

ICEF 2023 Statement from the Steering Committee

October 5, 2023

I. ICEF's 10th Anniversary



The 2023 Innovation for Cool Earth Forum or **ICEF celebrates its 10th anniversary**. Taking this memorable opportunity, **the Steering Committee is issuing the following special statement**, looking back at the journey travelled collectively in the past nine years and looking forward to the next decade.

1. What we have achieved since the ICEF inaugural annual meeting in 2014

- **In 2014, ICEF was initiated by Japan's late former Prime Minister Abe Shinzo**, who “proposed the establishment of a new international conference where the world’s leading policy makers, businesspersons, and researchers can meet and cooperate with each other to address climate change through innovation”. He participated in the first annual meeting, which, he stated, was “an unprecedented attempt, an energy- and environment-focused version of the World Economic Forum.”
- **One of the early achievements of ICEF was helping shape the Paris Agreement, by highlighting the importance of innovation in the negotiations that led to the success of COP21 in 2015.**

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- **In 2016, ICEF championed the ambitious goal of achieving “at least net-zero anthropogenic CO2 emissions.”** Since then, ICEF’s continuous advocacy for this goal has contributed to many countries, sub-national entities and companies pledging to achieve net-zero emissions around the mid-century.
- **Since its inception, ICEF’s consistent message has been that innovation, both technological and social, is essential to addressing climate change.** With this belief in mind, ICEF has elaborated on the roles of both the public and private sectors. **International cooperation** has also become a central theme.
- **Since 2017, ICEF’s strong creed has been that diversity, inclusiveness and justice must be enhanced to address the social and governance aspects** of climate change. At ICEF conferences, a balanced participation including youth and women has been realized and led to multi-faceted discussions.

1. What we have achieved since the ICEF inaugural annual meeting in 2014

- **ICEF has consistently adopted a technology-neutral approach to decarbonization**, including discussion of **renewables**, sustainable **nuclear power**, **carbon capture and storage**, and new **end-use technologies** across all sectors.
- **ICEF's contributions also include the development of innovation roadmaps** for clean energy technologies. Roadmaps on carbon utilization, direct air capture, carbon mineralization and low-carbon ammonia, among other topics, have helped inform a wide range of stakeholders about technologies that can help achieve net zero emissions. The term "biomass carbon removal and storage (BiCRS)" was first proposed in an ICEF roadmap and is now used widely.

1. What we have achieved since the ICEF inaugural annual meeting in 2014

- **ICEF has been a unique forum for a wide range of stakeholders to interact and advocate for innovation** in addressing climate change. In Japan, ICEF has attracted a series of other relevant international conferences on its margin, now culminating as the “Tokyo GX Week.”
- As ICEF has evolved **over the past nine years, the global situation surrounding climate change has significantly changed.** After the adoption of the Paris Agreement in 2015, the IPCC Special Report on 1.5° C in 2018 created further momentum for countries and regions to commit to net-zero around the mid-century. **We have witnessed massive deployment of new technologies,** most notably with renewables and electric vehicles. **However a huge gap remains between countries’ Nationally-Determined Contributions (NDCs) and the 1.5° C pathway.** Accelerated progress is needed to fill this gap.

2. What we need to advance the green transformation (GX)

- Under Japan's presidency **this year, the G7 leaders in Hiroshima agreed to “globally advance and promote a green transformation, working together to realize transformation of our economies”**. Obviously agreement among the G7 is not necessarily a global consensus, but green transformation or GX is our common challenge and shared opportunity.
- The **G7 leaders are “commit(ted) to holistically addressing energy security, the climate crisis, and geopolitical risks.”** They also said, **“While acknowledging various pathways according to each country's energy situation, industrial and social structures and geographical conditions, we highlight that these should lead to our common goal of net-zero by 2050.”** Such statements show the basic and shared directions for us to pursue GX.

