It's more important than ever for governments to invest in technology for saving lives. "

SEE CONTENT

New Infrastructure Enabling New Governance

Tuesday, November 17
11:17 a.m. - 11:33 a.m. (GMT +1)

Speaker:

Jiang Bo / Researcher, Doctoral Advisor and Board Chairman - China Electronics Technology Digital & Smart Technology Co - Shanghai - China

At present, good governance of cities depends in large part on capturing, storing, analyzing, and applying data. Shanghai is currently one of the most advanced Asian cities in terms of smart city development based on data. In this light, Jiang Bo made it clear that data is so important now that it can be "considered the new production factor, together with work and capital." The researcher talked about the Unified Management of Shanghai initiative, undertaken to support the efficiency of the entire urban system. This initiative encompasses a new model aimed at empowering urban governance through sensing systems. This model, which is replicable in other cities worldwide, indicates that Shanghai's city operation and management has entered a new stage in the comprehensive digital transformation.

❝ *Data is the new production factor.* **❞**

SEE CONTENT

Bold Urban Action to Tackle the Climate Crisis

Tuesday, November 17
11:33 a.m. - 11:58 a.m. (GMT +1)

Speakers:

Céline Vanderborght / Smart City Manager – Brussels - Belgium

Marta Subirà / Secretary of Environment and Sustainability - Government of Catalonia - Spain

Getting something positive out of the pandemic has become a priority for government administrations. In this context, advancing towards more sustainable city models is now practically an obligation. "As a result of the restrictions on movement due to the outbreak of COVID-19, many people started going places on foot more frequently, avoiding unnecessary journeys, buying in local businesses…" recounted Marta Subirà. "Now it's the responsibility of governments to promote the continuation of these practices once the pandemic is over, as they are very good for the sustainability of our cities," this representative of the Catalan government added. Céline Vanderborght echoed that sentiment, stating that governments' socio-economic recovery policies must combine recovery of business activity with the promotion of environmental responsibility policies that will help halt the climate crisis we are facing.

❝ *If we follow the 17 UN SDGs, we have the key to doing things better.* **❞**

Marta Subirà

SEE CONTENT

The Port as an Economic Driver of the City

Tuesday, November 17
12:00 p.m. - 12:16 p.m. (GMT +1)

Speakers:

Jens Meier / CEO - Hamburg Port Authority – Hamburg - Germany

Gene Seroka / Executive Director - Port of Los Angeles – United States

Santiago Garcia-Milà / Deputy Manager, President - Port of Barcelona - International Association of Ports and Harbors (IAPH) – Barcelona - Spain

During the pandemic, ports have proved to be an essential service, and they have had to maintain a large part of their activity since the beginning of the COVID-19 pandemic. These infrastructures are key logistical hubs that ensured that supplies reached cities during lockdown and enabled the reception and distribution of essential material such as PPE for healthcare professionals, while guaranteeing the protection of their workforce. According to Santiago García-Milà, "ports' mission is to create added value in their surrounding economy in a sustainable manner." That's why they will also play a decisive role in the post-COVID economic recovery.

❝ *Ports need digitalization to move towards certainty.* ❞

Gene Seroka

SEE CONTENT

Smart Villages & Territories

Tuesday, November 17
12:16 p.m. - 12:31 p.m. (GMT +1)

Speakers:

Ram Sidis / Head of the Innovation Area and deputy CEO - FLAI - Local Authorities in Israel - Modiin-Maccabim-Reut - Israel

Carmela Fortuny / Second Vice President - Diputació de Barcelona – Barcelona - Spain

The resources a small village has for combatting the pandemic are not the same as those available in a big city. In this light, Carmela Fortuny stressed that "it is important for supra-municipal organizations to invest in villages to guarantee territorial cohesion." The aim is to convert villages into smart villages, that is, rural communities that use innovative solutions to increase their resilience and create new opportunities in their territories. Accordingly, the pandemic has turned out to be an opportunity for villages, as many people who live in cities are moving to rural areas to telework. "This isn't a major trend at the moment, but it could help balance out the population density between cities and villages," Ram Sidis suggested.

ff *We need to invest in villages to convert them into smart villages.* **JJ**

Ram Sidis

SEE CONTENT

Electrification and Digitalization to Empower the Smart City Revolution

Tuesday, November 17
12:31 p.m. - 12:47 p.m. (GMT +1)

The electrification of public services, digitalization of energy monitoring and consumption, combined with cutting-edge technological advances, are the foundation of renewed and improved urban services. Valerio Vadacchino made it clear that "digitalizing public transportation increases efficiency and reduces the number of vehicles on the road, while electrification enables us to advance towards the decarbonization of cities."

These two trends enable cities to be more energy efficient and deliver a dual benefit. As less energy is consumed, this generates cost savings while we also move towards a more ecological city model. Vadacchino also flagged the key role inhabitants play in achieving the decarbonization of cities: "The energy consumed needs to be green, but citizens also need to make intelligent use of this energy."

Speaker:

Valerio Vadacchino / Head of Marketing Global e-City - EnelX
- Rome - Italy

❝ *Through energy efficiency cities become more sustainable and optimize economic resources.* **❞**

SEE CONTENT

SMARTCITY LIVE 2020

Artificial Intelligence and Big Data in the Fight Against COVID-19

Tuesday, November 17
12:47 p.m. - 12:55 p.m. (GMT +1)
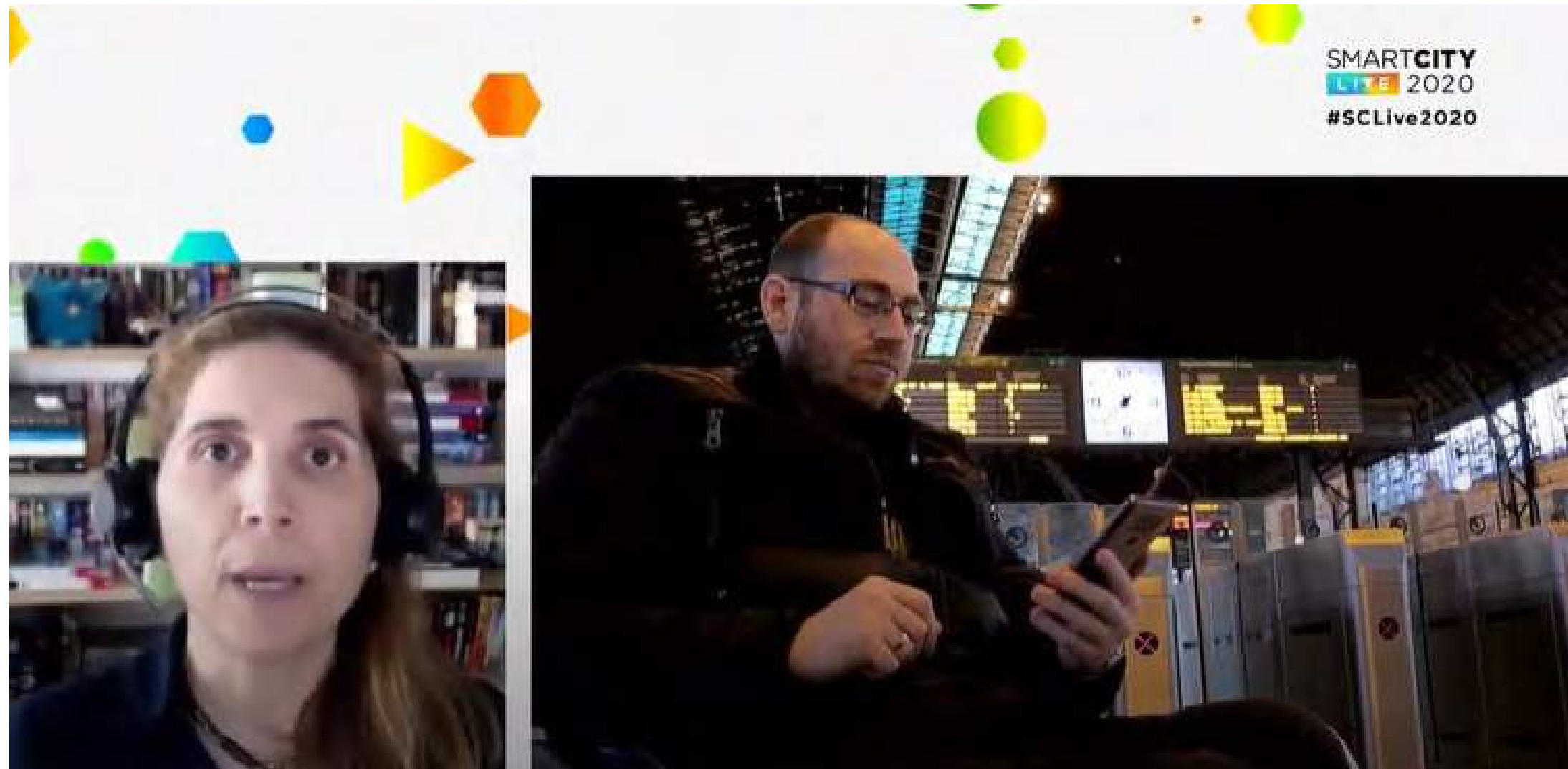
Speaker:

Nuria Oliver / Commissioner for Artificial Intelligence - Valencia - Spain

AI and Big Data are playing a key role in fighting coronavirus. Nuria Oliver explained that these technologies have been used "to support the efforts of the medical community and society at large to manage every stage of the crisis and its aftermath." Specifically, they are being used in virus detection and prevention tasks to speed up research into treatments.

AI and Big Data have also helped provide useful information to governments to help them define their public policies. By basing decisions on data, governments transmit an image of competence, reliability and transparency. "These qualities inspire trust among citizens in public figures," Oliver observed. Yet, she concluded, people need to be sure that their data is protected.

❝ *Many political decisions on the pandemic have been supported by Big Data and AI.* **❞**

SEE CONTENT

Empowering Small Business in Times of Crisis

Tuesday, November 17
12:55 p.m. - 1:03 p.m. (GMT +1)

Speaker:

Natalia Olson Urtecho / Co-founder - The Disruptive Factory
- COO - RadicalxChange

Eventually, the pandemic will pass, but many now fear that the global response to COVID-19 may have ravaged urban economies. Is it more important than ever for governments to financially invest in small businesses? Natalia Olson made it clear that government is a catalyst in helping finance infrastructure to invest in businesses. "I believe we have to empower private capital to invest in companies. Government has to stay small to remain efficient," she said. Moreover, in the smart city world, investing in infrastructure is key. "This is where a balance between government financing and private financing has to happen and meet halfway," she added. The co-founder of The Disruptive Factory, a woman-led company with sustainable goals that empowers small businesses, also stressed the need to empower more women as role models and business owners because "this is what is best for society." She went on to emphasize the need to be greener since "we need to think about the next hundred years."

❝ *Empowering more women is what is best for society.* **❞**

SEE CONTENT

Envisioning Our Urban Future Together

Tuesday, November 17
1:03 p.m. - 1:21 p.m. (GMT +1)

Speakers:

Miguel Eiras / Global Smart City, Smart Nation and Local Government Leader - Deloitte

Sharon Thorne / Global Board Chair - Deloitte

Deborah Sills / Global Consulting Government and Public Services Leader – Deloitte

Complying with SDGs is one of the keys to ensuring a fairer future for coming generations. The deadline for achieving these goals is 2030, however, "we won't meet the targets set until 2082 at our current pace," warned Sharon Thorne. Good intentions need to be transformed into action if there really is a global will to meet these SDG targets. "So far, there has been a lot of talk about what needs to do done, but now it's time to put this into practice," said Deborah Sills. Cities will play a crucial role in this task. Achieving environmental sustainability, social inclusion and justice across the world will only be possible if cities lead this change.

❝ *In order to reduce inequalities, the Administration must act at an ultra-local level: in neighborhoods and communities.* ❞

Deborah Sills

SEE CONTENT

SMARTCITY
LIVE 2020

A Just Transition with Climate and Social Ambition

Tuesday, November 17
1:21 p.m. - 1:31 p.m. (GMT +1)

Speaker:

Teresa Ribera Rodríguez / Fourth Vice-President and Minister for Ecological Transition and Demographic Challenge - Government of Spain - Madrid - Spain

The Spanish government has drawn up a post-pandemic recovery plan to increase the country's resilience. "This new roadmap will help us rethink our energy and mobility model," Teresa Ribera stated. According to the Fourth Vice President, in cities this will translate into "more green spaces and an urban redesign that enables us to better harness natural resources" such as the sun and wind. This new model will make it possible to advance towards greater sustainability in cities with the aim of achieving "climate neutrality," which must be reached before 2050, as stipulated in the Spanish government's Long-Term Decarbonization Strategy (ELP 2050).

❝ *The social and environmental resilience of cities has increased exponentially during the pandemic.* ❞

SEE CONTENT

Paris, The 15-minute City

Tuesday, November 17
1:31 p.m. - 1:47 p.m. (GMT +1)

The firm commitment of Paris to carrying out its ecological transition means promotion of the 15-minute city. In other words, a city where its inhabitants can access all services within a quarter of an hour on foot or by bike. Anne Hidalgo explained that this means moving "towards a model of organization and life based on neighborhoods." During the pandemic, the 15-minute city has also been an efficient management tool, as it has served to analyze the spread of COVID-19 in the city on an incredibly detailed scale. Another of the city's commitments is to improve sustainability, and the changes to the mobility model can be observed by simply taking a walk through the city. "Paris has become a bike-friendly city, which it wasn't previously, as bikes now carry greater weight in the urban mobility mix," Hidalgo pointed out. Carlos Moreno noted that ecology is an essential concept and that "we have to live in good conditions to have a good health". A crucial wish in current times.

Speaker:

Anne Hidalgo / Mayor - City of Paris - France

Carlos Moreno / Scientific Director of the Chair Entrepreneurship, Territory, Innovation - The Sorbonne University - IAE Paris - France

" *The 15-minute city model has served to analyze the evolution of the pandemic neighborhood by neighborhood.* **"**

Anne Hidalgo

SEE CONTENT

How Companies and Innovators Can Work Together to Build Smart and Sustainable Cities

Tuesday, November 17
1:47 p.m. - 2:02 p.m. (GMT +1)

Speakers:

Alex Pardo / General Director - Corporate Services and Venture Capital - Sorigué - Barcelona - Spain

Francisco Javier Gonzalez Baez / Open Innovation Manager - Acciona - Madrid - Spain

Silvia Sanjoaquín Vives / Head of New Business Models in Energy Efficiency - Naturgy - Barcelona - Spain

Gonzalo Galindo / Head of CEMEX Ventures - Madrid - Spain

The decarbonization of cities and the fight against the climate emergency are such big challenges that the only way to tackle them is through collaboration. One of the forms this takes is open innovation, a model that allows emerging companies and established corporations to work together to meet common goals. According to Gonzalo Galindo, in the case of Cemex, its commitment to innovation through startups is oriented towards finding solutions that will make its business more sustainable and environmentally friendly. Francisco Javier González stressed that Acciona works closely with various startups on renewable energy and sustainable mobility projects. Silvia Sanjoaquín highlighted Naturgy's participation in Start4Big, an innovation hub where emerging companies can present their initiatives to consolidated companies in order to advance towards more advanced urban models. Lastly, Alex Pardo stated that, when collaborating with startups, "the innovation capacity of emerging companies is just as important as their values being aligned with those of your own company."

❝ *Startups help us innovate in a more disruptive way, and we offer them the opportunity to test their technological solutions in the real market.* **❞**

Francisco Javier González

SEE CONTENT

Maimunah Shariff: The Impact of COVID-19 in Informal Settlements

Tuesday, November 17
2:02 p.m. - 2:12 p.m. (GMT +1)

Speaker:

Maimunah Shariff / Executive Director - United Nations Human Settlements Program (UN-Habitat) - Malaysia

The pandemic has revealed the inequality that can exist in the same city and shown that combating the virus is much more complicated in neighborhoods where access to quality healthcare is uneven, housing inadequate, water and sanitation lacking, transport infrastructure patchy and jobs precarious. "Unplanned urban living leaves people vulnerable, and the people most vulnerable to disease are those living on the margins of our cities," warned Maimunah Shariff. In this respect, Shariff pointed out that one of the main urban challenges is to ensure that the majority of the population, especially in developing countries, has access to decent housing. To achieve this goal, citizens need to be digitally empowered so that they can access the formal labor market and increase their income with greater ease.

