

2020 ANNUAL REPORT

Zero Emissions Noosa Incorporated



Incorporation No: IA57064

ABN: 74862487515

ACNC Registered Charity

Registered Business Name: Zero Emissions Noosa

ZERO EMISSIONS NOOSA ANNUAL REPORT

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1 President's Remarks

The lockdowns and economic and health impacts from COVID-19 in 2020 severely limited the outreach that ZEN could undertake during 2020. Nevertheless, we were able to continue progress on a number of fronts, and these are described in this Annual Report.

It was heartening to see Australian governments at all levels listen to the scientists when determining their response to COVID-19. I could only wish that a similar respect and action on the findings of science with regard to climate change was evident.

A recent report¹ from the Australian Academy of Science stated:

“Australia is facing an extremely challenging future under the current emission trajectory of the international community.”

“If the world continues on this pathway, [Australia] will lose many of its vital ecosystems (native forests, Great Barrier Reef, alpine regions), and will place its agriculture and health systems in jeopardy of failing.

“The argument that Australia doesn't contribute ‘significantly’ to the GHG emission problem and therefore should not act on climate change ignores the enormous losses that Australia will experience if it doesn't work with the rest of the world to achieve and exceed the Paris Agreement goals.”

Yes, we are facing a climate emergency and that is why ZEN exists. I am proud to report that a remarkable team of ZEN volunteers has continued its commitment to community information and engagement throughout a tumultuous year. This Annual Report will detail some of those initiatives and the great team behind them.

I would particularly like to thank our Coordinator, Dalia Mikhail and the ZEN Board of Directors, which has provided guidance, oversight and good governance during the year:

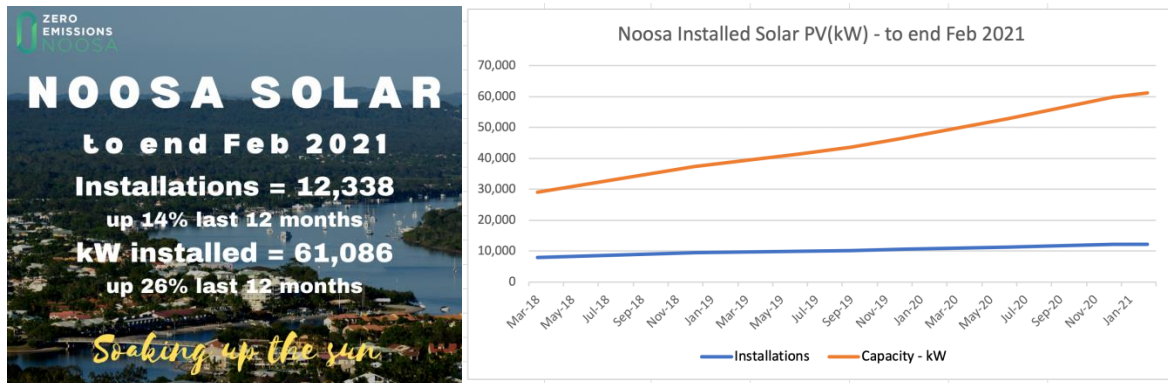
| | |
|-----------------|-------------------|
| Vice President: | Anne Kennedy |
| Treasurer: | Joe Shlegeris |
| Secretary: | Roman Raudonikis |
| Committee: | Geoff Acton |
| | Annika Reynolds |
| | Thorsten Kels |
| | Michael Whitehead |
| | Lyn Allen |
| | Mat Colefax |

Vivien Griffin
President

¹ Australian Academy of Science, [The Risks to Australia of a 3⁰C Warmer World](#), March 2021.

2 Noosa Electricity Generation & Consumption²

Installed solar PV in the Noosa LGA has continued to grow at a pretty constant rate, and 2020 was no exception, in spite of COVID-19. As at end February 2021, there were over 12,000 solar installations with a capacity of over 60MW.



Installations continue to grow at a pretty constant rate of 1MW per month. To December 2020, almost 45% of suitable residential dwelling have solar PV, but this varies across localities with postcode 4563 (Cooroy & districts) at 66%, and postcode 4567 (Noosa Heads, Castaways, Sunrise & Sunshine Beaches) at 32%.

Business is now catching up with 23% of them having solar (725 installations). This compares with a December 2017 figure of less than 5%. Business installations are larger with total capacity rapidly increasing from 2.9MW to over 13.4MW over the same period.

Available roof space would not appear to be an impediment to increased solar PV uptake with less than 15% of potential roof space being used. Annual tonnes of CO2 equivalent avoided due to use of electricity from renewable sources is estimated at over 83,000 tonnes.

