



Nov-Dec 2024



Live Green@NUS

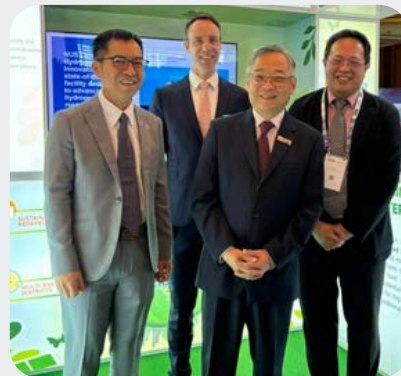
OUR SUSTAINABLE FUTURE STARTS TODAY

by NUS Sustainability

NUS @ SIEW 2024

NUS had its very own booth at the **annual Singapore International Energy Week (SIEW)**, a major conference organised by **Energy Market Authority (EMA)** at Marina Bay Sands in October!

Besides showcasing our energy research, NUS also presented an exciting new platform, the **NUS Energy Solutions Hub (NESH)**, which brings together researchers from different disciplines to amplify our university's contributions in the energy sector. NESH is part of the broader NUS Sustainable Futures platform that will be launched next year!



At the NUS Booth@SIEW are (from left) EMA CEO Puah Kok Keong, Solar Energy Research Institute of Singapore Deputy CEO, Dr Thomas Reindl, DPM and Minister of Trade and Industry Gan Kim Yong and NUS Energy Studies Institute Executive Director, Associate Professor Lee Poh Seng.

NUS Energy Solutions Hub (NESH) focuses on research in 5 sustainability areas

1

Multi-Energy Districts

AC/DC grid stability and reliability; integrating renewables and H₂ to the grid with heterogeneous energy storage system

2

Sustainable Urban Development

Nature-based solutions to tackle challenges of building cooling and urban heat island effect; productive facades for energy and food resilience

3

Sustainable Computing

Cooling solutions for tropical data centres; carbon conscious computing

4

Energy Policy

AI-based energy predictive analysis; data-driven energy planning and control

5

Sustainable Transportation

Solutions to sustainable engines in aviation, marine and land vehicles

YOUTH VOICES @ SIEW 2024

Thanks to the EMA, some NUS students earned complimentary access to SIEW 2024 where they attended keynote presentations and panel discussions as well as a networking lunch with industry representatives. Here are their key takeaways!



Heng Si Liang
Year 2, Engineering Science

It was exciting to witness international officials and leading industry figures gathered in Singapore to share their take on the transition to a cleaner energy future.

Two technologies that caught my attention were the advancements in nuclear technology and the acceleration to adopt hydrogen and ammonia as alternate fuels.

The networking lunch, where we met industry representatives across various fields such as energy infrastructure, energy storage and energy retailers, was a fruitful opportunity to gain insights into the evolving energy landscape and explore diverse career pathways within the industry.



NUS students at SIEW@2024



Janice Khoo
Final Year, Environmental Studies

It was eye-opening to learn about the diverse strategies for reducing emissions and ensuring energy security including lesser explored areas such as nuclear and geothermal energy.

A highlight was visiting booths on my areas of interest including the cutting-edge work being done in carbon capture, usage and storage.

I was also fascinated to learn about NUS and Solar Energy Research Institute of Singapore's innovative project on the recyclability of solar panels using shock waves for PV module recycling.

I left the event feeling more optimistic about the potential for change!

WORLD CITIES DAY 2024

SPOTLIGHT ON

NUS CITIES x YOUTH CLIMATE CHANGEMAKERS



Celebrated on 31 October, this year's World Cities Day shines the spotlight on **Youth Climate Changemakers: Catalysing Local Action for Urban Sustainability**.

By 2030, **an estimated 6 out of 10 urban residents will be under 18**, making youth engagement critical to shaping sustainable cities. From youth councils to partnerships with local governments and platforms, young people are increasingly empowered to drive **environmental resilience**.

