#### **Event Summary**

### Sleeping Financial Giants Public Symposium

5 March, 2019

15:30-17:30

Venue: Gallery 1, Ito International Research Center, University of Tokyo

On March 5<sup>th</sup>, 2019 at the public symposium that was held at The University of Tokyo, about 50 participants joined from various backgrounds such as academia, civil society, and the media. Participants were there to hear talks about climate science and how finance factors into the 'sleeping giants' – Earth System's critical ecosystems that have tipping points.

#### What is the Sleeping Financial Giants Initiative?

The Royal Swedish Academy\* and The Stockholm Resilience Center (Stockholm University), together with Future Earth, aim to build a scientific research base and dialogue platform for the sustainability of the Earth by encouraging cooperation between the Earth System and finance sector. Recognizing the opportunity of Professors Will Steffen and others to come to Japan, we held lectures and workshops for the first time in Asia, starting dialogue and collaboration between the academic and finance sectors.

\* The Global Economic Dynamics and the Biosphere programme (GEDB) at the Royal Swedish Academy of Sciences

Sponsors: Vinnova, Futura Foundation, the Erling-Persson Family Foundation, and Mistra Co-organizers: University of Tokyo Integrated Research System for Sustainability Science (IR3S), National Institute for Environmental Studies (NIES)

#### **Opening Remarks**

#### Fumiko Kasuga, Global Hub Director, Tokyo Hub, Future Earth

Dr. Kasuga explained the purpose of the Sleeping Financial Giants initiative, as a platform for dialogue between the financial sector and academia on Earth System sciences and towards a sustainable society. She introduced that there have been similar events in London, New York, and Stockholm and this occasion in Tokyo, is the fourth event and first in Asia.

#### Presentations

Seita Emori, Deputy Director, Center for Global Environment Research, National Institute for Environmental Studies

"Why we talk about Global Sustainability – a climate scientist's perspective"

Dr. Emori started the symposium with a talk focusing on the Paris climate agreement and achieving the 1.5 degrees target. He started the talk showing the youth climate strikes and how they are the next generation stakeholders, which are important to consider when thinking about Earth stewardship. He then showed how there is still a gap

between current pledges to the Paris agreement by member countries and what is necessary to achieve a 2 degree or 1.5 degree goal. He also emphasized the difference in impact between 1.5 and 2 degrees warming – although it is only a 0.5 degree difference, effects are to be much worse in a 2 degrees warming world. In order to achieve a 1.5 degree target, anthropogenic emissions must be at zero by 2050. Dr. Emori concluded with the fact that achieving a less than 1.5 degree world is an opportunity to accelerate measures towards a sustainable society.

## Will Steffen, Emeritus Prof., Australian National University "The Anthropocene: Where on Earth are We Going?"

Prof. Steffen's talk highlighted the fact that we have entered the Anthropocene epoch – a geological epoch that is dominated by human influence on the Earth system. He started the talk with data of how extreme weather is increasing, such as the number and intensity of tropical cyclones. As evidence that we may be in the Anthropocene, he showed the abnormal rates of temperature increase and current mass extinctions which have extinction rates tens to hundreds times greater than natural rates. He also mentioned the social inequalities in the Anthropocene, where inequalities are widening, especially in English speaking countries like the United States. He then highlighted the tipping elements in the Earth System such as melting permafrost which could have a positive feedback loop for further melting of itself and releasing greenhouse gases into the atmosphere. He mentioned the possibility of reaching an almost uninhabitable "hothouse earth" state if we continue our current emissions of carbon dioxide, and how we must fundamentally change our economic system to be equitable and regenerative by design.

# Victor Galaz, Deputy Director, Associate Prof., Stockholm Resilience Center, "Big Money, Big Change? How Big Finance Shapes the Earth system"

Dr. Galaz detailed in his talk how big finance around the world shapes the Earth System with its investments. He introduced how there is a strong linkage between the finance sector (by providing financial resources around the world) and deforestation leading to climate change. The "sleeping giants" that are critical ecosystems, namely the Amazon rainforest in South-America and Boreal forests in Canada and Russia play a huge role in sustaining our earth's system. These ecosystems are in danger of tipping toward collapse. Dr. Galaz showed that in the Amazon, primarily soy and cattle grazing – which is funded through big finance - has been causing deforestation. Similarly, the Boreal forests are closing in to their tipping points because of the wood, pulp, paper sectors, having the same effects in their respected areas. There are several financial giants that have major influence in these "tipping elements" through their shareholdings. Dr. Galaz continued that there are several more complexities to these situations by explaining that some of these companies set up subsidiaries in tax havens, which makes it more difficult to implement solutions in a rapid way.

#### Q&A

Q (to Dr. Galaz): Were there any connections with the role of administrations for example the rural caucus is working towards less transparency and more subsidies.

A: No, but there are some very intriguing and difficult political dimensions that have not been part of the research but are very important. For example, some of these companies appear in the Panama papers.

Q (to Dr. Galaz): Have you done a similar analysis with development financiers such as multilateral development banks, or bilateral agencies?

A: Short answer is no but we are planning to look into it. We are downscaling at the local level and we are expanding, so we will look into a different tipping element and then other types of financial data.

Q (to Dr. Galaz): Is the rest of the financial sector helpless, if we cannot make the few financial "giants" change?

A: Banks have customers. Pressure from regular customers on financial giants (banks and pension funds) are being seen in Sweden and can exert a large pressure.

Q (to Dr. Emori): Despite shared understanding of climate change, action has been slow. Why do you think is the reason for this, from an academic standpoint?

A: Depends on how you consider it has been "slow"; some companies have been showing ambitious goals, there are increase in quantity and affordability in renewables, etc. but this may be happening in a realm outside of average interest. In Japan, lay people seem to have been interested around 2008, but after the financial crisis, COP 15 failure in 2009, then the Great East Japan Earthquake in 2011, we had no room to consider climate change and personally, it seems we have not regained interest since then.