



AUSTRIAN WORLD SUMMIT

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Outcome Report

August, 2019

About the R20 AUSTRIAN WORLD SUMMIT

The R20 AUSTRIAN WORLD SUMMIT is a long-term initiative to create a network platform that will help regions, states and cities implement the UN Sustainable Development Goals and meet the global climate protection targets outlined in the Paris Agreement. Our goal is to bring everyone together in order to increase partnerships and exchange experiences and ideas. It is critical that we stay inspired and motivated in our efforts to implement the SDGs and to find effective ways to learn from one another.

Arnold Schwarzenegger launched the R20 AUSTRIAN WORLD SUMMIT in 2017, under the direction of R20 Austria&EU Director Monika Langthaler and under the patronage of Federal President Alexander Van der Bellen. On the basis of this initiative, a major international climate conference is held once a year in the Vienna Hofburg.

What we want to achieve:

- Raising awareness for climate change
- Showcasing innovative projects for climate protection
- Matchmaking for green solutions

Imprint

R20 AUSTRIAN WORLD SUMMIT
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Key Messages

Join forces

As the consequences of climate change will affect everybody, we all need to become active, regardless of age, location or background. It is essential to cooperate across borders and business sectors, so we ask everybody to join the global climate movement.

Diversity for change

We need politicians, business people, experts, scientists, media outlets and NGOs on our side to accelerate change. We should also include popular proponents from diverse areas (such as sport, fashion, movies, TV and music) in guiding others along the path to a sustainable future. Different audiences require different messengers to activate communities in a credible way.

Motivating & Inspiring people

Communicating the climate crisis is essential, making it understandable to everyone through personal stories, strong visualisations and new narratives. Individuals can make small changes in daily life leading to a change that we so desperately need. Growing political commitment and a shift in consciousness concerning climate change has already become noticeable. Sustaining this momentum is crucial to increase the effectiveness of action in the climate movement.

Climate Neutrality no later than 2050 is possible

If we fail to neutralize carbon emissions by 2050, the consequences will be devastating across the world. We cannot allow this to happen and there are already sustainable solutions ready to implement, with numerous best practice projects that prove their success. Looking for inspiration? The 2nd [R20 AUSTRIAN WORLD SUMMIT Special Report](#) showcases concrete projects that contribute to sustainable development, listing success factors and policy recommendations.

Enhance the pressure & speed

Decision-makers have merely been talking rather than acting for far too long. Now is the time for them to jump on board and increase their climate ambition. The discussion phase must now result in action and 2019 cannot pass without setting ambitious targets and taking ground breaking decisions to work towards climate neutrality. The UN Climate Action Summit (21-23 September) will provide an excellent opportunity to raise ambition, commitment and get action on track.

From Talanoa Dialogue to NDCs: Multilevel action is key

The Paris Agreement recognizes the importance of the engagement of all levels of government. By 2020 all national governments are expected to present their revised or second NDCs, presumably with more concrete actions and higher ambition levels. With the relevant COP24 decision referring to the Talanoa Dialogue, local and regional governments have further legitimacy to approach national governments and urge them to re-sharpen their NDCs.

Pushing towards next year's COP in Chile

The journey in 2019 will advance mainly along the paths toward the UN Climate Action Summit and SDG Summit in September 2019 in New York, which plays a catalysing role for new and

additional actions by raising ambitions of NDCs expected by 2020. The final gathering in the year of climate ambition will be the COP 25 in Santiago de Chile. According to the organizers, our oceans will be a special focus. It's expected that the recent devastating amazon fires will influence the agenda.

Put a price on carbon

Urgent calls for the taxing of pollution and ending of fossil fuel subsidies came from various speakers. Highly polluting industries, such as aviation, benefit from tax exemptions while low carbon rail travel faces full taxation. The broad consensus was that carbon taxation is an extremely effective instrument in fighting the climate crisis.

More support for vulnerable countries

So far, people living in poor and vulnerable countries have contributed almost nothing to climate change but are suffering the most from its impact. Top priority activities on the climate agenda are: ensuring food security, implementing early warning systems for natural disasters, providing access to clean energy and water, fostering sustainable agriculture, forestry and green technology, as well as awareness building. The key issue remains the accessibility of finance to implement further projects.

Green Finance – the engine of change

There is no doubt that green finance will play a crucial role in decarbonising our economy to establish sustainability on all levels. In order to close the investment gap from now until the middle of the century, there is a need for US\$ 29 trillion in investment to tackle climate change. All actors in the financial world are asked to take responsibility and to act aligned with the Paris Agreement.

Foster nature-based solutions

Forests are the largest terrestrial carbon stores and provide a multitude of goods and services. The significant role of forests was mentioned by Presidents from Hungary, Latvia and Ghana, by representatives from the Worldbank, Cool Earth and local governments. This demonstrates the importance of this natural resource as a CO₂ sink, for vital ecosystems and for regional value creation. Rehabilitation and reforestation help to protect or recover soil and coastal areas, binding CO₂ whilst conserving habitable areas for communities, animals and plants. In this context deforestation is a huge threat. In addition, a shift towards climate-smart agriculture is needed that depends on nature-based solutions.

Reduce pollution, save lives

Discussions and scandals regarding pollution are on the rise. More than 80% of all cities worldwide regularly exceed the air quality limits set by the WHO. Every year the deaths of more than 7 million people are linked to air pollution. Water studies predict that by 2050 there will be more plastic waste in the sea than fish. We have also heard shocking and alarming personal misfortunes that demonstrate the need for swift action to enhance the quality of life and health for all species.

Introduction: Goals and Guests

The purpose of this report is to sum up the various discussions, speeches and commitments, hereby collecting and showcasing successful messages, activities and goals for the future.



Climate communication was a new and important focus of the R20 AUSTRIAN WORLD SUMMIT this year. Nevertheless, in keeping with previous years, the overall common goal of this climate initiative was to increase the pressure on decision makers, to raise awareness and forge solutions for a sustainable future. For the conference and the Breakout Sessions we invited guests from different sectors and parts of society, a mixture of high-level politicians, CEOs and managers from the business sector, experts and scientists, journalists, NGOs, alongside climate activist Greta Thunberg, UN Secretary- General António Guterres, CEO of the Worldbank, Kristalina Georgieva, CEO of the Green Climate Fund, Yannick Glemarec, NASA Astronaut Scott Kelly and celebrities from sports, music and fashion. Moreover, R20 focusses on the power of regions and cities. This year we welcomed five Presidents and representatives from Germany, South-America, Scandinavia, Netherlands, Mozambique, Kenya, Gambia, Nepal, Scotland and from California, amongst others. With this diversity of speakers and guests we gathered in total 1,200 participants from over 50 nations. By hosting the first Climate Kirtag at the Heldenplatz we reached out to more than 10,000 people in addition to the annual summit. The combination of the high-level conference and the public outdoor event achieved in mainstreaming our messages to the broad public with remarkable media coverage. Thanks to our climate action heroes on stage, this was a joyful premier to be continued next year.



Opening Show

The R20 AWS started with a spectacular opening show with live music, visual effects and a dance performance. The storyline of the show told us about the formation of the earth, development of the ecosystems and the creation of the planet we all know. But this fragile planet with all its life and diversity is threatened by pollution, exploitation of natural resources, as well as increasing natural disasters such as floods, droughts and wildfires. All our planet's inhabitants, large and small, are endangered by the climate crisis, yet doing something about it remains in our hands. The time to act is now! We are aware of what is at stake and sustainable solutions are readily available, so let's start the implementation on all levels today!

"Climate action is something where we need everyone, no matter how old or young, no matter where he or she lives. The consequences of climate change affect everybody, so we all need to become active."

Monika Langthaler, Director R20 AWS



The intention behind this opening act was to begin the summit with a climate communication format through music and dance, elevating the audience from the very first minute to an emotional level. The goal was not only to touch the audience, but also to spread new hope and inspiration to motivate for more climate action and convince people to act sustainably.

"We need to touch the hearts of the people to get things changed"

Arnold Schwarzenegger, Initiator R20 AWS

Keynotes

After the opening and the welcome notes by **Monika Langthaler**, the Director of the R20 AWS and **Melinda Crane**, the Master of Ceremony, four remarkable keynotes were highly anticipated from the audience and international press.

The first speech was given by the Austrian President, patron and co-founder of the summit, **Alexander Van der Bellen**, who is deeply committed to climate protection. Not only has he convinced many of his colleagues to join this event, he also mobilized them to sign up to a bold *Initiative for More Climate Ambition* in the run up to last year's crucial COP 24 meeting in Katowice. The summit was the perfect opportunity to continue with this initiative in order to gathering even more heads of state and climate action heroes as supporters. The initiative will grow further even after the R20 AUSTRIAN WORLD SUMMIT until the Climate Action Summit in New York initiated by the UN Secretary-General. The goal is to increase the pressure on all countries and leaders to enhance their national climate targets and strategies.



"We know that the climate crisis is affecting global economic development, that it threatens agriculture, tourism, water and energy supply. And ultimately peace, security, social cohesion and prosperity for all of us. We know all this. So what needs to be done? We must reverse the trend in greenhouse gas emissions to become climate neutral by 2050."

Alexander Van der Bellen, Federal President of Austria

In his speech he clearly emphasized the goals and focus areas of the R20 AWS:

- **Showcases:** Put a spotlight on working solutions to combat the climate crisis
- **Cooperation:** Climate change concerns all of us – so we have to cooperate across all borders
- **Bottom up:** The power of cities and regions – highlighting subnational pioneers
- **Green Finance:** This will be a key sector in implementing sustainable solutions
- **Green Tec:** Innovative technologies – presenting what can already be done today
- **Awareness:** Communicating the climate crisis – making it understandable to everyone
- **Pollution & Health:** Pollution makes us ill – presenting new solutions together with experts

Alexander Van der Bellen concluded with a strong call to action, making clear that there is not much time left to change the course but it's possible if we act right now: *"To combat the climate crisis, it is not so much hope we need, but it is action! Let's make 2019 the year of ambition on climate action."*

Keynote speaker **Greta Thunberg** has dominated the climate debate in recent months like nobody before. She began her school strike last year in Sweden and has proved, in an incredible way, how a small action can quickly grow into a global movement. The Friday for Future protests are taking place all over the world in more than 100 countries and demonstrate clearly the massive need for vast and rapid change.

Impressed by this outstanding initiative Arnold Schwarzenegger invited the young climate activist from Sweden to be part of this year's R20 AWS. Greta took the opportunity to visit Austria and meet up with him and other important leaders to enforce once more her messages, as well as joining the Fridays for Future demonstration in Vienna.

She emphasised the urgency for improving communication of the climate crisis in an effective way, whereby everyone understands the nature of our emergency and that all of us have to act to combat it.



"We need to change the way we treat the climate crisis. We need to change the way we speak about the climate crisis. And we need to call it what it is: an emergency! This is the biggest crisis humanity has ever faced. And this is not something you can like on facebook."

Greta Thunberg, Climate Activist

"For too long politicians and decision-makers have been talking about the importance of stopping climate change, but what they are still doing is to expand airports, build new coal power plants and motorways. And then they fly off in a private jet to attend a meeting on the other side of the world."

Greta's wake-up call was a message to all of us as she addressed leaders including Presidents, celebrities, politicians, CEOs, journalists, all of whom have powerful voices and influence but still much to do in raising their climate ambition. She vowed to continue her strike until they meet their responsibility in this crucial phase. Her speech was received with a standing ovation that lasted several minutes.

Climate change is a global issue. Therefore the United Nations plays a crucial role in solving this crisis. In this respect it was an honour that **UN Secretary- General António Guterres** attended the summit for the second time. He is one of the world's most tireless advocates for dramatically accelerating the efforts to fight climate change, not only because of the responsibility to the young. With the implementation of the Paris climate treaty drawing near, he is hosting a UN Climate Action Summit on 23rd September to ensure that countries not only act on their commitments but also scale them up. He further outlined climate action at the sub-national level, which is key to addressing the climate crisis, not only because sub-national governments are the closest to the people, but also because regions and cities are the main engines of the world economy. He also shared a personal experience to give a voice to people which are already affected by climate change:



“All around the world, people are now losing their homes and being forced to migrate because of climate change. I have just returned from a trip to the South Pacific where I visited, among others, Tuvalu – a low-lying island nation that faces inundation from rising seas. I was profoundly impressed and profoundly moved. Rarely a day goes by without a new disaster highlighting the perils of a warming world. It is clear to me that we have no time to waste.”

UN Secretary-General António Guterres

He also promoted key **demands for climate action** to limit global temperature rise to 1.5 degrees and fulfil the promise of the Paris Agreement:

- We need to tax pollution and end subsidies for fossil fuels.
- We need to decarbonize urban infrastructure, especially transport and buildings, and stop building new coal plants that poison the air we breathe.
- We need to promote sustainable consumption and production and support climate-smart agriculture that depends on nature-based solutions.
- We need to strengthen the resilience of regions and cities to climate impacts.
- We have to reach the finance goal, determined in Paris, of \$100 billion per year, from public and private sources in developed countries, to advance mitigation and adaptation in the developing world. This means a full replenishment and an effective functioning of the Green Climate Fund.

