



Opening Statement for the CEC17

Berlin, 09 October 2017 (Monday)
evening opening plenary: 18:30 – 20:00
Mark Lawrence, IASS Potsdam

Welcome to the CEC17 !

It is a privilege and a pleasure to see so many of you gathered together for this second international, transdisciplinary conference on the many issues that arise when discussing the topic of “Climate Engineering”. At the Institute for Advanced Sustainability Studies, the IASS in Potsdam, we have been working on research, assessments, and communication about climate engineering for over six years, since a first scoping meeting held in the summer of 2011. Our approach to this topic fits in with the general approach of the IASS, working as a platform to bring together all relevant forms of knowledge from science, society and politics in order to initiate and support transformations towards sustainable development that are grounded in scientific research, helping us to face the Grand Challenges of the Anthropocene. The conference we are opening today builds on the success of the CEC14, the first conference of this kind, which we hosted with our partners three years ago. Perhaps these conferences will serve as the start of an ongoing series to discuss issues related to climate engineering, in the broader context of climate change.

CEC17 comes at a critical point in time, following on the 2015 Paris Agreement. In the Paris Agreement, as is well known, governments agreed to restrict the global mean temperature rise to well below 2 degrees Celsius and to pursue efforts to limit it to 1.5 degrees. As far as we know, it would still be physically possible to stay within these limits by drastically reducing the emissions of greenhouse gases, especially CO₂, as well as other climate-forcing pollutants, like the black carbon in soot. However, this would require reducing emissions to near-zero within the next couple of decades. This seems highly unlikely given societal and political inertia, and the resulting current emissions trajectories.



Recognizing this has led to often controversial discussions about two additional possible approaches to limiting the effects of climate change: first, actively removing CO₂ from the atmosphere, and second, directly modifying radiative forcing by either causing more solar radiation to be reflected back to space, or letting more terrestrial radiation escape through the atmosphere, in order to cool the Earth's surface. Together these are often called "climate engineering" techniques. And according to what we have learned from the IPCC assessments, though not impossible, it would be very difficult to achieve the Paris Agreement goal of even staying below 2°C global warming without resorting to at least one – if not both – of these forms of climate engineering.

In light of the uncertainties, potentials, risks and global impacts of climate engineering, especially in the broader context of the uncertainties and risks of climate change itself, we are in need of an open, transparent and critical engagement with questions surrounding research, regulation, and the arguments in favour of and against large-scale technical interventions in the climate system. The debate needs to involve different scientific disciplines as well as perspectives from politics and civil society. And this is where the CEC17 steps in.

CEC17 is intended to serve as an opportunity for a diverse audience of policy-makers, civil society organizations, and members of the public to critically engage with current research and the broader discussions that surround it. Further, it is providing a forum to not only present and discuss research results but also review the state of discussions around climate engineering, and scope key research questions and challenges for academia and society. We are also striving to provide a forum for capitalizing on innovative session formats to address the complexity of issues around the topic of climate engineering, while allowing for open discussions on equal footing, as well as providing a platform for networking, collaboration and exchange across disciplines, sectors (particularly academia, policy and civil society), countries, continents, and generations. Over the course of four days, we will have a total of 32 sessions and 5 plenary discussions, as well as a public panel discussion in cooperation with the House of World Cultures. Going beyond the CEC14, this time we have encouraged session conveners to choose interactive formats for their sessions, and we have continued and expanded our efforts to gather representatives from a wide variety of groups, sectors and communities.



We have also focused on including more participants from developing and newly industrialized countries, for which we have partnered with the Solar Radiation Management Governance Initiative, which is holding a meeting straddling the CEC17 this week, bringing in many participants from the global south, in particular from Asia. We have many prominent session conveners, panel discussion participants and speakers at the conference, some of the leading voices in the field, as well as the presence of active NGOs, in part thanks to the Heinrich Böll Foundation, and active intergovernmental initiatives, in part thanks to the Carnegie Climate Geoengineering Governance Initiative (C2G2).