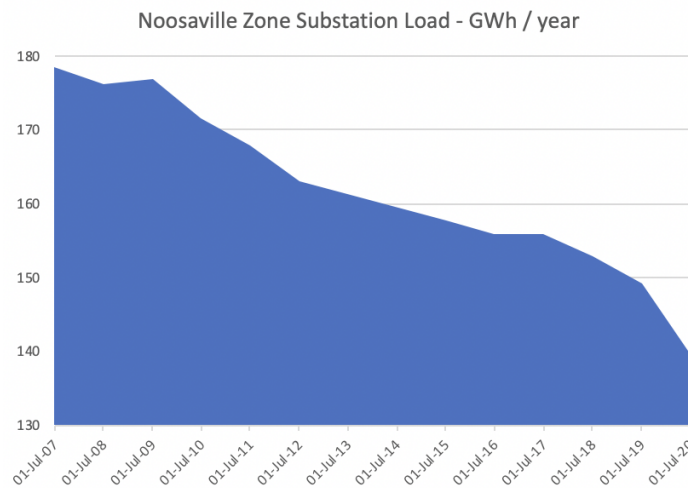
The percentage of electricity consumed in Noosa from renewable sources is estimated at over 30%. This compares well to a Queensland wide figure of 17.5% which is lagging the other states.

| National Energy Market | New South Wales | Queensland | South Australia | Tasmania | Victoria |
|------------------------|-----------------|------------|-----------------|----------|----------|
| 28% | 19% | 18% | 61% | 96% | 29% |

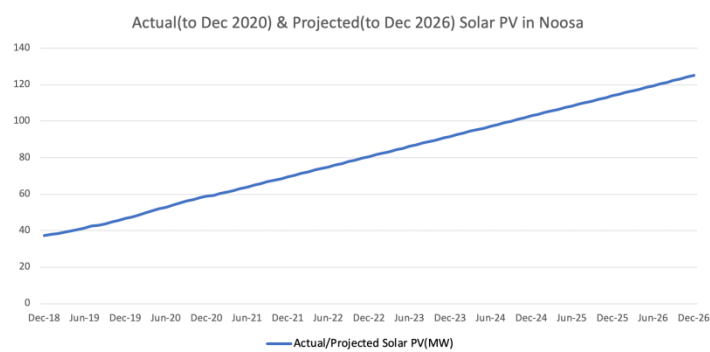
Average residential daily consumption reduced by 20% over a 10 year period up until the end of 2018. Since late 2020, Energex have not made public residential and business electricity consumption. ZEN is making representations to have this data made available again.

² Our thanks to Geoff Acton for this valuable and informative analysis. For more information, go to <https://www.zeroemissionsnoosa.com.au/noosa-electricity-data>

We have access to load data from the Energex Zone Substations that feed Noosa. Analysis of the largest of these at Noosaville show a continued decline of consumption from the Queensland grid, presumably due to increased use of local solar generation and reductions due to energy efficiency, all whilst population continues to grow. Over the 2 years to June 30, 2020, load on the Noosaville Zone Substation has reduced almost 10%.



Looking forward, we can project the recent rates of solar PV installation out to 2026. If the same “business as usual” rates of installation continue, by the end of 2026, solar capacity would double to around 125MW. This would still leave us short of our goal for the electricity component of 100% electricity from renewable sources.



Adding this much local generation will challenge the local electricity grid, as supply during the peak generation period in the middle of the day will exceed consumption. Options will include shifting loads to better match generation (e.g. hot water heating) and batteries to store excess generation for later use.

3. Deductible Gift Recipient (DGR) Progress

One of ZEN’s goals is to achieve tax deductible status for donations to our organisation. Thanks to the steady steering of our Treasurer Joe Shlegeris, we lodged an application with the Register of Environmental Organisations in 2020. We are now awaiting advice from the REO on this application.

4. Website/Facebook

Our website and Facebook pages have been an important information resource during 2020. Geoff Acton, and Duncan McQueen have maintained a steady stream of information on [Facebook](#) and Geoff and Dalia Mikhail have kept our website contemporary and informative

We have also published regular newsletters to both our Zero Emissions Noosa audiences and our Noosa EV Expo audiences. Copies since 2019 can be found [here](#).



5. ZENe

ZENe is our electricity emissions reductions Working Group, convened by Joe Shlegeris. This group has been in existence since our inception 4 years ago, and has been the creative force behind many of the ZEN electricity emission reduction initiatives. During 2020, it never missed a beat, simply transferring to Zoom mode. It is an informal group meeting monthly, and new enthusiastic members are always made welcome. My thanks to Joe Shlegeris for his commitment to the role of convenor since inception.

