



Education is the key to raising awareness and inspiring action in the fight against climate change and the Canadian International School of Hong Kong (CDNIS) is definitely showing the way.



## CDNIS sets example with eco-smart initiatives

By teaching the science and essential principles in the classroom, getting students involved in a wide range of green projects, and nudging all members of the campus community to make more sustainable choices, they have become a thoroughly “eco-smart” school and are fully committed to further improvement in every area of activity.

“I believe everyone has a role to play,” says Peter Wong, Director of Business Administration at CDNIS, who manages the day-to-day school operations and is concerned about the school’s environmental impact, and coordinates closely with staff. “We want to live and breathe sustainability, and we realise there is no point teaching it if the school doesn’t actually do it.”

To that end, Wong has made a point of adopting best practices from the corporate sphere and from around the world, resulting in numerous initiatives to reduce carbon emissions, cut energy consumption, and eliminate waste.

For example, with the installation of close to 350 rooftop solar panels, CDNIS is now generating power to feed into the local grid. Dedicated school buses to and from Wong Chuk Hang MTR station and other interchanges mean far fewer pupils and staff now travel by car. Internationally recognised BEAM Plus accreditation has been attained for all recent major campus redevelopment projects, confirming that campus renovations meet the highest standards in terms of materials and energy efficiency. And a green roof garden plus a host of recycling schemes give every student the chance to roll up their sleeves and play a part.



“Things like solar panels are not just ‘nice to have,’” Wong says. “It is also about the message they give and what students can learn about cleaner and more renewable energy, the concepts and the objectives. Broadly speaking, the school now generates 4-5 per cent of our energy needs. But the goal is to increase renewables and continue to raise awareness among students and staff about our impact on the environment, our carbon footprint, and how we can adopt more sustainable practices.”

To record progress and point the way ahead, the school produces an annual ESG report, highlighting steps it has taken and other ways to achieve a positive environmental impact. One current focus is “digital transformation” to move more quickly from paper-based processes to digital processes for procurement and administration. Another focus is to cut unnecessary waste in catering operations, at the same time spreading the message about individuals taking responsibility for their choices and actions.

Looking ahead, Wong is already working on a number of big plans. For instance, preliminary talks are taking place with the contracted bus company for them to switch to using electric vehicles.

“There are some technical limitations, but it’s our job to push the boundaries,” he says. “We are also looking to reduce total energy consumption by 3 per cent year on year. That comes down to constant education and reminders, powering down certain parts of the campus when school is not in session, installing LED light bulbs, installing water sensors in washrooms, and holding ourselves accountable under the BEAM standards.”

Given Hong Kong’s climate, Wong also hopes to set up a system of transparent pipes with small turbines inside to generate power from rainfall – and allow students to observe the process. And he is researching the possibility of installing special floor tiles in hallways and elsewhere to convert the kinetic energy from daily foot traffic into power.

One current member of the school committee helping this is Sarah West, who is in Grade 12 and taking biology as one of her IBDP subjects. She is passionate about environmental causes and has



been instrumental in successful campaigns to end the use of plastic utensils in the cafeteria and implement a “no cup, no coffee” policy so people bring their own reusable mugs.

As a leader in the school’s eco-action club, she has also introduced fellow students to green roof activities – planting, weeding, fertilising, and harvesting herbs, fruit and vegetables – so they can experience the benefits of working with nature and understand “where food comes from”.

Those who take part also see what recycling means in practice. Some of the food waste from the cafeteria goes into the on-site composter and then fertilises the crops. Much of the rest is sent over to Ocean Park, which puts it to similarly good use.

“The green roof also has a grass lawn and an area for plants native to Hong Kong,” says West. “Students are learning about science and the natural world, the right conditions for plant growth, and how bugs help the environment function. They love it.”

For Brent MacEachern, science and maths teacher for Grades 6 to 8, the green roof has also made it possible to incorporate different types of multi-stage experiment into his lesson plans. For example, exploring whether coffee grounds or tea leaves make a better fertiliser for tomatoes, basil or peppers, and how soil acidity affects certain plants, is “science in action” and brings the subject alive.

“We talk about combination planting techniques, biodiversity and drip irrigation and we can then apply those lessons on the green roof,” MacEachern says. “But also, sometimes we just have a ‘balance’ day there to get kids off their screens and out of the classroom.”