

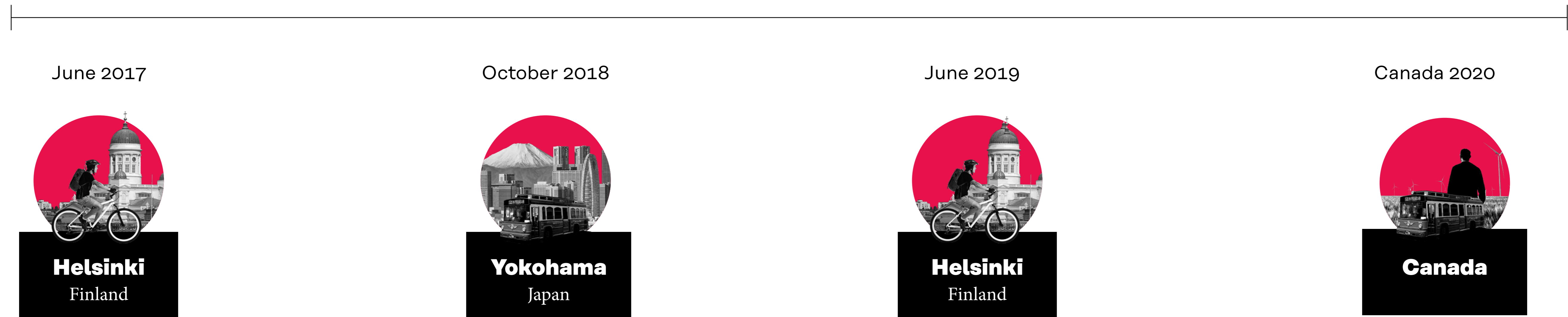
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C **WORLD**
CIRCULAR
ECONOMY
FORUM
2018 **E**
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WORLD CIRCULAR ECONOMY FORUM TIMELINE



"A circular economy is an essential key in building economies and societies that are sustainable."

Shinzo Abe
Prime Minister of Japan

KEY OUTCOMES OF THE WCEF2018

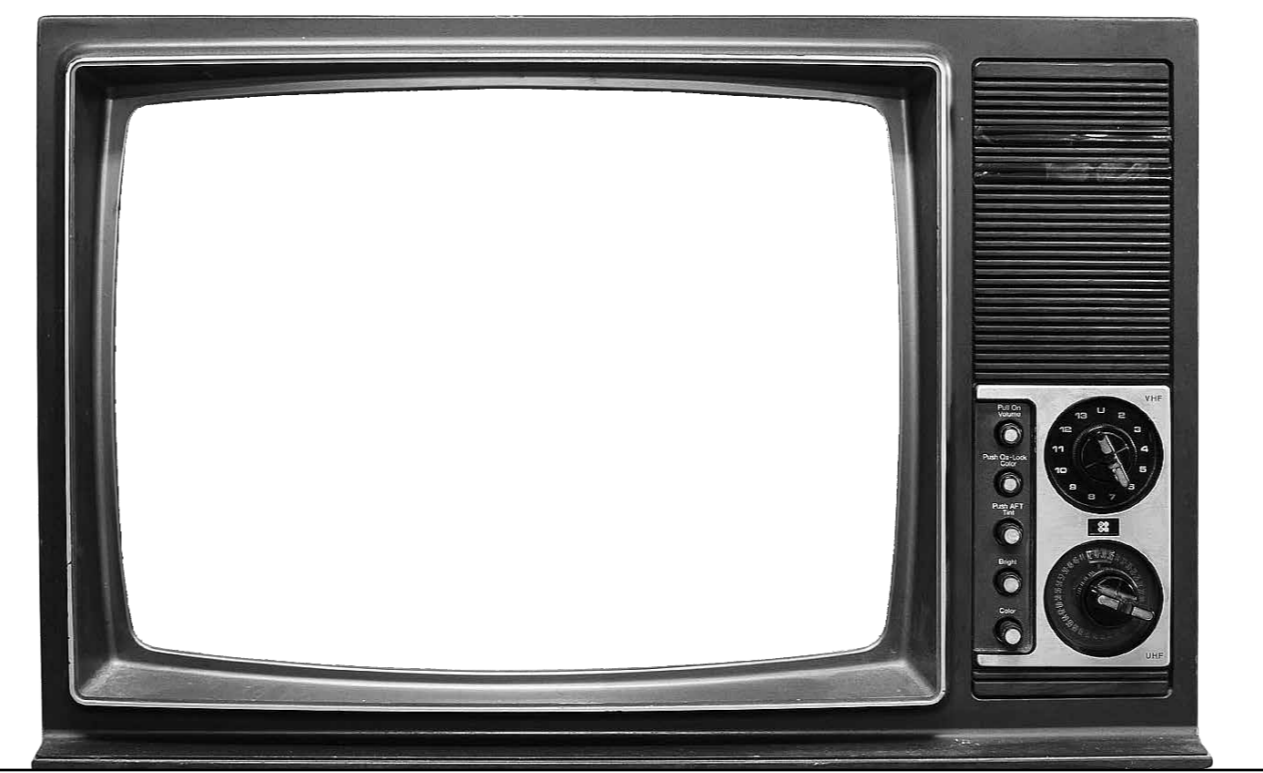
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THE WORLD LACKS A SHARED VISION OF THE CIRCULAR ECONOMY