❝ *Turning informal jobs into formal ones is essential to achieving the goal of everyone having a home.* **❞**

SEE CONTENT

SMARTCITY LIVE 2020

People-focused Smart Cities: Urban Digital Transformation Working for the Benefit of All

Tuesday, November 17
2:12 p.m. - 2:22 p.m. (GMT +1)

Technologies such as 5G applied to autonomous mobility or IoT to digital platforms for service delivery are having a major impact on urban transformation. "The challenge now is to make this technology work to transform cities into more inclusive and sustainable places," observed Pontus Westerberg. However, developing these innovations will be sterile if we do not address a higher priority goal first: ensuring that the world's population has internet access. Although the scale of this challenge is huge, Westerberg asserted that the UN goal of universal connectivity can be reached by 2030. To achieve this, we need to promote public policies for investment in infrastructures while facilitating access to connectable devices and training in order to equip the entire population with digital skills, Westerberg said.
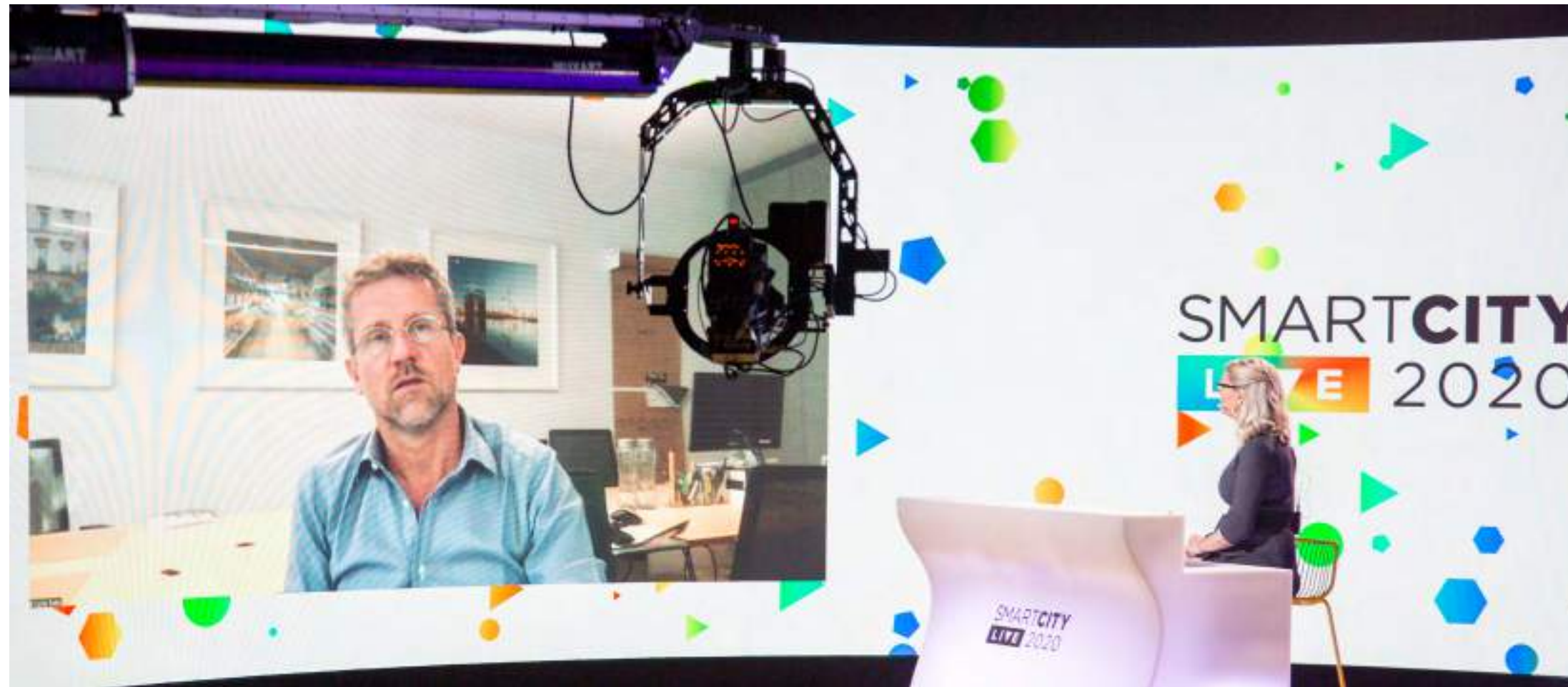
❝ *Communities and local governments must lead the way in implementing technology in cities.* **❞**

Speaker:

Pontus Westerberg / Program Management Officer - UN-Habitat
- Barcelona – Spain

SEE CONTENT

SMART**CITY** LIVE 2020

Carlo Ratti: Reinventing the Post-pandemic World

Tuesday, November 17
2:22 p.m. - 2:38 p.m. (GMT +1)

Speaker:

Carlo Ratti / Director - MIT Senseable City Lab – London
– United Kingdom

The pandemic has taken its toll on the global economy and urban living. Yet lockdowns and the overnight shift to remote work are also responsible for the emergence of new ways of doing things and a "trial and error" approach that should be kept in the future, according to Carlo Ratti. Citing Churchill's famous quote "never waste a crisis," the Director of the MIT Senseable Lab explained the projects Carlo Ratti Associatti has been involved in during the pandemic and expanded on his views on smart cities. He highlighted the importance of CURA, a non-profit open-source design and build initiative for helping ICUs scale up, and C40's Reinventing Cities competition for innovative, carbon-free and resilient urban projects, which is "a new way of thinking about development." Along these lines, referring to the international competition Carlo Ratti Associati won in 2017, he elaborated on the 15-minute-city concept, which is a great opportunity to try "to use the urban infrastructure better" and get to a new normal after the pandemic. Ratti also advocated the development of senseable/sensible cities. Behind this concept is the convergence of the digital and the physical, the Internet of Things (IoT) entering the space of our cities to better use the infrastructure we have. Somehow, tomorrow's challenges could be met using more intelligence in our cities, "making better use of what we already have", he said.

❝ *I believe in senseable cities, able to sense but also sensible. What lies behind this concept is IoT entering the space of our cities.* **❞**

SEE CONTENT

The Post-pandemic Transformation of Urban Mobility

Tuesday, November 17
2:38 p.m. - 2:44 p.m. (GMT +1)
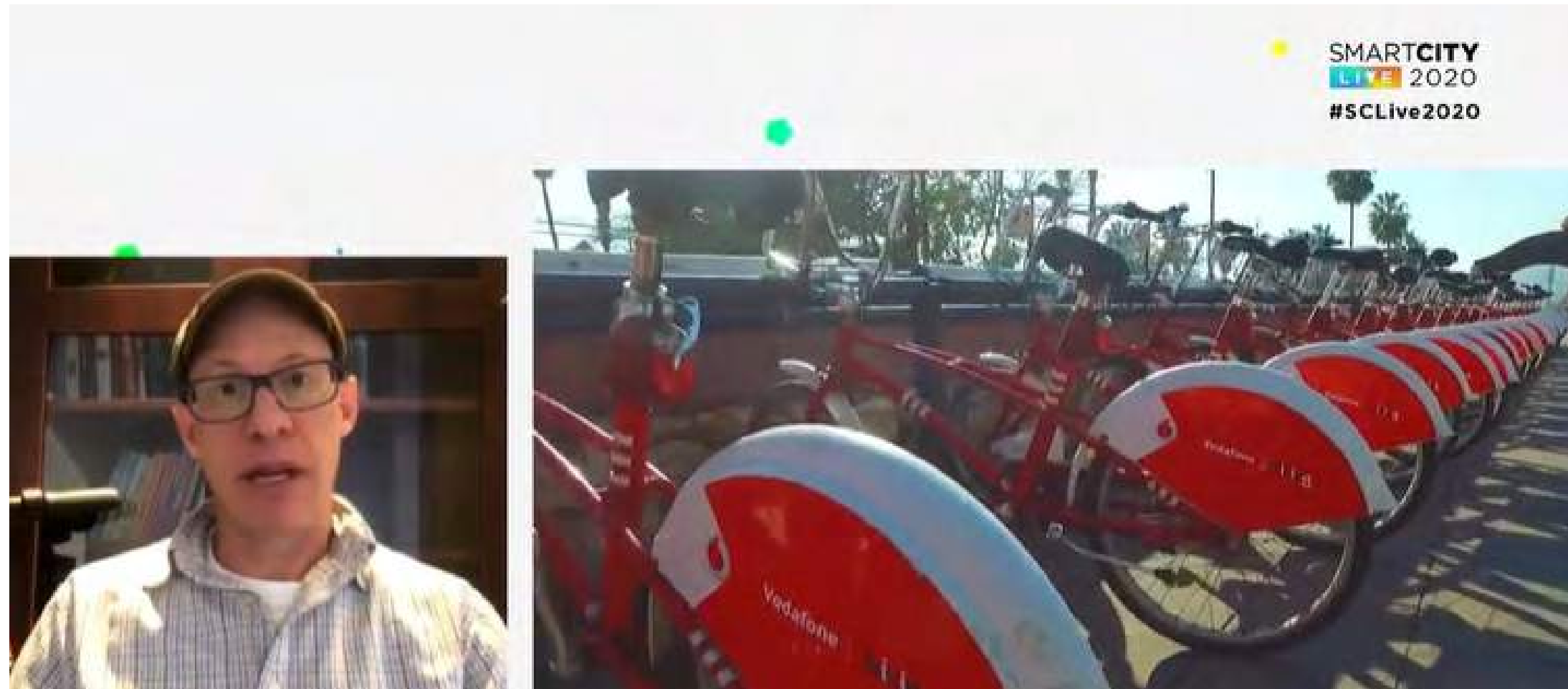
Speaker:

Boyd Cohen / Co-founder - IoMob-NextGen Enterprise Mobility
as a Service-Maas - Barcelona - Spain

European cities are making substantial investments in renovating their infrastructures with the aim of advancing towards greater sustainable mobility. Building large pedestrian areas, rolling out non-motorized and motorized micro-mobility vehicle lanes and restricting automobile traffic are some of the post-pandemic trends being observed in cities. "The end result will be fewer cars on city streets," asserted Boyd Cohen. He also highlighted that COVID-19 has made some citizens wary of using public transportation, as it could be a source of infection. Nonetheless, the entrepreneur believes that the momentum in advancing towards sustainable mobility is now unstoppable and that the pandemic has actually accelerated this process.

" *In European countries the COVID-19 pandemic has served to accelerate mobility towards a more sustainable model.* **"**

SEE CONTENT

The Global Voice of Cities

Tuesday, November 17
2:44 p.m. - 3:09 p.m. (GMT +1)

Speakers:

Michael Müller / Governing Mayor and Metropolis President
- City of Berlin - Germany

Thembisile Nkadimeng / Co-President UCLG and Mayor of Polokwane
– South-Africa

In the forties and fifties, a range of social and demographic factors led many people in the United States to abandon cities to settle in the suburbs. Could the COVID-19 pandemic cause a similar movement worldwide? According to the Mayor of Berlin, Michael Müller, we are not experiencing a similar phenomenon for now. At the moment, people are still prioritizing homes in the city center but looking for ones that provide greater levels of comfort. Yet in cities in developing countries, such as Polokwane, the priorities are different. "We need to accelerate investment in digital infrastructures to provide internet access to the whole population," said Thembisile Nkadimeng, as she believes this is the only way to achieve inclusive development.

❝ *People are not leaving the city, but they are looking for more spacious homes where they feel more comfortable.* **❞**

Michael Müller

SEE CONTENT

SMARTCITY
LIVE 2020

Saskia Sassen: Urban Fragilities in a Post-pandemic World

Tuesday, November 17
3:09 p.m. - 3:24 p.m. (GMT +1)

Speaker:

Saskia Sassen / Professor - Columbia University - United States

The COVID-19 crisis has exacerbated inequalities and emphasized the need to help countries address the drivers of fragility in a holistic manner. The situation is particularly serious in areas where the problems generated by the pandemic come on top of those caused by the climate emergency. "There are people who are experiencing the disasters of climate change directly: their land is being destroyed and they are losing their livelihoods," warned Saskia Sassen. "We must listen to their voices," she insisted. Moreover, she said that small changes and gestures can have a major impact on society. For example, citizens are now increasingly concerned about buying from local businesses, and some people have even made an effort to get to know their neighbors a little better for the first time during the pandemic.

❝ *After the pandemic, cities can only return to normal if citizens regain confidence.* **❞**

SEE CONTENT

How to Accomplish the Right to Housing? Interview with Mayor Ada Colau

Tuesday, November 17
3:24 p.m. - 3:41 p.m. (GMT +1)

Despite being a human right enshrined in the legislation of most countries, 20% of the world's population currently live in substandard housing. This housing emergency could be exacerbated by the pandemic, although the truth is that problem has been around for many years. For that reason, over the last five years Barcelona has doubled the number of affordable public housing units. Moreover, during lockdown, the Catalan capital also mobilized quickly to provide solutions for people without a roof over their heads. The number of apartments for homeless people in Barcelona increased from 2,200 to 3,000, and public facilities were equipped to accommodate people in need.

❝ *Over the last five years, Barcelona has doubled public housing resources.* **❞**

Speaker:

Ada Colau / Mayor - City of Barcelona - Spain

SEE CONTENT

SMART**CITY** LI🔲E 2020

Economic and Social Recovery Leaving No One Behind

Tuesday, November 17
3:41 p.m. - 4:01 p.m. (GMT +1)

COVID-19 started out as a health crisis and, after a few months, was compounded by an economic and social crisis. To absorb the impact of this pandemic and prepare for future crises, Nuria Marín pointed out the need to increase the resilience of cities and ensure that inequalities between citizens are not accentuated. In this respect, the Mayor of L'Hospitalet de Llobregat also stressed that it is just as important to move towards a smart society model, where no one is left behind, as it is to move towards a smart city one. Along these lines, Emilia Saiz highlighted that COVID-19 has revealed the extent of the digital divide and the urgent need to reduce it. Finally, Ana María Rodríguez-Ortiz pointed out the handicap Latin American cities have faced during pandemic: "The virus is not democratic, it preys on the weakest in society."

Speakers:

Núria Marín / Mayor – City of L'Hospitalet de Llobregat - President - Diputació de Barcelona - Spain

Ana María Rodríguez-Ortiz / Sectors and Knowledge - Inter-American Development Bank – Washington - United States

Emilia Saiz / Secretary General - United Cities and Local Governments (UCLG) - Barcelona - Spain

❝ *Technological development provides us with tools to make cities more inclusive.* ❞

Ana María Rodríguez-Ortiz

SEE CONTENT

Urban Mobility Trends Post-Lockdown

Tuesday, November 17
4:01 p.m. - 4:17 p.m. (GMT +1)

Before early 2020, nobody imagined that the right to mobility might be restricted to the degree to which it has been in 2020 and for such a long period. Josep Mateu pointed out that, after the pandemic, the way we move around cities will evolve to take advantage of the opportunities offered by technology and advance towards a more sustainable model. "But we mustn't forget that the priority of mobility must be to meet people's needs," he observed. Some of the most important trends over the next few years will be digitalization and electrification. Thanks to the former, intermodality will be promoted and we will be able to choose the most suitable mode of transportation for each situation," said Isabel Trias de Bes, while the latter will allow "cities to become greener environments," in the words of Lluís Puerto.

Speakers:

Josep Mateu / President - RACC Mobility Club

Lluís Puerto / Director - RACC Foundation – Barcelona - Spain

Isabel Trias de Bes / Responsible for Innovation Projects – RACC – Barcelona - Spain

❝ *Digitalization and electrification are the keys to sustainable and health safe mobility in cities.* ❞

Josep Mateu

SEE CONTENT

SMART**CITY** 2020

How Can Micromobility Support a Green and Sustainable Recovery?

Tuesday, November 17
4:17 p.m. - 4:33 p.m. (GMT +1)

The COVID-19 pandemic has revealed how micromobility services such as rented e-scooters and shared bikes are now a crucial part of the transportation mix in many cities. In Spain, SEAT wants to lead the shift in customer experience in this new era of mobility. Lucas Casasnovas explained why the Spanish automaker moved into micromobility even before the coronavirus pandemic confined us to our homes and reduced travel to essential workers and journeys. The environment, cities and people are key for the company, which considers mobility "a fundamental right". Casasnovas showcased the first electric scooter equivalent to 125cc and its brand-new SEAT Mó Motorsharing service, which will help achieve "cities 100% decarbonized, using quieter, pollution-free e-cars and with a multimodal mobility ecosystem where public and private initiatives will be combined."

Speaker:
Lucas Casasnovas / Director - Seat Mó – Barcelona - Spain

❝ *In the context of micromobility in smart cities we do not consider scooters and micromobility solutions to be competition for the car, but rather a complement.* **❞**

SEE CONTENT

Making Tech Work for People Across the Globe

Tuesday, November 17
4:33 p.m. - 4:50 p.m. (GMT +1)

Speaker:

Miguel Gamiño / Executive Vice President and Head of Global Cities
- Mastercard - New York – United States

Teleworking, telemedicine, e-learning. These concepts that were once unfamiliar to us have now become a daily reality for many during the pandemic. However, the rise in the digitalization of society has proportionally increased the risk of marginalizing people who are not part of this technological revolution. Universal internet access must become a priority worldwide, asserted Miguel Gamiño.

Ensuring that the world's population has access to a quality internet connection is a huge challenge, and collaboration is the only way of achieving this. Governments, large companies, citizens, NGOs and academics "all need to take on their share of responsibility and act accordingly," urged Gamiño. This cooperation will enable cities to emerge stronger than ever and become more inclusive and resilient places.

❝ *Citizens, the Administration and the private sector must work together to make cities more resilient.* **❞**

SEE CONTENT

Democratization of Technology and Connectivity as a Social Policy

Tuesday, November 17
4:50 p.m. - 5:01 p.m. (GMT +1)

Speaker:

Jordi Puigneró / Minister for Digital Policy and Public Administration
– Government of Catalonia – Barcelona - Spain

COVID-19 has shown that digitalization is crucial for increasing the economic and social resilience of communities and territories. In this respect, Catalonia has made it a priority to deploy 5G and fiber optic networks across its territory. "This is a strategic objective, and that's why the government is working hard to achieve it," explained Jordi Puigneró. In pursuit of this goal, Catalonia will operate the first open 5G laboratory in urban and rural areas. The representative of the Catalan government also highlighted that these technologies allow business to be conducted from remote villages or even from mountain locations, which used to be impossible. Catalonia aims to become a 5G reference point worldwide in order to attract international projects related to this technology to its territory while creating thousands of jobs.

❝ *The Catalan government has led the deployment of 5G and fiber optics throughout Catalonia so that the network can also reach rural areas.* **❞**

SEE CONTENT

How the COVID Response and Recovery Are Driving the Evolution of Digital Cities Now, Faster than Ever Before

Tuesday, November 17
5:01 p.m. - 5:17 p.m. (GMT +1)

Speaker:

Julia Glidden / CVP, Worldwide Public Sector - Microsoft - Boston – United States

When the COVID-19 pandemic is over and we look back at this time, we will remember the high death toll and unparalleled impact on the economy and daily lives of people. However, the health crisis has also been the catalyst for structural transformations that will endure, especially digitalization. "The public sector has leapt forward 20 years in terms of digital transformation," calculated Julia Gidden. Microsoft is one of the companies that has played a key role in global digitalization, due to its size and extensive portfolio of solutions. "Making a city more digital improves processes, strategic decision-making and operational efficiency," Gidden pointed out. In short, it delivers greater quality of life and well-being for citizens.

❝ *Society will demand that all public services are accessible online, and the Administration has to make this possible.* **❞**

SEE CONTENT

Inclusive Technology and Digital Rights

Tuesday, November 17
5:17 p.m. - 5:37 p.m. (GMT +1)

Speakers:

Theo Blackwell / Chief Digital Officer - City of London – United Kingdom

Michael Donaldson / Chief Information Officer - Barcelona City Council - Barcelona - Spain

John Farmer / CTO – New York City Mayor's Office of the CTO - United States

Jeanne Holm / Chief Data Officer - City of Los Angeles – United States

Technology's potential in fostering economic growth and increasing productivity is beyond question, but when deployed unevenly in cities, it can create a digital divide that can exacerbate inequality. John Farmer elaborated on this by highlighting that the importance of broadband internet today is equivalent to having electricity years ago. That is why, Farmer went on to say, New York has distributed more than 300,000 tablets to students since start of the pandemic. In the city of Los Angeles, the digital divide is as high as 40% in some instances: in wealthy neighborhoods household connectivity exceeds 98% whereas in vulnerable ones it does not even reach 50%. "We are working together with the telecommunications companies to reduce this unacceptable difference," said Jeanne Holm. Michael Donaldson stressed that connectivity should be considered a human right. "Some people don't have access to suitable devices or have sufficient digital skills and, therefore, run a much higher risk of being excluded," concluded Theo Blackwell.