6. Business Campaign

The Business Campaign Team of the ZEN e Working Group led by Anne Kennedy, planned a series of face-to-face forums with Business Associations in 2020. However, due to COVID 19 it was not possible to proceed with these.

Instead, it used the time to build relationships with the Business Associations in the Noosa Shire, to profile some of the businesses that are ZEN Inc. case studies in the Noosa Today column “Towards Zero Emissions”, to speak at the National Sustainability Conference and to start discussions with some of the Noosa Councillors about opportunities for Noosa Shire to help it meet some of the key commitments it has to addressing Climate Change – the Climate Change Adaptation Plan and the Cities Power Partnership Mayors Economic Recovery Statement. In addition, highlighting opportunities that climate change and the zero emissions goal presents for diversifying the Noosa economy, and how this can be reflected in the revision of the Noosa Local Economic Plan.

Business campaign team members were also actively involved in briefing and research sessions to keep up to date with issues affecting businesses in the shire e.g. prevention of export of solar to the grid, grid instability, community power grids and virtual power plans with batteries, as well as the

technology and opportunities for possible solutions e.g. through environmental upgrade agreements and discussions with key stakeholders like Energex, Planet Ark Power and Radian Energy.

Group members also spent considerable time keeping up to date with issues in the Renewable Energy Industry through zoom webinars and conferences with the Clean Energy Council, Smart Energy Council and others, usually these opportunities are only available face-to-face and at a considerable cost. However, being able to attend these sessions free via zoom was one of the unexpected benefits of COVID.

7 Race to Zero

Zero Emissions Noosa’s Race to Zero program is now embedded in 8 State Government Owned schools across the Shire. The program provides schools with real time access to their energy data for use in the curriculum via the solarschools.net website. Data is also gamified on the Planet Watch APP so younger students can better visualise the impact their energy decisions make on the environment, in real time.

The program was funded by the Noosa Council Environment Grant and provides educational support to all participating schools via ZEN's Project Officer. ZEN’s participating schools, Noosaville, Tewantin, Sunshine Beach, Cooroy, Kin Kin and Federal Primary schools and Noosa District and Sunshine Beach High Schools are reminded that they have access to this free support till the end of Term 2 so please take advantage of our in class or teacher training program. Please email info@zeroemissionsnoosa.com.au for access to this great resource.

The Race to Zero behavioural change program is designed to further the benefits of the installed solar systems on each school by reducing energy waste through education.

Schools are one of the largest CO2 emitters in our region and so reducing wasteful behaviours and educating our youth to switch things off when not utilising them has a huge combined impact. With some schools seeing 20% savings from this activity alone.



Dalia Mikhail, Mayor Clare Stewart, MP Sandy Bolton, Rob Jennings Principal and Ezra Rameka.

Over the past year the Race to Zero program has monitored the participating schools energy data and the combined CO2 saving has been 418 tonnes of CO2 with over 512 MWh of solar generated.

The behavioural change students learn in the classroom is also taken home to their households, together we can make a huge impact on our regions emissions by just being mindful of our energy use and switching devices off when not utilising them, it all adds up!

8. Environmental Upgrade Agreement s

Victoria, South Australia and New South Wales State governments have all enacted legislation which enables local government to borrow from a third party to be able to facilitate loans to business, with loans attached to the property, thus enabling lower interest rates and lengthy repayment periods. During 2020, ZEN began a campaign at State and Local Government level to achieve the legislative amendments to the Local Government Act which would allow this important reform to be available to business in Queensland. We are grateful for the support of local MP Sandy Bolton in pursuing this goal.



Vivien Griffin and Dalia Mikhail meeting with Mayor Clare Stewart and Economic Director Kim Rawlings to discuss EUAs.

9. SOLAR FOR STRATA MASTERCLASS

In 2019 ZEN had identified that strata properties significantly lagged behind in the installation of rooftop solar. As a result, a strong partnership between Tourism Noosa and ZEN was formed to



deliver a Masterclass for property owners on the benefits of solar and how to overcome the barriers.

The event was held in February 2020 to a packed audience, and a strong panel of expert speakers provided compelling and informative presentations.

We are hugely indebted to Juanita Bloomfield-Terry and the Tourism Noosa team for their expertise and commitment in delivering a highly professional and engaging event. Sadly almost immediately after the event, the COVID lockdowns commenced and the momentum was lost, but this will still continue as an important area of focus for ZEN.