Currently the world lacks a shared vision of the circular economy, but one can be created. The Sustainable Development Goals (SDGs) are an excellent basis to build a global circular economy strategy, and international organisations such as the UN and G20 are ideal bodies to create a global agenda and promote real action.

2



THE CIRCULAR ECONOMY IMPROVES BUSINESS, TRADE AND JOB CREATION

The circular economy is a new economic model that improves business, trade and job creation. It removes barriers and promotes collaboration and the free exchange of goods, services and ideas. Solutions that enable the circular economy must be allowed to spread freely around the globe.

3



THERE IS A NEED FOR STRONGER LEADERSHIP AND COOPERATION

There is an urgent need for stronger leadership and international cooperation. Public policy makers and business leaders need to lead the world away from the linear economic model, which has caused global challenges such as climate change, pollution and unemployment.

CIRCULAR VISIONS IN THE MAKING

The second World Circular Economy Forum (WCEF2018) took place from 22-24 October 2018 in Yokohama, Japan. More than 1,100 experts from over 60 countries discussed what we are doing today and what we need to do to create a true circular economy by 2050.

The key messages of the forum were that the world lacks a circular economy vision and there is an urgent need for strong leadership and international collaboration to bring this to fruition. The circular economy is good for the environment, but it is also beneficial for business, trade and job creation.

Currently the world lacks a shared vision of the circular economy, but one can be created. The Sustainable Development Goals (SDGs) are an excellent basis to build a global circular economy strategy, and international organisations such as the UN and G20 are ideal bodies to create a global agenda and promote real action.

The circular economy is a new economic model that improves business, trade and job creation. It removes barriers and promotes collaboration and the free exchange of goods, services and ideas. Solutions that enable the circular economy must be allowed to spread freely around the globe.

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cooperation. Public policy makers and business leaders need to lead the world away from the linear economic model, which has caused global challenges such as climate change, pollution and unemployment.

During the two days of the WCEF2018, the themes that rose regularly in the circular economy conversations were natural resources, manufacturing, transportation, services, food, living, plastics and capabilities. These themes were presented in WCEF Visions 2050 images, which give insights to the future of the circular economy. The circular economy will reduce resource extraction, create closed-looped manufacturing, build on-demand transportation systems and enable digital access to services. Additionally, circular economy will help to produce, conserve and consume renewable energy, and to create efficient biocycles in both urban and rural areas, allowing for innovative food production methods. The circular economy will help to upcycle plastics, keep our oceans clean, and enjoy diverse, life-long learning.

