

Contents

Contents	Page
Chairperson's Report	3
About Us	9
Our People	10
Our Key Partners	11
Our Major Achievements	12
Our Projects: Wind	13
Our Projects: Biogas	14
Community Energy	15
Community & Public Events	16
Our Finances	17
Auditor's Report	18

Once more it is a pleasure to present our 2020 Annual Report detailing the work undertaken in 2019/20 by the Augusta Margaret River Clean Community Energy (AMRCCE) Management Committee and our members.

Real sustainability is where the economic, environmental and community benefits enhance one another, rather than being traded off against one another. Our Clean Community Energy projects are an excellent example of this. They will simultaneously bring local economic value; reduce CO2 emissions; improve water quality; and support and engage community.

Our beginnings were in the community and our council policies. To summarise the current shire policies: The 2020 shire Local Energy Plan aims to assist the community to reduce emissions by 20% below 2006/07 emission levels by 2022 and to source 25% of its energy from renewable energy sources by 2022. The longer-term goals are to support the community to reduce emissions by 65% below 2007 levels by 2030 and achieve Net Zero by 2050. The Shire's Draft Climate Action Plan is to support Community to source 50% of its electricity from renewable energy sources by 2030.

Our work is putting these policies into action.



Wind Project

Our first goal was developed from the shire Working Party 3 years ago to complete a feasibility study and gain approvals for a 10MW Grid Connected windfarm and then to partner with a company to develop the wind farm, providing our community with a share holding that would fund ongoing projects to reduce community energy.

However, after making considerable progress we were met with the state aim to modernise the way the SWIS is regulated and managed, which in effect has meant a delay of the possible grid connection date until the end of October 2022. Nonetheless, we continued to progress our feasibility during the year. In particular a site visit from turbine manufacturer Enercon was arranged and the wind data from our wind monitor was analysed by both Enercon and Fulcrum 3D, who conducted the wind monitoring. This obtained turbine specification information necessary for furthering our Western Power application.

Sadly, Enercon has now withdrawn from the southern hemisphere and turbine selection will now need reconsideration. This, the regulatory situation, and the rapidly changing environment in the renewables sector will guide our work over the coming year.

Dairy effluent biogas project

Led by Ian Williams this project has made enormous progress this year. As you are aware the planned energy generation facility is in the immediate vicinity of WA's largest dairies. At the request of the Lower Blackwood Land Conservation District Committee (LBLCDC), AMRCCE agreed to investigate the viability of including a biodigester in the power project to provide baseload and/or dispatchable energy and also an innovative option for dairy effluent management in the Scott and Blackwood River catchments. In terms of effluent management, the aim is to remove nutrients and organic material effluent from the waterways, improve farm efficiencies, create a soil improver product, provide local employment and reduce methane emissions from the agricultural sector.

In collaboration with scientists from the University of Western Australia, the University of Southern Queensland, the LBLCDC and several large dairy farmers, we identified an innovative separation process to separate the dairy effluent solids from the liquid to enable cost effective transport of the solids to an anaerobic digester facility for energy production. This also provides the potential to eliminate nutrient run-off from dairy effluent into the waterways and return water with known quantities of nutrients (phosphate and nitrogen) to farmers.

Hence this year, following an amazing effort by Ian, we conducted an effluent separation trial funded by the WA Government's Royalties for Regions' DWER Regional Estuaries Initiative proving that it is possible, both practically and economically, for farmers to separate the effluent into reusable liquid filtrate (water) and stackable manure solids. The trial took place on the largest single dairy farm in WA using a WA designed filter called the "Z-Filter". This filter was chosen for its potential to capture a high proportion of the nutrient component of the effluent directly into a stackable solid fraction. It also aimed to test the equipment for robustness, on-going operational costs, servicing needs and service quality.

The trial has cost \$180,000 with funding of \$135,000 provided by the Regional Estuaries Initiative and the remaining \$45,000 funded from cash and in-kind contributions by AMRCCE and the dairy farm hosting the trial.