10. NOOSA LOCAL GOVERNMENT and STATE ELECTIONS

The Noosa Local Government election was held in March 2020, with a large line-up of councillor candidates and a contested mayoralty. In addition, the State Government election was held in October 2020. For both these events, ZEN formulated a range of policy questions for the candidates whose responses were then uploaded to our [website](#). Our thanks to Geoff Acton for his work on this issue. Zen Inc. also submitted a Recovery Plan to the Queensland Government COVID Recovery Taskforce outlining the role of renewable energies, particularly solar in kickstarting the Queensland economy following the COVID disruption. While ZEN remains non-party political, we believe this approach both alerted candidates to important issues around greenhouse gas emission reduction policy, and enabled the community to assess their responses on this issue.

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'Yes' for a climate action plan

PETER GARDINER



Noosa Council candidates respond to questions from Zero Emissions Noosa.

NOOSA'S next council decision makers will do so with the prospect of climate change firmly in mind if the responses from responding candidates to Zero Emissions Noosa 13 questions are an accurate guide.

ZEN president Vivien Griffin said overall she was pleased with the thoughtful responses made to the 13 questions, rather than "motherhood statements".

She sees support for the ZEN proposal for a massive street tree-planting program to help cool Noosa as one of the most vital areas for actions.

Not all of the candidates responded by the deadline for the survey response, but mayoral candidate Clare Stewart and councillor candidate Patrick Lloyd indicated their responses were still coming.

ZEN is seeking an emergency action plan.

Tony Wellington: "The Noosa Environment Strategy sets out council's objective to achieve net zero emissions for the organisation and the community. I am happy to consider further opportunities.

"Naturally, I am in favour of trees on public land, including road reserves and pathways."

As for the councillor candidates, their response were:

Nathanael Ford: His one word reply to the climate action plan was "absolutely".

Asked would he endorse a massive urban pathway tree-planting program in anticipation of increased temperatures in coming years?

"Yes. The natural shading is something I would personally prefer."

Julien Cahn: "The answer to all your questions is yes, with the caveat that the climate emergency should be addressed with reasoned thinking."

Brian Stockwell: "The Queensland Climate Resilient Council's detailed governance assessment ranked Noosa as a leading council in the state for its integrated approach to climate change.

"We do not have urban heat islands and hence we do not need massive urban street tree plantings — although I support a program to fill priority gaps."

Alan Lander: He would "absolutely support an action plan as long as there is such intransigence at the upper end of our political system".

He said Noosa needs to "preserve and enhance our region's lungs" through urban plantings.

Yanni Van Ziji: She said a climate action plan was "a really important next step after declaring a climate emergency".

Regarding urban plantings to counter future temperature rises: "I would encourage the planting of more trees in our urban areas."

Phil Moran: For the action plan, he would "endeavour to do so, however, getting this up to be included in the upcoming budget round may be tight".

As for street trees: "Absolutely, been banging on about this for years."

Amelia Lorentson: "A Climate Emergency Action plan must be developed with the community in time for the 2020-2021 Budget. As for the trees: "How many trees? How much? Where?"

Karen Cook-Langdon: "It's important to have a plan with clear and measurable targets."

She said the tree planting was a great initiative that needed supporting.

Frank Wilkie: He supported street trees and the plan if it can include the actions in Noosa Council's Climate Change Adaptation Plan, Coastal Hazards Adaptation Plan, Zero Emissions Noosa 2026 and other climate change adaptations.

Janet Kake: "I have participated in workshops with council in 2019 on climate change." She is a strong advocate for more tree plantings.

Meghan Halverson: She is keen for more trees and, "Yes, a climate emergency action plan is critical to claiming a climate emergency."

Snezana Redford: On an action plan: "Most definitely, this is one of mine and The Animal Justice Party's main platforms we are running on." On trees plantings: "Absolutely."

Joe Jurisevic: He supports carefully selective tree plantings and, "Council is already implementing several policies associated with climate change such as the Climate Change Adaptation Plan."

David Fletcher: Yes to the plan that, "should include but not limited to, an action program to identify and evaluate precincts which are endangered by fire, flood, drought and coastal erosion." He is in favour of tree planting.

Karen Finzel: Definitely wants the implementation of plan. "Of course, I will always engage community." She said tree plantings would enhance general wellbeing and combat temperature rises.

Andrew Squires: "Yes, developing a climate emergency plan should be done immediately. The council must engage with community He endorses tree plantings with cost and location considerations."

Tom Wegener: "I am passionate about cutting Noosa's emissions down to zero. I support the declaration of a climate emergency. He did not directly address tree plantings."

