CLIMATE**KIC**
Australia

Impact 2021-22

Welcome

It's been five years since Climate-KIC Australia officially opened our doors, with an ambition to catalyse climate action in Australia through collaborative innovation. Since then, we have been hard at work building more than 20 large-scale projects and programs in collaboration with over 100 partners across government, industry, R&D and the broader innovation community.

While we are proud of the collective impact of our work to date, we recognise the need to amplify our ambition, to move beyond single-point intervention towards coordinating at strategic leverage points where the greatest impact can be realised.

This requires new ways of working, new collaborations, and mechanism to coordinate diverse activities to move multiple levers in our systems in coordinated and connected ways. Climate-KIC Australia was formed with the specific intention of driving systems transformation. Our approach provides structure for communities to come together to identify portfolios of interventions that will create transformation.

Despite the continued challenges and the devastating impact of Covid-19 locally and internationally, Climate-KIC's Impact Report 2021-22 shows the significant progress we are making as an organisation with our partners. We are growing our organisation, increasing the variety and scale of our activities and invigorating our approaches.

This year has seen us further increase our focus on processes for system innovation. We have built capacity within our organisation and leveraged our close relationship with EIT Climate-KIC and their work in the space. As a result, we have more robust systems and processes to facilitate system innovation and our programs of work are showing the benefits.

We spent time during 2021-2022 working with our Board and partners to refine our strategy and proudly launched ***Climate Action through Systems Innovation*** recently in October 2022. This new strategy will guide our actions to achieve system transformation over the coming years. However, this current 2021-2022 impact report references our previous strategy which was in place during this financial year.

2021-2022 has welcomed one new member to our board. who together with our continuing members is enhancing governance processes and positioning the organisation for further growth.

Climate-KIC looks forward to working with our collaboration network to help Australia face the growing threat of climate change and seize the opportunity of a zero-carbon, climate resilient, just green economy.

Dominic McGann
Chairperson
Climate-KIC Australia

Christopher Lee
CEO
Climate-KIC Australia

Table of Contents

Impact Highlights

CLIMATEKIC Australia

76
Project partners

11
Transformative projects

41x
Leverage on partner contributions

BUSINESS RENEWABLES CENTRE AUSTRALIA

204
Member organisations

>91
Corporate PPAs contracted since inception

4.7 GW
Renewable energy supported through PPAs, supporting 11.4 GW renewable energy projects

ClimateLaunchpad Australia

20
Teams and 38 participants going through entrepreneurship training & development

2
Australian teams progressing to ClimateLaunchpad Global Grand Final

100%
Participants recommend program further

Australian Industry Energy Transitions Initiative

330
Stakeholders engaged

18
Partners, representing 30% ASX market value

5
Decarbonisation project concepts funding ready

About us

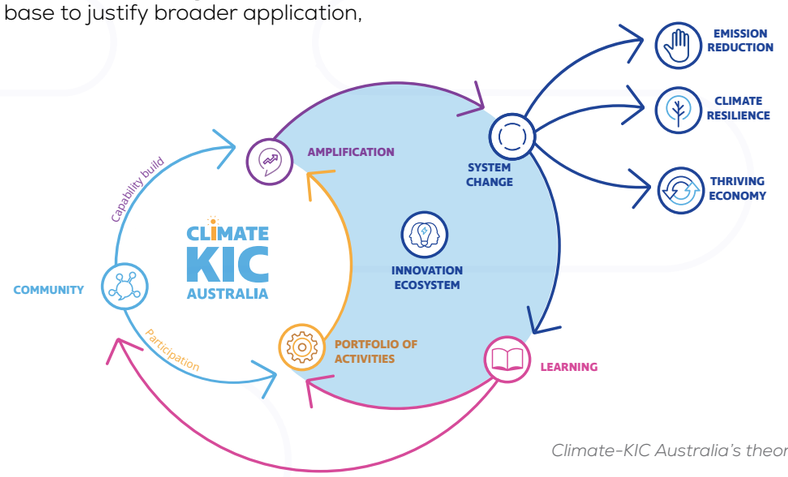
Climate-KIC Australia is a knowledge and innovation community established and funded by a national collaboration of private and public sector organisations in 2017. We are an independent, not-for-profit organisation that aims to link research, business, entrepreneurs, investors and government to drive transformational activities that unlock change at the speed and scale the climate challenge needs.

As shown in our theory of change, Climate-KIC Australia brings together a diverse community of change makers to participate in a portfolio of activities that drive systemic change. We catalyse systemic change using our systems thinking approaches, innovation capabilities, knowledge sharing and deep global networks through EIT Climate-KIC, the European Union's (EU's) climate innovation initiative.

The amplification of these innovative responses is supported by our community and their networks, who attract finance and broadcast portfolio insights as an evidence base to justify broader application, uptake and pathways to scale. By developing a highly collaborative, effective and experimental climate knowledge and innovation community, we believe we can trigger climate action that unlocks scale and systemic impact to help Australia mitigate and adapt to climate change.

Our operating values are:

- **Collaborative:** We build, support and encourage collaboration across our community.
- **Openly innovative:** We create opportunities to actively share our portfolio learnings, innovation processes and networks.
- **Nimble:** We have an entrepreneurial spirit and will remain lean, experimental and adaptive as we grow.
- **High Impact:** We pursue action to match the urgency and scale of climate change.



Climate-KIC Australia's theory of change

Portfolio of Activities

The Climate-KIC Australia community has made significant progress toward its vision by catalysing systemic change through:

1. **Projects:** We have established 11 collaborative projects
2. **Programmes:** We accelerate clean – and climatetech innovators and support research commercialisation

Our projects provide large demonstrations that may be scaled in the future. Our programmes accelerate climate innovations into businesses and accelerate reasearch commercialisation.

1. **Australian Industry Energy Transition Initiative (Australian ETI):** Accelerating informed action towards the achievement of net-zero emissions by 2050 in hard-to-abate sectors.
2. **Business Renewables Centre Australia (BRC-A):** Growing the renewable energy market by making it easier for organisations to sign a Power Purchasing Agreement.
3. **Fairwater Living Laboratory:** Assessing the performance of renewable thermal energy heat pumps in the Australian context.
4. **Materials Embodied Carbon Leaders' Alliance (MECLA):** MECLA's goal is to drive reductions in embodied carbon in the building and construction industry to net zero and to harness the opportunities for Australian industries prepared for a decarbonised and more resilient economy.
5. **Retrofit Australia:** Large-scale energy and thermal efficiency home retrofits program. Supporting the development of a large-scale home energy and thermal efficiency retrofit scheme, leveraging private finance.
6. **Urban Renewable Energy Zones (UREZ):** An Urban Renewable Energy Zone (UREZ) is an urban area that can support high levels of small and medium-scale renewable energy penetration, facilitate the decarbonisation of cities, help the wider energy system, and drive local socio-economic benefits.
7. **Climate Measurement Standards Initiative 2.0 (CMSI 2.0):** Providing guidance and support through voluntary standards for large companies disclosing their climate risk.
8. **Resilience Valuation Initiative:** Advancing an accepted process with enabling methodologies for valuing a resilience-building asset, feature or activity.
9. **Climate Scenarios:** Framework containing nationally standardised and consistent climate scenarios for four Australian regions with supporting guidance on using climate scenarios as part of a climate risk assessment.
10. **Australian Ocean Energy Group (AOEG):** Accelerating commercialisation of Australia's ocean energy sector.
11. **European Union - Australian Climate Business Network:** Connecting key industry associations in Australia and the European Union to promote sustainability, trade and business efforts towards implementing the Paris Agreement.
12. **Climate Launchpad (CLP):** Training and accelerating clean- and climatetech innovators to develop start-ups and connect with networks and opportunities in Australia and globally.
13. **Climate KickStarter:** Enabling research commercialisation in the climate space by providing targeted commercialisation training and capability building to researchers.

