



## Report: EU Climate Action Coffees – session 6

### Shifting development pathways to increased sustainability with the University of Cape Town (UCT)

Date: 3 June 2021

Time: 9.30am to 10.30am (SAST)



Facilitator: Gail Cameron, Flow Communications

A total of 21 participants joined the call, including:

- Representatives of Team Europe RSA
- Representatives from CLIMA, European Commission
- Representatives from UCT
- Representatives from SAMRC

### Session format

The session was one hour long, with presentations by three organisations, followed by a Q&A segment.

**Topics covered: shifting development pathways to increased sustainability with the University of Cape Town (UCT)**

### Why EU Climate Action Coffees?

The purpose of the “Climate Action Coffees” sessions is to build bridges between organisations implementing climate action initiatives in South Africa and their Team Europe counterparts, both in South Africa and in Europe.

As outlined by Ariane Labat, the climate action, environment and agriculture counsellor for the EU Delegation to the Republic of South Africa at the European Commission, said these sessions will help the European Union (EU) team get a sense of the work being done in

South Africa, and understand how the EU can play a more effective role in South African initiatives to tackle climate change.

## **Summary of the presentations**

### **Presentation 1: Professor Harald Winkler, director of the Energy Research Centre, UCT**

Prof. Winkler outlined the necessity of South Africa switching its energy development pathway from coal, a fossil fuel that is driving a rise in the country's greenhouse gas emissions.

Winkler was last year reappointed to an international team that collaborates to write and review the United Nations' (UN) Intergovernmental Panel on Climate Change (IPCC) assessment reports and is working on the IPCC's Sixth Assessment Report. The IPCC is the UN body that assesses the science related to climate change.

Winkler said the shift South Africa must make in its energy development pathway will create – and already is creating – winners and losers. This necessitates a discussion on ensuring a “just transition” to a low-carbon economy that Winkler described as “very important in South Africa at this time”.

The notion of a “just transition” was developed by the trade union movement to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity. South Africa already suffers a “triple challenge” of high rates of unemployment, poverty and inequality, making the need to secure workers' rights and livelihoods particularly acute.

South Africa is working to fulfil its commitments under the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, and President Cyril Ramaphosa this year told delegates at United States President Joe Biden's Leaders Summit on Climate that South Africa's greenhouse gas emissions would begin to fall by 2025, rather than – as promised at the UNFCCC – peak and plateau that same year.

In addition to the sea change that must come in South Africa's energy development pathway if the country is to meet its UNFCCC commitments, the country needs to switch from measuring its socio-economic success by tracking gross domestic product (GDP) to measuring it by tracking human well-being, Winkler said.

History suggests that a switch towards a sustainable economy does not happen by accident, said Winkler. He dismissed any notion that this switch would be easy or simple, saying that this is a change that cannot only be made at policy level and that it “comes down to choices made by people”. There is no single policy instrument that can bring about the necessary changeover, he said. It requires input and action from policymakers, citizens, the private sector, social movements and more.

Winkler also emphasised that “incremental change is not enough” and that existing development pathways do not plot a speedy enough route to a sustainable South African (or global) economy.

Winkler said there are a variety of instruments available that can be used to drive the switch. These range from changing consumption patterns through ecological tax reform and the regulation of advertisement to socio-technical innovations such as investment in public education and public sector research and development support via finance and investment instruments such as reforming subsidies and changes to insurance and pension sector regulation. These must “urgently” be implemented, he said.

New, climate-conscious development pathways need to be rooted in South Africa’s social and economic development aspirations so that the country’s “triple challenge” is addressed, Winkler said. Also, cultural needs need to be taken into account.

**Presentation 2: Bianca Werneke, project manager, Environment and Health Unit, South African Medical Research Council**

A large portion of South Africa’s population can be described as poor and vulnerable to health and environmental risks, and this sector of society is less able to make adaptations that will help them survive the negative effects of climate change. Also, South Africa’s average temperature is rising at double the rate of the global average, said Werneke.

She drew her presentation from a United Nations Environment Programme (UNEP) report, *Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*, that she has contributed to.

Werneke said humans have “declared war on nature” and that this has brought about development challenges, of which the global Covid-19 pandemic is the most obvious. Zoonotic diseases such as Covid-19 demonstrate that humanity needs to make “fundamental shifts” in its relationship with nature and the environment, Werneke said.

