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# "Think SDGs 2021" International Paca Conference Lin Toyota LP

**Smart and Sustainable Communities with COVID-19** 

2021.3.6 SAT 13:30-18:00

In Commemoration of the 70<sup>th</sup> Anniversary of Toyota City
"Think SDGs 2021" International Conference in Toyota
International Conference on SDGs

**Implementation Report** 



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## **Preface**

the pandemic.

As the key event to commemorate its 70th anniversary, Toyota City, along with the United Nations Centre for Regional Development (UNCRD), co-hosted "Think SDGs 2021" International Conference in Toyota' on Saturday, March 6, 2021.

Due to COVID-19, which was still rampant, the Conference adopted an online format, which turned out to have a positive effect on attendance. A total of 3,625 people, from all of the prefectures in Japan and across 20 countries, participated in the Conference in real time, while many others could learn what was discussed in the following days and weeks thanks to a related YouTube video. As a result, I believe that the Conference played a significant role as a forum to disseminate useful information on the Sustainable Development Goals (SDGs).

Under the theme 'How should we live in the era of a "New Normal," adopting a new lifestyle and network resulting from the COVID-19 pandemic?', this Conference focused on Toyota City's SDG priority areas (mobility/energy/wellness) with subject matter specialists as panelists, who shared case studies and engaged in active discussions.

With just ten years to go to reach the SDGs, we will strive to make an advancement as a SDGs Future City under the slogan 'Achieving Tomorrow's Standards' while sharing the power and potential of the citizens, municipality and corporations of Toyota City with all of you through the implementation of various projects and initiatives.

Last but not least, I would like to express my sincere gratitude to those who enabled us to hold this important Conference.

Toshihiko OTA, Mayor of Toyota City

On behalf of UNCRD, I would like to express my deepest gratitude to Mayor Ota of Toyota City and others, whose commitment made "Think SDGs 2021" International Conference in Toyota' happen.

Starting with the 'High-Level Symposium on Sustainable Cities' held in January 2015, UNCRD has strengthened its ties with Toyota City on various occasions. Having the 'International Symposium on Implementation of SDGs' in 2018 as a springboard, we successfully co-organized this international conference.

Five years have passed since the adoption of the SDGs at the UN Summit, and we now see the SDGs' colorful icons and color wheel wherever we go, and people with different positions, nationalities and cultures take actions referring to the SDGs as their shared language.

With less than ten years to go to attain the targets set out in the SDGs by 2030, the world has been disrupted by the COVID-19 pandemic, which also negatively affected the progress toward the SDGs. On the other hand, the disruption led to solid enhancement of IT infrastructure that has positively changed our daily lives. Such IT evolution allowed us to hold this international conference online, providing Toyota City with unprecedented opportunity to show the world its rich experience even in the midst of

To attain the SDGs, mobilizing not only the power of nations but also that of communities is of particular importance. I sincerely hope that Toyota City leads the way in the progress towards the SDGs across the Chubu area as well as in Japan.

Kazushige ENDO, Director, United Nations Centre for Regional Development



## **Overview**

# "Think SDGs 2021" International Conference in Toyota **Smart and Sustainable Communities with COVID-19**

How should we live in the era of a "New Normal," adopting a new lifestyle and network resulting from the COVID-19 pandemic?

Inviting the general public as an audience, we held a conference that is designed to provide participants with an opportunity to think about this important question, focusing on Toyota City's SDG priority areas (mobility/energy/wellness) and examining domestic and international good practices, with a wide variety of stakeholders.

## **Date and Time**

Saturday, March 6, 2021 ; 13:30-18:00

## **Format**

Online (For speakers: Zoom / For general audience: YouTube Live)

## Theme

Smart and Sustainable Communities with COVID-19

## Organized by

Toyota City / United Nations Centre for Regional Development (UNCRD)

# Supported by

Cabinet Office / Ministry of the Environment / Ministry of Land, Infrastructure, Transport and Tourism / Ministry of Economy, Trade and Industry / Ministry of Foreign Affairs / Aichi Prefecture / Nagoya City / Toyohashi City / Okazaki City / ICLEI Japan / Institute for Global Environmental Strategies (IGES)

> "Think SDGs 2021" International P PL Conference **▲in Toyota ▲** 🖪

Smart and Sustainable Communities with COVID-19

## **Participation**

# The Number of Registrants/Viewers

## The total number of registrants

1,251 (in Japanese: 1,173 / in English: 78)

## The cumulative total of live streaming viewers

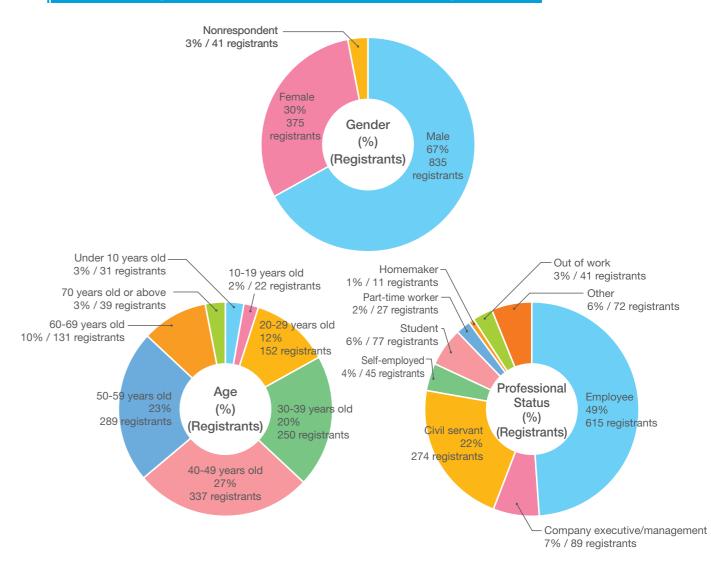
3,625 (in Japanese: 3,288 / in sign language: 120 / in English: 217)