11. Electric Vehicle Expo

Sadly our planned 2020 Electric Vehicle Expo did not proceed due to COVID uncertainties. However a valuable partnership between ZEN, Noosa Council and Noosa Junction Association has now been forged, and resulted in a highly successful event in early 2021.

12. Partnerships

We are grateful to the many organisations which have supported ZEN and shared its goals and vision in 2020. We want to acknowledge Noosa Council, Tourism Noosa and Noosa Junction Association for their continuing support and belief in ZEN. In particular we wish to acknowledge the extraordinary collaboration in our efforts from Anne Nolan, Renee Black and Adam Britton from Noosa Council, Judi Lalor from NJA and Juanita Bloomfield-Terry from Tourism Noosa.

13 Community Engagement

In April 2020, on behalf of ZEN Inc, Anne Kennedy, as Vice President, presented at the National Sustainability Conference’s first on line conference. Anne spoke to the topic “Sustainable Solutions for a New Decade - The Noosa Story”, outlining Noosa’s role as a regional influencer on climate and environmental initiatives, specifically highlighting ZEN’s role in assisting businesses with solar and energy efficiency with:

1. Case studies and information to help them break down the barriers to adopt sustainable business practices.
2. The different reasons SME’s have for adopting sustainable solutions/practices and
3. How business owners are delighted with the results – often even better than they expected.

ZEN Inc. was also invited to speak at the launching of the National Local Power Plan by MP Helen Haines, who is developing this Plan to gain Federal Government support and financial assistance to enable local communities to develop their own renewable energy solutions,

ZEN’s community engagement was also strengthened considerably in 2020 with a series of media articles in Noosa Today (see media section below).

13. Grants

Grants are an important source of funds to enable ZEN to continue its work. We particularly thank Noosa Council for the following grants:

| Source | Amount | Description | Acquitted |
|---------------|------------|---|--|
| Noosa Council | \$18000 pa | Community Alliance grant (2019-2021) Coordinator one day a week position | Still in progress |
| Noosa Council | \$8000 | Race to Zero project | Still in progress, extended to 30 June 2021 due to COVID |
| Noosa Council | \$4070 | 2020 Electric Vehicle Expo (subsequently held over to 2021 due to COVID) | Will be submitted in 2021 |

14. Advocacy

During 2020, ZEN had representation on the following consultation groups:

- a) Noosa Council Active Cycling and Walking Strategy Reference Group; and
- b) Noosa Council Transport Steering Group

On both groups ZEN advocates for strategies which can assist reduce emissions in the transport sectors.

15. Media

Under the leadership of Anne Kennedy, the Communications & Advocacy Team of ZEN Inc. was successful in negotiating agreement by weekly print newspaper Noosa Today to run a series of fortnightly articles under the banner of Zero Emissions Noosa. This is a terrific achievement and important in getting the benefits of rooftop solar and energy efficiency out to readers. The initial focus was to be on the business case studies collated by ZEN. The first articles commenced on 6 November 2020 and are still continuing. Please see Appendix A for the full 2020 series. A collection of all Noosa Today articles since the publication went digital can also be found [here](#).

16. Financial

As ZEN is a Level 2 organisation according to the Office of Fair Trading, we are required to submit verified accounts. These have been submitted to Wayne Staal, who kindly provides pro bono service to our organisation. The Cash Flow Statement and Balance Sheet as submitted to Wayne Staal are attached at Appendix B.

APPENDIX A – Towards Zero Emissions columns in Noosa Today

TOWARDS ZERO EMISSIONS NOOSA

Want to reduce your business bottom line?

Zero Emissions Noosa (ZEN) Inc's research shows that businesses which invest in solar regularly report the economic benefits it delivers. However, we also know that small business has little time to do the homework on the best options for them.

That's why ZEN has collated case studies of a range of Noosa businesses which have invested in solar.

The case studies, which will appear in Noosa Today regularly over the coming months, document the type of business, the system size, the payback period and the electricity savings for that business.

Haymes Paint Shop Noosa

Co-owner Mason Powell challenges any business in town to take the time and do the financial calculations.

He says, "They would be crazy not to invest in solar. The decision to have solar installed is an easy decision to make financially. If in doubt, seek advice".

Haymes Paint Shop is an example of a commercial tenant approaching their landlord to get permission to install a solar system.

The landlord did not pay for the installation, it was the long-term tenant.

Mason says despite the fact that Haymes is a tenant, investing in solar still stacks up. Their electricity bill savings covers the finance repayments, meaning the solar system pays for itself.

In this case, the solar system will be paid off before the current lease period of three years is complete, and they also chose a relocatable solar system, if they need to move location.