The results show that separation of the effluent manure does provides a viable alternative in dairy effluent management which could greatly reduce the need to store fresh effluent in holding ponds. Across the broader region, the process could reduce annual greenhouse gas emissions by 5,000 tonnes; eliminate nutrient run-off from dairy effluent into the waterways; save365,000m3 of water per year; return water with known quantities of nutrients to farmers for re-use through reticulation, reduce the amount of

commercial fertiliser required, and make available land presently used for effluent ponds. The trial suggests a "closed loop" option in effluent management, which could serve as a model for other catchments, may be viable.

The trial also enabled us to calculate the cost of transporting the separated solids to a power station site and to commence measuring the methane biogas potential of the solid material. This analysis was funded through donations received through the Foundation for Regional and Rural Renewal from Bernadette Cullinane who supports environmental outcomes through renewable energy in the Margaret River Region and the data will progress the biogas feasibility study. The remaining studies needed to complete the feasibility assessment, including evaluation of co-digestion of the dairy effluent solids with other waste and use of remnant composted solids as a soil improver/fertilizer, will be carried out using a Smart Farm grant awarded to a consortium led by the University of Southern Queensland with AMRCCE providing local support.

The energy produced by the biogas facility could be used in several ways. The output could serve as baseload and/or stored energy and made available as dispatchable energy. Alternatively, it could provide behind the meter heat and electricity to neighbouring farms. In the meantime, methane emissions on that farm have been decreased as the

separated solids compost naturally, preventing the release of methane. For the dairy farmer, it has provided a closed loop method of regenerative farming as the compost has been used to improve his soils. He will also save considerably in the amount of fertilisers he needs for his pastures and, at present, he is using the solids as a soil amendment increasing his savings in farm inputs and while improving his soils.

This is an example of real sustainability, where the economic, environmental and community benefits enhance one another.

Community Energy

Initially AMRCCE had planned to work on community-based projects to reduce emissions once it had achieved funding from the community shareholding in the power generating plant. However, as community energy projects have started to emerge, AMRCCE has commenced to investigate other possible options to assist the community to reduce emissions and energy costs.

During the year AMRCCE continued investigation and evaluation of the possibility of developing a local community retail energy provider in conjunction with Rod Littlejohn of Tersum Energy who has a similar partnership with Geraldton Community Energy. This partnership would

retail energy generated from rooftop solar installed on local homes and deliver energy to local contestable customers. If agreement is reached, it would initiate our vision for a low carbon 21st century economy for our region showing how renewables can deliver a vibrant new economy aligned with community expectations. We are also planning to initiate a further project, working towards zero community emissions 'The Revolving Fund' aims at empowering individuals and community groups to invest together in emissions reduction initiatives through donations that continue to work into the future.

The Revolving Fund would provide zero-interest loans to pay for practical projects that reduce greenhouse gas emissions.

Typically, these will be renewable energy and energy efficiency projects that otherwise would not occur. Loan repayments would go back into the fund and help fund subsequent projects. Contributions to the fund would be used over and over again to continue to reduce emissions making our community more resilient and community activities more affordable and sustainable.

AMRCCE has worked hard during the past financial year, in a difficult, technically challenging, and ever-changing field and we now feel close to making real reductions to greenhouse emissions in our shire.

Finances

The estimated total value of the Feasibility Study project is \$1,800,000 of which over \$600,000 has been completed. We have achieved Deductible Gift Recipient status which will mean donations will be tax deductible for our supporters. Our work this year has moved us closer to being ready to apply to ARENA or other parties for major funding.

We have 141 members as at 30 June 20 and the committee made the decision, in view of Covid-19, to make membership free for the coming year. We are very grateful to members who have made generous donations and these donations are now tax deductible. Our planned membership events were curtailed by Covid but we look forward to an Open Garden Fundraiser on Nov 14th.

AMRCCE is most grateful to our inaugural Treasurer Brian Middleton who established our financial processes and procedures and oversaw our financial performance to date and continues to support us by providing us with auditing services. Thank you Brian. At the last AGM, we elected Beth Dowling to our management committee, and she has become our new treasurer.