Mari Pantsar, Sitra's Director of the carbon-neutral circular economy, pointed to the world's goal of limiting global warming to about 1.5 degrees. The 8 October 2018 IPCC report warned that we were failing, but gave some solutions to strive for, including renewable energy, energy efficiency, reforestation and carbon capture. The IPCC did not mention the circular economy even once, but this was actually a good sign.

"If we can harness the full potential of the circular economy," Pantsar said, "including recycling, product material efficiency, sharing economy and new business models to transform our economies to become more sustainable and circular, we have good possibilities to succeed in limiting global warming to an acceptable level."

Tsukasa Akimoto, Japan's State Minister of the Environment, gave three proposals to the forum participants. First, specific goals are indispensable. Everyone from individual companies to multi-national regions should set and act upon goals. As an example he cited Japan's Sound Material Policy which focused on resource productivity, cyclical use rate and final disposal amount.

The second proposal was to raise the international momentum for the circular economy, which Japan has done in the past and will do in the future as it leads the G20 group of industrial nations in 2019.

The third proposal was to expand collaboration between public and private sectors, such as Japan's plastics campaign and the PACE platform created by the World Economic Forum and the Global Environment Facility.

THERE IS AN URGENT NEED FOR STRONGER LEADERSHIP



"We have visions of a viable future, but we need to share those visions for it to become reality. We need to act, and we have to act now."



Mikko Kosonen

President of Sitra

YOUTHS' IDEAS FOR THE YEAR 2050

WCEF 2018 is aimed at creating a better future, so two youths spoke to the forum participants about their own ideas for the year 2050.

Hana Ishii stressed the 3Rs: reduce, reuse and recycle. Individuals can make a difference, not only in their own families but also by encouraging friends to do the same. She had a fascinating idea for the year 2050: vending machines for recycling. If you recycle something in a machine you are rewarded with coupons which can be redeemed, such as for amusement park tickets. The more things you recycle, the more reward coupons you get. Ishii even had an idea to make this a reality, by a partnership between companies and waste management organisations.

Masayasu Takayama worried about the state of our oceans and if it would still be possible to enjoy sushi in 2050. To protect the sea we need to educate both individuals and companies, he said. For example, Japanese rice crackers often use a lot of wasteful packaging. Instead of plastic, rice crackers could be wrapped in rice straw sheets, which are biodegradable and reusable and are used to make goza or tatami mats. The more young people are educated with such ideas the better our future will be.

3RS
REDUCE
REUSE
RECYCLE



"Science, business and policy must work together. There is a diversity of interests and we need to manage this."



Izabella Teixeira

Co-Chair of the UNEP
International
Resource Panel

SESSION HIGHLIGHTS

The World Circular Economy Forum 2018 consisted of 17 sessions which brought forward themes from education to business and circular lifestyles. Here's some of them in a nutshell.

CIRCULAR VISIONS TOWARDS 2050

The kick-off session of WCEF2018 was about the vision of a circular economy in 2050. A variety of speakers explained the current situation, what is currently being done, and what actions to take in order to achieve our goals in the future.

A key point was collaboration on all levels of society: citizens, businesses, public leaders and multinational organisations. The vision of a circular 2050 can only be achieved with everyone working together.

Shinzo Abe, Prime Minister of Japan, pointed out his country's emphasis on the 3Rs of reduce, reuse and recycle. The President of Sitra, **Mikko Kosonen**, urged the forum to be a platform to share solutions.

Yoshiaki Harada, Japan's Minister of the Environment, called for a break from mass production and consumption and the building of an economy based on resource circulation. Finland's Minister of the Environment, Energy and Housing, **Kimmo Tiilikainen**, urged close collaboration between governments and businesses.