❝ *A city can only be smart if it is accessible to everyone.* **❞**

John Farmer

SEE CONTENT

Adopting Technologies Responsibly: a Global Policy Roadmap for Ethical Smart Cities

Tuesday, November 17
5:37 p.m. - 5:47 p.m. (GMT +1)

Most cities are not New York, London or Barcelona, meaning that not all cities have the necessary resources to implement the technology needed to develop a smart city. Mindful of this situation, the World Economic Forum (WEF) has developed a "set of real tried and tested policies" and made them available to any city that wants to implement them. "To date, 3,000 cities in 22 countries have adopted the WEF recommendations," Jeff Merritt said. This roadmap designed by the WEF is based on open data and includes a series of founding principles that do not tie smart city development to any specific technology.

❝ *A policy roadmap will facilitate the adoption of smart city models for cities with fewer resources.* **❞**

Jeff S. Merritt

Speaker:

Jeff S. Merritt / Head of Internet of Things and Urban Transformation - World Economic Forum - San Francisco – United States

SEE CONTENT

Brent Toderian: Brainstorming Urban Ideas

Tuesday, November 17
5:47 p.m. - 6:02 p.m. (GMT +1)

Speaker:

Brent Toderian / City planner and urbanist - Toderian Urban Works
- Vancouver - Canada

The popularization of teleworking has been celebrated by most workers. But have the potentially harmful effects for the ecosystem of cities been weighed up properly? "I don't think in-depth analysis of all potential scenarios has been carried out yet," observed Brent Toderian. Impoverishing the commercial fabric or desertification of certain areas of cities are some of the negative collateral effects of teleworking that public figures should bear in mind. Mobility is another urban aspect that has changed significantly since the beginning of the epidemic. In this regard, Toderian considers that the prevailing trend will be marginalization of the car as a means of urban transportation while all other ways of moving around the city will be strengthened: on foot, by bike, motorbike, electric scooter or any other micromobility solution.

" *Working from home has been a demand from citizens for a long time, but we must also consider the negative effects of this trend.* **"**

SEE CONTENT

Rethinking Urban Planning in Developing Economies

Tuesday, November 17
6:02 p.m. - 6:20 p.m. (GMT +1)

Speaker:

Sameh Wahba / Global Director, Urban, Disaster Risk Management, Resilience and Land Global Practice - World Bank - Washington DC – United States

Despite the problems it has generated during the pandemic, the high density of cities is not necessarily negative. "The high concentration of people in the same space allows citizens to be close to economic opportunities, encourages the exchange of ideas, facilitates economies of scale and stimulates productivity," Sameh Wahba said. However, if city management is not optimal, we already know the disadvantages this entails: pollution, crowds and crime, among others. Wahba also highlighted that the COVID-19 crisis will offer opportunities to improve urban development. "Thanks to teleworking, families can gain square meters in their homes at a lower price without compromising on job opportunities for members of the household," the director of the World Bank explained. It is also the right moment for cities suffering from excess pressure from foreign visitors to rethink their tourist model, Wahba added.

❝ *If properly managed, high density in cities offers inhabitants economic opportunities and access to better services.* **❞**

SEE CONTENT

Strengthening Metropolitan Governance

Tuesday, November 17
6:20 p.m. - 6:40 p.m. (GMT +1)

Speakers:

María Jesús Vera / General Director - Corporation of Regional Development and Tourism - Santiago Metropolitan Government - Chile

Antonio Balmón / Executive Vice President - Metropolitan Area of Barcelona (AMB) - Spain

Claudia López / Mayor - City of Bogotá - Colombia

Some urban challenges are too big or too complex to be tackled solely within a municipal framework. This is why, in the context of the global pandemic, metropolitan governments have played an important role in large conurbations. "We concentrated our efforts on providing economic assistance to the most vulnerable people and accompanying people who had been isolated by lockdown," said Antonio Balmón. In Santiago de Chile, one of the priorities of the Metropolitan Government, as María Jesús Vera explained, was to roll out kilometers of bike lanes to encourage the use of this safe mode of transportation during the pandemic. In the case of Bogotá, COVID-19 has also strengthened metropolitan integration, as the Bogotá-Cundinamarca Metropolitan Region was created at the height of the pandemic. "The new administrative structure has allowed us to combat the epidemic better," said Claudia López.

❝ *City councils and supra-municipal bodies have been responsible for absorbing a large part of the social impact of the pandemic.* **❞**

Claudia López

SEE CONTENT

Final Remarks

Tuesday, November 17
6:40 p.m. - 6:48 p.m. (GMT +1)

Speaker:

Jaume Collboni / First Deputy Mayor - Barcelona City Council - Spain

Companies focused on the digital economy have withstood the effects of the pandemic better. The deputy mayor of Barcelona, Jaume Collboni, highlighted that in recent years the city has consolidated itself as a powerful technological hub in Europe, and this has enabled it to absorb the impacts of COVID-19 better. In order to maintain this prominent position across the continent, he stressed that the city must concentrate on generating talent and attracting the best international professionals. Barcelona has a detailed economic recovery plan called the Barcelona Green Deal, which is based on digital and green economy projects. Over the next 10 years, the city will develop one million square meters of economic space that will create more than 60,000 jobs.

❝ *While many companies in traditional sectors are disappearing, the digital sector is generating new business opportunities and creating jobs.* **❞**

SEE CONTENT

B) SIDE EVENTS

More than 40 inspiring side events led by organizations and companies making strides in urban development were scheduled during Smart City Live 2020. They are all free to watch on demand on the Tomorrow.City platform.

40+ Side Events to catch up on

Missed a session at Smart City Live? There are now **44 hours of footage** from the digital event to access, including **more than 40 inspiring side events** led by organizations and companies making strides in urban development, so take a look - they're **all free to watch** at Tomorrow City

WATCH ON DEMAND

Tuesday, November 17th

Reinventing Cities with Technology after COVID-19 – Unpacking Ideas from Japan

Tuesday, November 17
10:15 a.m. - 11:15 a.m. (GMT +1)

Organizer:

Tokyo Development Learning Center and World Bank Group

The countries that have combated the pandemic best are those that have shown greater resilience. In the case of Japan, its cities have played a crucial part in the resistance against coronavirus disease while technology use has played a leading role. "Due to COVID-19 citizens are afraid to move around because they don't want to take public transportation and get too close to other people," explained a representative from Fukuoka city. That is why the city opted "to strengthen the artificial intelligence system to adapt bus routes in the most efficient way and make them less congested." Another key point was warning people about which areas of the city were busy to help them avoid crowds. "We keep citizens constantly updated so that they look for alternative routes for their trips," explained Taisuke Matsuzaki, Head of Smart City Projects in Kobe. A representative of the city of Yokohama, he noted that Japan is accustomed to natural disasters and has very advanced protocols for evacuating large numbers of people: "Now, during the COVID-19 pandemic, the challenge is to adapt these protocols so that they serve to distance people," explained the Yokohama representative.
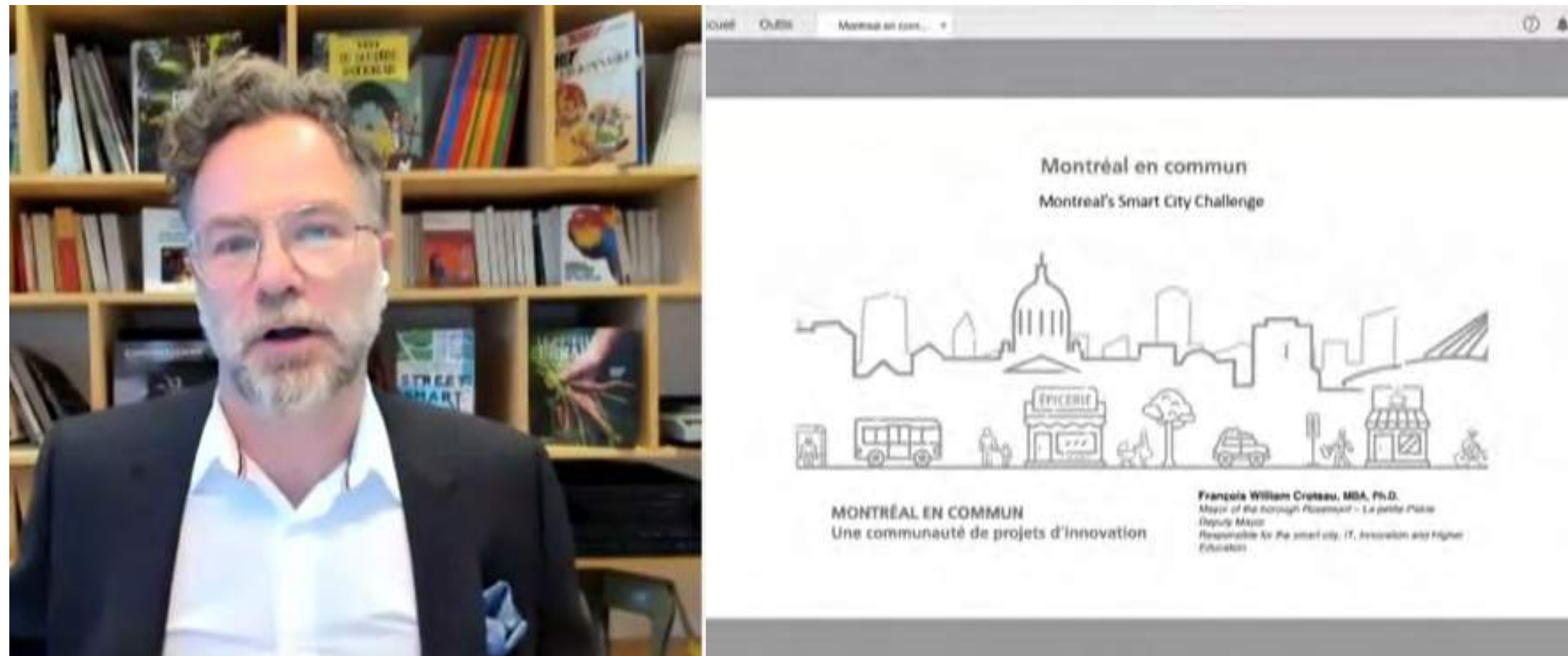
❝ *COVID-19 has made us realize how important data is in keeping citizens safe.* **❞**

Taisuke Matsuzaki
Head of Smart City Projects in Kobe

SEE CONTENT

People-focused Smart Cities: Connecting All the World's People by 2030 as a Force for Good

Tuesday, November 17
1:00 p.m. - 2:00 p.m. (GMT +1)

Organizer:
UN-Habitat

The pandemic has shown that digitalization is one of the keys to making society and the economy resilient. For this reason, people and regions that do not have internet access are more vulnerable. In an attempt to solve this problem, the UN has set the goal of ensuring that all the world's people have internet access by 2030. But how do we make internet access universal? "Digital transformation must start with the government itself," pointed out Lawrence Boya, spokesperson for the City of Johannesburg. Junyoung Choi, a representative from Seoul, stressed that the digital transformation process must be based on sustainability, innovation and a people-oriented approach. Michael Donaldson, spokesperson for Barcelona, agreed with his counterpart from Seoul's view and added that citizens are the biggest experts on the city. "That's why we need to listen to them during the process," Donaldson added.

❝ *The people who know most about cities are the citizens who live in them, so we need to listen to them.* **❞**

Michael Donaldson
CIO of Barcelona City Council

SEE CONTENT

G20 Global Smart Cities Alliance – Launching the Policy Roadmap

Tuesday, November 17
5:45 p.m. - 6:45 p.m. (GMT +1)

Organizer:

G20 Global Smart Cities Alliance

Creating a foundation upon which cities can build their smart city policies. That is the aim of the policy roadmap developed by the World Economic Forum. "This is an open data roadmap which seeks to provide general development guidelines that allow each city to adopt the smart city model that best suits their reality," explained Andrew Collinge, Advisor to the city of Dubai.

In the case of Chicago, one of City Council's priorities for smart city deployment was to make it fully accessible for all citizens, regardless of their abilities. Digitalizing the Administration ensured that everyone, regardless of their circumstances enjoyed the same access and, therefore, the same opportunities, explained Tamley. In her turn, Yalena Coleman, from Connected Places Catapult, highlighted that implementing a smart city is a matter of public interest and that the private sector must also get involved. "Companies can contribute innovation to technology implementation, operation and maintenance," argued Coleman.

❝ *Providing cities with a policy roadmap on smart city technologies can accelerate their implementation.* **❞**

Andrew Collinge
Advisor to the City of Dubai

SEE CONTENT

SMART**CITY** LIVE 2020

Latest Smart City Technology in Korea and Spain

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)

Organizer:

Kotra (Korea Trade-Investment Promotion Agency)

The future of cities is smart, and South Korea and Spain are two of the countries positioning themselves to lead the smart city ecosystem worldwide. In Spain, Indra is one of the leading companies in this sector. Pablo Martínez, Head of Indra Software Labs, specified that his company has developed 150 smart solutions that are applied in over 100 cities. Another large company with extensive experience developing smart city solutions is the South Korean corporation LG. "One of our major projects is the City Hub. This is an open-data platform where smart city services can be activated or deactivated according to the needs of each city," explained Veyins Neo Toprak, General Manager of LG's

Future Strategic Business Division. However, smart city innovations are not exclusive to big corporations. The South Korean startup Dtonic was part of a joint venture that has created an automatic track and trace system for COVID-19. "The software has been applied in our country and allows us to cross-reference large amounts of data (card payments, geolocation of smartphones) to identify the infected person's contacts," noted Nora Lee, CEO of Dtonic.

❝ *With our City Hub Technology, cities can activate and deactivate smart services at will.* ❞

Veyins Neo Toprak
General Manager of Smart City and Future Strategic Business Division at LG

SEE CONTENT

SMART**CITY** LIVE 2020

Digitalization as an Enabler in the Retail & Fashion Industry to Thrive in the New Normal

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)
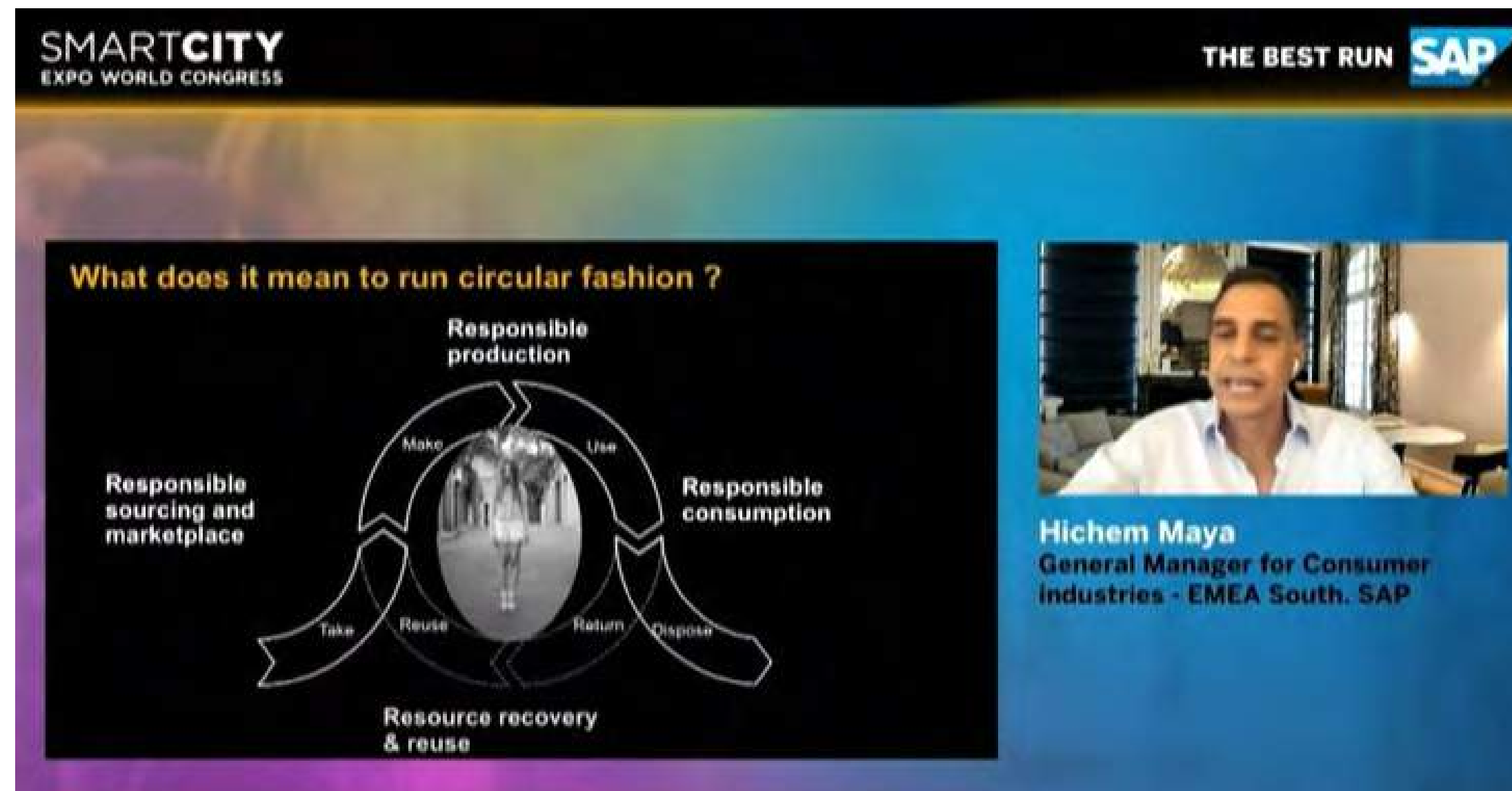
Organizer:

SAP

The way we shop has been transformed radically due to COVID-19. "The key is to be able to anticipate demand," commented Roberto Gómez, COO at Ametller Origen, a supermarket that saw its online orders multiply 15-fold during the lockdown. In order to absorb this exponential growth in online orders, Gómez asserted that the most important thing was data management. Collecting all the metrics, processing them and converting them into useful information on which to base decisions was crucial. For some businesses, the pandemic has unlocked higher profitability. "It is in our interest to increase the ratio of internet sales within our turnover, as we earn more money for each garment we sell online," Cüney Yavez, CEO of Mavid Jean, revealed. He also said that digitalization has stopped being something that only concerns the IT department and is now a phenomenon that permeates the entire group.