We are most grateful to our Shire and Council for the continuing support. We received \$20,000 in the 19/20 year and

\$30,000 has been pledged to assist with our work in the 20/21 budget. The Shire has also been invaluable in providing information assistance. Our gratitude also goes to the WA Government's Royalties for Regions' DWER Regional Estuaries Initiative which provided the bulk of the funding for the effluent research and Lotterywest for providing a grant that has allowed us to purchase computers and other equipment to carry out our research and activities more professionally.

We are very grateful to Brad Boley, on whose dairy farm the effluent trial is taking place, for his significant support which has been essential to a successful completion of the research project. We recognise that in taking on the research project, Brad was possibly putting his whole dairy system at some risk. We thank also Tim Crimp and Joanna Wren from Lower Blackwood LCDC for their support and practical assistance including assistance with the Farmers' Field Day.

Torben Grell was our contractor for the Z-Filter Trial. His enthusiasm has been vital, and we are very thankful to Torben for carrying out this challenging task which relied on his very particular set of skills. We are also very grateful to Dr Stephan Tait from the University of Southern Queensland who has been our scientific adviser for the trial. Others who provided invaluable support

include Phillip Burger of Solenius Australia Limited, Martyn Smith of Apex Envirocare, Nick MacNamara of AAG Investment Management, Ed Dawson of Dawson Metallurgical Services (and AMRCCE member) and Dr Kim Brooksbank of DPIRD.

The pro-bono support from so many members and supporters has continued and volunteers have provided hundreds of hours of valuable support. We are most grateful for personal donations made by many of our members. Thanks also to members who have helped in fundraising events.

I thank all our committee members for their work and support this past year. Particular thanks to Ian Williams who has again been responsible for the majority of our progress. He has steered both the dairy effluent trial and the due diligence process required to fully investigate a possible energy partnership. Again, Ian and Paula Cristoffanini have provided the basis of ensuring that our projects are developed in an organised and thorough manner. Thank you both for your amazing efforts.

It is difficult to thank all the members who have given hours of their time, but I would particularly like to thank Ken Clarke, Siobhan Tucci, Lyn Hellier, Jamie McCall, Bill James, Julian Kruger, Crispin Underwood, Michael Carr, Sue Juniper, Tim Crimp, Neroli

Carlton, and the many other members who have contributed. There are many other nonmembers who have assisted and our thanks go to you too in particular, thank you to Samantha Loff and Alice MacDougall from Herbert Smith Freehills who assisted us in obtaining our Deductible Gift Recipient (DGR) status which now allows us to provide tax deductibility to donations above \$2; Margaret Hender from Corena who has provided invaluable assistance for us to try to bring to fruition a Revolving Fund to provide loans for the installation of renewables and Paul Copestake of Fulcrum3D for the analysis our wind data. Finally, thank you to the Shire for allowing us to use the chambers for our AGM.

I have thoroughly enjoyed my last year as Chairperson and I look forward to working in some role to bring our goals to fruition.

"These are historical times, what we do or don't do right now will define the rest of our lives as well as the lives of our children and grandchildren."

Greta Thunberg, July 2020



AMRCCE CHAIR



About Us

VISION

To reduce carbon emissions by:

- producing renewable energy equivalent to at least 20% of the energy our community consumes through the grid, and
- reducing energy consumption through the grid by another 20%.

MISSION

To protect the natural environment by reducing carbon emissions by facilitating the use and provision of renewable energy installations and devices, especially for those who would otherwise not have access to them; by conducting research on the options for reducing carbon emissions in the Augusta Margaret River shire; by encouraging renewable and energy efficient energy facilities to set up in the shire by undertaking feasibility studies for operating renewable energy facilities including an anaerobic digester to produce energy and other coproducts from dairy waste; and by providing education on renewable energy and reduction of carbon emissions.

