

10. LJUBLJANA FORUM



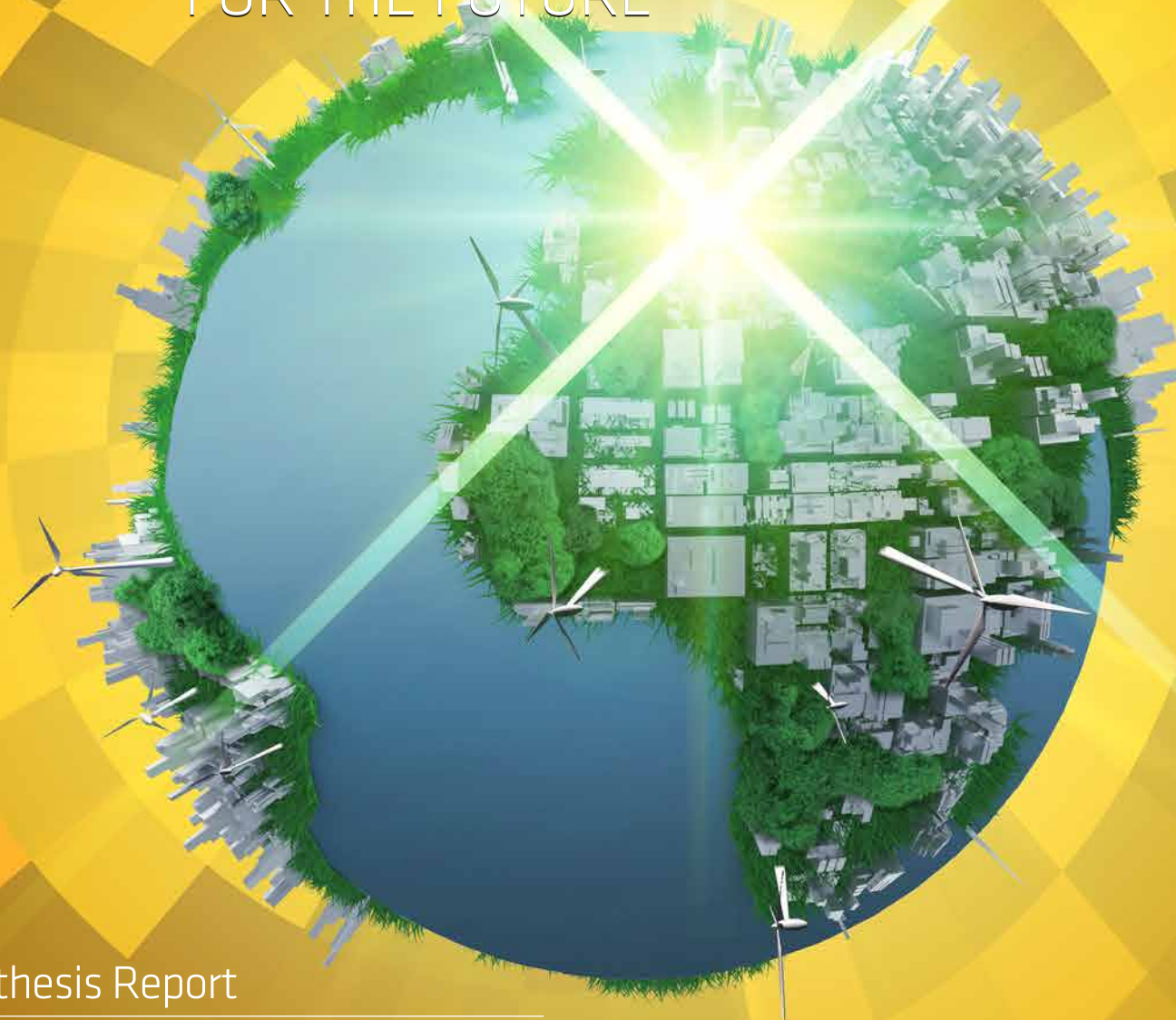
WWW.LJUBLJANAFORUM.ORG

ANNIVERSARY

FUTURE OF **CITIES**

SUSTAINABLE - SMART - INCLUSIVE - RESILIENT

TOWARDS **THE IDEAL CITY** FOR THE FUTURE



Synthesis Report

Conference

October 7th - 8th 2021 • Ljubljana Castle, Slovenia



Ljubljana Agreement 2021 for next generation of European cities

As a purpose driven event Ljubljana Forum's aim is also to influence the policy making arena from the bottom-up perspective. A very successful example of having influence in 2021 is Ljubljana Forum's impact on Urban Agenda for European Union, which was reinforced by Ljubljana Agreement during Slovenian EU Presidency in November 2021. Through Urban Forum, which derived from Ljubljana Forum, we influenced the EU Presidency event on next generation of European cities. Urban Forum is a Slovenian multi-stakeholders platform for addressing city challenges composed by Slovenian City Municipalities, Ministry of Environment and Spatial Planning and Go Foresight - GFS Institute.

New phase for European cities under the umbrella of the Urban Agenda for the European Union.

EU policies and legislation have a considerable impact on the development of European cities. How cities operate has an impact on the successful implementation of EU policies. As much as 70 percent of all measures to deliver EU policy goals are implemented at local level. During the Slovenian Presidency to the European Union in November 2021, EU Ministers responsible for Urban Matters adopted the

Ljubljana Agreement and its Multiannual Working Programme. The meeting was also attended by the European Commissioner for Regional Policy and representatives from the European Parliament (EP), Committee of the Regions (CoR), European Economic and Social Committee (EESC), European Investment Bank (EIB), Eurocities and Council of European Municipalities and Regions (CEMR), as well as Norway and Switzerland and several observers.

The EU Urban Agenda, established in 2016, is aimed at improving the quality of life in cities in partnerships with different stakeholders. The Ljubljana Agreement aimed at the removing barriers that cities face in the fields of regulation, funding and knowledge. It contains the fourteen thematic areas of cooperation and adds four new topics during the Slovenian EU Presidency: **"Urban Greening", "Sustainable Tourism", "Food" and "Cities of Equality"**.

More about Urban Agenda for the European Union:



https://ec.europa.eu/regional_policy/sources/docgener/brochure/multiannual_working_programme_uaeu_2022_2026.pdf

Conference



Synthesis report on
FUTURE OF **CITIES**
SUSTAINABLE - SMART - INCLUSIVE - RESILIENT
TOWARDS **THE IDEAL CITY**
FOR THE FUTURE

Content

5	Introduction
6	About Ljubljana Forum 2021
8	City Leaders and Representatives
9	Speakers
11	Moderators
12	About the Agenda
14	Official Opening of Ljubljana Forum 2021
15	Session I. Towards the Ideal City for the Future
17	Session II. Ideal city for the future (mayor's perspective)
20	Session III. Smart - Sustainable – Inclusive / Resilient city for the future
23	Session IV. Industry solutions for cities
28	Session V. Ljubljana Smart City – Challenges in 2021 & next steps towards concrete projects
30	Session VI. Financial instruments & Business models & NGOs for development of Cities
33	Session VII. City initiatives meeting EU twin objectives (Green & Digital transition)
36	Award Ceremony at 10 th Anniversary of Ljubljana Forum
38	Conclusions
40	About the People

Introduction

From 2011 on we evaluated the evolved concepts of sustainable, smart, inclusive and resilient city. As we learn from many participating cities through the years and at 10th anniversary by the cities of Ljubljana and Zurich, sustainable development is a benchmark for every city development.

Successful implementation of new technologies could lead us to the creation of Smart City 3.0 as it was demonstrated with a concrete city projects, like in the city of Seville. Implementation of Artificial Intelligence – AI in real time with a data provided by IoT solutions could support successful twin digital & green transformation of cities.

Award winners of the 10th Anniversary of Ljubljana Forum represents various stakeholders relevant for city development. Enthusiasm of award winners demonstrated their commitment to create and realise innovative projects and share good practices to different city actors.

Over 1200 participants attended a boutique event at Ljubljana Castle during the last 10 years. More than 330 international speakers presented innovative solutions. Different projects triggered investment exceeding 300 million euros. City leaders views and industry solutions are included in 10 summary reports generating more then 350 pages of city stories.

Evaluating 10 years of achievements of Ljubljana Forum provide us with a new knowledge and foster new research. If we want to move towards the “ideal city” we must constantly improve, analyse our implemented solutions and do strategic foresight with partners. Our work drive us to move ahead with new city projects in the years to come.

Blaž Golob
Chairman of Ljubljana Forum



Zoran Janković
Mayor of the City of
Ljubljana



Miran Gajšek
Co-Chairman
of Ljubljana
Forum, Head of
department for
urban planning,
City of Ljubljana



**Barbara
Haering**
Swiss Federal
Institute of
Technology,
Zürich



Blaž Golob
Chairman of
Ljubljana Forum



**Ladeja
Godina Košir**
Circular Change
Institute
for Circular
Economy



**Tomaš
Pavliček**
Chief Operations
Officer, Heliot
Europe



**Alexander
Prosser**
Vienna University
of Economics and
Business



The image shows the cover of a brochure for the Ljubljana Forum 2021. The cover has a yellow and orange geometric pattern. In the center, there is a circular inset showing a green cityscape with a blue lake and a bridge. Text on the cover includes '10th ANNIVERSARY', 'TOWARDS THE IDEAL CITY FOR THE FUTURE', 'SUSTAINABLE - SMART - INCLUSIVE', and 'LJUBLJANA FORUM 2021'.

