



Jul-Aug 2024

Live Green@NUS



OUR SUSTAINABLE FUTURE STARTS TODAY

by NUS Sustainability



A recent study by the LRF Institute for the Public Understanding of Risk (IPUR) of NUS, the Lee Kuan Yew Centre for Innovative Cities at Singapore University of Technology and Design and the Ministry of Sustainability and the Environment, shows that Singaporeans are eager to do their part to help the nation achieve Net Zero by 2050. Complementing the study, IPUR developed a guide for individuals on how they can get started on reducing their carbon footprint. We share some of its tips in this issue!

Ways to reduce your carbon footprint

To start, use a carbon footprint calculator to calculate your carbon footprint and work out which actions will be most effective in reducing your carbon emissions



There are many carbon footprint calculators available online. Try the one [here](#) by SP Group!



Actions you can take in your daily life



FOOD

Reduce food waste

Reduce consumption of meat and dairy

Switch to a plant-based diet

Switch to locally produced food

CONSUMPTION AND WASTE

Don't buy new — repair, reuse, rent, borrow

Refuse unneeded consumer products

Reduce consumption of carbon-intensive products

Reduce use of plastics

TRANSPORT AND TRAVEL

Reduce air travel

Reduce commute — work from home if possible

Switch to public transport such as MRT or bus

Switch to walking or biking

Switch to electric or hybrid vehicles

UTILITIES

Conserve energy at home

Buy energy-efficient lighting and appliances

Install a smart thermostat

Read more below!



More tips in [Getting to Net Zero: A Guide for Singaporeans to get started on reducing their carbon footprint.](#)

FOOD

Reduce food waste

When food is wasted, not only are the resources used in its production wasted, the greenhouse gas emissions from its decomposition also contribute to climate change.

DON'T WASTE FOOD

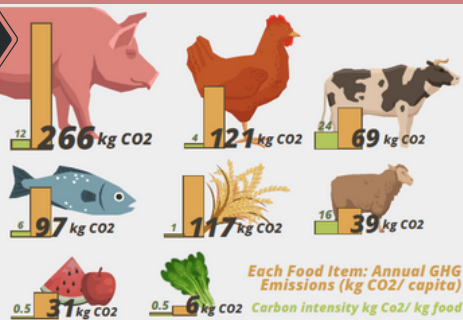
Support local and sustainable food sources

Since Singapore relies heavily on imported food, going local can help reduce the carbon footprint associated with transportation and support local economies at the same time.

Reduce meat intake or adopt a plant-based diet



DID YOU KNOW?



Red meat – beef, mutton and pork – were the most carbon intensive foods by kilo. However, as Singaporeans eat very little mutton and beef, pork generates the most annual emissions by food type.



CONSUMPTION AND WASTE

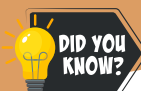
Don't buy new — repair, reuse, rent or borrow instead!

This applies to our clothes as well as many household items. The fashion industry generates 2–8% of global total emissions, but their impact on our carbon footprint has often been overlooked!



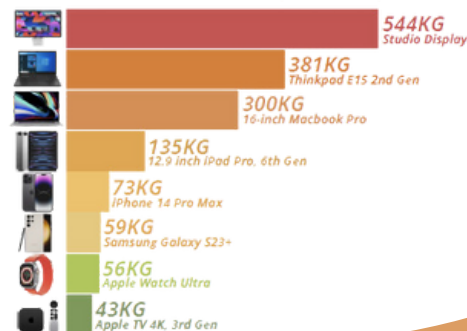
Reduce consumption of carbon-intensive products

Electronic devices can be very carbon-intensive. Monitors, laptops, tablets and phones generate carbon emissions throughout their life cycle. Choosing a smaller display, skipping a phone upgrade, and repairing rather than replacing devices will all contribute to reducing your carbon footprint.



DID YOU KNOW?

CARBON FOOTPRINT OF PRODUCING ELECTRONIC DEVICES (KG CO₂)



TRANSPORT AND TRAVEL

Reduce air travel



Just one trip within Southeast Asia adds more than half a tonne (540kg) to a person's carbon footprint. If you need to travel, choose direct flights (most carbon emissions from air travel come from take-off and landing), destinations closer to home, and fly economy as it has a lower carbon footprint per passenger.

Reduce commute

Where feasible, work from home or negotiate remote work options with your employer. Working from home once a week cuts commute footprint by 20%!