Our People



Management Committee

Chairperson
Deputy Chair
Secretary
Treasurer
Members

Lyn Serventy
lan Williams
Laura Stocker
Beth Dowling
Ken Dyer

Suzanne Hicks Bruce Hamilton David Hargreaves Steve McGill

AMR**CCE** is managed by a nine (9) person Management Committee consisting of Chair; Deputy Chair; Secretary, Treasurer and five Management Committee Members. From time to time sub-committees co-opt additional persons to assist its activities as required. Current Management Committee Members were elected at our last AGM and are listed above.

We would also like to acknowledge the invaluable contribution of our Electrical Engineer Ken Clarke who is a key contributor to our activities and the outstanding contribution of our past Treasurer Brian Middleton.

The organisation itself is entirely staffed by volunteers including our Executive Officer Paula Cristoffanini. As is usual in organisations such as ours, besides our regular volunteers many people have volunteered to make our activities possible throughout the year. We thank each and everyone of your valued contribution.

Torben Grell was our contractor for the Z-Filter Trial. We are very thankful to Torben for carrying out the many challenging tasks of this project which relied on his very particular set of skills.

Our Key Partners











KEY PARTNERS

We are very greatful for the support and assistance we receive from our key partners in achieving our vision and would like to acknowledge the assistance received from:

The Shire of Augusta Margaret River

Margaret River Rotary Club

Lower Blackwood Land Conservation District Committee

Transition Margaret River

Department of Water & Environmental Regulation

Regional Estuaries Initiative

The Foundation for Regional and Rural Renewal (FRRR)

University of Southern Queensland

University of Western Australia

Enercon



Our Major Achievements





selected a site and obtain access agreements for a wind farm in the

Scott River area



completed Wind Monitoring on site with Fulcrum3D and and had wind data analysed by Fulcrum and turbine manufacturer Enercon



Progressed Western Power Access Application and commissioned a Load System Analysis which inform decision to wait for regulatory changes to progress grid connection



Conducted a Farmers' Survey with funding from DWER to ascertain information on dairy effluent management practices in the Scott and Blackwood Rivers catchments and farmer interest in participating in AMRCCE's project



Conducted an innovative on-farm trial to establish if it was possible to separate dairy effluent efficiently and economically with the potential to eliminate nutrient run-off with funding from the State Government's REI through the Department of Water and Environmental Regulation



Commenced investigations of Virtual Power Plants to assist the community reduce emissions and consumption from the grid



Became a Registered Environmental Organisation, obtained Deductible Gift Deductible status, registered as a Charity and obtained a Fund Raising Licence



Participated in a range of community activities reaching a broad spectrum of the community



Met and briefed Ministers and the Shire, applied for funding from numerous sources and continued to liaise with industry and community contacts to progress our work

Our Projects:

Wind



PROGRESS TO DATE

- Identified optional locations within 3 km of Beenup substation
- Obtained Access Agreements
- Modelled publicly available and gifted wind data
- Onsite wind monitoring completed
- Western Power Connection Application commenced
- Explored potential finance opportunities
- Conceptual Development Application underway
- Wind data analysed and advice on turbine specifications received

Our goal has been to complete a feasibility study and gain approvals for a 10MW Grid Connected windfarm in the Scott River and to find a suitable partner to develop the wind farm providing our community with a share holding to fund ongoing projects to reduce community energy. Our work in this area will continue in the context of expected legislative, commercial and technical rule changes required to address Transmission Network Congestion not expected until 2022, the withdrawal of Enercon from the Southern hemisphere and the rapidly changing environment in the renewables sector.



Our Projects: Biogas

Z-FILTER TRIAL

The Z-Filter on-farm trial commenced in August 2019 with funding from the State Government's Regional Estuaries Initiative through the Department of Water and Environmental Regulation (DWER).

Work on the Biogas feasibility project during the reporting year centred around the on-farm trial of a Z-Filter. The aim was to test whether it was possible, both practically and economically, for farmers to separate the effluent into reusable liquid filtrate (water) and stackable manure solids.

