Program *(tentative)*

as of September 14, 2015

October 6th, 2015

20:00 – 21:30 **Networking Plaza**

October 7th, 2015

9:00 - 9:30 **Opening Session**

【Opening Address】 ※TBD

9:30 – 11:50 **Plenary Session (Part 1) - Principal Issues in the Future GHG Reduction -**

Philippe Benoit	Director, Directorate of Sustainable Energy Policy and Technology, IEA
Héla Cheikhrouhou	Executive Director of the Green Climate Fund
Leon Clarke	Senior Scientist, Pacific Northwest National Laboratory (PNNL)
Richard Lester	Japan Steel Industry Professor and Head of the Department of Nuclear Science and Engineering, Massachusetts Institute of Technology
Hiroaki Nakanishi	Chairman & CEO , Hitachi, Ltd., Vice Chairman of KEIDANREN (Japan Business Federation)
Laurence Tubiana	Ambassador for Climate Change and Special Representative for the 2015 Paris Climate Conference Ministry of Foreign Affairs and International Development of France

*Requesting participation of other ministers from developed and developing countries as well as business and academic leaders

11:50 – 13:10 **Networking Lunch**

13:10 – 15:45 **Plenary Session (Part 2)**

- Future Perspectives from Innovators, Visionaries and Global Leaders -

Ed Abbo	President & Chief Technology Officer, C3 Energy
Anatoly B. Chubais	Chief Executive Officer, RUSNANO
Amory B. Lovins	Cofounder and Chief Scientist, Rocky Mountain Institute
Takehiko Nakao	President of the Asian Development Bank
Sumant Sinha	Founder, Chairman & CEO, ReNew Power Ventures Pvt. Ltd.
Vaclav Smil	Distinguished Professor Emeritus, University of Manitoba
Muhammad Yunus	Chairman, Yunus Centre

*Requesting participation of other innovators, visionaries and global leaders

15:45 – 16:15 **Networking Coffee Break**

16:15 – 18:45 Concurrent Sessions (Part 1)

Geothermal Power

[Session overview]
Geothermal power is one of the most stable sources of renewable energy with significant potential for further development. In this session, the focus will be on policies with a remarkably long term outlook, such as 2030 and 2050 (e.g. Kenya, Switzerland). Secondly, technological development, especially new challenges aiming at supercritical fluids utilization will also be discussed.

Roland N. Horne【Chair】	Thomas Davies Barrow Professor of Earth Sciences, Stanford University
Keith Evans	Lecturer, Department of Earth Sciences, ETH Zürich
Hiroshi Asanuma	Leader, Geothermal Energy Team, National Institute of Advanced Industrial Science and Technology (AIST)
Guðmundur Friðleifsson	Chief Geologist, HS Orka hf
Other Speakers	※TBD

Hydrogen Energy

[Session overview]
Hydrogen is expected to become one of the major fuel resources in the future, as it produces no pollutants or greenhouse gases when used. It can also enhance energy security by using domestically available renewable resources for production. In this session, a policy roadmap for realizing hydrogen based society will be presented and discussed. Then, the session will look into economic and technological prerequisites for realizing this vision. Subsequently, the current situation and prospects of every stage of the value chain, including production, transportation and application, will be discussed.

Kenichiro Ota【Chair】	Professor, Green Hydrogen Research Center, Yokohama National University
Katie Randolph	Technology Manager of the Fuel Cell Technologies Office, U.S. Department of Energy
Takeo Kikkawa	Professor, Graduate School of Innovation Studies, Tokyo University of Science
Francois Venet	Group Vice President, Asia Pacific, Air Liquide
George P. Hansen	Director Communications, General Motors Japan
Kenji Kitahashi	Mayor, Kitakyushu City, Fukuoka, Japan
Hanno Butsch	Head of International Cooperation, NOW GmbH

Nuclear Energy

[Session overview]

Nuclear power can play a major role as carbon-free base load power source to serve the growing electricity demand of the world. In this session, we will discuss the deployment of nuclear power plants in emerging and developing economies, strategies to make nuclear power more acceptable for society, and the prospect of R&D, along with how we can overcome challenges such as safety, nuclear waste handling, and non-proliferation of nuclear arms.

Richard Lester【Chair】	Japan Steel Industry Professor and Head of the Department of Nuclear Science and Engineering, Massachusetts Institute of Technology
William D. Magwood, Ⅳ	Director-General, OECD Nuclear Energy Agency (NEA)
Christophe Béhar	Director, Nuclear Energy Division, French Alternative Energies and Atomic Energy Commission (CEA)
Nobuo Tanaka	President, The Sasakawa Peace Foundation; Former Executive Director, International Energy Agency (IEA)
John Hopkins	Chairman and Chief Executive Officer, NuScale Power, LLC
Paul T. Dickman	Senior Policy Fellow, Argonne National Laboratory
Other Speakers	※TBD

Cement

[Session overview]

Sectoral cooperation in the cement sector has progressed through WBCSD CSI activities so far. In this session, a stock taking of the existing outcomes of the sectoral cooperation and discussions of future activities in the sector will take place. It will particularly cover innovative technologies (e.g. CCS) and the importance of social infrastructure (e.g. waste treatment).

Vincent Mages【Chair】	Co-Chair of WBCSD CSI TF1; Vice President, Climate Change Initiatives, Lafarge Holcim
Philippe Fonta	Managing Director, Cement Sustainability Initiative (CSI) & Tires Industry Project (TIP), World Business Council for Sustainable Development (WBCSD)
S.K. Handoo	Advisor (Technical), Cement Manufacturers' Association (CMA)
Diane Thomas	Professor, Chemical and Biochemical Engineering Department, Faculty of Engineering, University of Mons
Eric Masanet	Head, Energy Demand Technology Unit, International Energy Agency (IEA)
Kenji Ogawa	Director, Senior Executive Officer, Taiheiyo Cement Corporation

Iron and Steel

[Session overview]
Iron and steel industry is one of the most energy-intensive industries and therefore holds a large greenhouse gas reduction potential. In this session, past and current energy conservation and CO2 reduction measures of this industry will be shared, and based on this, possible actions for this industry and necessary support and policy measures to promote further CO2 reduction from 2020 will be discussed. In addition, the iron and steel industries' possible global warming prevention contribution in other industries will be pointed out.

Jun Arima【Chair】	Professor, Graduate School of Public Policy, The University of Tokyo
Edwin Basson	Director General, World Steel Association
Hiroshi Tomono	Senior Advisor, Nippon Steel & Sumitomo Metal Corporation
Keigo Akimoto	Group Leader, Systems Analysis Group, Research Institute of Innovative Technology for the Earth (RITE)
Vaclav Smil	Distinguished Professor Emeritus, University of Manitoba
Other Speakers	※TBD

Energy Systems

[Session overview]
Energy supply and demand should be considered as a system composed of element technologies, and also as a societal subsystem related strongly with national security, economic development and environmental sustainability. In this session, recent topics including changes in the global energy market, possible emergence of new technologies and the relationship between the energy system and the ecosystem will be discussed. Furthermore, important long-term issues for the energy system will also be considered.

Kenji Yamaji【Chair】	Director-General, Research Institute of Innovative Technology for the Earth (RITE)
Christopher Gunner	Country Chairman, Shell Japan
Shozo Kaneko	Professor, Institute of Industrial Science, The University of Tokyo
Hiroshi Esaki	Professor, Graduate School of Information Science and Technology, The University of Tokyo
Afshin Afshari	Professor of Practice & Program Lead, Engineering Systems & Management, Masdar Institute
Michael Obersteiner	Program Director, Ecosystems Services and Management, International Institute for Applied Systems Analysis (IIASA)

Technology Transfer to Developing Countries and Investment Promotion

[Session overview]

Technology transfer from developed countries to developing countries plays an essential role in mitigating climate change. In the session, the international framework to promote technology transfer and private investment (both at UN and bilateral levels) will first be discussed. Secondly, discussions about enabling environment, such as policy and human capacity development, and necessary elements that technologies should fulfill to take root in recipient countries will take place.