Take public transport

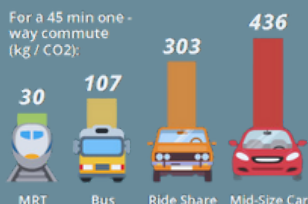
Swapping private for public transport once a week significantly decreases your carbon footprint in the medium or long run. If you drive, consider switching to electric or hybrid vehicles. Electric vehicles emit half the amount of CO₂/km driven compared to a similar vehicle, on top of reducing air pollution and noise.



DID YOU KNOW?

MRT is by far the most carbon-friendly form of transport. For a 45-minute commute, MRT generates about 30kg of carbon emissions, compared to 107kg for bus and 436kg for a mid-sized car.

For a 45 min one-way commute (kg / CO₂):



UTILITIES

Conserve energy at home (and save money on bills)

Use a fan instead of an air-con and save up to \$441 a year. Energy used by 1 air-con is equivalent to 11 fans. Use a thermos flask instead of an electric air pot and save around \$348 a year on electricity bills! Switch off the storage water heater after use and save an additional \$124 a year!



Buy energy-efficient appliances



Buy a 5-star instead of 2-star air-con and refrigerator and save around \$303 and \$59 a year respectively. Maintain your appliances as dirty or poorly maintained ones can consume more energy than necessary to operate efficiently. Turn off appliances and switches when not in use.

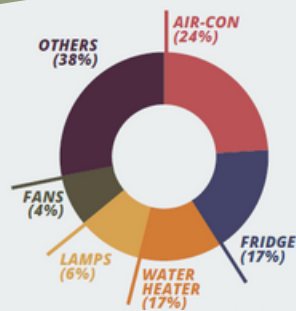


DID YOU KNOW?

WHAT DO WE USE ELECTRICITY FOR?

2020 AVERAGE MONTHLY ELECTRICITY CONSUMPTION

HDB flats: 376 kWh
Condominiums: 569 kWh
Landed properties: 1,257 kWh



HEAR FROM THE EXPERT

IPUR released the results of a study **Getting to Net Zero: Knowledge and Perceptions in Singapore** in collaboration with the Lee Kuan Yew Centre for Innovative Cities and the Ministry of Sustainability and the Environment recently.

We speak to Dr Olivia Jensen, one of the study authors, to find out more.

Dr Olivia Jensen

Deputy Director and Lead Scientist, IPUR



What is the purpose of the study?

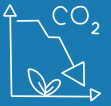
We wanted to understand the public's knowledge and perceptions of Net Zero so as to allow decision-makers inside and outside the Government to **identify opportunities** to accelerate progress towards Net Zero. We also wanted to **address misperceptions** and **bring to light the priorities, concerns and constraints of citizens**.

Drawing from the findings of the study, can you give a few tips to our NUS community on how we can work towards Singapore's Net Zero target?

A good place to start is to measure your **carbon footprint**. This will help you know what the most effective actions are. This doesn't mean that you have to give up the activities, foods or goods that you value most. Instead, think about **which actions you are most willing to take, the ones you would find easy to take, and that fit in with your relationships** with family, friends and colleagues. Consider all these, and then pick a few actions to get started.



Net Zero is balancing the amount of carbon dioxide and greenhouse gases that we release into the atmosphere with the amount that we remove from the atmosphere. Singapore has committed to achieve Net Zero carbon emissions by 2050.



THE STUDY BUSTED A FEW MYTHS TOO! DR JENSEN SHARES SOME OF THEM HERE.

MYTH

Singaporeans are aware of the national target to achieve Net Zero carbon emissions by 2050.

FACT

Only about 15% are aware of this national target, showing that there is a big gap between how much people know and how much they think they know.

MYTH

Only a minority of Singaporeans care about climate change.

FACT

When provided with information about Singapore's Net Zero target, respondents (65%) are overwhelmingly supportive of the current target, with a further 17% saying they support a more ambitious timeline to reach Net Zero.

MYTH

Older people are not committed to making changes to bring down emissions.

FACT

Older respondents aged 55 and above were on average more willing to perform climate friendly actions like home energy conservation and to make lifestyle changes such as reducing air travel and meat consumption than younger age groups.

Communications and Design Intern, IPUR

Faith



AN INTERN'S PERSPECTIVE ON THE NET ZERO GUIDE

Faith, a Communications and Design intern at IPUR, decided to apply the tips from the Getting to Net Zero guide in her daily life.

Within 2.5 months, she reduced her carbon footprint by more than 60% - from 2,686 Co2/month to 984kg Co2/month!