The initiator of the R20 AWS **Arnold Schwarzenegger** appreciated those demands and promised in his speech to be part of the UN Secretary-General’s Climate Action Summit in September to represent the power of cities and regions in order to raise ambition on all levels.

Arnold Schwarzenegger has already fought many battles in sports, politics and within the entertainment industry in Hollywood. Nevertheless, he stressed his greatest challenge yet which is to terminate pollution. When it comes to change, he believes in the power of the bottom up movement. For this purpose he founded R20 eight years ago. He initiated this annual summit in Austria, his home country, to showcase solutions and role models for a clean, healthy future to inspire and motivate in many ways. His goal is that everyone joins his green crusade to move forward together with former doubters and producers of pollution. Everybody is welcome to join the movement:



"We aren't asking you to flip the switch overnight. We are asking you to stop lying to the people about climate change and pollution, and to offer them solutions instead of bullshit. We are asking you to see the trends and to join the forward march of progress instead of trying to hold us back at every opportunity."

Arnold Schwarzenegger, Initiator R20 AWS

He emphasized once more that everyone can benefit from a clean economy and should be prepared to make essential changes throughout society, respective economies and the environment. Clean solutions are available and numerous best practice projects worldwide are proving how well they can work.

Dr. Jane Goodall, another climate action hero, was unable to join the R20 AWS in person this year. Nevertheless, the legendary scientist, conservationist and United Nations Messenger of Peace sent a video message with very personal, moving words in regard to making change happen. She pointed out that besides people, animals and the global environment are also being devastated by the consequences of climate change. If we value our planet and its rich variety life, business as usual can no longer be accepted, or else we face catastrophic costs. In the spirit of the R20 AWS she called for more climate action to everyone:



"If everyone of us makes small changes in our daily lives this will lead to a change that we so desperately need. We must bring our intellects, our passion and our wisdom together to mitigate the consequences of climate change. And we must act together now."

Dr. Jane Goodall, United Nations Messenger of Peace

Panels

After the exciting keynotes, nine panels took place in the Festsaal, focusing on different topics such as Rising Ambition on Climate Action, Cooperation & Partnership, Best Practice Projects & Solutions and Climate Communication.

Pursuant to the motto "Less talk, more action" we asked all decision-makers from policy or business to describe what they have done on climate action and the successes they have had, before being encouraged to announce what they plan to do next.

Focus: Rising Ambition for Climate Action

Act 1: Climate Leadership

The initial focus was on the urgent need for leadership to raise responsibility in the global process on sustainable development and international cooperation. The UN Secretary-General has stated that *"we must change course by 2020, or we risk passing the tipping point when we can no longer avoid the disastrous consequences for people and all the natural systems that sustain us."*

The leading politicians from different countries, as well as the CEO of the World Bank, were asked about the consequences for their areas of responsibility.



Latvia is committed to the goals of the Paris Agreement and the Prime Minister called for a more active approach on climate policy. He announced at the EU council in Romania to join the French Initiative which has the goal to reach net-zero greenhouse gas emissions by 2050 at the latest.

Raimonds Vējonis, President of Latvia, described the road towards this goal which means substantial changes through policy adaption, carbon pricing and financial support amongst others. In Latvia the energy, transportation, agriculture and forestry sectors are very much in focus. The decarbonization of these sectors is key to reaching the national climate targets. This creates a multitude of new opportunities for innovations in technologies, but also for green investments. Finally, the President stressed the importance of sustainable forestry and the vital role forests have as CO₂ sink.

Hungary supports the initiative by Austrian President Alexander Van der Bellen for more ambitious climate action and became the first EU member to ratify the Paris Agreement. **János Áder**, President of Hungary, pointed out that Hungary has successfully raised its GDP by 50 percent since 1990 while cutting carbon dioxide emissions by 32 percent, energy consumption by 15 percent and greenhouse gas emissions by 35 percent. The international Under 2 movement, comprising cities pledging to reduce their carbon dioxide emissions by 80 percent by 2050 compared to 1990, also has 23 Hungarian cities among its members, he said. *"If we succeed in implementing the investments we planned to do until 2030, 90 percent of Hungarian electricity production will produce no carbon dioxide by that date,"* he said. According to current plans, Hungary's greenhouse gas emissions by 2050 will not exceed the amount that Hungarian forests can neutralize, Áder said¹.

Ghana's President **Nana Akufo-Addo**, attended the Summit and the panel also in his capacity as co-Chair of the UN Secretary-General's Group of Eminent Advocates on the 2030 SDGs. During the discussion he emphasized the need for more leadership to take responsibility in the global process on sustainable development and international co-operation. Ghana, a country with 30 million inhabitants is already facing the consequences of climate change, therefore Ghana is an active partner of the climate negotiations and very attached to the Paris Agreement. Ghana's emission reduction programme is anchored in the country's national strategy for reducing emissions from deforestation and forest degradation (REDD+), and it is well-aligned with relevant national and local policies and strategies. As a climate action example, Nana Akufo-Addo explained how banning illegal mining in his country led to reclaiming previously devastated areas of land and, in the process, the employment of 20,000 young people to plant over 10 million trees across the country. This work leverages support from other initiatives, including from the World Bank programmes, focused on forest rehabilitation, social inclusion, climate-smart agriculture, and sustainable land and water management. Finally, he noted the rising awareness of the population to protect the environment as being an essential element for successful sustainable activities.

Nepal is another country highly vulnerable to climate change. During the panel discussion Vice President, the Rt. Hon. **Nanda Bahadur Pun**, explained that although his country has a negligible role in releasing carbon emissions, Nepal bears a disproportionate brunt of it. Nepal has experienced melting of Himalayan glaciers, disturbances in the drinking water system and gradual disappearance of flora and fauna. Aligned to the Paris Agreement, Nepal started a renewable energy initiative to mitigate and adapt with climate change. 3.6 million households already benefit from renewable energy such as solar, wind power, biogas, small and micro-hydropower, but 18 percent of the population are not connected to the national power grid. To improve this situation Nepal launched an ambitious plan in 2018 for the next energy decade (2018-2028) to substantially increase the production of renewable energy, whilst simultaneously promoting clean energy and reaching for a national aspiration of 'Prosperous Nepal, Happy Nepali'. This initiative aims to achieve sustainable, dependable, accessible, clean energy through the production of 15,000

¹ Editor's note: 50% from electricity is generated by nuclear power, moreover there are expected further investments for two new nuclear power generating units.

megawatts of hydropower within the decade, the Vice President said. He also highlighted initiatives such as 'Every Settlement, Energy Settlement', 'Electric Stove in Every House', 'Light for Education and Health', 'Every House, Energy House' and promotion of e-mobility. All these efforts are complemented by energy efficiency measures, such as installation of smart grid system, smart street light system, and smart appliances.

Kristalina Georgieva, in her role as CEO of The World Bank, explained what the international financial institution is doing to accelerate and ramp up climate action for mitigation and adaption in the poorest countries: *"The World Bank doubles the financing for climate adaptation and the World Bank also doubles the financing for mitigation projects."* This will mobilize at least 200 Billion Dollars for low carbon climate resilient development to help countries to price carbon or to bringing the subsidies from fossil fuels down. She added that a lot of people, far too many from poor and extremely vulnerable countries, are suffering from the climate crisis. Most of these people have done almost nothing to contribute to climate change. This is why the World Bank additionally decided to focus on adaptation measures with the following four key actions:

- Help countries implement early warning systems (floods, droughts)
- Focus on agriculture that is climate resilient and improves food security
- Make cities more resilient, smarter and greener
- Help nature to help us through action such as reforestation and protection of coastal areas

Act 2: The Power of Cities and Regions

R20 understands the significant impact of cities, towns and regions by implementing their climate commitments. Acting locally and partnering globally is a trend that has been highlighted at recent conferences such as COP24 in Katowice, which is also part of the DNA of the R20 AUSTRIAN WORLD SUMMIT.



Today, more than half of the world's population live in urban areas. By 2050, this proportion is expected to grow to two-thirds. In this regard, cities have a huge responsibility towards their citizens, especially when it comes to life quality and health aspects, **Maria Neira** Director of Public

Health and Environment from the World Health Organization (WHO) and host of the session, pointed out. One of the best overall indicators of a healthy or unhealthy city is air quality. This is because air pollution levels are typically low in well-planned cities with good transport systems, walkable streets and ample green spaces to filter the air. Ms. Neira also indicated that more than 80% of all cities worldwide exceed the air quality limits set by the WHO. Meanwhile, more than half of all cities that monitor air pollution report air quality levels 3.5 times or more than the WHO limit.

The session started with an interview of an outstanding expert and tireless fighter against air pollution and climate change, **Mary Nichols**, Chairwoman of the California Air Resources Board. She has devoted her entire career in public and non-profit service to advocating for the environment and public health, and was involved in the investigations into the VW scandal. She recollected the problem of air pollution (smog) in California in the 70ties, which resulted from unfiltered car fumes, especially in Los Angeles. There was an urgent need for change. Congress passed the Clean Air Act in 1963 to control air pollution on a national level. About a decade later, national laws requiring catalytic converters for new automobiles were introduced. Today, ozone levels in Los Angeles are 40% less than they were in 1970, despite double the number of cars. Mary Nichols explained why citizens accepted the measures at that time. On the one hand people's health was suffering, while on the other people wanted to see their city and the beautiful surrounding landscape clearly instead of through a thick layer of smog. Currently the State of California is on track to meet its 2030 emissions reduction goals, but its 2050 carbon neutrality or zero-net emissions targets remain challenging. More technological advancements and innovation have to happen to fight off climate change.² Electronic vehicles are one solution, which requires a huge transformation within the automotive industry. She added that the VW scandal has shown that diesel technology has no clean future, but diesel is still used in most trucks and SUVs, which are currently very popular. Moreover, there are different views on the diesel problem in Europe and the United States. There is still a controversy between the arguments of efficiency against pollutants & emissions.

Winfried Kretschmann, the Governor of Baden-Wuerttemberg, took the opportunity to strengthen the importance of cooperation on regional and local level. He demonstrated his experience as an active member of the "Under2 Coalition" in the run up to the decisive COP 21 in Paris to enhance the pressure from bottom up. The State of Baden-Wuerttemberg has many headquarters of renowned industry businesses and one of the lowest unemployment rates in the European Union. Those numbers show clearly that competitiveness goes together with climate action when the people are involved and convinced too. Kretschmann noted that they have already successfully implemented measures concerning resource efficiency. Now they have to adapt the automotive industry towards electromobility. Another mobility measure that has already been implemented is a price reduction in the use of public transportation by 25% to attract more people to switch from car to train. Baden-Wuerttemberg also uses the opportunities of digitalisation in terms of reducing the traffic jams in cities, which leads to the reduction of air

² Information added by editor, source: <https://news.bloombergenvironment.com/environment-and-energy/california-2050-carbon-neutral-goals-elusive-air-regulator-says>

pollution. The key message from Governor Kretschmann was that we have to show that climate action ensures future prosperity.

Manuel de Araújo, is a Mozambican politician who has been Mayor of Quelimane since December 2011. Moreover he is ICLEI's³ Vice President for Africa, which has given him a fundamental role as the voice of Africa within the panel. Mozambique has been heavily affected by the consequences of climate change this year: two cyclones in a row destroyed homes and public infrastructure and more than 1,000 people have died. The mayor reported that 90% of the city of Beira was destroyed and completely cut off from the world after an electricity blackout. Currently, the biggest challenge is to source financial help to reconstruct infrastructure, homes etc. Mozambique faces a lack of human and financial resources and is trying to gain money through the ICLEI network, as well as organizing a conference to support local communities and work on strategies and programs for the Climate Action Summit in New York in September. Three years ago, the city of Quelimane managed to finalise a local adaptation plan, Manuel de Araujo summarized, and there are a lot of activities within Africa, such as conferences, proposals and strategies, which seek to fulfil the Paris Agreement.

ICLEI was founded in 1990 as the International Council for Local Environmental Initiatives, and is a global network of cities, towns and regions committed to building a sustainable future. Today, the ICLEI network includes more than 1,750 local and regional governments in more than 100 countries. At the subnational level, ICLEI drives change along five interconnected pathways that cut across sectors and jurisdictional boundaries. **Ashok Sridharan**, as mayor of the city Bonn & ICLEI President, continued the discussion to promote the global cooperation of cities and regions for more practical learning and experience sharing. Therefore, he invited the audience to join the Resilient Cities, The Annual Global Forum on Urban Resilience and Adaptation⁴, which is hosted every year in Bonn, this year for the 10th time. ICLEI Resilient Cities has been providing a global and open space where local governments, researchers, businesses and civil society can meet, contributing their knowledge and expertise to the advancement of urban resilience.