## **Country of Residence of Registrants**

## From 47 prefectures in Japan and 20 overseas countries<sup>11</sup>

\*1 The United States, India, the Republic of Indonesia, the United Kingdom, the Republic of Ecuador, Canada, Kyrayz Republic, the Kingdom of Spain, the Kingdom of Thailand, the Federal Republic of Germany, the Federal Democratic Republic of Nepal, the Republic of the Philippines, the French Republic, the Federative Republic of Brazil, the Republic of Burundi, Malaysia, the Republic of South Africa, the Republic of the Union of Myanmar, the Kingdom of Morocco, Mongolia

## **Gender/Age/Professional Status of Registrants**





# **Program**

Saturday, March 6, 2021 ; 13:30- Held Online

"Think SDGs 2021"

**International Conference in Toyota** 

Smart and Sustainable Communities with COVID-19

Toyota City tourism promotion video		
13:30-	Opening Remarks Toshihiko OTA, Mayor of Toyota City	
13:35-	Opening Remarks  Amson SIBANDA, Chief, National Strategies and Capacity Building Branch, Division for Sustainable Development Goals, UNDESA	
13:45-	Introduction of Initiatives SDG business management and its monitoring/ information dissemination Kazushige ENDO, Director, United Nations Centre for Regional Development (UNCRD) Introduction of Initiatives Toyota City, SDGs Future City Toshihiko OTA, Mayor of Toyota City	
14:00-	Keynote Speech The world we envision under SDGs and the role of cities and regions Togo UCHIDA, Director of ICLEI Japan	

•	•	
•	Toyota City's 70 <sup>th</sup> Anniversary Video	
14:35-	Panel Discussion [Mobility] How should we create local city mobility in the age of living with and post COVID-19?  Facilitator Etsuko KUSUDA, Mobility Journalist  Panelists Toshihiko OTA, Mayor of Toyota City Koji TOYOSHIMA, Deputy Chief Officer, Toyota ZEV Factory, Toyota Motor Corporation	
	Takayuki MORIKAWA, Professor and Head of Institute of Innovation for Future Society, Nagoya University	
Video introducing Toyota Ecoful Town		
15:40-	Case Study [Wellness] The 'We Love Toyota City' initiative promoted by Toyota SDGs Partners  Facilitator Maki TSUBAI, Jyocos inc.  Panelists Toyota SDGs Partners  anam fair trade♮ / Ichirin Building Management / Umemura Construction / Girl Scouts of Japan, Aichi Council No. 62 / Katsumasa Toyota Yoshiwara Shop / Sunself Co., Ltd. / Jyocos inc. / Suzuhiro Forklift Co., Ltd. / Toyota City Fujioka-minami Junior High School / Junior Chamber International Toyota / Niwasho Corporation / Fujitsu Limited Tokai Branch / Matsuzakaya Toyota Store / Mikawa-no-yamazato Community Power / Re Smile	
Т	oyota City promotion video "The other side of Toyota City"	
16:45-	Panel Discussion [Energy] Impact of COVID-19 on cities' environment and energy policies  Facilitator  Junko OTA, Institute for Global Environmental Strategies (IGES)  Panelists  Minoru TAKADA, Team Leader (Sustainable Energy), Division for Sustainable Development Goals, UNDESA Caroline BOUVARD, Grenoble, France Sarah BURKINSHAW, Derbyshire County, England Anton SUNARWIBOWO, City of Bandung, Indonesia Hayley BIN PONICHAN, Shah Alam, Malaysia	
17:50-	Closing Remarks (Wrap-up) Toshihiko OTA, Mayor of Toyota City	
	Toyota City promotion video "Virtual Toyota Tour"	



## **Opening Remarks at the International Conference** "Think SDGs 2021" Toyota City, Japan ~Smart and Sustainable Communities with COVID-19~

Mr. Amson Sibanda, Chief, National Strategies and Capacity Building Branch, Division for Sustainable Development Goals, UNDESA



Honorable Mr. Toshihiko Ota, Mayor of Toyota City,

Distinguished Guests, Ladies, and Gentleman,

Thank you very much for giving me the opportunity to join you today, even if virtually.

In particular, I would like to thank all the co-organizers- the Municipal Government of Toyota, Aichi prefecture, Japan and the United Nations Centre for Regional Development.

On behalf of the United Nations Department of Economic and Social Affairs, I would also like to extend my sincere greetings and warm welcome to all of you to this International Conference titled "Think SDGs 2021", in Toyota City.

Although Toyota city would have loved to organize an in person international conference, disruptions caused by the COVID-19 pandemic have pushed all of us to explore new ways of doing business. Hence, this virtual conference is a good opportunity to adopt a "new-normal" style, resulting in opening the door to the next stage for Toyota City.

This important conference being held under the theme "Smart and Sustainable Communities under the COVID-19 Pandemic", seeks to discuss and find the best solutions and collaborative actions with multi-stakeholders for the Sustainable Development Goals, in the context of sustainable urban development.

Ladies and Gentlemen.

6 March 2021

As we gather here today, one thing is clear – not only is progress in achieving the 2030 Agenda slow within and among countries, the Sustainable Development Goals are off-track and require new effort and financing, including at the local level.

The overachieving objective of the 2030 Agenda to eradicate poverty in all its forms everywhere has suffered its worst setback. Recent estimates by the World Bank show that the COVID-19 pandemic likely pushed between 88 and 115 million people into extreme poverty in 2020, setting back efforts to eradicate poverty by around three years. This setback is largely due to a combination of factors, among them the COVID-19 pandemic, conflicts and climate change.

Climate change and disasters such as floods, fires, and other extreme weather events are also getting worse, in every region.

