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Plenary II: The Okayama Session on SDGs Towards further multi-stakeholder partnerships between industry and academia for the SDGs 5 December, 2017, Okayama, Japan

Facilitator: Prof. Hiroshi Kanzaki (Executive Vice President for International Affairs, Okayama University)

Presenters:

- Prof. Hirofumi Makino (President, Okayama University)
- Mr. Masao Seki (Chair of the revision drafting group, Keidanren Charter of Corporate Behavior, Senior Adviser on CSR, SOMPO JAPAN NIPPONKOA INSURANCE INC.)
- Mr. Hisashi Matsuda (Chairperson, Okayama Association of Corporate Executives)
- Prof. & Chair. Yasutomo Nasu (Dean of Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)
- Prof. Eiji Tomita (Dean of Faculty of Engineering, Okayama University)
- Assoc Prof. Yuta Nishina (Research Core for Interdisciplinary Sciences, Okayama University)

Prof. Hiroshi Kanzaki opened the session, stating that it would focus on Okayama and academia-business relationships within Okayama. He also noted it would cover the approach taken by universities in Okayama.

This session began with a keynote speech from **Prof. Hirofumi Makino**, where he spoke about the heritage of Okayama, of its inherited spirit for challenging social issues and of its mission to create and foster higher knowledge and wisdom, in order to build up a new paradigm for a sustainable world. Prof. Makino went on to discuss the achievements of Okayama University and Okayama city towards the Sustainable Development Goals (SDGs). His vision for the university is "going beyond, toward a fruitful academic capital". In 2007 Okayama University became Asia's first UNESCO Chair on Research and Education in Asia, whilst in 2017 it received the UNESCO Learning City Award. Since taking office in April of 2017, Prof. Makino has launched a vision to align research and social actions with the SDGs. This includes providing chances for students to have hands-on experiences such as fishing or forestry experiences, and discussion tables for students to discuss the importance of the SDGs. Initiatives have been rolled out such as translating the 'Getting started with the SDGs in universities' guide to Japanese. In May, Prof. Makino visited the Okayama Association of

Corporate Executives, where he spoke about how valuable academia and industry collaborations are, and how new value can be created by partnering with stakeholders, a direction he intends to continue with in the future.

Mr. Masao Seki spoke about the business sector's initiatives to deliver on the SDGs. He talked about the growing recognition and commitments to the SDGs, noting that the SDGs are drawing a lot of attention in the private sector, with a survey conducted showing 30% are already engaged, showing high interest among private companies. They are currently looking at the initiatives which are being undertaken in the private sector, such as mapping businesses to the framework of the SDGs, and the integration of the SDGs into business plans. Mr. Seki also spoke about the recent revision to the Charter for Corporate Behaviour (CCB) by Keidanren and the Council for Better Corporate Citizenship, prepared in both Japanese and English, which includes 10 principles and is the first revision in seven years, with the SDGs playing a core part in the revision. The main philosophy within the Charter has changed, and is one of a more positive and proactive attitude. Furthermore, a new article talks about respecting human rights, now one of the major pillars of the chapter and increasingly becoming a major topic among businesses. Mr. Seki raised the point of how to leverage the next stage of a super smart society – Society 5.0. He noted that by realising such a society, economic growth would become consistent with solutions to global and local challenges and hence aid in delivering on the SDGs.

Mr. Hisashi Matsuda began his speech mentioning the changes that have taken place and the risks society faces in the years ahead including the move towards vehicle-oriented societies, thereby undermining public transportation, as well as the risks of devastating natural disasters which are likely to occur on larger scales. In the business industry they face the task of delivering on the SDGs but at the same time, also making a profit. However, similar to the mindset of Okayama University, the SDGs need to be the backbone of any decisions. Using an example in northern Okayama where fish have been cultivated and cultured for caviar for over 20 years, Mr. Matsuda noted that new industries can always be created whilst maintaining sustainable management. Going forward, technologies need to take into account the enablement of sustainable industries in order to co-exist with nature.

Prof. Eiji Tomita introduced the first of three Okayama University initiatives: a study on 'Combustion in a Gas Engine for Power Generation Fuelled with Biomass'. He spoke about Maniwa, a city within Okayama prefecture known for biomass throughout Japan and stated how forestry biomass needs to be leveraged for developing industries. Prof. Tomita explained how biomass gas engines work, including the combustion process and the resulting exhaust emissions. He highlighted the benefits of biomass energy including its

ability to be used for many applications and how gas engines can be used to optimise the supply when other energy sources fail.

Dr. Yasutomo Nasu then spoke about the challenges from medical fields, using the example of the approach taken in Okayama University Hospital. Dr. Nasu provided an overview of the hospital's history, noting its place as one of the top five hospitals in the university rankings, in terms of clinical medicines. He spoke about its involvement in many national government projects and that it is the only university engaged in government-sponsored projects in this area. In terms of research, work is being done on gene therapy for lung cancer, and they have also founded Momotaro-Gene Inc, a venture company, supported by local businesses in terms of funding, with the aim of trying to spread this gene therapy to the rest of the world. Other projects include artificial retinas to restore vision and a biobank founded in April 2015, networking with four universities to form a Clinical Biobank Study Group.

Assoc Prof. Yuta Nishina presented on how science and chemistry can contribute to the SDGs, including how new materials could be developed to be utilised for Sustainable Development (SD) and for the SDGs. He focused on nanomaterials and nanotechnology, explaining that when elements are broken down, nanoproducts take advantage of the changing characteristics – as a result many products can be produced from granite, graphite or timber for example. This presents an opportunity to develop materials by using natural resources.