



Corinda State High School – *Are We There Yet?*

In 2008 the Corinda School community identified Environmental Sustainability as a strategic priority. The aim was to become the first school in Queensland to achieve Carbon Neutral accreditation. In 2018 the school finally achieved its goal and was not only the first school in Queensland to achieve this, but is the only Climate Active certified secondary school in Australia (formerly known as the National Carbon Offset Standard – NCOS). This is not a one-time goal, there is a greater strategy. The title “*Are We There Yet?*” describes the journey towards Carbon Neutrality – as with any innovation “*you will never arrive*” if a school is fully committed to continuous improvement. It simply inspires new learning.

Corinda State High School is a large metropolitan co-educational 7 – 12 secondary school, located in the western suburbs of Brisbane, with a population of over 2000 students and 200 staff. The School is well known for its achievements and has established a strong reputation in the Metropolitan region for its innovative Excellence program including academic excellence, sporting excellence and creative arts and design excellence programs. These are built around strong partnerships with reputable organisations in their chosen fields. The school has a strong mantra around: “*Today’s Innovation could be tomorrow’s norm*” – a reality that fuels a cycle of continuous improvement.

The school is equipped with State of the Art research and science facilities including digital technologies and multimedia. Students are deeply immersed within their curriculum disciplines in coding, virtual reality experiences and artificial intelligence systems allowing them to champion innovative futures thinking. A unique feature of the school is the thriving Agricultural Farm, which is a very rich STEM resource and has well established SmartFarming innovation. The school aims to present a holistic education catering for academic, social emotional and physical well-being of students’ life.

Corinda State High School lives and breathes its vision – *Exceed Your Expectations*. Underpinning this vision are its Educational and Aspirational Values which include:

- Learner Agency
- Learning Partnerships – teachers, peers, families and communities
- Individual & Societal Wellbeing.

The school’s aspiration is that every student will nurture his or her passions, by making connections between different learning environments, and thrive towards attaining their personal learning goals.

The school recognises that it is faced with the challenge to prepare students for rapid economic, environmental and social changes, for jobs that have not been invented and to solve problems that have not been anticipated.

In 2008 the school community identified the need to promote environmental sustainability and the fostering of environmental stewardship as a strategic priority. It has continued to be a priority in all strategic planning since. At the outset, it was assumed that Carbon Neutrality would be easily achieved in the 3-year cycle of the Strategic Plan, however the journey towards Carbon Neutrality presented to be quite a challenge for a large complex secondary school.

The journey began by undertaking research with other organisations that had achieved this. We learnt from their experience and this gave us some direction and insight to what we were undertaking. The research highlighted the extent of the work that needed to be undertaken. It was recognised that a major part of the work was and always will be behaviour change. In addition to this, planning needed to include a review of purchasing policy with consideration given to ‘whole of life’ of products and services. With this in mind an audit of the school’s emissions was undertaken a plan for reduction of emissions developed. This included incorporating the management of



infrastructure such as installation of water tanks, energy efficient lighting, recycling and composting, embedded curriculum focus on stewardship and extracurricular opportunities for students to engage with sustainability.

At the outset all staff engaged in an education program aiming to enact behaviour change with energy use around the school and in their homes. This was acknowledged as the largest contributor to emissions across the school. The impact of this highlighted significant reduction in energy consumption and data was continually monitored to record reductions over the first two years.

The installation of 2 x 250 000 litre water tanks which captures all the stormwater runoff allowed for the school to recycle the water through the use of underground irrigation systems on its sporting fields, oval and school farm. The school implemented water saving devices in its amenities to also reduce usage. Through these initiatives alone the water usage was halved.

Solar panels were installed through the National Schools Solar program allowing the school to offset some of its electricity consumption. The construction of a new Science facility saw the installation of additional solar panels which linked to monitoring panels for students to use in their curriculum. Additional funding was also accessed to install Solar Hot Water in the school. These infrastructure initiatives provided significant reductions in the school's emissions. The progress was slow but the results were showing positive progress towards the goal.

The school's quest to become Carbon Neutral was widely promoted in the school community. Opportunities to engage with guest speakers such as Peter Israel from The Climate Project – Australian Branch of Al Gore's Climate Change Leadership Program were embraced as an opportunity to educate the whole school community. One of the aspirational goals for our students was for them to be the leaders of change in the community – ready for 'Future You' (the School's new Strategic vision).



Students are pictured collecting coffee grounds from the local Coffee Shop for composting.

Education has been a large part of the work and will continue to be a priority within the community. Opportunities have been embraced to demonstrate to students how alternative energy sources can be utilised. Targeted intensive curriculum programs were developed within the junior school to empower student ownership of sustainability across the school. The school's emissions reduction measures vary from standard energy efficiency and recycling practices, to hands-on activities such as weed control, composting and permaculture. There are many enjoyable activities for kids to do that also teach the lessons of sustainability within and across the curriculum.

The school accessed a grant to install a wind turbine as an exemplar where students can use the data from this in their learning programs. Continual projects around reduction of waste, installation of recycling stations and community composting have been an ongoing priority. This continues to be a challenge as the school has seen significant growth in student numbers over the past 5 years. The school canteen is committed to recycling by its choice in packaging and accessing the composting facilities. Where possible produce from the school farm are accessed for use in the canteen.



A market garden is fully operational, located between key buildings in the school. This concept was adopted following a Professional visit to a school in Korea who also shared sustainability priorities. This concept was about building the garden within the school environment and embedding



this within the Food Science curriculum. A full paddock to plate program was embedded and the students have ownership over the maintenance of these gardens.

Corinda is located along the Oxley Creek and the school farm adjoins the creek. This has provided opportunities for the student action team – ‘The Green Team’ to replant vegetation along the creek accessing Council donations of trees and plant around the school grounds.

Over the years the school worked with a range of organisations seeking out productive partnerships in order to achieve its overall goal towards Carbon Neutrality. They all value added to the journey, but there were many blocks along the way. Taking a school to Carbon Neutrality has so many variables that other organisations do not deal with. So much was learnt along the way, and there were many backward steps – as seen by the time it took to reach its goal.

In 2017 one of the School Captains made it his mission to help the school achieve its goal. He became very proactive with the Business Manager, wrote to Politicians, contacted energy companies and devised a plan. It was at this time when the school partnered with Pangolin Associates. They assisted the school in devising a new plan, measuring emissions and offsets. Working with Pangolin Associates enabled the school to bring together all the individual projects implemented and measure their contribution. While the school had been very focused on the actions required, there was a gap in expertise for how these offsets are measured. It was reassuring to learn of what the school had achieved with offsets and reduction in emissions.

The expertise and guidance provided was extremely valuable for staff and students as they assisted us in completing the requirements for accreditation. We know maintaining our accreditation will be an ongoing challenge as Corinda is now fully air conditioned, and new facilities constructed. The school has recently undertaken a new energy audit as part of the Renewable Energy initiative being implemented by the Department of Education. Through this initiative the school will be funded to offset further emissions.

The implementation of Smart Farming innovation at the school farm has enabled innovative sustainability measures to be applied and this is beginning to attract attention from tertiary institutions. This is an exciting and unique innovation that presents an opportunity for a story itself. Corinda’s Agricultural Farm is an outdoor learning laboratory located just 12 kms from the Brisbane CBD. What is worth celebrating here is the energy and enthusiasm of staff and students involved in this work. Their commitment to sustainability and stewardship of the land is remarkable and their future plans are very exciting.

Working with the expertise and guidance of Pangolin Associates has provided the school with valuable support and our aspirations have become a reality – finally achieving the goal of Carbon Neutral Accreditation in 2018. There were times when the school thought this was not achievable, but it did not deter from committing to the end goal. The data and reporting provided has given the school enormous insight to all factors that contribute to emissions.

While the school has not achieved total carbon neutrality through its own offsets, it continues to aspire to achieve this through its work with Pangolin Associates. The offsets acquired are credible and ethically sourced making further contributions to stewardship of the earth. Keeping these at a minimum is the goal while the school continues to explore further strategies for offsetting. These credits have been purchased through funding generated at the school and with the support of local suppliers.





The school faces many challenges being 60 years old and experiencing the usual infrastructure challenges of burst water pipes and large maintenance projects. These challenges require attention as emissions are monitored and managed, and attention given to sustainability as improvements are undertaken. The recent purchase of the fully sustainable HIVVE modular classrooms at the Agricultural Farm is an example of how the school diversifies its building program. These two classrooms are designed not only as learning tools, but demonstrates how schools can be environmentally responsible. It is fully powered by renewable energy, air conditioned and is designed to maximise natural light. The HIVVE IQ technology in this building uses unique technology that continually monitors the classrooms and intelligently manages temperature and air quality.

Working within the system provides limitations but this has not stopped the school from challenging the status quo and changing the system – further influencing behaviour change within a large education system. This was evidenced through the work of the School Captain – who influenced the Government to introduce the Energy saving initiatives. This in itself is an example of the influence this school has had on behaviour change. The school's success at accreditation, resulted in the local Federal Member challenging the Federal Government in parliament, citing Corinda State High School as the example of leadership that is required to act on Climate Change.

As the title of this article states: *“Are We There Yet”* - we will never ‘arrive’. This does not mean that we will not maintain our Carbon Neutral status – it simply means that the school will need to continually monitor and measure and look for new ways – being true stewards of the earth. Success will really be measured by the mindset, the culture and the relationships that is lived and experienced through our ongoing priority to create a sustainable future for our students – who one day will be leading the way in their communities.



The Corinda State High School new strategic plan remains committed to its Carbon Neutral agenda and it is summed up in this statement: *“Our school, Our World, our dream – to ensure that our students are ready for what is ahead, they are globally engaged and competitive, and most importantly will exceed your expectations “.*

Helen Jamieson
Executive Principal