In the world of work, labour markets around the world were also disrupted in 2020 on a historically unprecedented scale. According to the International Labour Organization, an estimated 114 million jobs were lost globally in 2020 relative to 2019, with women and young workers disproportionately bearing the brunt.

The COVID-19 crisis has also worsened the learning crisis. At the peak of school closures in April 2020, an estimated 1.6 billion children were out of school worldwide. Before COVID-19 hit, 258 million children of primary- and secondary-school age were out of school. Hence, the disruptions to children's schooling have aggravated pre-existing challenges in education, many of which require both national and local solutions.

High and rising inequality is also tearing the social fabric, undermining trust in public institutions.

Gender-based violence, suicides and attacks on ethnic minorities are also on the increase.

Hence, the global crisis triggered by the novel disease COVID-19 pandemic and its unprecedented negative health, economic and social impacts has not only impacted the international community but has impacted cities and local communities everywhere.

This unprecedented pandemic and the multiple crises it has unleashed, is a powerful reminder of our interconnectedness and vulnerabilities, as the virus respects no borders, and that combating this pandemic calls for enhanced cooperation at the global, regional, national and local levels.

Given these daunting challenges, the key question we all should ask ourselves during this conference is how do we get back on

One answer lies in the theme of this conference. We need to think SDGs, including at the city and local level.

Fully implementing the 2030 Agenda for Sustainable Development is the best sure way of getting back on track and building back better. Given their indivisible and interlinked nature, the Sustainable Development Goals are more important now than ever.

At the local level, one way to fast-track progress is to mobilize subnational or local governments to pursue the Sustainable Goals at their level. Failure to local SDGs has costs, and cities such as yours should do everything to drive the 2030 Agenda by localizing these Goals.

Now is the time to put all hands-on deck and commit ourselves to protect the gains we have made and secure the well-being of people, economies, societies and our planet.

We must also fully leverage pandemic recovery and invest in critical areas that include improving access to vaccines, quality healthcare and education, scaling up social protection systems and measures, combating inequality and fighting climate change.

We also need to prioritize an inclusive and sustainable recovery. For this recovery to be sustainable, countries and cities such as Toyota city must fully embrace renewable energy, and green and resilient infrastructure.

We need to boost international cooperation and multilateral efforts as well as foster meaningful partnerships, including national and local governments, academia, the private sector, citizens and civil society organizations that focus on preventing threats from emerging pandemics and on building an effective defence against deadly infectious disease outbreaks.

As one of the main objectives of this conference is to discuss, in terms of implementation of the SDGs, how our communities and people have been changed because of the impact of the COVID-19 pandemic, I would like to highlight how cities and local governments can contribute to the review of the 2030 Agenda at the local level through the Voluntary Local Reviews.

As you all know, the SDGs were developed and agreed upon by 193 United Nations Member States that made the commitment of pursuing these crucial goals.

However, there are over 10 000 cities worldwide, not even counting the smaller municipalities, that can become the crucial partners Governments need in achieving the SDGs.

Hence, even though the Voluntary Local Reviews are not directly mandated by the 2030 Agenda, we strongly believe that they can help us localize the SDGs and also benefit the global understanding of where we stand with regards to progress towards the Goals. While there is no official format for the VLRs, we have learnt from the national processes that certain shared elements, drawing from the 2030 Agenda itself, can enrich the peer learning and contribute to the robustness of the reviews.

Hence, we have developed a set of Global Guiding Elements for the VLRs which draw from the Secretary-General's common voluntary guidelines for the VNRs.

These Global Guiding Elements also aim at fostering a dialogue between the Voluntary National Reviews and the Voluntary Local Reviews, where applicable.

Just like VNRs, the VLRs ought not to be treated as an end in themselves, but instead as a lever for implementation at the local level. Conducting such reviews enables sharing of experiences and lessons learned with other cities and local governments as well as with other countries, thus advancing the global achievement of the 2030 Agenda.

Local reviews can also showcase and bring forward unique but scalable solutions to problems we all try to solve. The VLRs can also help in assessing and addressing spatial inequalities within a country.

For the national governments and the Voluntary National Reviews, VLRs can provide a much fuller picture of where we are in terms of our SDG implementation and where our challenges lie.

However, it is incumbent on every country, city or local government that those lessons - the gaps and obstacles identified - are fed back into the domestic cycle of review and implementation.

On this issue, we have been very happy to see more and more national level reviews refer to meaningful collaboration with subnational governments.

If engaged, cities and regions can also support meaningful stakeholder engagement for the VNRs and SDG implementation at large. Municipalities can extend a hand to civil society organizers, private companies and community organizers who otherwise would not be participating in national level processes. They can also reach out to the most vulnerable and marginalized groups and help amplify their voices.

As UNDESA, we will continue to advocate and mobilize for cooperation at all levels, and advance shared values to take on the many challenges we face as well as take advantage of the many opportunities that are in front of us.

Finally, I would like to offer you my congratulations for the 70th anniversary events of Toyota municipal government. I wish Toyota city will have many more successful events in the future and will keep making a good progress on the implementation of the SDGs. I thank you!



**Introduction of Initiatives** 

## SDG business management and its monitoring/ information dissemination



Kazushige ENDO, Director, United Nations Centre for Regional Development (UNCRD)

The United Nations Centre for Regional Development (UNCRD) was established in 1971 in Nagoya, as the sole international organization in the Chubu area, with the aim to share the successful experience of Japan in the era of high economic growth with the world. Our main duty is to provide developing countries with opportunities to discuss various issues they are tackling, such as urban development, transportation, waste management and natural disasters, with the government officials of Japan and other Asian countries as well as subject matter experts.