Ismail Serageldin【Chair】	Director, Library of Alexandria
Ogunlade R. Davidson	Dean of Post－Graduate Studies, University of Sierra Leone
Jukka Uosukainen	Director, Climate Technology Centre and Network (CTCN)
Dang Huy Dong	Vice Minister, Ministry of Planning and Investment of Viet Nam
Michał Kleiber	Vice President, European Academy of Sciences and Arts
Jon Moore	CEO, Bloomberg New Energy Finance

19:00 – 21:00 **Official Dinner**

October 8th, 2015

9:00 – 11:30 **Concurrent Sessions (Part 2)**

Artificial Photosynthesis

[Session overview]
Artificial photosynthesis is a promising method for creating sustainable fuel and chemicals. Since it is still in a research stage, this session will firstly focus on sharing the current status of research projects in three of the leading in this area: the USA, Korea, and Japan. Also, effectiveness and competitiveness compared with other technologies will be discussed. Finally, based on the abovementioned discussion, a plausible future image of practical use of artificial photosynthesis will be shared.

Haruo Inoue【Chair】	Specially Appointed Professor, Department of Applied Chemistry, Tokyo Metropolitan University
Daniel G. Nocera	Professor, Department of Chemistry and Chemical Biology, Havard University
Kyung Byung Yoon	Director, Korea Center for Artificial Photosynthesis
Kazunari Domen	Professor, Department of Chemical System Engineering, The University of Tokyo
Takeshi Morikawa	Principal Researcher, Toyota Central R&D Labs., Inc.
Toru Setoyama	Executive Officer Fellow, Mitsubishi Chemical Corporation

Wind Power

[Session overview]
Wind power has become a global movement and is viewed as an important future source of energy supply. In this session, various wind power related technologies, such as onshore, offshore and floating wind turbines, grid integration will be discussed. Furthermore, different technical and social situations which can promote the use of wind energy will be brought into light.

Preben Maegaard【Chair】	Executive Director, Nordic Folkecenter for Renewable Energy
Jin Kato	Co-CEO, MHI Vestas Offshore Wind A/S
Takeshi Ishihara	Professor, Department of Civil Engineering, School of Engineering, The University of Tokyo
Raghavan Venkatesh	National Council Member, Indian Wind Power Association (IWPA)
Volker Thomsen	Vice President and Treasurer, World Wind Energy Association Bonn Germany

Electricity Storage

[Session overview]
In recent years, the demand for Electricity Storage Systems (ESS) deployment in the power system is increasing, due to large-scale introduction of variable generation. In this session, deployment strategies and technology perspectives of ESS, specifically, ESS deployment strategy determined by locality and technology application will be covered, with presentations on region specific policies and technology development perspectives.

Itaru Yasui【Chair】	Honorary Advisor, National Institute of Technology and Evaluation(NITE); Emeritus Professor, The University of Tokyo
Gabriel Petlin	Supervisor, California Public Utilities Commission
Peter Eckerle	Managing Director, StoREgio
Ahmed Ali	Director General, Ministry of Environment and Energy, Republic of Maldives
Cecilia Tam	Deputy Vice President, Asia Pacific Energy Research Centre (APERC)
Zempachi Ogumi	Professor Emeritus, Kyoto University

Smart Grids

[Session overview]
The development of the smart grid is seen as one important component in integrating large amounts of renewable energy into the electricity grid. In this session, the latest developments on smart grid technologies will be discussed together with topics such as how the electricity market should be regulated to facilitate the introduction of renewable energy, and how customers should be engaged regarding electricity use.

Paddy Turnbull【Chair】	Chairman, Global Smart Grid Federation
Ruud Kempener	Technology roadmap analyst, International Renewable Energy Agency (IRENA)
Kazuhiko Ogimoto	Project Professor, Collaborative Research Center for Energy Engineering, Institute of Industrial Science, The University of Tokyo
B.N. Sharma	Additional Secretary, Ministry of Power, India
Atul Mahajan	President and CEO, Oshawa Power and Utilities Corporation (OPUC)
Other Speakers	※TBD

Zero Energy Building

[Session overview]
The buildings sector is the largest energy-consuming sectors, accounting for over one-third of final energy consumption globally, and as such it is a huge source of CO2 emissions. Therefore, efforts to promote Zero Energy Buildings (ZEB)/Positive Energy Buildings (PEB) have been accelerating worldwide. In this session, technological innovation required for the realization of ZEB/PEB will be discussed. Following this, barriers that prevent the diffusion of ZEB/PEB, and the possible countermeasure policies will be highlighted.