AUSTRALIAN INDUSTRY ENERGY TRANSITIONS INITIATIVE (INDUSTRY ETI)

OUTPUTS:

- Phase 1 ***Highlights Report*** & ***Technical Report***
- Phase 2 Report ***Setting up Industrial Regions for Net Zero***
- Pathways Report & Technical Report (pending publication)
- A platform for heavy industry & business partners to share and take action on decarbonisation

INDICATORS:

- **18 partners representing 30% of ASX100 market value**
- **330 industry representatives engaged through workshops & meetings**

OUTCOMES:

- **5 decarbonisation project concepts funding ready relating to green steel, regional roadmaps and infrastructure and carbon capture, utilisation and storage**
- **Collaborative decarbonisation initiatives***

*target outcome

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 3 of 3

PROJECT SIZE

$6 million over 3 years

FUNDERS

Philanthropic donations, company contributions, ARENA

REPORTS

Setting up Industrial Regions for Net Zero

DELIVERY PARTNERS

ClimateWorks Centre, Energy Transitions Commission, CSIRO, RMI, Bloomberg New Energy Finance

INDUSTRY PARTNERS

Australian Gas Infrastructure Group, APA Group, Aurecon, AustralianSuper, BHP, BlueScope Steel, bp Australia, Cbus, the Clean Energy Finance Corporation, Fortescue Metals Group, HSBC Australia, Orica, National Australia Bank, Rio Tinto, Schneider Electric, Wesfarmers Chemicals, Energy & Fertilisers, Westpac, Woodside

Australian Industry **Energy Transitions** Initiative

Overview

The Australian Industry Energy Transitions Initiative (Industry ETI) supports Australian industries in hard-to-abate sectors to accelerate informed action towards the achievement of net-zero emissions by 2050.

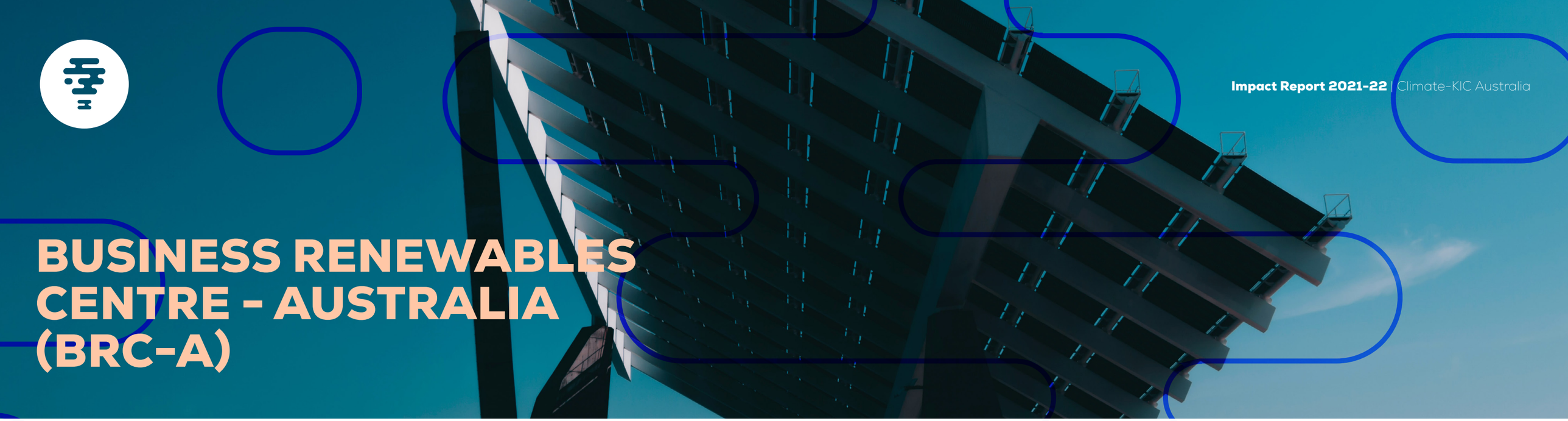
The Industry ETI facilitates knowledge sharing and collaboration on decarbonisation across five supply chains which collectively contribute more than a quarter of Australia's annual industrial greenhouse gas emissions and generate exports worth around $160 billion. These include steel, aluminium, liquified natural gas, other metals (such as lithium, copper and nickel) and chemicals (including explosives and fertiliser).

Outcomes

The Industry ETI has built a committed network of major industry and business partners and created a platform to coordinate learning and facilitate joint action on net zero emission supply chains and industrial regions.

Together the group has done pathways analysis that has found that it is possible to decarbonise heavy industry while limiting warming to 1.5ºC by 2050, noting that this transition will require a significant stretch in ambition and can only be achieved with strong, effective, coordinated action from government, industry, and finance.

The group has also engaged in shared journey learning and developed a portfolio of funding ready project concepts across topics such as regional decarbonisation infrastructure, green steel and carbon capture, utlisation and storage.



BUSINESS RENEWABLES CENTRE - AUSTRALIA (BRC-A)

BUSINESS RENEWABLES CENTRE AUSTRALIA

OUTPUTS:

- **145 Buyer members**
- **97 Organisations trained at 7 BRC-A Buyer Bootcamps**
- **204 member organisations**

INDICATORS:

- **219 Individuals attending BRC-A training Bootcamps**
- **At least 91 Corporate PPAs closed since BRC-A inception**

OUTCOMES:

- **680 MW contracted capacity in FY 2021-22**
- **4.7 GW contracted through Corporate PPAs in Australia, supporting 11.4 GW renewable energy projects**

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 4 of ongoing project

PROJECT SIZE

$2.5 million over 4 years

FUNDERS

ARENA, NSW Government, Victorian Government, Queensland Government, philanthropic funding, member contributions

REPORTS

Corporate Renewable Power Purchase Ageements in Australia: State of the Market 2021;

Best Practice Corporate PPA Guide

EVENTS

2 Bootcamps

4 webinars

PARTNERS

WWF Australia, UTS Institute for Sustainable Futures, RMI

Overview

The Business Renewables Centre Australia (BRC-A) supports Australian organisations to overcome the barriers contracting off-site renewable energy. The initiative is based on a highly successful model developed by the Rocky Mountain Institute (now RMI) and seeks to achieve four strategic objectives: grow demand for renewable energy, build buyer capability, facilitate connections and foster leadership.

