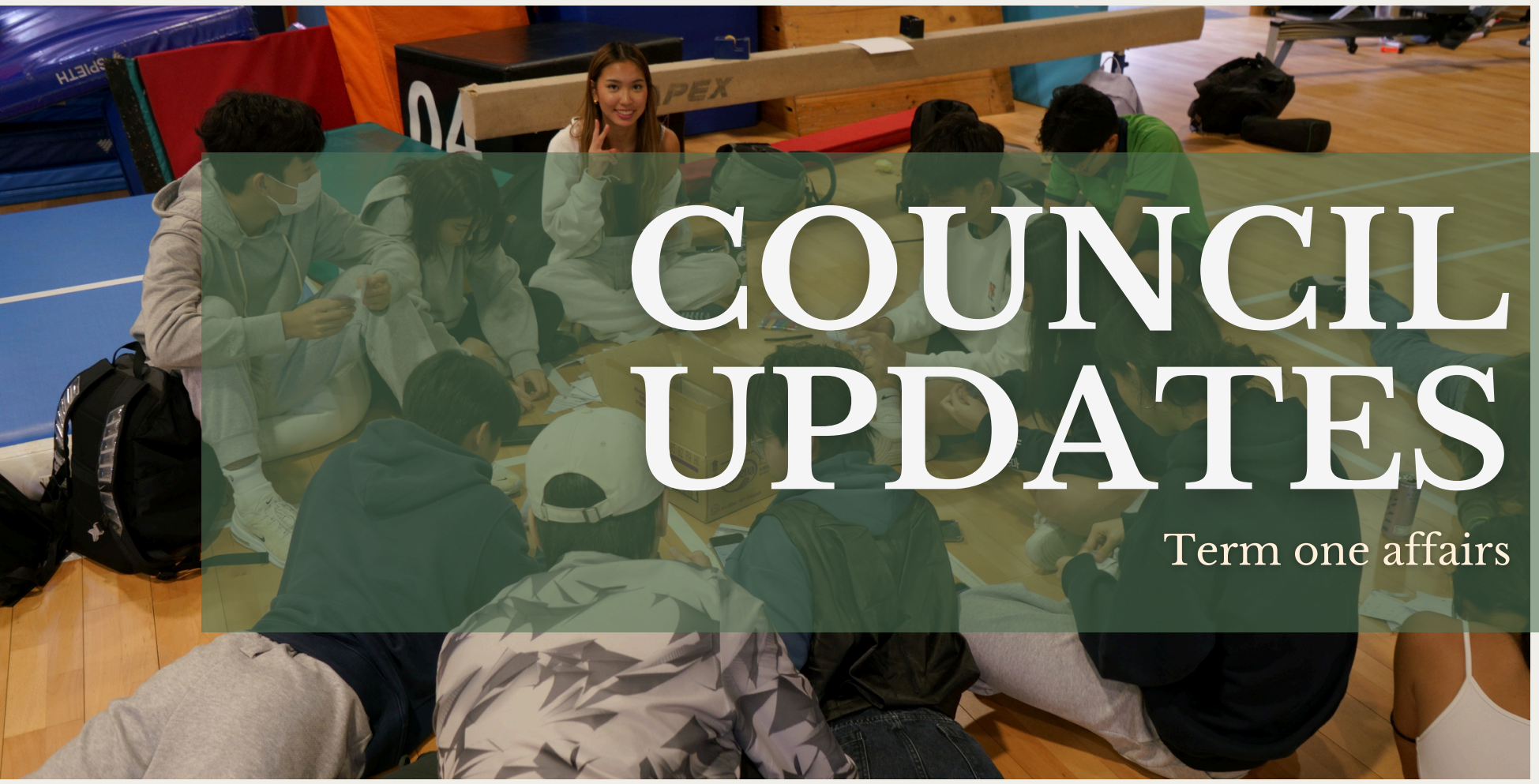
# ENCON 25-26


# Term One Newsletter

council updates
term one events
editorials



# COUNCIL UPDATES

Term one affairs

## COUNCIL OVERVIEW

In October, we welcomed the newly recruited members of ENCON 25-26. This year's council structure features a few key changes from the previous year, including the relocation of the Social Media department as a sub-department under Media and the removal of Deputy Head positions. Leadership comprises the Chairperson and Vice Chairperson, who oversee three core departments: Secretariat, Research, and Media. Each department is led by a Head and includes three core members; the Media department includes two additional Social Media Coordinators. Finally, the General Team consists of two representatives from each middle school year group, who assist and collaborate with each department on a project-specific basis .

## TASS

In Term 1, the STC branch of The Alliance of Sustainable Schools achieved significant success with its innovative esports tournament, blending gaming with sustainability. The Clash Royale event garnered impressive participation, with over 30 teams (80+ players) applying.
Looking ahead, TASS plans to partner with Chartwells to offer improved meal-size options for students and will place additional recycling bins next to food waste stations in the cafeteria, continuing to foster a greener, more inclusive school community.

## CALL TO EARTH WEEK

The council's annual Call to Earth Week was held from December 1st to 5th, with this year's theme being 'Habitat Destruction.' Over the week, we hosted various events: a non-uniform day, a Recycled Crafts Workshop, an Interhouse Recycled Origami competition, a Book Drive, and a Habitat Fair.

The week began with a non-uniform day, where students dressed in green, blue, and brown. We took photos of participants with a habitat-themed photo frame, and these were combined to make an Instagram reel to demonstrate STC's commitment to sustainability. Next, students showcased their house spirit by participating in an