About Ljubljana Forum 2021

The tenth edition of the Ljubljana Forum took place on 7th - 8th October 2021, at the Ljubljana Castle, in Ljubljana, Slovenia. It welcomed over 130 participants, speakers, and moderators from all over the world. More specifically, geographic diversity of participants was as follows: 50% from South East and Central Eastern Europe, 15% from Slovenia, and 35% from the rest of the world. In addition, the Forum ensures diversity of stakeholders by welcoming participants, such as high level representatives, city leaders, futurists, urban planners, architects, academics and researchers, industry solution providers, consultants, governmental and European Union (EU) institution representatives, banks, civil society, and media.

The specific 5 objectives of the conference were:

Objective 1: To present and promote the Green Cities Concept.

Objective 2: To present Governance Challenges of Sustainable Cities and Smart Infrastructure.

Objective 3: To present the opportunities of Industry Solutions for Green Cities and Smart Infrastructure.

Objective 4: To present the best Project Practices and Entrepreneurship for Green Cities.

Objective 5: To connect, learn, bring about new projects, and move forward.

The overall objective of Ljubljana Forum 2021 has been to offer a framework for cooperation, networking and learning to enable and encourage good practice and create prosperous future of cities through researching, developing, and implementing the best practices of urban development. Continuous cooperation among key stakeholders is inspiring digital transformation of cities towards Smart Cities.

Organizers and partners of Ljubljana Forum 2021

- | | |
|---|---|
| <ul style="list-style-type: none">• AAMI Corporation• A1• BTC City• City of Ljubljana• City of Vienna• Energetika Ljubljana• European Investment Bank• GoForeSight Institute• Heliot Europe• IBM• Institute for Electronic Participation• International Association for the Advancement of Innovative Approaches to Global Challenges IAAI• Petrol• Riko | <ul style="list-style-type: none">• Sigfox Slovenia• Slovenian - Nigerian Chamber of Commerce• T2• Technology Park Ljubljana• The Events• Vienna University of Economics and Business• Vodovod Kanalizacija |
|---|---|

Participating cities

- City of Ljubljana
- City of Banja Luka
- City of Beograd
- City of Novi Sad
- City of Rijeka
- City of Vienna



Ljubljana Forum is an annual gathering that combines knowledge and experience of city governance and defines **key areas, visions, and strategies of the future development** of cities.

The aim of Ljubljana Forum is to promote opportunities for future development of cities and metropolitan areas of the Southeast European region.

The objective of Ljubljana Forum is to **offer a framework for cooperation, networking, and learning among various stakeholders**: political decision-makers, city leaders and city administration, investors, businesses, civil society, researchers, academics, and students.

The objective of Ljubljana Forum is to empower this network of stakeholders to create prosperous future of cities through **researching, developing, and implementing the best practices of urban development**.

City Leaders and Representatives at Ljubljana Forum 2021



Mr Zoran Janković,
Mayor of Ljubljana



Mr Draško Stanivuković,
Mayor of Banja Luka



Mr Zoran Radojčić,
Mayor of Beograd



Mr Marko Filipović,
Mayor of Rijeka



Ms Mira Radenović,
Member of the City council
in charge of environmental
protection and sustainable
development, Novi Sad



Mr Jurgen Czernohorsky,
Executive City Councillor
for Climate, Environment,
Democracy and Personnel,
Vienna

Speakers of Ljubljana Forum 2021



Mr Zoran Janković,
Mayor of Ljubljana



Mr Blaž Golob,
Chairman of Ljubljana
Forum



Mr Lorenzo Madrid,
Smart City Expert - Key
Note Speaker, Senior
Consultant - GFS Institute



Ms Barbara Haering,
Swiss Federal Institute of
Technology, Zürich



**Ms Ladeja Godina
Košir,** Circular Change
Institute for Circular
Economy



**Mr Alexander
Prosser,** Vienna
University of Economics
and Business



Mr Miha Mermal,
Chief Marketing & Chief
Sustainability Officer, BTC

Ms Biljana Prinčič,
Chief Digital Officer, Riko
Engineering



Mr Gašper Žerovnik,
Head of Digital
Transformation, T -2



Mr Andrej Bergant,
Executive Director Energy &
Solutions, Petrol



Mr Tomaž Pavliček,
Chief Operations Officer,
Heliot Europe



Mr Dejan Podgoršek,
Technology Partner
Arhitekt, IBM



**Ms Marjana
Senčar Srdič,** Head
of IoT Technology and
Innovations, A1



Mr Gregory Krug,
Product Manager, ZF GmbH





Ms Mojca Markizeti,
Head of Sustainability
& Regulatory Affairs,
Iskraemeco



Mr Arian Debeljak,
Chief Technology Officer,
City of Ljubljana



Mr Boris Koprivnikar,
Sincular Consulting



Mr Simon Delakorda,
Institute for Electronic
Participation - Inepa



dr. Matevž Pogačnik,
University of Ljubljana



**Ms Saša Heath
Drugovič,** City of Celje



Mr Gregor Košir, Vice
mayor, City of Kočevje



Mr Francesco Ferrero,
Head of European
Investment Bank Group
Office for Slovenia, EIB

Mr Tihomir Divjak,
Foresight Europe
Network FEN



Mr Fred Uduma,
President of Nigeria -
Slovenian Chamber of
Commerce



Mr Tomaž Lanišek,
Development & Smart
City Manager, City of
Kranj



Mr Simon Mokorel;
Expert for Development,
City of Nova Gorica



**Mr Mensur
Ferhatović,** Fire
brigade Rijeka



Mr Klemen Furlan,
CEO at GoGiro



Mr Miroslav Polzer,
CEO of the IAAI



Moderators of Ljubljana Forum 2021

Ms Helena Ajdnik,
Event Moderator



Ms Darja Virjent, ESG
Sustainability & Business
Advisor



Mr Miran Gajšek,
Co-Chairman of
Ljubljana Forum, Head
of department for urban
planning, City of Ljubljana



Mr Blaž Golob,
Chairman of Ljubljana
Forum



Mr Frane Šesnić,
CEO of Zagreb Innovation
Centre



Mr Milan Lazarević,
Tech Community
Manager, Technology Park
Ljubljana



About the agenda

Thursday, 7th October 2021

Place of venue: **Ljubljana Castle**

Session I: **Opening & Keynote speech**

Moderator: Ms. Helena Ajdnik, CEO, Kreativus

Time	Session	Speaker
9.00 - 9.15	Official Opening of Ljubljana Forum 2021 Introduction & Welcome address	Mr. Zoran Janković, Mayor, City of Ljubljana
9.15 - 9.30	Keynote speech: 10 years of Evolution of Ljubljana Forum "Towards the Ideal City for the Future"	Mr. Blaž Golob, Chairman of the Ljubljana Forum

Session II: **Round Table of Mayors / Ideal city for the future** (mayor's perspective)

Moderator: Ms. Darja Virjent, ESG Sustainability & Business Advisor

9.30 - 11.00	Mayor - Ljubljana by Zoran Janković, Mayor - Vienna by Jurgen Czernohorsky, Executive City Councillor for Climate, Environment, Democracy and Personnel - Beograd by Zoran Radojčić, Mayor - Rijeka by Marko Filipović, Mayor - Novi Sad by Ms. Mira Radenović - Banja Luka by Draško Stanivuković, Mayor
--------------	---

Session III: **Smart - Sustainable - Inclusive - Resilient city for the future**

Moderator: Mr. Miran Gajšek Co-Chairman of Ljubljana Forum, Head of department for Urban planning - City of Ljubljana

11.30 - 12.30	Dr. Barbara Haering, ETH Zurich, Dr. Lorenzo Madrid, Senior Consultant - GFS Institute Ms. Ladeja Godina Košir, Circular Change, Dr. Alexander Prosser WU - Vienna
---------------	---

Session IV A: **Industry solutions for cities**

Moderator: Ms. Darja Virjent, ESG Sustainability Business Advisor

14.00 - 15.00	BTC by Mr. Miha Mermal	Chief Marketing & Chief Sustainability Officer
	Riko Engineering by Ms. Biljana Prinčič	Chief Digital Officer
	T -2 by Mr. Gašper Žerovnik	Head of Digital Transformation
	Petrol by Mr. Andrej Bergant	Executive Director Energy & Solutions

Session IV B: **Industry solutions for cities**

Moderator: Ms. Darja Virjent, ESG Sustainability & Business Advisor

15.00 - 16.00	Heliot Europe by Mr. Tomaš Pavliček	Chief Operations Officer
	IBM by Mr. Dejan Podgoršek	Technology Partner Architect
	A1 by Ms. Marjana Senčar Srdič	Head of IoT Technology and Innovations
	ZF GmbH by Mr. Gregory Krug	Product Manager
	ISKRAEMECO by Ms. Mojca Markizeti	Head of Sustainability & Regulatory Affairs

20.00 **Ljubljana Forum Reception & Award Ceremony - Ljubljana Castle**

Decennium Award Ceremony

Prospectives for Western Balkans by Julian Vassallo; Deputy Head of EU Delegation to North Macedonia

