







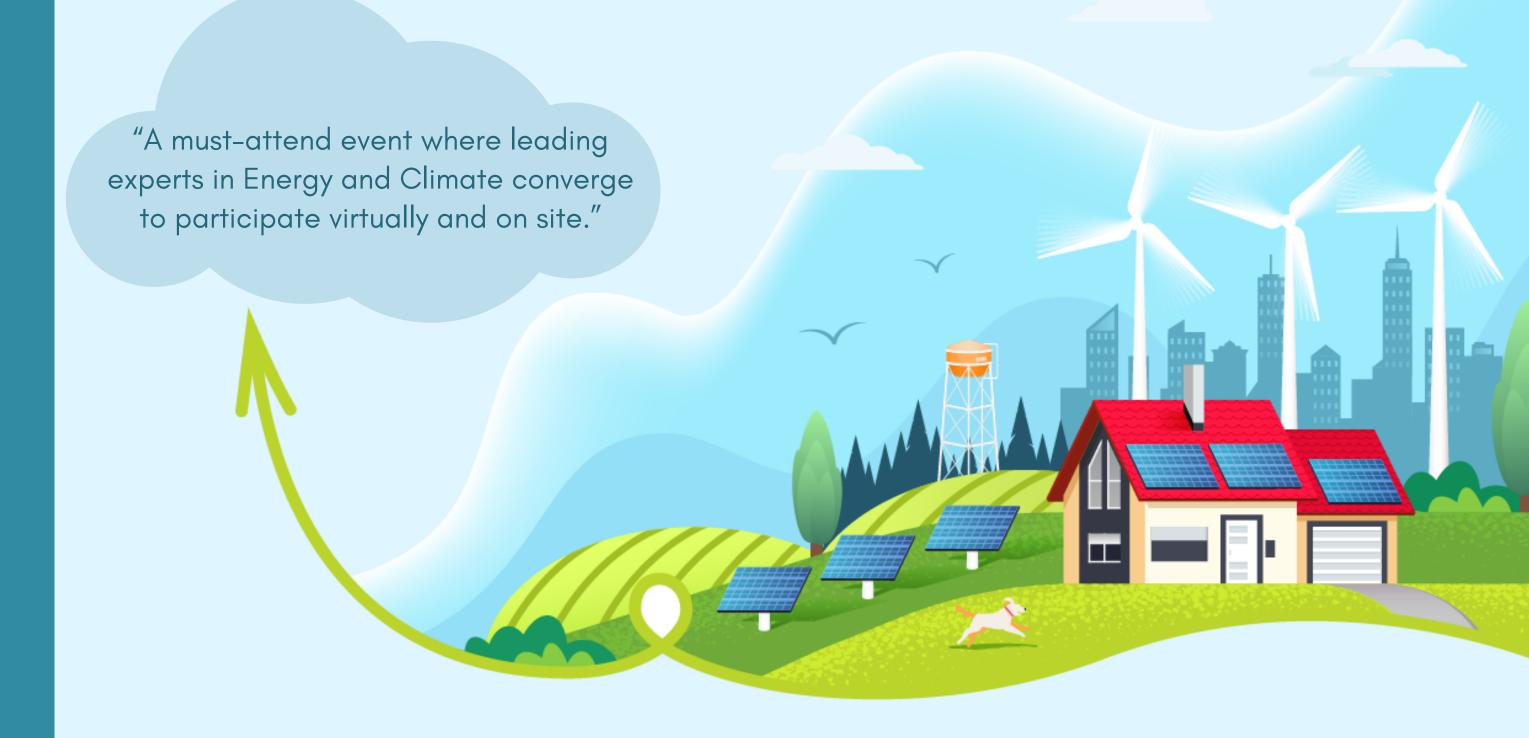
# 8<sup>th</sup> INTERNATIONAL CONFERENCE ON SUSTAINABLE ENERGY AND ENVIRONMENT

"The Road to Net-Zero: Energy Transition Challenges and Solutions"



#### **ANNOUNCEMENT AND CALL FOR ABSTRACTS**

7- 9 November 2022 The Knowledge Xchange (KX), Bangkok, Thailand



Organised by the Joint Graduate School of Energy and Environment, King Mongkut's University of Technology Thonburi and its consortium partners, in collaboration with Kyoto University









For more information, please contact SEE 2022 Secretariat:



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E-mail: see.jgsee@gmail.com Website: www.see-conf.com