Shuzo Murakami【Chair】	President, Institute for Building Environment and Energy Conservation (IBEC)
Vincent Cheng	Director, Building Sustainability Group, Arup
Yoichi Miyamoto	President, Shimizu Corporation
Amory B. Lovins	Cofounder and Chief Scientist, Rocky Mountain Institute
Jane Henley	Senior Advisor, U.S. Green Building Council

Low-Carbon Mobility

[Session overview]
According to the IPCC, the transport sector represents about 14% of global GHG emissions. Whereas renewable energy is increasing in electricity generation, mobility is still largely dependent on fossil fuels. In this session, we will look at the outlook for light automobiles in particular, and how to get this sector to move towards sustainable alternative fuels. Furthermore, the session will investigate the state of innovation in technology of both new vehicles (EV* and FCV**) and conventional vehicles.
*Electric Vehicle, **Fuel Cell Vehicle

Yasuhiro Daisho【Chair】	Professor, Graduate School of Environment and Energy Engineering, Waseda University
Michael Walsh	Special Adviser, The International Council on Clean Transprot (ICCT)
Nobuhiko Koga	General Manager, Energy Affairs Department, Toyota Motor Corporation
Lutz Rothhardt	Director, Development Japan, BMW Group Japan
Richard Parker	Director of Research and Technology, Rolls-Royce

Business Engagement in Climate Change

[Session overview]
Business engagement is essential to tackle climate change effectively, since businesses have expertise on both low-carbon technologies and markets. This session highlights several themes associated with the role of businesses. The themes are as follows: communication on low-carbon technologies and policies between the government and business sector, channels to engage in the UN framework, lessons from industries' proactive action plans, innovation and technology dissemination to achieve substantial GHG reduction, etc.

Taishi Sugiyama【Chair】	Senior Researcher, Central Research Institute of Electric Power Industry (CRIEPI)
Soichiro Sakuma	Chairman, Subcommittee on Global Environment, Committee on Environment and Safety, KEIDANREN (Japan Business Federation)
Emmanuel Guerin	Special Advisor to the France Climate Change Ambassador and Government Special Representative for COP21
Peter M. Robinson	President and CEO, United States Council for International Business (USCIB)
Peter Bakker	President & CEO, World Business Council for Sustainable Development (WBCSD)
Brian Flannery	Center Fellow, Resources for the Future
Hiroyuki Tezuka	Chair of Global Environment Strategy WG, Committee on Environment and Safety, KEIDANREN (Japan Business Federation)
David Victor	Professor of International Relations, School of Global Policy and Strategy, University of California, San Diego (UCSD)

Role of Public Funding for Research, Development and Demonstration

[Session overview]
Funding agencies have the ability to induce technology innovation through financial support. However, there are many different functions a funding agency can provide, and it is important to find effective methods for achieving innovation. In this session, methods for effectively achieving innovation in the energy and environment sector will be discussed by funding agencies from different countries.

Hiroshi Kuniyoshi【Chair】	Executive Director, New Energy and Industrial Technology Development Organization (NEDO)
Pun-Arj Chairatana	Director, National Innovation Agency (NIA), Ministry of Science and Technology, Thailand
Shane Kosinski	ARPA-E Deputy Director for Operations, U.S. Department of Energy
John Loughhead	Chief Scientific Advisor, Department of Energy & Climate Change (DECC), UK
François Moisan	Executive Director, French Agency for Environment and Energy Management (ADEME)
Lean Weng Yeoh	Director, National Research Foundation, Singapore
Other Speakers	※TBD

11:30 – 12:45 Networking Lunch

12:45 – 15:15 Concurrent Sessions (Part 3)

Advanced Liquid Biofuels

[Session overview]
In order to reduce CO2 emissions from the transport sector, advanced liquid biofuels using lignocellulosic biomass, non-food crops or waste need to reach the market. This session will focus on opportunities and challenges in advanced liquid biofuels. Key issues, such as trends of the market and technologies, experiences and challenges of commercialization (i.e. innovative technologies, emerging pathways, and business models), enhancing innovation processes and partnerships for business development will be discussed.