³ ICLEI: International Organisation of Local Governments for Sustainability

⁴ <https://resilientcities2019.iclei.org/about/>

Focus: Cooperation & Partnerships

We need to team up in the spirit of multilevel cooperation and vertical integration between all levels of government to mainstream developments for climate action, better health and more sustainability. The key question of the second focus topic was how to scale up the implementation of more projects, especially in developing countries. Those countries feel the effects of global warming most dramatically although their historical share of greenhouse gas emissions has been relatively low. The Paris Agreement acknowledges this with its ground-breaking call for deeper cooperation on financing, technology transfer and capacity building to support both mitigation and adaption. Likewise, the 2030 Agenda dedicates an entire sustainable development goal to the need for stronger global partnerships.

Act 3: North-South Cooperation

Creating jobs, wealth and sustainability through deeper collaboration is an essential priority for African countries. Africa emits only 4% of the world's carbon emissions, yet it is deeply affected by global warming. This year Mozambique has been hit by two devastating cyclones in just six weeks, which is extraordinary in this region. **Higino Marrule**, Minister of Agriculture and Food Safety of Mozambique, provided insights about consequences for the country and its 30 Million inhabitants. The resource-rich country uses the income from the oil and gas sector to invest in education and modernize agriculture. Mozambique pursues the strategy to greatly increase the productivity of agriculture. The minister outlined the potential with the example of maize production. At the moment they harvest 1.5 tons per hectare, whereas utilizing modern machines and technologies could facilitate an increase to 8 tons per hectare. Alongside technological modernization, new markets have to be created to achieve good prices for the products. Within their strategy, the mitigation of climate change plays a central role, as well as the reduction of poverty and the improvement of education to balance the goals of sustainability and growth as much as possible.



According to recent research, various regions in Kenya suffered the most extensive drought in the 20th century than at any time over the last 2,000 years. Malnutrition, conflict and migration are some of the consequences. According to **Charles Keter**, Kenya's Cabinet Secretary for Energy,

the main challenges to improve the situation in his country are technology and knowledge transfer in the following fields:

- Monitoring and early warning systems to prevent the worst consequences of droughts or other extreme weather events.
- Suitable agricultural methods, such as the cultivation of drought resistant crops.

The top priority is to set preventive measures in order to ensure food security. In the energy sector, Kenya aims to provide energy access to all (currently 75%), to enable clean cooking facilities and to extend the share of renewable energy from 85% to 100% in the coming years. A renewable energy mix of geothermal, wind, solar and hydropower is possible. At the moment Kenya is looking for partnerships to realize these projects.

Yasmine Fouad, Minister of Environment in Egypt, added her perspectives about balancing sustainable development in times of change. Egypt is passing through a very important transformation phase. The main challenge is to pass the sustainable development process very quickly with the goal of enabling a good living standard for all citizens. Egypt is planning new sustainable cities for the people who are already being forced to move away from coastal areas strongly affected by floods and rising sea levels. Within the planning process, a key objective is to balance the needs of the people and implement efficient water and energy systems. On the political level, Minister Fouad stressed the importance of embedding climate change on the top of the national agenda. After the COP in Katowice, Egypt decided that The National Counsel for Climate Change has to report directly to the Prime Minister to mainstreaming climate change measures in all areas. Currently, the country is focussing on the following activities: small adaptation projects in agriculture, awareness building regarding heat waves and droughts, university projects with students, electromobility, waste recycling, renewable energy and inclusive programs especially for woman and young people.

Act 4: Mobilizing Investments by Green Finance

Within the topic of partnership, act 4 moved on to the crucial question of money flows. The host of the panel, **Barbara Buchner**, Executive Director of the Climate Policy Initiative, introduced the key question of how to leverage the kind of investment that will be needed to reach the ambitious sustainability goals. In order to close the investment gap from now until the middle of the century, there is a need for US\$ 29 trillion in investment to tackle climate change. There is no doubt that green finance will play a crucial role in decarbonising our economy to establish sustainability on all levels. As we have seen in the last few months, there is a lot of commitment in the financial sector and growing pressure on investors to step out of carbon-intensive investments and direct capital flows into more sustainable activities. On the positive side, we can already see some activities and pioneering examples paving the way for a more sustainable sector. Nevertheless, the overall finance sector is still falling short of the numbers needed to enable the transition to a climate-neutral economy and fulfil the Paris Agreement and SDGs.

As an introduction to the discussions, Barbara Buchner asked **Samba Bathily**, Founder and Chairman of Africa Development Solutions Group (ADS) and co-chair of the AfroChampions Executive Committee, about the Sub-national Climate Fund Africa (SnCF Africa). R20 has teamed up with AfroChampions and BlueOrchard Finance, a leading global impact investment manager, to create the SnCF Africa. This fund is structured to invest in a portfolio of projects that will provide clean energy, waste processing and recycling and energy efficient lighting services to cities and regions in African countries, including a number of Least Developed Countries (LDCs). SnCF Africa "blends finance" from philanthropists, foundations, governments, development finance institutions and private investors, and deploys a unique ecosystem that fast-tracks the identification, development and delivery of a portfolio of bankable projects. SnCF Africa expects to invest in up to 30 projects and mobilize between US\$ 350 million and a maximum of US\$ 1 billion in climate finance in the form of co-investment in projects. What makes the fund so special? There is not enough funding on subnational levels with a volume between US\$ 5-15 million that are small-scale projects, especially in rural areas. Blended finance is needed to make such projects attractive to the private sector. The main success factors of successful project implementation in Africa, in his opinion, is the understanding of local realities and proof of concept to engage the community at a local level.

Allianz is a leader on sustainability in the insurance sector and tries to bring the whole industry on track. Panellist **Günther Thallinger** has been a Member of the Board of Management of Allianz SE since January 2017, responsible for Investment Management. In January 2018 he additionally assumed responsibility for steering ESG topics within Allianz. He reported that the insurance industry, as asset owners, is becoming increasingly involved in green finance. Although the volume going into green finance is growing every year, this remains below the amount needed. Therefore, Allianz SE Group is working on building up a network of long-term investors and asset owners committed to creating 100% climate neutral portfolios aligned with the principles of the Paris Agreement. The target is to extend the network from US\$ 2 trillion to US\$ 10 trillion with the coming months. In his view, green investments and decarbonisation of all business models are the basis for an inhabitable planet.

Isabel Fernandez, Head of Wholesale Banking from the ING Group, explained the path the ING Group is taking, which has been active in green finance for many years. ING Group discovered that financing climate resilient projects was no longer enough, and that many companies, along with their clients, wanted to improve to become more sustainable. For this reason, ING Group created a new product: The sustainable improvement loan, on which ING works with clients on their transition towards tomorrow's economy through constructing the first deal in the syndicated loan market where pricing is linked to a sustainability rating. Isabel Fernandez also stressed that all financial flows need to be aligned with the Paris Agreement as quickly as possible. ING believes it has a moral obligation not merely to financially empower its clients, but to actively make a better world. In this sense she further announced that ING commits to full transparency of the portfolio in the next 12 months to put sustainability at the top of the agenda.

From the business perspective the discussion moved to the global perspective, more specifically on adaptation and mitigation projects in developing countries where the Green Climate Fund

(GFC) plays a crucial role. **Yannick Glemarec**, Executive Director of the GCF, explained how the world's largest dedicated fund helping developing countries reduce their greenhouse gas emissions and enhance their ability to adapt to climate change works. The GCF was established in order to access long term affordable finance to scale up climate resilient development. Therefore, it uses limited public money in a highly catalytic manner to increase private sector financial flows to developing countries to support schemes such as capacity building or larger infrastructure projects. Mr. Glemarec identified the main challenge right now is to recapitalize the fund to mobilize money for projects. He added that the focus this year is also to increase investments on the subnational level through blended finance mechanisms.



Climate change also threatens biodiversity and there are specific funds which provide strategic & financial resources for biodiversity conservation. **Rosa Lemos de Sá** took part in the panel to present a best practice example for another innovative financial mechanism, the Brazilian Biodiversity Fund (Funbio). In 1996 Funbio was created by a multidisciplinary group consisting of representatives from the Federal Government, academia, civil society and the business world on the strength of a US\$ 20 million donation from the Global Environment Facility (GEF). For the last 22 years it has been a strategic partner of these sectors and has administrated US\$ 614 million in disbursements to 282 projects across the Amazon region. In the last 15 years, the fund succeeded in cutting the amount of CO₂ emissions equivalent to the global emissions of the transport sector in one year. Investment this year alone has been US\$ 100 million for long-term projects on climate and biodiversity.

Input: The View from Space

Just 50 years ago, two astronauts became the first humans to reach and set foot on the moon. Amongst the photos taken, one of the most extraordinary was when the camera looked back and produced an iconic image of our own planet in the distance. Since then, the human population has more than doubled, our planet has dramatically changed and the stability of our ecosystems is at breaking point. Never has it been more important to understand how our planet works and adopt preservation and recovery efforts.

As in past years, a main focus of the R20 AUSTRIAN WORLD SUMMIT was to showcase success stories and highlight methods that work. Before returning to concrete best practices in Focus 3 and 4, we zoomed out into space to take a wider view of our planet's beauty and fragility with a keynote from two very special guests.

Former US Navy Captain and Astronaut Scott Kelly, who was Commander of the International Space Station (ISS) for over 500 days, set a record for the total accumulated number of days spent in space. In his book "Infinite Wonder" he documents his view of the earth during a yearlong mission to the ISS. He held the keynote together with the **Director of the United Nations Office for Outer Space Affairs, Simonetta di Pippo**, who shared her experiences of international cooperation on space missions.



Scott Kelly reflected on his first look back at our planet from space. He *"was absolutely shocked at how beautiful our planet earth is from space"*. He discovered that a new perspective on something we take for granted can change the way we think about something forever, and that this can occur in just a few seconds. *"This incredible experience, this unique perspective on our planet made us (the team on board the ISS) more humanitarians"* he added. Through this "orbital perspective" he saw the fragile atmosphere as thin as a contact lense and observed countries without political borders. He also noticed air pollution in parts of Asia and Central, as well as the consequences of climate change, such as the smoke of wild fires in California, monster storms and the effects of droughts.

Simonetta di Pippo presented the ISS as a best example of international cooperation, not only in space, but also on earth. It is a scientific platform to explore survival issues in space, but also about planet earth and the transformative effects that our activities have on it. Climate change is one of those effects and it is a global problem which must be addressed in a coordinated manner among all nations. It is essential to share the same information worldwide about the drivers, evolution and impacts of climate change. In this respect she stressed that satellites are key to delivering global, uniform, sustained and regularly repeated data to observe and monitor relevant variables of the world's climate. Space technology is able to monitor greenhouse gases, temperature changes, sea level rise, the evolution of ice covers, as well as long term monitoring of the sun and ozone levels. Satellites have the potential to observe 31 out of 50 essential variables for climate modelling, which has been identified by the Global Climate Observing System. The scientific value of space missions is huge in terms of delivering decisive data and for research into and development of new technologies and materials. In conclusion, Scott Kelly noted that if the NASA mission to Mars is successful, which he considers an exciting probability, we shall still have to take care of our home planet, which can only happen when we work all together as a global team.

Focus: Best Practice Projects and Solutions

Showcasing success stories, models and instruments is a central theme of the R20 AUSTRIAN WORLD SUMMIT. Selected best practice projects, solutions and initiatives have shown the potential of scaling up on a global level, thereby having a significant impact on sustainability and the reduction of greenhouse gas emissions. The transfer of technology and knowledge is one key element for speeding up the green transformation. Nevertheless, we also need to consider the systems we live in and promote cultural change to encourage societies to take responsibility for the wellbeing of everyone. The different case studies provide valuable lessons concerning success factors, as well as on the challenges we must be aware of.

Act 5: Role Models from Regions & Cities

The panel discussion on role models from regions and cities was characterised by decision makers combining the local, regional and national level with their expertise and experiences. They all follow ambitious targets and combine bottom-up and top-down approaches to improve the transition to more sustainability together with the citizen initiatives. Cities and regions can and will make a difference and already hold powerful keys in their hands.

Harriët Tiemens is Deputy Mayor of Nijmegen (Netherlands) and responsible for Sustainability, Housing and Mobility. Nijmegen is a growing city in the Arnhem-Nijmegen metropolitan area, with more than 170,000 inhabitants and a population density of 3,000 inhabitants per km². Nijmegen was the European Green Capital in 2018 and has gained access to international networks and organizations, whilst sharing knowledge and solutions with all European Green Capitals. A focus of Nijmegen's approach lies on developments to keep and make cities beautiful and liveable: clean mobility, fossil-free energy, sustainable food supply, vital city and circular economy. The transition to sustainable mobility and fossil-free energy has been a focus for many years, not only in

providing infrastructure for cycling, but also by working on concepts for the phasing-out of natural gas which is the dominant energy source in the Netherlands. *"We need to make our cities liveable and lovable and ready for the future"* is a key message from Deputy Mayor Tiemens, describing quality aspects going hand in hand with the objective to make the city CO₂-neutral. A key objective of Nijmegen's European Green Capital Award campaign is to involve citizens and entrepreneurs as much as possible in order to become a prosperous city. Nijmegen aims to become energy neutral by 2045 and 'climate proof' by 2050, and aims to reach these objectives together with its local stakeholders. A participation map of Nijmegen shows all projects undertaken in the public space by citizens. Public participation is also important for the city's energy projects. For its first wind power park, the municipality requested support from environmental NGOs to go forward. Private parties mobilized thousands of people, who bought shares in the wind turbines. Since 2016, Windpark Nijmegen-Betuwe has been generating the energy needed for over 7000 households, or 10% of the city.



The experiences resonated strongly with those of Vienna's Deputy Mayor, **Maria Vassilakou**, who addressed the challenge of rapid urbanisation and high pressure on the housing market combined with the objective of being a smart city providing less energy consumption and GHG emissions, as well as high providing a quality of living. Successful models, such as the €365 annual ticket for the use of public transport (€1 per day), is currently being considered in many cities all over Europe and further away. They show that providing affordable, environmentally friendly options can create a success story. Vienna serves as an international example of social housing with high quality standards. Just recently, Vienna passed a reform of the Building Code that connects the commitment to affordable housing with the aim of lowering emissions: Climate protection was added as a new objective and the city banned oil heating, installing zones to minimise gas connections to new residential buildings. However, in the same amendment, a requirement to speed up the construction of new subsidised affordable housing was added. Every residential development built consisting of more than 250 units must include two thirds as

social/affordable housing. Vienna Deputy Mayor Maria Vassilakou has announced new objectives in the Smart City strategy with a 50% greenhouse gas emission reduction per capita by 2030 and 85% reduction by 2050. The strategy will be continuously monitored and aims to keep Vienna ranked at the top of the most livable cities in the world.

Ben Macpherson, Minister for Europe, Migration and International Development, presented the ambitious goals Scotland currently has. He described the impressive development of renewable energy in the power sector with more than a 70% share in gross annual electricity consumption, and the target of 100% by 2020. Just recently Scotland's First Minister's declared a global climate emergency, which will be followed by several further actions. If accepted by Parliament, Scotland will have the most ambitious statutory targets anywhere in the world with net-zero emissions by 2045. Aside from the provision of renewables and low carbon electricity, there is significant economic turnover for some other sectors, including provision of energy efficiency products and low carbon services. By setting a 2045 target for net-zero emissions of all greenhouse gases, the new Climate Change Bill will provide the necessary certainty and impetus to markets, businesses and industries to shift towards low-carbon technologies and practices. For Ben Macpherson, this is about "the combination of natural resources, the economic advantages, and human determination", employing these in an efficient and innovative way.

Act 6: Brands – Leading Companies Acting Now

The business sector plays a decisive role in designing the transition and requires business leadership to guide sectors towards a more sustainable pathway. It is not merely about the opportunities associated with this, but also with regard to identifying the risks of inaction. For three years in a row, the World Economic Forum's Global Risk Report has identified climate change as an enormous threat to global business and industry. It is a systemic risk linked to many other areas of risk, such as economic, social and environmental. Business has an impact on production processes and simultaneously has the capability to facilitate climate change mitigation and adaptation through implementing clean technologies and sustainable business strategies. The circular economy has become a popular buzzword, yet it is part of several strategic processes. In the B2C sector, companies also have the chance to reach out to their customers and increase awareness, as well as inspiring behavioural change. The panellists described their approaches, successes and challenges and how responsibility can become a key factor within the business sector.

Johan Eliasch has been the CEO of sports equipment company HEAD for over 20 years. In 2007, he founded the Cool Earth initiative, which works alongside rainforest communities to halt deforestation and climate change. The idea behind this is to encourage preservation of the rainforest by partnering with rainforest communities to improve quality of life. This enables them to protect their surrounding forests from threats such as commercial logging, commercial agriculture and extractive industries. The partnerships are located on the frontline of deforestation, in countries where the threat to the forest is greatest. From an initial target of saving 4,500 acres of rainforest, Cool Earth and its community partners now protect over 900,000 acres. In all these areas the deforestation rates went down to zero. Even more importantly, Cool Earth asks every community to work with them. Johan Eliasch's message to those who are not acting is that they will miss opportunities and feel ashamed in the long-term. The way we treat the planet, provide clean air and water and sustainable energy resources will become paramount to our survival.



Ulrike Rabmer-Koller, Vice President of the Austrian Chamber of Commerce and General Manager of Rabmer Group based in Altenberg/Linz, is active in construction and environmental technology. She stressed the opportunities for Austrian companies of being active in the

environmental sector and in exporting their technologies to global markets. Austria is known for GreenTech worldwide. Innovation is a key to becoming successful. There is need to implement the transition, especially in energy intense industries and traditional companies. We have to create a win-win situation in order to gain ecological and economic benefits. Therefore, a change in attitude is important too. Climate strategies need to be included in all strategies. In the near future it will become normal to take action on climate change and sustainability.

Ferdinand Barckhahn is General Manager of Germany, Austria and Switzerland at SodaStream International, the world's leading manufacturer of water carbonators. Sodastream is renown as the world's leading manufacturer of water carbonators and for its creative & provocative environmental campaigns against plastic waste supported by celebrities and influencers. In the last three years, the company has prevented 2.5 billion PET bottles from entering the German and Austrian market. Both countries are the main drivers of success in Europe and two of the most important markets for the company worldwide. One SodaStream reusable bottle eliminates up to 3000 single-use plastic bottles in a household. Studies show that this saves 80% CO₂ compared to water from a single-use plastic bottle. SodaStream provides a success model delivering continuous double-digit revenue growth. A success factor is the disruptive marketing. Sodastream is transforming the industry, not only through the products, but also by fostering an innovative culture. It is important to communicate the message of sustainability, health and wellness. Barckhahn finally advocated: *"There is a sense of urgency. We need to do things now."*

Pia Heidenmark- Cook, Chief Sustainability Officer at INGKA Group, outlined some of the key element of IKEA's strategy. INGKA Group is the largest IKEA franchisee with 370 stores in 30 markets which is a huge lever for promoting sustainability. It is about systemic change, scale and speed. Systemic in terms that everything is connected. Social factors and responsibility play a key role, such as gender equality (50% of manages are female), whilst refugees are also provided employment. She made clear that there is not only overconsumption but also underconsumption for example if people having no access to water. This has to be addresses by the business sector too. The speed of the transition can be observed in many areas and renewable energy is one of them. By 2020, IKEA will produce more renewable energy than the company consumes. The product materials are also put in the spotlight. Wood is fundamental to IKEA and is sourced from certified or recycled sources. Cotton is another important raw material found in many products, from sofas and cushions to bed sheets and mattresses. Since 2015, all the cotton used in IKEA products has been acquired from sustainable sources. This means that the cotton is either recycled, or grown using less water, chemical fertiliser and pesticides.

The awareness of consumers is rising. IKEA conducted extensive market research last year with 40,000 participants. While 80% fully understood that climate change is a direct result of human activity, only 3% could name solutions. This provides an opportunity for the company to share knowledge and provide solutions. Sustainability has to become the new normal and be affordable for everyone.

Rémi Vrignaud, CEO of Allianz Austria, showcased that models from a small country, such as Austria, can have a massive impact. As an insurance company, Allianz has to align the assets to the long-term commitments and safeguard future generations. In collaboration with WWF, Allianz

has developed a scoring model for the investments covering 6 billion Assets under Management. For each position it is now known how sustainable it is. Furthermore, Allianz Austria has incorporated the model into a new bond fund. Allianz Austria intends to pursue and develop this collaboration with the aim of encouraging engagement on the investment side. Sustainability has become a matter of course and is no longer a niche. The financial and insurance market can make a real difference to our planet.

Act 7: Fossil Free Mobility

Transportation belongs to the most important sectors when it comes to reducing greenhouse gas emissions and pollution because emissions are still rising. Even in the EU-28 countries, emissions from transportation (including international aviation) are now about 25% higher than in 1990 and contributed 27% of total EU-28 greenhouse gas emissions in 2016. On the other hand, in many regions and areas we see that a turnaround is achievable. Act 7 on "Free Mobility" therefore focussed on solutions and successful models to promote and establish environmentally friendly transport. It is clear that to head towards climate neutrality outstanding performance will be necessary to reach the goals. With Austrian athlete **Michael Strasser**, who crossed Russia (Race Across Russia 9.208 km), Africa and America by bicycle, each time setting a new world record, the Act had a presenter who has proven that outstanding performance is possible. Strasser also advocates for increased environmental and climate protection, promotes cycling in daily life and became the first cyclist to be part of a new UN Environment campaign called Mountain Heroes.

The discussion put rail traffic into the spotlight. In Austria rail traffic has increased by 20% since 1990 and ÖBB (Austrian Federal Railways) provides a real contribution to climate protection by pledging 100% with green electricity. Nevertheless, Austria's balance sheet on transport remains an issue with traffic still being six-times higher than rail traffic. **Michaela Huber**, Member of the Executive Board for ÖBB, outlined some elements of success and political challenges to be addressed. Rail transport can provide a combination of convenient travel, safety and quality, whilst also saving the environment. Environmental aspects are becoming an increasingly important factors for passengers when deciding to take the train. Greta Thunberg opted to travel from Sweden to Vienna with the ÖBB Nightjet. However, competition is intense against low-price airfares. Whereas fuel is not taxed on the aviation industry, rail traffic faces full taxation, thereby leading to an increase in ticket prices. When deciding between methods of transport, people should consider that taking the train is 31 times more environmentally friendly than flying, whilst it is 21 times more environmentally friendly to transport goods by rail than by truck.

California is one of the leaders when it comes to promoting electric vehicles, high emissions standards and renewable energy. **Kevin de Leon**, who served in the California State Senate from 2010 to 2018, wrote some of the nation's most far reaching climate and environmental justice policies, including Senate Bill 100 setting a mandated target for 100 percent renewable electricity in California by 2045, and Senate Bill 350 responsible for the single largest investment in electric vehicle charging infrastructure. The electrification of vehicles will, together with more renewable energy, provide a real boost to building a clean mobility system. Adopting 100% Renewable

Energy and electrification is therefore a major element to reducing pollution and greenhouse gas emissions. Electrification means replacing fossil-fuel-powered cars and trucks with electric vehicles. California is the largest state in the US. Transportation was responsible for 41% of California's climate pollution in 2016. Developments in innovation and transportation can have a genuine impact on the whole country and will result in a radical shift in the energy market. The objective is to democratise the benefits of energy production so that all individuals can access the benefits of the latest and the greatest clean energy technologies. Energy retail sellers will be able to compete with fossil energy. De Leon stressed the role of legislation in order to put standards into law faster. *"Don't just hope, do it. This is all about leadership."*

Electrification also plays a role in the bicycle market. Austrian company KTM is a good example of achieving success with this strategy. Since 2014, sales have risen from €130 million to almost €300 million in the current financial year. Record investments are currently being made in the construction of an extremely modern bicycle production plant. This is the first step towards further investment plans by KTM Fahrrad. **Johanna Urkauf**, CEO of KTM Bikes, explained the repositioning of the brand a few years ago. In 2007, KTM Bikes sold about 1000 bikes per year, compared to the current figure of 150,000. This was made possible by many innovations. A few years ago an e-bike weighed 30kg and could only reach 30km. Now the weight has reduced to 20kg with the reach extended to 200km under ideal conditions. Besides these product improvements, bikes are a healthy, sustainable and practical mobility solution. In daily life half of all transport routes are less than 6km and can be made faster by bicycle than car. Ms Urkauf also mentioned that political decision makers can help increase the share of cyclists. Offering tax incentives to employers who provide bikes to employees can pass on benefits to everyone. In Germany the implementation during the last three years had a positive impact. In Austria bicycle infrastructure is still a key challenge with room for improvement. She mentioned that the daily routine of riding a bike makes individuals healthier and happier.



Focus: Climate Communication

Raising awareness of a healthy environment and reaching out to as many people as possible is of major importance to getting the message across that climate change affects us all. Based on current trends, developments and research results, the panels discussed strategies and experiences to solve some challenges in the current climate debate by addressing relevant issues, including framing, storytelling, narration and communication instruments leading to inspiration and catalyzing mobilization.

Act 8: The Role of Media in a Changing Public Landscape

Communication on climate change is not an easy task. We're dealing with complex content but need to expand the audience and mobilize more people. Greta Thunberg faced this challenge head on. As a 16-year old from Sweden, within a short space of time, her movement had become an unprecedented and powerful example of mobilization for climate action and led to a shift in the climate debate. There is a change in the media landscape and we have to adapt the style of communication. The panel discussed what have we learned so far about communicating climate change and how can we do better to activate decision makers and citizens to become part of the fight against climate change and pollution.



For many years **Marcus Wadsak** has been working as a weather presenter on ORF television, where he continues to present the weather forecast on the main evening news program, reaching more than one million viewers every day. In dealing with complicated scientific facts, he mentioned the objective to reach people by speaking "in their language". He always asks himself: Does my message reach the people? Weather presenters have to translate knowledge based on science into something clear and understandable. Only if they understand it can they recall it. *"Climate change is not only happening in remote places, but right now, right here. We can feel, see and hear the impact."* Since 2007 Wadsak has been a member of the 'Climate Broadcasters Network - Europe' and is a founding member of 'Climate Without Borders', which looks at best practices and shares experiences. Despite the negative messages, he advocates remaining optimistic and focussing on existing solutions. He summed up that we can still act and reach the

goals of the Paris Agreement. The time in which a completely unreliable public figure receives everybody's attention by doubting climate change must come to an end. Nobody has the right to snub facts whilst ignoring scientific data and reality.

Leo Hickman, is chief Editor of Carbon Brief, an online media providing high level information and journalism on climate change and energy, going deeply into complex content and working with visualisation: The challenge is that climate change is complex but also that science is fast moving. Carbon Brief not only covers natural sciences, but also stories on policy response. A key learning is that you need the right messenger to address the audience. Therefore it is not only about the message, but also about the messenger. Carbon Brief seeks to visualize information in digestible and understandable ways. In this respect, social media plays a crucial role and the climate stories for social media are designed to be attractive and sharable. It also requires in depth reporting. We always have to condense issues for different audiences, such as scientists, policy makers or other journalists. There is not only one audience. On debunking fake news from sceptics, Hickman recommended not giving them the attention that serves to amplify them. It is a strategic and tactical decision on which piece of information you want to debunk. He also mentioned the change of language and wording. The Guardian has new guidelines on climate language with 'global heating' being used instead of 'warming'. *"It makes a difference if you say 'climate crisis', 'climate breakdown' or just 'climate change'."*

In combination with the topic climate change, Arnold Schwarzenegger often refers to pollution as a major aspect for communication. **Beth Gardiner**, an environmental journalist is author of the recent book: "Choked: Life and Breath in the Age of Air Pollution". In this book, Gardiner travels to many countries and gives insights into air pollution, which cuts short about 7 million lives worldwide every year. She visited victims, researchers, opponents (e.g. lobbies hindering emission limits), but also successful solutions. Journalists often deal with data and sometimes shocking statistics. There are 7 million people dying due to air pollution worldwide. In the end, one face can be more powerful to make the story understandable and emotional towards what's really happening on the ground. The way media is structured today doesn't make it easier. Stories are often on an intellectual level and very slow by the standards of a 24h media cycle that constantly demands something new. Nevertheless, facts will remain important, yet powerful human stories help to develop a narrative.

Act 9: Encouraging a Sustainable Lifestyle

Tackling climate change affects everyone. It goes hand in hand with a cultural transition by changing behaviour and the mindset of people. Gaining the interest and awareness of different social groups requires new strategies, promoters and role models. The panellists discussed how we can encourage people to adopt a sustainable lifestyle in a meaningful and lasting way. FM4 Radio Moderator **Chris Cummins** led the panel.

Norwegian World Cup ski racer, **Aksel Lund Svindal**, has a long list of outstanding performances and titles: He is a two-time overall World Cup champion (2007 and 2009), an Olympic gold medal

winner in super-G at the 2010 Winter Olympics and in downhill at the 2018 Winter Olympics, and a five-time World Champion in downhill, giant slalom, and super combined (2007 Åre, 2009 Val-d'Isère, 2011 Garmisch, and 2013 Schladming). In late-January 2019, he announced his retirement from alpine skiing following the 2019 Ski World Championships. One of the issues he wants to focus on now is sustainability. Recently Svindal co-founded and launched a fashion brand called "[Greater Than A](#)", which focuses on building a sustainable brand and producing high quality, functional clothing that does not harm the planet. The objective is to change the fashion industry from within by showcasing a brand that, aside from providing a good, sustainable product, also offers a new breed of conscious consumers better and more sustainable choices for their wardrobe. It wants to inspire people to make other sustainable choices in life as well. Svindal explained: *"It's all about helping people make better choices."* We must work with nature not against it. Every choice we make, both as consumers and manufacturers, has an impact on the future. Therefore providing choices to consumers is crucial and inspiring people and stories can help to promote them. When those who influence start to advocate sustainability, we actually change society. Beside the sustainability of the used materials, it is also longevity providing a major asset. Products shall not end up at the back of the cupboard or as landfill.

"We are all in this together. No matter if you are a businessman, politician, athlete or citizen, everyone can contribute." It feels a lot better to make a choice that is good for the environment. As long as they have the possibility, people always want to make the right decisions." If all of us do small things, the result is more effective than if only a few people do it to the extreme. Therefore we have to make the good choice available to everyone.



Kurt Weinberger, who is the CEO of Austrian Hagelversicherung, an insurance company for natural disasters with clients mostly from the agricultural sector, addressed the structural and cultural component to our behaviour. They are all linked together. Weinberger's warnings on soil sealing are well known in Austria: every day the area of 20 football fields are sealed for construction projects. The way we build our houses, the way we travel, the way we consume makes a difference. The urgency of climate change asks for a rapid change. Every day CO₂-concentration rises. The transformation required is a deep change process in our society, economy and needs a change in mind-set from individuals too. We know that there are solutions but we need to accelerate by changing structures. Weinberger mentioned some examples: better

public transport, regional food, less land consumption, bio-economy which is replacing fossil energy with renewable energy, and a tax reform shifting taxes from people to resources.

It was clear in the discussion with **Jürgen Schneider** that sustainability and climate protection are driving forces behind creating jobs and wealth. The risks of inaction are high because our economy is vulnerable. Therefore climate protection is an investment. Policies will create a framework to address and include more citizens in active engagement. Great things can be accomplished if we have great inspiration. Greta and Arnold are proving that the right people are inspiring us. If the right people undertake the right initiatives, many others will follow.

Climate Kirtag



At the first Climate Kirtag more than 10,000 visitors joined music acts, athletes like Aksel Lund Svindal, climate activist Greta Thunberg and host Arnold Schwarzenegger. Moderated by model and actress Barbara Meier, they set a strong and loud sign for climate protection despite the bad weather conditions. Outstanding Austrian artists such as Pizzera & Jaus, Conchita Wurst and Hubert von Goisern provided an exuberant atmosphere around the flaming speeches. The successful premier of this new "R20 event" made it possible for everyone to be part of the R20 AUSTRIAN WORLD SUMMIT and the positive responses showed that the climate movement has arrived in the center of the society.

Greta Thunberg, who had already received standing ovation for her wake-up call at the R20 AUSTRIAN WORLD SUMMIT in the Hofburg, once again emphasized the seriousness of the situation and was also celebrated at Vienna's Heldenplatz with thunderous applause. She criticized the ongoing inaction of the world's leaders but stressed once more that it's still possible to avoid the worst consequences on climate change if we act right now. "Nobody is too small to make a difference, never forget that", she addressed the enthusiastic audience. *"Every act, no matter how small, counts,"* says Thunberg. Supporters of Fridays for Future Vienna, who have joined Greta Thunberg's school strike, supported the young climate activist with a vocal number and all the guests joined in.

Host **Arnold Schwarzenegger** was delighted to see so many supporters of the cause and so much climate action in his home country Austria. *"All we have to do, is work together. Because we cannot rely on politics,"* said Schwarzenegger. The former governor of California stressed that the greatest changes in history have always come from the people and not from the politicians. *"I count on you! And promise you, if you support me: I'll be back!"*



Ski star **Aksel Lund Svindal** also had a message to inspire the audience. He remembered every one: "If we all do small things the overall result is greater than if only a few people do something extremely." He mentioned as concrete examples to use less packaging, to buy only things you really need or to take the bike instead of the car. Time is over to wait for political decisions but everyone has the power to consume and to handle more sustainable in everyday life.

Organizer **Monika Langthaler** was overwhelmed how many people came here to be part of the first Climate Kirtag. To bring the R20 spirit from the inside of the Hofburg to the public, she explained the goal of the R20 AWS is not only to build up more environmental awareness and to show best practice solutions but also to bring together people with loud and powerful voices to enhance the pressure towards the politicians to take their responsibility to act immediately.

Main sponsor **Clemens Hallmann** concluded: *"The stronger our signal, the more our message will be heard and the sooner something will happen. We can change something if we really want to."*



Breakout Sessions

The R20 AUSTRIAN WORLD SUMMIT was not only a discussion, but also a demonstration of what is already possible in concrete terms. At the second day best practice examples from all over the world were showcased in various Breakout Sessions around the city.

CLIMATE COMMUNICATION: Spreading the Message Successfully

Organized by R20AWS in cooperation with Climate and Energy Fund Austria

Speakers

Host: Chris Cummins, Radio FM4

Ingmar Höbarth, CEO, Climate and Energy Fund, Austria

Marcus Wadsak, Weather Forecaster, ORF 1 (Austrian Television)

Leo Hickman, Editor, Carbon Brief

Christian Rainer, Editor, Profil

Isabella Uhl-Hädicke, Salzburg University/CCCA

Madeleine Daria Alizadeh, Daria Daria

Markus Hafner-Auinger, Klimabündnis

Cornelia Daniel, Dachgold and Energy Blogger

Katharina Rogenhofer, Fridays for future Vienna

Carel Mohn, klimafakten.de



Background

A main outcome of the R20 AUSTRIAN WORLD SUMMIT (R20 AWS) 2018 was to identify that better communication of climate change holds the potential to implement, mobilize and support climate action. For this reason, this year the conference dedicated a Breakout Session to this topic. R20 AWS initiator Arnold Schwarzenegger has often claimed that climate change needs to be linked to other issues, such as health and economy, for better understanding. As one of the most prominent climate activists and motivators for a wide range of people, he fully understands the power of publicity and the media. For this reason he jumped at the opportunity to take part in the Breakout Session discussion himself. There he stressed once again: "We have to find the right way to reach the people." Based on current research results from various disciplines and practical experience, the side event showed best practices and tried to solve some challenges in the

current climate debate by addressing issues such as framing, storytelling, narration and communication instruments of mobilization.

Outcomes

Fact-based arguments, strong visualizations, but also success stories are important to motivate people and avoid a defensive attitude when dealing with climate-relevant information. The following arguments and positions were put forward during the presentations and discussions:

Enlarge the group of listeners

- Mobilizing the people is only possible when you really know who your audience is.
- We're dealing with complicated content but need to expand our audience. We do not reach the general public with our complex discussion on climate change. Therefore, we have to tailor the content and find suitable messengers to fit the target group.
- To spread the content more widely, journalists are a vital audience group.

The right messenger

- The messenger is more important than the message itself.
- Greta Thunberg was the appropriate person with a suitable attitude in the right place at the perfect time. Within a few weeks, she achieved more for climate protection than any scientist or politician had managed before her school strike. Young people in particular have become impressed and inspired by Greta Thunberg. She and Fridays for Future mobilized the masses in an extraordinary and unprecedented way.
- Another good example is a video made by German Youtuber Rezo, uploaded shortly before the European Elections in May 2019. "The Destruction of the CDU" (which was also about climate change) received 13 million views within a few days.
- This demonstrates the impact that giving a face to climate protection can have on raising awareness. Scientists, facts and graphics can only reach a limited audience, but finding the right messenger allows for increased identification.

Innovative preparation and illustration of content

- Old school graphics or calculating an individual's own carbon footprint rarely manages to arouse interest in the recipient. Animated graphics (playing with data) make it possible to illustrate the problem at a glance, especially on social media
- A good example: the interactive feature on the impacts of climate change at 1.5C, 2C and beyond of Carbon Brief⁵. In 2019, Carbon Brief won the Association of British Science Writers' Award for "Innovation of the year" for this.

The right wording is essential

- Media plays an important role in the presentation and interpretation of data. Communication is always a matter of perspective – as this example clearly shows:
 - Only one third of Germans back the implementation of a CO₂ tax.
 - Already, one third of Germans back the implementation of a CO₂ tax.

⁵ <https://interactive.carbonbrief.org/impacts-climate-change-one-point-five-degrees-two-degrees/>

- The wording should be carefully chosen: Better "global heating" than "climate change"; better "clean air" than "climate targets".
- More people respond to communicating with humor and positivity (e.g. "Bigfoot exists, climate change does not"). Negativity and communicating gloomy future prospects causes the majority of people to feel like they cannot have an impact. As a result, attention decreases and audiences do not engage.

Don't be too complicated

- To reach the audience, you have to touch the people. More effect can be had by keeping things concise and clear, and through using headlines and pictures. Tabloid journalism demonstrates the possible simplification of complex issues, although we should keep in mind that topics are often over simplified as a result.
 - Headline @Österreich: Sprit: Preis-Schock wegen Sommer-Hitze (Fuel: Price shock due to summer heat)
 - Headline @DiePresse: Klimawandel: Bier könnte knapp werden (Climate change: beer could run short)

Societal change never starts with a majority

- The narrative about climate change has changed: now, it is closer to people than the science communication before. Greta Thunberg and the movement Fridays for Future are showing how communication can touch (young) people.
- What has changed:
 - The political commitment and a shift in thinking about climate change are increasing.
 - It's important to recognize: When you identify other people fighting the same fight as you, you do not feel alone. It is therefore particularly important to show the wide variety of people who are committed to climate protection.
 - Climate communication is scaling up with a different side of the same story
 - Attention has risen. Sustaining this momentum is one of the most important tasks in climate communication.

CLIMATE FINANCE: New Opportunities for Developing Countries

Organized by R20AWS in cooperation with Austrian Economic Chamber of Commerce

Speakers

Host: Christoph Resch, brainbows & **Markus Haas**, Austrian Economic Chamber of Commerce

Gunter Schall, Head of Unit Private Sector and Development, Austrian Development Agency

Michael Otter, CEO AUSSENWIRTSCHAFT AUSTRIA Austrian Chamber of Commerce

Barbara Buchner, CEO, Climate Policy Initiative

Sabine Gaber, Member of the Executive Board, Developing Bank of Austria

Michaela Seelig, Director for Sustainable Finance and Regional Economic Policy, Austrian Ministry for Sustainability and Tourism

Martin Hiller, CEO, REEEP

Riccardo Decarolis, Sustainability Adviser, South Pole



Background

Climate Finance continues to be a key issue in order to bring the Paris Agreement to life. It requires a huge shift in investment towards low-carbon, climate-resilient options if we want to keep the rise in average global temperatures below two degrees Celsius. Not least because of the urgent need of climate action, Article 2.1c of the Paris Agreement includes a long-term ambition to "make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". Whilst climate-related finance flows are considerable, they remain relatively small in the context of wider trends in global investment.

The breakout session on Climate Finance was organized by R20 AWS and brought together experts from financing institutions, public authorities and advisors with project developers to discuss how more investments in low-carbon, climate-resilient projects could be mobilized and how these funds could be made more accessible to small and medium sized projects, particularly in developing countries.

Following a panel discussion on these issues, the second part of the session consisted of five working groups, each hosted by one of the panellists, discussing the following topics in greater detail:

- which barriers in accessing finance do project developers experience (hosted by the Climate Policy Initiative)
- the role of the public sector for mobilizing capital, e.g. through adequate frameworks, incentives etc. (hosted by the Austrian Ministry for Sustainability and Tourism)
- how project holders can benefit from climate finance through the OeEB (hosted by the Development Bank of Austria OeEB)
- ideas for projects that support the creation of much-needed data in developing countries (hosted by REEEP)
- nature-based solutions and their success factors (hosted by South Pole)

In addition, several showcase projects and initiatives from the [R20 AWS Special Report 2018](#) and the [R20 AWS Special Report 2019](#) pitched their climate impact solutions and explained which financing approaches they applied.

Outcomes

The discussion, following up on the "Mobilizing Investments by Green Finance" panel discussion held on the first day of the conference, reiterated the urgent need for capital for low-carbon, climate-resilient projects and the transition of our economy in general. Given the fact that another €180 billion is needed annually, the panellists agreed that mobilizing the private sector is key to reaching the Paris goals. However, this requires an adequate policy framework, available instruments and mechanisms, as well as common standards and definitions. The EU Commission's Action Plan on Sustainable Finance, which was adopted last year, represents a significant step forward in this regard. Austria is also working on these issues with its Green Finance Action Agenda and a Working Group has already been set up.

On the side of asset owners, the discussion showed that risk perceptions have been changing in recent years due to climate change, although not fast enough. Investments in climate-resilient projects have become a means to mitigating climate-related physical (operational) and financial risks. Educating investors further and emphasising the multitude of advantages green investments hold is therefore extremely important.

Some participants pointed out that there is theoretically already enough finance available, but the key issue was to bring finance and investible projects together and how to reach significant scale, e.g. through the replication and bundling of smaller projects. Another discussion point was the allocation of risks and the risk taking by public institutions in particular.

In this context, several innovative financing instruments were discussed. Blended finance was considered a powerful force in mobilizing private capital for projects that are currently not bankable. This approach can be used to overcome information asymmetries and close financing gaps, although care should be taken not to crowd-out other private sources of capital. Other relevant financing approaches discussed were green bonds, venture capital and crowdfunding, contracting models, as well as public guarantees and on-lending by development banks through financial intermediaries.

In the end all experts agreed that as a prerequisite for successful financing of climate-impact projects, particularly in developing and emerging countries, capacity building on the side of project developers is of the utmost importance. Therefore, access to and (public) funding of business development and technical advisory services, as well as information about existing funding opportunities, should be improved.

Further success factors and policy recommendations gained from the working groups

Key success factors for the realization of projects:

- technically, economically and ecologically sound project design as a prerequisite
- in developing countries there is a specifically high demand for off-grid energy solutions
- heating/cooling needs also to be included, not only electricity production
- nature-based solutions and carbon removals are important upcoming trends, also transportation (incl. shipping)
- upfront equity/pre-phase project financing is a key success factor for SMEs
- subordinated/mezzanine capital is an additional asset
- access to financing networks and other forms of cooperation
- local partners (bottom-up, local context)
- "project killers": delays in (public) funding processes, lack of public support

Recommendations for public authorities and the finance industry:

- platforms to bring projects and finance providers together and make projects bankable
- bringing different risk perceptions together, risk sharing by public institutions, banks, NGOs...
- guarantees and blending to support start-ups
- providing seed/venture capital for project development (reducing initial risks)
- innovative financial solutions/tools for pooling/bundling/aggregation of projects
- aligning interest between governments and the private sector, creating awareness
- effective policies that penalize carbon emissions and environmental pollution, stopping subsidizing fossil fuels
- strict monitoring of on-lending
- common definitions, standards and language
- transparency/disclosure and ambition by asset owners
- knowledge and capacity building in financial institutions, local fund managers engaged with local authorities
- closing the financing gap for project sizes of between €500,000 and 4-8 million
- re-organizing carbon trade

BLENDED FINANCE: New Instruments to Facilitate Infrastructure Projects at the Sub-National Level

Organized by R20 Headquarter Geneva

Speakers

Host: Stefano Battiston, University of Zurich

Yannick Glemarec, CEO, Green Climate Fund

Christian Schwarzenegger, University of Zurich

Marion Verles, CEO, Gold Standard

Karen Wilson, Social Impact Investment, OECD

Philip Moss, Head of Sustainable Development Investment Partnership and Blended Finance, WEF

Maria Teresa Zappia, Chief Investment Officer, Blue Orchard Finance

Paulus Geraedts, Team Leader EIP, European Commission

Weixi Gong, Chief Investment and Technology Promotion, UNIDO

Frannie Léautier, COO & Asset Management Executive, Trade and Development Bank

Dana Barsky, COO Impact Advisory and Finance Department, Credit Suisse International

Alexander Kern, Law & Finance Professor, University of Zurich

Johannes Reich, Energy Transition Regulation Specialist, University of Zurich



Background

We know that to keep pace with population growth, migration and urbanization trends in a way that mitigates climate risks, improves living standards and delivers long-term sustainable growth, an increase in sustainable infrastructure investment is needed. This need is particularly high at the city, state and regional levels, where mid-size projects offer an unprecedented opportunity to maximize development impact. And yet, financing for such projects remains limited.

The breakout session was organized by R20, the University of Zurich and the USC Schwarzenegger Institute, in partnership with the Climate Infrastructure Partnership. It brought together a broad range of stakeholder groups to discuss ways to direct more capitals towards green projects. The session also served as the kick-off to a wider research process that will be led by the University of Zurich over the coming months. As explained by its Vice-President, Professor Christian Schwarzenegger, the objective is to connect scientific analysis with practice to provide a

better understanding of the barriers to deploying sustainable infrastructure at the sub-national level, and of the role of blended finance in addressing these. "Arnold said we need more climate action heroes. As scientists, we want to provide the tools for these heroes to make change happen" he concluded.

Outcomes

Thirteen speakers, solicited for their unique perspectives on implementation of sustainable infrastructure, on the Paris Climate Objectives and on the SDGs, participated in the discussion and provided key insights on:

- The investment potential for mid-size infrastructure projects at the sub-national level
- The SDG impact potential of such projects
- The role of sound impact measurement in mobilizing further support
- The role blended finance can play in accelerating the financing of project development and implementation
- The obstacles – institutional, technical and financial – met in blended finance today.

Market potential for mid-size projects

Essentially, the breakout session showed the market potential for mid-size sustainable infrastructure is there. Local authorities from around the world are looking to build such projects, but access to finance remains difficult. "Most of our projects are small or mid-sized and they are struggling to access finance because, for institutional investors, projects under 50 million euros are usually not being considered for investment" (Eszter Mogyorósy, Climate Finance Manager, ICLEI). The few mid-size projects that do seem to be predominantly financed by DFIs, who, since the global crisis, have somehow filled the gap left by commercial banks. In that context, it becomes abundantly clear that creating new sources of capital investments is critical, and blended finance seems to offer a great solution. "there is a huge investor appetite for blended finance and when it works, blended finance works beautifully well because it strengthens the fiscal position of sub-national governments and improves the quality of the services" (Yannick Glemarec, CEO, Green Climate Fund).

Requirements to accelerate innovative financing models

However, panelists agreed that innovation is still required for blended finance models to really accelerate the financing of projects at the sub-national level. Adopting a portfolio approach, rather than the traditional project by project approach, or associating blended finance with a side vehicle to address the technical assistance and capacity (technical, institutional, regulatory) issues, were some of the recommendations made in panel 2. Participants also highlighted the need, and critical role, of consistent and sound impact measurement in stimulating the investment community to engage more actively in sustainable investments.

"If you don't have the money, you have nothing"

The breakout session would not have been totally complete without a surprise visit from Arnold Schwarzenegger. "This session is particularly important because, as I have often said, if you don't have the money, you have nothing" he explained as he joined the stage after sitting in the audience for panel 1. Connecting project holders with investors is key here he added. "I am normally the terminator but here I am talking as the connectator. Because to me connecting is the most important thing".

SUSTAINABLE CITIES: Carbon-Neutral Housing and Mobility

Organized by R20AWS in cooperation with City of Vienna

Speakers

Host: Georg Günsberg, Günsberg Strategy Consulting

Birgit Hebein, designated Deputy Mayor of Vienna

Claire Roumet, Executive Director Energy Cities

Magnus Berntsson, President of the Assembly of European Regions (AER) and R20

Bernd Vogl, Head of Department for Energy Planning, City of Vienna

Rana Adib, Executive Director, REN21

Peter Pätzold, Mayor for Urban Development and Environment, Stuttgart

Arnout Smit, Arnheim Nijmegen City Region

Fran Pavley, USC Schwarzenegger Institute and former California State Senator



Background

Cities and Regions are a major focus at the R20 AUSTRIAN WORLD SUMMIT. They belong to the most affected areas of climate change and, at the same time, are drivers of a sustainable transition. Around three quarters of global greenhouse gas emissions are produced in urban areas. The organisation of urban infrastructure has a significant impact on the balance of emissions and may affect long-term emissions by a factor of 10. Housing and mobility are of particular interest when it comes to designing the transition to a carbon neutral society. Social aspects need to be integrated into strategies. Cities and regions can and will make a difference and hold powerful keys in their hand, because brainpower, economic activity and infrastructure are concentrated here. Many examples prove that solutions already exist and a variety of technological and structural options are available. Based on some of these examples the session discussed solutions, instruments and strategies, from integrated energy and urban planning to sustainable buildings and transport solutions.

Current status: Renewable energy in cities

In the Breakout Session on Cities, the current report on "Preliminary Findings of the Renewables in Cities Global Status Report" (<https://www.ren21.net/cities/>) was presented by REN21 Executive Director, Rana Adib. The report illustrates how cities are using renewable energy in the electricity, heating, cooling and transport sectors. Although cities occupy less than 2% of the world's landmass, 4.2 billion people, over half the world's population, reside within them. Today, cities, their residents

and businesses consume two thirds of the world's energy, while in 1990 this amounted to less than half (45%). Rapid urbanisation, coupled with population growth, has led to rising energy demand at the municipal level: The final report will be published in September 2019. Most (final) energy is consumed for heating, cooling and transport: 48% for heating and cooling, approximately a third for transport and 20% for electricity. 39% of total annual energy-related CO₂ emissions come from heat consumption. Cities are also important drivers of the global economy.

In the power sector, the number of cities powered by at least 70% renewable electricity more than doubled between 2015 and early 2018 (from 42 to 101). In their efforts to advance renewable energy, cities are driven by a wide range of objectives, including reducing air pollution and carbon emissions, reducing energy costs, providing energy access and creating local jobs, as well as energy security and governance goals. By the end of 2018, more than 200 cities worldwide had committed to 100% renewable electricity in the power sector, with target years ranging between 2020 and 2050. In the United States alone, more than 100 cities and towns established targets for 100% renewables.