Moderator: Ms. Helena Ajdnik, CEO, Kreativus

Friday, 8th of October 2021

Place of venue: **Ljubljana Castle**

Session V: **Ljubljana Smart City – Challenges in 2021 & next steps towards concrete projects**

Moderator: Mr. Blaž Golob

Introduction by: Mr. Arian Debeljak Chief Technology Officer, City of Ljubljana

Time	Session	Speaker
9.00 - 10.00	Panelists: Mr. Boris Koprivnikar, Sincular Consulting (CITY – GOV/INDUSTRY view), Mr. Simon Delakorda, Institute for Electronic Participation (NGOs view), Dr. Matevž Pogačnik, Ms. Saša Heath Drugovič (University view), City of Celje (CITY – GOV view), Mr. Gregor Košir, Vice mayor City of Kočevje (CITY- GOV view)	

Session VI: **Financial instruments & Business models & NGOs for development of Cities**

Moderator: Frane Šesnić, CEO of Zagreb Innovation Centre

10:00 - 11:00	Mr. Francesco Ferrero	Head of European Investment Bank (EIB) Group Office for Slovenia
	Ms. Saša Heat Drugovič	Association of Slovenian City Municipalities (ZMOS), City of Celje
	Mr. Simon Delakorda	CEO of Inepa - Institute for Electronic Participation
	Mr. Tihomir Divjak	Senior Consultant at Foresight Europe Network FEN
	Mr. Fred Uduma	President of Nigeria, Slovenian Chamber of Commerce

Session VII: **City initiatives meeting EU twin objectives** (Green & Digital transition)

Moderator: Mr. Milan Lazarević; Tech Community Manager, Technology Park Ljubljana

11:15 - 12:00	Project 1 / Smart Settlement Mlaka in Kranj	by Mr. Tomaž Lanišek; Development & Smart City Manager, City of Kranj
	Project 2 / Nova Gorica – Cultural Capital of Europe	by Mr. Simon Mokorel; Expert for Development, City of Nova Gorica
	Project 3 / Experiences in application of satellite communication in Croatia	by Mr. Mensur Ferhatović, Fire brigade Rijeka
	Project 4 / Giro Car Share Start-up, Technology Park Ljubljana	by Mr. Klemen Furlan; CEO, Giro Car Share
	Project 5 / With #DigitalArt4Climate & Carbon Footprint Compensation	by Mr. Miroslav Polzer; CEO, IAAI


12.00 - 12.10

Conclusions of Ljubljana Forum 2021

Announcement of 11th Ljubljana Forum on Future of Cities / October 6th-7th 2022

Official Opening of Ljubljana Forum 2021



 **Zoran Janković**, mayor of the City of Ljubljana

Zoran Janković, mayor of the City of Ljubljana welcomed participants to the 10th Ljubljana Forum inviting everyone to share their knowledge and experience concerning European cities as sustainable, smart, inclusive, and resilient cities.

The aim of the Forum is to gather creative people to engage them in smart city development discussions as well as encourage, and foster good practices of smart city (infrastructure) projects. In the 10 editions of Ljubljana Forum there have been many good practices and excellent projects. The opening address of Zoran Janković focused on the desire to develop practices, projects and ecosystems of smart cities that sustainably increase the high quality of life, while protecting the planet for future generations. The fastest way to achieve this is to learn from each other. For this reason, this annual gathering of mayors from the region is of high importance. For ten Forums in a row, each gathering allows mayors to share their experience at the roundtable and inspire improvements across our region.

Session I:

Keynote speech

10 years of Evolution of Ljubljana Forum “Towards the Ideal City for the Future”



Blaž Golob, chairman of Ljubljana Forum, Ljubljana Forum - GFS Institute

Blaž Golob, the chairman of Ljubljana Forum, emphasized the importance of this traditional event and expressed gratitude to the cities that are returning to the Forum for many years. These dedicated leaders are united in the main aim of each conference in Ljubljana – together they are striving to co-create cities of wellbeing.

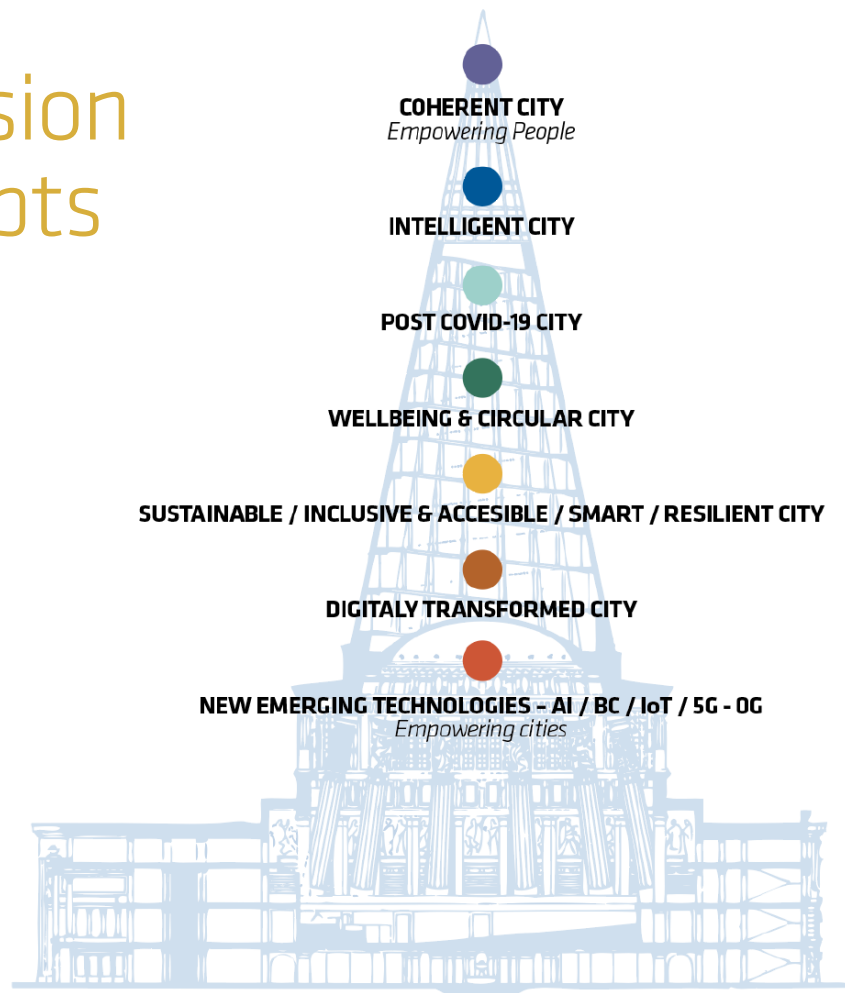
His presentation on the evolution of the Ljubljana Forum highlighted the key figures and awards that have been given over the years. He took the participants through a decade of achievements of the forum, remembering the beginnings and development of the concept, as well as thanking the stakeholders for their cooperation and support. He concluded with an ideal city scheme based on new emerging technologies, paving the way to intelligent and coherent city. See next page Ljubljana Forum evolving model of an ideal city for the future.

»Through various concepts introduction in the last decade a model of a coherent city for the future has been formed. A coherent city represents a synergy of different evolving concepts supported by new emerging technologies. It is important to state that new technologies, including artificial intelligence, will remain in the service of humanity, that is, the actual needs of people and not vice versa, at the service of algorithm. "Strategic foresight" is of great use for moderating different stakeholders' interests with a prospect of creating different scenarios for development of ideal cities for the future.«

Blaž Golob, chairman of Ljubljana Forum, Ljubljana Forum - GFS Institute



From Vision & Concepts towards concrete projects



Key figures

Over **1200** participants, coming from all over the world.

Over **330** expert speakers and moderators, coming from all over the world.

Over **300** pages in **9** reports about city challenges & industry solutions

Over **100** innovative governance, business, and technology solutions for promoting smart city development and improving city management.

Over **55** best smart city practice cases and projects presented. Innovative business models and technology solutions for smart city development presented.

7 new project initiatives with a total value exceeding € **300** mio.

Session II:

Round Table of Mayors Ideal city for the future (mayor's perspective)



Draško Stanivuković, mayor of Banja Luka, **Zoran Radojčić**, mayor of Belgrade, **Aleksander Saša Arsenovič**, mayor of Maribor, **Marko Filipović**, mayor of Rijeka, **Mira Radenović**, Member of the City council in charge of environmental protection and sustainable development, Novi Sad, **Jurgen Czernohorsky**, Executive City Councillor for Climate, Environment, Democracy and Personnel, Vienna

Ljubljana Forum is about exchanging good practices to strengthen the competitiveness of the region. Representatives of towns and cities discussed the vision of cities, the challenges and obstacles facing SEE cities, highlighting future projects that are engaging all city stakeholders in the project planning phase, which is a key factor in its success. In debate they discussed what is the concept of the ideal city in the future and emphasized the inclusiveness of citizens, participation of public agencies, non-governmental organizations, etc. They stressed that for major decisions, people need to be empowered and involved in the decision making in a democratic way. Mayors must trust citizens in their decision-making processes.