# **KEYNOTE SPEAKERS**

7 November 2022
THEME: ON THE ROAD TO NET-ZERO



Key messages and implications of COP26 for science and innovation in developing countries Emeritus Prof. Ralph Sims, Massey University, New Zealand



Recent advances in smart grid developments and practices

Prof. Nouredine Hadjsaid, Grenoble Institute of Technology, France



Power sector deregulation in developing countries Prof. Nagayama Hiroaki, Kyoto University, Japan

8 November 2022
THEME: SMART ENERGY SYSTEMS AND CITIES



The future of storage technology and the role of hydrogen in emerging economies Dr. Wison Luangdilok, Fauske & Associates, LLC, USA



Modern power systems and power trading platforms

Prof. Antonello Monti, RWTH Aachen University, Germany



Electrification of the transport sector: Battery and hydrogen fuel cell vehicles Dr. Amela Ajanovic, Vienna University of Technology, Austria

# KEYNOTE SPEAKERS

9 November 2022

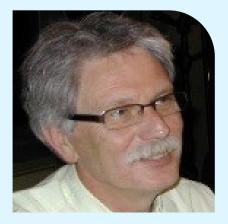
THEME: CIRCULAR BIOECONOMY



Sustainable consumption and production for transition to carbon neutrality: Doing more with less *Prof. Shabbir H. Gheewala, JGSEE, Thailand* 



The role of biofuels, bioenergy and biomaterials in sustainable energy transition Prof. Ian O'Hara, Queensland University of Technology, Australia

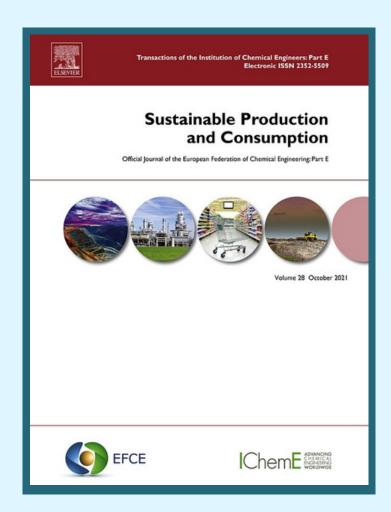


Advances in functional materials for sustainable energy and environment Emeritus Prof. François Weiss, Grenoble Institute of Technology, France

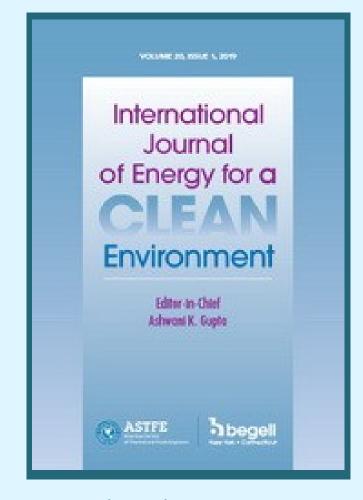
# JOURNAL SPECIAL ISSUES



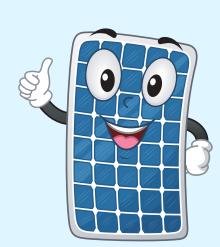
- Open access
- No processing fees



- Indexed in Scopus
- IF: 8.921



- Indexed in Scopus
- IF: 1.68



# INVITATION TO SEE 2022

The Joint Graduate School of Energy and Environment (JGSEE-CEE), in collaboration with its consortium partners\* and Kyoto University, is pleased to announce the organisation of the 8th International Conference on Sustainable Energy and Environment (hybrid) or "SEE 2022" on the theme "The Road to Net-Zero: Energy Transition Challenges and Solutions". The conference will be held during 7–9 November 2022 as a hybrid platform enabling participants to join virtually or in person in Bangkok, Thailand.

The UN Climate Change Conference in Glasgow (COP26) last year reached a broad consensus on key actions to address climate change, including the science, solutions, political will to act, and clear indications of action. The conference produced new "building blocks" to advance the implementation of the Paris Agreement through actions that can get the world on a more sustainable, low-carbon pathway forward. Thus, more than 70 countries have set a target of reducing emissions to net-zero by 2050, covering about 76% of global emissions. Over 1,200 companies have put in place science-based targets in line with net-zero, and more than 1000 cities, over 1000 educational institutions, and over 400 financial institutions have joined the Race to Zero, pledging to take rigorous, immediate action to halve global emissions by 2030.