Interhouse Recycled Origami Competition. Over 1,200 pieces of origami were folded in total, promoting the reuse of materials in a hands-on, creative way. Later in the week, the Council debuted the Habitat Fair. Attendees could visit various booths, each hosting a minigame like Memory Match, Habitat Throw, or Frog Jump. By collecting stamps from the games, they exchanged them for eco-friendly prizes, including metal and wooden straws and plushies. Finally, on Wednesday and Thursday, the school was invited to buy second-hand books for cheap at our Book Drive, educating students on the benefits of reusing materials while simultaneously raising awareness about deforestation as a form of habitat destruction. The proceeds from the event will be donated to The Nature Conservancy, an NGO that focuses on habitat restoration in Hong Kong. Overall, the week was a meaningful success, fostering both environmental awareness and community spirit.

# WASTEFUL AI

## *and what it can mean for our generation*

### *What is Wasteful AI?*

*We are in a modern era where technological advancement is flourishing. For instance, it means that artificial intelligence can write essays, create pictures, and solve complex problems within just seconds. At Shatin College, we are encouraged to use new tools to learn and create. However, for such a school community that deeply cares about the environment, we should continue asking ourselves this important question: what is the hidden cost of such digital convenience?*

*The fact is, each time we use an AI, it produces some real-world cost. Behind every answer and image, there is a process involved that uses massive amounts of electricity, water, and creates waste. The same technology that might seem to promise a smart future is also building a large environmental footprint right now.*

*As the Environmental Council, our aim is to bring students and staff together to support sustainability. Today, that means looking beyond the physical waste we can see to the invisible, but often more wasteful; footprint of our use of AI.*