Haymes Paint Shop is a specialist in paint and decorating, operating six days a week. Business owners Mason Powell and Phil Fortington are very renewables focused and wanted to do their bit for the environment while reducing their electricity spend.

In 2018, they had their 20kW system installed. Pre-solar their electricity costs were \$2,190 per quarter. After solar, they saw an 87 percent reduction.

Their estimated payback is 2.9 years, for their investment of \$23,796 to finance the solar system, which reduces the company's greenhouse gas emissions by 24 tonnes of CO2-e per year - a great contribution to making Noosa a more liveable environment while saving money at the same time.

In 2020, Haymes went one step further in reducing their electricity costs by investing in LED lighting throughout their store.

See for yourself at <https://www.zeroemissionsnoosa.com.au/case-studies>

Haymes Paint Shop co-owner Mason Powell.



Tax incentives for Noosa businesses to invest in solar and storage

The Smart Energy Council highlights major tax incentives in the Federal Budget that will slash power bills for businesses and drive investment in solar, battery storage and electric vehicles.

Temporary full expensing allows businesses with a turnover less than \$5 billion to deduct the full cost of depreciable assets acquired from 6 October 2020 and first used or installed by 30 June 2022.

Instant Asset Write Off allows businesses with a turnover of up to \$500 million to claim immediate 100% deduction of depreciable assets up to \$150,000 by 30 December 2020.

By installing solar and battery systems, companies across Australia are saving money.

They can fully finance new solar and batteries and save money under these programs. The Smart Energy Council urged the Morrison Government to extend the Instant Asset Write Off because it helps businesses save money and is a critical program for the commercial solar and storage industry.

For details go to zeroemissionsnoosa.com.au

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Solar-powered Haymes Paint Shop on Eumundi Road.

Pictures: SUPPLIED

Friday, 6 November, 2020 NOOSA TODAY 33

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TOWARDS ZERO EMISSIONS NOOSA
Businesses take control

Forward thinking Noosa businesses are turning to solar power with great results, and the resounding message is, Solar for Business is a No-Brainer. Many are now looking at how to take their control of energy usage even further, and this is where commercial batteries are leading the charge.

Battery systems make the most of rooftop solar and slash demand charges while providing certainty of supply during power outages. Battery-supported solar installations ensure that any excess energy can then be stored for use when electricity rates are high or for overnight usage.

Batteries allow a business to shift its energy profile. The savings from this are heightened if a business is subject to demand charges. This can account for a significant portion of a company's annual electricity cost. Where a demand charge is in place, this can be up to 45-50 percent of total electricity costs.

The benefits of storing all excess solar output in onsite batteries don't stop at demand charges. All business will have an overnight electricity usage of some form, so capturing the excess solar produced during the day ensures that this power is available for night time usage, ensuring minimal to no grid consumption, and the best bang for your solar buck.

Battery storage combined with solar helps businesses to maximise their use of self-generated and very cheap electricity. But even without solar panels, the use of a battery storage system can enable a company to use cheaper off-peak grid power for charging. You can then use that stored energy at times when mains



Picture: CSIRO

electricity supply is most expensive. Case Study: Battery + Solar = No Electricity Bill With solar installed at his home, Andrew Chapman already knew its benefits. For his business, he wanted to go a step further, harnessing all of the solar energy while using a battery for storage to ensure energy security.

Andrew has run his well-known Andrew's A-Grade Mechanical business in Pomona for 18 years, operating five days a week and often late into the night. He says: "The financial savings from solar were an obvious benefit, but energy security was the main reason for us installing the solar and battery system in our business. The Enopte Power Station (battery) provides the garage with a constant power supply, even through power black-outs or power surges.

"The battery powers the security cameras,



Andrew Chapman with battery system.

Picture: SUPPLIED

fridges and other electronics, or if the power goes off. For added reassurance, we selected a battery that is manufactured locally at Cooloom Beach, on the Sunshine Coast. Our advice is to choose a company that you can trust and local is best."

Costs and benefits at a glance

Electricity costs before installation: \$900 per quarter.
 Current electricity costs: \$0 per quarter. The new system offsets the entire electricity bill.
 Installation cost: Equipment lease repayments of \$810 per quarter for 5 years.
 Payback period: 4.5 years.
 Greenhouse gas emissions reduction per year: 8.5 tonnes of CO2-e.
 Technical details
 Installation date: May 2019
 System size: 7 kW
 Solar system: Zeus Apollo 275W solar panels
 Battery storage: Enopte Power Station (battery & inverter)
 Battery capacity: 7.7kWh
 Check out <https://www.zeroemissionsnoosa.com.au/business-solar> for ZEN Inc.'s Solar Checklist to help you take the right steps to installing solar in your business.

