NATIONAL DESIGN CHALLENGE

Food and Agri Sector

Bega Valley



AUSTRALIAN
DESIGN
COUNCIL

DESIGNING FOR IMPACT

1

The Australian Design Council's mission is to engage Australia's world-class design sector to help grow more globally competitive Australian firms, and in turn, national prosperity.

2

We know design adds significant value to products, services, systems and businesses and across sectors of Australia's economy.

3

The National Design Challenge is a framework to scale the impact of design by embedding our world class professional design capability into Australia's Modern Manufacturing Strategy as a key enabler.

4

With funding from Food Innovation Australia Limited (FIAL), our starting point was the Food and Agri Sector and their Modern Manufacturing Roadmap that supports the sector's growth in annual value-add capability from its current $59bn per annum to over $200bn by 2030.

5

Bega Valley was the first Regional Cluster to be selected to pilot the National Design Challenge, as it transitions to a Circular Economy region.

“I began the process thinking I was going to be delivered a solution, as this is what I understood the role of design to be.

But I ended the process understanding design is about challenging assumptions, it’s about providing an input into a solution and not an entire solution in itself.

As you would in every other part of corporate life, you seek out a series of inputs and align them to make a business decision.

This design-led process has delivered an additional critical input to help inform our business decisions for the future of the Bega Valley.”



Barry Irvin AM
Executive Chair
Bega Cheese

6

Three teams of multidisciplinary senior designers, worked alongside Bega Valley business leaders to reframe their project briefs and highlight how greater impact and value can be created through the inclusion of design capability into each project.

7

The National Design Challenge provided a platform for the design sector to challenge project assumptions, but more importantly, provide a practical pathway to deliver greater impact for the region and sector through a design-led approach.

8

The inclusion of Design at this stage did not provide a single solution, but rather allowed the team of engineers, researchers, scientists and business leaders to better understand what problem they were solving and consider how they could use their collective knowledge and expertise the solve the problem right and embed design into the solution.

9

Our immediate next step is to work with the Bega Valley businesses to use the challenge outcomes and embed the required design capability into project outcomes to enable them to deliver greater impact.

10

Longer term, we will continue to work with Food and Agri Clusters and other priority areas identified by the Modern Manufacturing Strategy to adopt the National Design Challenge Framework to amplify their impact through a design-led approach.

BEGA VALLEY OUTCOMES

Bega Circular Valley is a ten-year project bringing together federal, state and local governments, large and small businesses, universities, international expertise, community organisations – all with a common purpose of creating a Circular Economy.

The Bega Circular Valley group imagines a future where Bega is a lighthouse model for regional Australia, a model for how economic, environmental and social resilience can thrive.

To help deliver this vision, the National Design Challenge provided a forum for senior designers and the Bega Valley Community to collaborate. The starting point was an eight week activity where three teams challenged project assumptions and asked how might we deliver greater impact for the region through a design-led approach.

- **How might we realise more value for the Bega Valley through a re-imagined Visitor Center?**
- **How might we create a food chain and brand value driven by and driving towards a Circular Economy?**
- **How might we create an opportunity to reprocess liquid whey into a value-added ethanol that sets a new standard for circularity?**

IMPACT

Continuing to challenge ideas creates the foundations for diversity and the exploration of alternative ideas. Drawing strength from the typical interdisciplinary approach of design, this collaboration will help foster a stronger and more resilient community - ready to anticipate and respond to the challenges of tomorrow.

RESULTS & IMPACT

THIS PROCESS HAS BROUGHT GREAT CURIOSITY



BARRY IRVIN

BY REFRAMING "FERMENTATION"

WE CAN HAVE — AND NOW

COW-BASED MILK

PLANT-BASED MILK

CELL-BASED MILK

THIS WAS **NEW** TO WHAT WE WERE THINKING ABOUT



YEAST AS AN ENERGY PRODUCT

INJECTING DESIGN MEANS:

DE-RISK DECISIONS

MORE DIVERSITY OF IDEAS

BENEFITS ALL PRODUCTS, NOT JUST ONE

? ? ?

ADJACENCIES ?

THIS HAS RAISED LOTS OF VALUABLE QUESTIONS

NEW SKILLS?

NEW MARKETS?

?

HOW TO DISTRIBUTE?

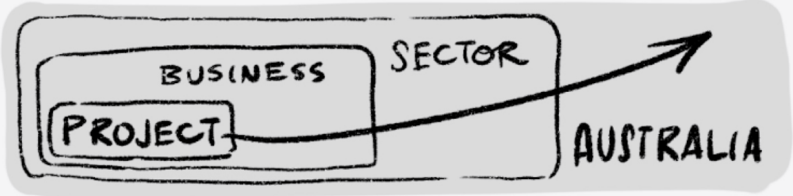
E.G. THIS ALSO HAS POTENTIAL for:

HYDROGEN PRODUCTION

AND

the SMART ENERGY FOODS SPACE

THIS IS AN EXEMPLAR FOR HOW TO CREATE NEW VALUE THROUGHOUT:



FOOD AND AGRI SECTOR OUTCOMES

The Food and Beverage Roadmap under the Australian Government's $1.3B Modern Manufacturing Initiative guides investment for Australian manufacturers to scale up production, commercialise their products and operations, and integrate into domestic and global supply chains.

To strengthen our economy, we need to make the most of our natural advantages in agriculture, and that means adding as much value as we can to raw materials through manufacturing. Design is a critical enabler in this value adding process.

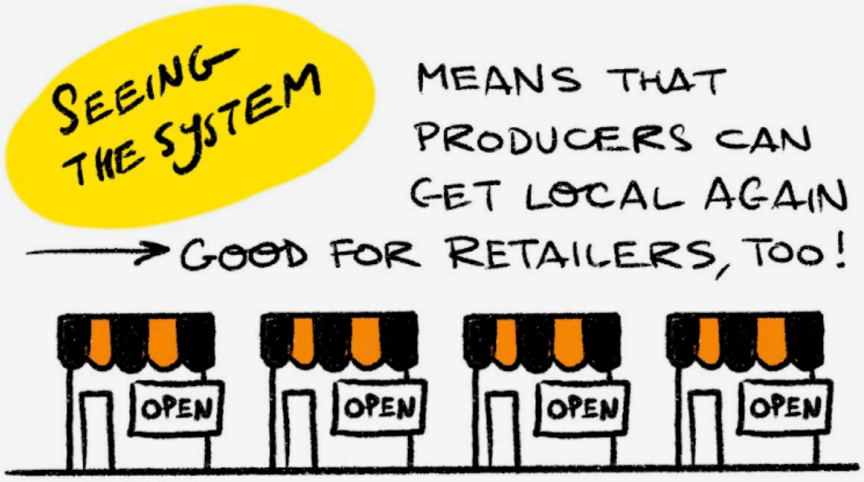
We know a design-led approach leads to better products, services and business models. Design also creates a forum for collaboration where teams can consider clarity on what problem they are solving and whether they have all the knowledge to deliver the right solution.

The National Design Challenge provides a platform to start the design conversation. It also ensures teams are held accountable to follow through in their execution through a design-led approach.

IMPACT

By identifying new trends early, a design-led approach will enable the food and agriculture industry to de-risk decision-making earlier. The community now has the skills and experience to collaborate throughout the process and draw on the unique perspective of all stakeholders to thoroughly explore all avenues.

With this foundation, the industry will be able to build evidence and confidence in concepts, ideas and prototypes for years to come.


SEEING THE SYSTEM
MEANS THAT PRODUCERS CAN GET LOCAL AGAIN
→ GOOD FOR RETAILERS, TOO!
OPEN
OPEN
OPEN
OPEN


... ALSO MEANS WE'RE NOT BOUND TO SHALLOW DEFINITIONS.
e.g. "ENVIRONMENTAL SUSTAINABILITY" =
Animal welfare
Local culture
Community health


THESE CREATE 2ND ORDER OPPORTUNITIES
THEY'RE HERE FOR THE PICKING!


THIS HAS SHOWN THE IMPORTANCE OF trust AS 'SOCIAL GLUE'
MIRJANA PRICA




YOU CAN BUILD INFRASTRUCTURE, BUT WITHOUT TRUST, PEOPLE WON'T STAY.
TRUST
Recipe for CIRCULARITY SUCCESS

DESIGN SECTOR OUTCOMES

The Australian design community is a thriving sector, but to grow, it will require collaborations that can scale its impact by creating high-value opportunities.

The Food and Agri Modern Manufacturing Roadmap is a platform to begin this conversation and together with the National Design Challenge framework, has identified how professional designers can be strategically engaged to leverage their unique capability and deliver amplified impact.

The Australian design sector has the potential to expand beyond a solution-led space to become one that offers the principles, practices and frameworks to address complex social, economic and environmental challenges.

IMPACT

The inaugural National Design Challenge provided a framework to demonstrate how design-led practices and principles can de-risk decision making and support business growth, community development and prosperity. Engaging professional designers creates an opportunity for individuals, businesses and organisations across industries to lean into design-led tools to grow and prosper.

While the Bega Valley National Design Challenge focused predominantly on the challenges and opportunities inherently connected to this community, the success and positive reception of the program foreshadows opportunities for the wider design community.

Through the inclusion of professional design capability into National Priority programs, the National Design Challenge expects to see growth in the current *$67.5 Billion, or 3.5% of GDP of value added to our economy - created by the wider Australian design sector.

*'Defining Design', IP Australia, 2020

THIS HAD JUST AS MUCH IMPACT ON ...