»In Ljubljana we are continuing projects following our vision for 2025. Today, 170 projects are underway in the city. And many are planned for the future: for example heating system, new projects due to climate change, expansion of pedestrian zones and much more. We are in the process of creating a new vision of Ljubljana city 2045. The balance is the key to the wellbeing of the city and is only possible by listening to the citizens to discover which issues they are facing. The quality of life for all citizens must be taken into consideration. A good mayor loves his citizens.«

Zoran Jankovič, mayor of Ljubljana





»The key word is balance. This is important for any city. The city of Belgrade is the best place to invest. And I wish Belgrade will become even healthier and more suitable environment for the growth of children. There are also many future projects: metro, transit ring road, wastewater management project, linear park with green and smart concept by the river. When we talk about the ideal city, we are talking about the concept of a smart city and urban planning.«

Zoran Radojčić, mayor of Belgrade



»The biggest challenge is, not only for the mayor of Rijeka, but for all mayors of cities, how to spend EU funds. In Croatia, no project is started without EU funding. We work with the government and have good relations with citizens and are aware of their needs. We need to empower citizens to work with the city. Without smart citizens and smart governance, there is no smart city. There is a lot of investment in Rijeka, for example in the project 'Rijeka will be the best marina in the world'. Among the future projects I would like to highlight water supply system, energy exchange of public transport, transport connections, city centre together with the port of Rijeka, education and sports etc.«

Marko Filipović, mayor of Rijeka



»Work locally, think globally. City of Maribor continues with projects in its vision. We learn from other cities and try to give our best for our citizens and the whole region. We have increased the city budget and bought land to build housing for the elderly. We have all citizens in mind when planning future projects. In the next four years, we expect to implement projects such as pedestrian zones, bridges over the Drava River, the use of the river for public transport and an even better connection between the urban and rural part of the city. As far as the development of the region is concerned, we would like to connect the Pohorje resort with the city of Maribor. City of Maribor also runs several projects focusing on circular economy.«

Aleksander Saša Arsenovič, mayor of Maribor

»There are many challenges in Banja Luka. The most important thing is that the city government understands the needs and challenges of its citizens. We put the family at our centre. We are a part of Europe. Hence, we need investors to support our future projects, such as water supply system, wastewater collection, bridge reconstruction, public transport reform.«

Draško Stanivuković, mayor of Banja Luka



»The biggest challenge in Novi Sad, which is growing very fast, is how to connect with citizens to implement smart city solutions. We can reach our citizens and their needs through non-governmental organizations, and vice versa, we can bring our projects closer to our citizens through non-governmental organizations. We are learning from cities in the region and aim to become a green European city.«

Mira Radenović, Member of the City council in charge of environmental protection and sustainable development, Novi Sad



»For us in Vienna, it is all about the quality of living. Cities are living entities. There are big challenges in Vienna: the city is growing, the labour market and the economy are also a big challenge, and the biggest challenge of our time is climate change. Our mission is to remain the first in the world in terms of quality of life in the future. In order to involve people in our projects, we need to innovate in the democratic processes. For example, encouraging young people to express their perspective and vision for the development of the city in the future, and then including them into action plan of the city.«

Jurgen Czernohorsky, Executive City Councillor for Climate, Environment, Democracy and Personnel, Vienna



Session III.

Smart - Sustainable - Inclusive - Resilient city for the future
4 key note speeches selected from the last 10 years



Miran Gajšek, Department for urban planning, City of Ljubljana, **Lorenzo Madrid**, Senior Consultant - GFS Institute, **Barbara Haering**, Swiss Federal Institute of Technology, Zürich, **Ladeja Godina Košir**, Circular Change Institute for Circular Economy, **Alexander Prosser**, Vienna University of Economics and Business

In the introduction, **Miran Gajšek**, head of the Department for urban planning, City of Ljubljana, emphasized that within the forum we are planning, fore-sighting, and co-creating a vision for the future. He pointed out that a lot of funds are currently available (EU funds, city, state budget, etc.). We are at a point where we are obliged to make wise decisions about how we will spend them and keynote speakers contribute their take on the ideal city for the future.

Dr. Barbara Haering, Swiss Federal Institute of Technology from Zürich, took us from digital transformation to driving innovation and sustainability. She presented the city of Zürich as an example. Even though cities face challenges, the quality of life in urban areas needs to be maintained or improved. At the same time, resource and energy consumption will have to be reduced. New technologies and digital transformation offer great potential to meet these challenges. Digital transformations offer opportunities and cause threats for sustainability. Strategic objectives (equal opportunities sustainable development, innovation and attractive business) and main elements (innovation, cooperation, dialog) are essential. She concluded with an invitation to put the focus on sustainable development, also as a benchmark for every project we launch.



»We know enough. We have the technologies. We ourselves bear responsibility for the change needed.«

Barbara Haering, Swiss Federal Institute of Technology, Zürich

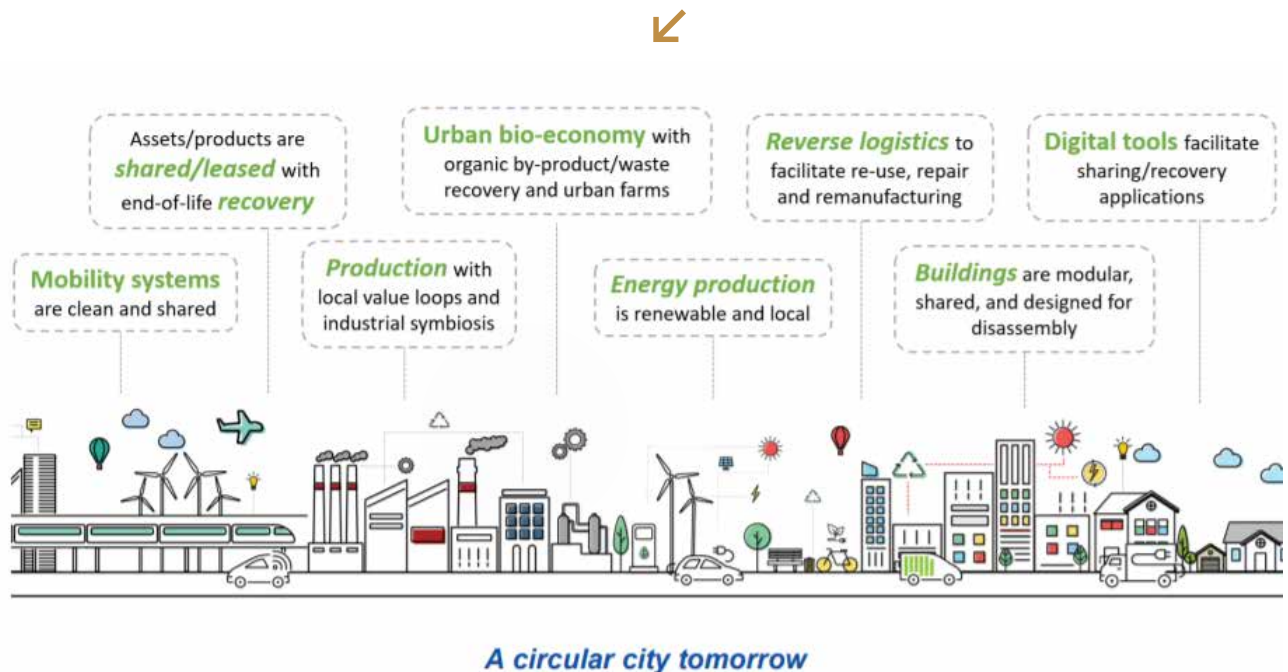
Ladeja Godina Košir, Circular Change Institute for Circular Economy, explained how circular economy can engage and enable stakeholders for the circular transition and thus co-create ideal cities. For this reason, sensing circular economy is essential. She presented some best practices of the circular economy, including the Port of Montenegro. The presentation continued with the cities of the future. They should be smart, creative, sustainable, green, circular. She concluded with the circular city of tomorrow and two examples of projects that are already underway, Green Pinguin Game and Ljubljana Circular City 2045.

»The circular city of tomorrow must take into account a clean and shared mobility system, modular buildings, urban bioeconomy, local value production, renewable and local energy production, reverse logistics, digital tool sharing, and so on.«

Ladeja Godina Košir, Circular Change Institute for Circular Economy



Cities for circular change by Ladeja Godina Košir



Source: https://www.eib.org/attachments/thematic/circular_economy_15_steps_for_cities_en.pdf



»We are not learning! We need vision, governance, leadership and political will to achieve our goals.«

Lorenzo Madrid, Senior Consultant - GFS Institute

Dr. Lorenzo Madrid, smart city expert and key note speaker, presented lessons to move forward. He started with the fact that smart city at the end is the evolution of the concept of the e-government. We need to understand the different levels of the smart city: smart city 1.0, smart city 2.0, smart city 3.0. He reminded the audience of the importance of learning trial and error in smart city development, and presented some bad practices from which we need to learn. He warned that we are not learning. Therefore, he suggested 10 key rules to avoid bad results. We need leadership, alignment, culture, simplification, integration, communication, execution, supervision, planning and capacity building. Recipe for success is in the vision, governance, leadership, and political will.



