

## Powering Innovation

We recognise the need to change the way we think and work as an organisation as we navigate towards a just transition. Towards this end, we have created an ecosystem where ideas are incubated, tested and scaled to market by supporting key PETRONAS innovation initiatives, namely PETRONAS Innovation Garage (PING), SEEd.Lab and FutureTech Accelerator.

## Driving Sustainability

In line with our net zero carbon emissions 2050 pathway commitments, PLC serves as a platform to upskill leaders in sustainability and at the same time build sustainability advocacy across the organisation, from the environmental and human capital perspectives. We have also designed and built a new campus to drive our sustainability efforts.



PLC also hosted several key events, namely the PETRONAS Race2Decarbonise Hackathon and a roundtable forum on Road to COP27: Alignment on Energy Sector Decarbonisation to support National Narratives on Net Zero GHG Aspirations, with the Malaysian Government's Economic Planning Unit (EPU) to demonstrate our strong commitment in lowering our carbon footprint in support of Malaysia's environmental agenda.

### Sustainability Efforts at PLC

Aligned with PETRONAS' approach to sustainability, PLC's campus is built with a green vision. It is environmentally responsive with energy-saving architecture as well as green and digital technologies in place. Our campus has achieved the Platinum status of the Green Building Index Malaysia Certification and Leadership in Energy and Environmental Design (LEED) Platinum status of the US Green Building Council.

#### Biodiversity

- Total area of 35 acres (including lakes, streams and landscapes) to provide habitats for flora and fauna such as indigenous plants, butterflies and dragonflies.
- 2,160 trees planted, which can potentially absorb 64.8 tCO<sub>2</sub>e equivalent to the amount of carbon dioxide produced by 127 air conditioners running for a year.

#### Wastewater Management

##### i. Greywater

- Wastewater generated from hand-washing basins is collected, filtered and used for toilet flushing, which reduces water demand and costs.

##### ii. Rainwater Harvesting Tank

- Rainwater is stored in four storage tanks with a maximum storage capacity of 1,368 m<sup>3</sup> and is used for landscape irrigation. This capacity can wash up to 228,000 linen bedsheets.

#### Waste Management

- A maximum of 150,124 kg of food waste per year can be fed into a vessel composting system. This generates an estimated 10,509 kg of compost per year that may be used as fertiliser for PLC's landscape.

#### Reduction of Heat Island Effect

- Man-made lake with water volume of 14,203 m<sup>3</sup> (equivalent to approximately 5.7 Olympic-sized swimming pools), reduces the air temperature surrounding the building.
- Main building facade is orientated north-south to minimise solar heat gain.

#### Energy Generation

- 4,066 photovoltaic (PV) panels installed to generate an estimated 2.3 million kWh/year, equivalent to the ability to power up 327 double-storey houses per year.

#### Daylight Harvesting and Glare Control

- Reduce reliance on artificial lighting through specially designed glass panels which are strategically placed for optimum natural light.
- High performance glazing to reduce energy consumption through the building envelope.

#### Electric Vehicle (EV) Chargers

- 17 Gentari EV charging points are available at PLC.

#### Health and Well-being

- Open spine area allows for well-ventilated social spaces.
- Use of MERV 13 rated air filters for better indoor air quality.
- Selection of Low Volatile Organic Compounds (VOCs) paints and adhesives.
- CO<sub>2</sub> sensors to maintain the quality of fresh air within air-conditioned building environment.

#### Efficient Systems

- Air Conditioning and Mechanical Ventilation (ACMV) system with high system co-efficient performance.
- Lighting system with automated light (lux) sensors and motion sensors.