Since 2004, SEE, which is a series of biennial conferences, has been serving as a forum for presenting recent progress and advances in science, technology, and innovation that addresses energy, environment, and climate change issues, and exchange of ideas and networking. The SEE 2022 will continue to adhere to this theme. However, for this new edition of the SEE Conference, the emphasis will be on sustainable innovation and energy transition for accelerating solutions for climate actions in meeting net-zero emission ambitions by around mid-century and underpinning sustainable growth and development in the region and globally.

SEE 2022 will therefore serve as a forum for the exchange of information, knowledge and experiences in the field of smart city, future energy systems, bio-circular economy, environmental and climate technologies and management, and energy and climate science. Potential contributors from academia, research organizations, government agencies and international institutions, and private sector practitioners are invited to submit contributions in the areas of science, technology and policy, for on-site and virtual presentations at the conference.

\*JGSEE's consortium partners within the Center of Excellence on Energy Technology and Environment include: King Mongkut's University of Technology Thonburi (Lead University), King Mongkut's University of Technology North Bangkok, Chiang Mai University, Prince of Songkla University, and Sirindhorn International Institute of Technology at Thammasat University.

## **IMPORTANT DATES**

Abstract submission

Notification of acceptance

Deadline for payment

Full-paper submission (optional)

31 July 2022 (extended deadline)

10 August 2022 (extended deadline)

30 September 2022

30 August 2022

For papers to be peer reviewed for publication in the conference proceedings, or

30 September 2022

For papers to be peer reviewed for publication in journals

associated to the conference



# **TOPICS**

The SEE 2022 conference will cover both fundamental and applied aspects of different technological development as well as energy and climate related policy and economic considerations under 5 major topics as detailed below.

# Topic A: Future energy systems

- ➤ Micro-grid;
- Demand side management (DSM);
- Energy efficiency & management;
- ➤ Energy storage system (grid-scale);
- Renewable energy technologies;
- ➤ Electrification in end-use sectors;
- ➤ Hydrogen and fuels cells;
- ➤ Virtual power plants (VPP);
- Electricity market deregulation and power trade and enabling policies;
- Sustainability of energy systems;
- Environmental risk from energy systems.

# Topic B: Bio-circular economy

- Bioenergy and biofuels;
- ➤ Waste utilisation and waste to energy;
- Community based power plants;
- ➤ Biorefinery and biomaterials: bio-based chemicals and bioplastics, etc.;
- ► Hydrogen production;
- Biochar;
- Circularity: recycling and reuse of residues and waste;
- Sustainable production and consumption;
- ► Food-water-energy nexus;
- ➤ Techno-socio-economic issues and sustainability of bioeconomy.

# Topic C: Smart cities and mobility

- ➤ Smart grid;
- ➤ Smart mobility;
- Net zero energy building (smart and green buildings);
- ➤ Battery (energy storage);
- Renewable energy;
- Smart technologies for energy application (automation, big data, Al, IoT);
- Data center and data center energy management;
- Sustainable urban planning and design.

# Topic D: Environmental and climate technologies and management

- Disaster analysis, monitoring and mitigation, and emergency preparedness;
- Climate change impacts on hydrology and water resources;
- ➤ Pollution control;
- Greenhouse gas measurement, estimation and modeling;
- Methane detection and mitigation;
- Carbon capture, utlisation and storage;
- Carbon and water footprint measurement and assessment;
- ➤ Non-biomass related sustainability assessment;
- Environmental and health risks from climate change;
- ➤ Air quality and climate change.

# Topic E: Energy and climate policy

- Energy transition;
- Scenario analysis and modeling of energy and carbon emissions;
- Carbon markets/emission trading;
- Economics of climate change;
- ➤ Energy and Climate policy.

# CALL FOR ABSTRACTS

#### **Abstract submission**

Interested participants are invited to submit an abstract in English not exceeding 500 words in length (in MS Word). Authors are encouraged to submit an informative abstract that includes all the sections typically found in a full paper, i.e., background, purpose, methodology, results, and conclusion. More details, including a template, can be found on the conference website at: www.see-conf.com. The abstract is to be submitted by 31 July 2022 through the online system of the conference. A maximum of 2 abstracts can be submitted by each presenter.

Registration is required to access the online submission system. However payment is not mandatory at this stage. Notification of acceptance will be given within 4 weeks after the submission date (or by 10 August latest). Accepted abstracts will be published in the Book of Abstracts after full payment of registration has been made (please make a payment by 30 September 2022).

## **AVENUES FOR PUBLICATION AND DISSEMINATION**

#### **Book of abstracts**

Accepted abstracts will be published in the Program and Book of Abstracts of the conference upon payment of the conference registration fees (30 September 2022).