❝ *You have to interpret the data in order to anticipate demand.* **❞**

Roberto Gomez
COO at Ametller Origen

SEE CONTENT

SMART**CITY** LIVE 2020

Barcelona Smart Region: Innovative Projects to Improve Connectivity and Sustainability

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)

Organizer:

Diputació de Barcelona

To convert an area covering 7,726 square kilometers and over 300 municipalities in a smart territory comprising smart cities and smart villages. This is the aim of the Diputació de Barcelona, whose first step has been to deploy fiber optics across the province. "We have already managed to get high-speed internet to most villages and cities," celebrated Gregori Mora, Smart Region Manager at the Diputació de Barcelona.

Another of the provincial deputation's initiatives is to provide all municipalities with the option of managing their data in an intelligent way. To achieve this, it has developed the Smart Region Platform, a system that collects and processes in real time urban data about noise, public lighting, mobility and air quality. Mora said that the biggest 40 municipalities in the region have already joined the program and predicted that the rest will join shortly.

" *We have 8,000 sensors that measure the pulse of the entire region of Barcelona.* **"**

Gregori Mora
Smart Region Manager at Diputació de Barcelona

SEE CONTENT

SMART**CITY** 2020

CIOs as Linking Pins: Bridging IT and European Digital Policy for Smart Cities

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)

Organizer:
Eurocities

What do CIOs of European cities spend their time doing? "I spend many hours at work analyzing European regulations. It would be a big mistake not to do so," stated Michael Donaldson CIO of Barcelona. It is a good example of the extent to which European policies have an impact on local governments. According to Marijn Fraanje from The Hague, one of the trends we will see in coming years across the European Union is a common digital identity. "If there are no borders between countries, why should there be different digital identities," Fraanje asked. Another of the keys to developing a startup ecosystem on a European scale will be intercity collaboration. "We need to find common spaces where municipal managers from different cities can share their expertise and promote mutual enrichment," said Bart Rosseau of the City of Ghent.

" *If there are no borders between countries, why should there be different digital identities?.* **"**

Marijn Fraanje
CIO of The Hague

SEE CONTENT

Smart Mobility, the First Brick of the Smart City at the Service of Citizens

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)

Organizer:
Keolis

The definition of a smart city varies significantly depending on who you ask. According to Arnaud Julien, Chief Innovation Officer at Keolis, what distinguishes smart cities is their ability to understand citizens and adapt to their needs. "To achieve this, it's necessary to monitor cities and process data in order to be able to adapt and tackle global challenges such as climate crisis or COVID-19." In terms of specifics, one of the pillars of the smart city is smart mobility. Dijon, where Keolis is responsible for public transportation, offers users an all-in-one app that allows them to manage all transportation modes on the same network map. This includes all public transport services, parking facilities and the bike-sharing service. The application has been a great success and is currently used by 200,000 people in the French city.

❝ *The three pillars of the smart city are resilience, sustainability and efficiency.* **❞**

Arnaud Julien
Chief Innovation, Data and Digital
Officer at Keolis

SEE CONTENT

Digitization Enables New Economy – Binjiang IoT Town Builds Polit Zone of Digital Economy Development

Wednesday, November 18
9:00 a.m. - 9:45 a.m. (GMT +1)

Organizer:

Hangzhou Binjiang IoT Town

A region that represents just 1% of the territory and accounts for 4% of the total population concentrates 40.3% of all the nation's exports. This is the case of the Zheijan province in China, which has reached this impressive figure thanks to digitalization of industry and implementation of technologies like Big Data, cloud computing and AI in manufacturing processes. One of the jewels of the crown in Zheijan is the Binjiang district, in the city of Hangzhou. This area is a cluster of high-tech companies spread over 3.66 square kilometers. The cluster comprises around 450 companies employing about 90,000 workers. The combined revenue of these companies comes to 207.7 billion yuan (30.07 billion US dollars). Despite the coronavirus pandemic, some 300 companies in areas such as cloud computing, Big Data, cybersecurity and microchip production are expected to join the cluster in 2021.

❝ *We want to be a leader in industrial digitalization by focusing on technologies such as Big Data, cloud computing and AI.* **❞**

**Hangzhou Binjiang
IOT Town**

SEE CONTENT

The Business Case for Climate-Neutral Cities – The Mission of our Time

Wednesday, November 18
10:15 a.m. - 11:15 a.m. (GMT +1)

Organizer:

Innovation Norway

The climate crisis is a very real threat and, regrettably, the climate goals needed to revert this situation are not being reached quickly enough. "There's still time, if countries intensify their efforts, we can change the situation," said Jekabs Groskaufmanis, from Lavitjas Mobilais Telefons (LMT). Apart from action by states, cities play an important role in combating climate change, as they hold authority over key areas for decarbonization like mobility, waste management and public lighting. Groskaufmanis also reminded us that investing 1% of GDP in low-emission solutions in the city translates into a 10% saving over a decade, so taking measures like this are cost-effective as well as ecologically responsible. In addition to being a question of environmental sustainability and economics, decarbonization also directly impacts human health. Living in areas with poor air quality can reduce life expectancy by up to 10 years, warned Tommi Roman, who heads the Smart City segment at Vaisala. To raise the visibility of this problem, Roman recommended that cities install sensors and AI solutions to identify sources of pollution in order to take appropriate action.

❝ *Investing in low-emission solutions can bring big savings to cities in the medium term.* **❞**

Jekabs Groskaufmanis
Spokesperson of LMT

SEE CONTENT

Digitalization, Collaboration and Storytelling: The Building Blocks for Future Smart Cities

Wednesday, November 18
10:15 a.m. - 11:00 a.m. (GMT +1)

Organizer:
Siemens AG

Large-scale smart city projects are not only implemented through collaboration between companies and governments but also between companies with their competitors. "It isn't possible to develop technological solutions for a large population without working closely with the city council, other companies and all the important players in the city," said Oliver Kraft, EVP Expo 2020 at Siemens.

Afzal Mohammed, Head of the MindSphere and Command and Control Team at Siemens, claimed that only conglomerates like Siemens are capable of producing holistic solutions that enable cities to take the leap to becoming a smart city. The executive indicated that the priority for smart cities should be to leverage the available data, and contextualize and correlate them to make them truly useful.

" *Collaboration between competing companies is essential to implement smart city solutions on a large scale.* **"**

Oliver Kraft
EVP Expo 2020 at Siemens

SEE CONTENT

Catalogue of Public Procurement of Innovation

Wednesday, November 18
10:15 a.m. - 11:15 a.m. (GMT +1)

Organizer:
ACCIÓ

Public Procurement of Innovation (PPI) refers to situations in which government administrations use their purchasing power to act as early adopters of innovative solutions for which strong commercial demand is still lacking. Through PPI, government agencies can improve their services with highly innovative solutions and also promote innovation in the business community. PPI enables startups to enter public competitions across the world. However, these businesses do not usually have sufficient resources to monitor the opportunities that come up outside their city, region or country. Through its international offices, the Catalan government monitors and identifies PPI opportunities abroad and shares this information with Catalan companies so that they can submit their projects, explained Ana Simón, Deputy Director of International Innovation and Disruption at ACCIÓ. "Moreover, if a company has the right technology, ACCIÓ also advises it on how to maximize its chances of success," she added.

❝ *Through PPI, governments improve their services and innovation is promoted in the business community.* **❞**

Ana Simón
Deputy Director of International Innovation
and Disruption at ACCIÓ

SEE CONTENT

AI-HUB (SZ) Enabling Smart City Construction – As a Pilot Exploration of Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone

Wednesday, November 18
10:15 a.m. - 11:00 a.m. (GMT +1)
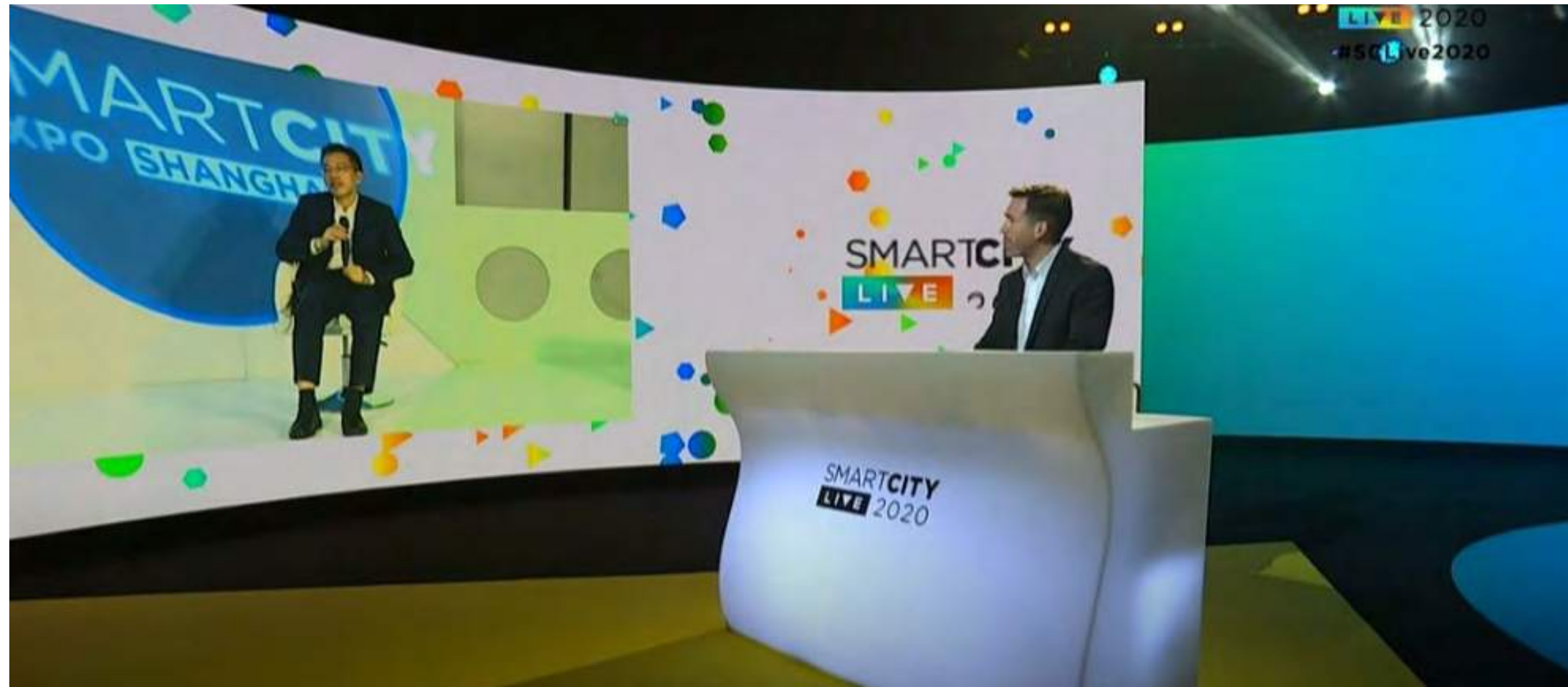
Organizer:
Smart City Research Institute of China Electronics Technology Group Corporation

In October 2020, Shanghai entered a new stage in its comprehensive digital transformation by opening the Unified Management of Shanghai by One Network internet of things operation center. The initiative focuses on the construction of a shared, open and collaborative ecosystem aimed at solving the usual problems city management faces, such as inadequate maintenance or incomplete data. Jiang Bo, Researcher, Doctoral Advisor and Board Chairman at China Electronics Technology Digital & Smart Technology Co., underlined the advantages of this comprehensive IoT management platform that is able to support intelligent management and multi-layered sharing of data. "It's like connecting different nerve endings in the city to support bigger, wider and deeper urban governance," he explained.

❝ *This new collaborative ecosystem will empower our urban governance and improve our capabilities and systems.* **❞**

Jiang Bo
Researcher, Doctoral Advisor and Board Chairman at China Electronics Technology Digital & Smart Technology Co.

SEE CONTENT

SMART**CITY** LIVE 2020

#CitiesAreListening: Dialogue on a Smart Recovery in the Post-COVID-19 era

Wednesday, November 18
10:15 a.m. - 11:00 a.m. (GMT +1)

Organizer:

United Cities and Local Governments (UCLG)

Governments across the world are drawing up their post-COVID recovery plans, but what do we want this recovery to look like? "We are at a critical moment, we have to broker a deal to ensure social justice and the future of the planet," asserted Emilia Saiz, Secretary General of the UCLG. Digital rights must be guaranteed in this recovery. "Internet access can no longer be considered as optional or optative, it needs to be a basic right for all," stressed Aik van Eemeren, member of the Innovation Team of the Office of Technology of the Amsterdam City Council. In this context, van Eemeren also pointed out that we have to be careful when implementing solutions such as apps to trace citizens' contacts. "Once we open the door to controlling people's movements it will be very difficult to turn back, and this is dangerous ground," warned van Eemeren.

❝ *Digitalization must serve to make society more inclusive, otherwise it will fail.* **❞**

Aik van Eemeren
Member of the Innovation Team of the Office
of Technology at Amsterdam City Council

SEE CONTENT

SMART**CITY** LIVE 2020

Implementing the Smartest Technologies on the Road to Green Recovery

Wednesday, November 18
10:15 a.m. - 11:00 a.m. (GMT +1)

Organizer:

Enterprise Estonia

After consolidating its position as one of the most digitally advanced countries in the world and ensuring that 100% of government procedures can be carried out online, Estonia's goal now, as Doris Pold, CEO of Estonian ICT Cluster explained, is to have the smartest cities in the world. One the keys to taking this qualitative leap in cities is to promote sustainable and technologically safer mobility. To achieve this, government administrations in Estonia have surrounded themselves with innovative companies like Bikeep, a firm that manufactures urban micro-mobility infrastructures such as stations and lockers for bicycles and electric scooters. Bercman Technologies, another startup, has developed smart traffic signs that are capable of exchanging information with autonomous vehicles, and Eyevi technologies, a company specializing in sensorization infrastructures to obtain data that can improve urban mobility, is already conducting pilot tests in some Estonian cities.

❝ *Estonia's ambition is to have the smartest cities in the world.* **❞**

Doris Pold
Estonia TIC Cluster

SEE CONTENT

SMARTCITY LIVE 2020

Women's Leadership in Mediterranean Cities and Regions: Addressing the COVID-19 Pandemic and Beyond

Wednesday, November 18
11:30 a.m. - 12:15 p.m. (GMT +1)

Organizer:

Union for the Mediterranean

The pandemic has shown that women leaders govern responsibly and efficiently. Samia Ghali, Councilor of the Marseille City Hall, stressed that more female leadership is needed to promote change that leaves a lasting imprint. Nonetheless, women have been impacted by COVID-19 the hardest. Efforts to care for children and the elderly have been stepped up due to school closures. But there is another aspect that should not be overlooked. Cases of domestic violence against women multiplied during lockdown, stated Nawal Haddadeen, Secretary General of Arab Women Organization of Jordan. Laia Bonet, Deputy Mayor for Agenda 2030, Digital Transition, Sports, Territorial and Metropolitan Coordination of the Barcelona City Council, stressed that the unpaid labor of women carers needs to be recognized "socially and economically," as they are essential for smooth running of the economy. She also stated that cities could be the scenario for this just and necessary transformation. Elisabet Nebreda, Secretary for Foreign Action of the Generalitat de Catalunya, supported this approach and asserted that women must be placed at the center of the foreign action promoted by countries in the Mediterranean network.

❝ *Women leaders have governed responsibly and efficiently during the pandemic creating an outstanding response.* ❞

Samia Ghali
Councilor for Marseille City Council

SEE CONTENT

SMART**CITY** LIVE 2020

Cities Reboot: Data-Driven Solutions for the New Sustainable & Inclusive Cities

Wednesday, November 18
11:30 a.m. - 12:30 p.m. (GTM +1)

Organizer:

Microsoft Iberica

Information and technology help cities to improve decision-making and operational efficiency. "When the data is collected and analyzed, it gives you insights from which you can take action," said James Lockyer, IoT Specialist at Microsoft. Ultimately, this enables cities to increase their resilience and environmental sustainability and improve the quality of life of inhabitants.

One of the keys to achieving these objectives is the use of a digital twin that allows data collected via sensors to be associated with real infrastructures in cities. Digital twin technology monitors all the elements that make up a city, such as streets, buildings, underground systems, vegetation and transportation lines. "It enables a city to aggregate important information, and this is a very useful tool for decision-makers," highlighted Pascal Martínez, Director of Bentley Systems.

❝ *Data and technology increase the environmental sustainability of cities and improve the quality of life of citizens.* **❞**

James Lockyer
IoT Specialist at Microsoft

SEE CONTENT

SMART**CITY** LIVE 2020

Nissan Intelligent Mobility Talks – VI Nissan Forum

Wednesday, November 18
11:30 a.m. - 12:15 p.m. (GTM +1)

Organizer:
Nissan Iberia

The automobile industry is evolving rapidly, and Nissan is adapting to address new demands in society. Developing electromobility, autonomous driving and vehicle connectivity are some of the Japanese automaker's priorities. "A sustainable future isn't possible without smart mobility. "The aim isn't to deprive customers of the experience of driving but to create a better future where automobiles will serve as an example of clean and safe mobility," explained Bruno Mattucci, CEO of Nissan Iberia.

In this respect, the Spanish Vice President and Minister for the Ecological Transition, Teresa Ribera, highlighted that post-COVID-19 plans must be drawn up thinking about the next generation. To achieve this goal, we must accompany industry in its ecological transition, she said. Ribera added that working with the automobile industry is essential to fulfil government commitments to a sustainable agenda due to the weight of the industry as a whole, the number of jobs it generates, the transformations we are facing, and because the transformation of the energy system in itself is an opportunity to strengthen the value chain.

" *It is crucial to support industrial initiatives that are concentrating their efforts on developing products that consumers demand.* **"**

Teresa Ribera
Spanish Vice President and Minister
for the Ecological Transition

SEE CONTENT

SMARTCITY LIVE 2020

Cities Deserve a Stakeholder Journey to Support and Ensure their Decarbonization

Wednesday, November 18
11:30 a.m. - 12:15 p.m. (GTM +1)

Organizer:
Engie

The global market for decarbonization of cities is gaining new momentum, which has been reinforced through the COVID-19 crisis and associated recovery plans. Cities are increasingly looking to develop, deliver and facilitate a smart and interconnected energy system. Given the scale of this goal, it is critical to win the support of communities and other prominent urban stakeholders. For this reason, "stakeholder engagement and in-depth understanding of the policy environment are key factors for companies seeking to develop and implement smart city projects successfully," asserted Louis-Frédéric Robin, Group Director in charge of Cities & Infrastructures at Engie. Along these lines, the company strives to understand the needs of local communities and familiarize itself with the future aspirations of the cities where it operates.

❝ *Decarbonization of cities has gained new momentum due to COVID-19 and associated recovery plans.* ❞

**Louis-Frédéric Robin
Group Director in charge of Cities
& Infrastructures**

SEE CONTENT

L'Hospitalet, Resilient City. Promoting Inclusive and Sustainable Development

Wednesday, November 18
11:45 a.m. - 12:30 p.m. (GMT +1)

Organizer:

L'Hospitalet de Llobregat City Council

L'Hospitalet de Llobregat has set a goal of becoming a city free of physical, social, economic and environmental barriers by 2030. "The goal is to make the city more resilient and move towards a more inclusive urban model," said Nuria Marín, Mayor of L'Hospitalet de Llobregat. "To achieve this, we have a roadmap with over 650 initiatives in different areas," specified the mayor. The role of mobile technology will also be essential in making cities more resilient. "The city has the potential to become a European laboratory for 5G," said Carlos Grau, CEO of the Mobile World Capital Barcelona. To advance on all these fronts, Raül Blanco, General Secretary for Industry and Small and Medium Business at the Spanish government, ensured that "investments will be accelerated to enhance the resilience of cities" and to respond to external threats, such as COVID-19.

❝ *Increasing our resilience will make our city more inclusive.* **❞**

**Núria Marín
Mayor of L'Hospitalet de Llobregat**

SEE CONTENT

SMART**CITY** LIVE 2020

2030 Agenda and Urban Agenda for Catalonia: From Strategy to Practice

Wednesday, November 18
11:45 a.m. - 12:30 p.m. (GMT +1)

Organizer:

Generalitat de Catalunya

Every department of the Catalan government is committed to implementing the 2030 Agenda and to promoting the 2030 Catalonia Alliance. "It is in cities that the most effective solutions for achieving the Sustainable Development Goals (SDGs) set out in the 2030 Agenda can be applied," said Agustí Serra, of the Catalan government.

Beth Tuà, who is responsible for technical coordination of Secretariat of Urban Agenda and Territory of the Catalonia, said the government is committed to creating more inclusive cities, as well as to establishing a new definition of green spaces and tackling environmental imbalances. To this end, the Catalan government is taking part in the syn.ikia project, which is part of the EU Horizon 2020 initiative, with 13 partners from six different countries. It will enable the development of sustainable neighborhoods. The goal of syn.ikia is to increase the proportion of sustainable neighborhoods with surplus renewable energy in different contexts, climates and markets in Europe.

❝ *It is in cities that the most effective solutions for achieving the SDGs set out in the 2030 Agenda can be developed.* **❞**

Agustí Serra
Secretary of Urban Agenda and Territory
of the Government of Catalonia

SEE CONTENT

Smart Cities Germany – An emerging Market for Urban Technologies Providers

Wednesday, November 18
12:45 p.m. - 1:30 p.m. (GMT +1)

Organizer:

Germany Trade & Invest (GTAI)

Germany is promoting the digital modernization of municipalities through smart city model projects. The project started in 2019 and, after the first two rounds, 45 projects have already been selected to build the best-possible future-oriented urban infrastructures to attract international companies.

The smart city model projects combine the requirements of integrated urban development with sustainability and digitalization to improve the quality of life in existing and new urban structures. "These projects included digital transformation processes in areas such as mobility, sustainability, energy, building, health and e-government, and they represent an investment of 820 million euros," explained Michael Berz of GTAI.

" *German cities are keener than ever to get smart and are increasingly benefiting from strategic partnerships with international companies.* "

Michael Berz
Senior Manager at GTAI

SEE CONTENT

Enable Connectivity for Smart and Sustainable Buildings

Wednesday, November 18
12:45 p.m. - 1:30 p.m. (GMT +1)

Organizer:

Alcatel - Lucent

Remote work has taken on unprecedented significance in 2020 and become a reality for a large part of the population. In this regard, "connectivity, efficiency and cybersecurity have become indispensable features in buildings," explained Fátima Elleouet, Business Developer at Alcatel-Lucent Enterprise.

One notable project carried out by this company following the pandemic was to upgrade the new smart building at the University of Colombia. On the one hand, the firm set up dynamically configured LAN and WLAN networks for teachers and students and, on the other, it oversaw connectivity in the building, making sure it was sufficiently secure. "In this project, the sensorization of installations using IoT devices was essential," said Jacques Der Ohanian, Head of Communications for Vertical Markets business development team at Alcatel-Lucent.

❝ *Connectivity, efficiency and cybersecurity have become essential features in buildings.* **❞**

Fátima Elleouet
Business Developer at Alcatel-Lucent Enterprise

SEE CONTENT

Urban Agenda, a Key Strategy for Sustainable Cities

Wednesday, November 18
12:45 p.m. - 1:30 p.m. (GMT +1)

Organizer:

Ineco

The Spanish Urban Agenda is a strategic document that sets out the actions to be carried out in Spain to achieve the goals of the 2030 United Nations Urban Agenda. David Lucas, General Secretary for Urban Agenda and Housing, said that "one of the main goals of the Spanish Urban Agenda is to improve the quality of life of citizens through digitalization."

The pandemic has sped up this digital transformation process, and citizens have had to adapt as well. "COVID-19 has created an urgent need for training in digital skills so we can adapt to new trends such as teleworking," said Pablo Hermoso de Mendoza González, Mayor of Logroño and Chairman of the Spanish Network of Smart Cities (RECI). In this regard, one of the goals of the Urban Agenda is to advise local governments so they can accelerate their digital transformation and increase the technological capabilities of their citizens.

❝ *Smart data will help our cities advance faster.* **❞**

**Pablo Hermoso de Mendoza González
Mayor of Logroño and Chairman of RECI**

SEE CONTENT

Future is Rural: A New Vision for Sustainable Development

Wednesday, November 18
1:00 p.m. - 1:45 p.m. (GMT +1)

Organizer:

Generalitat de Catalunya

Rural areas offer a valid alternative to some of the problems associated with COVID-19 and the high density of cities. However, the public services in these areas are often not as complete as those in urban areas, which can hinder their competitiveness and ability to attract talent. This, however, is starting to change. "We have 300 smart projects in Catalonia that provide intelligent solutions to the main problems of rural areas," said Joan Durán, Project Manager of Smart Cities and Regions of the Catalan government. One of these initiatives is Shotl, an on-demand mass transportation platform. "It allows users to request the service by simply using their smartphone, and our algorithm provides an estimated wait time," said Silvia Coronado, Marketing Manager at Shotl. Another initiative, Sense4Care, improves the care given to the elderly by means of wearables that can monitor them and sense falls so that they can call for assistance.

❝ *We have almost 300 Smart projects aimed at making the life of people in rural areas easier.* **❞**

Joan Duran
Project Manager of Smart Cities and Regions
of the Government of Catalonia

SEE CONTENT

SMART**CITY** LIVE 2020

Smart Metropolis. How to Build-up a Smart Public Organization in Different Critical Areas

Wednesday, November 18
1:00 p.m. - 1:45 p.m. (GMT +1)

Organizer:

AMB

The Barcelona Metropolitan Department (AMB) is applying a smart approach to many aspects of its management. "We need to increase the efficiency of the resources we use to meet the challenges of climate change and build a more resilient metropolis," noted Antoni Farrero, General Coordinator of the Technical Management Office at the AMB. In this regard, aspects such as the fight against climate change and promoting the circular economy and sustainable mobility are priorities in the public policies promoted by the AMB. This metropolitan agency currently manages a network of 51 parks and 42 beaches, which are used by more than 3.2 million of its citizens. Various technology solutions are being implemented to manage these spaces more efficiently. One example of this progress is the sensorization of parks and coasts, "which allows any problem to be geolocated in real time," explained Jordi Bordanove, the AMB supervisor tasked with preserving public spaces.

❝ *The fight against the climate crisis, as well as promoting the circular economy and sustainable mobility, are priorities in our management.* **❞**

Antoni Farrero
General Coordinator of the Technical
Management Office of the AMB

SEE CONTENT

How Does Artificial Intelligence Enhance Traffic Signal Control and Traffic Safety?

Wednesday, November 18
2:00 p.m. - 2:45 p.m. (GMT +1)

Organizer:

Flir Systems

Artificial Intelligence (AI) represents a giant leap forward in regulating traffic in large cities. Benjamin Schiereck, Business Development Manager at Flir Systems, explained what the Smart City project in Hamburg, possibly one of the most ambitious in Europe, entails: "Between 2020 and 2021, we will install more than 2,000 thermal imaging sensors to detect vehicles and bicycles. These sensors, which will be placed on traffic lights and public lighting, will allow us to collect and analyze data with which to identify patterns and adjust the signals in near real time." The data collected by these sensors are sent to the city's urban data cloud platform, which allows the local police to optimize and solve traffic problems more quickly (traffic jams, road works, etc.) "In the event of an accident, these sensors make it possible to react and notify emergency services almost immediately," Schiereck added.

" *By sensorizing traffic signals, we can notify emergency services immediately in the event of an accident.* **"**

Benjamin Schiereck
Business Development Manager
at Flir Systems

SEE CONTENT

SMARTCITY
LIVE 2020

Bournemouth Christchurch & Poole: The New Smart Place

Wednesday, November 18
2:45 p.m. - 3:30 p.m. (GMT +1)

Organizer:

BCP Council

Bournemouth, Christchurch & Poole (BCP) is the first open innovation ecosystem in the United Kingdom to use a complete 5G platform. This Smart Place is being utilized by major companies which are testing applications that require the maximum mobile internet speed to work properly. BCP is one of the largest local authorities in the United Kingdom. This has made it possible to become a pole of attraction for all types of business and economic activity. Adrian Hale, Smart Place Programme Manager of the BCP Council, stressed that "by focusing on things that really matter to people, communities and businesses, BCP generates value that benefits its citizens and the technology partners working alongside."

❝ *Solving people's problems also benefits companies in our community.* **❞**

Adrian Hale
Smart Place Programme Manager
of the BCP Council

SEE CONTENT

Cities for Global Health: A City-to-City Platform to Face Pandemics

Wednesday, November 18
3:00 p.m. - 3:45 p.m. (GMT +1)

Organizer:

Metropolis

Each city has managed the pandemic differently. But the Cities for Global Health online platform collects aggregated information on the impact, opportunities and transformations that some cities experienced as a result of COVID-19. "The platform features 600 contributions from more than 100 cities and is an international hub of ideas that has arisen in reaction to the pandemic. It is also a tool for possible future emergencies," said Agnès Bickart, Senior Manager for Institutional Relations at Metropolis. This same platform shows that Daegu, in South Korea, has been an example of successful management during the COVID-19 pandemic. It went from one case on February 18 of last year to 6,000 in less than one month, and to zero cases one month later. Digitalization has been a key tool for overcoming and eradicating COVID-19. "Tests were carried out on all citizens, and this was accompanied by quick mobile tracking and tracing. The cooperation between the local and central governments was also a success," said Dr. Kiseok Lee, Director for Daegu International Affairs and Trade Division.

❝ *The Cities for Global Health platform will be a useful tool for future emergencies.* **❞**

Agnès Bickart
Senior Manager for Institutional Relations at Metropolis

SEE CONTENT

Innovative Camera and IoT Solutions for City Challenges Today and Tomorrow

Wednesday, November 18
3:15 p.m. - 4:15 p.m. (GTM +1)

Organizer:

Axis Communications

Data are fuel for smart cities. But are we making sufficient use of the huge quantity of data that cities have access to? "Currently only 5% of data that cities gather is being used efficiently. Right now, the challenge cities face is to organize and process this data so that it can be incredibly useful," explained Massimiliano Calps, of IDC Government Insights. When data is used intelligently, significant results can be achieved. In this respect, Kevin Taylor, Segment Development Manager at Axis Communications, highlighted an urban traffic planning project his company took part in. "Atlanta (United States) implemented a program to reduce congestion on the main avenues of the city. The results were incredibly positive and traffic accidents were reduced by 25%." The project's benefits went beyond alleviating the problem of road congestion, as the workload for law enforcement officers was lessened, allowing them to concentrate on other aspects of public safety.

" *The most critical aspect to solve city challenges is converting raw data into productive data.* **"**

Kevin Taylor
Segment Development Manager
at Axis Communications

SEE CONTENT

SMART**CITY** 2020

Cities Leading the Way Towards a Just Digital Transition in the Post-COVID Era

Wednesday, November 18
3:15 p.m. - 4:00 p.m. (GMT +1)

Organizer:

Barcelona City Council

Barcelona, Amsterdam and Montreal are working internationally through the Cities for Digital Rights Coalition towards a digital transition based on rights, inclusiveness and ecology. Laia Bonet, Deputy Mayor of the Barcelona City Council, raised the need to act on two fronts: reduce the digital divide and ensure digital rights such as privacy, transparency and non-discrimination online. Touria Melani, Deputy Mayor of Amsterdam, highlighted the launch in her city of a digital agenda that prioritizes inclusiveness and is committed to innovations such as artificial intelligence. "The challenge is to protect citizens while providing them with the tools to move forward," Melani said. François William Croteau, of the Montreal City Council, noted that "the pandemic has accelerated the digital transformation of the city and led to the adaptation of municipal services to meet the citizens' demand for services via the Internet and by telephone."

❝ *The challenge is to protect citizens while providing them with the tools to move forward.* **❞**

Touria Melani
Deputy Mayor of Amsterdam

SEE CONTENT

Cities' New and Bold Approach to Drive City-wide Innovation

Wednesday, November 18
3:15 p.m. - 4:00 p.m. (GMT +1)

Organizer:

Nokia

Planning the digital transformation is essential for the well-being and safety of citizens. Accordingly, Nokia has brought its technology to various cities to speed up their digitalization. Such is the case of Graz, a city near Vienna (Austria), where Nokia, together with Citycom, has been selected to deploy the 5G network. "This technology will allow us to make the use of highly advanced technologies, such as autonomous driving and remote surgery, a reality in our city," said Bernd Stockinger, CEO of Citycom. Jakub Mazur, from Wroclaw (Poland), said that "the city's goal is to become a modern city on every level." To do this, Nokia has also deployed the 5G network in the city and developed a smart city platform that enables Wroclaw to use advanced networking and digital technologies to provide services tailored to the needs of citizens.

" *5G will allow us to make autonomous driving a reality in Graz (Austria).* **"**

**Bernd Stockinger
CEO of Citycom**

SEE CONTENT

Tactical Urbanism and Mobility. Solution or Challenge?

Wednesday, November 18
3:45 p.m. - 4:30 p.m. (GMT +1)

Organizer:

Reial Automòbil Club de Catalunya (RACC)

Large cities have had to be flexible to adapt to the restrictions imposed to combat COVID-19, while simultaneously allowing everyday activities to continue. One way to achieve this has been through tactical urbanism. Rosa Alarcón, Mobility Councilor of the Barcelona City Council and President of Transports Metropolitans de Barcelona (TMB), put forth her city as an example of this dynamic urban planning. "Since the pandemic began, we have made drastic decisions quickly. At first, we provided public space for healthcare workers to park near hospitals. When the lockdown was first eased, we imposed time slots when the roads were free. Now we are taking measures to support the economy and generate jobs, like expanding restaurant terraces," she explained. Josep Mateu, chairman of the RACC, said that the pandemic has drastically reduced mobility in Barcelona and its metropolitan area. "In addition," he continued, "two out of three citizens have changed their travel habits, with more journeys on foot and by private vehicle." According to Mateu, this is due to citizens' growing mistrust of public transportation related to their fear of infection.
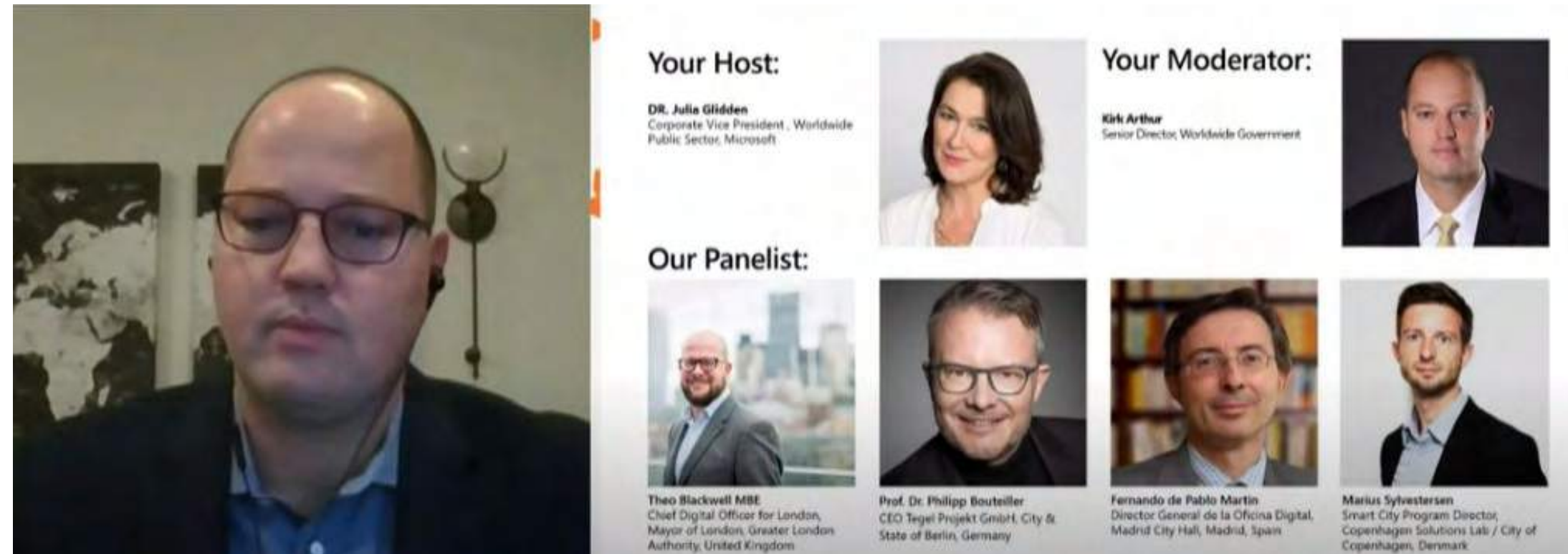
" *We have adapted our urban planning policies to guarantee the safety of citizens and promote economic activity.* **"**

Rosa Alarcón
Mobility Councilor of the Barcelona
City Council and President of Transports
Metropolitans de Barcelona

SEE CONTENT

From Crisis to Opportunity: Transforming European Cities in the COVID Era

Wednesday, November 18
4:00 p.m. - 5:00 p.m. (GMT +1)

Organizer:

Microsoft

2020 was the year of consolidation for smart technologies. This is because for the first time, "the risk of doing nothing greatly outweighed the risk of doing something," noted Julia Gidden Corporate Vice President of Worldwide Public Sector at Microsoft. A good example of this accelerated digitalization is London. "In ten days, the city underwent a digital transformation that had been planned to take one year," observed Theo Blackwell, London's Chief Digital Officer.