This WA designed filter was chosen for its potential to capture a high proportion of the nutrient component of the effluent directly into a stackable solid fraction. It also aimed to test the equipment for robustness, on-going operational costs, servicing needs and service quality.

It was hoped that this innovative separation process would enable cost effective transport of the solids to an anaerobic digester facility for energy production and an alternative dairy effluent management system with the potential to eliminate nutrient run-off from dairy effluent into the waterways and return water with known quantities of nutrients (phosphate and nitrogen) to farmers.

The results of the study will be available in the next financial year.

Community Energy



AMRCCE's ultimate aim has always been to work on assisting the community to reduce emissions. To this end we have continued our investigation and evaluation of establishing a community retail partnership with Tersum Energy such as exists in Geraldton in the form of Geraldton Community Energy.

Our due diligence has included numerous meetings and workshops and testing of the Tersum models by modelling the consumption and cost of a range of real local energy users; review of legal agreements; discussions on process and local employment and gauging community interest.

A decision on this will be reached in the coming year.

Another model we have been interested in to assist the community to reduce emissions is that of the Corena Revolving Fund which makes interest free loans to community groups for emissions reduction projects. The fund relies on community donations empowering individuals to get behind the initiative. Our ability to now provide Tax Deductibility for donations above \$2 means that we can now start progressing this initiative. We are grateful to Corena for their support by giving us access to their policies and processes so that we can commence to design our Fund.





Community & Public Events

Besides participating in the activities listed earlier, AMR**CCE** continues to maintain a public presence through:

AMR Show Sustainability Pavillion October 2019

Augusta River Festival

Opening of the Z Filter Trial

Farmers Field Day

Bushfire Fundraiser at the Commons

Augusta Stakeholders' Meeting 24 June

Raffle at Screening of the 2040 Movie

Climate Action Meetings

"Us and Now! Margaret River- a gather-in with Paul Pulé & friends" to share projects and support.

Presentation to the Project Reference Group of the Regional Estuary Intiative of the Department of Water and Environmental Regulation and the Estuary Forum in Augusta.

Project Snapshot 2019 and Sundowner of The Giant Light Steps Environmental Stewardship Alliance* and Transition Margaret River

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Our Finances



AUGUSTA MARGARET RIVER CLEAN COMMUNITY ENERGY INC

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED JUNE 2020

	2019/20	2018/19
	\$	\$
RECEIPTS		
	254	
Contributions towards expenses	351	20 160
Donations	12,752	30,160
Fundraising	670	989
Grants	20.000	25.000
- Augusta Margaret River Shire Council	20,000	25,000
- Energise Margaret River - AMRSC	40.040	2,659
- Lotterywest	15,519	405.000
- Z-Filter - DWER		135,000
Memberships	2,509	2,619
Sale equipment	400	
Workers' compensation insurance claim	22,787	
	74,988	196,427
PAYMENTS 1.		
Advertising and promotion	193	71
Biodigester workshop	•	3,264
Credit card charges	55	-
Computer software	467	546
Grant expenditure		
- Energise Margaret River	-	4,823
- FRRR	1,840	-
- Farmer survey deposit - AgGrow Energy Resources		8,200
- Lotterywest - computer equipment	14,802	-
- Z-Filter - DWER	118,656	
Insurance	2,488	2,391
Miscellaneous	945	129
Postage and stationery	199	120
Travel expenses		1,502
Website expenses	338	68
Western Power enquiry/report		10,718
Workers' compensation employee payment	24,106	
GST movement	13,849	(12,756)
	177,938	19,076
SURPLUS (DEFICIT) FOR THE PERIOD	(102,950)	177,351
OPENING FUNDS 1 JULY 2019	194,694	17,343
CLOSING FUNDS 30 JUNE 2020	91,744	194,694
REPRESENTED BY:		
Cash on hand	47	47
Cheque account	91,697	194,647
		777
	91,744	194,694

Auditor's Report





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AUDITOR'S REPORT FOR MEMBERS OF AUGUSTA MARGARET RIVER CLEAN COMMUNITY ENERGY (INC)

Qualified Opinion

I have audited the accompanying statement of receipts and payments for the Augusta Margaret River Clean Community Energy (Inc) for the period 1 July 2019 to 30 June 2020.