Depending on the review results, authors of the accepted abstracts will be invited to submit a full paper. For authors interested in this option, two possibilities are available: (1) conference proceedings and (2) journals. The process is as follows:

#### Proceedings of the conference (optional)

Authors of the abstracts selected by the Technical Committee of SEE 2022 for publication in the proceedings of the conference, will be invited to submit a full paper by **30 August 2022**. The authors will be invited to produce a full-text manuscript following the format of a template available on the conference website. The submission is through the online system of the conference. The full papers will be assessed through a peer review process and will be published electronically in the proceedings with an associated ISBN.

#### Journals associated to the conference (optional)

Opportunities are also available for publication in three journals associated with SEE 2022:

- Journal of Sustainable Energy and Environment (open access, no processing fees)
- Sustainable Production and Consumption (Indexed in Scopus, IF: 8.921)
- International Journal of Energy for a Clean Environment (Indexed in Scopus, IF: 1.68)

Authors of the abstracts shortlisted by the Technical Committee of SEE 2022 for potential publication in a special issue of one of the above journals, will be invited to produce a full-text manuscript (3,000 – 6,000 words) following the guidelines of the journal identified. The full papers, which will be peer reviewed, should be submitted by 30 September 2022 to the SEE 2022 secretariat (at: see.jgsee@gmail.com). Publication in the above journals is free of charge. Only the papers that have been presented orally at the conference will be peer reviewed for journal publication.

## BEST STUDENT PAPER AWARD



Best Student Paper Awards will be accorded to well-written and presented student papers (oral presentation must be done by a current student) for each of the five main topics covered in SEE 2022. The presenters of the winning papers will receive a certificate, a cash prize and an invitation to publish their papers in the Journal of Sustainable Energy and Environment – a journal published by the Joint Graduate of School Energy and Environment.

#### **Important note:**

- The authors of the papers nominated for Best Student Paper Award will be given the option to indicate if they prefer to submit their conference paper to JSEE instead of being included in the conference proceedings. The student author is expected to present the full paper at the conference.
- Kindly note that due to copyright issues, papers can be published in one location only. Thus, conference papers confirmed for publication in other academic journals will not be included in the conference proceedings.

## REGISTRATION

#### On-site

Categories	Registration fees
Participants (presenters)	350 USD (10,500 THB)
Students (presenters)	200 USD (6,000 THB)
Listeners (attendees)	100 USD (3,000 THB)

#### Online

Categories	Registration fees
Participants (presenters)	250 USD (7,500 THB)
Students (presenters)	100 USD (3,000 THB)
Listeners (attendees)	100 USD (3,000 THB)

#### Note:

- 1. The registration fee includes access to all technical sessions, and electronic copies of the Book of Abstracts and proceedings, as well as luncheons and coffee breaks.
- 2. Student(s) are requested to provide a copy of their Student ID for registration.
- 3. All transaction fees should be covered by the remitter so that the amount received by the SEE 2022 Secretarial is no less than the total due.
- 4. Presenters are required to pay their registration fees by 30 September 2022 at the latest for their accepted abstracts to be included in the Program and Book of Abstracts, and their papers (optional) to be considered for either proceedings or journal publication.

Cancellation Policy: Please note that no refund will be available upon cancellation of participation.

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Dr. Sebastien Bonnet Thailand Ms. Siriya Seneewongse Na Thailand Ayudthaya

# VENUE OF THE CONFERENCE





# <u>The Knowledge Xchange (KX)</u>

110/1 Krung Thonburi Road, Banglamphulang, Khlongsan, Bangkok 10600 THAILAND



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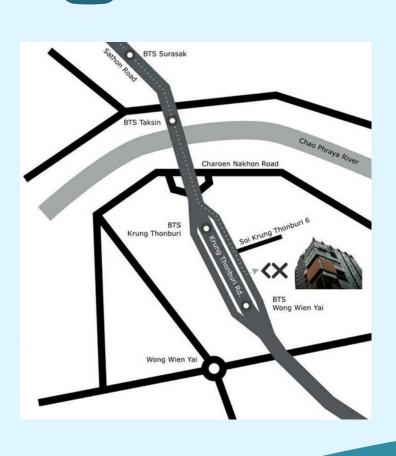
contact@kxinnovation.com



www.kxinnovation.com



https://goo.gl/maps/KY4EHmy3QvYMfTEc6





### **SEE 2022 Secretariat**

The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT), 126 Prachauthit Road, Bangmod, Tungkru, Bangkok 10140 Thailand

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