Launched in 2018 with partners WWF-Australia and the Institute for Sustainable Futures (UTS), BRC-A is an independent, trusted educator and information hub for organisations looking to procure off-site renewable energy. The initiative provides a suite of resources including an interactive Buyer Roadmap featuring primers, templates and guides which, combined with Corporate Power Purchase Agreement (PPA) Training Bootcamps build the capability of buyers to execute high quality PPAs. BRC-A offers members an online marketplace to showcase projects seeking offtake and service providers who can help facilitate deals.

Outcomes

At least 20 Corporate PPAs have been executed in FY 2021-22, resulting in an aggregated capacity of approximately 680 MW of renewable energy contracted. Support for corporate renewable energy procurement this year builds on previous years to deliver 4.7 GW renewable energy capacity, supporting 11.4 GW of renewable energy projects as of June 30 2022.

Throughout 2022, BRC-A continued its educational webinar series (*Buying Power*) for members and non-members to maximise corporate education and outreach. Held approximately monthly, these webinars attract around 250 registrants each. During this period, 26 individuals have attended a BRC-A Buyer training Bootcamp from 15 different Buyer Organisations seeking to learn about Corporate PPAs. Moreover, 100% of participants agreed that their knowledge on how to execute a PPA had significantly increased as a result of the BRC-A training.

In FY 2021-22, the BRC-A online portal was visited by 600 new users. In the coming year, the portal will be integrated into the public website to maximise its utility, and a new Energy Buyers Diagnostic Tool will be developed and launched on the website. Written summaries and video content will be developed for several resources, making them more accessible. Additionally, plans have been developed to produce 12 further resources where funding becomes available, addressing issues such as supply chain and aggregation of PPAs.

FAIRWATER LIVING LABORATORY

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 3 of 3 (completed June 2022)

PROJECT SIZE

$1.7 million over 3 years

REPORTS

ARENA Milestone Report Jan 2019

ARENA Milestone Report Jan 2020

ARENA Milestone Report Jan 2021

Final Annual Public Report

FUNDERS

ARENA, NSW Government, Frasers Property Australia

PARTNERS

UTS Institute for Sustainable Futures, Curtin University, Frasers Property Australia, Green Building Council of Australia, Wattwatchers, Presync

Overview

The Fairwater Living Laboratory project aims to assess the performance of renewable thermal energy heat pumps in the Australian context. A first in Australia, Frasers Property Australia installed this technology into homes at their Fairwater development in Blacktown NSW. Specifically, the study is testing whether the technology reduces local peak demand (especially during hot summer days); is commercially viable; reduces energy consumption/ emissions and reduces urban heat island impacts.

Now complete, a summary of the key findings can be found at our **website**.

Outcomes

The following key stakeholders are using the insight generated by the Fairwater Living Laboratory project to:

1. PROPERTY SECTOR

- Influence decision making about mass adaption of GSHP in residential greenfield developments by reviewing value proposition, total savings, and long-term quantification of energy performance of GSHP
- Inform precinct wide sustainability measures in new developments.

2. POLICY MAKERS

- Influence policy (laws, policies, procurement rules, budgets and metrics) by understanding network impacts, urban heat island impacts and carbon emissions reduction of utilising GHSP and broader precinct level sustainability measures.

3. RESEARCHERS

- Train future workforce by dissemination of research incorporated into Master's units and PHDs
- Build new lines of enquiry such as follow-on projects inspired by the research.

OUTPUTS:

- 1 Final ***Annual Public Report***
- Informing decision making within property sector, policy makers, and researchers

INDICATORS:

- **4 knowledge sharing workshops/presentations with government and property sector**
- **Useful information about renewable energy heat pump technology usage* and precinct level sustainability measures**

*technology implementation outcomes

OUTCOMES:

- **Actionable insight generated**
- **Lower emissions through policy changes and property sector decision making which increases the uptake of lower energy technology and better precinct-level design in future housing developments**

MATERIALS AND EMBODIED CARBON LEADERS' ALLIANCE (MECLA)

MECLA

OUTPUTS:

20 case studies

5 *Spotlight* events

INDICATORS:

120 member organisations from industry, government, research & NGO

9 working groups across thematic areas

OUTCOMES:

Reductions in embodied carbon in the building and construction industry to net zero and harness the opportunities for Australian industries prepared for a decarbonised and more resilient economy*

*target outcome

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 1 of 3

PROJECT SIZE

Approx $500k over 2 years

FUNDERS

NSW Government, WWF and industry

REPORTS

3 milestone reports for NSW Government

20 case studies

PARTNERS

WWF Australia, PreSync

120+ industry partner organisations

EVENTS

5 *Spotlight* events

Government & Industry Event

Overview

The Materials & Embodied Carbon Leaders' Alliance (MECLA) was launched in April 2021 by WWF Australia and Presync, with supporting funding from NSW Department of Planning Industry and Environment (DPIE). Climate-KIC Australia was commissioned to provide operational support and assistance on establishing MECLA as a national initiative.

MECLA's goal is to drive reductions in embodied carbon in the building and construction industry to net zero and to harness the opportunities for Australian industries prepared for a decarbonised and more resilient economy, and to align with the Paris Agreement targets and principles of the circular economy.