She took steps such as waking up 10-15 minutes earlier every morning to catch the train, instead of using ride hailing services, to reach her workplace on time, reducing the number of meals she consumed meat from twice to once a day, embarking on thrift and second-hand shopping as well as setting a timer for her air-con to switch off after two hours. Read more about her experience [here](#)!

Read the Getting to Net Zero study [here](#) and Faith's experience of the Getting to Net Zero guide [here](#).



GET INVOLVED

NUS Sustainability CONNECT Highlight 2024

Rethink Sustainability: Innovation and Impact



Following a successful run last year, the NUS Sustainability **CONNECT** returns this year with a condensed **Highlight** edition, comprising a week of talks, tours and workshops which showcase our university's sustainability efforts. For the first time, we are partnering the Lee Kuan Yew School of Public Policy's Festival of Ideas on the events under its Environment and Sustainability track.

Visit our [webpage](#) for updates! Registration for events will open progressively. Watch last year's **CONNECT** video [here](#).

14 SEP – 21 SEP 2024

Opening event

Inaugural EMLL Lecture

Don't miss the **NUS Environmental Management Leadership Lecture (EMLL)**, featuring Mr Ravi Menon, Singapore's first Ambassador for Climate Action and a member of NUS Board of Trustees! Gain insights into how transformative leadership can drive successful environmental management efforts!



Panel discussions and symposiums

Sign up for symposiums on important topics such as **Liveable Cities in Uncertain Times** by NUS Cities, and **Innovative Environmental Solutions for Accelerating Low Carbon Transition** by NUS Environmental Research Institute.

Book your seat for an interactive session with LRF Institute for the Public Understanding of Risk to learn how to **Carbon Crunch** - **Reducing our Emissions One Plate at a Time** - or join a research seminar and panel discussion with NUS Sustainable and Green Finance Institute on **Integrated Impact Valuation Framework for Green Buildings**.

Tours, workshops and a hackathon

Embark on an exclusive **Tour of the Solar Energy Research Institute of Singapore R&D Facilities and Yuhua Agri-PV Testbed**. Hear fascinating tales about the plants around UHall on a **Guided Plant Tour** with Dr Amy Choong from the Department of Biological Sciences.

Take part in not just 1, but 4 events lined up by Ridge View Residential College, including workshops on **Discovering the Art of Nature Journaling** and **Exploring Biophilic Design on Campus**, a **Guided College Tour** and a dialogue session, **From Theory to Practice in Sustainability Education**. And if you are a NUS student with an impactful sustainability idea, pitch it at the **SDG Open Hack @NUS**, part of the NUS Enterprise Sustainability (E-SUS) Challenge, and stand to win prizes!

Closing event

Tree-planting and Campus Wildlife Talk

Join NUS Toddecats to **Reforest Kent Ridge** in the morning, and then attend a talk on our rich and interesting **Campus Wildlife**. The events are held as part of [NUS Homecoming 2024](#).



Other Events



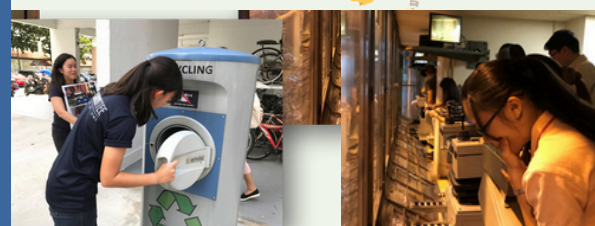
APPLY BY
**14 AUG
2024**

Youth Corps Leaders Programme

Jointly organised by NEA and Youth Corps Singapore

Take part in the Youth Corps Leaders Programme (YCLP) - National Environment Agency (NEA) Youth for Environmental Sustainability (YES) Edition and make an impact in environmental sustainability while developing leadership skills through service-learning. During the 9-12 month programme, you will be empowered to conceptualise and implement projects to address pressing environment issues in the community.

For NUS students. [Register](#).



Towards a Healthy Singapore: Green Building Impact on Public Health

NUS SDE4 Open Plaza
Organised by NUS Cities

Explore the link between the built environment and public health through sustainability workshops, exhibition booths and a panel discussion featuring Guest-of-Honour Minister Grace Fu. Aligning with the Ministry of Sustainability and the Environment's 2024 theme, "Public Hygiene", highlights include the launch of a "Towards A Healthy Singapore" booklet and a tour of the net zero energy building SDE4.

Open to public. [Register](#).



26 AUG 2024

2PM - 6PM

If you have sustainability events to publicise, email us.