

ISETS NEWSLETTER 2023 Q1

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ORGANISATIONAL DEVELOPMENT

APPOINTMENT OF THE CHAIRPERSON AND NEW MEMBERS TO THE ISETS ADVISORY COMMITTEE

ISETS is proud to announce the appointment of H.E. Dr. **Suwit Khunkitti**, former Deputy Prime Minister and Minister for Natural Resources and Environment of Thailand, as the Chairperson of the ISETS Advisory Committee.

H.E. Dr. Suwit Khunkitti brings a wealth of expertise and practical experience to ISETS, with over 30 years of experience in the field of natural resources and the environment. His appointment will provide valuable support and guidance to ISETS as it strives to achieve its mission of facilitating the transition to a sustainable energy future.

Prof. Roc Xunpeng Shi, ISETS President of the Executive Committee, expressed that H.E. Dr. Suwit Khunkitti's appointment is a testament to the importance of international cooperation in driving the global energy transition. Under his leadership, the ISETS Advisory Board will play a key role in ensuring that ISETS continues to make a significant contribution to the energy transition. H.E. Dr. Suwit stated that ISETS is a timely initiative, with a worthy cause, and it will be his privilege to serve as the Chairperson of its Advisory Committee.

In addition, two Editor-in-Chief have joined the ISETS Advisory Committee. Prof. **Richard Tol** is a distinguished academic and Editor-in-Chief of *Energy Economics*, a leading journal in the field. Prof. Richard Tol is in the Department of Economics at the University of Sussex, UK, Professor of the Economics of Climate Change at the Institute of Environment, and Department of Space Economics at Vrije Universitat Amsterdam, Netherlands, and a member of the European Academy of Sciences. Prof. **Aoife Foley** is a highly regarded scholar and currently serves as the Editor-in-Chief of *Renewable and Sustainable Energy Reviews*, a top peerreviewed journal in the field of energy economics. Professor Foley will deliver a **keynote speech** at the Inaugural ISETS International Conference to be held in Bangkok on 15-19 October 2023.

Other distinguished experts that have joined the ISETS Advisory Committee include Professors **Siaw-Kiang Chou**, **Deepak Sharma**, and **Jinjun Xue**. Prof. Chou is an Honorary Fellow and

President Emeritus of the Institution of Engineers, Singapore, and a Fellow of various engineering organizations. He is credited with designing energy standards used today in the Singapore Green Mark building certification scheme. Prof. Sharma is a professor at the Asian Institute of Technology (AIT) and assumed office as the new Vice President for Academic Affairs in 2019. Prof. Xue is a Director and Professor of Nagoya University-SinoCarbon Carbon Neutral Innovation Joint Laboratory and Co-director of China Institute of Global Low-Carbon Economy.

The advisory committee members bring valuable expertise and research fields to ISETS as it works towards a sustainable energy future. Their extensive knowledge in energy policy, renewable energy, climate change, and sustainable energy transition is expected to provide important insights that will help shape ISETS' strategic direction and enhance its reputation as a leader in global topics related to energy transition, environment, and sustainability. The committee's contributions are anticipated to be particularly valuable in promoting the organization's leadership and reputation in the areas of energy transition, environmental transportation, and global sustainability issues.

DESIGNING THE SECOND GENERATION MEMBER PORTAL

We are pleased to inform you that the ISETS Secretariat is currently in the process of designing a second generation member portal. This new portal will provide an enhanced user experience and allow for seamless enrolment in the upcoming international conference, including abstract submission and payment of conference registration fees.

We are excited to announce that this new portal is expected to be launched by the end of April. Once the new portal is ready, we will ask all members to transfer to the new platform. We kindly request all members to log in with their existing username, but they will need to reset their password for security purposes.

The new member portal will allow for easy and convenient submission of abstracts for the international conference, which is scheduled to take place later this year. We are confident that this new platform will provide an improved experience for all members and we look forward to your continued support and participation in our association.

We will keep you updated on the progress of this exciting development and look forward to welcoming you to our new member portal soon.

KNOWLEDGE-SHARING

Energy transition

In IPCC pathways limiting warming to 1.5 °C, global coal power generation declines rapidly due to its emissions intensity and substitutability. A <u>paper</u> published in Nature Climate Change investigates the socio-political feasibility of coal power phase-out.

Critical minerals

The <u>report</u> we drafted for the United Nations ESCAP examines the implications of the energy transition on SDGs for countries that currently or could potentially extract and export critical minerals.

Carbon prices

Through the Paris Agreement, most nations committed to limiting average global temperature rise to 2°C by 2100. A <u>paper</u> published in Joule investigates the effectiveness of carbon prices in achieving the deep decarbonization needed in the power system.