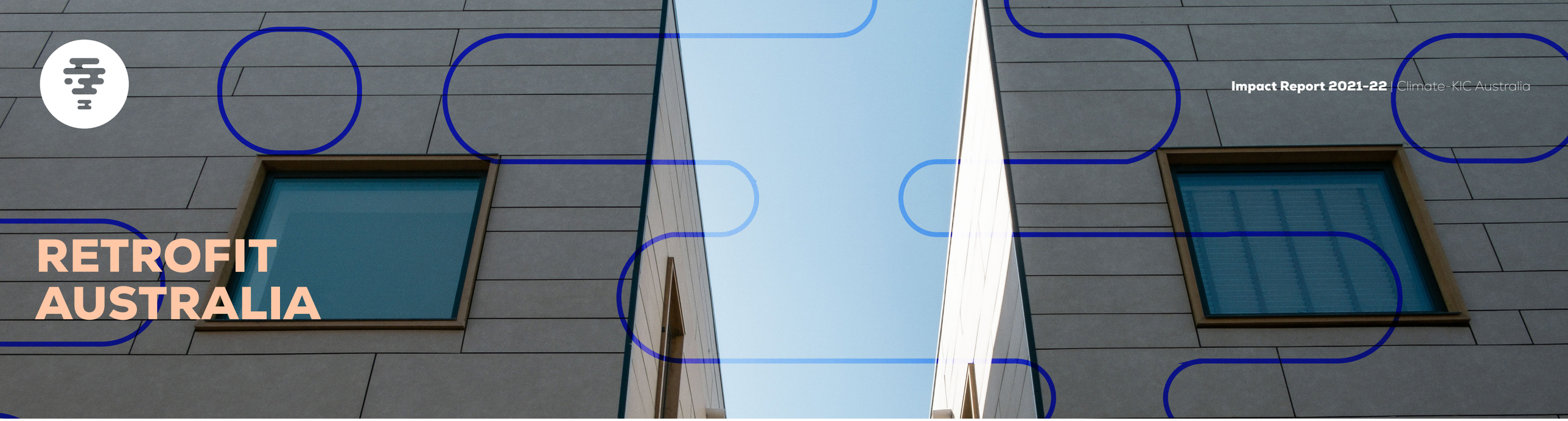
Growing from originally 42 partner organisations, MECLA now engages with over 120 industry and government organisations (including 6+ state jurisdiction departments and 4 standard setting specification bodies) in 9 working groups across the construction supply chain (plus Project Control Group and Project Leadership Group). Overall, more than 1,000 industry and government professionals have been involved in working group meetings, five *Spotlight* events and building of a knowledge hub that includes brochures, 20 case studies and videos demonstrating different ways carbon reductions have been achieved in the construction and building sector.

Outcomes

By bringing together different sectors across the building and construction supply chain, MECLA can gain a better understanding of barriers of update and find systems level solutions that will be vital to moving ahead. These include:

- Demonstrating demand and activating the supply of materials
- Defining a best practice embodied carbon evaluation framework
- Knowledge sharing and supporting innovation in materials and processes as part of a pre-competitive approach
- Developing a common language for design specifications, procurement guidelines and tendering criteria
- Helping to manage industry's climate transition risks, risks associated with adopting innovative materials and the required skills development
- Supporting materials to reduce their carbon intensity and giving visibility to other low carbon and innovative materials.

MECLA is now entering its second phase, seeking funding from all state jurisdictions and industry organisations to continue driving change across five areas of intervention while moving from a NSW focus to the national stage.



RETROFIT AUSTRALIA

OUTPUTS:

Final project **report**

Final project **report at a glance**

INDICATOR:

5 partners & 25 Industry Reference Group (IRG) members

OUTCOME:

Improved energy efficiency and electrification of millions of Australian homes*

*target outcome

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 1 of ongoing project

PROJECT SIZE

$99k over 5 months

FUNDERS

RACE for 2030 CRC and partners

REPORTS

Pathways to Scale: Retrofitting One Million+ Homes

PARTNERS

NSW Department of Primary Industries & Energy, Victorian Department of Environment, Land, Water & Planning, Curtin University, UTS, Planet Ark Power (eleXsys)

Overview

Energy efficient and electric homes are healthier and more comfortable but also reduce peak load demand on the overall energy system whilst contributing to emissions reductions and an equitable energy future. Over eight million Australian homes have poor thermal and energy efficiency performance, requiring substantial energy consumption to maintain comfort and deliver household services.

Australia needs to transform our existing homes to align with the energy transition and support homeowners as prosumers and consumers in the distributed energy grid. Maximising energy efficiency in homes, moving energy demand into periods of maximum renewable generation and enabling electrification can support the transition toward net zero energy. This project proposes the design and development of an evidence-based large-scale home retrofit scheme. In particular it explores the opportunities to leverage public and private finance towards this goal.

Building on an ongoing collaboration with industry and research partners Climate-KIC initiated a research project under the RACE for 2030 CRC which seeked to advance the design of the scheme and understand the research and ecosystem conditions required to support its roll-out.

The project was delivered through a mix of desk-top research, literature review, modelling, and stakeholder consultation. The literature review is exploring the impacts of previous international large-scale energy efficiency retrofit programs and the determinants for success of such programs. Modelling is being used to explore the benefits that could be shown from various retrofit upgrades in three priority locations across Australia.

This work was complemented by one legal and governance workshop, two IRG workshops, eight semi-structured IRG participant interviews and three PPC meetings to collect further insight and support scheme design.

Outcomes

In collaboration with project partners, Climate-KIC engaged and mobilised a large Industry Reference Group which guided the research project, while also directly contributing their expertise and experience to the design of the initiative. This group is also the precursor for long-term collaboration to deliver the scheme and support transition to a supportive ecosystem.

The project delivered recommendations for large-scale home retrofit schemes, including its aims, target markets and insight into the conditions in the broader home retrofit ecosystem which will be required to achieve the desired impact. The project report has been utilised by many industry partners and community groups and plays a role in establishing the next stage of longer-term research activity for retrofitting homes in the RACE for 2030 CRC.

Climate-KIC is currently seeking funders to partner with to develop viable delivery models to electrify and improve the comfort and efficiency of all types of Australian homes at scale. The process will enable collaboratively designing, and ultimately creating, the mobilisation required to do the work of retrofitting millions of Australian homes including public, social and community housing, low income or vulnerable households and owner occupied or rented households. This will complement other industry projects to collaboratively demonstrate that it is practical, possible and desirable to implement home retrofits at scale in Australia and will lead to prototypes and community scale delivery model pilots.

URBAN RENEWABLE ENERGY ZONES (UREZ)

OUTPUTS:

- 2 case studies (in WA & NSW)
- 2 Industry reference group workshops

INDICATORS:

- 8 project partners
- 8 Industry Reference Group members

OUTCOME:

A commercial deal model and committed energy consortia for UREZ demonstration projects

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 1 of ongoing project

PROJECT SIZE

$210k over 12 months

REPORTS

2 case studies (WA & NSW)

EVENTS

2 Industry Reference Group workshops

FUNDERS

RACE for 2030 CRC, Planet Ark Power

PARTNERS

UTS, Curtin University, Planet Ark Power (eleXsys)

Overview

Distributed Energy Resources (DERs) are a large and growing component of the Australian electricity network and a major factor in corporate strategies for economic growth, environmental sustainability, and social wellbeing. Blessed with one of the best solar resources in the world and driven by government incentives, high electricity prices, and the declining cost of the technology, Australia has become world leaders in rooftop solar. DERs will be a cornerstone of Australia's energy system transition to net zero however, a central challenge remains on how we best integrate rapidly increasing levels of DER into reliable and cost-competitive energy systems. Australia has an ideal opportunity to test new approaches to unleash reliable, affordable, clean energy for all.

An Urban Renewable Energy Zone (UREZ) is an urban area that can support high levels of small and medium-scale renewable energy penetration, facilitate the decarbonisation of cities, helps the wider energy system, and drives local socio-economic benefits. In collaboration with industry, government, and research partners, Climate-KIC initiated a six-month RACE for 2030 Fast Track Project to explore whether UREZ is a useful mechanism to accelerate DER investment in cities whilst maximising the use of existing grid infrastructure, value stacking, and driving other benefits. As the RACE for 2030 Fast Track Project revealed that a UREZ is desirable, Climate-KIC partnered with Planet Ark Power to coordinate stakeholders towards forming a project that would allow a commercial deal and energy consortia to form with design considerations toward future replication and scalability to crowd in more investment.