The report describes several successful instruments in the implementation of renewable energy. Among these are financial incentives such as rebates, tax incentives and low-interest loans for renewable energy, public investment and procurement policies, business models driving renewables in cities, or the mobilisation of finance.

Outcomes

In presentations and discussion, several key elements for the successful implementation of solutions in the housing and transport sector were identified.

Citizen engagement: Collaborate on the right level and scale

The transformation can only be sustainable when the citizens are on board. Therefore the awareness and activation of people, along with support for bottom-up initiatives, can become drivers behind accelerating the transition. Nevertheless, without top-down instruments (such as regulation, objectives and guidelines) bottom-up processes are destined for failure. It is the combination of these approaches that can result in the success factor. The design of urban energy systems affects urban residents in direct ways by defining how energy is produced, transmitted and consumed. Citizens can have an impact by partnering with others to create community-based energy projects.

New thinking: integration of sectors and policies

We need to rethink our approach to sectors (sector integration), budgeting and investing. The integration of spatial planning processes and energy planning will be a fundamental component, not only in cities, but also in the exchange between cities and their surrounding areas. Urban district heating and cooling networks provide an opportunity for cities to integrate renewables into the heating and cooling sector.

Fiscal reforms: aligning with the Paris Agreement

Fiscal reforms are crucial. Not only is the integration of technologies and sectors necessary, but also policies on national, subnational and municipal levels. Beside governance and the dissemination of examples and experiences also relevant budgeting are crucial. At the end of the day, aligning 25 or 50% of the budget to meeting the Paris Agreement goals will not be enough, but needs to be 100%. Cities can increase the pressure on governments to implement the necessary reforms. Carbon taxation is highly effective and can be integrated into trade agreements. Also at local and regional levels, tax credit plays a role. Higher renovation rates to existing buildings can be increased through measures such as the availability of subsidies and tax credit.

More focus on social aspects and fairness

Carbon neutrality and social justice are not a contradiction but go hand in hand. Many examples (e.g. Vienna) have showcased that buildings with low energy consumption provide better living conditions and a contribution to the reduction in fossil fuel usage. We want cities in which no one must stay home because it is too hot outside. Elderly people and children are much more affected by climate change. Current numbers show an increase in heart-strokes within elderly people during hot summers which can also result in social isolation. Even the yellow jackets don't want to be seen as being against climate change measures but don't accept that driving car get additional taxes while business flights don't.

The role of regulation

Regulation and legislation are absolutely crucial. Standards have to be made compulsory, in the transport sector as well as in the energy sector. E.g. in housing laws, a majority of inhabitants instead unanimity to allow energy related measures would help. Moreover, it would be better to spend money on quality aspects than building parking space in the underground.

We need better data

Gaps currently exist in municipal policies/incentives to promote renewable energy deployment in power, heating and cooling, transport, and on generation capacities (RES), as well as RES share in public transportation, municipal fleets and the renewable energy share in urban district heating.

Electric vehicles as part of the solution

By continuously improving our public transport system and bicycle infrastructure, we can reduce the amount of traffic and lower pollution and greenhouse gas emissions. Electric vehicles can play a role in the solution, but cannot solve associated traffic problems (such as lack of space, pedestrian hazards and traffic jams).

CO₂-neutral fuels might emerge but capacity will remain a limiting factor. No further investment should be made in fossil fuels if we are to meet the Paris goals.

Examples

Arnhem/Nijmegen: regional collaboration for phasing out natural gas

The motivation behind developing plans for a step-based phase-out of natural gas is not only climate policies, but also due to earthquakes related to natural gas exploitation. Local and regional energy strategies have two components: citizen engagement and expanding district heating. Possible approaches include exploring geothermal energy sources, electrical heat pumps and a neighbourhood energy supply.

California: leading by ambitious legislation

California has 40 million people and about 25 million cars (not including trucks). California predates standards and has more stringent emissions standards than the federal government. The current Trump administration is a rolling-back on air pollution. 15 other states have adopted CA tailpipe standards and many cities have implemented them.

In California, the cap on emissions has been incredibly effective. 40% of all energy comes from clean resources. Part of the strategy is to replace natural gas and electrify as much as possible. No further natural gas power plants will be built in California not only because citizens have demanded this. California does not produce energy from coal power plants but received it from surrounding states. Citizens are making the choice not to purchase coal power from other states. In the future the focus will be on Renewables and EVs.

Stuttgart: integrating energy supply, planning and transport

Stuttgart has strategically integrated energy and urban planning to include energy supply, mobility and buildings. Mixed housing is important (business, residential, commercial, social infrastructure, schools). In finding potential sources of energy production, waste heat can provide the basic heating needs for many buildings. Buildings in Stuttgart are built to high standards. Rooftops are green and provide solar energy. Another approach has been the reduction of parking spaces.

The city is adapting to counter the effects of climate change and provides a model for greener cities of the future with more water, parks, and preparations for an increasing number of inhabitants. The idea that every family lives in a house is no longer possible. The buildings of tomorrow need to be built today.

Vienna: combining the energy transformation and social aspects

Vienna serves as an international example of successfully implemented social housing with high standards, but also faces the challenges caused by urbanisation trends and the need for rapid decarbonisation. Vienna passed a reform to construction regulations that demonstrates the city's commitment to affordable housing with the aim of lowering emissions. Climate protection was added as a new objective and the city banned oil heating, whilst forming zones to minimise gas connections to new residential buildings. The same amendment additionally required an immediate increase in the construction of new subsidised affordable housing. There remain investments in fossil fuels, such as gas boilers, in new buildings, but building codes state that RES must be used with a gas boiler.

Many examples show energy innovation projects in Vienna, from the renovation of existing buildings to new Plus Energy building and solutions in energy supply, transport and neighborhood energy. A new app has been programmed and will be available in app stores in the near future titled "Energy Ahead".

PLASTIC POLLUTION & HEALTH: Strategies for a Circular Economy

Organized by R20 AWS and the Ministry of Sustainability and Tourism

Speakers

Host: Thomas Jakl, Director General, Austrian Ministry for Sustainability and Tourism

Werner Boote, Documentary Filmmaker (Plastic Planet)

Hans-Peter Hutter, Deputy Head, Center for Public Health, Medical University of Vienna

Craig Halgreen, Director Sustainability & Public Affairs, Borealis

Joost van Dun, Global Circular Economy Lead, ING

Alexander Hell, Sustainability, REWE International AG

Christian Redl, Apnoea Diver, Initiator 7 Oceans Project

Martin Wesian, CEO, Helioz

Ewald-Marco Münzer, Münzer Group & Joseph Siaw Agyepong



Background

Plastic as a material offers a wide range of benefits. It is waterproof, lightweight, transparent and hermetic: four characteristics that make it advantageous to many industries, notably commerce. Nevertheless, due to the colossal increase in production of this non-biodegradable material, it currently poses a serious threat to both our ecosystem and our health. Unlike organic material, it does not decompose easily, instead remaining in the environment for hundreds, sometimes thousands, of years before disintegrating into tiny nanoparticles.

In recent years, these microplastics (particles smaller than 4.75 millimetres in diameter) have been detected in our drinking water and food chain, as well as the human body. The exact effects that these synthetic particles have on our bodies and the ecosystem, remain the subject of on-going research. Meanwhile, wind and ocean currents continue circulating the particles to every corner of our planet. Plastic is already causing severe damage to wildlife even before the decomposition process begins breaking it down into smaller particles. Countless species, such as seabirds, turtles, fish and whales, are ingesting pieces of plastic and dying as a result.

Plastic pollution is quickly becoming one of the main challenges of our century. Since the 1950s, an estimated 8.3 billion tons of plastic has been produced, while only nine percent of this has been recycled. The majority of it continues to be burned, dumped in landfill sites or thrown

directly into the natural environment. Around 8 million metric tons of plastic is swept into the ocean annually - the equivalent of one garbage truck every minute. Recent studies predict a grim future in which, by 2050, there will be more waste plastic in the sea (by weight) than fish.

Higher-income countries tend to generate more plastic waste per person. However, due to effective waste management systems, their mismanaged waste and impact on the oceans are relatively low. Instead, a recent study estimates that more than a quarter of the plastic in our oceans may originate from just ten rivers, eight of them in Asia. This makes the improvement of waste management systems across the world another important challenge in the fight against plastic pollution.

Outcomes

We know that new strategies to cut down on plastic waste are urgently needed to avoid further and irreparable damage to both our ecosystems and our health. It's imperative that we rethink our way of life and leave our current attitudes to disposability behind us. By fostering a circular economy we could end the enormous export of waste to developing countries, whilst simultaneously creating profit from previously discarded material. Finding sustainable alternatives to plastic represents another significant challenge we currently face.

Responsibility of all: consumers, producers, governments

- Each of us can contribute by making small changes to our buying habits, increasing pressure on companies and governments to reduce the amount of plastics used, particularly in packaging.
- Producers should be encouraged to become increasingly resource efficient (reducing material input and improving recycling rates) and should set measures along the whole value chain to foster a circular economy
- Win-win situations for all stakeholders are key to the implementation of holistic approaches.

Awareness & Communication: How to break down complex topics to simple messages

- There remains an enormous gap between "lazy, unaware consumers" and "well informed, responsible customers" who understand the impact of their behaviour.
- In order to swiftly change perceptions and mind-sets we need alternative, simple solutions that are attractive to the majority of the public.
- Communication through young role models and influencers: In the last month we observed that when children focus on a topic, they can influence and have an impact on older generations. The other way around appears less effective.
- At the end of the day the central message must be: It's cool to protect the planet.

Not new but still true: "Act local, think global"

- Reduce transportation through implementing more local recycling processes to close local material circles.
- Europe used to export waste to other countries such as Malaysia and China, but these countries have recently announced a halt to these imports, declaring that plastic waste is a hazardous material. Europe currently faces an opportunity to deal with its own waste and has to act in a more local way.

Role models & Solutions

- Best practice example from Sweden: Implementation of the public procurement law leads to reduce the demand of non-environmentally friendly products, substances, materials...
- Best Practice Example: Sodastream combines marketing with awareness campaigns to encourage their customers to eliminate plastics from their daily routines.
- Solutions & Trends: To (re)design products which can be reused or increase refillable systems.
- Waste to Energy: Borealis recently launched a project that turns waste into fuels.
- Financial solution: Initiate soft loans to fight plastic pollution

Policy recommendations

- New policy solutions and quick implementation of these policies are crucial for turning the economy into a circular economy.
- We need more enforcement and policy control. A legal framework by itself is not enough. If every rule is to be followed, we have to design clear and detailed guidelines.
- The negative impacts of fossil products on social and ecological dimensions have to be evaluated and priced accordingly
- Increasing the price of plastic products may be more effective than banning products (Incentives vs. Prohibiting).
- It's very difficult for politicians to reach out to the younger generation. Nevertheless, politicians should take pollution seriously and act as role models themselves.

SUSTAINABILITY IN TOURISM: More Quality of Life and Regional Value Enhancement

Organized by the Federal Ministry for Sustainability and Tourism

Speakers

Host: Christian Baumgartner, Response & Ability

Ulrike Rauch-Keschmann, Director General, Tourism and Regional Policy, Austrian Ministry for Sustainability and Tourism

Xenia zu Hohenlohe, Partner/Founder, Considerate Group

Florian Werner, Arlberg Hospiz Hotel

Elisabeth Hauser-Benz, Stanglwirt

Brigitte Hainzer, Mobility Coach for the Tirol Werbung

Michaela Reitterer, Boutique Hotel Stadthalle



Background

Tourism is one of the fastest growing economic sectors in the world and represents an important source of income for many regions and cities. Whilst tourism can increase, enhance and sustain quality of life for guests, local populations and people working in the sector, the industry's impact on climate change must not be ignored or side-lined. An agenda for sustainable tourism needs to address all aspects of the sector's economic, social and environmental impact: Beside economically healthy enterprises, a reasonable balance should be found between the usage and respect of natural resources. Tourism should not only help to enhance quality of life but also regional value.

Outcomes

The tourism sector has already demonstrated it's ability and creativity in dealing with the associated challenges: Some destinations have begun offering climate-friendly mobility. Hotels have created a USP by focussing on renewable energy, up-cycling and good working conditions. One hotelier invented a 'climate-Euro' as part of the fees for the overnight-stay, which runs into climate protecting measures. This initiative should be encouraged Europe-wide. Some parts of

the tourism industry focus on sustainable food (regional, seasonal and fair trade) and on the avoidance of food waste. This contributes to a significant reduction of CO₂-emissions.

Such activities are not only accepted but valued by the guests and result in increased employee-loyalty. The time has come to take the motto of the R20AWS 'from action to transaction' and spread best practices to provide a comprehensive transformation of the tourism industry, thereby fostering increased sustainability and climate protection.