The Mayor of Yokohama **Fumiko Hayashi** explained what her city has been doing to reduce waste as well as how they share best practices with other cities. Vice-President of the European Commission, **Jyrki Katainen**, said the EC is putting the circular economy at the heart of EU economic policy.

CIRCULAR ECONOMY IN DEVELOPING COUNTRIES

The circular economy has obvious environmental benefits, but the advantages don't end there. The plenary session Social, Environmental and Economic Benefits from Circular Economy in Developing Countries focused on how many social, economic and environmental challenges are interlinked. Circular solutions can help address these issues while simultaneously advancing SDGs. Social welfare must be addressed, or else the circular economy will be unsustainable.

Hidetoshi Nishimura, President of ERIA, pointed out how countries such as Singapore and Malaysia are already enacting circular solutions to overcome resource constraints. **Lu Dongsen**, Director of the Division of Circular Economy Development in China, explained how China's latest Five-Year Plan heavily emphasised the circular economy and sustainable development.

Luc Gnacadja, President of GPS-Dev, reminded everyone of the importance of agriculture in Benin and the need for the circular economy to address soil degradation. **Izabella Teixeira**, Co-chair of UNEP-IRP, used her home country of Brazil as an example of a diverse, resource-rich country which needs tailored approaches for different regions.

Several experts stressed the importance of the financial sector, such as its influence on consumer behaviour and rural development. Additionally, financing can accelerate the pace of change and scale up activity.



EUROPEAN
COMMISSION
IS PUTTING
THE CIRCULAR
ECONOMY AT THE
HEART OF EU
ECONOMIC
POLICY

ADOPTING TO A CIRCULAR LIFESTYLE

The circular economy should not only be thought of in a macro scale, because it also involves circular lifestyles and transforming consumption. Individuals can adopt circular lifestyles, and their decisions help to determine resource consumption.

Markus Terho, Sitra's Project Director for Resource-wise Citizen, explained how consumers still have the behaviour of hunter-gatherers, where the acquisition of more stuff is linked to happiness. Yet research has shown that people who believe they are living sustainably enjoy greater life satisfaction. Mercari's COO **Fumiaki Koizumi** explained the value of consumer-to-consumer platforms, such as for old mobile phones, allowed for products to remain in circulation.

Takayuki Kitajima, Representative Director of Unilever in Japan, said corporations should rethink product design, drive systemic change, work with officials, partner with consumers in collection and sorting, and explore new business models.

Anu Mänty, Senior Lead at Sitra, explained the group's sustainable lifestyle test, where consumers can see how their routine impacts the environment. They can also use Sitra's list of 100 ways to be smart and sustainable. The actions of individuals not only make a positive difference; they can exert pressure on policy makers and businesses to also take beneficial actions.

EDUCATION IS THE KEY

The keystone for achieving a circular economy is education: teaching what the circular economy is, why it is necessary and the benefits it provides. The Education for the Circular Economy session at WCEF2018 was dedicated to integrating circular economy thinking into the minds of future professionals. Japan is a perfect place for this, because they have the exclamation 'Mottainai', which conveys regret over waste. Mottainai has been used extensively in environmental education not only in Japan, but around the world to promote positive thinking and actions.

Michiharu Kono, Director of Japan's Office of Environmental Education at the Ministry of the Environment, detailed how Japan promotes sustainability education, not only in schools but in homes and workplaces. Additionally, the circular economy will need new professional skills which also must be taught, as explained by **Chris Grantham**, Executive Director for the Circular Economy at IDEO.

During the panel discussion the participants stressed the vast diversity of proper education: corporations can teach proper risk-taking, universities can promote design-thinking through all disciplines and children can teach adults, for example.

An important concept was relearning old ideas. Companies currently have a set idea of value creation which may involve old linear models and actually destroy value over the long term. Additionally, people have the idea of accumulation of material possessions as a goal for happiness. With proper education, these ideas can change.



CIRCULAR BUSINESS SOLUTIONS

Many businesses were present at WCEF2018, and for good reason: circular business solutions can not only improve the planet, but be very profitable. During the Showcasing Circular Business Solutions about a dozen companies pitched their business model innovations.

Some of the innovations were laundry as a service, biodegradable coffee capsules and constructing buildings as repositories of valuable materials that can be recovered later. Other innovations were not a product or service, but instead a multiparty platform, such as transportation as a service or the sharing of micro circular models.

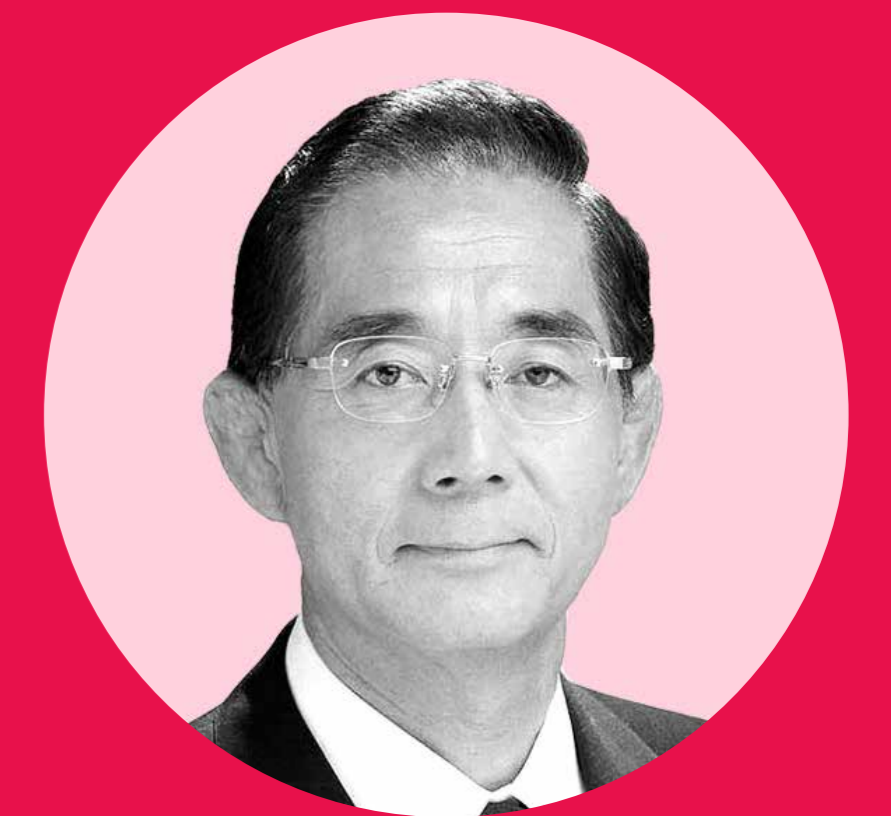
Julien Guerrier, Director of the Executive Agency for SMEs of the European Commission, said they were investing a billion euros over the next three years to promote the circular economy among smaller companies. **Jyri Arponen**, Senior Lead at Sitra, explained the circular economy playbook, which includes circular concepts, best practices and tools for businesses to take advantage of circular solutions.

Many of the circular business solutions showcased partnerships, such as small companies working with larger ones, or innovations funded by public programs such as EU's Horizon 2020 or LIFE programme. Increasingly, the best solutions are not ideas which arise in isolation, but are instead the result of collaborative, creative processes.

33%
OF THE WCEF
PARTICIPANTS
REPRESENTED
BUSINESSES



"Humankind has to break away from economies of mass production and mass consumption, not only one-way consuming resources into waste, but circulate resources repeatedly to reduce waste; we need to build a civilised society based on circulation."