China's transition away from coal

China's transition from coal to cleaner energy sources is critical for achieving global decarbonization. A <u>paper</u> published in One Earth discusses how to Enabling a Rapid and Just Transition away from Coal in China.

Digital economy on energy transition

The digital economy positively affects energy transition; in other words, a 1% increase in the digital economy will boost the renewable energy consumption structure by 0.021% and <u>renewable energy generation</u> structure by 0.106%. Moreover, the digital economy stimulates the renewable energy transition by promoting governments' governance capabilities.

Building a Community with a Shared Future for Mankind to Inject the Strongest Impetus for the Lowcarbon Transition of the Power Sector

Dr. Muyi Yang, and Dr. Yi Jin point out that the keys to avoiding further deterioration of climate change and ensuring energy security lie in advocating the clean and low-carbon transition for power supply and breaking loose the dependence on fossil energy as early as possible.

To be seen in Global Energy Interconnection Information, 2023. 01.

EVENTS IN Q1

1. PERSONAL INTERVIEW: ISETS CHAIRMAN PROF. XIANSHENG SUN

Prof. Sun spoke at a symposium on the Party's 20 National Spirits of the CPPCC National Committee. He stressed that the new energy system should be able to support China's medium-to-high-speed economic development and successfully achieve the second Centenary Goal. Realize the optimization and integration of industrial structure, and achieve carbon peak and carbon neutrality on schedule. Moreover, Technological innovation and technological progress are the basis of carbon neutrality. Give full play to the role of the market, commercialization to mobilize various resources coordinated and integrated development. Finally, he strengthened that the reform and innovation of the system and mechanism will pave the way for the new energy system.

2.IMPLICATIONS OF THE ENERGY TRANSITION ON SUSTAINABLE CRITICAL MINERALS DEVELOPMENT: ALIGNING EXTRACTIVE INDUSTRIES WITH THE SUSTAINABLE DEVELOPMENT GOALS

Transition towards a clean energy future is a mainstay of the global efforts to achieve the Paris Agreement's goals. The energy transition implies a shift from a fuel-intensive system to a material-intensive energy system, and will create significant demand for critical raw materials (CRMs), including critical minerals, because the technologies underpinning low-carbon energy systems, such as wind, solar PV and batteries, are more minerals-intensive than fossil fuel-based technologies.

This report examines the implications of the energy transition on SDGs for countries that currently or could potentially extract and export critical minerals. After the Introduction, Chapter 2 presents the potential implications of the energy transition on critical mineral development. Replacing fossil fuels with clean energy sources by extension increases dependence on mineral resources. As the transition towards a clean energy future deepens, a fundamental change in the demand for extractive products, away from fossil fuel and towards mineral resources, will take place. Chapter 3 discusses the opportunities and challenges that the sustainable development of CRMs will face during the energy transition. Chapter 4 examines the energy transition and critical mineral development in Asia-Pacific countries. Chapter 5 summarizes CRM development in selected Asia-Pacific countries, followed by a summary of the global best practice that can contribute to achieving sustainable CRM development. The remaining gaps that need to be filled for the purpose of promoting sustainable critical mineral development are summarized in Chapter 7. The foundation for policy recommendations is presented in chapter 8.

The summary report and full record can be found on the website here.

3.THE 9TH ISETS ENERGY TRANSITION FORUM: IMPROVING THE RESILIENCE OF ASIA'S CLEAN TECHNOLOGY SUPPLY CHAIN: HOW A CLOSER AUSTRALIA-CHINA COOPERATION CAN HELP?

Dr. Marina Zhang, Associate professor at the Australia-China Relations Institute, University of Technology Sydney, delivered a speech on Complementarities and vulnerabilities in the supply chain of clean energy transition between Australia and China. Mr. Anthony Coles, Chair of Net Zero Working Group, Australia-China Business Council, delivered a speech on Australia-China Net Zero faster, together- Re-framing supply chain risk. Ms. Ravenna Chen, APAC Regional CEO, TurStar, delivered a speech on RCEP tech innovation and cooperation chance. Mr. Beni Suryadi, Manager at ASEAN Centre for Energy, delivered a speech on Low-carbon supply chain in ASEAN.

4.THE 10TH ISETS ENERGY TRANSITION FORUM: BUILDING A FLEXIBLE, SAFE AND CLEAN POWER SYSTEM

The clean transformation of China's power sector has accelerated over the past decade, with a surge in renewable energy generation. China is striving to achieve peaking carbon by 2030 and being carbon neutral by 2060, which means the energy transition is likely to deepen further in the next few years. Weather-dependent and volatile renewable energy sources, such as wind, solar and hydropower, will gradually replace coal at the heart of China's power system.