NUS Cities, **an interdisciplinary entity** hosted within the College of Design and Engineering, offers a unique **Minor in Cities** programme which equips students with the skills to develop **liveable, sustainable and resilient cities** using an urban systems approach. Courses include **Liveable Cities, Cities for All, Cities in Nature, Smart Cities, and Planning and Governing Cities**.

An **Inaugural Social** was introduced this year where students were given the chance to share their perspectives with industry leaders, and also gain an understanding of the career opportunities available in the various industries.

Students have also been going on **summer exchange programmes overseas** to gain **real-world insights** into how other cities tackle their challenges. During a 10-day summer programme in **Obihiro, Japan**, they visited vegetable farms and fish ports to understand the relationship between nature and food production. In another 20-day summer exchange programme with the **University of British Columbia (UBC) in Vancouver, Canada**, they engaged with leading professionals from the built environment and planning sectors in Singapore and Vancouver and did a comparative study on the blue and green features of both cities.



(Above) The NUS Cities Inaugural Social introduced this year allowed students to share their perspectives with industry leaders.



Students, stakeholders and professors posing for a group photo while on a visit to a tree nursery featuring green houses and an automated seedling machine during the summer exchange programme in Obihiro, Japan.



A visit to a kombu harvesting farm under the NUS Cities' summer programme in Obihiro allows students to observe first-hand the various processes involved in kombu making, from drying the kombu to processing it into powder for consumption.

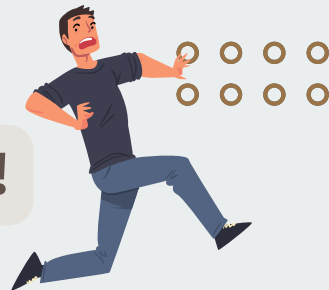


Students under the UBC-NUS summer programme learn about blue and green features of Bishan-Ang Mo Kio Park with Ms Liu Huei Lyn, Senior Landscape Architect, Public Utilities Board.



HELP!

THERE'S A SNAKE IN MY DORM!



With some parts of our campus located near forest patches, encounters with wildlife are not uncommon. Residents at College Green, which is near the Singapore Botanic Gardens along Dunearn Road, spotted snakes in some of their dormitories and bathrooms recently, understandably giving rise to a lot of fear.

What can you do when you encounter a snake, other than get into a state of panic?



HEAR FROM OUR EXPERT

Mr Sankar Ananthanarayanan, a graduate tutor at the NUS College of Humanities and Sciences and a co-founder of the Herpetological Society of Singapore, gives some tips.

Did you know?

1. Stay calm and back away slowly.



2. Keep exit routes, for eg., the dormitory or bathroom door that lead outside, open for the snake to exit. Snakes are generally shy and would try to slither away rather than attack humans.



3. Do not approach or attempt to handle the snake. Snakes generally will not attack unless they are cornered or provoked.



4. If you need assistance, call these 24-hour hotlines: NParks' Animal Response Centre at 1800-476-1600 or ACRES (Animal Concerns Research and Education Society) at 9783 7782.



5. To prevent future encounters, find out why the snake may have appeared in your area – a potential cause can be improper waste disposal which attracts pests that snakes prey on.



Myth

The only way to survive an encounter with a snake is to kill it.

Myth

Snake bites are a health concern in Singapore.

Fact

Most snakes will leave you alone if you do likewise.

Fact

The last reported death from a snake bite in Singapore is in 1995.

Myth

Most snakes are venomous.

Myth

Snakes usually reside in the forest.

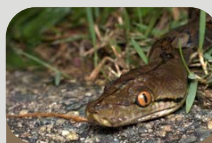
Fact

There are about 70 species of snakes in Singapore, of which about 10 per cent or 7 are highly venomous. They are largely forest snakes such as the Wagler's Pit Viper.