Yoshiaki Harada

Minister of the
Environment of Japan

SUSTAINABLE DEVELOPMENT GOALS & CIRCULAR ECONOMY

The Sustainable Development Goals (SDGs) are the blueprint for a better and more sustainable future. Created by the UN, the seventeen goals encompass everything from education to health, from the elimination of poverty to responsible production and consumption.

These are a basis to build a global circular economy strategy. The SDGs were created by global organisations which are ideal decision-makers to build a circular economy strategy. The SDGs and circular economy go hand-in-hand, because many of the goals are unachievable without circular solutions. Moreover, the Paris Agreement goal of keeping global warming well below two degrees is likely unattainable without circular solutions, because renewable energy and energy efficiency are not enough. The circular economy is an integral part of both mitigating climate change and reaching the SDGs.

The Intergovernmental Panel on Climate Change (IPCC) warned that we are off-track on our goal of limiting global warming, but their recommendations did not take into consideration circular economy solutions. This is an opportunity to demonstrate the effectiveness of circular solutions in both promoting development and limiting climate change created by human activity.

SDGS ARE THE
BLUEPRINT FOR A
BETTER AND MORE
SUSTAINABLE
FUTURE



"The world can't survive without moving to the circular economy. It will bring us improved welfare and new jobs. We need the circular economy to reach the Sustainable Development Goals 2030 targets."



Kimmo Tiilikainen

Minister of the
Environment, Energy
and Housing of Finland



1,100
EXPERTS
DISCUSSED
WHAT WE NEED TO
DO TO CREATE A
TRUE CIRCULAR
ECONOMY BY
2050

1,100

**PARTICIPANTS FROM AROUND
THE WORLD**

64

COUNTRIES

100

TOP SPEAKERS

9

**PARTNER
ORGANISATIONS**

10

SIDE EVENTS



TOP 10 COUNTRIES BY PARTICIPATION

- 1. JAPAN**
- 2. FINLAND**
- 3. CHINA**
- 4. BELGIUM**
- 5. NETHERLANDS**
- 6. FRANCE**
- 7. UNITED KINGDOM**
- 8. ITALY**
- 9. UNITED STATES**
- 10. SWEDEN**