Adaptation and rethinking of frameworks/guidelines/indicators/long-term strategies

- Governments need to have clear tourism strategies, such as the Austrian Plan T – Masterplan for Tourism, which addresses all aspects of the sector's economic, social and environmental impact and includes sustainability both within their overall goals and their concrete implementation measures.
- Sustainability must be an integral aspect of tourism success, therefore success indicators beyond merely numbers of arrivals and overnight stays need to be developed and implemented.
- The best solutions often are developed in a participatory approach, whereby all stakeholders – decision makers, companies, employees, civil society, such as NGOs, etc. are involved at the same eye-level.
- The financial system, e.g. banks and their loan criteria, as well as insurance companies, need to support measures for enhanced sustainability more seriously to motivate tourism suppliers to adopt sustainability into their business models.
- Tourism suppliers need more guidance in their sustainability approaches: trainings, support programs, financial assistance for improvements, etc. that foster a culture of cooperation and increase the image of tourism as employer.

Creating more awareness in all stakeholder groups

- Business and Sustainability reports corresponding to the SDGs could result in increased awareness of the importance of tourism as an instrument for the implementation of the SDGs
- Tourism marketing needs to position sustainable offers and destinations in the foreground, using the values behind sustainability more than the wording 'sustainability' to attract consumers.
- Tourists need to channel their growing interest in sustainability into more sustainable travel behavior, especially in terms of mobility. Bringing the message of sustainability to life with exciting visualizations and authentic story telling can support this.

Incentives to reward sustainable behavior or payments to support sustainable measures

- Payments for more or less sustainability – e.g. the climate-Euro or CO₂-compensation for flights – should be changed from opt-in to opt-out decisions. Similarly, nightly turndown services and other services could be provided 'opt-in' in order to raise awareness of how many resources are consumed on even menial tasks. Climate friendly and sustainable behavior could be awarded with incentives.

BIOECONOMY: Sustainable Action to Fight Climate Change

Organized by the Federal Ministry for Sustainability and Tourism

Speakers

Host: Gerda Daniel

Jürgen Schneider, Director General for Climate, Ministry for Sustainability and Tourism

Philippe Mengal, BBI JU Executive Director

Karolina Begusch-Pfefferkorn, Head of Unit, Federal Ministry of Education, Science and Research

Theodor Zillner, Deputy Head of Department

Tanja Meyer, BioBase4SME Project Coordinator

Christian Gorsche, Head of Material Development, Cubicure GmbH

Martin Greimel, Head of the Austrian Bioeconomy Center, University of Natural Resources and Life Sciences

Dana Peskovicova, BIOEAST Contact Point Slovakia

Nicole Kocher, ALPLA GmbH, bio – degradable coffee capsules

Caroline Palfy, Development HoHo Wien, cetus Baudevelopment GmbH



Background

Bioeconomy stands for an economic concept that aims to replace fossil resources (raw materials and energy sources) with renewable raw materials in as many areas and applications as possible. It covers all industrial and economic sectors that produce, process, handle or use biological resources. The bioeconomy thus offers a great opportunity to tackle global challenges, such as increasing climate change, food and water scarcity or growing environmental pollution, while at the same time strengthening economic development.

Director-General Jürgen Schneider explained about the perils of climate-change and the necessary fight for the reduction of greenhouse gas emissions. This requires a coordinated climate and energy strategy – the Austrian #mission2030 – that ensures the balance between environmental sustainability, competitiveness and security of supply in the future as well.

In order to make the step towards the implementation of the hitherto knowledge-based bioeconomy – involving the relevant stakeholders and using all political instruments – the Austrian Government adopted a strategy for bioeconomy in Austria. This Austrian Bioeconomy Strategy is intended to be an essential cornerstone of the Climate and Energy Strategy and to support the decarbonisation of the economic system. To further boost the implementation of bio-based ideas in Austria the Federal Ministry for Sustainability and Tourism cooperates with the Federal Ministry of Education, Science and Research and the Federal Ministry for Transport, Innovation and Technology are working on a bio economy action plan.

Outcomes

The Breakout Session "Bioeconomy" presented several examples of the ongoing cooperation in this field and showed specific best-practice projects like:

- The Bio-Based Industries Joint Undertaking (BBI JU), which is a € 3.7 billion Public-Private Partnership between the EU and the Bio-based Industries Consortium. Operating under Horizon 2020, this EU body is driven by the Vision and Strategic Innovation and Research Agenda (SIRA) developed by the industry. Executive Director Philippe Mengal explained the expected impact of these activities for Europe by 2030, which comprises
 - a replacement by 25% of oil-based chemicals and 10 times more bio-based materials
 - an increase by 25% mobilisation of unused sources and develop potential of agro-food "waste" & forestry residues
 - the creation of 700,000 jobs (with 80% in rural areas)
 - the reduction of EU's dependency on import of strategic raw material
 - an average 50% GHG emission reduction
- BioBase4SME supports SMEs and start-ups across North-West Europe to overcome technological and non-technological barriers to bring their biobased innovation to the market. It is subsidized by the Interreg North-West Europe Programme. Tanja Meyer, the BioBase4SME Project Coordinator, highlighted aspects such as identifying the demand for bio-based solutions, placing products in the appropriate markets (e.g. bioplastics), covering capital requirements and creating public awareness for the products, based on the experience with 78 investigations in European SMEs receiving "Innovation Coupons".
- Dana Peškovičová, from BIOEAST, the Central and Eastern European initiative for knowledge-based agriculture, aquaculture and forestry in the bioeconomy, gave an insight into the collaboration between involved countries and how to overcome existing misconceptions concerning agriculture and food sector and use bioeconomy solutions to increase competitiveness of the sector.
- Christian Gorsche from the Austrian Cubicure GmbH demonstrated the chances of Lithography-based 3D-printing with bio-regenerative feedstocks (for example: lignin). He made clear about the benefits such as a reduction of waste and emissions, the possibility of localized and flexible production and the advantages of a liberated creativity.
- Martin Greimel from the Vienna-based University of Natural Resources and Life Sciences, reported about the Austrian Bioeconomy Center, which deals with the education and research for renewable resources. It has a strong focus on strengthening the network with national and international actors in the Bioeconomy scene.
- Finally, Nicole Kocher explained how ALPLA GmbH from Vorarlberg created home compostable coffee capsules made from sunflower seed husk to achieve shelf life properties matched to its plastic alternative.

FOREST RESPONSES TO CLIMATE CHANGE: Why African Forest Matter

Organized by the Austrian Federal Ministry for Sustainability and Tourism, the Austrian Federal Ministry of Education, Science and Research (BMBWF), and the International Union of Forest Research Organizations (IUFRO)

Speakers

Host: Alexander Buck, Executive Director, IUFRO

David Albertani, R20

Maria Patek, Director-General for Forestry and Sustainability, Austrian Federal Ministry for Sustainability and Tourism

Emma Archer van Garderen, University of Pretoria, South Africa

Hubert Hasenauer, Rector, University of Natural Resources and Life Sciences, Vienna, Austria

Ramni Jamnadass, Co-Leader, Tree Productivity and Diversity, World Agroforestry Center (ICRAF), Kenya

Wubalem Tadesse, Former Director General, Ethiopian Environment and Forest Research Institute (EEFRI), Ethiopia

Albert van Jaarsveld, Director General and Chief Executive Officer, International Institute for Applied Systems Analysis, Austria

Ingwald Gschwandtl, Head of International Forest Policy, Austrian Federal Ministry for Sustainability and Tourism, Austria



Background

Forests are the largest terrestrial carbon store. They can sustainably produce woody biomass to replace fossil fuels; and solid wood products can substitute other energy intensive materials. In addition to their crucial role in mitigating the worst impacts of climate change, forests provide a multitude of ecosystem goods and services that are vital to human well-being and to the protection of biodiversity. Climate change, however, also severely threatens forests and trees. Africa is expected to face particularly high impacts from climate change. Moreover, people in

Africa are highly dependent on forest goods and services and therefore particularly vulnerable to climate change.

Against this background, renowned experts from Africa discussed with Austrian representatives from government and research about how to capture more fully the mitigation potential of forests and at the same time reduce the vulnerability of forests and people to climate change.

Outcomes

Main challenges & drivers

- Temperatures in all African countries are rising faster than the global rate; this warming is very likely to persist for centuries to millennia and will continue to cause further long-term changes in the climate system, with associated impacts on forests and other terrestrial ecosystems;
- Global warming is adding to a range of other non-climate-related pressures on forest ecosystems in Africa, such as population pressure, overexploitation of forest resources, and the increasing need for agricultural land. Africa is also one of the most rapidly urbanizing continents;
- These drivers put immense pressure on the continent's biodiversity and nature's contributions to people and will increase overall under all plausible future scenarios;

Recommendations for action

- Yet, there are **measures** to increase the sequestration and storage of carbon dioxide from the atmosphere, and to reduce the vulnerability of forests and people. Such measures include forest landscape restoration and rehabilitation, as agreed under the Bonn Challenge and related regional initiatives, and strategic investments to protect and mobilize sufficient, diverse and high-quality tree seeds and planting materials;
- Such measures must be based on the best available scientific evidence and must be supported by effective **governance frameworks** that are sensitive to community needs and provide for the equitable sharing of benefits and responsibilities;
- For **science** to have the desired impact on policy and practice, however, there is a clear need to increase investment into Research & Development on the African continent, and to build more sustainable scientific and educational institutions, including those aimed at training practitioners;
- **International collaboration** should be guided by the principle to conduct research not on Africa, but together with Africa. The portfolio of existing and planned new programmes and initiatives for cooperation and networking between Austria and African countries, including through IUFRO, support this approach and have potential to accelerate the impact on the fight against climate change.

ROUNDTABLE: Pollution & Health

Organized by USC Schwarzenegger Institute & R20 AWS

Speakers

Arnold Schwarzenegger, Former California Governor and Chairman of R20

Fran Pavley, Former California State Senator and author of the Global Warming Solutions Act

Kevin De Leon, Former Leader of the California State Senate and author of California's 100% renewable energy bill

Trevor Traina, United States Ambassador to Austria

Beth Gardiner, Journalist and Author of Choked

Rosamund Adoo-Kissi-Debrah, Founder of the Ella Roberta Foundation and anti-pollution activist

Karolina Skog, Former Member of Swedish Parliament and author of Swedish eco-labelling bill

Romain Lacombe, Founder and CEO of Plume Labs



The World Health Organization (WHO) cites air pollution as the “silent killer.” Air pollution is strongly linked to strokes, heart attacks, different kinds of cancer, dementia, premature births, and many other ailments. Nearly 9 million early deaths can be attributed to air pollution each year. The problem with air pollution is nobody can really see it. The goal of the discussion was to find effective tools to understand and visualize the dangers of air pollution in order to encourage climate action. There were inputs from former legislators, activists who are at the frontlines calling for immediate action, climate leaders who lead the pollution labelling movement, and business leaders who are using their technologies to help map air pollution.

Outlook

The key findings of the R20 AWS 2019 will feed into the most important climate processes, conferences and stakeholders in the run up to crucial decisions necessary to prevent the climate crisis. In 2019, the year of increased climate ambition, this will happen at the **UN Climate Action Summit** and the **Youth Summit** in September in New York, where the Director of the R20 AWS, Monika Langthaler, will accompany the Austrian President Alexander Van der Bellen. Following the talks at the R20 AWS 2019, they will again meet UN Secretary-General António Guterres and Greta Thunberg, who has crossed the Atlantic Ocean by sailboat to continue the climate strikes in the US. She will also take the opportunity to put pressure on decision makers at the Climate Action Summit. This Summit will convene on the theme, 'Climate Action Summit 2019: A Race We Can Win. A Race We Must Win.' It will seek to challenge states, regions, cities, companies, investors and citizens to step up action in the areas of energy transition, climate finance and carbon pricing, industry transition, nature-based solutions, cities and local action, and resilience. Convening during Climate Week NYC 2019 and in parallel to the opening of the 74th session of the UN General Assembly (UNGA 74), the Summit is one of several high-level events where the R20 AUSTRIAN WORLD SUMMIT delegation will take part.

As every year, another key event on the climate roadmap 2019 is the **UN Climate Conference of Parties, COP 25**, which will take place this year in Santiago de Chile from December 2-13 with the motto "Climate action depends on all of us – Time for action is now". Following this call, the outcome of the R20 AUSTRIAN WORLD SUMMIT will be brought to the agenda through R20 in order to share experiences, knowledge and call for better multilevel integration from local to global level.

For the R20 AWS team, the summary of content becomes the basis upon which to investigate and develop focus areas for the **next R20 AUSTRIAN WORLD SUMMIT on May 26, 2020**. Our role is to provide solutions, speed up their implementation and spread them to all relevant sectors and levels, thereby putting climate action into practice. Our network is expanding globally, but also on national and local level. We are looking forward to working further with our partners and supporters to mobilize more key stakeholders but also a broad public to become part of the climate action movement.

Thanks to all Climate Action Heroes for the support!



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Initiator R20 AWS: Arnold Schwarzenegger
Patron R20 AWS: Federal President Alexander Van der Bellen

We'll be back:

May 26, 2020