The CEO of Tegel Project GmbH (Berlin), Philipp Bouteiller, said that "in March, only 5% of the Administration's staff had a laptop and public services came to a stop. Now, we are much better prepared." Fernando de Pablo Marín, Director of the Digital Office of the Madrid City Council, said that "the pandemic has proven to be the most effective engine for accelerating the city's digital transformation."
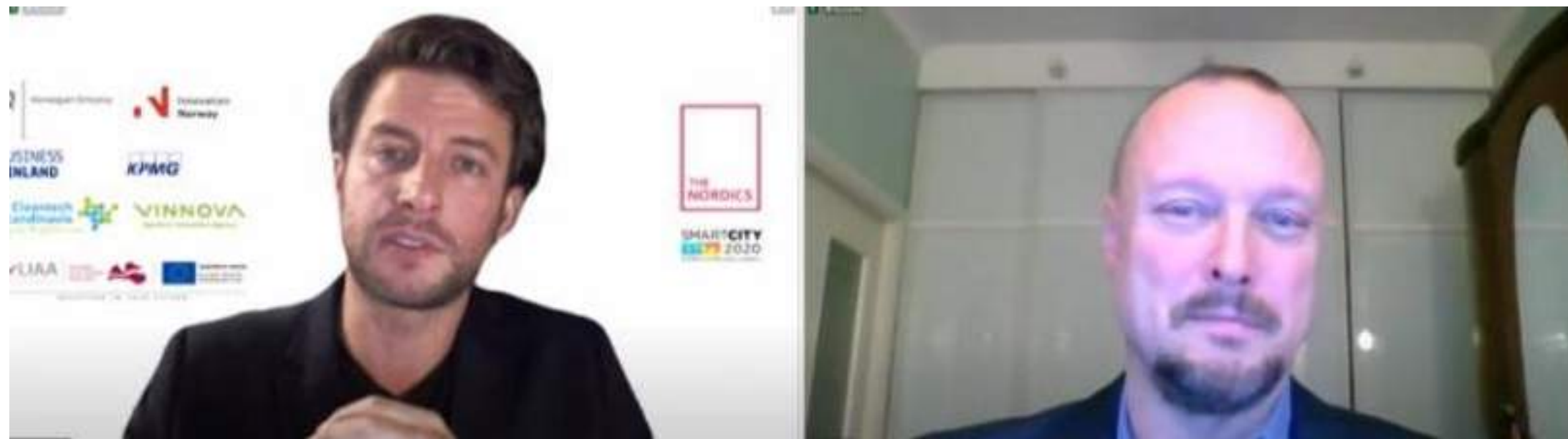
❝ *During the pandemic, the risk of doing nothing outweighed the risk of doing something.* **❞**

**Julia Gidden
CVP, World Wide Public Sector,
Microsoft**

SEE CONTENT

Cities as Testbeds for Innovation

Wednesday, November 18
4:15 p.m. - 5:15 p.m. (GTM +1)

Organizer:

The Nordics

COVID-19 has shown that decisions, particularly those taken by governments, must be made quickly to ensure maximum impact. However, decision-makers have to act in the context of increased uncertainty and burdened by the pressures of accepting responsibility for the consequences of these decisions. "For this reason, we have created a platform that simulates the scenarios that could arise after an important decision has been taken," explained Peter Ylén, Principal Scientist at VTT, Technical Research Centre of Finland. The latest initiative that VTT has been involved in focuses on providing an economic boost to the city of Espoo.

In Oslo (Norway), technology is being used to advance towards a smart, sustainable model. For some time, municipal contracts in the city have prioritized builders that have electric fleets. This has helped companies "to develop heavy machinery that runs on electricity, a type of vehicle that didn't exist until recently due to lack of demand," explained Gaute Hagerup of the Oslo City Council.
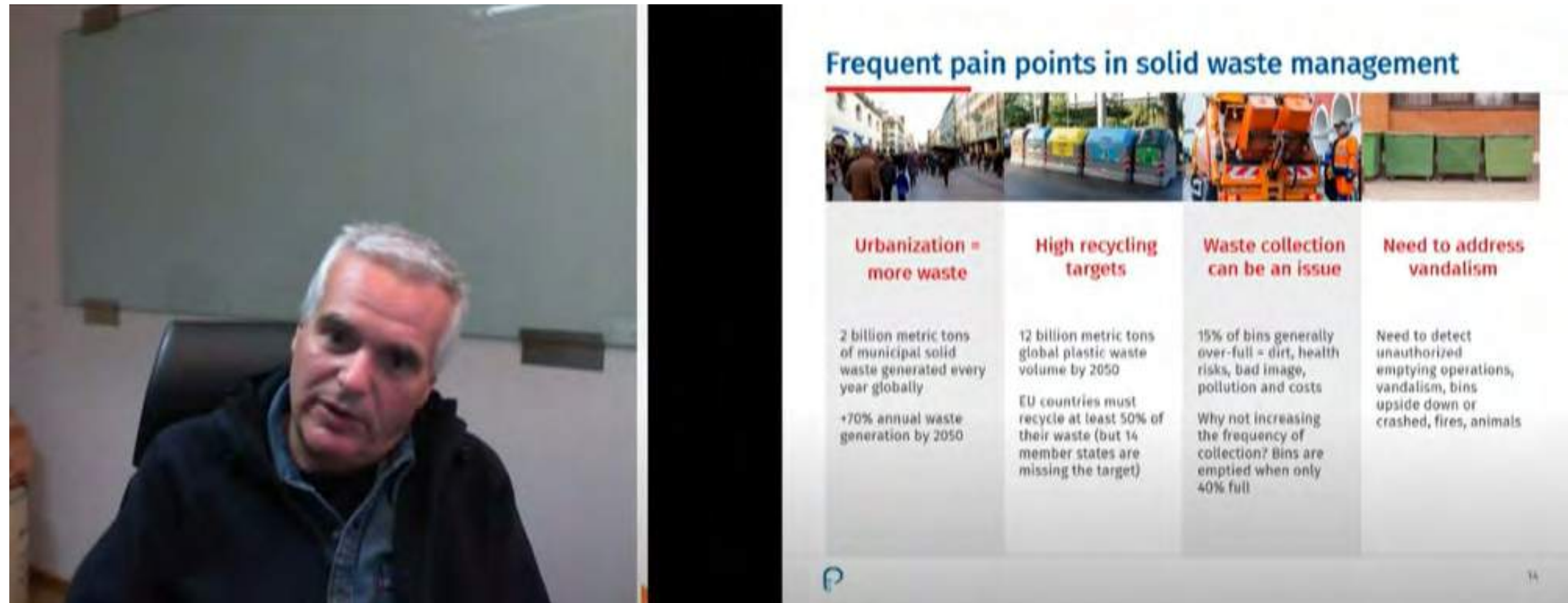
❝ *Advancing towards a smart city model, depends more on people than on technology.* **❞**

Peter Ylén
Principal Scientist at VTT

SEE CONTENT

Smart Waste, a Key Pillar for Sustainable Open Cities

Wednesday, November 18
4:30 p.m. - 5:15 p.m. (GMT +1)

Organizer:

Paradox Engineering

The transition towards a smart, resilient, and sustainable city means overcoming numerous obstacles. According to Gianni Minetti, CEO of Paradox Engineering, "this process is easier if we have the right data." One way to get this information is through intelligent sensors and video technologies which allow functions such as the control of parking spaces or proper waste management. Regarding the Smart Waste solution, Minetti noted: "It includes a network of smart sensors that send information on waste accumulation, the day and time of collection, and alerts in the event of fire or vandalism. It also predicts when containers will be full, avoiding unnecessary trips to empty them." Waste generation is expected to grow 70% annually over the next 30 years, which will make smart waste solutions more necessary than ever.

" *Smart waste solutions will allow us to manage the expected 70% increase in waste generation in coming years.* **"**

**Gianni Minetti
CEO of Paradox Engineering**

SEE CONTENT

SMARTCITY
L I ᴠ E 2020

Smart Piers Cities

Wednesday, November 18
4:30 p.m. - 5:15 p.m. (GMT +1)

Organizer:

Smart Ports

The crisis caused by COVID-19 has put ports to the test. The cargo terminals in the Port of Los Angeles remained operational during the pandemic, as they are deemed an essential part of the country's supply chain. "The port had to stay open to distribute products intended for healthcare workers, as well as to maintain the production and purchase of goods," explained Gene Seroka, Executive Director of the Port of Los Angeles. Intensive use of technology at the port made it possible to minimize physical contact between workers and thus ensure their health and safety. Another port where technology plays a particularly important role is the Port of Hamburg. "We are in the middle of the city, which makes it easy to use digital technologies and to travel to the facilities safely," noted Jens Meier of the Port of Hamburg.

❝ *Technology has allowed us to minimize contact and maximize employee safety.* **❞**

Gene Seroka
Executive Director of the Port
of Los Angeles

SEE CONTENT

SMART**CITY** LIVE 2020

Defining a New Era in Urban Mobility

Wednesday, November 18
4:30 p.m. - 5:15 p.m. (GMT +1)

Organizer:

Fédération Internationale de l'Automobile - Smart Cities

The pandemic has accelerated the transition towards more sustainable and digitalized mobility. Electrification is progressing rapidly, but there is still a long way to go. So said Jamie Reiglie, CEO of FIA Formula E, who provided a glimpse of what cars in Formula E, considered a zero-emissions sport since September, will be like in three years: "We are going to use lighter and longer-lasting batteries to allow vehicles to travel further for longer. We will also work to make charging as fast as possible." As for the electrification of the private vehicle fleet, 15% of cars sold in Europe in 2020 were electric, according to Beatriz Sánchez, Region Head for Latin America at Julius Baer. "This percentage has exceeded our expectations. In the next five years, we estimate that 18% of the market will be electric," she predicted.

" *In the next few years, electric cars will account for 18% of the car market.* **"**

Beatriz Sánchez
Region Head for Latin America
at Julius Baer

SEE CONTENT

SMARTCITY LIVE 2020

Smart Innovation and City Progress in Disruptive Times: How Cities Are Using Disruption to Accelerate Innovation

Wednesday, November 18
5:00 p.m. - 5:45 p.m. (GTM +1)

Organizer:
City Possible (Mastercard)

The disruption caused by COVID-19 has been the catalyst for many innovations in cities and organizations. "It's amazing to see how companies and governments have adapted to keep working despite everything and have implemented solutions like teleworking," highlighted Jamie Cudden, Smart City Program Manager of the Dublin City Council. Kip Harkness, Deputy City Manager of the San José City Council, also pointed out that coronavirus has transformed the way organizations are structured. "We've been able to identify problems and form instantly cross-departmental teams with clear governance and authority and empower them to take action." Moreover, the fact that the pandemic is lasting so long, also has a positive side in Harkness's view. "Trends like teleworking will be maintained as the habit has already been developed and habits are very difficult to break."

" *Trends like teleworking will be maintained because they have become a habit.* "

Kip Harkness
Deputy City Manager of the San José
City Council

SEE CONTENT

Human Rights, Sustainability and Technology: Digitally Organizing Communities

Wednesday, November 18
5:30 p.m. - 6:15 p.m. (GMT +1)

Organizers:

Catalan Agency for Development Cooperation

Human rights and the Sustainable Development Goals (SDGs) are more relevant than ever following the appearance of COVID-19. To help achieve them, technology can be an ally if used correctly, but it can also have drawbacks. Carme Gual, Director of the Catalan Agency for Development Cooperation, raised the need to incorporate the tertiary sector and NGOs into the digital development of cities. "We are aware that inequality is on the rise in developing countries, and we are willing to move forward in the fields of technological innovation, but in a way that is inclusive." On the other hand, according to Natalia Anguera, Director of the UNHCR-Catalonia Committee, "we need to improve how we deal with refugees and vulnerable people in order to ensure that smart cities don't exclude anyone." Otherwise, Anguera continued, "we risk having cities that are very smart but accessible only to the most technologically savvy."

❝ *We must advance in the digital development of cities, but we must do so inclusively.* **❞**

Carme Gual
Director of the Catalan Agency
for Development Cooperation

SEE CONTENT

SMART**CITY** LI**V**E 2020

Barcelona Smart Region: Providing Smart Services for Citizens

Wednesday, November 18
5:45 p.m. - 6:30 (GMT +1)

Organizer:

Diputació de Barcelona

The Diputació de Barcelona is involved in several smart region projects intended to improve the quality of life and well-being of its citizens. One example can be found in park management. "They have been sensorized to determine the capacity of their parking areas and thus identify potential overuse problems," noted Josep Melero, Head of the Communication Section of the Diputació de Barcelona. In the field of mobility, this supra-municipal agency is rolling out blue lanes: a 300-km network of cycling lanes near rivers with video surveillance systems. As for the agency's digitalization, the library services app is one of the Provincial Council's greatest successes. Among other features, this platform lets users reserve documents, find out which library is closest to them using geolocation, and access services online.

❝ *Smart projects include areas of activity as diverse as mobility, park preservation and library services.* **❞**

**Josep Melero
Head of the Communication Section
of the Diputació de Barcelona**

SEE CONTENT

Portugal Smart Nation: The Tale of How a Nation Can Become Global

Wednesday, November 18
5:45 p.m. - 6:30 p.m. (GMT +1)

Organizer:

AICEP Portugal Global (Portugal's Agency for Investment and Foreign Trade)

Portugal seeks to develop smart and sustainable cities that are a global benchmark. According to João Dias, Director of AICEP, Portugal's Agency for Investment and Foreign Trade, "cities are living laboratories where new technologies can be created and tested." Dias added that cities "are gathering more and more data due to sensorization and IoT, which offers a huge potential to develop technologies such as AI." On the other hand, Caterina Selada, Head of CityLab CEIIA, presented one of the most striking smart innovations that have been installed in some Portuguese cities. It is a system that, using blockchain technology, quantifies in real time the CO_2 emissions avoided by a citizen when using alternative transport solutions. "People who move around the city sustainably receive credits that can be exchanged for public services or even used to pay municipal taxes," Selada explained.
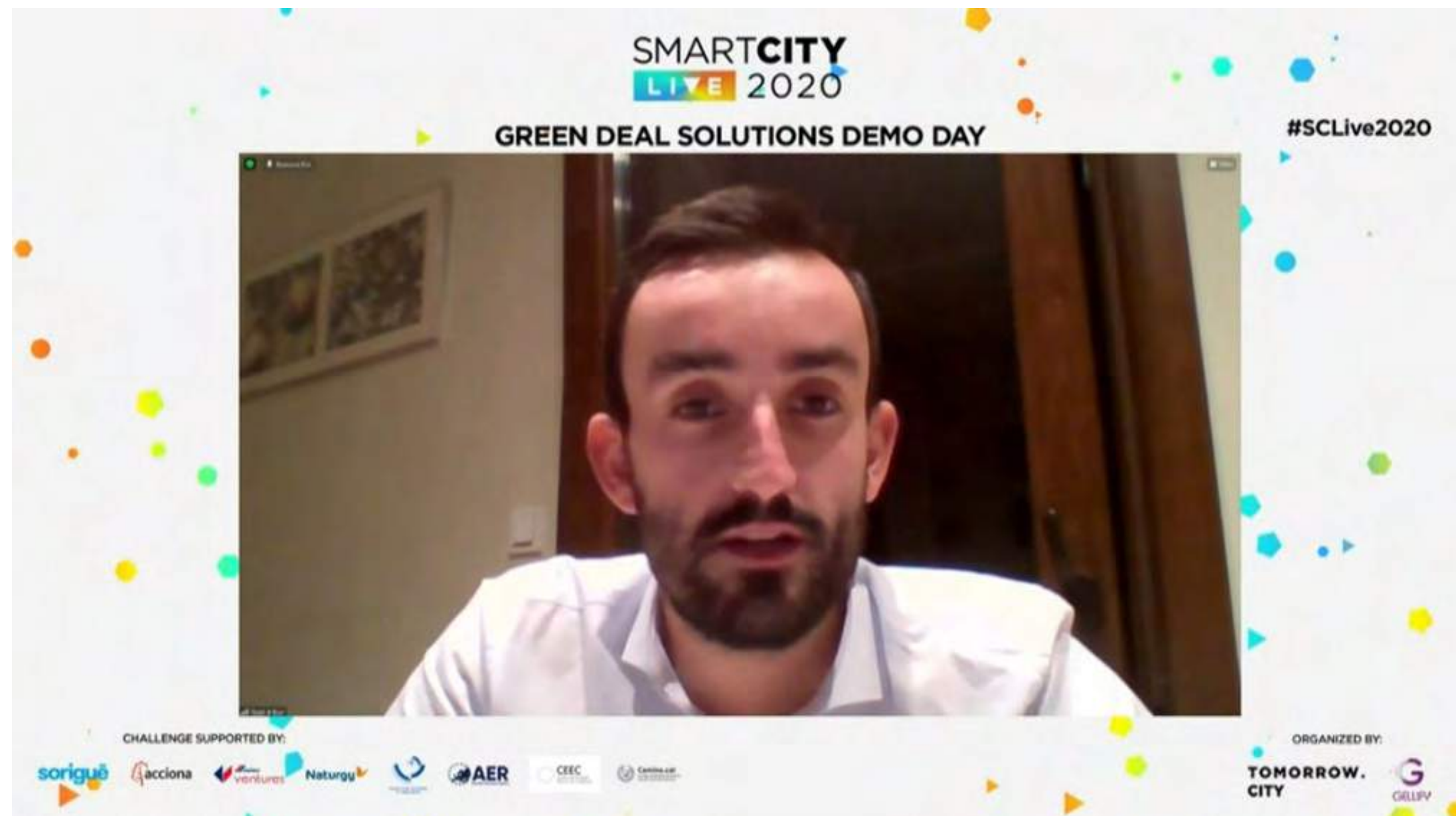
" *Cities are living laboratories where new technologies can be created and tested.* **"**

João Dias
Director of AICEP

SEE CONTENT

Green Deal Solutions Demo Day

Wednesday, November 18
6:15 p.m. - 7:15 p.m. (GTM +1)

Organizer:

Tomorrow.City and Gellify

Collaboration between big companies and startups is one of the most efficient mechanisms for developing innovative and sustainable solutions in cities. What do corporations value the most in the emerging businesses they work with? "Communication between the company and startup must be fluid, and deadlines and milestones must be defined properly," asserted Ibon Iribar, Venture Capital Analyst at Cemex Ventures. At his turn, Domingo Asuero, an engineer at Naturgy, said that "it's essential for startups to develop solutions bearing in mind market needs and defining their target very clearly from the outset." For Francisco Javier González, Open Innovation Manager at Acciona, the aspect that adds most value to a startup is "the team," combined with its focus and commitment to sustainability aligned with its values.