UNCRD is part of the United Nations Department of Economic and Social Affairs (UNDESA), which has been organizing various international conferences on the Sustainable Development Goals (SDGs) for which Toyota City has been an active collaborator and participant. One of such collaborations was the 'High-Level Symposium on Sustainable Cities' co-organized by Toyota City and UN Headquarters in 2015 with 250 participants from 23 countries. Its discussion summary was reported back as additional input to the SDGs.

How did global disruption caused by the COVID-19 pandemic affect people's health, society and the economy? In addressing this difficult challenge, we must "Build Back Better," or aim to reconstruct the world to be a better place than the pre-COVID-19 period. This is an utterly difficult task, but I believe that today's conference will provide us with an invaluable opportunity to think about the way to achieve it based on the SDGs.

Sustainable development aims to achieve environmental, economic and social development hand-in-hand, and in Toyota City, a variety of forums where one can put this aspiration into practice can be found. Toyota Ecoful Town is one of such places, accommodating 245 people from 12 countries who attended UNCRD-organized training for the past ten years.

As you may be well aware, interest in SDGs has been increasing among corporations, governments and academia as well as among citizens. With Toyota City, which was designated as an SDGs Future City in 2018 as a frontrunner, more than ten municipalities were awarded the designation (including Aichi Prefecture, Nagoya City and Toyohashi City in 2019 and Gifu Prefecture and Mie Prefecture in 2020), and initiatives to attain the SDGs are gaining traction.

Touching upon the Voluntary Local Review (VLR) emphasized in the opening message of Mr. Sibanda of UNDESA, it refers to a mechanism where local governments voluntarily evaluate and report on their local-level initiatives relating to the SDGs. This mechanism will increase in importance in the endeavor to achieve the SDGs in the future. UNCRD, in collaboration with Toyota City, Nagoya City and private sector partners, has been studying the VRL in the past year. We aim to contribute to SDGs-related initiatives at the regional level by sharing the results of our study with other municipalities.

Finally, let me introduce the initiatives of the Chubu Japan SDGs Platform. This platform was established in December 2020 by RCE Chubu, the Association of The Club of Rome (Japan), the Chubu SDGs Promotion Center and UNCRD to lead the efforts of various parties for the successful attainment of SDGs in the Chubu area. In partnership with the members of the platform, including Toyota City, and a wide range of other stakeholders, UNCRD will strive to support initiatives to achieve the SDGs at both the global and regional level. In this endeavor, we at UNCRD very much look forward to further collaborating with all of you.

# **Introduction of Initiatives Toyota City, SDGs Future City**



Toshihiko OTA, Mayor of Toyota City

The image of the world in the midst of COVID-19 almost stuns me with its stark contrast with the euphoric year of 2019, when Toyota City hosted matches of the Rugby World Cup.

Toyota City has a population of over 0.42 million, and about 70% of the land is covered with forests. As this ratio is almost the same as that of Japan as a whole, I frequently tell people that Toyota City is the epitome of the country. While our overwhelming image may be the city of automobiles, Toyota City also boasts many tourist attractions as well as a variety of seasonal landscapes.

In 2009, Toyota City was designated as an Environmental Model City, and it has since been awarded various designations with the current emphasis on its status as an SDGs Future City with the slogan 'Achieving Tomorrow's Standards.' Although the future will eventually come even if we do nothing special, Toyota City is determined to take actions in order to realize our dreams and hopes in the future without delay.

As a local government can achieve little if acting alone, I believe that it is important to build partnerships with the private sector, businesses, universities, various groups, the United Nations and other organizations.

Local governments and these partners sometimes use different types of terminology and nuances that make communication difficult, but I am convinced that we will be able to overcome this hurdle if we utilize the SDGs as a shared language.

Both governments and businesses embrace the aspiration to help society and people. For governments, to help means to fulfil its duties, while for businesses the act of helping must be compatible with its raison d'être as a going concern. Toyota City is nurturing "Toyota SDGs Partners," with registered members totaling 210 (at the end of January 2021). We aim to partner with these businesses/organizations in addressing societal challenges and build win-win relationships in which local governments and businesses can enhance both the wellbeing of citizens and business opportunities. This idea tells me that the SDGs do not discriminate against any entity that tries to help attain SDGs.

Toyota City was ranked 5th in the SDGs Advancement Ranking by Nikkei Glocal magazine, and this external recognition pushes us towards further effort in this area.

By promoting private-public partnership, helping citizens and businesses/organizations to cooperate, and utilizing and incorporating the advanced technology owned by Toyota City in such collaboration, we will open the door to achieve various objectives. With this in mind, Toyota City will continue to strive to be a city where diverse value propositions are created by the power of resources, activities and people.



## **Keynote Speech**

# The world we envision under SDGs and the role of cities and regions



Togo UCHIDA, Director of ICLEI Japan

#### Introduction

The SDGs aim to create a sustainable world. In other words, the current world is not seen as sustainable. Society and the economy are sustained with the support of the global environment as their infrastructure, but the global environment undergoes constant change. There is a shared sense of crisis that once reaching a tipping point, this constant change transforms itself into irreversible mutation, resulting in the demise of society and the economy, which have been supported by the global environment. With this sense of crisis on one hand, there are also people who question this hypothesis, saying "I have heard similar warnings in the past, but nothing happened" or "Will you force us to go back to the pre-Industrial Revolution period, giving up economic development?" Today, I would like to answer these questions.

#### History of discussion on "sustainable development"

Upon the establishment of the United Nations in 1945, the UN set about various initiatives, aiming to build peace among nations and address issues such as human rights and economic disparity. In the 1960s, the economy of the US, Europe and Japan rapidly grew, and the resulting pollution became a global problem. This required multilateral coordination, leading to the establishment of the United Nations Environment Programme (UNEP) in 1972. However, at that time, pollution and environmental issues were seen as problems solely for developed countries, and some argued that addressing these issues might derail further economic development. Still, the creation of UNEP played a catalytic role in invigorating environmental discussions among various parties.