With that, we will now move to the highlights of this opening session: three talks giving us a broad set of perspectives on the topic of Climate Engineering. After that, we'd like to invite you to a reception in the foyer and upper galleries.

And now it's my pleasure to introduce our first speaker, Prof. Michael Taylor of the University of the West Indies. Prof Taylor, who is also participating in the SRMGI Global Forum this week, teaches in the Department of Physics at the University of the West Indies, Mona (Jamaica). He also served as Head of the Department of Physics from 2009-2016 and is currently the Deputy Dean for the Faculty of Science and Technology. His research interest is in the area of Caribbean climate science, including climate variability and change. Professor Taylor has been the director of the Climate Studies Group, Mona (CSGM), since 2007. The CSGM plays a leading role in coordinating and producing climate research related to the Caribbean region. Their work has been incorporated into several reports for CARICOM governments including for reporting purposes to the UNFCCC. Professor Taylor is well published, and serves on a number of national and regional climate related boards and panels. Today, Prof Taylor will give a talk on "*Climate Change and the Caribbean: Important Take Away messages*".

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Next, I'm pleased to introduce our second speaker of this panel, Oliver Morton from the Economist. Oliver Morton writes about scientific and technological change and their effects. He concentrates particularly on the understanding and imagining of planetary processes. He is a senior editor at The Economist, responsible for the magazine's briefings and essays. He was previously Chief News and Features Editor at Nature and editor of Wired UK, and has contributed to a wide range of other publications. He writes on subjects from quantum physics to synthetic biology to moviemaking; his articles have been anthologized and won awards. He is the author



of three books: *Mapping Mars: Science, Imagination and the Birth of a World* (2002), which was shortlisted for the Guardian First Book Award; *Eating the Sun: How Plants Power the Planet* (2007), a book of the year in *The Spectator* and the *Times Literary Supplement*; and *The Planet Remade: How Geoengineering Could Change the World* (2015), longlisted for the Samuel Johnson Prize and shortlisted for the Royal Society Book Prize. In *The Sunday Times* Bryan Appleyard described it as “ambitious, enthralling and slightly strange”. He is an honorary professor in Department of Science, Technology, Engineering and Public Policy at UCL and has a degree in the history and philosophy of science from Cambridge University. The Asteroid 10716 Olivermorton is named in his honour. He will give a talk on “*Re-engineering and re-imagining the Earth*”.

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Our last speaker today is Dr. Michelle Gyles-McDonnough. Michelle Gyles-McDonnough (Jamaica) is the Director, Sustainable Development Unit, Executive Office of the Secretary-General at the United Nations, New York. Throughout her career, Ms. Gyles-McDonnough has practiced privately as a lawyer; served as advisor to the Secretary-General of the Organization of American States and has deep development experience within UNDP, including as Chief of UNDP's sub-regional facility for the Caribbean, UN Resident Coordinator for Barbados and the OECS, Resident Coordinator for Malaysia, Singapore and Brunei Darussalam and was recently appointed as Deputy Assistant Administrator and Deputy Regional Director Designate for Asia and the Pacific. She is currently Director of the Sustainable Development Unit in the Executive office of the Secretary-General. Ms. Gyles-McDonnough holds a law degree from Columbia University School of Law, with honours in international and foreign law, a Master in Public Administration from the John F. Kennedy School of Government at Harvard University, and also a Diploma in Executive Education from The Wharton School at the University of Pennsylvania. She received her undergraduate degree at Bryn Mawr College in Pennsylvania. Dr. Gyles-McDonnough will speak about the “*International Context for the Geoengineering Debate*”

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And finally, a great thanks to all our speakers for their inspiring/informative/thought provoking talks. I would also like to thank all those who have contributed to putting this program together, and who will contribute to the many sessions this week, and I would like to wish you all successful as well as highly informative and stimulating critical discussions. We will close the day with a reception in the foyer and upper galleries – a great opportunity to get started with the critical global discussions of the CEC17!