The project aim over the next two years is to implement at least two UREZs, with 50 (or more) UREZs to be developed by 2031. The initial demonstration projects will be community-driven to catalyse on the community's existing social licence to operate including community engagements and investments or commitments of local councils, communities, and businesses to UREZ activities, technologies or synergy concepts.

Outcomes

For the first UREZ demonstration project, stakeholders were coordinated toward forming a commercially viable project that would allow a commercial deal and energy consortia to form. A commercial deal structure was developed in collaboration with project partners, with key stakeholders expressing interest in driving the next stages of investigating the deal. To smooth the way for implementation at scale, the energy consortia are interested to participate in the knowledge sharing forums.

CLIMATE MEASUREMENT STANDARDS INITIATIVE 2.0 (CMSI 2.0)

°CMSI

OUTPUT:

13 partners

INDICATORS:

>1,700 downloads of the CMSI guidance Executive Summary since issue

1 review of guidance initiated

OUTCOME:

Enhanced climate change risk management in Australia's financial sector

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 1 of ongoing project

PROJECT SIZE

$50k

EVENTS

5 Secretariat and Steering Group meetings

PARTNERS

Suncorp Group, IAG, RACQ, NAB, Westpac, Commonwealth Bank, QBE, CSIRO, Investor Group on Climate Change (IGCC), Australian Banking Association, Insurance Council of Australia, MinterEllison, Finity Consulting, ARC Centre of Excellence for Climate Extremes

Overview

Climate Measurement Standards Initiative (CMSI) is an industry-led collaboration, which aims to enhance climate risk management of Australia's financial sector. It provides provide forums, research and open-source resources (guidance, training, fact sheets, etc), that support a consistent Australian framework for financial sector climate risk analysis and disclosure aligned with international practice.

The CMSI developed voluntary guidelines for disclosure of climate physical risks to infrastructure and the built environment in Australia in line with recommendations for the Task Force on Climate-related Financial Disclosure (TCFD). Since their release these documents have been used across industry to support disclosure of climate-related financial risks, with over 1700 downloads of the executive summary and over 1,100 downloads of the technical summary.

The CMSI is now in a second phase of operations seeking to continue to provide resources and forums in this complex and evolving space. CMSI participants have confirmed their ongoing commitment to the initiative and there is growing need for support in meeting the increasing expectations for meaningful disclosure of climate-related financial risks.

As an initial step the CMSI 2.0 engage the ARC Centre of Excellence for Climate Extremes to analyse how new climate change information from the IPCC 6th Assessment Report impacts on the advice given in the CMSI guidance. The results of this analysis are expected early in 2022-23.

CMSI 2.0 will extend from this work To facilitate collaboration between climate science, research and industry to support:

- Scientifically defensible use of climate science to inform climate risk analysis and disclosure;
- Sharing of emerging practice and issues in the application of climate science for financial sector climate risk analysis and disclosure; and
- Coordination of cross-sector effort to address emerging issues.

Outcomes

More than 130 industry experts participated in the development of the first reports. Encompassing a diverse set of participants including insurers, banks, scientists, regulators, reporting standard professionals, service providers and supporting parties, the project integrates, the disciplines of climate science, hazard science, catastrophe modelling, and financial modelling to provide a set of open-source standard guidelines.

Through initial and ongoing engagement the CMSI is building industry capacity in this area. The continuing CMSI meetings have supported industry participants to explore, understand and improve climate risk management approaches and unpick challenging issues at the nexus of cutting edge scientific modelling and financial decision making.

RESILIENCE VALUATION INITIATIVE (RVI)

RESILIENCE VALUATION INITIATIVE

OUTPUTS:
2 Statements
4 Case studies

INDICATOR:
23 organisations participating

OUTCOME:
Increased investment in resilience to protect vulnerable communities

Inputs/Outputs 2021-22

PROJECT TIMELINE
Year 2 of 4

PROJECT SIZE
$220,000 (2022-2024)

FUNDERS
Australian Business Roundtable for Disaster Resilience and Safer Communities, National Emergency Management Agency, Initiative participant contributions

REPORTS GENERATED
2 Statements
4 Case Studies

EVENTS
5 Steering Committee meetings
3 Working Group workshops

MEMBERS
Australian Red Cross, Australian Institute for Disaster Resilience, Natural Hazards Australia, Minderoo Foundation, EY, Infrastructure Australia, AustralianSuper, Munich Re, Arup, Queensland Reconstruction Agency, AECOM, Resilience Projects, Frasers Property, WWF Australia, Energy Networks Australia

PARTICIPANTS
National Emergency Management Agency, Department of Prime Minister and Cabinet, Resilience NSW, CSIRO, NAB

Overview

The Resilience Valuation Initiative (RVI) is a coalition of public, private and not-for-profit stakeholders working to improve the reliability of measurements of the benefits of resilience, allowing for confidence in making investment decisions into resilience activities and infrastructure. Climate-KIC Australia is providing secretariat and program support the RVI, as well as playing a lead role in the design and delivery of the work plan.

Investment in climate adapted and resilience assets, features and projects will be critical to ensuring the prosperity and sustainability of Australian communities. There is an interest from government and the private sector to fund and invest in resilience, but uncertainty around understanding the costs and benefits makes it difficult to make informed decisions about when, where and how to invest.

To support informed decision-making for resilience investment, the RVI will identify and apply robust valuation approaches to resilience valuation, capture learnings and build capability to encourage further uptake and scaling across public and private sector decision-making. In addition, it will seek to identify common characteristic, techniques and values that can form a basis for increasing standardisation and comparability in resilience valuation approaches. The process will recognise the systematic nature of climate change and disasters, take an all-hazard approach and consider social, environmental, economic and governance factors.

Outcomes

The RVI aims to increase proactive investment in physical and community resilience measures to protect vulnerable communities from the impacts of disasters and climate change. To achieve this, public and private sector decision-makers need reliable and accessible approaches to balance different priorities and values The RVI is mobilising public and private stakeholders in Australia to develop and use a practical solution that values resilience and better calculates the broader social, environmental and economic benefits of investments in resilience-building activities. This will help to bring public and private investment to resilience-building projects.

CLIMATE SCENARIOS

OUTPUT:

2 reports (pending release)

INDICATOR:

2 consultation workshops with private sector stakeholders

OUTCOME:

Enhanced consistency, comparability and quality of climate change scenario analysis in Australia

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 1 of 2

PROJECT SIZE

$100k in 2022

FUNDERS

Department of Climate Change, Energy, the Environment and Water (DCCEEW)

PARTNERS

DCCEEW, Climate Comms, CSIRO, Bureau of Meteorology, State and Territory Governments

EVENTS

2 Stakeholder consultation workshops

Regular multi-agency project working group meetings

Overview

Australia is already experiencing the impacts of a changing climate, particularly changes associated with increases in temperature, the frequency and intensity of extreme events, changing fire weather and shifting rainfall patterns. Climate trends and extreme events have caused major impacts in our cites and regional communities. Further climate change is anticipated due to ongoing increases in greenhouse gas emissions. It is increasingly critical that individuals, communities, governments, industry, business, and non-government organisations understand and manage current and future climate risks.

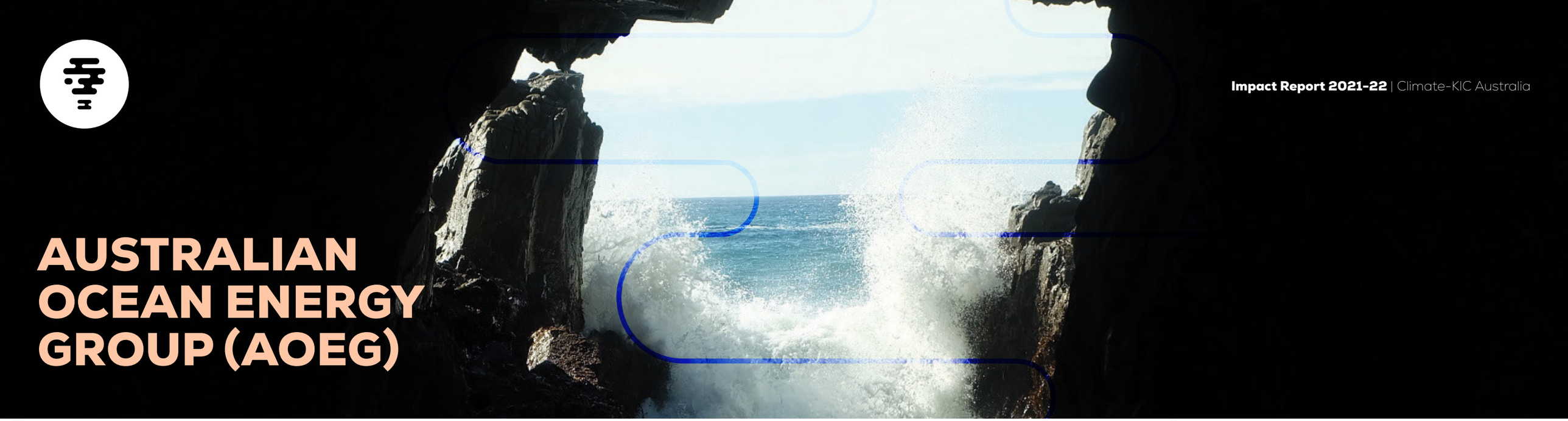
Climate-KIC Australia is working in close collaboration with DCCEEW, ClimateComms and partners to deliver a program of research, engagement, and advice to support improved climate scenario information at a national scale. This includes consideration of nationally consistent climate scenarios and supporting guidance on using climate scenarios as part of a climate risk assessment. This work will form part of an ongoing effort to improve the availability of climate scenario information for use in climate change risk assessment.

A review of user needs, challenges and recommendations for Australian climate scenarios was undertaken by Climate Comms and Climate-KIC to inform the development of climate scenario resources. It identified that many organisations lack the resources and expertise to engage with the complex information and guidance provided to support climate risk assessment. There is a need for simple and straightforward content to support early users to undertake a preliminary assessment, build their capability and enhance their understanding of their climate risk.

Outcomes

The project is expected to support the development of preliminary national climate change scenario information that can provide an entry point for stakeholders into the expanding landscape of climate science information. It also provides key information providers with an understanding of the capacity and capability of some key stakeholders to engage with climate scenarios. This can then drive improved engagement processes and product design into the future.

The project will also deliver insight to inform the process of designing further climate scenario information and resources.



AUSTRALIAN OCEAN ENERGY GROUP (AOEG)

AUSTRALIAN OCEAN ENERGY GROUP

OUTPUT:

Ocean energy market investigation

INDICATOR:

Identification of priority target markets for Australian ocean energy

OUTCOME:

Accelerated adoption of ocean energy in Australia

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 4 of an ongoing project

PROJECT SIZE

$200k per year

PARTNERS

31 Australian & international members across industry, government & academia

Overview

With over 70% of our earth covered by oceans, Australia's 25,780 kilometres of coastline provides access to hundreds of terawatts of untapped potential energy from its waves and tides. Amongst this coastline, Australia's blue economy has a projected value of $100 billion per annum by 2025. Statistics further show that the marine industries alone make up a significant component of the national economy, with marine industries accounting for 4.8% of GDP and provide over 40,000 new employments. This economic significance demonstrates a sizable market opportunity exists for renewable ocean energy.

Although new markets for ocean energy can be identified, the ability to transform blue economy businesses, industries and communities into buyers of ocean energy technologies and systems requires a substantially different approach than currently exists. As ocean energy technologies continue to successfully mature, it is now time to move from a "technology push to a market pull".

To launch this new paradigm shift, AOEG conducted the first phase of its "market-pull" initiative through implementation of an Ocean Energy Market Investigation ("market investigation"). The primary aim of this project was to identify a potential group of early adopter end-users operating in the blue economy for ocean energy. In addition to identification of this priority target market group, AOEG also desired to understand where the key markets are located relative to Australia's wave and tidal resources and learn what issues need to be addressed for these early adopters to commit to adoption of an ocean energy system.

This study is considered the beginning of a long-term ongoing effort by AOEG to gather in-depth intelligence about blue economy markets (end-users) and establish the foundation for building demand for ocean energy in Australia. The market data collected in AOEG's inaugural study represents a 'snapshot' of the markets and does not include the total markets available to ocean energy.

Outcomes

- Reduced time to market for the technology development companies through increased visibility and identification of early-adopter markets willing to "co-develop" suitable ocean energy systems.
- Increased first mover investors who recognise the market opportunities for ocean energy and willing to be in on the ground floor to gain foundational knowledge about the industry, diversity of technologies and emerging markets.
- Improved collaboration to reduce barriers to development on issues that individual technology development companies cannot do for an entire industry, such as working with government regulators to establish local, regional and national permitting consistency, facilitating development of government incentive plans, etc.
- Expanded number of pilot commercial demonstration projects that serve as "showrooms" for "co-design/co-development" ocean energy initiatives and catalysts for commercialisation. These are use cases to help early adopters get started on their own ocean energy journey.