In my opinion, except for the effects of the matters described in the *Basis for Qualified Opinion* section, the accompanying statement of receipts and payments presents fairly, in all material respects, the receipts and payments of the Augusta Margaret River Clean Community Energy (Inc) for the period 1 July 2019 to 30 June 2020 in accordance with the cash basis of accounting.

Basis for Qualified Opinion

It is not practical for the Augusta Margaret River Clean Community Energy (Inc) to maintain absolute control over all donations and fundraising activities until their initial entry in the accounting records. Accordingly, the audit in relation to fundraising activities and donations was limited to amounts recorded.

The audit was conducted in accordance with Australian Auditing Standards. Responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Statement of Receipts and Payments* section of the report. I am independent of the Augusta Margaret River Clean Community Energy (Inc) in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) relevant to the audit of the statement of receipts and payments in Australia. Other ethical responsibilities have been fulfilled in accordance with that Code. The audit evidence obtained is sufficient and appropriate to provide a basis for my qualified opinion.

Emphasis of Matter - Basis of Accounting

Attention is drawn to the basis of accounting under which the statement of receipts and payments has been prepared. The statement of receipts and payments is prepared to provide information to members of the Augusta Margaret River Clean Community Energy (Inc). As a result, the statement may not be suitable for another purpose.

Augusta Margaret River Clean Community Energy (Inc) Responsibilities for the Statement of Receipts and Payments

The Augusta Margaret River Clean Community Energy (Inc) is responsible for preparation and fair presentation of the statement of receipts and payments in accordance with the cash basis of accounting; this includes determining that the cash basis of accounting is an acceptable basis for the preparation of the statement of receipts and payments in the circumstances, and for such internal control as management determines is necessary to enable the preparation of the statement of receipts and payments that is free from material misstatement, whether due to fraud or error.

In preparing the statement of receipts and payments, the Augusta Margaret River Clean Community Energy (Inc) is responsible for assessing the ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the Augusta Margaret River Clean Community Energy (Inc) either intends to liquidate or to cease operations, or has no realistic alternative but to do so.

Page 1 of 2

Liability limited by a scheme approved under Professional Standards Legislation Middleton Consulting Accountants Pty Ltd ABN 38 056-284-854-Brian Middleton CPA JP

Auditor's Report





Auditor's Responsibilities for the Audit of the Statement of Receipts and Payments

The objectives are to obtain reasonable assurance about whether the statement of receipts and payments as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes an opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this statement of receipts and payments.

As part of an audit in accordance with Australian Auditing Standards, professional judgement and professional scepticism are maintained throughout the audit. In addition the audit seeks to:

- Identify and assess the risks of material misstatement of the statement of receipts and payments, whether
 due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for the opinion. The risk of not detecting a
 material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve
 collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
 internal control.
- Conclude on the appropriateness of the Augusta Margaret River Clean Community Energy (Inc) use of the going concern basist of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Augusta Margaret River Clean Community Energy (Inc) ability to continue as a going concern. If it is concluded that a material uncertainty exists, it is a requirement to draw attention in the auditor's report to the related disclosures in the statement of receipts and payments or, if such disclosures are inadequate, to modify the opinion. Conclusions are based on the audit evidence obtained up to the date of the auditor's report. However, future events or conditions may cause the Augusta Margaret River Clean Community Energy (Inc) to cease to continue as a going concern.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, and related disclosures made by the Augusta Margaret River Clean Community Energy (Inc).
- Evaluate the overall presentation, structure and content of the statement of receipts and payments, including
 the disclosures, and whether the statement of receipts and payments represents the underlying transactions
 and events in a manner that achieves fair presentation.

I would communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control identified during the audit.

Brian Middleton CPA JP

08 September 2020

3/34 Town View Terrace Margaret River WA 6285

Page 2 of 2