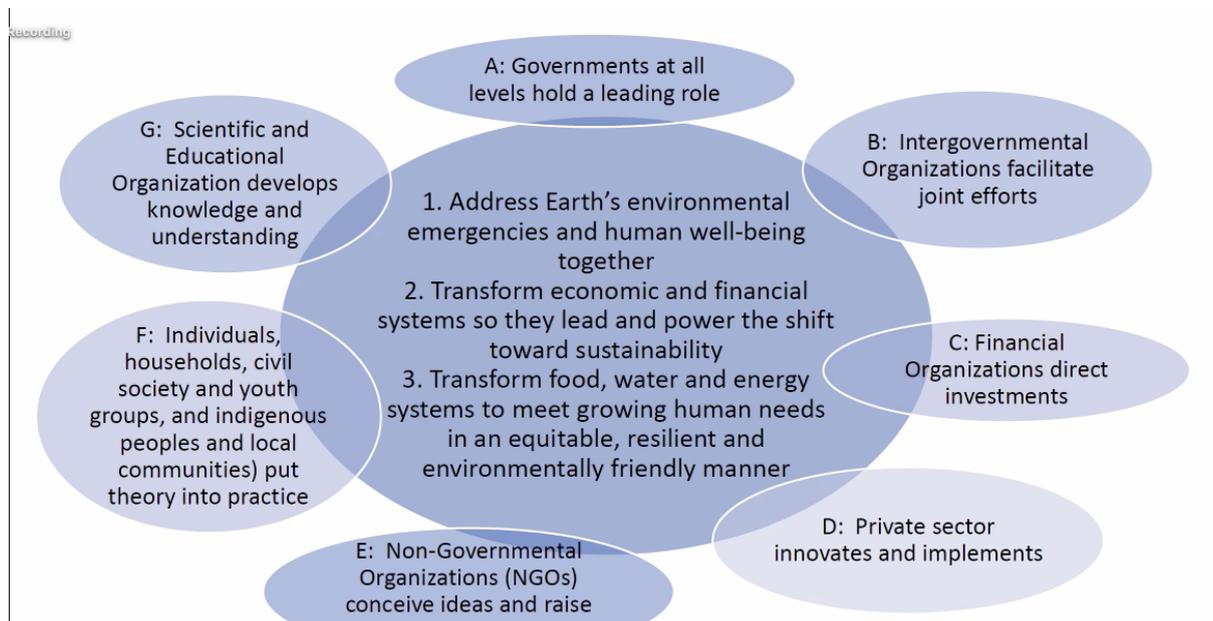
Human well-being is dependent on the Earth’s natural systems, yet economic, technological and social advances across the globe have led to a reduction in the Earth’s capacity to sustain human well-being at current rates, Werneke said. A fundamental change is needed because social, economic and financial systems fail to account for the essential benefits humanity derives from nature.

Also, the global community is failing to meet its commitments to limit environmental damage and neither the global nor the South African community is on track to meet the United Nations’ Sustainable Development Goals (SDGs) by the promised 2030, she said. Changes to the human world’s relationship with nature can be made through redirected investment, new businesses, natural capital accounting and other measures, she said.

Werneke said only a “system-wide” change in human consumption and behaviour patterns will achieve the long-term well-being that humanity seeks. This will necessitate sea changes

in the technological, economic and social organisation of society, including in world views, norms, values and governance.

The below diagram lists some of the changes required, with the roles for the various players:



Werneke said that making these changes will be “a tough job”, but that it is also “non-negotiable” and that “we need to use all the tools that we have got” – such as the SDGs – in effecting fundamental change in the way humans interact with their environment and the other animals and creatures that share it. “People don’t like change, especially when it is inconvenient,” she warned.

The negative effects of climate change and biodiversity loss are felt more acutely in South Africa, Werneke said. Also, the country faces the “triple challenge” of widespread poverty, inequality and unemployment, which can exacerbate its effects.

Werneke closed by asking the individuals present to think about how they could make personal changes, and suggested they use World Environment Day (5 June 2021) as an opportunity to start.