In this context, the webinar focused on three core questions: What technology solutions can be used to improve the flexibility of the power system in China? What are the main technical, economic, market and regulatory issues facing the adoption of flexible technologies? And more importantly, how to solve these problems? Lauri Myllyvirta, who is a principal analyst, Energy and Clean Air Research Center, Finland, Xunpeng Shi, ISETS Chairman, Muyi Yang, ISETS deputy secretary general, Jiahai Yuan, Professor in North China Electric Power University and other participants discuss above issues.

UPCOMING EVENTS

1.2023 INTERNATIONAL CONFERENCE ON CLIMATE AND ENERGY FINANCE

2023 International Conference on Climate and Energy Finance (ICEF) will be held by Hunan University in Changsha between June 2-4, 2023.

Organizers

ISETS Energy Finance Network Society for the Studies of Climate Finance, Chinese Society of Optimization, Overall Planning and Economical Mathematics

Host

Hunan University

Co-organizers

TIERS, Southwestern University of Finance and Economics Institutes of Science and Development, Chinese Academy of Sciences Hunan Institute of Systems Engineering and Management

Call for paper & sessions can be found here.

2. THE INAUGURAL ISETS INTERNATIONAL CONFERENCE

The inaugural ISETS international conference will be held by the International Society for Energy Transition Studies, in cooperation with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) between 14-19 October 2023 at the United Nations Conference Centre, Bangkok.

The Conference will be held alongside the Third Asia Pacific Energy (Ministerial) Forum on 18-20 October 2023 and together they form key parts of the Asia Pacific Energy Week. The key findings and recommendations from the ISETS conference are expected to be channelled to the subsequent ministerial forum.

The Conference will cover a wide range of energy and environmental issues of interest to academia, analysts, policy- makers and industry participants and beyond.

Keynote panels and other plenary sessions that bring together ministers and senior officials from ESCAP member countries and leaders from industries, think tanks, NGOs, multilateral organisations, and the academic community will facilitate dialogue on key policy issues on the energy transition and climate change.

Prof. **Aoife Foley**, the Editor-in-Chief of *Renewable and Sustainable Energy Reviews*, will deliver a **keynote speech**.

Call for Proposals: Youth Voices

The ISETS International Conference is excited to announce the creation of special youth sessions, aimed at gathering and amplifying the voices of young researchers, entrepreneurs, and other talents below the age of 25.

We are inviting proposals from young people who are interested in presenting their innovative ideas, research findings, and entrepreneurial ventures related to energy transitions, sustainability, and the environment. The youth sessions will provide a platform for young talents to showcase their work, network with peers, and engage with policymakers and industry experts.

If you are a young researcher, entrepreneur, or student with a passion for energy and sustainability, we encourage you to submit your proposal to participate in the youth sessions. Your proposal should include a brief summary of your presentation topic, your credentials, and how your work aligns with the themes of the ISETS International Conference.

To submit your proposal or for any inquiries, please send an email to **isets@isets.org**. Proposals will be evaluated and offers will be made on a continuous basis until all available spaces are filled.

3. CALL FOR PROPOSALS: EXHIBITION AT THE UNITED NATIONAL CONFERENCE CENTER

As part of the conference, we will be setting up an exhibition in the form of posters or physical displays at the **United National Conference Center on 16 and 17 October 2023**. This is a great opportunity to showcase your research, products and ideas to a diverse audience of professionals, academics, and policymakers.

Individuals and businesses are encouraged to submit proposals for participation in the exhibition by sending an email to isets@isets.org. Spaces will be allocated on a first-come-first-serve basis, so we encourage you to submit your proposal as soon as possible.

Thank you for your interest and we look forward to hearing from you soon. The conference will set exhibition in the United Nations Conference Center in Bangkok, in poster or physical display. Individual and business are encouraged to submit proposals for participation the exhibition (to isets@isets.org). Spaces are allocated on a first-come first serve base.

Call for paper & sessions can be found here.

About ISETS

The International Society for Energy Transition Studies (ISETS) is a worldwide non-profit professional organisation based in Australia, which has members in 50+ nations and more than ten international organisations.

ISETS was founded on 16 June 2020 through the Founding Declaration signed by a group of 31 energetic and internationally acclaimed professionals who have extensive experiences in energy, environment and other sustainable development issues.

ISETS aims to facilitate an equitable and inclusive transition of energy and relevant sectors toward a sustainable low-carbon future with consideration of economic development, social equity, and environmental stewardship through international partnerships.

Social Media Platforms

YouTube Channel: @isets2020 Twitter: @isets2020 LinkedIn: <u>https://www.linkedin.com/company/intsets/</u> WeChat:

