

RACE for 2030 CRC Strategy 2020-21 October 2020



Introduction

This strategic plan is a guiding document for our Collaborative Research Centre (CRC), defining our values, how we work, what we want to achieve and how we plan to do it. Our name describes our objective: Reliable, Affordable, Clean Energy (RACE) by 2030. Our success will be measured by the economic and environmental outcomes catalysed by our work. We want our legacy to be transformative, and a lasting change in boosting energy productivity and decarbonisation of energy services. We are committed to catalysing cumulative \$3.9 billion energy productivity benefits and reducing carbon emissions by 20 mega tonnes cumulative by 2030.

On March 8 this year, the Commonwealth announced they were funding RACE from July 2020 for 10 years. We have since completed the first stage of establishment of the CRC, launched the research program to fund fast track and major projects, and are undertaking nine opportunity assessments to refine the planning for ongoing research. In April 2021, we will initiate market transformation and capacity building programs to amplify the impact of our research. By the end of 2020/21 we will be in full operation with \$350 million of committed resources over 10 years contracted with around 90 partners.

This document summarises our approach to chart the direction of the CRC. This plan will be revised in June 2021 with a longer-term focus, utilising the experience from the first nine months of operation and results from planning research projects. The strategy will continue to be a living document and reviewed annually.





Business Cooperative Research Centres Program

How we will achieve Reliable Affordable Clean Energy by 2030?



10 Years of funding



\$350 million of resources Deployed to achieve maximum impact



Commonwealth investment



Industry investment: About \$85 million cash; \$194 million in kind



17 Priority Themes 10 Years



9 Opportunity Assessments In 12 months - Maximum 2 per month FAST TRACK PROJECTS

What is the RACE for 2030 Cooperative Research Centre?

RACE for 1010 (RACE) is an industry-led research collaborative to drive energy innovation across the supply chain to deliver improved, lower cost and lower emission energy services for energy customers. RACE will increase distributed clean energy uptake by increasing load flexibility and support the growth of Australian energy technology businesses.

The Minister for Industry, Science and Technology Karen Andrews stated at the RACE launch that "Supporting cutting-edge energy technology and research is a sure-fire path to lower emissions, cheaper power and a reliable grid. The cost and reliability of energy is a vital component of running a business. Reducing energy costs for businesses means more money for investment, more production, and more jobs – essential elements of a healthy and growing economy. For Australian families, this research offers the opportunity to reduce their carbon footprint, while lowering power bills and freeing up money in the household budget. RACE will also help Australia play its role in reducing global emissions".

RACE Vision

A flourishing low carbon Australia, where energy research improves quality of life and boosts energy productivity.

RACE Mission

Drive innovation for a secure, affordable, clean energy future.

Our Core Values

- We listen to the people's voice (seek diversity in perspectives and listen to energy users)
- We speak from the heart (be authentic, with the best of intentions)
- We translate passion into action (highly driven to deliver great outcomes)
- We build together (inclusive and collaborative)
- We seek impact through innovation (to achieve our ambitious shared vision)

Objectives for Australia by 2030 - Accelerated by RACE



- Increasing demand flexibility = Increasing renewable penetration while increasing reliability
- Increased energy productivity during economic growth
- Increased electrification



- Less shedding of household PV
- Less energy waste
- Lower energy costs
- Reducing emissions to less than 20 mega tonnes by 2030

Our Partners

RACE brings the promise of collaboration across the energy value chain, from energy users to suppliers of energy, technology providers and start-up companies, governments, and Australia's leading energy researchers.

This unique industry innovation ecosystem allows RACE to address large complex problems with whole of industry, systemic design solutions. The potential impact of RACE is exemplified by the fact that partners distribute 50% of Australia's power needs.



RACE Research and Delivery Programs

The four RACE research programs that will deliver innovation across the economy are:



RACE for BUSINESS:

Boosting business energy productivity and cutting costs via digitalisation, electrification and value chain optimisation.



RACE for HOMES:

Developing and applying new energy technologies and solutions to lower costs and improve comfort for households.



RACE for NETWORKS:

Optimising Australia's electricity grid through customer distributed energy resources and network integration.



RACE for EVERYONE:

Accelerating the customer-centred energy transition via fore-sighting, stakeholder engagement with the innovation ecosystem, capacity building, training and education.

Market Transformation Program

Our mission is to catalyse major and lasting change from our research.

Converting research outputs into results is key to the success of the CRC, so RACE has allocated a significantly larger budget to this function than typical CRCs. Our role is much more 'knowledge sharing' - we seek to proactively market research outcomes to target markets through member industry associations, growth centres, other collaborating organisations. We will conduct extensive outreach activities to businesses and build an expanding end user partner base. We will collaborate closely with other agencies to drive change.

Capacity Building Program Designed for Maximum Leverage

We have a focus on capacity building as an integrated part of our change programs, to address the skills shortage in this rapidly expanding field.

This will include:

- training and embedding energy managers in major businesses for large leveraged impact
- implement short courses
- PhDs placed in businesses
- businesses placing their staff in universities for post graduate research
- implementation support tools.

Commercialisation Program

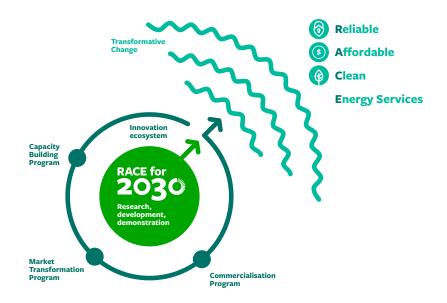
RACE will help Australian businesses to commercialise IP, with a focus on building start-ups.

We will help start-ups take their technologies across the 'valley of death', working cooperatively with a range of stakeholders to assist them to export their technologies and services globally.

Path to Impact

RACE will have a clear focus on the theory of change to leverage the impact of our research projects by at least 20 times, to achieve market transformation.

Our research is focused on outcomes and impact and will be driven into the market through our market transformation, capacity building, and commercialisation programs. We will work closely with the broader innovation ecosystem to optimise our combined efforts to deliver Reliable Affordable Clean Energy.



RACE Board and Governance

RACE has a totally independent and very accomplished board made up of five members with extensive experience in directing CRC's, public administration, governance, and energy innovation.

The Chair is Louise Sylvan, who is also Chair of Energy Consumers Australia, a Director of APRI (Australian Risk Policy Institute), and has previously been Deputy Chair of the ACCC, and a commissioner of the Productivity Commission.

The board was selected by the RACE bid team to provide the highest levels of governance and skills for the establishment and initial operation of the CRC. The board has been designed so that one member is up for election in 2020, two members in 2021, and two members in 2022. There is scope to add up to two additional board members to bring additional skill sets and diversity.

Louise Sylvan Chair

RACE Team

A team of seasoned professionals was established with a passion for addressing the array of critical challenges facing Australia, and massive business opportunities relating to climate and energy.

The RACE team has a balanced background of business and research, with the CEO, Jonathan Jutsen, and COO, Thushy Sathi coming from accomplished track records in business including startup technology companies, with a very pragmatic approach to solving real here and now problems. Chris Dunstan is the CRO – Chief Research Office. We have nine full-time staff currently, with three more planned for April 2021, and five more parttime program (0.6FTE) and node leaders.

We will maintain a very lean team with low overhead costs.



Jonathan Jutsen

racefor2030.com.au





Australian Government Department of Industry, Science, Energy and Resources Business Cooperative Research Centres Program

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