»We collect huge amounts of analogous and digital data from a smart infrastructure. We can analyse them on a record-for-record basis in Analytics and AI. Where does this take us? AI in real time based on Internet of Things.«

Alexander Prosser, Vienna University of Economics and Business

Dr. Alexander Prosser, Vienna University of Economics and Business, shared how AI is supporting development of smart cities, challenges and prospects. He stressed out why AI is the game changer. Essentially, with AI we can analyse data in real time. He presented examples from smart grid and suggested to collect individual data from every windmill and current consumption data from smart meters for prediction of consumption and production based on real-time data. Furthermore, we should use AI to predict load development to increase resilience heads-up to control centres, if difficult patterns are predicted. Via AI we can also optimize systems. Dr. Alexander Prosser explained how to face the challenges of the future. We do not need technology (which we already have), we need public awareness, acceptance, training, a regulatory framework, ethical issues, public-commercial cooperation and, most importantly, digital sovereignty over the value chain.

Session IV:

Industry solutions for cities



Miha Mermal, BTC, **Biljana Prinčič**, Riko Engineering, **Gašper Žerovnik**, T-2, **Andrej Bergant**, Petrol.

Miha Mermal, Chief Marketing & Chief Sustainability Officer, describes how his company BTC has transformed according to the customer needs and how they have started their sustainability journey 20 years ago. They constantly disrupt business models and collaborate with start-ups. BTC also acts as an innovation centre. Hence, they host the Slovenian digital centre, where local digital solutions are being presented during the Slovene presidency to the EU. Many of them are human-centric as the future is focused on solutions focused primarily on the people.

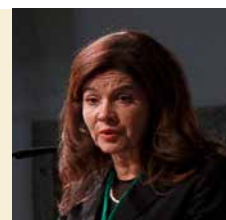




Riko Engineering combines extensive international experience in planning and implementing projects related to equipment, energy, ecology, and logistics systems. **Biljana Prinčič**, Chief Digital Officer, explained how they support the green and digital transformation with their solutions while thinking of the wellbeing of their customers. They are globally advocating sustainable construction by using sustainable materials. Therefore, they focus on the environmental and social responsibility in designing future smart cities.

»Diversity of partners is crucial in co-creating future smart cities in addition to involving local partners to ensure understanding of their needs.«

Biljana Prinčič, Riko Engineering



»An ideal city for the future needs to be user-centric. All solutions exist to benefit people.«

Gašper Žerovnik, T-2

Gašper Žerovnik, Head of Digital Transformation, shared how a telecommunication company T-2 can contribute to the ideal city for the future by potentially changing behaviour with incentive in a one self-contained ecosystem. They do not only provide services but also try to build relationships with customers. Two-way communication as well as citizen experience measurement is the most important aspect of their platform for smart cities.

Petrol is mostly concerned with saving nature for future generation. They believe it is the obligation of the industry to show the way and lead us through the transformation. **Andrej Bergant**, Executive Director Energy & Solutions at Petrol, predicted the future in the energy sector and acknowledge we will need to change our lifestyles in near future. For over 70 years, they are the main supplier for gasoline in the region. However, they are preparing their transition to providing energy for electric cars. The company is also engaged in smart city project of energy efficiency buildings and is investing heavily in renewables both in Slovenia as well as in the wider region.



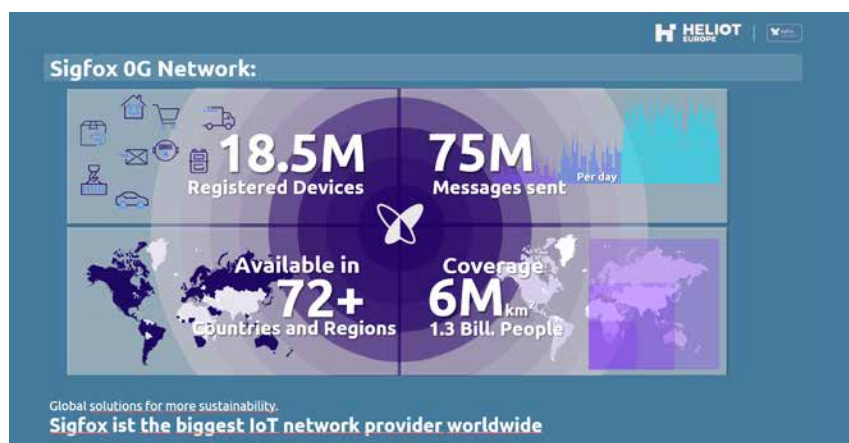
Session IV:

Industry solutions for cities



Mojca Markizeti, Iskraemeco, Dejan Podgoršek, IBM, Gregory Krug, ZF, Marjana Senčar Srdič, A1, Tomaš Pavliček, Heliot Europe

The flow of the data is constantly increasing. However, for simple operations OG is sufficient, explained **Tomaš Pavliček**, Chief Operations Officer, representing Heliot Europe and Sigfox, which is the world's leading service provider for the Internet of Things (IoT). The company has built a global network to connect billions of devices to the Internet while consuming as little energy as possible. This makes their solutions both sustainable, lower-cost, and more flexible than earlier generations of connectivity technology.

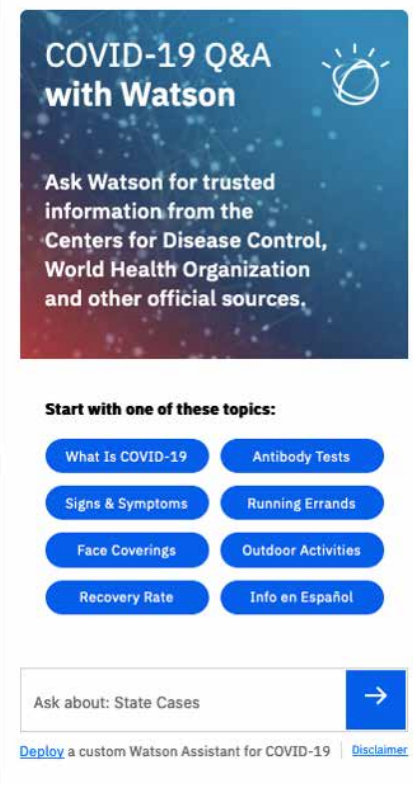


»It has never been easier to gather real-time insights into infrastructure stability and trash collection or monitoring building systems and secure valuable assets with wireless plug-and-play solutions.«

Tomaš Pavliček, Heliot Europe



Dejan Podgoršek, Technology Partner Architect at IBM, revealed what an ideal city could do today to support citizens in the post-pandemic times. With the EU Green Pass, we learned once more, why sharing personal data is sensitive. However, many measures are staying in place and technology can be beneficial, especially when regulation is changing often. For example, space monitoring: only a certain number of people can enter a room or a building. This way the counting could be automatic. IBM is also developing a digital health pass based on Blockchain to protect personal data and much more.



Marjana Senčar Srdič, Head of IoT Technology and Innovations, represented the 2nd biggest operator in Slovenia, A1. Their solutions are simple and user friendly. Their smart city platform also pay special attention to older generations and people in need. As every city is its own story, the company is engaged with local partners to consult them on the best solution. The company advises that all relevant data is shared with the community in order to co-create the ideal city for the future with them.



Gregory Krug, Product Manager, presented how ZF Group can contribute to the ideal city for the future with less traffic jams. The company is the 3rd automotive supplier and has an extensive digital innovation portfolio in the field of mobility. They believe a network of different means of transport that is seamlessly integrated should offer people all the benefits of mobility. ZF supports this switch to emissions-free, safe, and smart public transport with a diverse range of electric drives for all vehicle segments, plus sensors and control boxes for autonomous transport systems.

Energy demand represents more than 75% of the EU greenhouse gas emissions and most of them are created in the cities. **Mojca Markizeti**, Head of Sustainability & Regulatory Affairs, presented one of the solutions from Iskraemeco aimed at the younger generation. A project, called Green Penguin, brings digital technologies to meet the demands of nature with the help of children. This gamification combines smart technologies with the green transition to build environmental and digital literacy, starting with younger generations and gradually expanding to all age groups.



»If we combine our smart solutions with the Green Penguin project, we can achieve many sustainable development goals and enable cities to actively fight the climate crisis.«

Mojca Markizeti, Iskraemeco



Session V.

Ljubljana Smart City Challenges in 2021 & next steps towards concrete projects



Arian Debeljak, City of Ljubljana, **Boris Koprivnikar**, Sincular Consulting, **Simon Delakorda**, Institute for Electronic Participation, **Matevž Pogačnik**, University of Ljubljana, **Saša Heath Drugovič**, City of Celje, **Gregor Košir**, City of Kočevje



»Technology is only the enabler. The content of the solution is the key.«

Arian Debeljak, City of Ljubljana

Arian Debeljak, Chief Technology Officer from the City of Ljubljana, introduced all the buzz words that are around for some time already. Smart city concepts are becoming more and more comprehensive. Although we are good in theory, when it comes to practice, the things go slow. Mostly due to lack of finances, competences, and poor interoperability. Since the ideal city for the future will be multilevel (technology, processes, society, etc.), all stakeholders will need to be engaged in the solution creation, if it shall be realistic and accepted by the citizens.

Boris Koprivnikar, CEO at Sincular Consulting, also stressed the importance that lack of connectivity has in the progression towards the ideal city for the future. He suggested a four-pillar strategy on this journey: organization, data, technology, and processes. These should be addressed systematically. In addition, continuous advancements of any smart city platforms should be expected. This way all solutions could be tested. If users do not accept it, the solution can be easily adapted or removed. Changing people would be a futile goal.