EUROPEAN UNION-AUSTRALIAN CLIMATE BUSINESS NETWORK

European Union – Australian Climate Business Network

OUTPUTS:

- **20+ outreach events attracting 1500+ participants over course of project**
- **Technical summary report on Sustainable Finance Roadmap (pending release)**

INDICATOR:

80+ industry associations engaged

OUTCOMES:

Increased knowledge by the Australian business community and policymakers of European policies, good practices and lessons learned in the field of climate and trade action

Inputs/Outputs 2021-22

PROJECT TIMELINE

Year 2.5 of 2.5 (completed Dec 2021)

PROJECT SIZE

$400k over 2.5 years

FUNDERS

National Emergency Management Agency

REPORTS

4 Budget reports, 2 half-yearly progress reports, Technical summary on Sustainable Finance Roadmap project, final project summary report, bi-monthly newsletters

EVENTS

20+ outreach events (13 in FY 21-22)

PARTNERS

European Commission's Strategic Partnerships for the Implementation of the Paris Agreement (SPIPA) program, German International Development Agency (GIZ), Australian Sustainable Finance Initiative)

Overview

The European Union Australian Climate Business Network (the Network) project commenced in May 2019, with the objective to work with key business/industry partners in Australia (AUS) and the European Union (EU) to establish and activate a national Network with a sustainability and trade focus.

With the release of the Australian Sustainable Finance Roadmap in November 2020 by the Australian Sustainable Finance Initiative (ASFI), the European Union Australia Sustainable Finance Roadmaps project extension during the remaining six months of the Network project was developed to facilitate knowledge sharing among Australian and EU experts to highlight potential areas of alignment between their respective financial and investment frameworks.

Outcomes

By fostering exchanges and collaborations around policy developments and industry practice between EU and AUS business communities as well as Australian national and state policymakers and stakeholders from the EU, the Network activities contributed to the general objectives of the EU's Sustainable Partnerships for the Implementation of the Paris Agreement (SPIPA) in increasing 'public awareness in Australia on the challenges and opportunities associated with the implementation of the Paris Agreement and NDCs, including the business community'.

This was achieved through:

- Thematic workshops developed and presented between EU and AUS industry sectors with attendance of business and policymakers
- Exchanges of experts (peer-to-peer) and speakers at industry conferences
- Information on EU policy developments and industry practice shared with industry associationsTechnical workshops between EU and AUS experts in sustainable finance realised to build knowledge and capability within Australian finance and investment sector
- Increased awareness of the opportunities and challenges related to the Paris Agreement and of European cooperation with partner countries
- Bilateral exchanges facilitated between AUS and EU industry/trade associations
- Regular public and member only events series for EU AUS Network and Sustainable Finance projects.

Further collaboration between Climate-KIC Australia and ASFI is being supported by the European Union during 2022-23 as part its climate diplomacy program the "European Union Climate Dialogues", to exchange knowledge and expertise between the EU and Australia to inform the development of an Australian sustainable finance taxonomy.

CLIMATELAUNCHPAD (CLP)

OUTPUTS:

- **300 attendees at 2021 Australian Pitch Final**
- **38 participants across 5 states in 2022**
- **3 digital bootcamps in 2022**
- **Women in Cleantech digital lunch**

INDICATORS:

- **92.7% participants record that they have developed capabilities**
- **100% participants rate the training program "excellent" or "good"**
- **100% participants would recommend program further**
- **2/3 Australian winners progress to CLP Global Grand Final in 2021**

OUTCOMES:

- **70% alumni surveyed still in business**
- **190 participants record making meaningful connections**
- **33% Australian finalists secured seed funding prior to Australian pitch final in 2021**

ClimateLaunchpad
Australia

Inputs/Outputs 2021-22

PROGRAM TIMELINE

Year 5 of annual program

PROGRAM SIZE

$200k over 1 year

EVENTS

Digital pitch training (Aug 2021)

Australian National Final (Aug 2021)

Women in Cleantech online lunch event (March 2022)

3 digital bootcamps (May 2022)

3 webinars (June 2022)

FUNDERS

AusIndustry Entrepreneurs' Programme, Future Battery Industries CRC, RACE for 2030 CRC

PARTNERS

Humanitech, Fishburners, Victorian Cleantech Cluster, Global Entrepreneurship Congress

Overview

ClimateLaunchpad is the world's largest and most successful clean- and climatetech business ideas competition and pre-accelerator program. Its mission is to unlock the global potential for cleantech to address climate change and help to fast-track ideas into businesses. The annual program provides an opportunity for innovators and entrepreneurs to connect to a global network of trainers, mentors, investors, accelerators and market opportunities.

Outcomes

Since its global inception in 2017, Australian CLP alumni continue to grow their businesses and make an impact. A survey conducted in May 2020 showed over 70% are continuing post-CLP; securing funding, growing, running pilots, partnering with industry or government and entering Accelerators.

In 2021, Queensland team Whirl were awarded a $50,000 development grant from Humanitech through their partnership with ClimateLaunchpad. Whirl, along with Victorian team SEE Labs and WA team Woodify represented Australia at the Asia Pacific Regional Finals, with Whirl and SEE Labs ultimately progressing through to the Global Grand Final.

In 2022 further pathways to support start-ups succeed were mobilised, including opportunities to attend and pitch at both the Victorian Cleantech Cluster and the Global Entrepreneurship Congress 2023.

In 2022, 38 innovators from across five states were accepted into the program and attended one of three Boot Camps, multiple webinars and training opportunities. A female founder rate of around 33% was achieved, improving on 2021 performance.

100% of our survey respondents said they were likely to recommend the program further, with the ClimateLaunchpad boot camp trainer receiving a rating of 4.4/5. The webinars had an exceptionally high participation rate with all survey respondents rating the webinars as "excellent" or "good". More than 30 mentors, advisors and Australian and international trainers were involved in the program and supported the innovators' throughout the program. Some of the participating Australian finalists secured seed funding before entering the Australian Pitch Final.

CLIMATE KICKSTARTER

Climate KickStarter

OUTPUTS:

2 research commercialisation courses designed

One pilot course (*Light*) delivered to climate researchers across multiple states, Universities and Cooperative Research Centres

INDICATORS:

4/5 rating from participants on commercialisation capability improvement

4/5 rating from participants on curriculum and relevance of modules.

OUTCOMES:

Second pilot course (*Deep Dive*) scheduled

Fully subscribed pilot courses, high demand by climate researchers

One industry led project initiated as a result of the course training.

Inputs/Outputs 2021-22

PROGRAM TIMELINE

Pilot of potentially ongoing project

PROGRAM SIZE

$50k for pilot delivery of *Light* program

FUNDERS

Future Battery Industries CRC, RACE for 2030 CRC

REPORTS

KickStarter *Light* evaluation Report

PARTNERS

Cruxes, Occami

EVENTS

1 KickStarter *Light* course

Overview

Australian universities and research institutions have a strong track record of discovery and innovation, but Australia trails behind other global innovation ecosystems in translating research outputs into long-term commercial opportunities. Through 5 years of delivering clean tech innovation programs, we understand that researchers need additional training and support. Climate-KIC Australia in partnership with Race for 2030 and the Future Battery Industry CRC addressed this need by designing the new research commercialisation program Climate KickStarter. Multiple interviews with climate researchers and co-design workshops and design sprints with climate researchers, CRC representatives and Australian and international commercialisation trainers and experts were conducted to build a fit for purpose program specialised for the Australian climate research community.