" *Communication must be fluid between corporations and startups, and deadlines and milestones must be defined properly.* **"**

Ibon Iribar
Venture Capital Analyst
at Cemex Ventures

SEE CONTENT

SMARTCITY LIVE 2020

Towards a New Latin American City: Rethinking Urban Development After COVID-19

Wednesday, November 18
7:00 p.m. - 7:45 p.m. (GTM +1)

Organizer:

Inter-American Development Bank (IDB)

Latin America is at a disadvantage in tackling the impacts of the pandemic, as 30% of its inhabitants live in highly precarious situations. "The positive take on this is that the epidemic can offer a second opportunity to the region," pointed out Tatiana Gallega, Division Chief for Housing and Urban Development at the Inter-American Development Bank.

Despite the complicated situation in the region, there are many examples of cities that acted quickly to combat the pandemic. This is the case of Niterói: "We were the first city in Brazil to disinfect the streets and communities, we have carried out one COVID-19 test per 10 inhabitants," said Giovanna Victer, Secretary of Financing in Niterói. In Lima (Peru), a megacity with over nine million inhabitants, we had to prioritize the needs of the most vulnerable people. "We established a Lima Takes Care of You strategy with the aim of preventing, monitoring and delivering services to the 25% of citizens who live below the poverty threshold," explained Carlos Javier Vera, Architect, Urbanist and Coordinator of the Municipality of Lima.

❝ *It's the responsibility of countries and cities to care for the most vulnerable people.* **❞**

**Tatiana Gallega
Division Chief of Housing and Urban
Development at the Inter-American
Development Bank**

SEE CONTENT

C) WORKSHOP

HOW DOES TECHNOLOGY ENABLE SAN FRANCISCO TO BECOME A SAFE CITY FOR CITIZENS?

With San Francisco as a use case, Smart City Live 2020's digital workshop showcased LiDAR-based smart city solution by teaming with strategic partners such as Quanergy, Cisco, Genetec and Technolutions.

The session illustrated how technology can be focused on delivering city management solutions while protecting citizen privacy and freedom.

In San Francisco, urban challenges are linked to its demographics and urban traffic. In coming years, the city's population is set to rise from its current 860,000 to 1.1 million. This will have a direct impact on the density of the city—already one of the most populous per square meter in the United States—which, owing to its geographical limitations, has no room to expand. In parallel, in recent years the arrival of Uber and Lyft has led to a 15% increase in traffic, though it is estimated that 50% of the vehicles on these platforms are unoccupied while driving on the road.

The combination of these two factors translates into a mobility challenge for the city. In order to address this challenge, the City Council, through the San Francisco Municipal Transportation Agency (SFMTA), is implementing innovative solutions that allow for more efficient and safer management of the way citizens move around. One of these solutions is the Lidar technology app, a project developed by Quanergy, Cisco, Genetec and Technolutions.

Lidar delivers automation and visualization of the traffic flow. Based on the information obtained, measures can be taken to reduce road congestion, increase pedestrian safety, reduce idling and greenhouse gas emissions, and reduce public transit travel time and signal delays for all modes. This is carried out by maintaining respect for the privacy of drivers and pedestrians, as the data is collected anonymously. This last point is critical, as facial recognition technology has been prohibited in San Francisco since 2019.

HOW DOES TECHNOLOGY ENABLE SAN FRANCISCO TO BECOME A SAFE CITY FOR CITIZENS?

This system is currently in the test phase: it has been implemented at five intersections in the city near the Chase Center Stadium, and sensors will be installed over the next few months at four additional locations in the city. Besides generating relevant information about traffic flows, Lidar also offers other useful applications for the smart city. These include automating parking lot entry and exit, public safety and crowd management functionalities, or even controlling social distancing during a pandemic like the current one.

SEE CONTENT

D) GLOBAL CALL FOR SOLUTIONS

As a smart city touchstone, Smart City Expo World Congress constantly surveys the ecosystem for a deeper understanding of all that is new, interesting and profitable. This year, the digital edition of the congress, Smart City Live 2020, worked with key partners to jointly address a critical problem that goes along with the pandemic: **How can we accelerate the transition towards a climate-neutral economy?**

After analyzing more than 1,000 solutions, Smart City Live 2020 unveiled the five finalists who pitched their brilliant solutions during the event:

SORIGUÉ: CIRCULAR ECONOMY AND SUSTAINABILITY

Sorigué is a construction and service company. One of the emerging companies it backs is Honex, which specializes in manufacturing panels made from sustainable material derived from paper mill waste. Another startup that Sorigué has recently chosen to support is Eolos, a company that designs, manufactures and sells marine buoys to conduct wind measurement campaigns for wind farms. Lastly, Sorigué has also partnered with the startup Platio to create solar pavement.

ACCIONA: A MODEL OF OPEN INNOVATION

Acciona promotes and manages infrastructures and renewable energies and is committed to an open, disruptive and digital innovation model. To encourage collaboration with emerging companies, Acciona implements the I'MNOVATION program, through which it seeks to promote the development of startups with the help of Acciona professionals and experts. Thanks to Acciona, emerging companies get the opportunity to test their solutions in the real market. The projects the company engages with are usually linked to renewable energy, shared mobility, last-mile transport and water reuse.

CEMEX: FOR A GREENER CONSTRUCTION

CEMEX is committed to promoting innovation in the construction sector in order to improve the way the cities of the future are built. One of the pillars of this commitment to sustainability is investment in startups that specialize in developing new, more sustainable construction products and processes through its corporate venture capital unit, CEMEX Ventures. In this regard, in recent months Cemex has invested in Arqlite, a company that produces lightweight cement from plastic waste that was not considered recyclable until now. Another company that Cemex supports is Carbon Upcycle, which uses technology to transform waste products like fly ash and slag to make them more reactive and increase their cementitious properties. The use of previously captured CO2, combined with a physical transformation of the material during the process, generates a new additive for cement that enables the production of concrete with a small environmental footprint.

NATURGY: INNOVATION HUBS AND PUBLIC-PRIVATE PARTNERSHIPS

Naturgy collaborates with city councils and startups to accelerate the implementation of smart city technologies. A good example is Madrid in Motion, a mobility hub where the government, large corporations and emerging companies join forces to develop new urban mobility solutions. Another example is Start4Big, a cross-sector platform where smart city solutions are also being developed. In terms of public-private partnering, Naturgy supports the GrowSmarter project, which has helped rehabilitate 30,000 square meters of residential and tertiary buildings in Barcelona.
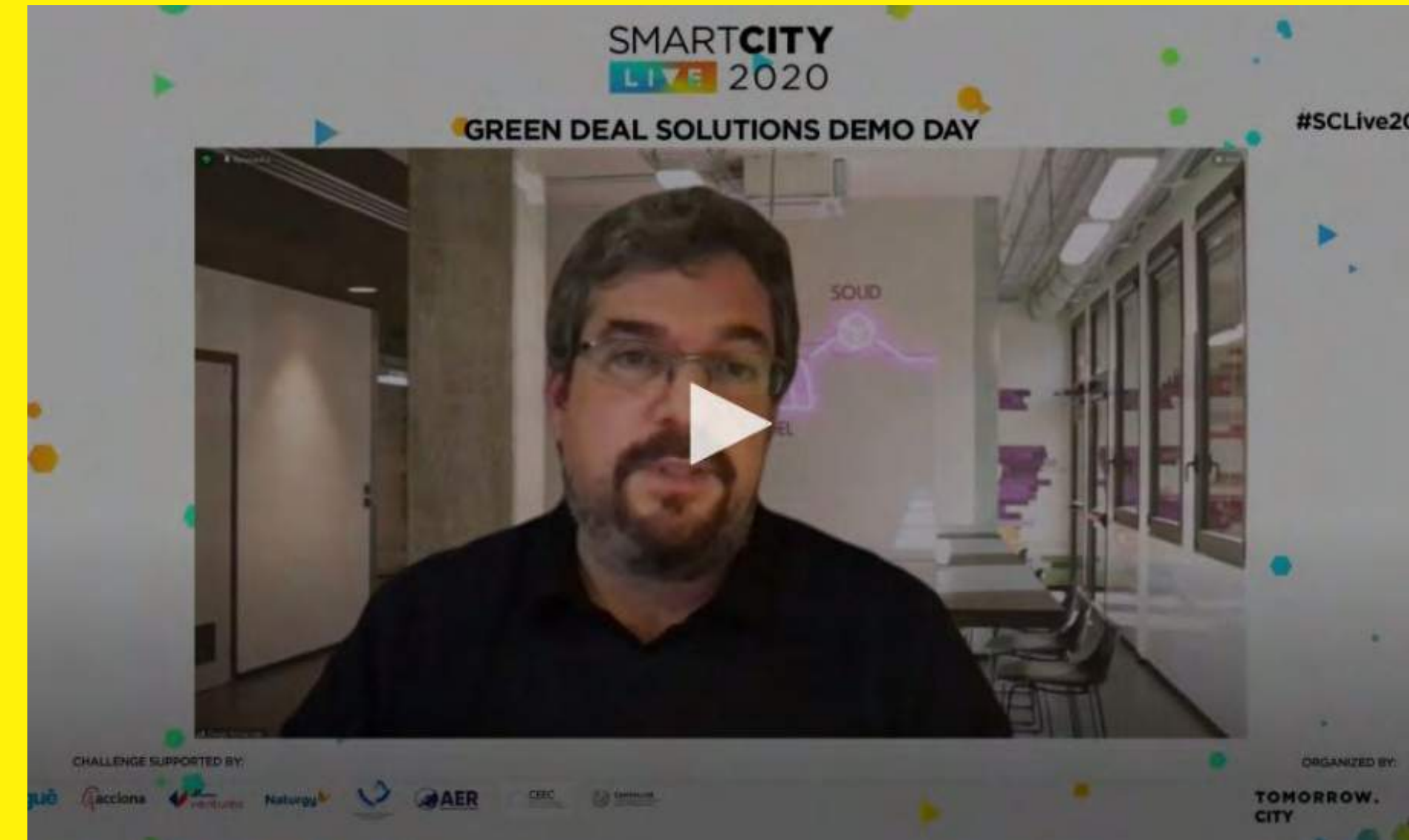
SEE CONTENT

9
TAKEAWAYS FROM THE EVENT

SMART**CITY**
LIVE 2020

ENABLING TECHNOLOGIES	ENERGY & ENVIROMENT	MOBILITY	GOVERNANCE & ECONOMY	LIVING & INCLUSION

TECH WILL BRING ON REVOLUTIONARY CHANGES

- Fiber optic and 5G networks have enabled many people to switch from the office to working from home fairly easily. 5G will also be essential in implementing remote surgery and autonomous vehicles. Also, the combination of IoT, 5G and AI represents a huge leap in efficiency, which will bring on the fourth industrial revolution (4IR).

- AI technologies play a key role in every aspect of the COVID-19 crisis response. AI tools and technologies can be employed to support the efforts of policy makers, the medical community and society at large to manage every stage of the crisis and its aftermath: detection, prevention, response, and recovery, and to accelerate research.

- The use of digital twins makes it possible to associate data collected via sensors with real infrastructures in cities. The city can aggregate important information via the digital twin, which is an especially useful tool for decision makers.

- Data is the new production factor. Good governance of cities depends in large part on capturing, storing, analyzing and applying data.

- Smart city technologies designated for use by citizens must be simple and user-friendly. This is the only way the whole population, regardless of people's technological capabilities, can leverage these innovations.

" *With the development of 5G and AI, intelligent connections will penetrate all walks of life, bringing great changes and development opportunities for the cities, and creating revolutionary changes in people's lives.* "

Yanfen Chen
Director, Shanghai Unicom Smart City Research Institute

SMART**CITY** LIVE 2020

ENABLING TECHNOLOGIES	ENERGY & ENVIROMENT	MOBILITY	GOVERNANCE & ECONOMY	LIVING & INCLUSION

ENERGY EFFICIENCY IS KEY FOR CITIES TO MOVE FORWARD

- The COVID-19 pandemic combined with the climate emergency have hit hard, particularly in certain communities in developing countries.

- The populations of cities continue to grow, as does the waste their inhabitants generate. Boosting the circular economy in cities and opting for smart waste solutions based on the Internet of Things (IoT), which monitor containers to optimize waste management, are two ways to effectively control the rise in urban waste expected in upcoming years.

- Transport digitalization and fleet electrification are two growing mobility trends. Intermodality is promoted thanks to digital solutions, and this translates into fewer cars on the road in cities. Electromobility is crucial for moving towards urban decarbonization.

- Governments should implement energy efficiency projects and accelerate any already in place. These initiatives deliver a dual benefit for cities, as they save economic resources by consuming less energy while advancing towards a more ecological city model.

- Up to now, the impact of COVID-19 on the environment has been positive, as pollution has dropped due to mobility restrictions. Trends such as teleworking or the 15-minute city also decrease mobility and ensure that positive environmental effects are to some degree permanent. However, there are trends working in the opposite direction, such as the increased use of private vehicles to the detriment of public transport due to fear of infection.

" *Through energy efficiency cities become more sustainable and optimize economic resources.* **"**

Valerio Vadacchino
Head of Marketing Global e-City, Enel X

SMART**CITY** LIVE 2020

ENABLING TECHNOLOGIES	ENERGY & ENVIROMENT	MOBILITY	GOVERNANCE & ECONOMY	LIVING & INCLUSION

RESTORING PASSENGER CONFIDENCE IS KEY TO INCREASING PUBLIC TRANSPORT

• Public transport digitalization and fleet electrification will be key in moving towards more efficient and sustainable mobility. Intermodality will be promoted through digital technologies, and we will be able to choose the most appropriate mode of transport for each situation, while electromobility will transform cities into greener spaces and help them move towards decarbonization.

• As a result of the pandemic, local governments are strengthening their policies to reduce car use in cities' mobility mix. City councils are increasing their commitment to alternative forms of transport, creating more safe spaces for pedestrians and more bike lanes, and introducing stricter limitations on car travel. This trend is particularly marked in European cities.

• People will not use public transport the same way they did before the pandemic until they regain confidence and the fear of infection disappears. In this context, personal micro-mobility solutions such as bikes and electric scooters will gain prominence in urban travel. Apps displaying all available mobility services (public transport, car-sharing, motorbike-sharing, public bike services) for the city on a single platform are helpful.

• Created in Paris, the 15-minute city model has the potential to completely transform mobility in cities. The idea is to create neighborhoods where all essential services are a maximum of 15 minutes away by foot or bike for all neighborhood residents. The COVID-19 pandemic and economic impacts have completely transformed citizens' lifestyles and the urgency of establishing this model is set to increase in this context.

• Some regions, especially in Asia, may soon implement immunity passports to boost international mobility.

" *Immunity bubbles and digital immunity passports for people to start to circulate more are going to happen in Asia.* "

Parag Khanna
Global Strategist and best-selling author, Founder of FutureMap

SMART**CITY** LIVE 2020

ENABLING TECHNOLOGIES	ENERGY & ENVIROMENT	MOBILITY	GOVERNANCE & ECONOMY	LIVING & INCLUSION

COOPERATION IS THE ONLY EFFECTIVE WAY TO FIGHT THE PANDEMIC

- The pandemic has accelerated the digital transformation of administrations, and the population will demand that most services continue to be available online. Some experts argue that the leap the public sector has taken towards digitalization would have taken 20 years if the COVID-19 crisis had not occurred.

- It is the responsibility of administrations to ensure equal opportunities in rural areas by deploying the necessary digital infrastructures. Teleworking can reinvigorate life in villages, as their population can grow through people leaving cities to live in rural areas.

- Teleworking has become a daily reality for many people after the pandemic. The most obvious benefits of this model are better work-life balance and gains in productivity. Another positive aspect, perhaps less obvious, is that teleworkers can invest the time they formerly spent traveling on other productive activities and that this could lead to further economic growth.

- Local governments have been on the frontline of the battle against the pandemic. Metropolitan authorities have played a particularly important role in suburbs. On the other hand, cooperation between different levels of government has proved to be the only effective way of dealing with the pandemic. Added to this, major smart city projects in cities can only be implemented if companies, including competitors, work together on these initiatives.

- Governments have had to intervene in the production-based economy in order to rescue companies and protect jobs during the pandemic. It is difficult for governments to cover the financial assistance needed by all businesses affected by the economic crisis due to COVID-19, but they should facilitate private financing for businesses experiencing difficulties due to the pandemic.

" *Politics decisions always have to be people-centric. The pandemic made clear that we have to increase cities and citizens resilience.* "

Núria Marín
Mayor of L'Hospitalet de Llobregat and President
of the Diputació de Barcelona

ENABLING TECHNOLOGIES	ENERGY & ENVIROMENT	MOBILITY	GOVERNANCE & ECONOMY	LIVING & INCLUSION

THE TRUTH BEHIND REMOTE WORK: IT IS NOT NECESSARILY ALL GOOD FOR CITIES

- The pandemic has exposed the deep inequalities that can exist in the same city and clearly shown that combating the virus is much more complicated in neighborhoods where access to quality healthcare is uneven, housing inadequate, water and sanitation lacking, transport infrastructure patchy and jobs precarious.

- Administrations must work to reduce the digital divide between social classes and between urban and rural areas, both of which have widened during the pandemic. Deploying adequate digital infrastructures across the territory, ensuring access to telecommunications services and connectable devices for the whole population and training in digital skills for citizens are key to narrowing this gap.