Simon Delakorda, Inepa - Institute for Electronic Participation, discussed the capacity divide between the big and the small municipalities or cities. The capitals are usually the most developed in terms of accessibility and openness. However, citizens of small towns hardly can experience any aspects of smart city. In his opinion, trust building is crucial for implementation of any smart city project. It is not sufficient to have technological solutions. The ideal city for the future is about what citizens actually need and what they will be willing to accept as users.

»Municipality needs to address different lifestyles of its citizens, which are often in conflict. Hence, the question is how to manage the diversity and expectations about the future.«

Simon Delakorda, Inepa
- Institute for Electronic Participation



Dr. Matevž Pogačnik, Associate Professor, University of Ljubljana, explains why smart city development plans and strategy cannot be enough. Governmental and local level cooperation is crucial as well as communication with all stakeholder because people always fight the change. To mitigate this, communication and engagement with stakeholders is essential for the project implementation. Also, when deciding about priorities you need to include everyone because different groups have different priorities and wishes about the ideal city for the future. In addition to aforementioned challenge of the new job creation.

Saša Heat Drugovič, Association of Slovenian City Municipalities (ZMOS), illustrated the role cities could have in the transformation towards a more sustainable future. Covid-19 has been a big push towards digitalization that has escalated digital transformation in all areas of life. However, this different way of life was adopted out of necessity. Since human desire for change is not high, we need funds to change our unsustainable habits. Many EU funds are available; just under 100 million is accessible for digitalization that should take place as an interplay between experts (knowledge), industry (solutions), and government (adjusting policies).

Gregor Košir, Vice mayor from the Municipality of Kočevje, shared their experience as forerunner in the area of smart cities in Slovenia. Back then no one wanted to copy them even though they were eager to share their knowledge and learnings. Still nowadays competences are the main issue as well as the lack of national strategy. The government should fund smart city projects at the local level since municipalities understand the needs of the citizens' best and will be able to engage them to develop ideal city for the future bottom up.

»Digitalization should feel natural to people. You need to get citizens ready to accept the smart city solutions because getting out of the comfort zone is never easy.«

Gregor Košir, Municipality of Kočevje



Session VI.

Financial instruments & Business models & NGOs for development of Cities



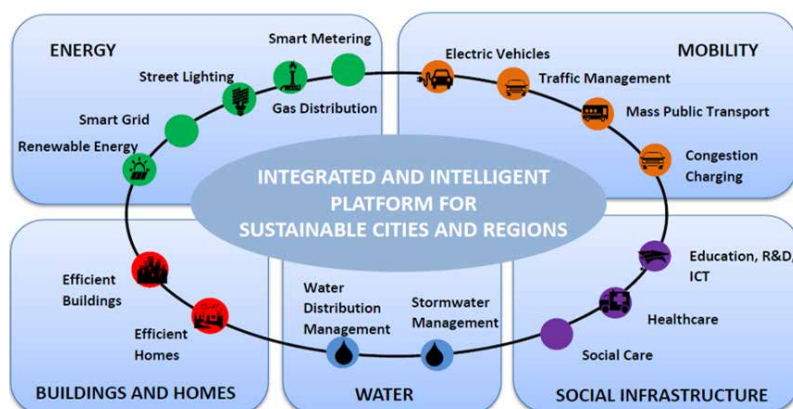
Frane Šesnić, Zagreb Innovation Centre, **Fred Uduma**, Slovenian Chamber of Commerce, **Francesco Ferrero**, European Investment Bank, **Saša Heat Drugovič**, Association of Slovenian City Municipalities, **Simon Delakorda**, Inepa - Institute for Electronic Participation, **Tihomir Divjak**, Foresight Europe Network FEN



»All solutions grow from the competence and skills that the city has. Funds are never an issue, if the project is well designed since there are many available financial frameworks.«

Francesco Ferrero, EIB

Francesco Ferrero, Head of the European Investment Bank Group Office for Slovenia, has demonstrated how EIB supports city development. The EIB bank provides inexpensive loans to smart city projects as well as assessment that are not only financial – they look at technology, social and environmental to imagine its impact. In addition, consultation and technical project assistance ELENA is available to identify investment needs and to prioritize, prepare, and structure its projects. For EIB the following guiding principles can achieve more sustainable cities and communities: Sustainable, Integrated, Inclusive, and Innovative cities for the future.



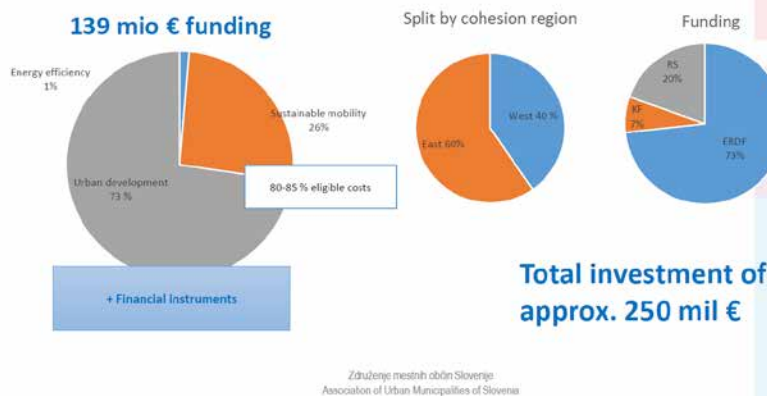
Saša Heat Drugovič, Association of Slovenian City Municipalities (ZMOS), presented how the urban transformation has been financed so far as well as the vision for the future. ELENA has been a platform that brings cities together. However, local funding and capacity building are to further advance the sustainable urban development. Among lessons learnt from the Integrated Territorial Investment of the Operational Programme 2014-2020 they will ensure better planning of the financial redistributions among years, same conditions for all the target groups and same guarantees for users at the same priority axis in the next financial perspective. In the future, there will be focus on the support of locally led development strategies and sustainable urban development across the EU.

»Europe closer to citizens – sustainable and integrated development of urban, rural and coastal areas through local initiatives is proposed among the five main policy goals for the use of EU Financial Instruments 2021-2027.«

Saša Heat Drugovič, Association of Slovenian City Municipalities



Integrated Territorial Investment ITI



»Even though funding is about the infrastructure, it needs to respond to the social environment in order to bring value.«

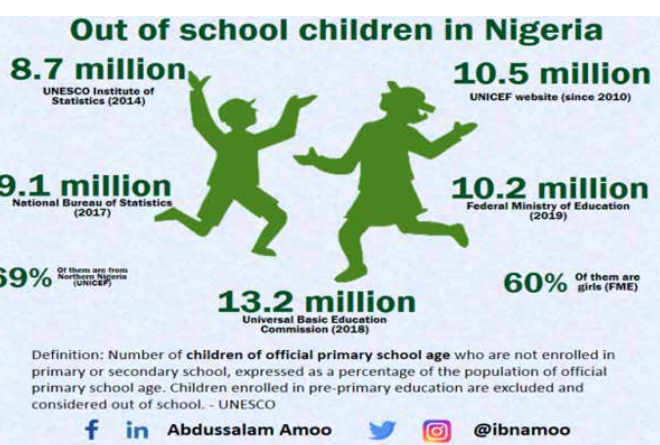
Simon Delakorda, Inepa - Institute for Electronic Participation



Simon Delakorda, Inepa - Institute for Electronic Participation, emphasized that we need to start with people. Each user experience has different layers due to the complexity of the target groups. He warned the solution developers that many digital services both, in EU and at the national level, are not meeting the legislation standards on accessibility. At the same time, the expectations of modern users are high. An ideal city for the future must provide services that work well and enable all stakeholders to access them on equal terms. To achieve that citizens shall be involved in the co-creation of the ideal smart city.



Tihomir Divjak, AeLeHSP – Africa-eLearning-eHealth-Satellite-Project, spoke about lack of access to education in Africa. During the pilot phase of the project, it moved from Chad to Nigeria. However, the aim stays the same: transforming refugee camps into oasis of peace with education. Preparation phase of the project is now finished and new partnership between EU and AU are being established. In addition to accessibility of education to girls in Africa, they are also focusing on possibilities of digital access to schools since this is becoming the new norm in the pandemic times.



Fred Uduma, President of Nigeria, Slovenian Chamber of Commerce, presented the possible implementation of the AeLeHSP – Africa-eLearning-eHealth-Satellite-Project in Nigeria. The target group are children between 6 to 15 years of age, which is 1st to 9th grade. The number of children, who are out of school, are enormous. The assessments vary from 8.7 to 13.2 million. Education is not only a human right but it also enables productivity. For this reason, the project provides basic education to bridge the digital divide as well as expands e-learning activities into the rural areas and into 64 IDP camps in Nigeria.

Session VII:

City initiatives meeting EU twin objectives (Green & Digital transition)



Mensur Ferhatović, Fire brigade Rijeka, **Simon Mokorel**, City of Nova Gorica, **Klemen Furlan**, Giro Car Share, **Tomaž Lanišek**, City of Kranj, **Miroslav Polzer**, IAAI, **Milan Lazarević**, Technology Park Ljubljana

Simon Mokorel, Expert for Development from Municipality of Nova Gorica, presented the European Capital of Culture GO! 2025 with the slogan GO! BORDERLESS. It is a story in which memories of the past and visions for the future intertwine and create a concrete, participatory and effective cultural strategy that seeks to improve the long-term quality of life of the inhabitants of the entire border area. Together, Nova Gorica, Slovenia, and Gorizia, Italy, are working to overcome obstacles: cities divided by war, united by cooperation and close friendship, have set themselves the ambitious goal of becoming a cross-border European Capital of Culture.