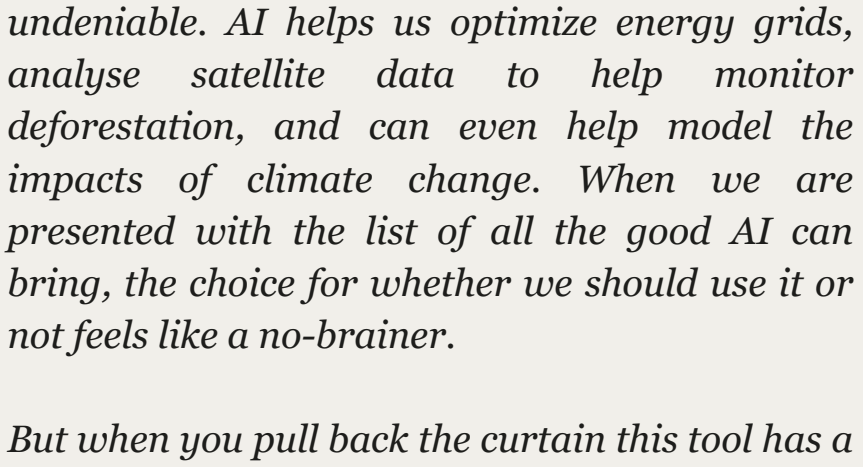


**Fig 1.1: A photo of AI waste products (IEEE Spectrum)**

### *Moral implications*

*AI changes how we tackle environmental problems. On one hand, its potential is undeniable. AI helps us optimize energy grids, analyse satellite data to help monitor deforestation, and can even help model the impacts of climate change. When we are presented with the list of all the good AI can bring, the choice for whether we should use it or not feels like a no-brainer.*

*But when you pull back the curtain this tool has a cost. AI needs a lot of power, the computers that train and run AI use massive amounts of energy, which could mean more burning of fossil fuels. While, the special computer chips themselves also need rare minerals, and obtaining them out of the ground leaves scars. Additionally, when all this tech becomes obsolete, and it does so fast, it just piles onto the world's electronic waste crisis. (MIT News)*

*So we're stuck in this loop. The very machine we created as a rescue boat is also a leaky one. It raises the tension between collective benefit and the collective costs. Getting out of this dilemma means that we demand AI runs cleaner, and that its own footprint doesn't wipe out its own good deed.*

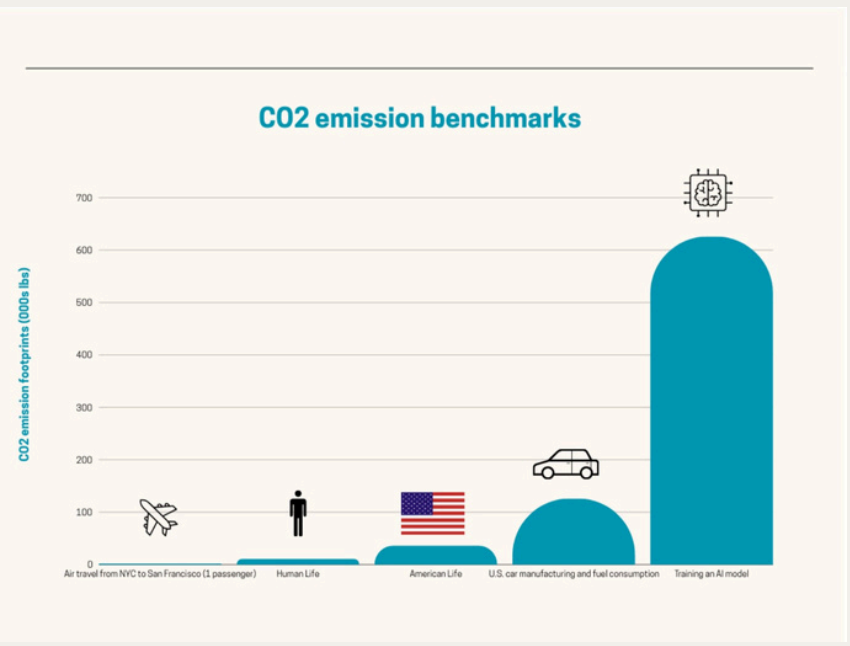



Figure 1.2: **A graph showing carbon dioxide emission benchmarks (The Observer)**

## *Why It Matters to Us*

*The environmental cost of AI is a real factor, not some threat over the horizon. This is due to the never-ending demand for computing power. Researchers at OpenAI have determined that computational power required to train state-of-the-art AI models has doubled every 3.4 months since 2012. That kind of exponential growth charts a forbidding future: per Earth.org, by 2040, the ICT sector could be responsible for a full 14% of global emissions, driven by the omnipresent hum of data centres and communication networks.*

*This computational hunger immediately translates into a massive carbon and resource footprint. A single large model training can use as much energy as more than 130 Hong Kong households do in a year. The more pervasive problem, however, is the energy consumed every time we interact with AI-called "inference." A single, whimsical AI-generated image has the carbon cost of charging a smartphone halfway, according to research by Luccioni et al. (2024). That same act, repeated numerous times a day for millions of users, both over vital and trifling matters, becomes monumental waste.*

*Besides electricity, these powerful data centers are incredibly thirsty for water to prevent overheating, with major technology firms reporting increases in water use upwards of 20-30% year on year directly due to AI growth. Moreover, the very hardware life cycle is highly unsustainable. The continual drive for more powerful chips accelerates the generation of electronic waste, a crisis where only 17.4% of global e-waste is formally being recycled. The picture this paints is clear: our digital convenience is shackled to an energy, water, and hardware-wasting physical system. Findings indicate that E-waste solely from* ***generative AI*** *could potentially lead to a total accumulation of 0.6-2.5 million tons during 2025-2030. Furthermore, an AI request to ChatGPT consumes 10 times the electricity/energy compared to a singular Google search. Such an issue causes environmental degradation on a massive scale and plagues those living in damaged ecosystems. (UNEP)*

## *How We Can Help*

As students, we should only provide relevant data to AI models to avoid the consumption of excess energy. This can be achieved by only using AI for educational/research purposes and when absolutely needed. According to the research conducted by Luccioni, et al., (2024), a single generated AI image can use as much energy as half a smartphone charge. (Association for Learning Technology)

Furthermore, we must limit the amount of interactions we have with AI and craft our prompts in a way that we can get the most information out of as little retries/prompts as possible when needed. This requires our *prompts* to be concise and clear-cutted. We should also adopt more environmentally friendly AI models such as DeepSeek V3 which *"claims significantly reduced energy consumption - approximately 1/10th of comparable models"* instead of AI software with significantly higher environmental impact/no significant data e.g. Gemini 1.5 Pro (Association for Learning Technology)

In this digital era we live in, we have arrived at a certain stage where we cannot reject AI. Instead, we must learn methods of responsible consumption as well as the environmental logic behind AI in order to truly minimize our carbon footprint as well as the harm towards ecosystems. Only then can we truly strive to make a positive impact towards helping the environment.

# *Works Cited*


Armstrong, Anna. “Think before You Prompt: Reduce Your AI Carbon Footprint with ROCKS.” ALTC Blog, 15 May 2025, altc.alt.ac.uk/blog/2025/05/think-before-you-prompt-reduce-your-ai-carbon-footprint with-rocks/#gref.

Cho, Renée. “How AI Is Revolutionizing the Recycling Industry.” State of the Planet, 18 June 2025, news.climate.columbia.edu/2025/06/18/how-ai-is-revolutionizing-the-recycling-industry/.

Kanungo, Alokya. “The Green Dilemma: Can AI Fulfil Its Potential without Harming the Environment?” Earth.org, Earth.org, 18 July 2023, earth.org/the-green-dilemma-can-ai fulfil-its-potential-without-harming-the-environment/.

Luccioni, Sasha, et al. “Power Hungry Processing: Watts Driving the Cost of AI Deployment?” Association for Computing Machinery, 3 June 2024, https://doi.org/10.1145/3630106.3658542.

UNEP. “AI Has an Environmental Problem. Here’s What the World Can Do about That.” UNEP, 21 Sept. 2024, www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about.

Zewe, Adam. “Explained: Generative AI’s Environmental Impact.” MIT News, Massachusetts Institute of Technology, 17 Jan. 2025, news.mit.edu/2025/explained-generative-ai-environmental-impact-0117.

# *Credits*

## Design:

Lele Xia

## Research & Editorial:

Kaden Yip
Sonja Dietz
Chloe Zhang
Justin Tang
Ivan Yung