### Fall 2019 Newsletter

Nuclear Innovation: Clean Energy Future (NICE Future) initiative of the Clean Energy Ministerial (CEM)

Dear NICE Future colleagues,

We are pleased to provide you with an update on the recent activities of our growing initiative. It has been a busy few months, and we are excited to share some of our accomplishments, as well as draw your attention to upcoming opportunities for your involvement. The NICE Future initiative is a country and partner-driven effort, and we sincerely look forward to engaging with you to shape your participation in a way that advances the initiative and ensures it meets the needs of your governments and stakeholders.

### **Survey: Activities under the NICE Future Initiative**

We are conducting a survey to better meet your country's goals under the NICE Future initiative. Please take a moment to let us know what your priorities are for the coming year, and ideas for how you would like to contribute to make the NICE Future initiative even better. You can complete this survey by following this link: surveymonkey.com/r/LHK3B7M.

### **Upcoming Events**

In the following months, there are more opportunities than ever for you to engage with us and participate:

TBD

<u>Reaister</u>
<u>here.</u>

#### Webinar: Nuclear Energy in Clean Energy Planning in Latin America, in Spanish (register to receive an update on timing)

Our next topical webinar will be co-sponsored with the International Framework for Nuclear Energy Cooperation (IFNEC) and will feature perspectives from Latin American countries and invited experts. We are also planning a webinar on the energy-water nexus. Please be sure to subscribe to our webinar series here: <a href="mailto:nice-future.org/webinars">nice-future.org/webinars</a>.

13-14 November Washington, D.C.

#### **IFNEC Ministerial Conference**

The NICE Future initiative will be spotlighted at the upcoming IFNEC Ministerial Conference titled "Bringing the World SMRs and Advanced Nuclear" — see the attached flyer or visit <a href="contac.cc/2LCdXCd">conta.cc/2LCdXCd</a>. The Conference will feature a ministerial session dedicated to NICE Future initiative's clean energy themes.

We look forward to connecting with you soon on upcoming events and hope to continue our work with you into the second year of the NICE Future initiative. Please reach out to us through our website or by joining our mailing list: nice-future.org/.

### **Recent Events**

14-15 October

> Vienna, Austria

### IAEA technical workshop on modeling flexible energy systems

Several of our NICE Future initiative countries and partners were invited by the IAEA to a technical workshop that will contribute modelling expertise to the development of a special IAEA report on modelling flexible energy systems. This report will be of interest to and help inform the NICE Future initiative's Flexibility Campaign.

**7-11** October

Vienna, Austria

### **International Conference on Climate Change and the Role of Nuclear Power**

The NICE Future initiative played a prominent role in the IAEA International Conference on Climate Change and the Role of Nuclear Power! This conference was organized by the IAEA, in coordination with the OECD Nuclear Energy Agency, and offered a platform to discuss objectively the scientific and technical aspects of the role of nuclear power in combating climate change. U.S. DOE Senior Advisor Suzie Jaworowski, on behalf of the NICE Future initiative, spoke at several of the Conference's events, briefing participants and moderating sessions that included as topics: the latest NICE Future initiative

updates related to nuclear-renewables systems integration, the pace of innovation in the nuclear industry that will enable integrated and flexible systems, and the importance of engaging a millennials and women to build a diverse and vibrant workforce for the future.

17 September

> Vienna, Austria

## IAEA General Conference Side Event: Nuclear Energy in Clean Energy Systems: Telling Our Story

The NICE Future initiative, launched in May 2018, is in its second year! This event focused on some of the achievements of the initiative in its first year and outlined its vision for year two. The event showcased--from the perspective of governments, industries, NGO, and women and millennial groups-how the NICE Future initiative is encouraging a vision for new, clean, and reliable energy solutions for the near-term and future. The event described innovative and integrated systems and applications and how nuclear technologies can function flexibly to enable clean energy systems of the future.



IFNEC Chair and Deputy Secretary for Nuclear Energy of Argentina Julian Gadano provides remarks to an IAEA Climate Conference side event convened by the NICE Future initiativefocused on nuclear energy in national clean energy strategic planning.



Attendees at the IAEA General Conference on Climate Change special side event on nuclear energy included government, NGO, and industry leaders.



Panelists prepare their remarks, in NICE Future-hosted discussions at the IAEA Climate Conference, on the importance of gender diversity and attracting young talent in planning clean energy systems of the future.



Senior specialist to the United Arab Emirates Council, Emirates Nuclear Energy Corporation Miyra Al Blooshi, answers questions from the audience.