In the UNEP meeting held in 1982 in Nairobi, Kenya, for the first time it was recognized that pollution and environmental issues were global challenges rather than problems exclusively for developed countries. However, no consensus was reached concerning how to balance environmental protection and economic development. Under such circumstances, in the Nairobi meeting, the Japanese government proposed that a commission which gives advice on environmental issues should be set up and that the UN should take the lead in building consensus on how to balance environmental protection and economic development.

Based on this proposal, the 'World Commission on Environment and Development,' headed by Ms. Gro Harlem Brundtland, the then Prime Minister of Norway, was established, and in its report published in 1987, the term 'sustainable development' was for the first time defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' In short, the concept that formed the basis of the SDGs was defined 34 years ago, and the proposal leading up to this definition was made by the Japanese government.

#### How the world has been addressing complex environmental issues

In 1988, UNEP and World Meteorological Organization (WMO) established the Intergovernmental Panel on Climate Change (IPCC). After publishing its first assessment report in 1990, the IPCC has regularly published reports on climate change, stating that human activities possibly have a huge impact on the global environment and induce global warming.

The IPCC's 'Special Report on Global Warming of 1.5 °C' presented scientific consensus that in order to achieve the 1.5 °C target, CO<sub>2</sub> emissions must be reduced to reach net zero by around 2050, creating momentum towards carbon neutrality.

The 'Global Assessment Report on Biodiversity and Ecosystem Services' published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in 2019 states that 75% of the land surface has already been significantly altered and over 85% of wetlands have been lost. This report suggested that an average of around 25% of species in assessed animal and plant groups were threatened and around one million species are estimated to already face extinction. It also estimated that without some action, there would be a further acceleration in the global rate of species extinction, which was already at least tens to hundreds of times higher than it has averaged over the past 10 million years. According to the report, by 2016, 559 of the 6,190 domesticated breeds of mammals used for food and agriculture (over 9 per cent) had become extinct and at least 1,000 more were threatened.

Based on these reports and rapidly propagated scientific understanding, it has become the global consensus that the tipping point towards significant environmental alteration is imminent. Climate-related disasters are on the rise both within and outside of Japan, and in media reports, stronger terms have become increasingly common, e.g. "climate change" is replaced by "climate crisis/disintegration", "global warming" by "global overheating", and "loss in biodiversity" by "6th extinction event."

With this sense of urgency, what should the human race do? Ms. Kate Raworth created the concept of the 'donut of social and planetary boundaries,' stating that between a 'social floor (foundation)' and 'environmental ceiling' exists safe and equitable space for humanity. Whether we can pursue economic prosperity within this boundary is a challenge today's humanity is facing. This is why the SDGs now attract attention.

#### The role of cities and regions

Japan is now facing a rapid decrease in population, an aging society and financial contraction. Japan's dependence on imported resources is high while the degrees of self-sufficiency in food, wood and energy are low and the catch of fish as well as overall agricultural production have continued to decline. Japan has benefitted from the globalization of the economy, urbanization, improvement in production efficiency and other factors. However, these factors in turn seem to increase pandemic risks. As the national government, let alone a municipal government, cannot solve the issues it faces if working alone, communities and citizens are also responsible for considering how to address those issues.

For a region to develop, an integrated improvement in the environment, society and the economy is necessary in the forms of 'low-carbon development,' 'nature-based development,' 'fair and human-centered development,' 'resilient development' and 'circular development.' Thus, initiatives to solve global issues have become those to solve regional issues at the same time.

#### What the world has learnt from the disruption caused by COVID-19

In the field of urban design, the focus has been shifted, in conjunction with change in lifestyles, towards the mitigation of population density and congestion and securing green zones, public spaces and enough road width.

As pandemics will wreak havoc from time to time in the future, investment in digitization (DX) is critical, but at the same time, it is necessary to think about 'sustainability of cities' from diverse perspectives. From the viewpoint of 'fair and human-centered development,' it is important to take a comprehensive approach so that no one will be left behind in the era of digitization.

The socially disadvantaged people become even more vulnerable in a pandemic. By making good use of geographic information systems (GIS), information on various items, such as organizations, facilities and shops in a region, can now be collected and edited to allow us to better cope with unforeseeable disasters. It was reaffirmed that a society that balances the needs of the environment, society and the economy is resilient to various risks. Today, interested parties, such as government offices, nations and citizens, are required to maintain this sense of balance.





## **Panel Discussion [Mobility]**

## How should we create local city mobility in the age of living with and post COVID-19?

Facilitator Etsuko KUSUDA, Mobility Journalist

Panelists Toshihiko OTA, Mayor of Toyota City

Koji TOYOSHIMA, Deputy Chief Officer, Toyota ZEV Factory, Toyota Motor Corporation Takayuki MORIKAWA, Professor and Head of Institute of Innovation for Future Society, Nagoya University



With Ms. Etsuko Kusuda, a mobility journalist, as a facilitator, three panelists gave a presentation on the theme of "How should we create local city mobility in the age of living with and post COVID-19?"

## Introduction of the next-generation mobility initiatives in Toyota City Toshihiko OTA. Mayor of Toyota City

Mr. Ota outlined the proof-of-concept test "T+CAGO," delivery services by ultra-small EVs (electric vehicles), aiming to prevent the "Three Cs" among citizens and support local businesses, as well as the "Sakura Project," an initiative in which externally powered autonomous vehicles are dispatched to evacuation centers in the wake of disasters to secure power supply. Then, an overview of house call medicine utilizing ultra-small EV "C+pod" was presented as a way to make good use of mobility to solve issues in local communities. This vehicle enables doctors and other health professionals to visit patients' homes in communities with narrow roads without stress. In the "Satomobi LIFE Project," citizens themselves take the lead in utilizing ultra-small EVs to allow elderly people living in mountainous areas to secure the means to move, go out and drive safely. It was explained that the EVs are remodeled to meet users' needs and the speed limit is kept low.