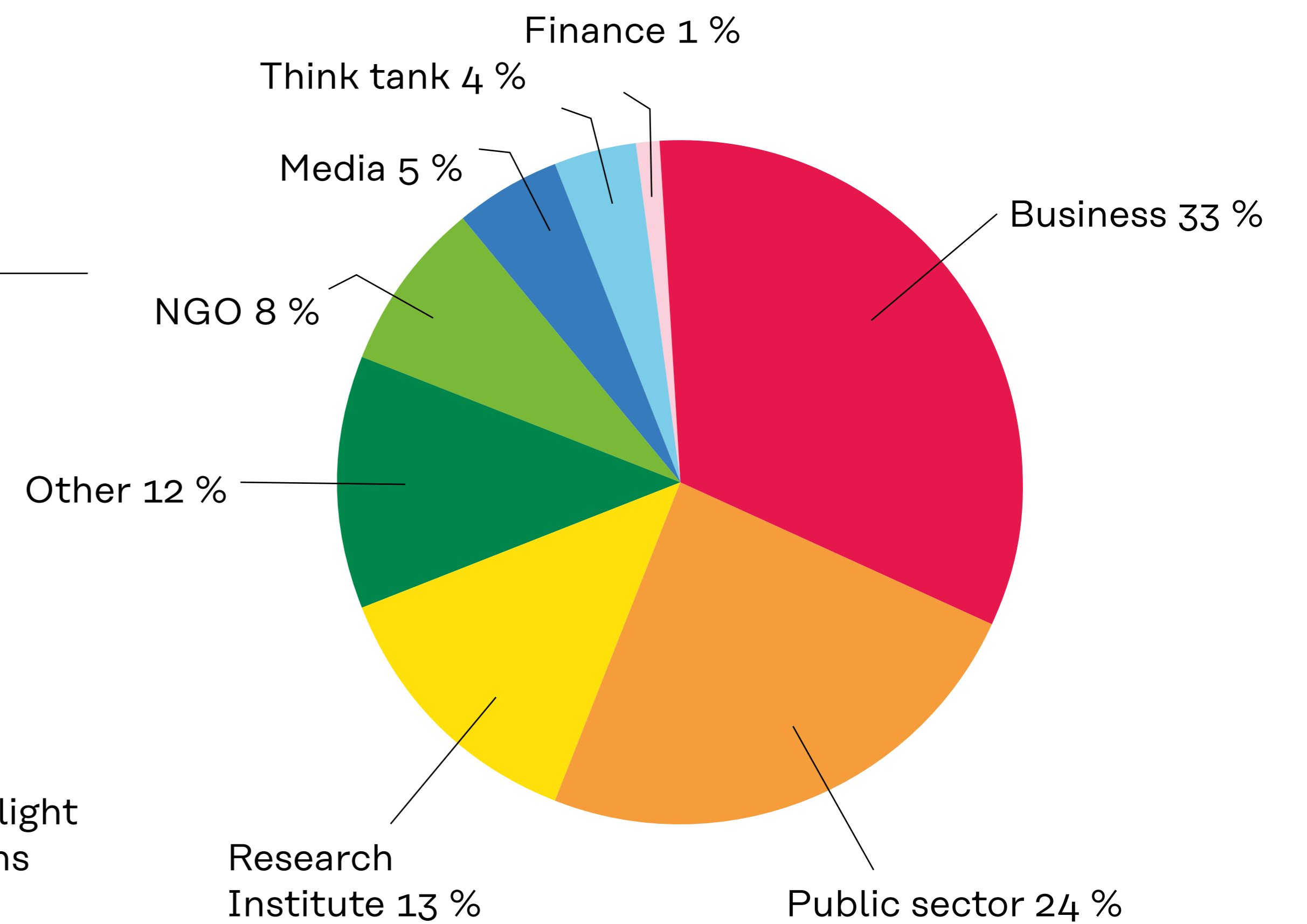
#WCEF2018
TWITTER
REACH WAS
26,5
MILLION

33 %

**OF THE WCEF PARTICIPANTS
REPRESENTED BUSINESSES**

**PARTICIPANTS
BY SECTOR**

1,173 PARTICIPANTS IN TOTAL



25

EXHIBITORS

The WCEF2018 Expo Area brought into the spotlight selected circular economy solutions, organisations and businesses around the world.

WCEF2018 WAS DONE TOGETHER



HOSTS

The Forum was co-hosted by the Finnish Innovation Fund Sitra and the Ministry of the Environment of Japan. Sitra is an independent Finnish organisation which builds a fair and sustainable future. The Ministry of the Environment of Japan is a cabinet-level ministry responsible for environmental conservation, pollution control and nature conservation.



CO-ORGANISERS

Co-organisers included the Ellen Macarthur Foundation, the Economic Research Institute for ASEAN and East Asia (ERIA), the European Commission, the Organisation for Economic Cooperation and Development (OECD), the UN Development Programme, UN Environment Programme and the World Economic Forum's Pace Network.



KEY PARTNERS

Key partners were the Institute for Global Environmental Strategies (IGES) and UN Centre for Regional Development.

W C E F

WORLD
CIRCULAR
ECONOMY
FORUM
2018

SITRA

環境省
Ministry of the Environment

ELLEN MACARTHUR
FOUNDATION

ERIA
10th anniversary 2008-2018

European
Commission

OECD
BETTER POLICIES FOR BETTER LIVES

UN
DP
Empowered lives.
Resilient nations.

UNEP
United Nations
Environment Programme

PACE
PLATFORM FOR ACCELERATING
THE CIRCULAR ECONOMY

IGES
Institute for Global
Environmental Strategies

UNCRD