12 September <u>Link to</u> <u>Webinar</u>

### Webinar: Communicating the Roles of Nuclear Energy in Clean Energy Systems: Spotlight on Young Professionals and Africa

The NICE Future initiative and the International Youth Nuclear Congress (IYNC) presented this webinar. Featured were young professionals, experts and academics working in nuclear and nuclear energy-related fields, and others interested in hearing perspectives from industry and government representatives as they shared their vision for nuclear energy in Africa's future. Our expert panel included:

- Carrie Edwards, Senior Advisor, U.S. Department of Energy, NICE Future Lead Countries Team Member
- Jeremy Gordon, Director, Fluent in Energy
- Edwin Chesire, Technical Advisor, Kenyan Nuclear Authority, Kenya

- Abdul Byamukama Ateenyi, Radiation Protection Officer and Head of Nuclear Power Regulation, Atomic Energy Council, Uganda
- Raphael Chesori, IAEA Ph.D. Fellow, Institute of Nuclear Chemistry and Technology, Kenya
- Princess Mthombeni, Stakeholder Liaison, South African Nuclear Energy Corporation (Necsa), South Africa

September

Abu Dhabi,

UAE

### 24<sup>th</sup> World Energy Congress CEM Side Event: Transformative roles of nuclear in resilient, flexible clean energy systems

At the invitation of the UAE government, the CEM Secretariat hosted a side event at the 24<sup>th</sup> annual World Energy Congress highlighting several work streams under the CEM. This side event included panels on regional and long-term planning scenarios as many energy technologies increasingly deliver energy across borders in synergy.

The NICE Future initiative was pleased to host a special panel – featuring top executives from industry -- on the transformative roles of nuclear in resilient and flexible clean energy systems. This panel put a spotlight on the NICE Future initiative's vision as well as the recently launched "Flexible Nuclear Campaign". Both the NICE initiative and the Flexible Nuclear Campaign seek to share solutions for nuclear energy to enable clean energy systems in the near and long term.

Panelists discussed flexible nuclear operation today, and breakthroughs in flexible nuclear operation coming soon such as small modular and advanced designs. This session also sought to address integration issues with other technologies and how combined uses of nuclear energy, such as for heat and power, hydrogen production, desalination,



The Director for the Joint Institute for Strategic Energy Analysis and operating agent of the NICE Future initiative Dr. Jill Engel-Cox leads a panel on the transformative roles of nuclear energy at WEC. The panel included Agneta Rising, World Nuclear Association, Mike Howard, Electric Power Research Institute, Alexandre Perra, Electricité de France, and Tom Mundy, NuScale Power.

and industrial applications is a truly transformative capability for the industry and clean energy systems.

28-29 August Washington, D.C.

#### Department of Energy – Office of Nuclear Energy (DOE-NE) Leaders of Tomorrow in Nuclear Energy forum

In August, NICE Future initiative team members Jordan Cox and Caroline Hughes briefed fellow colleagues and participated in the U.S. Department of Energy – Office of Nuclear Energy (DOE-NE) Leaders of Tomorrow in Nuclear Energy forum where they and leaders from other U.S. DOE laboratories networked and learned about the DOE goals and plans to advance nuclear energy in the United States and abroad.



Leaders of tomorrow in nuclear energy stand before the Department of Energy seal



Karla Olsen updates forum participants on DOE's plan to make nuclear cool again.

Images from twitter: @GovNuclear.

27-29 May Vancouver, Canada

### 10<sup>th</sup> Clean Energy Ministerial (CEM10)

At CEM10, the NICE Future initiative led two high-level side events while co-sponsoring several others, including an event with NGOs ClearPath and Third Way and a special screening of the film "New Fire" followed by discussion with the film's director and NGO experts. Various notable nuclear industry-driven events were also held on the margins of CEM10. Most impressive was that nuclear energy issues were, for the first time, a fully integrated topic of discussion within multiple CEM10 deliberations, roundtables, and side events.

While a Year 1 goal for the initiative of "bringing nuclear energy into the clean energy conversation" at CEM was achieved, a key Year 2 goal is to build greater awareness around the roles that nuclear energy could play in "enabling clean energy systems" and accelerating progress on clean air.



Participants on a CEM10 panel on the NICE Future initiative.



Doug Arent, PhD, speaks as part of a World Energy Congress panel.

Images from jisea.org/20190621.

# Flexible Nuclear Campaign for Nuclear Renewables Integration

At CEM10, the NICE Future initiative announced the NICE Future initiative's new "Flexible Nuclear Campaign for Nuclear Renewables Integration" also known as the 'Flexibility Campaign." As you may know, a CEM campaign is typically a boosting of efforts for an 18-24-month duration designed to elevate aspects of existing initiatives and increase public visibility. The United States, Canada, and the United Kingdom are supporting this effort, with leadership by NGOs ClearPath, Energy for Humanity and the Energy Options Network, in cooperation with interested governments, multilateral partners, private sector stakeholders, and research organizations. The campaign will focus attention on and showcase opportunities for innovative and advanced nuclear systems to operate flexibly, working in tandem with renewables. The campaign will incorporate modeling (recognizing the existence of a diversity of available tools to analyze different national scenarios) and communicate cost and technical performance requirements back to government stakeholders and advanced reactor design teams.

Our work will culminate in a deliverable report for CEM11. This report will include a review of ongoing analyses in this field and describe new analyses concerning the economic and grid values that flexible nuclear generation can create. We want to dedicate a portion of the campaign to highlighting existing work underway in participant and partner countries. To do this we need your help! If you are interested in participating, please reach out to us.

### **Resources**

The NICE Future initiative has added three new resources to its website!

- The Silent Giant: The need for nuclear in a clean energy system
- Nuclear Power in a Clean Energy System
- The Future of Hydrogen: Seizing today's opportunities

To suggest a resource, contact us.