Climate KickStarter focuses on the researcher as an individual and supports them to develop the building blocks - confidence, knowledge, skills, and ability - to identify and leverage future commercialisation opportunities.

The program is delivered in two modalities by world-class trainers and mentors who have successfully commercialised research and grown start-ups and companies across Australia and internationally. A mix of teaching and learning methods are leveraged while covering modules about commercialisation pathways, industry engagement, customer engagement, IP and stakeholder management.

The shorter *Light* course is designed as an early exposure point to introduce researchers to commercialisation pathways and processes and skills. A longer *Deep Dive* course is designed to equip researchers with the skills to be able to apply their research to the commercial space.

Outcomes

The first *Light* course pilot was delivered in May 2021. 95% of the participants would recommend the course to other researchers. Participating researchers experienced a steep learning curve, some applying their commercialisation capabilities directly to their current projects. Customer engagement, stakeholder and IP management were considered some of the most valuable aspects and participants rated the curriculum with a 4-star rating.

The pilot for the *Deep Dive* course is schedule for November 2022 with funding already confirmed for the ongoing roll-out of the full program in 2023.

Community

Community acts as the place to engage with and drive climate innovation. Our community helps to generate insight and shape our activities.

Our community continues to be a valuable asset that helps Climate-KIC by seeding large-scale projects through their contributions to our organisations capacity. Partner contributions achieve 41x leverage.

As we progress through this strategic period we are reviewing our approach to community. As our projects continue to create momentum and engage broadly we are exploring how to create action-focussed collaborative communities. We will continue to connect across sectors and states to share insights through capability building initiatives and entrepreneurship activities.

PARTNERS

Curtin University

NSW GOVERNMENT

PLANET ARK Power Cleaner energy. Lower cost.

SUNCORP

UTS

WWF

PHILANTHROPY

As a charitable institution, endorsed as a deductible gift recipient (DGR) with the Australian Tax Office, Climate-KIC Australia is eligible to receive philanthropic donations. Philanthropic donations are a valuable addition to our partner and project funding and give Climate-KIC valuable capacity to generate large-scale multi-stakeholder collaborative projects.

Throughout the financial year we cultivated relationships with foundations and family funds, and were successful in receiving project donations. We are now actively working to generate new leads, improve awareness and find pathways to larger funding.

Operations

Climate-KIC Australia Ltd (ABN 95 616 047 744) is a public company limited by guarantee registered under Australian Corporations Act on the 22nd November 2017. On the 4th August 2017 the company was registered as a charity with the Australian Charities and Not-for-profits Commission. The effective date of charity registration is 1st January 2017.

The company was added to the Register of Environmental Organisation's on 26th April 2018 providing DGR status to Climate-KIC Australia Ltd.

The company structure and governance balance Climate-KIC Australia's goal of agility with the need for transparency and clear accountability to its funders. A strong governance framework allows our lean organisation to maintain operating rigour.

ENVIRONMENT

Climate-KIC Australia aims to minimise the environmental impact of operations and maximise the positive benefits from our work. Our office spaces are provided and accessed mostly through our partners, which helps us ensure that they are the highest possible energy efficiency ratings. Our headquarters office in Sydney is co-located with ISF at UTS. The office has a six-star Green Star Interiors rating.

As a result, the main source of emissions from our operations come from air travel. This year, there was minimal local and international travel due to Covid-19. Our modest travel is offset at the time of purchase.

BOARD & TEAM

Directors as at 30 June 2022

Dominic McGann
Chair
McCullough Robertson Lawyers

Fiona Bednarz
Suncorp

Justine Jarvinen
UNSW Energy Institute

Professor Greg Morrison
Curtin University / Western Sydney University

Sara Parrott
Hand Heart Pocket

Professor Mary Ritter
EIT Climate-KIC

Professor Stuart White
University of Technology Sydney

Stephanie Ziersch
Independent Consultant

Leadership team

Christopher Lee
CEO

Meredith England
Director, Strategic Innovation

Jason Nielsen
Director, Strategic Projects

Will Soutar
Director, Business Development

Katie Vines
Director, Operations

Belinda Whelan
Director, Strategic Projects

The Climate-KIC Australia Board met six times during 2021-22. Most meetings were held virtually throughout this time, although the Board met in person for a strategy session in March 2023.

One new Board member, Fiona Bednarz, was added to the Board during 2021-2022.

The Board has been refining its practices to drive improved performance of the organisation. The Finance and Risk Committee, chaired by Justine Jarvinen meets monthly to provide oversight of the organisations finances. The Nomination and Remuneration Committee, chaired by Stephanie Ziersch has met regularly to review and refine the governance of the board and identify remaining skills and capability gaps that might be filled through recruitment of additional Board members (up to a maximum of twelve). Finally, the Philanthropic Committee chaired by Sara Parrott has been actively supporting the efforts of Climate-KIC staff to engage with the philanthropic sector.

Climate-KIC Australia had a high staff retention rate during 2021-2022, employing 18 staff at the end of June 2022.

FINANCES

This section provides an overview of Climate-KIC Australia's Profit & Loss and Financial Position. Full audited accounts are available in the public domain via the **Australian Charities and Not-for-Profits Commission (ACNC)**.

Profit & Loss

	2022 $	2021 $
Revenue	**3,609,924**	2,969,294
Other income	**193,596**	196,108
Direct project costs		
- Program delivery and administration	**(1,537,662)**	(688,984)
- Contractors and project employee costs	**(942,454)**	(1,389,321)
- Other direct project costs	**(45,237)**	(65,297)
Other employee costs	**(738,187)**	(670,241)
Administrative expenses	**(462,868)**	(246,294)
Professional fees	**(59,732)**	(49,918)
Depreciation and amortisation	**(3,784)**	(5,407)
Surplus for the year	**13,596**	49,940
Total comprehensive income for the year	**13,596**	49,940

Statement of Financial Position

	2022 $	2021 $
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	**392,267**	238,114
Trade and other receivables	**419,006**	495,153
TOTAL CURRENT ASSETS	**811,273**	733,267
NON-CURRENT ASSETS		
Plant and equipment	**21,376**	12,614
TOTAL NON-CURRENT ASSETS	**21,376**	12,614
TOTAL ASSETS	**832,649**	745,881
LIABILITIES		
CURRENT LIABILITIES		
Trade and other payables	**549,321**	408,150
Deferred funding and contributions income	**91,300**	162,815
Employee benefits	**87,326**	83,810
TOTAL CURRENT LIABILITIES	**727,947**	654,775
TOTAL LIABILITIES	**727,947**	654,775
NET ASSETS	**104,702**	91,106
EQUITY		
Retained surplus	**104,702**	91,106
TOTAL EQUITY	**104,702**	91,106

CLIMATE**KIC**
Australia

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