- Teleworking has become a daily reality for many people during the pandemic. Yet we need to calibrate the potentially harmful effects that this could have on the ecosystem of cities. Many companies and jobs that depend on physical activity in office spaces are at serious risk of disappearing, and entire zones of cities are in danger of being deserted.

- Although online learning has been a good solution for reducing the spread of infection, in-person teaching is still crucial, especially for low-income students. Children from more vulnerable households often live in more challenging environments and thus are unable to follow an educational program properly. Moreover, schools perform monitoring tasks to safeguard the well-being of the most vulnerable young people, something that cannot be done remotely.

- The pandemic has revealed an urgent need to increase the resilience of cities. The goal is for cities to increase their capacity to address present and future challenges, reduce their vulnerabilities and be capable of overcoming impacts using a proactive approach, as in the case of COVID-19.
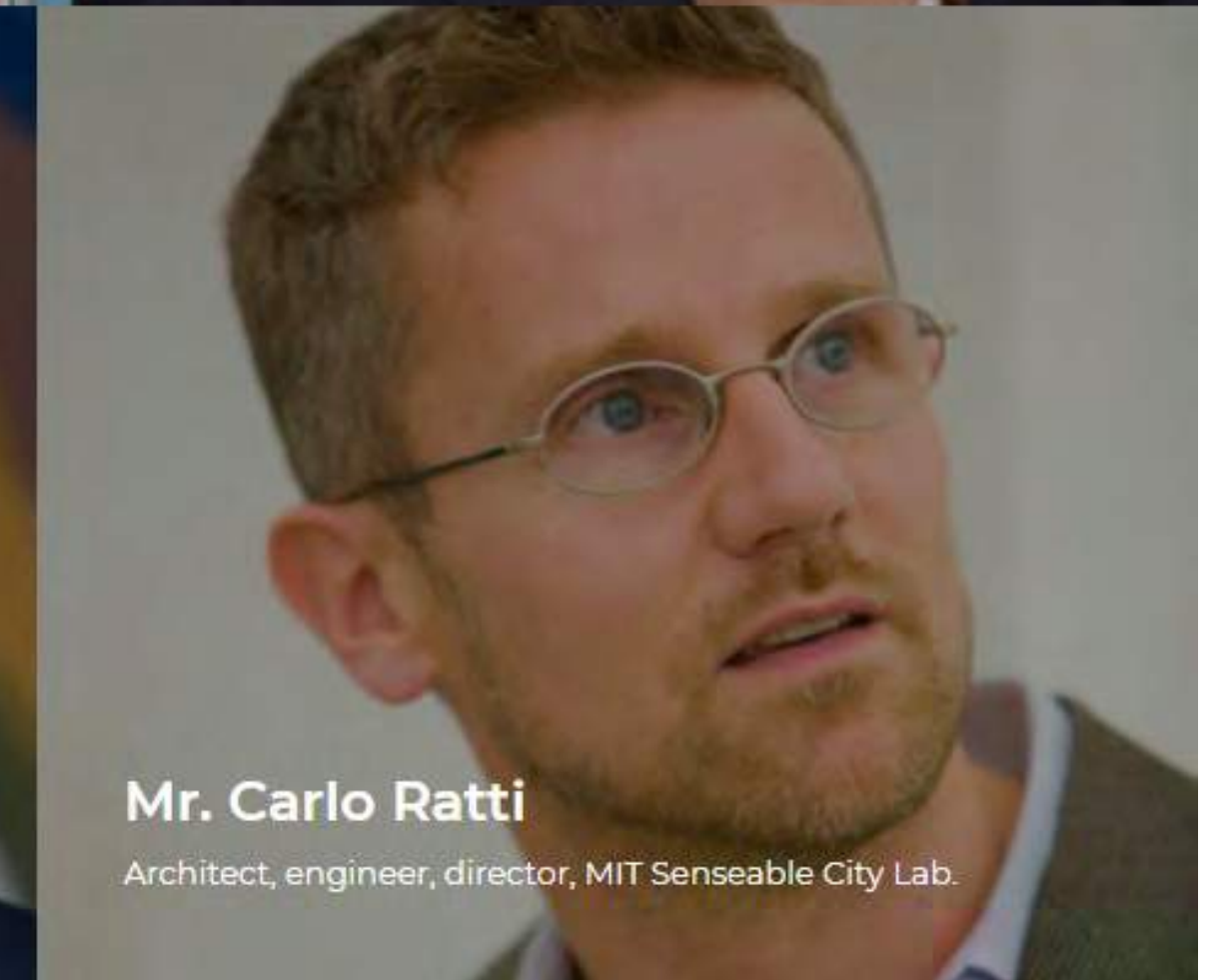
" *Working from home can imbalance the whole ecosystem in cities. So, we need to think about all the different scenarios and plan proactively.* "

Brent Toderian
City Planner and Urbanist, Toderian Urban Works

Ms. Ada Colau
Mayor, Barcelona City Council.

Mr. Takuya Hirai
Minister for Digital Transformation, Social Security, Tax Number System and Information Technology Policy, Government of Japan.

Ms. Teresa Ribera Rodríguez
Fourth Vice-President of the Government and Minister for Ecological Transition and Demographic Challenge, Government of Spain.

Ms. Lori E. Lightfoot
Mayor, City of Chicago.

Ms. Saskia Sassen
Robert S. Lynd Professor of Sociology, Columbia University.

Ms. Anne Hidalgo
Mayor of Paris.

Mr. Michael Müller
Governing Mayor, City of Berlin.

Mr. Carlo Ratti
Architect, engineer, director, MIT Senseable City Lab.

SMARTCITY 2020

" *Housing is a big challenge. Although, in Barcelona, we are doubling the percentage of public housing and using all the possible strategies, including PPP, to ensure access for all.* **"**

Ada Colau
Mayor, Barcelona City Council

" *Japan wants to build a seamless digital society where people can experience the advantage of digitalization without even noticing it.* **"**

Takuya Hirai
Minister for Digital Transformation, Social Security, Tax Number System, and Information Technology Policy, Japan

" *We need to be wise enough to invest the number of resources we require to retrofit our cities and have a better future.* **"**

Teresa Ribera
Fourth Vice-President and Minister for Ecological Transition and Demographic Challenge, Government of Spain

**"** *People on a low-income cannot afford to work from home and are much more exposed to the virus.* **"**

Lori E. Lightfoot
Mayor of Chicago, United States

" *After the pandemic, cities can only return to normal if citizens regain confidence.* **"**

Saskia Sassen
Professor, Columbia University, New York

" *The 15-minute-city is a remarkably interesting source of transformation. During the first COVID-19 lockdown, it allowed us to work on a neighborhood scale.* **"**

Anne Hidalgo
Mayor of Paris, France
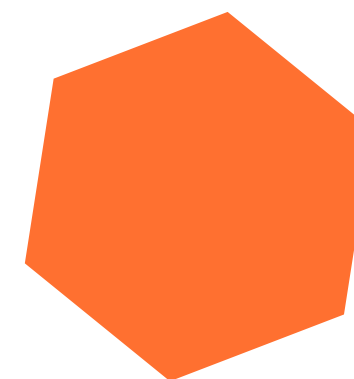
" *We need to invest more in science and research and being ready as individuals for emerging technologies.* **"**

**Michael Müller
Governing Mayor of Berlin and Metropolis President, Germany**

" *During the pandemic, we've seen the utility of the trial and error approach. We should keep it in the future.* **"**

**Carlo Ratti
Architect and engineer, Director of MIT Senseable City Lab**

" *After the pandemic, we will move towards a world more focused on talent rather than protectionism and populism.* **"**

**Parag Khanna
Global Strategist and best-selling author, Founder of FutureMap, Singapore**

" *The current situation is an opportunity. COVID-19 makes you think about the resilience of towns: offices and houses need to be necessarily closer.* **"**

**Victor Mulas
Senior Urban Specialist and Task Team Leader of Tokyo Development Learning Center (TDLC), World Bank**

" *The most important element to build a smart city is connecting the physical and the digital world.* **"**

**Kun Yue
President, Global Government Business Department, Huawei**

" *Working all together in synergy and in an open way helps create a smarter city.* **"**

**Yanfen Chen
Director, Shanghai Unicom
Smart City Research Institute**
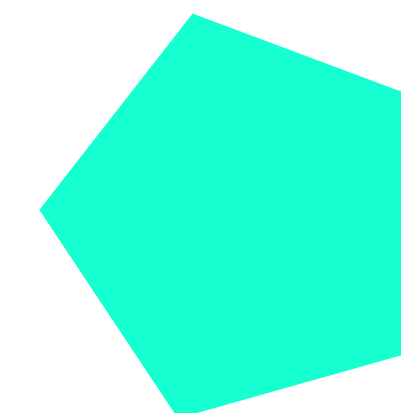
❝ *The COVID-19 crisis helps demonstrate the importance of digitalization.* **❞**

Lacina Koné
Director General, Smart Africa

❝ *Fighting climate change is everyone's business. If we follow the 17 UN SDGs, we have the key to making things better.* **❞**

Marta Subirà
Secretary of Environment and Sustainability, Government of Catalonia

❝ *Digitalization is key to moving towards certainty.* **❞**

Gene Seroka
Executive Director, Port of Los Angeles, United States

❝ *A new kind of companies are coming up. Anything that has to do with health and agriculture has become huge with the COVID-19 pandemic.* **❞**

Natalia Olson-Urtecho
Chief Operating Officer of RadicalxChange, and Innovation and Investment Advisor, The World Bank

❝ *Public-private partnerships (PPP) are key to refurbishing the city.* **❞**

Silvia Sanjoaquín
Head of New Business Models in Energy Efficiency, Naturgy

❝ *Inequalities in cities are the main challenge of the new decade.* **❞**

Maimunah Shariff
Executive Director, United Nations Human Settlements Program (UN-Habitat)

SMARTCITY LIVE 2020

" *To lower the digital divide, access is key but also devices and all the issues to do with digital skills.* "

**Pontus Westerberg
Program Management Officer, UN-Habitat**

" *Cities should promote motorized and non-motorized micromobility areas to have less cars on the street.* "

**Boyd Cohen
Co-Founder, IoMob**

" *We need a change in the financial paradigm to ensure all improvements cover our whole territory and we do not leave anybody behind.* "

**Themsibile Nkadimeng
Co-President UCLG and Mayor of Polokwane, South Africa**

" *Covid-19 has brought new important questions such as: what's the essential? How do we take care of caregivers? What is the role of the public sphere?.* "

**Emilia Saiz
Secretary General, UCLG**

" *Future cities will be 100% decarbonized, pollution free, and with a multimodal mobility ecosystem where public and private initiatives will be combined.* "

**Lucas Casasnovas
Director, SEAT Mo**

" *We are now faced with the most challenging issue of all time. We can use this energy to help one another to create a city that is better and more inclusive.* "

**Miguel Gamiño
Executive Vice President, Enterprise Partnerships, Head of Global Cities and City Possible, Mastercard**

SMARTCITY LIVE 2020
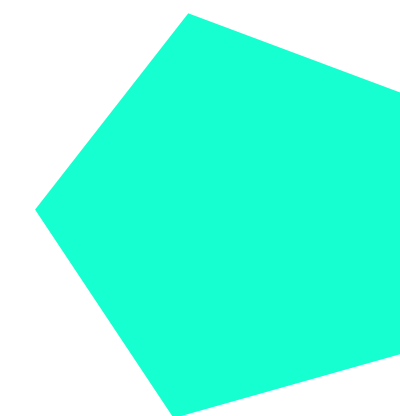
" *Connectivity is at the base of a new society and economy. Becoming digital will be crucial for any territory.* **"**

**Jordi Puigneró
Minister for Digital Policy and Public Administration, Government of Catalonia**

" *The challenges ahead are enormous. We will not go back to a world where services are not accessible digitally, but we have to maintain a human touch, because we need human contact.* **"**

**Julia Glidden
CVP, Global Public Sector,
Microsoft**

" *The first thing we need to think about is access to technology as a human right.* **"**

**Michael Donaldson
Chief Technology Officer and Chief Information Officer, Barcelona City Council**

" *The focus on affordability is critical. We need to find affordable options for the long term.* **"**

**Jeanne Holm
Chief Data Officer, Los Angeles, United States**

" *We have an ethical obligation in the way we use data.* **"**

**Theo Blackwell
Chief Digital Officer, London, UK**

" *At WEF, we want to ensure every city has some foundational policy in place to roll out smart technologies in a way that is responsible and ethical.* **"**

**Jeff Merritt
Head of IoT and Urban Transformation, WEF**

Cities are on the frontline of the COVID pandemic response. It is misleading to think that density is the problem. It's not really about density but about how density is managed.

Sameh Wahba
Global Director Urban, Disaster Risk Management, Resilience and Land Global Practice, World Bank

Extending urban governments to new areas while keeping proximity makes you more robust.

Antonio Balmón
Executive Vice President, Metropolitan Area of Barcelona (AMB)

Mayoralties and supramunicipal entities had been absorbing much of the social impact of the pandemic.

Claudia López
Mayor of Bogotá, Colombia

Coordination between all levels of government is essential to combat the pandemic.

María Jesús Vera
General Director of the Corporation of Regional Development and Tourism, Santiago Metropolitan Government, Chile

The crisis is hitting all countries in the world hard. In Barcelona, we will do the best to capture international talent with events like Smart City Live.
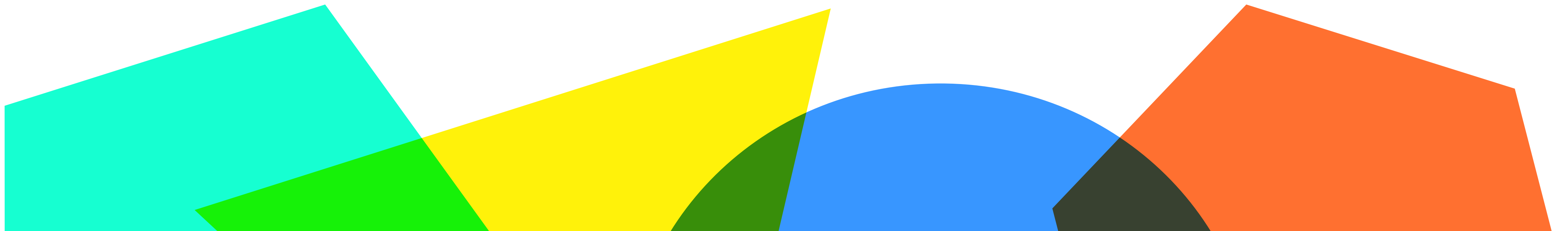
Jaume Collboni
First Deputy Mayor, Barcelona City Council
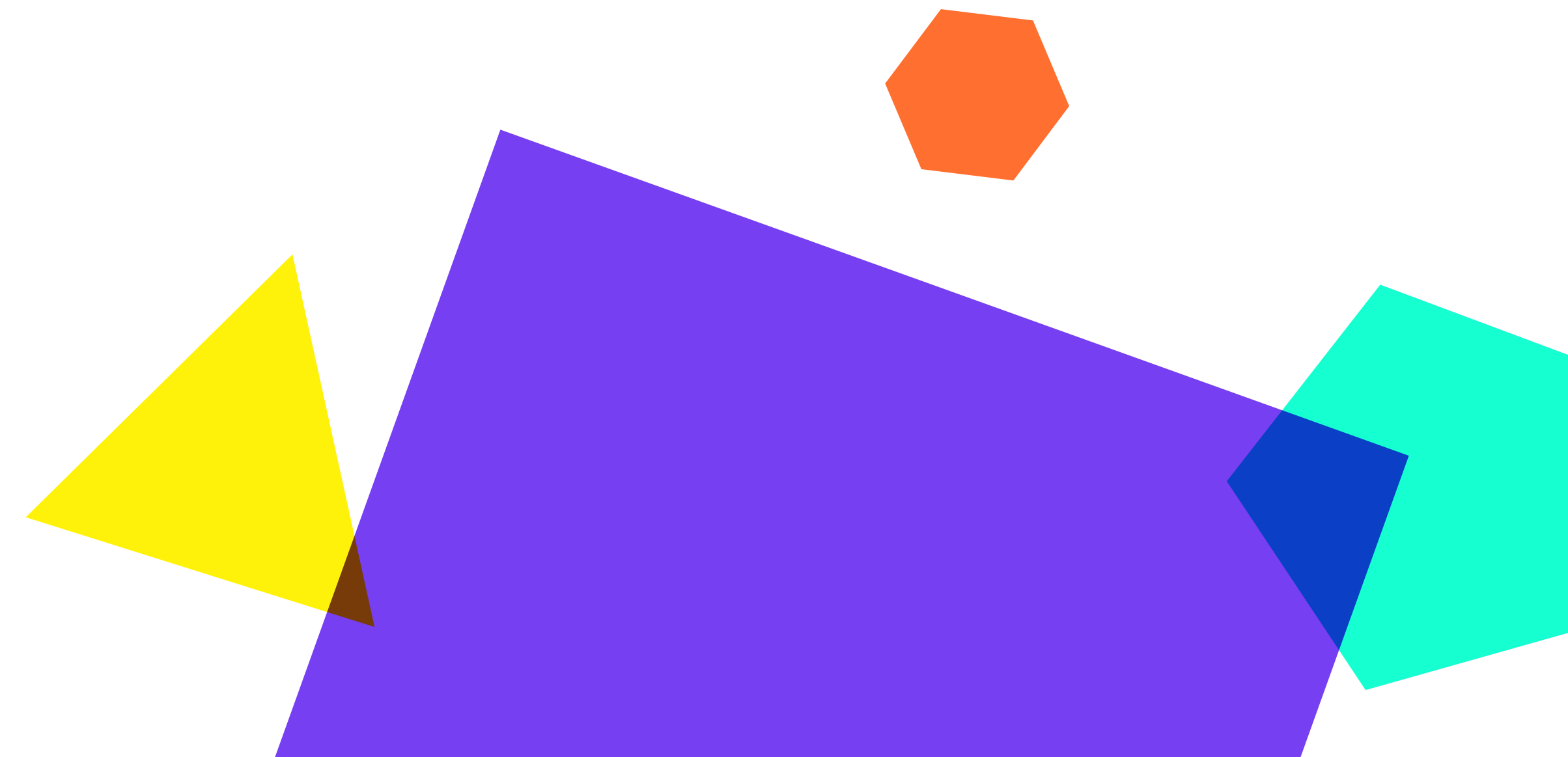
See you next edition:
November 16-18, 2021

Meanwhile, watch all Smart City Live 2020 sessions
and new features on **Tomorrow.City**, and don't forget to catch up on
discussion on our website and social media.

www.smartcityexpo.com