### **Presentation 3: Florian Claeys, scientific officer to the European Commission Directorate-General for Climate Action**

Claeys provided a response to the first two presentations. He congratulated Winkler and Werneke for making solid links between research and politics, and for showing how widespread changes need to be if humanity is to transition to a sustainable world order in a manner that is just towards everyone.

Werneke and Winkler presented scenarios and aspirations that are in line with those of the EU, as set out in Europe’s “Green Deal”, he said. The Green Deal is the European Commission’s plan to make the EU’s economy sustainable and “carbon-neutral” by 2050.

“This can be done by turning climate and environmental challenges into opportunities, and making the transition just and inclusive for all,” he said.

Claeys said that, like Winkler, the EU used a “pathway approach” to help it plot different scenarios, depending on which development plans were used to transition from current trajectories to ones that are more climate conscious.

In particular, the EU based its modelling on the Global Biosphere Management Model (GLOBIOM), which is used to assess competition for land use between agriculture, bioenergy and forestry and was developed by the International Institute for Applied Systems Analysis. It has also plotted different scenarios so that it can better understand how to reach its target of 55% net greenhouse gas emission reduction by 2030, compared to the rate of emission in 1990. These scenarios use different “technologies”, such as behavioural and dietary changes, fossil fuel emission reductions and innovative technologies such as carbon capture.

A major challenge for the EU is to effectively link the fight against climate change with the struggle against biodiversity loss as they are “interdependent and mutually reinforcing emergencies”. This means they need to be addressed together, Claeys said.

Synergies and trade-offs between climate change and biodiversity mitigation and adaptation have led strong research efforts, Claeys said. Nature-based solutions to these challenges have the potential to contribute to the climate change mitigation efforts needed to meet the long-term goals of the Paris Agreement, to keep global warming to less than 2°C above pre-industrial levels.

Claeys said he also appreciated how the presentations highlighted the importance of economics in addressing climate change, including the challenges of employment and a “just rural transition”. Linked to nature-based solutions is the bioeconomy – using renewable biological resources from land and sea, such as crops, forests, fish, animals and microorganisms to produce food, materials and energy.

Claeys also addressed the issue of how finance is shifting development pathways towards increased sustainability and how to ensure that the world shifts from “brown finance”, which favours the fossil fuel-based economy, to “green finance”, which favours sustainable development.

In April 2021 the EU published the text of the EU Taxonomy Regulation, which creates a classification system for environmentally sustainable economic activities, Claeys said. This legislation provides two sets of technical screening criteria for economic activities, ensuring that they contribute substantially to climate change mitigation and adaptation, and that they do so while causing “no significant harm to other environmental objectives”. This alignment of financial and environmental objectives is a key issue at international level, and is common to the conventions concluded at the 1992 Earth Summit in Rio de Janeiro, Brazil, Claeys said.

## **Q&A and discussion**

Ariane Labat said it is important that global leaders hear the voices of the world's young people, who are calling for action on climate change.

The EU will try to facilitate research, and to speak to parliamentarians on the issue, she said. Labat said she believed “minds are open” to considering the various pathways projected and to working to “choose the right one”.

Claeys said the EU is in discussion with the Chinese government regarding land use and biodiversity. Workshops are being organised and the EU is planning to publish reports from these interactions, and these can be used to strengthen collaboration between the EU and South Africa on climate change and other issues.

Winkler said he would share Werneke's UNEP report with his IPCC colleagues, because it “very much supports equity”. He thanked Claeys for setting out the EU's thinking on planning using illustrative pathways and said he would be sharing this with his IPCC colleagues as it had an effect on chapter three of the Sixth Assessment Report, which Winkler is helping to write.

Winkler said he agrees that finance is key to a just transition to a global green economy and emphasised that South Africa needs to find ways of financing a “much faster” move away from a coal-based energy economy.

Werneke agreed that South Africa's Integrated Resource Plan, which sets out its energy trajectory, needs to relinquish coal as a major energy resource. She said she is involved in discussions with Eskom, South Africa's power utility.

Brain Mantlana of South Africa's Council for Scientific and Industrial Research asked Winkler why he had presented “sustainability” as a singular concept when he had spoken of development pathways in the plural. Winkler replied that while sustainability is “very much intended as a plurality” as it means different things in different contexts, he did not think that one would speak of “sustainabilities”.

To view the full presentation [click here](#).