ZERO EMISSIONS NOOSA

Cooroy a hinterland hero

Zero Emissions Noosa (ZEN) has been tracking progress towards the goal of zero community emissions for Noosa by 2026. In this series we'll be focussing on electricity and looking in detail, postcode by postcode, so you can see how your locality is shaping up to the challenge.

We start with 4563 which encompasses Cooroy, Lake MacDonald, Tinbeerwah, Cooroy Mountain, Ridgewood, Carter's Ridge and Black Mountain.

Around one in six people in the Noosa Council area live in postcode 4563, and residents are leading the way with 66 percent of dwellings having installed solar PV, whilst 37 percent of businesses have invested in solar.

Total solar installed is around 12.2MW, which is about 2/3 of the capacity of the Sunshine Coast Council's solar farm at Valdora. Whilst the uptake is high, it's estimated that only 1/7 of the solar PV potential on all roof types is being utilised.

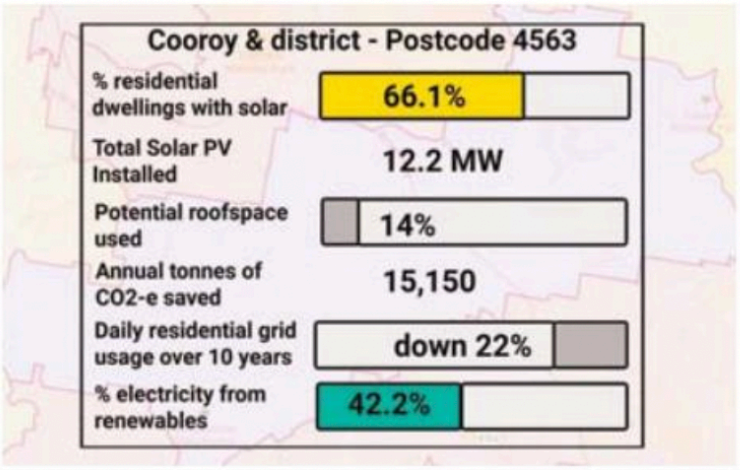
The solar on roofs and other renewable generation saves about 15,150 tonnes of CO2 per year that otherwise would have been emitted from coal fired power stations. Around half of the electricity generated from rooftop solar is consumed on premises and the rest is exported to the grid and is used by other locals.

Whilst the number of electricity customers is going up, the overall electricity consumption is going down. Over a 10-year period average residential daily usage is down 22 percent. There's growing interest in batteries with 25 installations to date.

Rod Ritchie, president of the Cooroy Area Residents Association, is delighted and says, "Cooroy and district is over 40 percent self-sufficient in electricity thanks to a high uptake of rooftop solar and reducing energy use. This is a fantastic result, making us one of the top performing areas in Queensland."

Details can be found at zeroemissionsnoosa.com.au/4563

Next time we'll look at postcode 4565 which takes in Boreen Point, Cooroibah, Cootharaba, Noosa North Shore, Ringtail Creek, and Tewantin.



Cooroy facts and figures. Picture: SUPPLIED

ECO Cottages – Cooroy's Quiet Achiever

Greg Phipps, Director of Eco Cottages at Cooroy, is a very passionate person – passionate about his product and about reducing his construction business's carbon footprint. Since 2007, he has owned and operated a manufacturing business constructing prefabricated modular timber homes using white cypress timber.

Australian studies show the construction sector's carbon footprint is an estimated 18 percent of our national greenhouse gas emissions, including embodied energy in materials. However, timber is a better environmental choice than concrete and steel because it is renewable and has less embodied energy (EE).

"I believe white cypress is a sustainable timber source for constructing our cottages", said Greg. "It is a 'hard' softwood tree that is native to Australia and found in abundance in native regrowth forests of eastern Australia.

"Currently we have a university researcher working in the business to develop life cycle assessment data for white cypress to scientifically substantiate its role as a sustainable timber source in prefabricated modular housing. I believe prefabricated housing, using white cypress timber, will be very important in future housing affordability and social housing projects."

Continually looking for ways to reduce Eco Cottages emissions in both the construction of its cottages and the operations of the factory, in January 2020, Greg had a 100kw solar system installed.

Eco-Cottages in production.

"With power bills of $2,550 quarterly, and on average, $10,200 annually, it was an obvious way of not only reducing our energy costs, but also reducing our emissions. Now our power bills are $1,055 in credit quarterly and on average $4,220 in credit annually. That's after we have used all the power we need in the drying of timber and cottage construction," said Greg.

"While it will take about nine years to pay it off, it's a sound long term business and sustainability decision for our business. "

Technical details: 362 x 275 Watt Zeus Apollo Solar Panels; 1 x 50 KVA Goodwe Inverter; 1 x 15 KVA Z20 Zeus Apollo Inverter; 1 x 10KVA Imeon Hybrid Inverter; 4 x AuziMAZ 20Ch Energy Monitors.

Greg Phipps and team. Pictures: SUPPLIED

Barry Henderson with his Yutong electric bus. Picture: ROB MACCOLL


Trevor Richards displays his new trike.


Trying out an e-bike

E-vehicles come to town

By Margaret Maccoll

From scooters, skateboards and bikes to racing cars and even a bus all manner of cutting edge electric vehicles was on show at the Noosa Electric Vehicle Expo held last Sunday.Expo coordinator Vivien Griffin said the interest from Noosa residents was evident in the crowd of visitors that came to the expo, even despite the threat of rain.

Among the exhibitors was Barry Henderson who drove his Chinese-made Yutong bus to the Noosa expos from Coffs Harbour on a single charge with more than 30 per cent power remaining.

Barry said the he had offered one bus to Noosa Council to trial from the company that had almost 370,000 passenger buses operating around the world.

"They're a quiet, smooth and totally different ride to diesel," he said. "They're so quiet people can have conversations."

The bus takes three hours to charge and runs about 420km on a single charge.

Alongside Barry and his Yutong bus was Trevor Richards who in 2007 registered the first electric car in Queensland, a converted ute. Trevor bought along his ute as well as his latest invention, a very flashy trike. Powered by 48 battery cells the vehicle has a range of 240km but it wasn't a cheap build. The trike cost Trevor about $50,000 to build, $20,000 of that cost being the batteries which he said have a life expectancy of about 8-10 years.

Given the increasing popularity of electric bikes in Noosa it was no surprise to see a number of electric bike demonstrators at the event. Among them were so very slick models. Harry Proskefalas and Wolfgang Roffmann of Emotion concepts brought along their chopper-style Wild electric bike which sells for about $4,500-$5000 at speeds up to 50km/hr, requiring only a car drivers licence to operate. Their electric trick cruise at 70km/hr, sells for $6,500-$7000 and makes for a safe and comfortable ride, he said.

Glenn Brown of Noosa Classic showed off their Spanish made imports in various styles including the Cruzer which resembles an Old Indian motorbike.


Harry Proskefalas on his Emotion concepts trike.


Testing the skateboards.