2. What we need to advance the green transformation (GX)

- **To increase energy security and reduce the risk of adverse environmental impacts from the energy transition, it is imperative to expand and diversify supply chains for clean energy technologies and find substitutes for critical minerals.**
- **Efforts by developed economies alone are far from sufficient. Strengthening North-South international cooperation on topics including transfer of technologies and climate finance is essential.**

3. Towards the future

- **ICEF's fundamental role and mission remain unchanged. We remain firmly committed to promoting both technological and social innovation while strengthening diversity and inclusiveness.** In the years ahead, our efforts will be enhanced. As AR6 of IPCC pointed out, the choices and actions in this decade will have impacts now and for thousands of years to come. **More urgently than ever, we need to accelerate scaling of solutions** to tackle the climate crisis in this critical decade.
- **ICEF embraces new focal challenges**, including accelerating deployment of the solutions available today and continuing to innovate approaches for reducing greenhouse gas emissions and removing carbon dioxide from the atmosphere. In doing so, **ICEF underscores the importance of not only country perspectives but also sectoral thinking**, particularly on hard-to-abate sectors. **In addition, sustainable finance deserves stronger focus.** The financial community needs to be engaged more in scaling up deployment of clean energy technologies.

3. Towards the future

- **ICEF is dedicated to developing new, diverse and secure supply chains for critical materials, energy technologies and manufacturing.**
- **ICEF pays particular attention to increasing the scale and improving the effectiveness of North-South collaboration to help the Global South thrive in the energy transition and manage inevitable climate impacts.**
- **ICEF continues to empower the next generation of innovators to succeed in bringing new solutions to fruition by supporting those innovators to interact directly with global leaders, access resources and reach new markets.**

II. ICEF2023

Under the main theme of “Innovation for Just, Secure and Sustainable Global Green Transformation (GX)”, the ICEF’s tenth annual meeting (ICEF2023) was convened in a hybrid format on October 4 and 5, 2023 as an initiative of the "Tokyo GX Week" , when a series of 10 conferences discussed a wide range of energy and environmental issues. Around 1,700 people from governments, international organizations, industry, and academia participated in this event, representing 79 countries and regions. At the conclusion of ICEF2023, the Steering Committee summarizes a series of discussions as follows.

II . ICEF2023

- **ICEF2023 had in-depth discussions on innovative policy-making for building secure and resilient supply chains of energy and resources.** The need for cross-border cooperation was identified and the interface of policy, technology, finance and innovation was discussed.
- **ICEF2023 also discussed “GX together” where GX is pursued inclusively with no one left behind.** Just transition was discussed from regional and socio-economic perspectives, and the role of public and private blended financing mechanisms were elaborated.

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- Leading experts dealt with the following **five specific issues**:
 - First, **the Global Stocktake**, a process to inform the Parties to UN Framework Convention on Climate Change in updating and enhancing their NDCs every five years under the Paris Agreement. The first Global Stocktake will soon culminate at COP 28. ICEF2023 provided an excellent opportunity to collect the views of the private sector and NGOs.
 - Second, **linkages between food, water, energy, and climate change**. Sustainable agriculture and food security in relation to water and soil, as well as adaptation and resilience measures needed for addressing climate change, were discussed.

- Third, **the innovative and inclusive use of renewables**. Topics included how maximize benefits and minimize negative impacts on local communities, environments and ecosystems through synergies and co-benefits with the 17 UN Sustainable Development Goals. The role of developing economies was emphasized.
- Fourth, **sustainable aviation**. Topics included forecasting sustainable aviation fuel (SAF) supply beyond 2050, identifying alternatives for aviation fuels and opportunities for improving propulsion system such as hydrogen electric powertrain.
- Fifth, **nuclear fusion technology**. Recent trends, including the role of startups and university spin-offs in developing promising technologies and attracting investment, were discussed.

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- **The ICEF Steering Committee expresses our deepest appreciation for the active participation of speakers and audience at ICEF 2023 and at the previous nine meetings. We remain firmly committed to engaging diverse stakeholders, in particular leading youth, women and innovators, and thereby creating stronger momentum for technological and social innovation for a carbon-neutral and sustainable future.**