Fact

As their natural habitats shrink, some forest snakes are drawn to urban areas where their prey is abundant. For instance, pythons travel through drains and canals in search of rats, while the paradise tree snake and the common wolf snake prey on house lizards.

Non-venomous snakes which may be found in urban areas



Reticulated Python



Paradise Tree Snake



Common Wolf Snake

A wildlife awareness workshop by wildlife specialist Joe Kam will be conducted on **14 Nov (Thu), 6 – 7pm** at the **Multi-Purpose Hall at College Green** (5 College Green, Dunearn Road, S299723). **Staff and students are welcome. Entry is free!**

To learn more about reptiles and amphibians in general, email the **Herpetological Society of Singapore**. The society conducts free guided walks, runs talks and exhibitions, and engages in research. Visit herpsocsg.com for more information.



GET INVOLVED

11-22 NOV (MON-FRI)

NUS@COP29 in Baku, Azerbaijan

NUS academics and researchers will be speaking and moderating at panels at the Singapore Pavilion. They include those from NUS Cities, Centre for Sustainable Medicine, Centre for International Law, Institute for Environment & Sustainability, Centre for Nature-based Climate Solutions and Coastal Protection and Flood Resilience Institute. NUS students will also be participating as youth delegates. Keep updated on [COP29 Singapore Pavilion](#).



COP29
Baku
Azerbaijan
UN CLIMATE CHANGE CONFERENCE

15 NOV (FRI)

10.30AM – 12PM

Navigating ASEAN's Energy Transition Webinar: Disentangling Policies, Technologies and Supply Chains

By Lee Kuan Yew School of Public Policy's Asia Competitiveness Institute (ACI)

ACI researchers, regional experts and industry players assess the policies that ASEAN and its member states have enacted to achieve an energy transition.



Free. [Register.](#)

6.30 – 8.30PM

Circular Economy Workshop: The Role of Business

By student interest group 1.5 degreeeNUS

Explore the benefits and challenges of circular economy practices by dissecting real-world case studies and delving into in-depth discussions.



Free. [Register.](#)

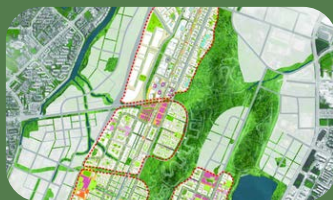
NUS Cities Lecture Series

18 NOV (MON)

6.30 – 8.30PM

A 5-minute Interlaced Township: Planning A Healthy, Regenerative and Inclusive Town with Complete Neighbourhoods for Innovation and Resilience

Lecture by Professor Heng Chye Kiang which showcases research by the NUS Centre for Sustainable Asian Cities on the redevelopment of the Paya Lebar Airbase.



Free. [Register.](#)

20 NOV (WED)

6.30 – 8.30PM

Advanced Ecological Architectures & BioCities: Learning by Living – How to Build a Greener Future

Michael Salka from the Institute for Advanced Architecture of Catalonia's Valldaura Labs shares the institute's Master in Advanced Ecological Buildings & BioCities where students "learn by living" in a historic farmhouse while using advanced technologies to create self-sufficient and ecological environments.



Free. [Register.](#)

21-22 NOV (THU-FRI)

9AM – 5PM

By Asia Research Institute

(De)Carbonising Asia Workshop: Histories and Futures of Energy, Space and Infrastructure

How have Asia's specific socio-technical-political configurations historically shaped the use of fossil fuels in Asia? This is just one of the many questions that will be discussed in this 2-day hybrid workshop.

Free. [Register.](#)

29 NOV (FRI)

1.30 – 5.30PM

By Energy Studies Institute

Carbon Capture and Storage Value Chain, Processes and Risks Workshop

Scholars and experts come together to examine the carbon capture and storage value chain in depth, delving into technical and policy-related dimensions and assessing the opportunities and challenges involved.

Free. [Register.](#)

If you have sustainability events to publicise, [email us.](#)