While Toyota City has already established an intra-municipality network that aims to solve social issues by utilizing next-generation mobility, it continues to look for new ways to make better use of mobility.

## What eco-friendly vehicles mean for Toyota Motor Corporation Koji TOYOSHIMA, Deputy Chief Officer, Toyota ZEV Factory, Toyota Motor Corporation

Toyota Motor Corporation has been developing eco-friendly vehicles with the belief that they can contribute to society only when they consume less energy, are adaptable to increasingly diversified energy sources and are widely used. In addition, it embraces the concept of "Right Vehicles for the Time and Place" when it comes to eco-friendly vehicles. For example, for narrow roads/places EVs are the best option, while HVs (hybrid vehicles) and PHVs (plug-in hybrid vehicles) are better options for long haul drives. In the post COVID-19 world, product distribution is expected to grow, and the company offers FCVs (fuel-cell vehicles) to commercial operators to better protect the environment. Toyota Motor Corporation would be also able to contribute to the world by utilizing its expertise derived from the development of technology for the motors, control units and batteries of the Prius, which was launched in 1997.

In Japan, EVs can play a role as power generators and storage batteries, especially in the wake of a disaster. Aiming to make EVs an inseparable part of society, the company hopes that an increasing number of people adopt EVs, supported by the wide adoption of HVs and PHVs today. Toyota Motor Corporation is also developing small-size EVs as mobility for a society in which elderly people can move with ease for as long as they can and maintain their driver's license. In order to support the safe movement of people with a sense of security, Toyota Motor Corporation will develop a wide range of mobility options, from walking-support EVs to HVs, PHVs and FCVs.

## Life/city/mobility in a post COVID-19 society

## Takayuki MORIKAWA, Professor and Head of Institute of Innovation for Future Society, Nagoya University

Mr. Morikawa gave a summary of new services ('Mobility Blend') to realize a mobility society promoted by the Center of Innovation of Nagoya University to invigorate elderly people, as well as autonomous driving within it, and he noted that model communities such as Toyota City have already realized the concept.

Mobility Blend refers to mobility services for areas without full public transportation services that blend existing local transportation services and "CASE" (connected/autonomous/shared/electric) transportation, adapting to the respective communities' circumstances, to improve citizens' convenience and diversify options for transportation.

In order to implement CASE-type transportation in our society without delay, vehicles travelling at a low speed (20 km/h or less) have been developed under the concept of "slow autonomous driving" that ensures that vehicles better co-exist with people and society. These vehicles are currently on field trial.

The rate of aging of the mountainous areas of Toyota City, which introduced Mobility Blend, has been 40-50%. Aging of the population is a common issue among mountainous areas across Japan. These areas are also facing shared problems, such as poor public transportation systems, many slopes and last mile issues. This is why these areas are frontrunners in introducing Mobility Blend.

#### Utilization of mobility in disaster prevention

According to Mr. Toyoshima, HVs and PHVs, with their engine, power generator and storage battery, are able to supply 1,500 W of electricity as far as they are able to secure gasoline. On the other hand, while EVs can be used as power sources in emergency situations, they will not be able to supply power once they run out of stored electricity. That is the difference between HVs/PHVs, capable of supplying power for a long time by utilizing gasoline, and EVs. In the wake of the Great East Japan Earthquake, it was determined to increase the number of these externally powered vehicles.

Mayor Ota stated that while many official vehicles of Toyota City are HVs, there is no system that allows those who need them to have access to the vehicles in an emergency. Toyota City is now considering utilizing apps to solve this problem.

Mr. Morikawa emphasized that mobility is lifeblood in the wake of a disaster. Mobility is essential both in evacuating and rescuing people in a disaster. However, if too many people use vehicles to evacuate, it is likely to cause a traffic jam, resulting in secondary harm. Thus, it is particularly important to have drills in normal times to make people understand that those who can walk should walk and only those who cannot walk should drive a car in disaster evacuation. Hence, mobility in daily life is extremely important in light of disaster prevention too.

#### Utilization of mobility for post and with COVID-19, going out and health

Mr. Morikawa presented the Post COI Project, an initiative of lifestyle reform in the age of post COVID-19, such as work-style reform, work at home, the digitization of education and medicine, and the automation of the transportation of people and goods. Another topic was how to construct social platforms on which people can enjoy fruitful work and good services and find purpose in life regardless of where they live. Mr. Morikawa looked forward to working to build a new society in which people seamlessly move around big cities, medium- or small-size cities, and mountainous areas or in which services are extended to all these areas if people have to stay where they live.

Mayor Ota presented his plan to work with corporations and universities in developing mobility and relevant systems in the future. In addition, he believes building a society where people care about themselves, their family and community members should be one of Toyota City's priority areas as it will help fulfil the pledge of the SDGs that it will 'leave no one behind.' Based on the belief that a traditional Japanese society was such a society, he emphasized that it is important that initiatives to reconstruct a society where people take care of themselves as well as their community and initiatives to develop new types of mobility and systems are implemented hand-in-hand.





## **Case Study [Wellness]**

## The 'We Love Toyota City' initiative promoted by Toyota SDGs Partners

Facilitator Maki TSUBAI, Jyocos inc.

## Panelists Toyota SDGs Partners

anam fair trade&natural / Ichirin Building Management / Umemura Construction / Girl Scouts of Japan, Aichi Council No. 62 / Katsumasa Toyota Yoshiwara Shop / Sunself Co., Ltd. / Jyocos inc. / Suzuhiro Forklift Co., Ltd. / Toyota City Fujioka-minami Junior High School / Junior Chamber International Toyota / Niwasho Corporation / Fujitsu Limited Tokai Branch / Matsuzakaya Toyota Store / Mikawa-no-yamazato Community Power / Re Smile



With Ms. Maki Tsubai from Jyocos inc. as a facilitator, the representatives of Toyota SDGs Partners presented case studies under the theme of "the 'We Love Toyota City' initiative promoted by Toyota SDGs Partners."

#### **About 'Toyota SDGs Partners'**

'Toyota SDGs Partners' is a group of businesses and organizations that work together to attain the goals set out in the SDGs and promote and educate on the SDGs through initiatives to address the challenges Toyota City is facing. Since its designation as an SDGs Future City in 2018, Toyota City has been making great effort to promote and educate on the SDGs. However, it considered that working alone would not result in increased buy-ins towards the SDGs and hence launched this partnership program in 2019 so that Toyota City is supported by participating members in its endeavor to promote the SDGs. Today, Toyota SDGs Partners boasts over 200 partnering members.

#### Implementation of working sessions on the theme of 'collaboration'

Leading up to this international conference, Toyota SDGs Partners have had six working sessions involving to learn, deepen the understanding of, and put in practice the SDGs. Participants of the working sessions came up with three themes: 'Education and the development of the next generation,' which aims to familiarize children with the SDGs; 'Rescue squad for towns in disaster,' which aims to develop a model in which businesses and organizations can leverage their expertise in the wake of a disaster; and 'Otagaisama Council,' which is a mechanism in which people help each other to solve problems in town.

#### Case study presented by 'Education and the Development of the Next Generation' team

Participating businesses/organizations: anam fair trade&natural / Umemura Construction / Girl Scouts of Japan, Aichi Council No. 62 / Matsuzakaya Toyota Store / Re Smile

The first theme concerns 'education and the development of the next generation,' which aims to familiarize children with the SDGs. Each member of this team had been implementing various SDGs-related programs. However, they often heard people say "I do not understand what the SDGs are about" or "The SDGs are for the national government." Through discussions, team members came to understand that the SDGs at their core are rather close to their daily life. Based on this realization, the team set the goal of familiarizing children with the SDGs via planned events for children.

The team is now considering creating an SDGs card game for classes or establishing a mechanism in which children think about the SDGs in their daily shopping. As the first step, on the following day of the Conference, the team participated in WE LOVE TOYOTA FESTA to hold a workshop in which children came up with issues to be tackled on their own and wrote down "what they can do to address them" on 17 types of paper 'leaves' that will become part of an 'SDGs Tree' on an exhibition panel. The team members looked forward to achieving their goal of familiarizing children with the SDGs through these activities.

#### Case study presented by 'Rescue Squad for Towns in Disaster' team

Participating businesses/organizations: Sunself Co., Ltd. / Suzuhiro Forklift Co., Ltd. / Toyota City Fujioka-minami Junior High School / Niwasho Corporation / Fujitsu Limited Tokai Branch

The second theme is a 'rescue squad for towns in disaster,' which aims to develop a model in which businesses and organizations can leverage their expertise in the wake of a disaster. As the first step, team members clarified what each participating company/organization can/cannot do in order to support communities when a disaster hits the areas. Through this exercise, their respective strengths and weaknesses, e.g. A Company has equipment but not enough staff or B Organization cannot cooperate with another entity in the wake of a disaster as it has enough staff but lacks collaborative networks. It was concluded that member companies/organizations can form one team that is capable of contributing to communities by supplementing each other to leverage their respective strengths.

An issue identified through the working sessions is smooth collaboration in the wake of a disaster if it really happens. The current procedures stipulate that if a disaster takes place, the relevant divisions at the Toyota City government are supposed to issue cooperation requests to the private sector via the council and other business associations. However, the team proposed the formulation of a 'rescue squad for towns in disaster' or a group made up of companies/organizations that share a common purpose, so that it can act voluntarily for its local community.

In order for this group to be able to smoothly collaborate in work in an emergency, Fujioka-minami Junior High School, a team member, will co-organize a disaster prevention event, partnering with its community, as a proof-of-concept experiment. In this event, the school and its students will simulate the delivery and sorting of relief supplies, the loading, unloading, and sorting of those supplies at and around its gymnastic hall, and activities at an evacuation center. The team looks forward to seeing many other similar groups, which work with respective areas' junior high schools, being established to leverage their strengths and expertise. In concluding, the team expressed its aspiration to grow the initiative of a 'rescue squad for towns in disaster' to make Toyota City more safe and secure with the power of citizens, starting from this international conference.

#### Case study presented by 'Otagaisama Council' team

Participating businesses/organizations: Ichirin Building Management / Katsumasa Toyota Yoshiwara Shop / Jyocos inc. / Junior Chamber International Toyota / Mikawa-no-yamazato Community Power

The third theme is 'Otagaisama Council,' whose members endorse the idea that they can transform the economy into a more circular one if problems in town can be solved by utilizing existing skills in the community.

The team reported that it had started discussions by sharing the members' own problems with each other and discussing what other members can do to solve these problems in the belief that members from different business fields can create synergies.

Small acts of 'Otagaisama,' or 'we can help each other,' will lead to wider collaboration towards the SDGs. If this 'Otagaisama Council' can become a springboard for similar activities being established in various communities, it will be considered as the team's achievement. The team concluded that they would continue implementing this initiative to get concrete results

#### Conclusion

Following the presentation of case studies by the three teams, Ms. Maki Tsubai, the facilitator, wished that various projects created through the half-year working sessions since October 2020 would move forward to realize their respective aspirations and attract interest from many people.





## Panel Discussion [Energy]

# Impact of COVID-19 on cities' environment and energy policies

Facilitator Junko OTA, Institute for Global Environmental Strategies (IGES)

Panelists Minoru TAKADA, Team Leader (Sustainable Energy), Division for Sustainable Development Goals, UNDESA Caroline BOUVARD, Grenoble, France Sarah BURKINSHAW, Derbyshire County, England

Anton SUNARWIBOWO, City of Bandung, Indonesia Hayley BIN PONICHAN, Shah Alam, Malaysia



With Ms. Junko Ota from the Institute for Global Environmental Strategies (IGES) as a facilitator, five panelists gave a presentation on the theme of the "impact of COVID-19 on cities' environment and energy policies." As an introductory note, Ms. Ota presented the following facts: Japan is the 6th largest emitter of CO<sub>2</sub> and approximately 90% of its emissions derive from energy, making energy issues very important for Japan; Toyota City has declared itself to be a Zero Carbon City, whose forests that cover 70% of its land are important CO2 absorbers; and various initiatives are taking place, including technical demonstration tests in partnership with companies/organizations, ZEHs, the development of next-generation vehicles, smart towns, and the promotion of renewable energy.

## Significant challenges for global energy Minoru TAKADA, Team Leader (Sustainable Energy), Division for Sustainable **Development Goals. UNDESA**

The world today is facing two significant issues: the issue of the universal access of energy, as many people still live without electricity; and the issue of climate change. As an increase in temperature is expected to cause catastrophes, the human race must break away from dependence on fossil fuels to reach net zero emission by 2030. On the other hand, there are also positive changes: the prices of renewable energy, which has attracted new investments, have decreased; many governments have committed themselves to the creation of a net zero emission society by 2050 as the momentum for carbon neutrality has gained traction; a shift to renewable energy is creating a significant number of jobs; and tens of thousands of people have been newly gaining access to clean energy every

The UN is currently preparing for a high-level dialogue on how to achieve Goal 7 of the SDGs and realize a net zero emission society by 2050, and Japan is expected to take the lead in the field of innovation and technology.

## Environmental activities and energy policy of Grenoble and impact of COVID-19 **Caroline BOUVARD, Grenoble, France**

The reason why energy is important for Grenoble is that the city is susceptible to climate change and air pollution due to its location, surrounded by mountains. It aims to be the 'Green Capital' of Europe by 2025, supported by its environmental and energy policies. For example, in relation to air quality, the city has established a vehicle-free zone in the city center with the aim to make public transportation cleaner, as vehicles are major emitters.

In the midst of the COVID-19 pandemic, France was under lockdown for about two months last year, which affected the usage of energy. As people stay and work at home for a longer time, the introduction and improved efficiency of clean energy are required for use both at home and in the office. As a long-term energy policy, the city focuses more on the production and use of hydrogen energy rather than other clean energy, with a strategy that aims to build a value chain for effective and optimal use of produced hydrogen for the regional economy.

## Impact of COVID-19 in the UK and future outlook in the field of energy Sarah BURKINSHAW, Derbyshire County, England

The UK was under lockdown for a total of almost one year due to COVID-19. The country has been depending

on resources and energy, but the lockdown, which forced retail shops and educational institutions to be shut down and made difficulties for public transportation, tourism and other industries, led to the realization that the future should be greener.

As an initiative unique to Derbyshire, it is considering utilizing abandoned coal mines, where water will be heated with geothermal energy to about 40 °C. This is a circular system that can heat buildings and allow aquaculture using very clean energy. Furthermore, it will create new jobs and lead to the development of the next generation. In addition, as an effective use of energy, Derbyshire is considering introducing a park-and-ride system to realize a carbon-free society.

Derbyshire will continue to invest in the further use of hydrogen and electric vehicles to realize a greener and cleaner future.

## Change in society in the City of Bandung, Indonesia, after the outbreak of COVID-19 Anton SUNARWIBOWO, City of Bandung, Indonesia

The City of Bandung has been working on Goals 6, 11 and 13 of the SDGs. More than 30,000 citizens of Bandung have suffered from COVID-19. The pandemic changed society in various ways, stunted economic growth, and pushed up unemployment and poverty rates. It also led to increases in medical waste (mainly the personal protective equipment of health professionals), the bed occupancy rate and the usage of internet services, some of which have proved to be societal challenges.

On the other hand, COVID-19 has accelerated solutions to community environment and energy problems with initiatives such as 'Buruan SAE,' an agricultural project in the city, increased production of renewable energy, and a car (motorbike)-sharing demonstration experiment in partnership with universities.

The future goals of the city are initiating knowledge sharing and networking with other cities and building resilient communities. The City of Bandung will continue to aim to realize sustainable development mainly by promoting capacity building and transforming itself into a smart city.

## **Energy optimization in Malaysia** Hayley BIN PONICHAN, Shah Alam, Malaysia

Based on a 'Shah Alam Roadmap,' energy optimization initiatives were launched with benchmarking in 1998 and are currently carried out by referring to good practices of other cities worldwide for comparison. The city is designated as an APEC low carbon model city as well as an ASEAN SDGs model area.

A case study on an air-conditioning system for buildings was presented to show that air conditioning in buildings is essential in Malaysia as it is located in a hot and humid tropical zone with a room temperature of 20-30 °C and a humidity of 70-80%. Shah Alam has introduced an integrated monitoring system that monitors intersections to mitigate congestion and buildings, including public facilities, and feeder pillars. It can also support the maintenance of air conditioning systems, and a project to install the integrated monitoring system is planned to be completed by 2023. In addition, in an air-cooling enhancement program, a test of linking multiple buildings with one chiller plant has been conducted, and cooling efficiency was improved with reduced costs by installing thermal storage systems.

#### Conclusion

Following the presentations, in a panel discussion, panelists, including speakers from participating cities and Mayor Ota, concluded that these cities and Toyota City will continue to collaborate.