The concept: Borderless

- Diversity as richness;
- Finding new ways across borders between languages, nations, social groups;
- Bridging art and science, culture and economic history and technology, urban and rural;
- An example of good practice and a European laboratory of collaboration

»The ECOC brings positive effects that go far beyond the year when the city holds the title: the cultural, economic, urban and social legacy of the project revives the present and future of cities and community residents in the region.«

Simon Mokorel, City of Nova Gorica





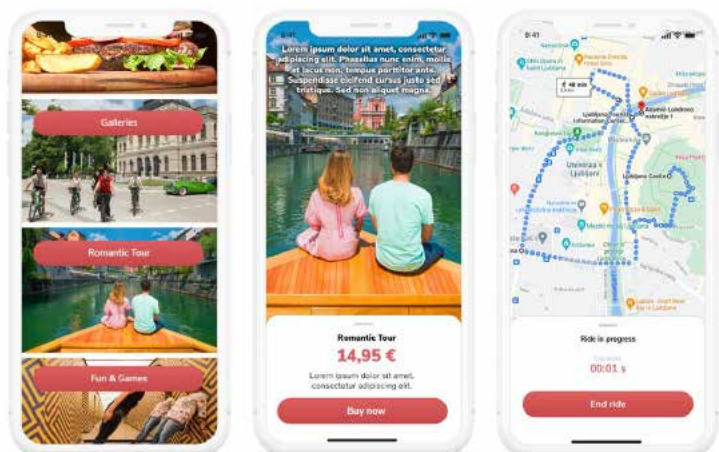
Mensur Ferhatović, Fire Brigade Rijeka, has shared his experience in application of satellite communication in Croatia. This smart defence project emerged with a bottom up approach. The issue to solve was the lack of response in the real time when the communication channels are broken. They have created a pilot to convince the public sector to invest in the solution. A satellite enabled communication in 2.5 hours with all stakeholders, both local and national. Every municipality should have such vehicle with a satellite to ensure more security as additional human casualties due to lack of communication channels in case of natural disasters are unnecessary.

Klemen Furlan, the CEO of Giro Car Share Start-up, introduced the Car Sharing Hub. This peer-to-peer solution that enables you to list or rent a car in just few clicks. They also ensure a daily policy for all rentals in order to be fully insured. The company is a one stop shop for solutions as a substitution for cars even if not yet perfect. Nevertheless, they do provide an alternative. They believe that citizens should motivated to use more sustainable transportation modes. This could move us into more sustainable future since the calculation is that for all e-moped, e-scooters, and e-bikes covering the needs of Ljubljana energy from one solar panel could be sufficient.



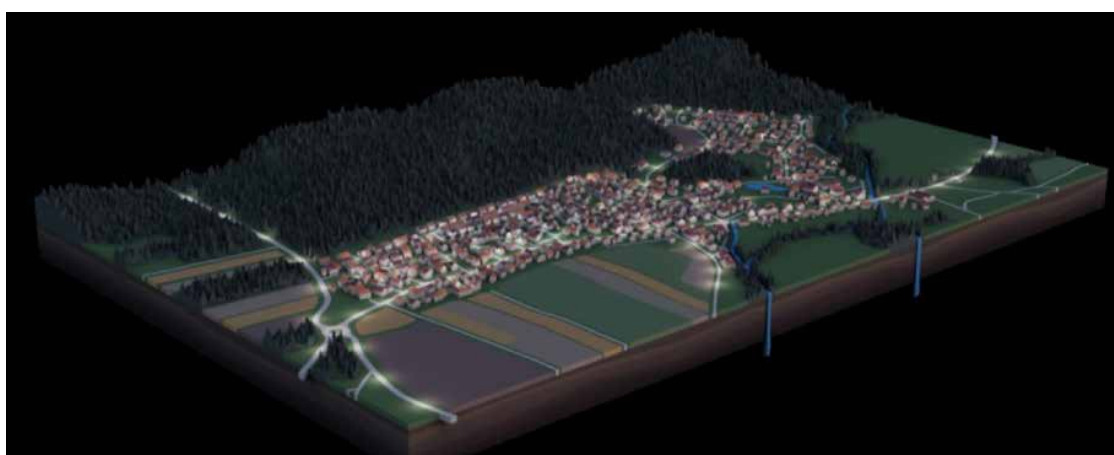
»Since we collect data, we have the possibility to find the people breaking the laws in traffic and forward this information to the city authorities, if needed.«

Klemen Furlan, Giro Car Share





Tomaž Lanišek, Development & Smart City Manager from City of Kranj, presented the Smart Settlement Mlaka. The final solution of the mentioned project enabled the collection, display and analysis of data from smart meters (electricity, gas, water), smart sensors for the environment and traffic. This pilot project in the neighbourhood Mlaka followed the EU principle „Test Before You Invest“ and gave the Municipality an insight into the organization, management and challenges of future smart city projects. Based on the IoT sensors, they were able to create a digital platform with data lake for the purpose of providing information for the citizens and city management.



Miroslav Polzer, CEO IAAI, introduced the audience to the new project to empower all members of society to engage in climate action, particularly non-Party stakeholders such as youth or gender-based stakeholders. The Action for Climate Empowerment (ACE) has been launched by a partnership led by the Austrian Federal Ministry for Climate Action. With #DigitalArt4Climate & Carbon Footprint Compensation they empower all members of society to engage in Climate Action and change their perception on ACE.



Award Ceremony at 10th Anniversary of Ljubljana Forum

Honorary speaker at Award ceremony EU diplomat Mr Julian Vassallo, ELSA (Almuni member)

Award Ceremony has honored the greatest contributors to the Ljubljana Forum in the first decade.



Julian Vassallo, Deputy Head of EU Delegation to North Macedonia, shared his observation how Ljubljana Forum is an excellent opportunity to strengthen co-operation for better performance of cities and regions in Europe and worldwide. Mr. Vassallo provided an insight from the conclusions of EU - Western Balkans summit.

»EU confirmed its commitment to provide European perspective for Western Balkans region and its cities with a concrete deliverables.«

Julian Vassallo, Deputy Head of EU Delegation to North Macedonia

Ljubljana Forum Award

- 2013** **Belgrade** · Ada Bridge project
- 2014** **Podgorica** · Center for Education of Children
- 2015** **Ankara** · Ankara Boulevard project
- 2016** **Tirana** · Tirana lme smart application project
- 2017** **Maribor** · Wcycle project
- 2018** **Almaty** · Urban mobility reform
- 2019** **Rijeka** · Technology Park Torpedo

More about EU-Western Balkan summit at:
<https://www.consilium.europa.eu/en/meetings/international-summit/2021/10/06/>



Awards presented by Mr. Miran Gajšek Co-Chairman of Ljubljana Forum



←
Category 1:
Participating city
Winner:
RIJEKA, Mayor
MARKO
FILIPOVIĆ



←
Category 2:
Key note speaker
Winner:
Ms. BARBARA
HAERING



←
Category 2:
Key note speaker
Winner:
Ms. LADEJA
GODINA KOŠIR



←
Category 2:
Key note speaker
Winner:
Mr. LORENZO
MADRID



←
Category 2:
Key note speaker
Winner:
Mr.
ALEXANDER
PROSSER



←
Category 3:
Company partner
Winner:
BTC
Mr. JOŽE
MERMAL



←
Category 4:
NGO
Winner:
Slovenia / Nigeria
Chamber of
Commerce
Mr. FRED UDUMA



←
Category 5:
Financial Institution
Winner:
European Investment
Bank - EIB
Mr. FRANCESCO
FERRERO



←
Category 6:
Education / Research / Consulting
Winner:
Institute of
Economics Zagreb
Mr. ZORAN ARALICA



←
Category 7:
Participant / Projects initiator
Winner:
Mr. TIHOMIR
DIVJAK



Conclusions of Ljubljana Forum 2021

At Ljubljana Forum we presented different levels of cities maturity for providing wellbeing for its citizens. Participating city leaders from Vienna to Novi Sad presented their city challenges and plans to overcome them from early stage.



With planning & foresight we bring species derived from different scenarios of how cities should look like in 2030. From that long term different scenarios “fore sighting” we move back to the current where we co-create city plans and initiate city projects on various themes from housing, water, energy, mobility, to wellbeing and other relevant themes of city development.

Besides already proven solutions city leaders also search for different innovations made for their specific city challenges. The beauty of different city challenges is that every city can create its own unique project to overcome them and consequently provide higher quality of life to its citizens.



Mr. Miha Murn President of AAMI Art Corporation provided art exhibition of Slovenian painters at Ljubljana Castle during the 10th Ljubljana Forum.

Ljubljana Forum with its unique multi - stakeholders platform provides an opportunity for NGOs, Universities, Financial institutions and industry from start-ups to established companies to learn about city challenges in an effective way. Creation of many new city projects is the most important take away goal.