DESIGN

DESIGN IS MOVING FROM:

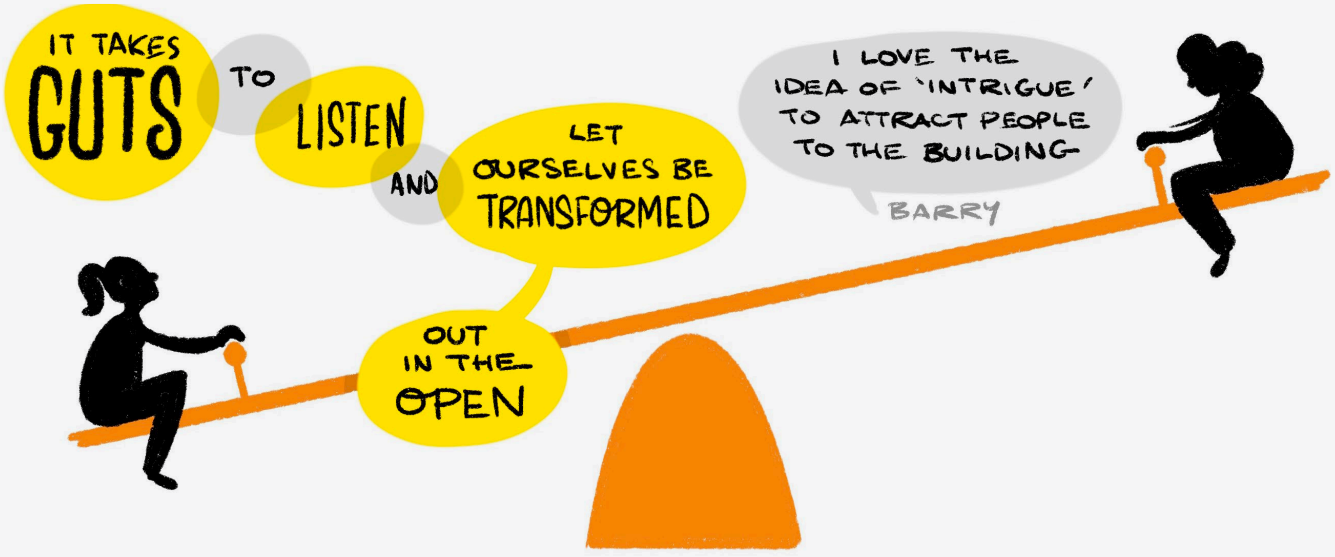
SERVANT OF THE VOICE OF BUSINESS to ADVOCATE FOR VOICE OF CUSTOMER to FACILITATOR FOR ALL VOICES

BUT DESIGN'S TOOLS ARE MORE ABOUT THESE

...as it had... ON THE CHALLENGE

HOW WE **DEFINE** A CHALLENGE... IS OFTEN the **BIGGEST** CHALLENGE!

THERE WAS A RENEWED APPRECIATION FOR CURIOSITY AS A DRIVER



DESIGN CAN SYNTHESISE ALL THE STORIES TOGETHER USING LANGUAGES OF:

FRAMING

PROTOTYPING

TESTING

A PATHWAY TO A **DESIGN-LED ECONOMY**

The need to diversify our economy and the industries which underpin Australia's national prosperity has only been accelerated by the impacts of COVID-19 and we believe design can play a major role in this transition.

Design is a critical business input, one that brings the unique thoughts, skills and insights of multiple professions together to navigate challenges and collaboratively seek a pathway forward.
This National Design Challenge outlined a clear pathway for Bega Valley and our Australian design community to continue to come together to drive impact, above and beyond what had previously been envisaged as possible.

The Australian Design Council is committed to continue to work with the Food and Agri Sector and all other National Priority Sectors to apply the National Design Challenge framework to embed design as a critical input to amplify the impact from these strategies.

We look forward to collaborating with the Modern Manufacturing industries and stakeholders to embrace design capability and reinvigorate Australian Manufacturing.



The clarity, foresight and collaboration that comes with design-thinking strategies will not only allow individuals, businesses and regions to leverage a competitive advantage, but can underpin Australia's national prosperity as a whole.

PARTICIPANTS

FOOD INNOVATION AUSTRALIA LIMITED

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DESIGN CHALLENGE TEAM ONE

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BEGA VALLEY

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DESIGN CHALLENGE TEAM THREE

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The Australian Design Council acknowledges Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work. We recognise their continuing connection to land, water and community and pay respect to Elders past, present and emerging.

The inaugural National Design Challenge program would not be possible without funding from Food Innovation Australia Limited (FIAL).

LEVERAGING AUSTRALIA'S DESIGN-LED INNOVATION CAPABILITY

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The Australian Design Council is a not-for-profit industry body advocating for a design-led future for Australia to deliver long term growth and national prosperity.
It champions the role of design in addressing complex social, economic and environmental challenges.

AUSTRALIAN
DESIGN
COUNCIL

Design by Mitch Morgan Design
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