Adam concludes: "Having solar is a consistent thing. We are drawing energy from an outside source - the sun - that we don't have to pay for. Even on cloudy days we are still using power from our solar system. I'm blown away by how well this system works."

Noosa Today 20.11.20

Towards **0 ZERO EMISSIONS NOOSA**

Installing residential solar energy

Solar power is now the cheapest electricity available so installing a solar system is a cost-effective way to reduce electricity bills.

Feed-in tariffs also allow you to sell excess energy back to the grid. The average household can expect an investment return in two to five years.

First thing to do is take a good look at your electricity bill. How much are you using and how much is it costing you? As a rule of thumb, using 20kWh of electricity per day would equal a 5kW solar photovoltaic system. Next step is to choose an accredited, trusted solar installer who guarantees their work. They will model your estimated annual electricity generation and expected savings.

Ensure that your installer quotes on Tier 1 solar panels with a proven inverter. The inverter converts the direct current (DC) energy generated by the panels into 240V alternating current (AC) electricity to power your home. The size and number of panels you install will depend on your daily usage and roof space. Solar panels should ideally face north, but can be placed east and west to catch morning and afternoon sun, and angled if needed to maximize solar capture.

Final steps are to upgrade your energy meter and choose a retail electrical provider that delivers you the best deal. Then each time you flick a switch, enjoy using your cheap and planet-friendly electricity powered by the sun.

To find out more about solar power check out ZEN Inc.'s Solar Checklist to help you take the right steps to installing solar in your home at <https://www.zeroemissionsnoosa.com.au>

Noosa Council has a free solar and energy advice program partnership with Australian Energy Foundation (AEF). Call 1300 23 68 55.

Disclaimer: ZEN Inc. does not provide recommendations about the suitability or effectiveness of any product or service nor does it endorse any provider mentioned. Publishing



Mat Colefax with his new solar roof.

Pictures: SUPPLIED



Mat Colefax and family.



The Colefax installation.

Mat Colefax's residential solar success

In early 2020 the Colefax family installed a 6.6kW solar system on their home and Mat Colefax couldn't be happier.

"Our system is right on track to generate the estimated 11,000+ kWh of electricity this year," he says. "And due to my careful selection of a local installer and quality equipment, the system is actually saving us more than forecast, potentially delivering around 40 percent more savings!"

Key selection factors for Mat were the brand quality and value of the panels, the inverter, and the solar system installer, along with guarantees. "Our system was a financed one, with zero upfront deposit and quarterly payments of \$387. So instead of looking at payback time, the key question for us was how much do we start saving from the second the solar system switches on, and how secure are those savings," says Mat.

The Colefaxes are a family of five and their house has a pool. Pre-solar, their previous annual electricity bill was around \$2580. Since installation, their quarterly electricity bills are now zero, with first and third quarter input credits from solar generation around \$100-\$200. Credit from the winter quarter was only \$7, due to higher energy use from heating the house.

The Colefax's 6.6kW Solar Package consists of LG panels with 25-year warranty, SMA SunnyBoy 5.0 Inverter with 10-year full onsite warranty including monitor, installed by a local company with a 10-year installation guarantee. The system is 6.6kw single phase battery compatible.

As well as delivering direct dollar savings, the Colefax's 6.6kW Solar Package is good for the planet.

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Noosa Today 4.12.20

NEWS NOOSATODAY.COM.AU

Towards **0 ZERO EMISSIONS NOOSA**

Savings using the sun

By Phil Jarratt

Noosa Sun Motel is saving money using the sun. According to manager Darren Keenan, "We started with a 10 Kw system in 2016 and then added another 5 Kws about year later. We thought it would take about five years to pay off the system, but we were delighted when it paid itself off in just over two years. We have also installed solar heating for our pool.

"The key driver for installing solar was to reduce electricity costs. It made sense to have solar installed to run the air-conditioning and lighting for all the guest rooms. Without any direct control over how guests choose to use air-conditioning and electricity within the apartments, it made complete sense. I am very happy with the savings."

Darren encourages other tourism businesses to look at installing solar, not only for the cost savings, but also because Noosa is in a Biosphere and an environmentally sensitive area, so it is a great way of reducing our carbon footprint.

Noosa Sun Motel is positioned alongside the Noosa River at Noosaville. For over 25 years, its 15 apartments have provided tourists with affordable accommodation by the river.

LOCATION
131 Gympie Terrace, Noosaville
DATE INSTALLED
August 2016



Noosa Sun Motel showing solar panels.

Picture: SUPPLIED

TECHNICAL
Solahart 255W solar panels
SMA Inverter
ELECTRICITY COST BEFORE SOLAR
\$4,000 per quarter
ELECTRICITY COST AFTER SOLAR
\$2,000 per quarter
INSTALLATION COST
\$17,000

ESTIMATED PAYBACK PERIOD
18 months

EMISSIONS REDUCTION

Greenhouse Gas Emissions Reduction per year: 18.2 tonnes of CO2-e

**Energy tips to save \$

Saving money on your power bill is easy. Energy efficient households and businesses can save 10-30 percent off electricity bills and still be comfortable year round. Being energy efficient also helps Noosa Shire reach its target of zero net emissions by 2026.

Draught-proof your building so warm air

in winter and cool air in summer does not escape. Seal under doors and around wind gaps. Check air conditioning vents to ensure they are not letting outside air in and proper insulation in your roof.

In winter open curtains to let in the sun and then close them at night. In summer of windows or use fans before turning on air conditioners. Setting air conditioners between 26 degrees C in summer and 18-20 degrees C in winter uses less energy and is still comfortable.

Choose high energy rating appliances save money in the long run. Turn appliances off at the wall when not in use or plug them into an energy saving power board. Appliances on standby still cost you when they are not being used.

Install a water efficient shower head to save on water costs and hot water heating. Use cold water to wash your clothes and only open the dishwasher and washing machine when you have full loads. Then dry your clothes the sun - Queensland's biggest energy asset

Use natural light as much as possible. Install skylights to let the natural light in and ways switch off lights when not in use. Replace lights with more efficient LED bulbs.

Household and business emissions (including transport) make up around 58 percent of total community emissions. Being energy efficient reduces energy usage, saves dollars and helps the planet.

Go to <https://www.zeroemissionsnoosa.com.au/residential-1> for free solar and energy advice by Noosa Council and Australian Energy Foundation (AEF). Call 1300 23 68 55.

Noosa Today 18.12.20

APPENDIX B

| Zero Emissions Noosa, Inc. cash flow for the year ended 31 December 2020 | | | |
|---|-------------|--------------------|--------------------|
| <i>all figures include GST</i> | | | |
| | | | |
| opening cash balance at 31 December 2019 | | | \$22,771.56 |
| | | | |
| sources of cash: | | | |
| interest | \$30.42 | | |
| grants | \$24,167.00 | | |
| member fees | \$1,240.00 | | |
| donations | \$123.52 | | |
| exhibitor fees | \$0.00 | | |
| GST refunds | \$1,315.00 | | |
| | ----- | | |
| total cash sources: | | \$26,875.94 | |
| | | | |
| uses of cash: | | | |
| consultant fees | \$3,420.00 | | |
| service fees | \$21,989.00 | | |
| admin expense | \$655.00 | | |
| GST paid | \$1,324.00 | | |
| | ----- | | |
| total cash uses: | | \$27,388.00 | |
| | | ----- | |
| net cash flow | | | -\$512.06 |
| | | | ----- |
| closing cash balance at 31 December 2020 | | | \$22,259.50 |

| | | |
|-----------------------------------|-------------|--------------------|
| Zero Emissions Noosa, Inc. | | |
| ABN 74 862 487 515 | | |
| year end balance sheet | | |
| 31 December 2020 | | |
| assets | | |
| cash at Bendigo Bank | \$22,259.50 | |
| GST refund due | \$655.00 | |
| other assets realisable as cash | \$440.00 | |
| | ----- | |
| total assets | | \$23,354.50 |
| liabilities | | |
| accounts payable: | | |
| | \$0.00 | |
| | \$0.00 | |
| GST payable | \$0.00 | |
| other liabilities | \$0.00 | |
| | ----- | |
| total liabilities | | \$0.00 |
| | | ----- |
| net assets | | \$23,354.50 |

| | | |
|---|-------------|--------------------|
| uncommitted cash | | |
| 31 December 2020 | | |
| cash & equivalents | | \$23,354.50 |
| <i>funds allocated to specific projects:</i> | | |
| Community & Environment Alliance grant (contract staff services) Year 1 to 31 August 2020 | \$0.00 | |
| Community & Environment Alliance grant (contract staff services) Year 2 to 31 August 2021 | \$14,021.40 | |
| Race to Zero grant | \$4,950.00 | |
| EV Fest 2020 (now March 2021) | \$4,070.00 | |
| | ----- | |
| committed funds | | \$23,041.40 |
| | | ----- |
| uncommitted cash | | \$313.10 |