John Holladay【Chair】	Manager, Biomass Sector, Energy & Environment Directorate, Pacific Northwest National Laboratory (PNNL)
Dolf Gielen	Director of the Innovation and Technology Center, International Renewable Energy Agency (IRENA)
Masayuki Inui	Acting Group Leader, Research Institute of Innovative Technology for the Earth (RITE)
Andreas C. Kramvis	Vice Chairman, Honeywell
Bas Melssen	Head of Biomass Conversion Business Development, Asia Pacific, Novozymes
Ken C. Lai	Vice President, Asia Pacific Operation, LanzaTech
Yusfandri Gona	Head of Airport Authority Region IV, Directorate General of Civil Aviation, Chairman of Aviation Biofuel and Renewable Energy Task Force, Republic of Indonesia

Solar Energy

[Session overview]
In order to promote further deployment of solar energy, there are still issues that need to be addressed. One such issue is the intermittency of the power output, where energy storage can be considered as one possible solution to solve this. In this session, among the many different ways of harvesting solar power, focus will be on roof-top PVs. A roadmap for further deployment of roof top PVs with batteries will be presented and discussed.

Speakers	※TBD

CCS

[Session overview]

CCS is expected to be one of the key technologies to mitigate climate change, and in increasingly attracting attention as the Boundary Dam Project, the world's first large-scale CCS project in the power sector, started in 2014. In this session, the current situation and future prospects of CCS projects will be reviewed, and challenges in CCS deployment (e.g. cost reduction, safety ensuring and expansion of demonstration projects) will be discussed from technological and social perspectives.

Sally M. Benson【Chair】	Director, Precourt Institute for Energy; Professor, School of Earth, Energy & Environment Sciences, Stanford University
Leon Clarke	Senior Research Economis, Pacific Northwest National Laboratory (PNNL)
John Gale	General Manager, IEA Greenhouse Gas R&D Programme (IEAGHG)
Shinichi Nakao	Group Leader, Chemical Resarch Group, Research Institute of Innovative Technology for the Earth (RITE)
Mike Monea	President, Carbon Capture and Storage Initiatives, SaskPower

International Framework for Complementing UN

[Session overview]

While the United Nations Framework Convention on Climate Change is expected to play a central role in the field, the regime is facing numerous challenges towards achieving its ultimate goal. In this session the following will be discussed: how to overcome those challenges, and how partnerships and collaboration among forums and regimes beyond the UNFCCC can complement the work of the UNFCCC.

Robert N. Stavins【Chair】	The Chairman of the Environment and Natural Resources Faculty Group at the John F. Kennedy School of Government, Harvard University
Emmanuel Guerin	Special Advisor to the France Climate Change Ambassador and Government Special Representative for COP21
Eija-Riitta Korhola	Former member of European Parliament; Adviser in European Affair
Maria Mendiluce	Director, Climate & Energy, World Business Council for Sustainable Development (WBCSD)
Masakazu Toyoda	Chairman & CEO, The Institute of Energy Economics, Japan (IEEJ)
Mitsutsune Yamaguchi	Special Advisor, Research Institute of Innovative Technology for the Earth (RITE)
Other Speakers	※TBD

15:15 – 15:45 **Networking Coffee Break**

15:45 – 18:15 **Plenary Session (Part 3) - Future Strategy for Climate Change -**

Peter Bakker	President & CEO, World Business Council for Sustainable Development (WBCSD)
John Loughhead	Chief Scientific Advisor, UK Department of Energy and Climate Change
Patrick Pouyanné	Chief Executive Officer and President of the Executive Committee, Total
Robert N. Stavins	The Chairman of the Environment and Natural Resources Faculty Group at the John F. Kennedy School of Government, Harvard University
Win Tun	Union Minister for Environmental Conservation and Forestry, Myanmar
David Victor	Professor of International Relations, School of Global Policy and Strategy, University of California, San Diego (UCSD)

*Requesting participation of other ministers from developed and developing countries as well as business and academic leaders

18:15 – 18:45 **Closing Session**

19:00 – 21:00 **Farewell Dinner**