Ljubljana Forum will further provide strategic foresight and build an agenda around the relevant topics for cities with the purpose to have an impact on city urban planning, different strategies and development of "must have" city projects and new innovative projects using new emerging technologies.

City stake-holders and organisers of Ljubljana Forum work together with the aim to create better cities with higher quality of life that is supported by sustainable development and digital transformation.

As the event become mature in ten years, but still far from being ideal, the organisers and Ljubljana Forum partners will continue to work towards ideal city for the future with the purpose to overcome city challenges and at the same time like new EU Bauhaus Initiative bring content and aesthetics to the wellbeing of European cities.

Mr Miran Gajšek, Co-Chairman of Ljubljana Forum, Head of department for urban planning, City of Ljubljana,
Mr Blaž Golob, Chairman of Ljubljana Forum





About the People

City Leaders

Mr Marko Filipović, deputy mayor of the City of Rijeka
 Mr Miran Gajšek, head of department for urban planning, City of Ljubljana
 Mr Zoran Janković, mayor of the City of Ljubljana
 Mr Draško Stanivuković, Mayor of Banja Luka
 Mr Zoran Radojčić, Mayor of Beograd
 Ms Mira Radenović, Member of the City council in charge of environmental protection and sustainable development, Novi Sad
 Mr Jurgen Czernohorsky, Executive City Councillor for Climate, Environment, Democracy and Personnel, Vienna

Speakers & Moderators

Mr Zoran Janković, Mayor of Ljubljana
 Mr Blaž Golob, Chairman of Ljubljana Forum
 Mr Lorenzo Madrid, Smart City Expert - Key Note Speaker, Senior Consultant - GFS Institute
 Ms Barbara Haering, Swiss Federal Institute of Technology, Zürich
 Ms Ladeja Godina Košir, Circular Change Institute for Circular Economy
 Mr Alexander Prosser, Vienna University of Economics and Business
 Mr Miha Mermal, Chief Marketing & Chief Sustainability Officer, BTC
 Ms Biljana Princić, Chief Digital Officer, Riko Engineering
 Mr Gašper Žerovnik, Head of Digital Transformation, T-2
 Mr Andrej Bergant, Executive Director Energy & Solutions, Petrol
 Mr Tomaš Pavliček, Chief Operations Officer, Heliot Europe
 Mr Dejan Podgoršek, Technology Partner Architekt, IBM
 Ms Marjana Senčar Srdić, Head of IoT Technology and Innovations, A1
 Mr Gregory Krug, Product Manager, ZF GmbH
 Ms Mojca Markizeti, Head of Sustainability & Regulatory Affairs, Iskraemeco

Mr Arian Debeljak, Chief Technology Officer, City of Ljubljana
 Mr Boris Koprivnikar, Sincular Consulting
 Mr Simon Delakorda, Institute for Electronic Participation - Inepa
 dr. Matevž Pogačnik, University of Ljubljana
 Ms Saša Heath Drugovič, City of Celje
 Mr Gregor Košir, Vice mayor, City of Kočevje
 Mr Francesco Ferrero, Head of European Investment Bank Group Office for Slovenia, EIB
 Mr Tihomir Divjak, Foresight Europe Network FEN
 Mr Fred Uduma, President of Nigeria - Slovenian Chamber of Commerce
 Mr Tomaž Lanišek, Development & Smart City Manager, City of Kranj
 Mr Simon Mokorel, Expert for Development, City of Nova Gorica
 Mr Klemur Ferhatović, Fire brigade Rijeka
 Mr Klemen Furlan, CEO at GoGiro
 Mr Miroslav Polzer, CEO of the IAAI
 Ms Helena Ajdnik, Event Moderator
 Ms Darja Virjent, ESG Sustainability & Business Advisor
 Mr Miran Gajšek, Co-Chairman of Ljubljana Forum, Head of department for urban planning, City of Ljubljana
 Mr Blaž Golob, Chairman of Ljubljana Forum
 Mr Frane Šesnić, CEO of Zagreb Innovation Centre
 Mr Milan Lazarević, Tech Community Manager, Technology Park Ljubljana

Participants

Mr Mirjan Poljak, SL CONSULT d.o.o.
 Mr Bojan GOLIC, Civil Service Agency of Bosnia and Herzegovina
 Ms Alenka Rožaj Brvar Dr. Arbora
 Mr Visar Dobroshi, RECURA jsc
 Mr Barmak Sadri, Ferdowsi university of mashhad
 Mr daniel sotesek Prof. university of alcala



Mr Aleksander Hatlak, Petrol d.d.
 Mr Donatus Eta Agbor, VISION 2007 / NGUTI RURAL COUNCIL
 Mr SALMAN JAMAL SAID, Somali Voice
 Mr Tadej Pfajfar, LUZ, d.d.
 Mr Tihomir Divjak, GFS
 Mr Vojko Obersnel M.Sc. City of Rijeka
 Ms Jana Škorjanc Štraki, Občina Trbovlje
 Ms Polona Schmit, Občina Trbovlje
 Ms Barbara Žagar, ministry for environmet and spatial planning
 Ms Dr.SABINE STADLER, city of Vienna, on behalf Mr RAMI
 Ms Dr.Sabine STADLER, none ÖIF and cultural institutions
 Mr Fred Uduma, Slovenia-Nigeria Chamber of Commerce
 Ms Ana Mohorič, ADVANTAGE AUSTRIA
 Ms Claudia Angermayr, ADVANTAGE AUSTRIA
 Mr Kristjan Verbič mag. Vseslovensko združenje malih delničarjev (VZMD)
 Mr Simon Delakorda, Tehnološki park Ljubljana, ZMOS - Association of Urban Municipalities of Slovenia
 Mr Cvetoslav Gregorc, Omega Consult d.o.o.
 Ms Darinka Pavlič Kamien, Kamien Komunikacije, Darinka Pavlič Kamien s.p.
 Mr Klemen Koncilija, Časnik Finance
 Mr Michael König, Kaifa Technology Chengdu
 Mr Miroslav Holubec, Keners
 Mr Radoslav Jakab, Keners
 Mr Matevž Pogačnik, University of Ljubljana, Faculty of electrical engineering
 Mr Drasko Stanivukovic, City of Banja Luka
 Mr Bojan Kresojevic, City of Banja Luka
 Mr Bor Rozman, Mestna občina Kranj
 Mr Mitja Lovšin, STN d.o.o.
 Mr Aleksander Saša Arsenovič, Municipality of Maribor
 Mr Srečko Đurov, Municipality of Maribor
 Mr Michele Leonardi, IBM Slovenia

Ms Vesna Kuralt, GFS Institute
 Ms Ana Vizovišek, City Municipality of Kranj
 Mr Tomaž Lanišek, Mestna občina Kranj
 Mr Jürgen Czernohorszky, City of Vienna
 Mr Rok Mikulič, T-2
 Mr Gregor Macedoni, Municipality Novo mesto
 Mr Miha Ernstschneder, T-2 d.o.o.
 Mr Gašper Žerovnik, T-2 d.o.o.
 Ms Aline-Marie Hoffmann, City of Vienna
 Mr Simon Mokorel, Municipality of Nova Gorica
 Mr Dejan Podgoršek, IBM Slovenija d.o.o.
 Mr Halil Karakas, Istanbul Metropolitan Municipality
 Mr Ali Tasdemir, Istanbul Metropolitan Municipality
 Mr Peter Dermol, Mestna občina Velenje
 Ms Biljana Prinčič, Riko d.o.o.
 Ms Karla Sitar, Mestna občina Velenje
 Mr Janez Škrabec, Riko d.o.o.
 Mr Andrej Ivanc, Riko d.o.o.
 Mr Domen Grudnik, Mestna občina Velenje
 Mr Anže Sovinc, Mestna občina Velenje
 Ms Helena Knez, Mestna občina Velenje
 Mr Jožef Zrimšek, T-2 d.o.o.
 Mr Igor Oman, Episcenter d.o.o.
 Ms Marjana Senčar Srdič, A1 Slovenija
 Ms Maja Zupančič Pintar, GFS Institute
 Mr Miha Murn, AAMI Corporation
 Mr Samo Matoh, A1 Slovenija d.d.

Team

Mr Miha Sever
 Ms Marija Mardonovič
 Ms Vesna Kuralt

0G IoT network
Sigfox

IoT “Internet of Things”

When **things** are in your hands

Sustainable, safe, reliable, cost-effective network of Internet of Things for digital transformation and entry into smart future.



For smart cities,
villages and
communities



For smart
industries



For smart
services

Sigfox is a leading provider of dedicated connectivity for the Internet of Things. SIGFOX provides a two-way communication service through a global radio network.



GoForeSight Institute

www.gfs4.eu

Prepared by: Blaž Golob, GFS Institute, Vesna Kuralt, GFS Institute

Editor in chief: Vesna Kuralt, GFS Institute

Graphic design by: Andrea Plavljanič, plava.eu

Photographs by: Željko Stevanič, IFP d.o.o.

All rights reserved. No part of this report may be reproduced in any form by any electronic or mechanical means (including photocopying, recording or information storage and retrieval) without permission in writing from the GoForeSight Institute.

©GFS

Published in 2022 by the GFS Institute, Cesta na Kurešček 46, 1292 Ig, Slovenia, EU.

www.gfs4.eu

ORGANISERS:



City of
Ljubljana

PARTNERS:

