PROJECT PROPOSAL:

Environmental Stewardship Program - October 2022

PREPARED BY

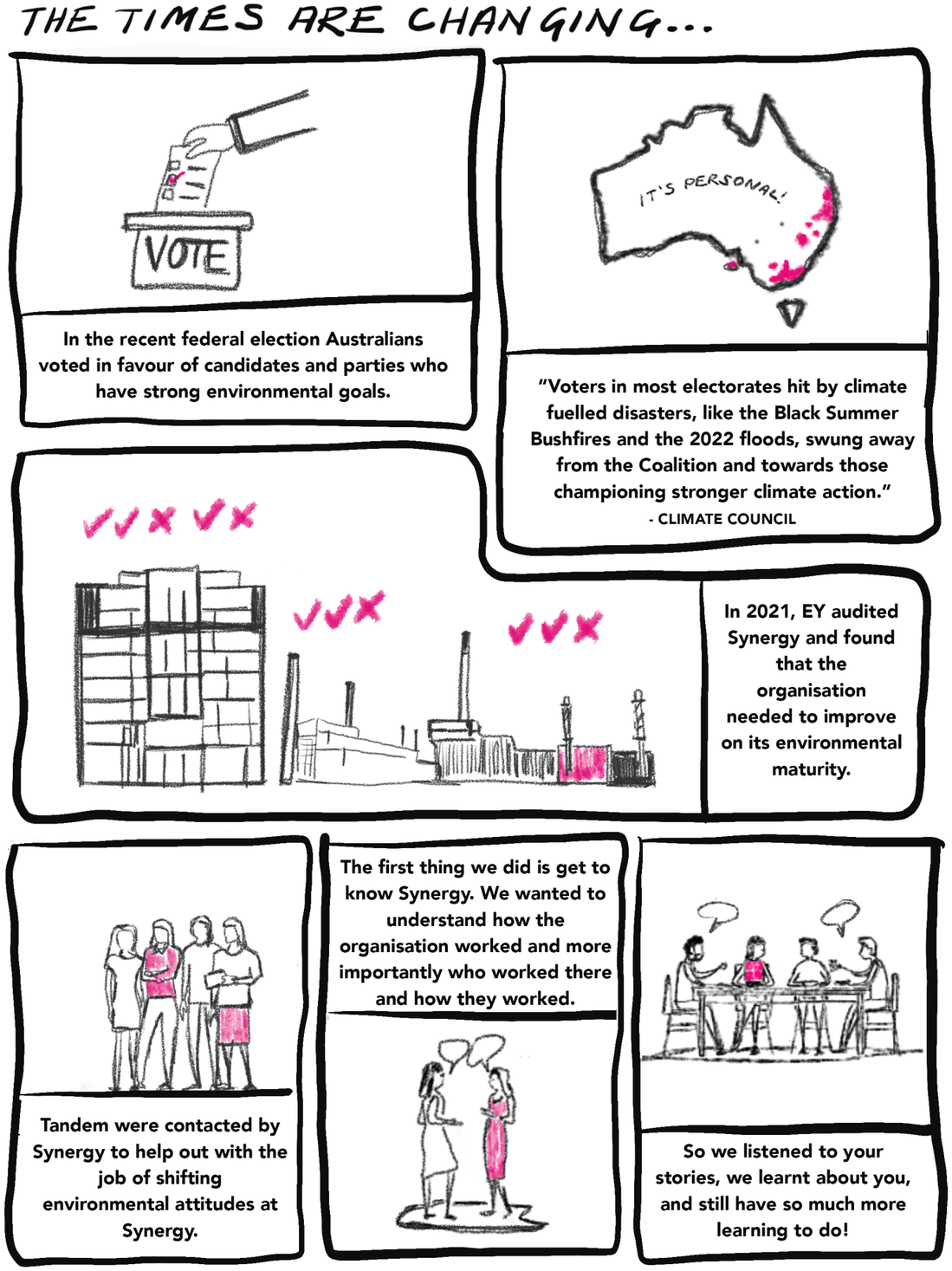
tandem CODESIGN

Contents

HOW DID THIS ALL BEGIN?

Following the delivery of the EY Environmental Maturity Assessment, which outlines seven areas/levers for improvement (Strategy, People, Leadership & Governance, Assurance & Reporting, Risk & Opportunity, Systems & Structures, and Digital Technology), Tandem Codesign were engaged to help understand what “environmental maturity” means for a company like Synergy and develop an environmental stewardship program.

A key focus for Synergy’s recently released Environmental Strategy is to increase the average maturity from Developing to Established by the end of 2022, and then all levers to Established by 2024.



Climate Council. (2022). *THE 2022 CLIMATE ELECTION: Unpacking how climate concerned Australians voted.*

INTRODUCTION

Why are we here (the problem we were given)?

Synergy engaged Tandem Codesign to improve understanding of what “environmental maturity” means for a company such as itself and develop an environmental stewardship program. We are developing strategies and pathways to help positively shift thinking around environmental sustainability within Synergy.

Synergy engaged Tandem after EY completed an assessment of environmental maturity across Synergy. EY applied a comprehensive data and thematic analysis using its EHS Maturity Model, which follows leading practice and regulations. The model examines seven critical levers an organisation must address to support and sustain a healthy and safe workforce engaged in environmentally sound operation:

- STRATEGY
- PEOPLE
- LEADERSHIP AND GOVERNANCE
- ASSURANCE AND REPORTING
- RISK AND OPPORTUNITY
- SYSTEMS AND STRUCTURES
- DIGITAL TECHNOLOGY

EY aimed to provide Synergy with a holistic view of the current state of its environmental maturity and outline the steps required to improve in this area. EY assessed the current overall level of environmental maturity at Synergy as ‘Developing’. The assessment identified individual strengths and opportunities for improvement within this. EY measured both Strategy and People as ‘Basic’ and Leadership & Governance, Assurance & Reporting, Risk & Opportunity, Systems & Structures, and Digital Technology as ‘Developing’. We know that a key focus for the recent environmental strategy is increasing the average maturity to ‘Established’ by the end of 2022, then all levers to ‘Established’ by 2024.

We consulted with multiple team members across SBU to explore current projects related to our project space. This narrowed our scope to focus on Strategy, People, and Leadership, which leaves projects like Project Carnaby to focus on operations-driven processes and reporting. With our human-centred approaches to understanding behaviours, attitudes, and motivations, we believe we are best-positioned to shift and build focus on environmental thinking in staff. This will then drive environmental processes in the workplace.

Who are we and why are we suited to help you?

At Tandem Codesign we know that to design innovative products and service systems we must first understand the people that operate and deliver them. These important people are the backbone of any industry and key to sustaining an organisation’s product or service offerings. Our primary purpose is therefore to understand both the overarching and specific motivations of organisations and their staff and stakeholders.

We look to listen, empathise, explore and investigate project problems to reveal critical data affecting the people connected to those organisational systems. This allows us to help designing future-focused innovative product and service systems that are not only efficient but adaptable and therefore sustainable for extensive periods of time.

A recent CSIRO report (2022) lists environmental, social and corporate governance (ESG) metrics as a global trend requiring research and development. Emerging social trends have heightened the influence of human perspectives and experiences on future community, business, technology and policy decisions. Consumers are demanding increased transparency from organisations, governments and scientists to maintain their trust.

What is design thinking?

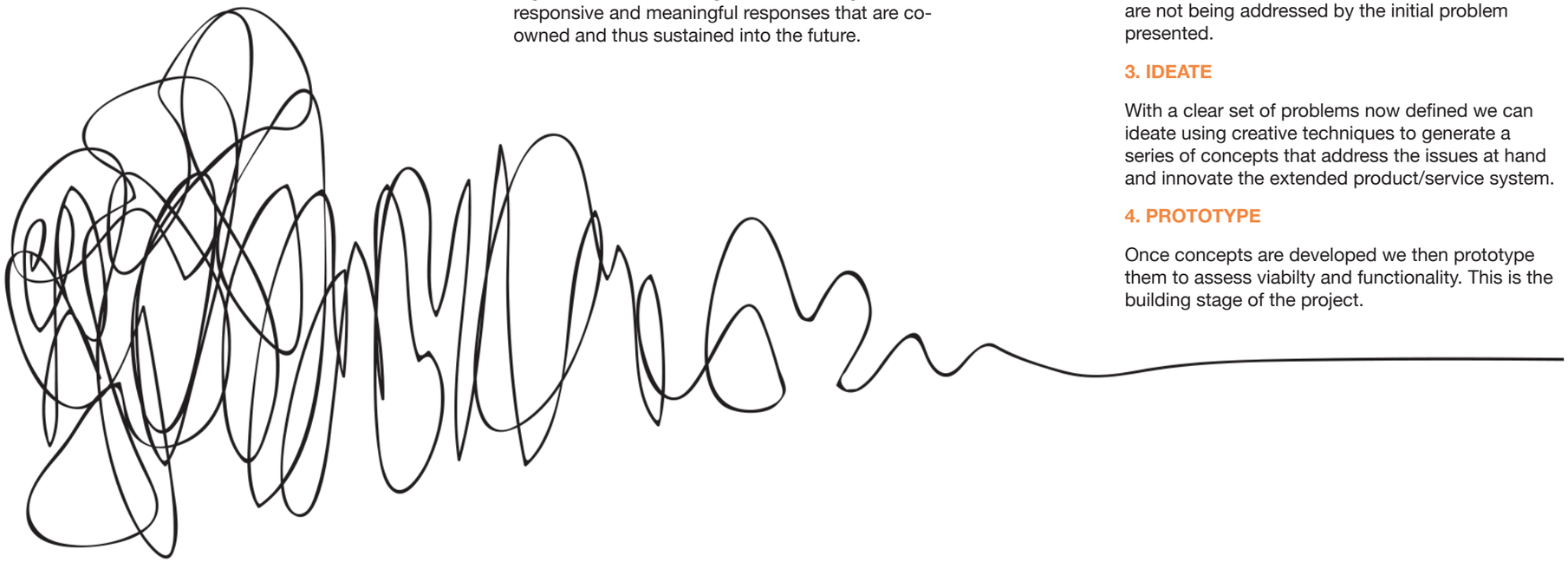
We are always exploring better ways of working to ensure that our designs change the world for the better. We established Tandem Codesign as an organisation that would incorporate academic knowledge with world-leading practice. Our approach is rooted in ‘design thinking’.

“Design thinking is an iterative process used to address complex problems”

A Design Thinking Approach

Designers and creatives have long thought broadly and even abstractly about the world in everyday contexts, but design thinking’s application in business contexts emerged around the 1970s with key players like IDEO making it more accessible and commercial. Traditionally, businesses approached innovation by considering how viable an option was given current technology. Design thinking goes a step further to consider the people factor. There is no point introducing a new communication system, or work process, unless it meets the needs, desires and motivations of those who use it. Businesses would cease to function without people driving them. Therefore, the ‘designerly’ tendency to think and research deeply about these critical people is what sets design thinking apart in innovation practices.

Despite what its name might suggest, design thinking can include anyone; in its simplest terms, it reignites the childhood curiosity of asking ‘why?’. As a team, we work alongside organisations to encourage lateral and critical thinking through creative techniques that allow us to understand complex problems. This empowers individuals in an organisation to come together to codesign* flexible, responsive and meaningful responses that are co-owned and thus sustained into the future.



*Codesign is a participatory process that aims to involve those impacted by a problem in the process of designing outcomes that will meet their needs (Stickdorn & Schneider, 2011). It is based on the premise that generating services that are valuable and meaningful requires us to design with people, not for people (Penin, 2018).

How does it work?

Design thinking doesn’t necessarily require a set process or set of steps although there is a methodology that can be referred to for assisting in understanding what needs to be considered. The diagram above illustrates the stages that can be incorporated however these should not be seen as lineal in format and should instead be adopted as guidelines to move in and out of when needed. The key components of the system include

1. EMPATHY

This method dictates that in order to design for a specific cultural setting we must first understand the desires and motivations of people within those cultural groups.

2. DEFINE

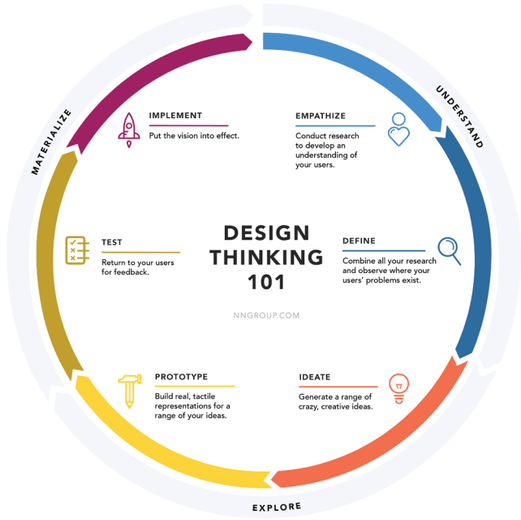
Once we have cultural understanding we are then able to dig deep to reveal underlying issues that are not being addressed by the initial problem presented.

3. IDEATE

With a clear set of problems now defined we can ideate using creative techniques to generate a series of concepts that address the issues at hand and innovate the extended product/service system.

4. PROTOTYPE

Once concepts are developed we then prototype them to assess viabilty and functionality. This is the building stage of the project.



5. TEST

Project prototypes are then tested within their contexts to see how they perform to see whether they need adjustment, refinement or improvement to ensure their success.

6. IMPLEMENT

Implementation is the final stage of the process where the concepts are offically put into real world action.

These stages are all interchangable depending on what a project requires. At any stage, project designers for example, may need to conduct further empathetic research or apply additional prototyping of concepts if issues are identified along the way. The process is also never finished. After implementation is complete it is common to find further issues which often require starting the process again but from a refinement perspective to fine tune specific areas of product/service systems.

This is the process that we used with Synergy and it’s staff when exploring the implementation of an Environmental Stewardship Program. This process sucessfully allowed us to better understand the unique cultural settings of all Synergy sites. It also revealed the underlying issues which were directly affecting the core problem at hand of improving environmental maturity for the organisation. This document unpacks our process as detailed above when looking to create innovate outputs and outcomes for Synergy as an organisation.

Background literature review

Our first step was to explore the research surrounding the key terms that inform this project. Below is a review of the existing literature around the themes of environmental stewardship and sustainability.

ENVIRONMENTAL STEWARDSHIP

Environmental stewardship can be termed "green management". According to Ik & Azeez (2020), green management "is a social corporate responsibility in support of sustainable development to curb negative business activities that adversely affect the environment, with dire consequences for humanity". Environmental stewardship should focus on educating employees and directing them to apply their knowledge to improving work processes and routines (Scott, 2010). However, for this to work there must also be incentives and support to help encourage this behaviour (Gosling et al., 2016; Süßbauer & Schäfer, 2018). Employees are increasingly valued as organisational resources, due to their capability to exhibit certain positive habits or dispositions that engender collaboration toward promoting positive environmental change (Ik & Azeez, 2020).

To create a successful environmental stewardship program an organisation must clearly definition what it wishes to achieve and what it means by "environmental stewardship". This improves understanding of the factors that lead to the success or failure of environmental stewardship in different contexts (Bennett et al., 2018). One definition of environmental stewardship programs is that they aim to "protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts" (Bennett et al., 2018).

Successful programs hinge on various factors. Bennett et al. (2018) believe there are three central elements: actors, motivations and capacity. These are influenced by the social–ecological context and converge to produce both environmental and social outcomes. In many cases, stewardship actions involve hybrid networks or multi-stakeholder partnerships that include public agencies, civil society organisations, funding bodies, NGOs, and local communities (Connolly et al. 2014; Finkbeiner and Basurto 2015; Romolini et al. 2016).

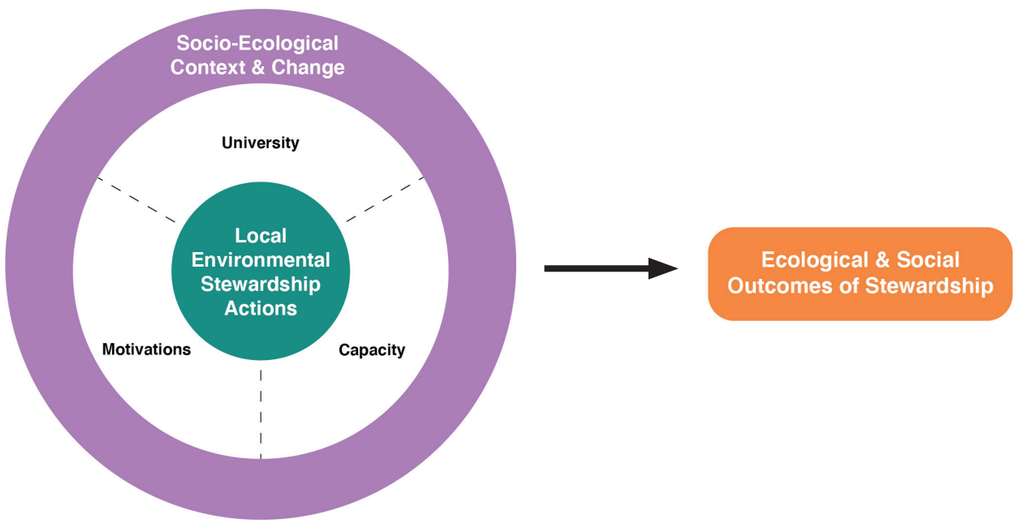


Figure 1: Outcomes of Environmental Stewardship

MOTIVATIONS FOR ENVIRONMENTAL STEWARDSHIP PROGRAMS

There are three main reasons why an organisation, group or individual may want to implement an environmental stewardship program. Understanding these motivations can often assist in making necessary changes.

Firstly, such measures can bring personal pleasure or satisfaction, through the achievement of psychological needs such as self-acceptance, feelings of competence or self-efficacy, a sense of autonomy or wellbeing, and the need for belonging or affiliation with a group (Ryan & Deci 2000a; Tabernero & Hernández 2011).

Secondly, stewardship actions can be intrinsically motivated by the desire for autonomy, relatedness, and competence. This corresponds with the three universal psychological needs of self-determination theory (Ryan & Deci 2000b; Cetas & Yasué 2017) and the higher order need for self-actualisation (Maslow, 1943). In short, actors might pursue stewardship because of the innate desire to do what is perceived to be the right thing.

Finally, stewardship programs might offer external rewards and sanctions including of an economic, social or legal nature. Economic motivations, which have received significant attention (Wunder 2007; Sorice et al. 2013), include financial rewards (e.g., payments to enable certain management actions, payments for ecosystem services, market premiums for more environmentally sustainable products) or financial disincentives such as fines or loss of access to markets. The desire for social recognition or avoidance of sanctions, which are both related to group norms and collective orientation, are often strong motivators for conservation of resources or for following rules set by a group (Basurto et al. 2016). Considering why Synergy is undertaking changes to improve environmental outcomes for the company and stakeholders is central to the success of a stewardship program because it can help with the way such changes are communicated.

DEFINING SUSTAINABILITY

Defining sustainability is a complex task due to the different opinions ofvarious stakeholders (Bonda & Sosnowchik, 2007, p. 4; Brandon & Lombardi, 2005). The definition usually depends on perspective. For many, the emphasis is on environmental concerns. Sustainability as a concept emerged in the 1960s as a response to the environmental degradation created by poor management of resources (McKenzie, 2004, p. 1). The Organisation for Economic Co-operation and Development (OECD) was founded in 1961 in response to this problem.

Concerns about environmental sustainability have a long history. The term first appeared in printed form in an issue of The Ecologist in 1972, but it was not until 1987, in the Brundtland Report, that the first definition appeared. Sustainability was described as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 8).

This definition remains one of the most commonly referenced but critics feel that it favours development over other goals (McKenzie, 2004, p. 2). As Jacobs notes, the vagueness of the definition allows businesses to claim support for sustainability while actually contributing to the sustainability problem (1999, p.24) and allows stakeholders to select their preferred interpretation of the Brundtland definition (Connelly, 2007, p. 261). The vagueness remains despite research focusing on improving the definition. Carter, Pisaniello and Burrit believe "this vagueness allows governments to 'hijack' sustainability to serve their own agenda" (2010, p. 6). These issues indicate a need for an unambiguous definition and the importance of making this clear for Synergy as an organisation.

Once the concept of sustainability was established, theorists from a variety of disciplines from economics to environmental science started to debate ways to improve clarity depending on their viewpoint. Some emphasise reducing poverty, and access to education and resources (Elliott, 1999). Toman states that ecologists have used the

definition to benefit their environmental concerns (2006, p.252). Others feel that an emphasis on social capital is the most effective way of curbing environmental destruction (Agarwal & Narain, 1993; McKenzie, 2004, p. 3). The current definition in Australia today has a strong economic emphasis (Carter et al., 2010). Critics of the Government's stance on sustainability have accused it of prioritising short-term economic benefits over environmental and social impacts that have longer-term consequences (Business Council of Australia, 2004; O'Connor, 2006).

From these theories, several visual models have been formed to represent the relationships between the different facets of sustainability. One such model shows three rings that signify economic and social sustainability being bordered by environmental sustainability (Figure 2). Another common representation shows the relationships between economy, society and environment as three interconnected circles of the same size (Figure 2.2), thus emphasising their interdependence and equal importance (Rodriguez, Roman, Sturhahn, & Terry, 2002; Wigmore & Ruiz, 2010; Wilhelm, 2012). This model is often referred to as the "triple bottom line" (TBL).

This definition was first used by John Elkington in 1994. Elkington is an environmentalist and economist. His aim was to target corporate social responsibility by providing a framework that measures financial, social and environmental performance over a period of time (Hindle, 2008).

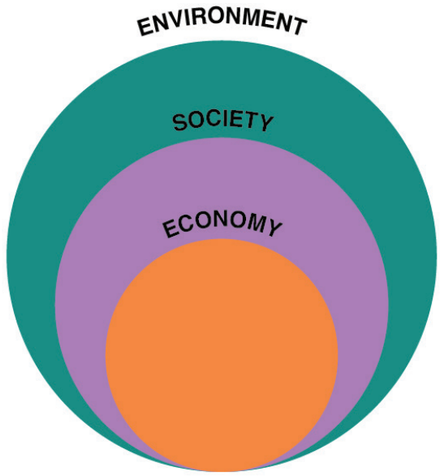


Figure 2: Facets of Sustainability

McDonough and Braungart give a similar definition (2002). They believe that human, environmental and economic health are interconnected. Savitz states that the TBL is a true reflection of sustainability as it encompasses the three facets of the issue (2006, p. xiii). The Western Australian government also uses the TBL model with the definition being "Sustainability is the commitment to creating lasting benefits through an integrated consideration of social, environmental and economic aspects in all that we do" (The Western Australian State Sustainability Strategy, 2022). This definition of sustainability, being a more complex and inclusive model, clearly satisfies diverse applications of sustainable development and is therefore more appropriate for Synergy.

Despite discussions on the correlation between good environmental practice and increased profit, evidence of the social and ethical benefits to companies is lacking (Pernick & Wilder, 2007; Willard, 2012; Wills, 2009). The "brown agenda" puts forward the argument that economic and social development is crucial to curbing environmental destruction (Agarwal & Narain, 1993). As much of the worst environmental destruction happens in areas of high poverty and low social unity, it is argued that improving social capital through development will lead to better environmental outcomes.

These differing arguments demonstrate the interconnectedness of each aspect of the TBL. They show that, despite the TBL being the current model

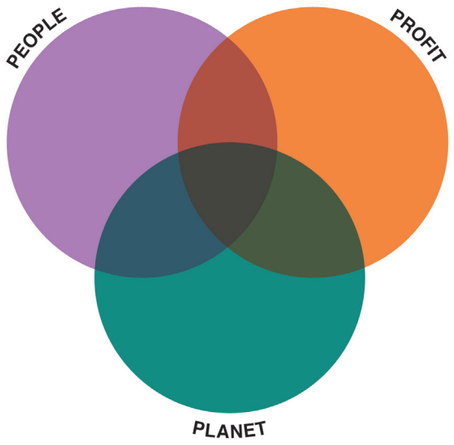
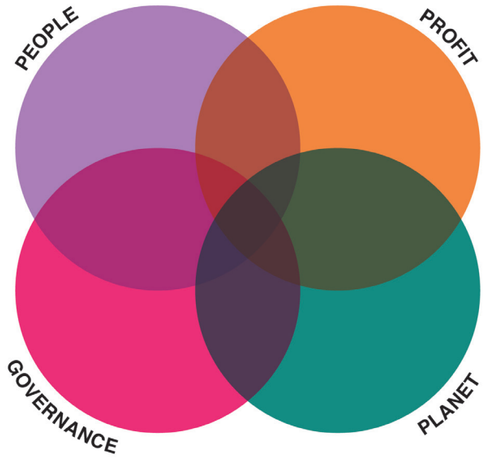


Figure 3: Triple Bottom Line

Figure 4: Quadruple Bottom Line



used by most organisations for measuring and defining sustainability, there are still problems with balancing the three aspects. Moreover, tensions between the ecological and economic perspectives remain. In the short term there is possible competition between the three aspects of the TBL, resulting in tensions and complexities (OECD, 2002). Adams, Frost and Webber use the example of the inequalities in the assessment criteria used by Dow Jones Sustainability Index to demonstrate the conflicts (2004). Understanding these tensions is particularly important within the context of this project.

Other versions of the TBL concept are emerging, with some critics supporting introduction of various fourth aspects, to form the quadruple bottom line (QBL). Elkington himself has recently conceded that the TBL is not enough. He calls for more "radical intent" if we are to make significant changes to our future (2018). Many others see the TBL as an outdated term with the need for more complexity in the definition to include a wider scope (Rambaud, 2015). However, the definition still remains a major framework for sustainability and has most relevance for retail design. For some, the fourth element of the TBL is governance (Evans, Joas, Sundback, & Theobald, 2006; Nolmark, 2007; Teriman, Yigitcanlar, & Mayere, 2009). This definition originates from the business field and recognises the importance of governments and factors such as democracy, laws, planning systems and regulations (Evans et al., 2006; Nolmark, 2007). Others believe a fourth pillar should represent culture and be separated from the social pillar of the definition (Hill et al., 2008; Matunga & Saunders, 2006; Scrimgeour & Iremonger, 2001). This version of the QBL considers social, cultural, environmental, and economical accountability (Scrimgeour & Iremonger, 2001). The importance of culture as the fourth pillar was raised in the Agenda 21 for culture in 2002. This plan for sustainable development in the 21st century, sanctioned by the United Nations, seeks to encourage and maintain cultural diversity and human rights.

Health is another option proposed for the fourth element of the QBL. This is of particular significance in the context of Synergy with health and safety reporting. In this instance the health of people, animals and the environment is recognised as the "bedrock" of sustainability and should be considered as a separate element beyond the TBL framework (Creating Sustainable Communities in a Changing World, 2011, p. 262). Another way of referring to the QBL is offered by Waite with the acronym SURF (Supply chain, User, Relations, and Future) (2013). They claim this framework places emphasis on the entire system of use and can be applied to a diverse range of scenarios. Such differing definitions of the fourth pillar provides further evidence of the complexity involved in creating a framework that is relevant to every situation.

“Successful sustainability within a company goes hand in hand with greater collaboration”

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Environmental, social and governance (ESG) is a framework that helps stakeholders understand how an organisation manages risks and opportunities around sustainability issues. ESG has evolved from other historical movements that focused on health and safety issues, pollution reduction, and corporate philanthropy. ESG includes environmental aspects such as depletion of resources and climate change, social aspects like labour practices, gender equality and product safety, and governance aspects such as board diversity, business ethics and corruption, which had widespread global implications on business sustainability (Singhania, & Saini, 2021).

ESG is connected to the idea of legitimacy theory. This theory emphasises the importance of societal acceptance. Companies may only survive, according to the legitimacy theory, if society believes they are operating in accordance with society’s values and norms (Gray, Owen, and Adams, 1996). As a result, in order to meet the shareholder’s expectation, businesses adopt ESG frameworks (Beelitz and Merkl-Davies, 2012; Dowling and Pfeffer, 1975; Palazzo and Scherer, 2006). In this backdrop, one of the key resources considered for long-run business survival is legitimacy (Dowling and Pfeffer, 1975). According to this theory, an organisation’s ability to integrate and manage relationships with its stakeholders is critical to its success (Van Beurden and Gössling, 2008). Since stakeholder expectations form the basis for business sustainability, a link between ESG reporting and stakeholders comes from the idea that organisations should meet explicit and intrinsic shareholders’ needs (Freeman and McVea, 2001). Aras & Crowther (2009) believe it is essential to publish information related to accountability and sustainability to satisfy shareholder demand. The primary and most important theory for explaining the relationship between ESG disclosures and financial performance is the importance of stakeholders. Kocmanová and Dočekalová (2012) propose that profits may be expected to increase for investors if ESG information or sustainable reporting is made a priority for organisations.

ORGANISATION SUSTAINABILITY

When defining sustainability in the context of a company like Synergy, organisational sustainability needs to be considered. Sustainability of an organisation echoes the ideas drafted initially in the Brundtland report (1987). It states that for an organisation to be sustainable it must “maintain economic prosperity without compromising its environmental responsibility and social stewardship” (Dyllick and Hockerts, 2002). Estes (2009) claims that effective sustainability strategy development requires a clear vision with strategic direction, time and a long-term focus. One way for an organisation to focus on eco-sustainability is to use the McKinsey seven S’s (7S’s) framework.

The framework can be used for successful implementation of business strategy. It consists of strategy, structure and systems, shared values, staff, skills and style. Hard elements consist of strategy, structure and systems and relate to resources, institutions and strategy. Soft elements consist of shared values (vision and beliefs), staff, skills and style (Peters and Waterman, 2004). Managing the soft S’s is as important as the hard S’s to preserve companies’ long-term profitability and continuing innovation.

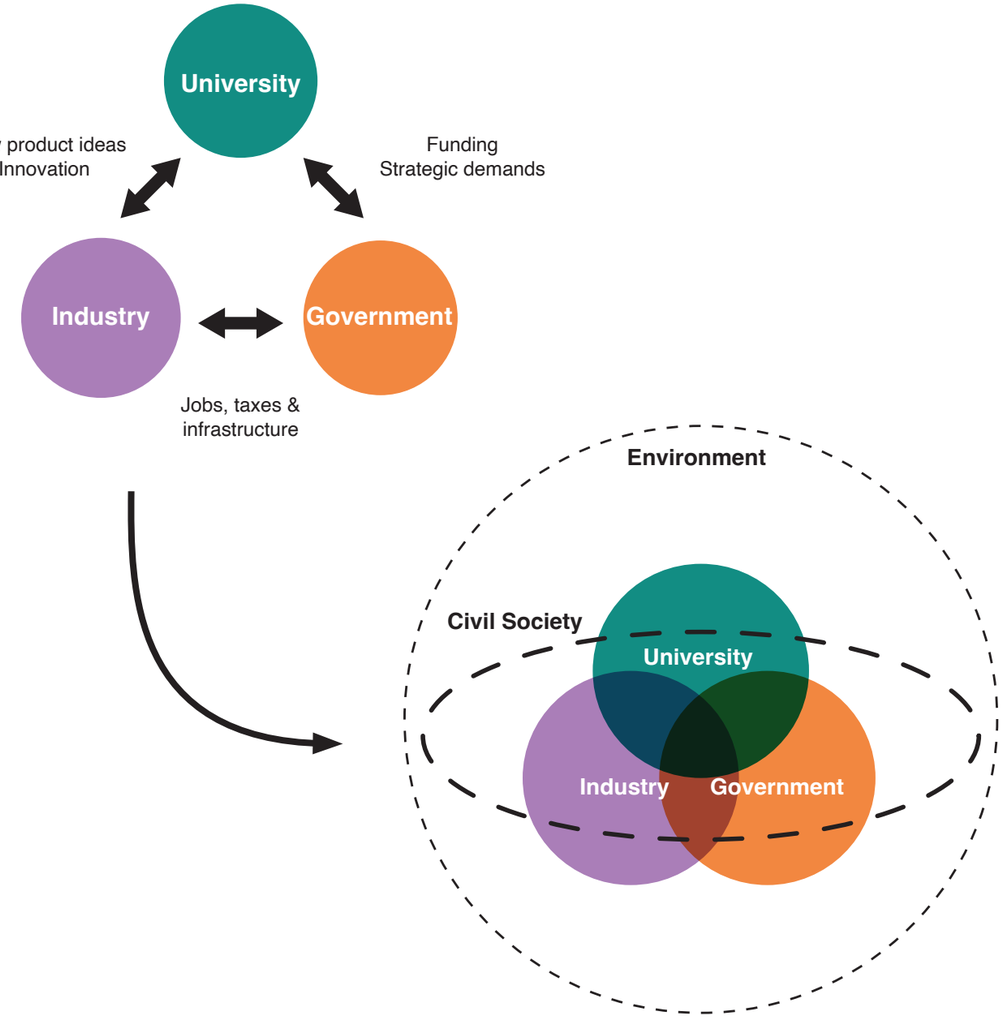
COLLABORATION AND SUSTAINABILITY

In accordance with the people focus of the soft skills underlined in McKinsey 7S’s. Some researchers state the importance of collaboration in developing and maintaining successful sustainability plans. Successful sustainability within a company “goes hand in hand with greater collaboration among many groups both internal and external to the operation” (Kiron et al., 2012). The success of such plans is linked to company structure as value can be created by thinking and acting beyond silos and departmental responsibilities (McPhee, 2014). This approach promotes “any group or individual who can add new relationships, new ideas and new ways of creating value for the firm, regardless of which department they belong to”.

TRIPLE, QUADRUPLE AND QUINTUPLE HELIX

Others call for collaboration beyond stakeholders in order for innovative and sustainable change. The triple helix model of innovation refers to a set of interactions between universities, industry and governments in order to foster economic and social development (Dzisah & Etzkowitz, 2008). Interestingly, the environment is left out of the agenda in the triple helix model (Carayannis & Campbell, 2010). Researchers call for the quadruple helix (Carayannis & Campbell, 2009), which blends in the perspective of a media-based and culture-based public and the quintuple helix, which frames knowledge and innovation in the context of the environment (natural environments).

All models are linked to the idea of the knowledge economy and knowledge society. Currently, there exists a general belief (indicated by numerous publications; Etskowitz, 2008; Leydesdorff, 2012; Carayannis, Bath & Campbell, 2012) that knowledge becomes increasingly important for society, the economy and also democracy. Advancements and sustainable development of society and the economy appear unlikely without leveraging and enhancing knowledge.



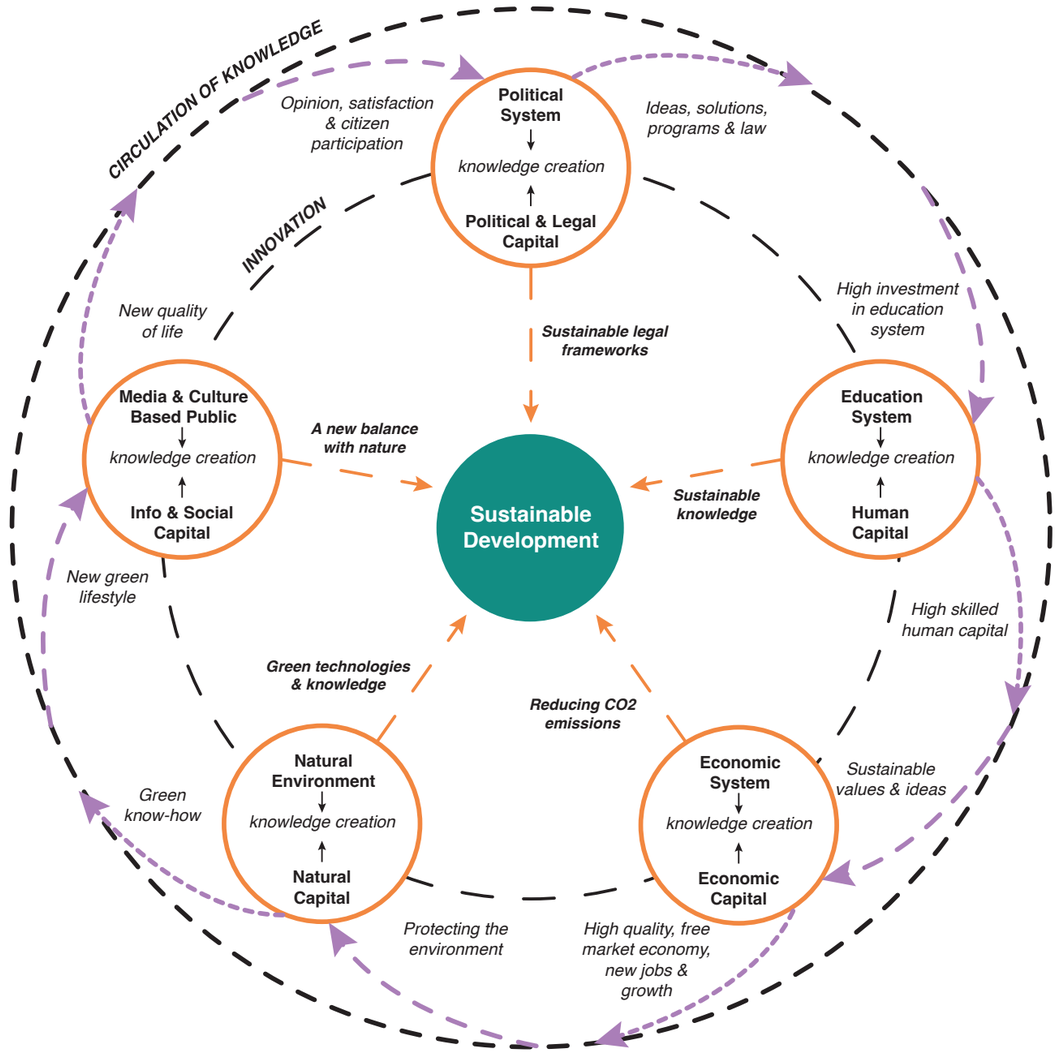


Figure 5: Triple Helix (Left)
Figure 6: Beginnings of Quintuple Helix (Centre)
Figure 7: Quintuple Helix (Right)

Regardless of which definition or model is adopted, the underlying theory that links them all is the need to collaborate within organisations and with stakeholders. There is an emphasis on clarity and communication and the need for processes and principles to focus on not just the hardware of a company but also the software, or the people and their roles and beliefs.

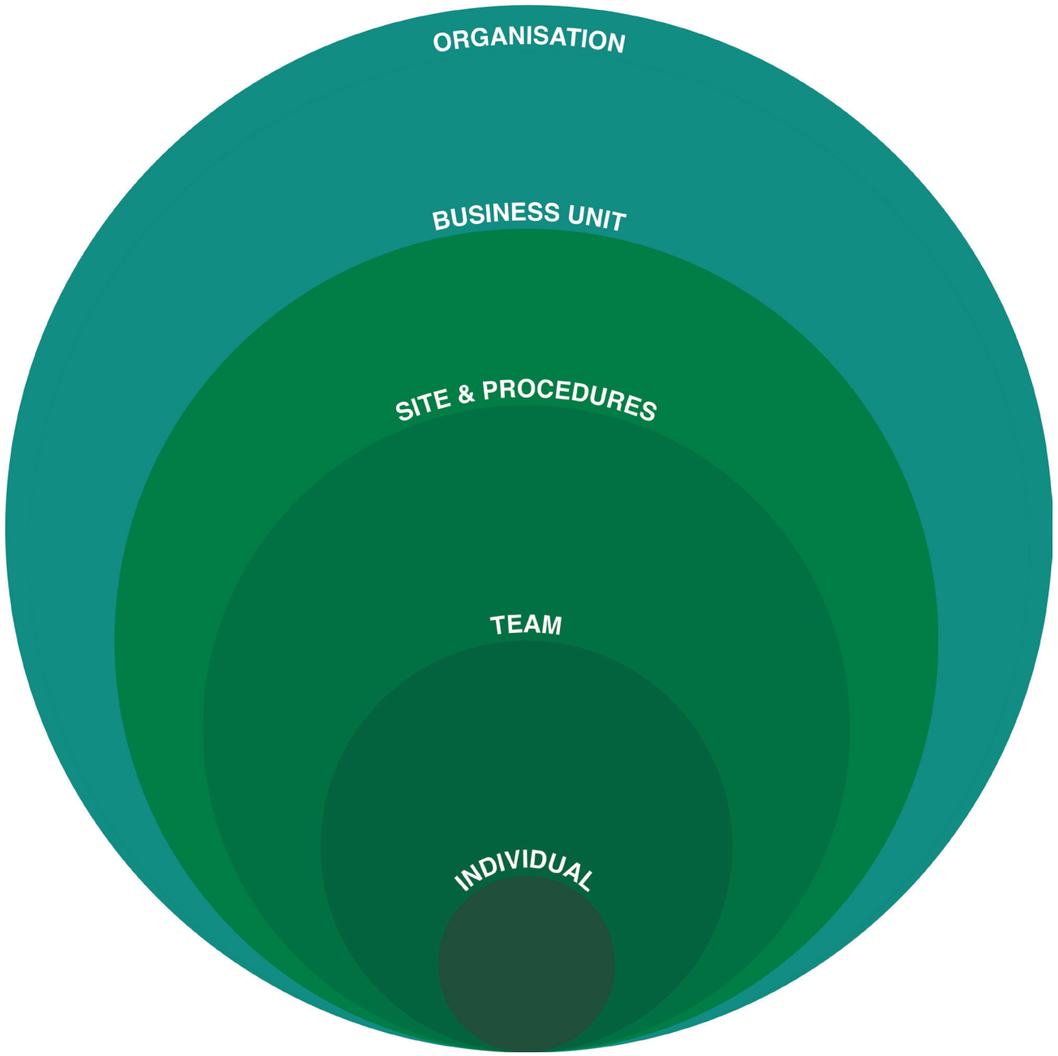


Figure 8: Sustainability Ripple Effect

THE BENEFITS OF UNDERSTANDING SUSTAINABILITY THROUGHOUT THE COMPANY

Companies that had a clearer sustainability goals and standards were found to:

- identify social and environmental impacts
- reduce cost, use fewer raw materials and create less waste, resulting in savings
- reduce risk and minimise the risk of prosecution
- improve relationships with customers
- improve relationships with the community
- create more effective supply chain management
- achieve greater employee motivation

Benefits were therefore realised for all stakeholders and the whole supply chain, including client, constructor, supplier and maintenance contractor through to the end user and local communities.

COMMUNICATION IS KEY TO A SUCCESSFUL STEWARDSHIP PROGRAM

Motivating staff to question and change their working practices is crucial to the success of a sustainability programme (and of any change programme!). To make a sustainability strategy effective, it has to be well communicated. It is also evident that leadership and ownership are vital to the process, and that the energy and enthusiasm of key staff members are crucial to the success that can be gained from adopting a more sustainable approach.

The Integrated Design Collaborative are an organisation who have a more comprehensive way of viewing sustainability for designers (2008). The Integrated Design Collaborative provides five levels of design: conventional practice, green design, sustainable, restorative and regenerative. In this system, sustainable design is renamed “neutral design” as it emphasises sustaining the current condition of the environment and resources (Reed, 2009, p. 45). However, the Integrated Design Collaborative believes that designers should aim for the higher goal of regenerative design, which is a type of “co-evolution” involving designs that work with and respond to nature. Mendler and Odell reflect similar sentiments in their definition, believing that sustainable design should be a “closed-loop” system that is dynamic, flexible and restorative (2006, p. 2). Evidently, for many in the design field, the idea of maintaining resources for future generations is not significant enough in terms of positive environmental outcomes.

ENVIRONMENTAL SUSTAINABILITY ASSESSMENT TOOLS

Being able to assess which decisions will have the least effect on the environment is one of the biggest challenges today. Ideally, the impacts of materials and processes used in design would be highly transparent, thus allowing consumers to make decisions with the least impact on the environment. These tools can be divided into two categories – those that deal with quantitative performance indication to assist in the design decision making process; and those that rate a product or project based on the performance level once in use (Maas, Huyghe, & Oostra, 2011). These tools mainly focus on environmental sustainability, rather than all three components of the TBL. The most common type of tool that assists with the decision-making process, which can be applied to most design processes, is a life cycle analysis (LCA) (Yeheyis et al., 2013). The LCA technique is employed in the design field, in areas such as food production, mining and the manufacturing industry. It is used to measure the impacts of materials, water, and energy used, and the emissions at every stage (National Waste Report, 2020). It usually begins with raw material extraction and ends with waste management.

By conducting an LCA an account of all materials and energy used or produced by a product or system can be created and the associated environmental impacts measured (Kofoworola & Gheewala, 2008). LCAs have been used for many years in the field of sustainable design. LCAs are primarily used for assessing the environmental impact of an individual product. They are used to help designers explore more environmentally sustainable options when considering design process selection and design optimisation (Azapagic, 1999). LCAs are used in assessments that determine the eco-labelling of materials and products for the design industry (Baldo, Rollino, & Stimmeder, 2002), and are acknowledged in C2C methodology as a successful way of measuring environmental impacts (William McDonough & Braungart, 2002). It is also acknowledged, however, that they can be a successful way of improving the economic viability for companies if they lower resource use and waste costs. They can also improve a company’s reputation by reducing negative environmental impacts (“Choosing a good green consultant,” 2009). These positive economic and social outcomes are by-products of the environmental benefits a LCA may bring, rather than the main focus.

Despite being generally recognised as a successful tool for designers to assess the impact of their

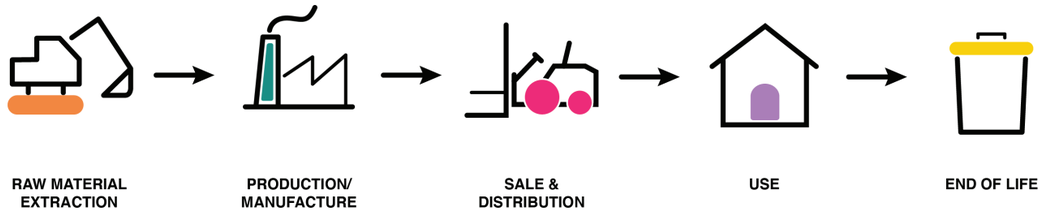


Figure 9: Life cycle mapping tool (Adapted from: Hoyle, 2006)

designs, there are various problems with the LCA methodology (Plan of implementation, 2002). Firstly, LCAs are expensive to undertake (A. Walker, 2012). Much of the expense generated by LCAs is associated with the high level of expertise and significant time required. Despite their best intentions, designers sometimes forgo completing an LCA because of a lack of time and training (Lewis, Gertsakis, Grant, Morelli, & Sweatman,

2001). Another factor that complicates issues for Australian designers is that most information is based on European or American research, so using this data locally/here can lead to inaccurate results (A. Walker, 2012). In addition, we are experiencing a period of rapid change in manufacturing processes and materials which adds further complications to completing a successful LCA (Cole, Howard, Ikaga, & Nibel, 2005).

Some critics also have an underlying belief that an LCA can be manipulated to produce

a desired result (Curran, 1999). Others feel that LCAs require hybridisation with other

tools for it to be an effective and holistic measurement of environmental impacts

(Treloar, Love, Faniran, & Iyer-Raniga, 2000). In addition, difficulties with accessing

information has led to the development of more simplified LCA tools, which are not

as accurate (A. Walker, 2012). Clearly LCAs are not always an effective tool due to difficulties related to accessing and understanding data.

CRADLE TO CRADLE

A well-known model for sustainable design is the design philosophy coined by McDonough and Braungart called “cradle to cradle” (C2C) (2002).

The C2C approach encourages designers to model nature’s cycles and methods of processing waste in a way that enriches ecosystems efficiently with minimal residual waste. It is another system for designers that lacks a TBL approach and focuses almost entirely on environmental sustainability. Many feel that McDonough and Braungart’s approach to design has led the way for significant environmental change (Connell, 2000; Nichols, 2008; Ruff & Olsen, 2009) and when it first appeared it “took the design world by storm” (Mendler & Odell, 2006, p. 2). It has become such a respected approach to design that the term has its own C2C certification system where designers pay to have their product assessed and, if successful, registered as a C2C design. It is clear that both theorists have a strong commitment to making changes that will improve the state of the environment in the future, rather than having the aim of simply preventing further damage. However, designers aspiring to these goals are finding various barriers to the design process. There appear to be as many supporters of the framework as there are those with reservations about its effectiveness (Bakker, Wever, Teo, & Clercq, 2009; Lasani, 2016). Some criticism points to the feasibility of a completely closed loop system of recycling (Bjorn & Strandesen, 2011; Reay, McCool, & Withell, 2011). Most criticism of the C2C philosophy, however, stems from difficulties in understanding the chemical composition of materials (Bakker et al., 2009, p. 3). In a survey conducted by Reay, McCook and Withall, 87% of respondents cited difficulties in understanding the science involved with C2C (2011). In addition, many materials are actually composed of several different materials making it a challenging and complex task to uncover information from suppliers about all the processes and materials involved in the manufacture of a product. This makes the C2C approach “a challenging path to choose” (Rossi, Charon, Wing, & Ewell, 2006, p. 209).

C2C is an approach that is supported by the circular economy concept (CE) (Pomponi & Moncaster, 2017). CE is an idea introduced by Pearce and Turner in 1990 as an alternative to the traditional linear economy of make, use and dispose (1990). Geng and Doberstein describe CE as utilising resources according to the life cycle principles (2008). This results in converting waste into resources. Despite the term growing in use in academia, industry and policy, the term still holds much ambiguity and can lead to misinterpretation (Geissdoerfer, Savaget, Bocken, & Hultink, 2016).

INTERNATIONAL ENVIRONMENTAL MANAGEMENT STANDARDS AND SYSTEMS

An Environmental Management System (EMS) is a set of processes and practices that enable an organisation to reduce its environmental impacts and increase its operating efficiency. It is a framework that is used to help an organisation achieve its environmental goals through consistent review, evaluation, and improvement of its environmental performance. The assumption is that this consistent review and evaluation will identify opportunities for improving and implementing the environmental performance of the organisation. The EMS itself does not dictate a level of environmental performance that must be achieved; each organisation’s EMS is tailored to its own individual objectives and targets.

The basic elements of an EMS include the following:

- Reviewing the organisation’s environmental goals;
- Analysing its environmental impacts and compliance obligations (or legal and other requirements);
- Setting environmental objectives and targets to reduce environmental impacts and conform with compliance obligations;
- Establishing programs to meet these objectives and targets;
- Monitoring and measuring progress in achieving the objectives;
- Ensuring employees’ environmental awareness and competence; and,
- Reviewing progress of the EMS and achieving improvements (EPA, 2022)

Some of these elements overlap with the EY reporting on Synergy where Synergy was found to need further development.

The most commonly used framework for an EMS is the one developed by the International Organization for Standardization (ISO) for the ISO 14001 standard. Established in 1996, this framework is the official international standard for an EMS, which is based on the Plan-Do-Check-Act methodology.

Synergy has based its own EMS on this system. As identified in the original EY report, it is not something that the company audits its progress against. The intended outcome of the system is to enhance the environmental performance of an organisation. However, in an analysis of the relationship between environmental motivations and ISO14001 certification, Gonzalez-Bonito (2005) concluded that the decision to pursue the ISO14001 certification responds to ethical and competitive motivations, and that once the company gets its certification, its portfolio of environmental motivations does not change significantly. More recent research into 19 Danish companies who had stopped using ISO14001 found that the main reason was a cost-benefit consideration; the resources needed to maintain the certification are too big compared to the experienced benefits. The lack of benefits is mainly related to economic arguments, but the companies also explain that there is no focus on ISO14001 from either customers or other environmental stakeholders (Mosgaard & Kristensen, 2020). For this reason, Synergy’s decision not to use ISO14001 is understandable. However, these organisations were mainly small businesses, with limited resources. For larger organisations the EMS was considered particularly useful for long term benefits and sustaining continuous improvement.

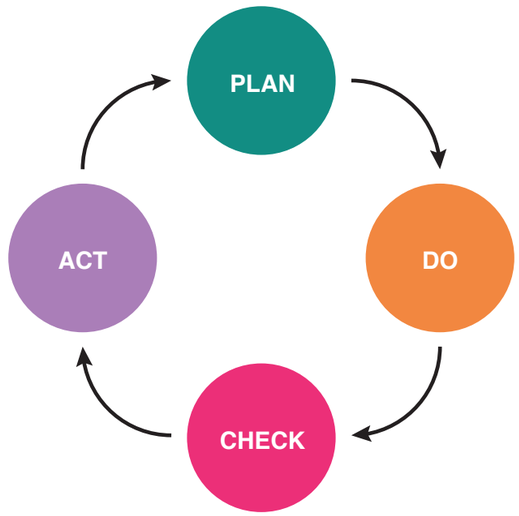


Figure 10: Plan, Do, Check, Act (PCDA) Model

“In order for an organisation to make effective environmental change organisations need to be sincere in their sustainability mantra and not merely mouthing greening propaganda”

CONCLUSION

The purpose of this literature review was to better understand all the key terms and concepts around the problem we were engaged to explore. The focus of Stage One was to discover and define the issues around the problem of improving the environmental maturity of Synergy. Central to this is understanding the complexities of the issues around sustainability, environmental stewardship and environmental standards and reporting. Below is a summary of the main insight gained from the review of the literature.

The triple bottom line (TBL) or quadruple bottom line (QBL) are the two most prevalent definitions of sustainability. Both seek to find balance between environmental, social and economic sustainability. One definition of the QBL adds governance as the fourth pillar. Central to these definitions is the idea that the success of environmental sustainability is closely tied to the need to address social and economic sustainability (Rodriguez, Roman, Sturhahn, & Terry, 2002; Wigmore & Ruiz, 2010; Wilhelm, 2012).

Creating a clear definition of sustainability is needed in order for an environmental stewardship program to be successful (Süßbauer & Schäfer, 2018).

Also essential is understanding the motivations for why the stewardship program is being undertaken (Bennett et al. 2018).

In order for an organisation to make effective environmental change organisations need “to be sincere in their sustainability mantra and not merely mouthing greening propaganda” (Ik & Azeez, 2020).

Successful sustainability within a company “goes hand in hand with greater collaboration among many groups both internal and external to the operation” (Kiron et al., 2012). The success of such plans is linked to company structure as value can be created by thinking and acting beyond silos and departmental responsibilities (McPhee, 2014).

Others call for collaboration beyond stakeholders in order for innovative and sustainable change.

The triple helix model of innovation refers to a set of interactions between universities, industry and governments in order to foster economic and social development (Dzisah & Etzkowitz, 2008).

Motivating staff to question and change their working practices is crucial to the success of a sustainability programme (and of any change programme!). To make a sustainability strategy effective, it has to be well communicated (Leiper, Fagan, Engström, & Fenn, 2003).

In order to attract and retain good staff, organisations should focus on maintaining a public profile that reflects their values. This improves positive public perception about the company. This in turn aids in the attraction and retention of staff as they feel proud to work for a company that has positive public perception (Tanwar & Prasad, 2016).

Successful change management begins with the idea that the need for the change is urgent and the best way to motivate change is to personalise the urgency. If staff can see how the change is needed, as without it they will be negatively affected, change is much more likely to occur (Kotter, 2012).

Environmental management systems (EMS) are a way of improving an organisation’s environmental performance. The lack of benefits is mainly related to economic arguments, but the companies also explain that there is no focus on ISO14001 from either customers or other environmental stakeholders (Mosgaard & Kristensen, 2020). For this reason, Synergy’s decision not to use ISO14001 is understandable. However, these organisations were mainly small businesses, with limited resources. For larger organisations the EMS was considered particularly useful for long term benefits and sustaining continuous improvement.

TANDEM METHODOLODY

Our Methodology

Our methodology has a proposed time frame of twenty weeks across four key stages. Note this is a proposed approach to the engagement and the activities, deliverables and time frame might need to be adjusted. Please note that although we have represented our methodology in a linear way, understanding complex problems is a messy process and we may need to return to phases at various points in the process.

Project Objectives

- Engage design thinking and creative approaches to explore project issues laterally.
- Create codesign project environments to ensure all voices are heard and adopted.
- Utilise ethnographic data gathering processes that generate detailed understanding around underlying and unforeseen project issues.
- Create a clear definition of critical project problems and a strategy for how to approach them.
- Apply empathetic approaches to understand organisational people and their motivations.
- Ideate pathways forward which address redefined project issues.
- Prototype emerging project concepts to ensure they comply with organisational feasibility, technology limitations and human desirability.
- Present a comprehensive project proposal which depicts the project process, research strategy, uncovered findings, redefined project problems, tested concepts and suggested implementation models for stage 2.

Risks and Limitations

- Limited access to organisational personal and systems
- Project parties do not meet milestones and deadlines
- COVID19 restrictions impact access to collaborative work environments

Design thinking and service innovation approaches require that project problems are dealt with as unknowns to ensure deeper understanding is gained through exploratory research and design process. It means adopting long term system design to allow continual organisational investigation and problem analysis to ensure ongoing system enhancement. This means that the project needs to be agile and iterative to evolve with the constantly shifting variables within a large and complex organisation such as Synergy. The project risks and limitations therefore can be overcome via strong collaborative project partnership arrangements and an ability to shift as the project findings dictate.

Deliverables

Deliverables for the project are broken down into four key phases within our methodology (as depicted on pages 16-17):

Phase 1

- Project update meeting with key members of Synergy's team.
- Updated milestones and key documentation list.

Phase 2

- Codesign workshops

Phase 3

- Codesign workshop(s) for feedback

Phase 4

- Draft proposal
- Proposal
- In-person presentation of key findings

Phases for Stage 1

1.

CONTEXTUAL RESEARCH

PURPOSE:

To understand the relevant background of the project and start to identify key players in the research.

KEY ACTIVITIES:

- Conduct initial start-up meeting with Synergy.
- Establish clarity around Synergy as an organisation (principles, governance, project methodology, roles and responsibilities, project management, risk and issue management, IT)
- Identify key internal and external stakeholders
- Request and agree on key documentation for inclusion in Stage 2.
- Definition of terms and understanding of problem
- Precedence studies
- Existing data review. Before commencing the project we do not know exactly what this data may be. It be will most likely be information that we need to fully understand the context of the issues we will explore further in future stages. For example, annual reports, surveys and feedback.

DELIVERABLES:

- Project update meeting with key members of Synergy's team.
- Updated milestones and key documentation list.
- Fortnightly meetings with project progress updates and future plans. These meetings will be formally documented through meeting minutes and sent to Synergy for review.

2.

ETHNOGRAPHIC RESEARCH

PURPOSE:

This phase of the research focusses on understanding the problem from a human perspective. Who is affected by the issues around the problem and how do they feel about it. In this phase we aim to understand the *who* and *why* of the project.

KEY ACTIVITIES:

- Stakeholder mapping
- Core Actors & Roles
- Persona's
- Interview questions formulation
- Interviews with Synergy Employees
- Create Empathy Maps
- Interviews with stakeholders
- Observation of Synergy staff and site
- Codesign workshop planning
- Codesign workshops

DELIVERABLES:

- Codesign workshops
- Fortnightly meetings with project progress updates and future plans. These meetings will be formally documented through meeting minutes and sent to Synergy for review.

3.

DEFINING

PURPOSE:

In this phase we will summarise and visualise our findings. We look for patterns and questions that should be asked. We start to look for future areas of research and focus.

KEY ACTIVITIES:

- Stakeholder mapping
- Summary of research findings
- Visualisation of research
- Creation of glossary
- Key focus areas
- Redefining the problem
- Key insights (questions)
- Problem statements

DELIVERABLES:

- Codesign workshop(s) for feedback
- Fortnightly meetings with project progress updates and future plans. These meetings will be formally documented through meeting minutes and sent to Synergy for review.

4.

PROPOSAL

PURPOSE:

In this phase we will draft, finalise and present the final proposal.

KEY ACTIVITIES:

- Synthesis of document
- Feedback from consultants
- Adjustments based on feedback
- Review of proposal
- Final amendments
- Presentation to Synergy
- Reflecting and future planning

DELIVERABLES:

- Draft proposal
- Proposal
- In-person presentation of key findings
- Fortnightly meetings with project progress updates and future plans. These meetings will be formally documented through meeting minutes and sent to Synergy for review.

Time frame

This time line is a guide only. Activities and time frames should remain similar but may be subject to change based on accessibility of staff and information and research discoveries that may require a change of approach.

WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
CONTEXTUAL RESEARCH																					
Contextual Synergy desk research																					
Definition of terms and understanding of problem																					
Precedence studies																					
Existing data review																					
ETHNOGRAPHIC RESEARCH																					
Stakeholder mapping																					
Core Actors & Roles																					
Persona’s																					
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Problem Statements																					
PROPOSAL																					
Synthesis of document																					
Feedback																					
Adjustments																					
Review of Proposal																					
Final amendments																					
Presentation to Synergy																					
Reflecting and future planning																					

HOW DID IT PLAY OUT?

When using design thinking as a framework to tackle complex problems with many moving parts, we must be prepared to adapt and innovate our process in order to meet project requirements. This means the process tends to shift and change from project to project and additionally deviate from the original trajectory we imagined. Through our experience using this framework, we have realised it is important to be able to shift and change and not grow too attached to our initial ideas.

Roles and responsibilities

As outlined in the contract of work and kick-off sessions, Synergy was to be available to participate in qualitative research activities, feedback sessions, resource and information sharing, and swift correspondence. In turn, Tandem Codesign would do our best to work flexibly around Synergy schedules and provide adequate planning time to arrange participatory activities. A strong and transparent collaborative relationship between Synergy and Tandem was key for the success of the project. We aimed to built rapport that would be critical for this relationship through consistent presence at Synergy sites throughout the project.

We acknowledge that the agility required to work with a design thinking and codesign project is often a challenge when working with organisations with stable and rigid work structures. This is only magnified with increasing levels of complexity. Populated schedules of Synergy staff posed a challenge for us when attempting to engage with the frequency and flexibility we would have liked. Varying locations of staff across four Synergy sites, stretching from Collie to Pinjar provided additional challenges to collecting data and engaging in a preferred face-to-face manner.

Layers of complexity in the organisational structure and unclear levels of awareness among roles made it difficult to gain access to information and resources that would have aided the research process. The project began during a period of transition for Synergy, with the revised Corporate Strategy on the brink of release and announcements from the State Government regarding closure of coal fired power stations by 2030. This resulted in a general level of uncertainty about the trajectory of the organisation. It meant that we had to consider whether or not the resources we were consulting would still be relevant once the new Corporate Strategy was released in August 2022.

Process in deep terms

Stage One of this project aligns primarily with the “discover and define” phases of the design thinking framework. Discovery involves deep research in which we aim to understand the context of the organisation and the people within it (Stickdorn & Schneider, 2011, p.128). In this stage our aim is to understand the problem from the perspective of the people who interact with it daily. The discover and define phases are typified by ethnographic research techniques. We use these methods to understand behaviour and mindsets (Stickdorn & Schneider, 2011, p.129) and to give us qualitative data which helps us understand not just ‘what’ is happening but ‘why’ it is happening. We further support this with desk research, which aims to understand the problem in a broader context. This considers other disciplinary areas, academic research, and other organisations, to learn from how they have addressed similar problems. Finally, the define phase involves analysis of data for patterns and trends that helps us synthesise insights and concisely explain underlying problems and opportunities (Lewrick, Link & Leifer, 2020, p. 22).

“It is important to understand that the environment team does not exist in isolation; we had to think more broadly to understand how they integrated with the rest of the organisation”

Discover and define: ethnographic research

FUTURE OUTCOMES NETWORK

The Future Outcomes Network is a tool to increase understanding of the current state of systems and culture in an organisation. It examines the systems and culture from the perspective of “in place and working”, “in place and not working”, and “not in place and needs to be”.

Findings and notes:

- Segments we examined were: Competencies, Behaviours, Systems, Tools and Culture
- We set the tool up in a visible space, and ran through it as an activity with leaders from the Environment Team and asked them to invite their team to add to the matrix.
- There was little engagement in the method, perhaps due to low foot traffic of the space.
- Concepts were placed under multiple categories
- We needed to clarify the difference between elements that are in place and ‘working’ or in place and ‘effective’.
- As an exploratory exercise used to initially make sense of a complex organisation. We kept topics broad at this point to increase the range of information.
- We used this tool to examine findings from the EY Report and compare them to responses from the Environment Team.
- We found discrepancies in terms of the positioning of the environmental team in the organisation and the effectiveness of leadership.

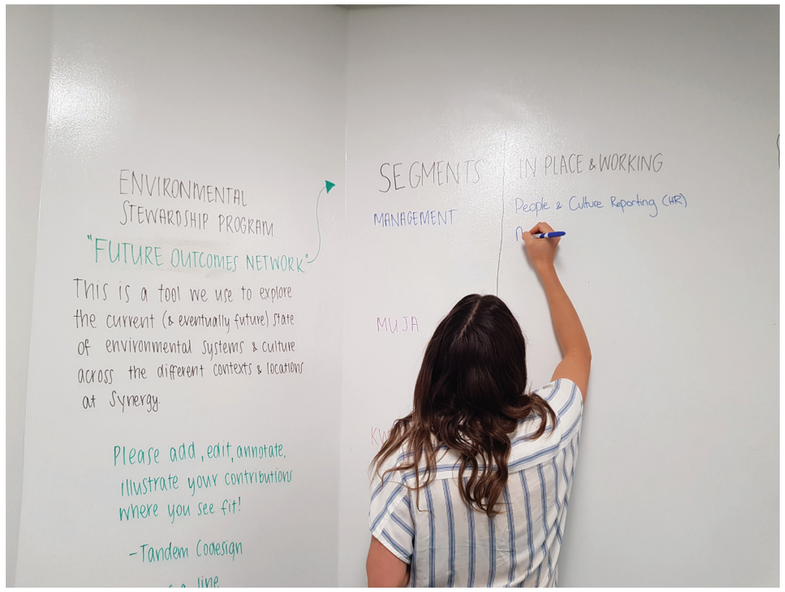
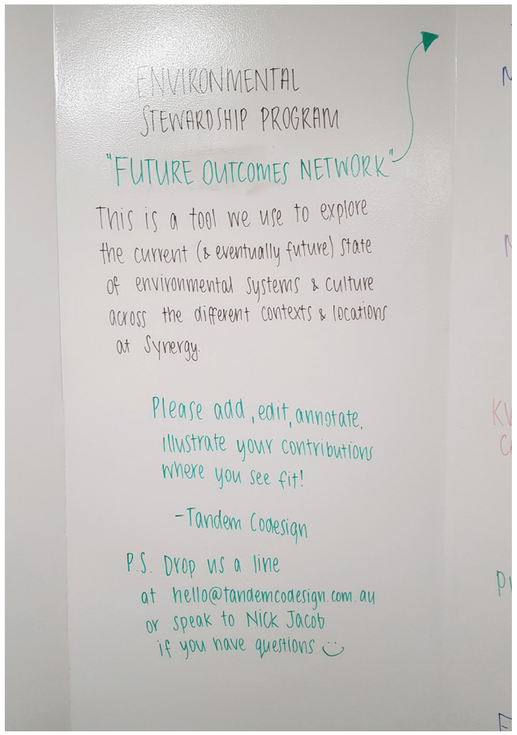
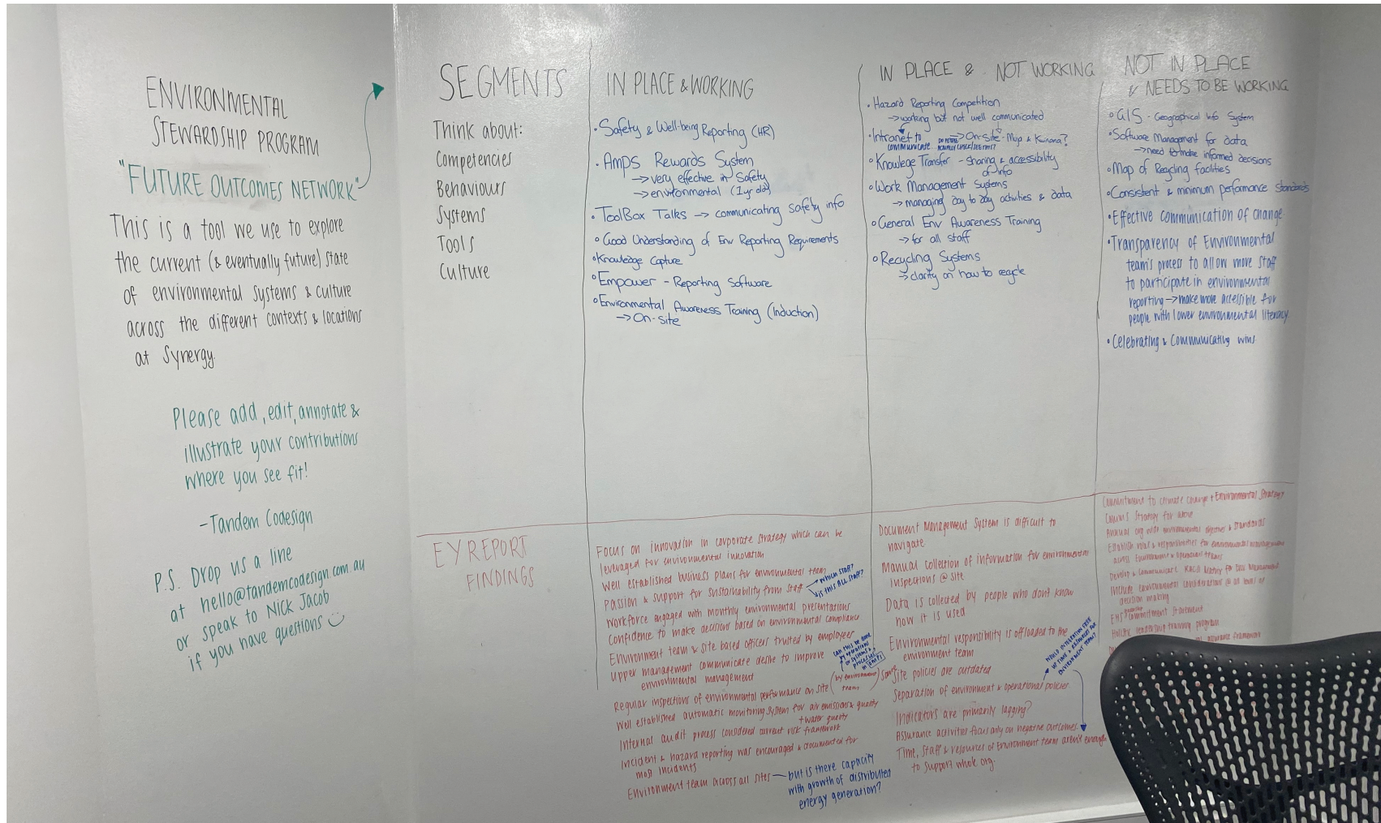


Figure 11: Future Outcomes Network Activity





DESIGN THINKING WORKSHOP FOR THE ENVIRONMENT TEAM

To kick off Stage One we ran a workshop with the Environment Team at Murdoch University to introduce them to the Design Thinking Framework, ways of working and to explore the problem space. In the workshop we:

- Established what it means to work in a human centred way- present game
- Initial problem statement as it was understood - How might we increase Environmental Maturity at Synergy?
- Used word association to explore the concept of environmental maturity
    - » Brainstormed words associated with environment and maturity and recombined them to reframe our understanding of what the term means
    - » Rephrased the core term to enable Synergy staff to change their perspective on what this concept means and understand it in more relatable contexts
    - » Examples of new phrases created:
        - Green culture
        - Proactive discovery
        - Nature knowledge
        - Pollution acceptance
        - Responsible connection
        - Hope frameworks
        - Climate change stability
        - Culture progression
        - Receptive society
- Activity allowed us to observe team dynamics and understand who had the ability to influence and encourage, or distract the team

Figure 12: Word Association Activity & Outputs

JOURNEY MAPPING

Journey mapping is a tool used to visualise and make sense of the experience of a user as they interact with a service (Lewrick et al., 2020). In this context, we adapted the journey mapping tool to help us understand a ‘day in the life’ for a member of the environment team as they carry out their role at Synergy. This had a particular focus on how environmental processes impact their activities. As a first prototype, we ran the activity with two members of the environment team to create a fictional journey map based on people they interact with on site (in this case Muja). They were asked to use pictures and words to illustrate the journey ‘John’ would take as he woke up in the morning, made his way to work, and headed home for the day again. We then used this prototype as an example for the rest of the team, and engaged with the author of this journey to explain the process, helping to relate the process to the team in a more relevant way.

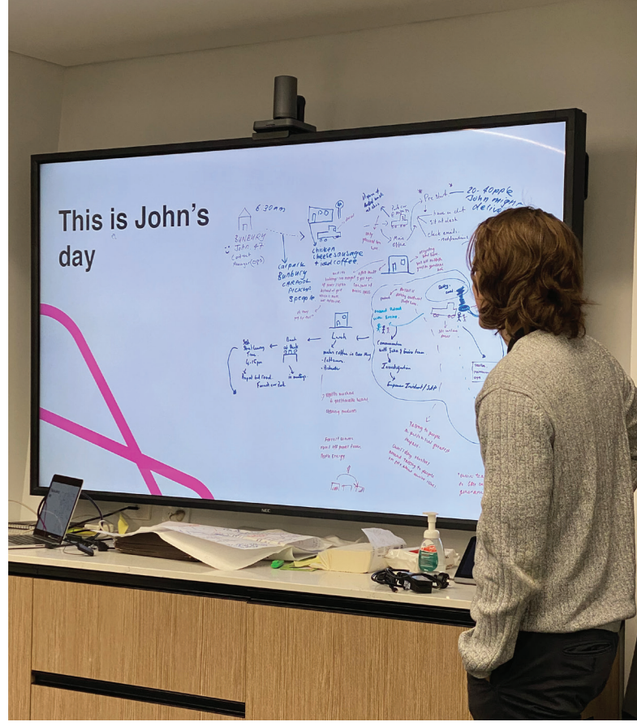
We used the following steps in the journey mapping workshop:

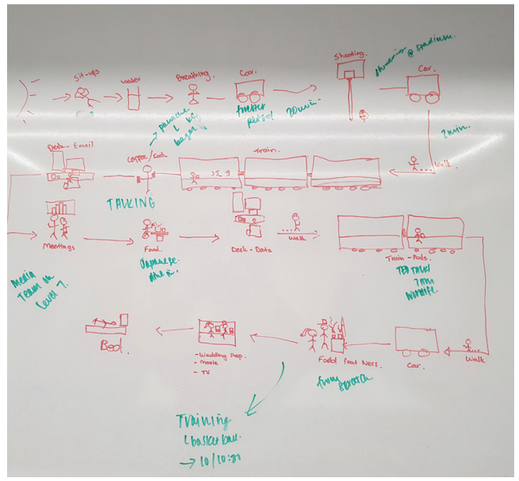
- Each team member was given a marker and asked to draw out their typical work day from the moment they woke up to the moment they went to sleep.
- Prompts were given to include as much detail as possible, including moments that they were acting in sustainable ways.

Each journey map was then used as a basis for a storytelling session in which the team member was asked to talk the rest of the group through their day while members of the Tandem team prompted further input and clarification of the journey. Storytelling is a valuable tool for understanding human experiences. Stories provide powerful insight into the values, beliefs, and motivations of their tellers (Quesenbery & Brooks, 2010). Additionally, they provide understanding of the social, political, environmental, and cultural context (Brun, 2017).

This exercise enabled us to build understanding of the barriers the Environment Team faced in their day-to-day roles at Synergy. We built empathy within the team, as they understood their individual and shared challenges. It also helped us better understand similarities and differences within the team and their roles. Almost as importantly, it gave us insights into their lives outside of work, which impact the way that they operate in their job. It was an opportunity for us to explore how to build better environmental practices into their typical work day.

This exercise enabled us to build understanding of the barriers the Environment Team faced in their day-to-day roles at Synergy. We built empathy within the team, as they understood their individual and shared challenges.





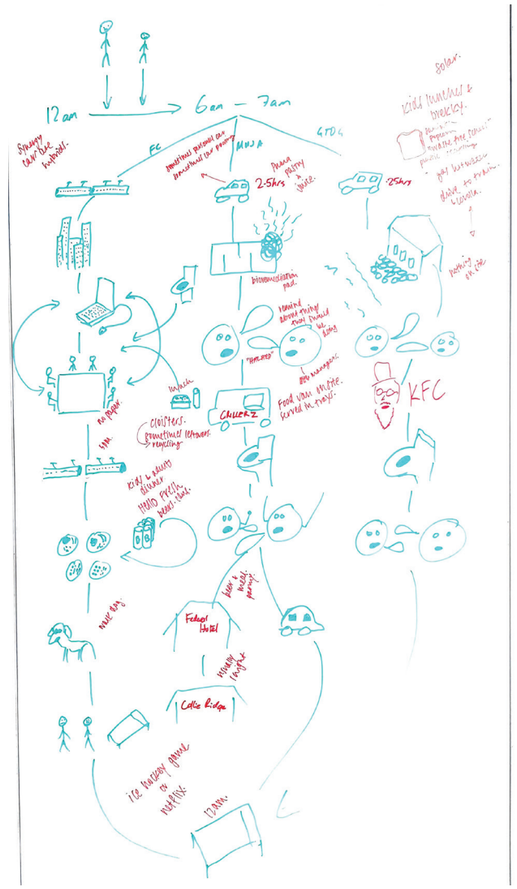


Figure 13: Journey Mapping Activity & Outputs

STAKEHOLDER MAPPING

A stakeholder map is a visual tool that represents the various people, groups, or organisations involved with a problem context (Stickdorn & Schneider, 2011; Lewrick et al., 2020). We categorise these stakeholders into Primary (most directly impacted/involved), Secondary and Tertiary Stakeholders (least directly impacted/involved).

We undertook stakeholder mapping with managers from SBU to understand who was impacted by the project and improve our understanding of who we needed to talk to.

The workshop produced the following insights:

- There was hesitance to think about the project impacting those beyond the Environment Team, let alone Synergy
- We discovered there was no organisational chart when we requested one to help make sense of the teams listed in the stakeholder map

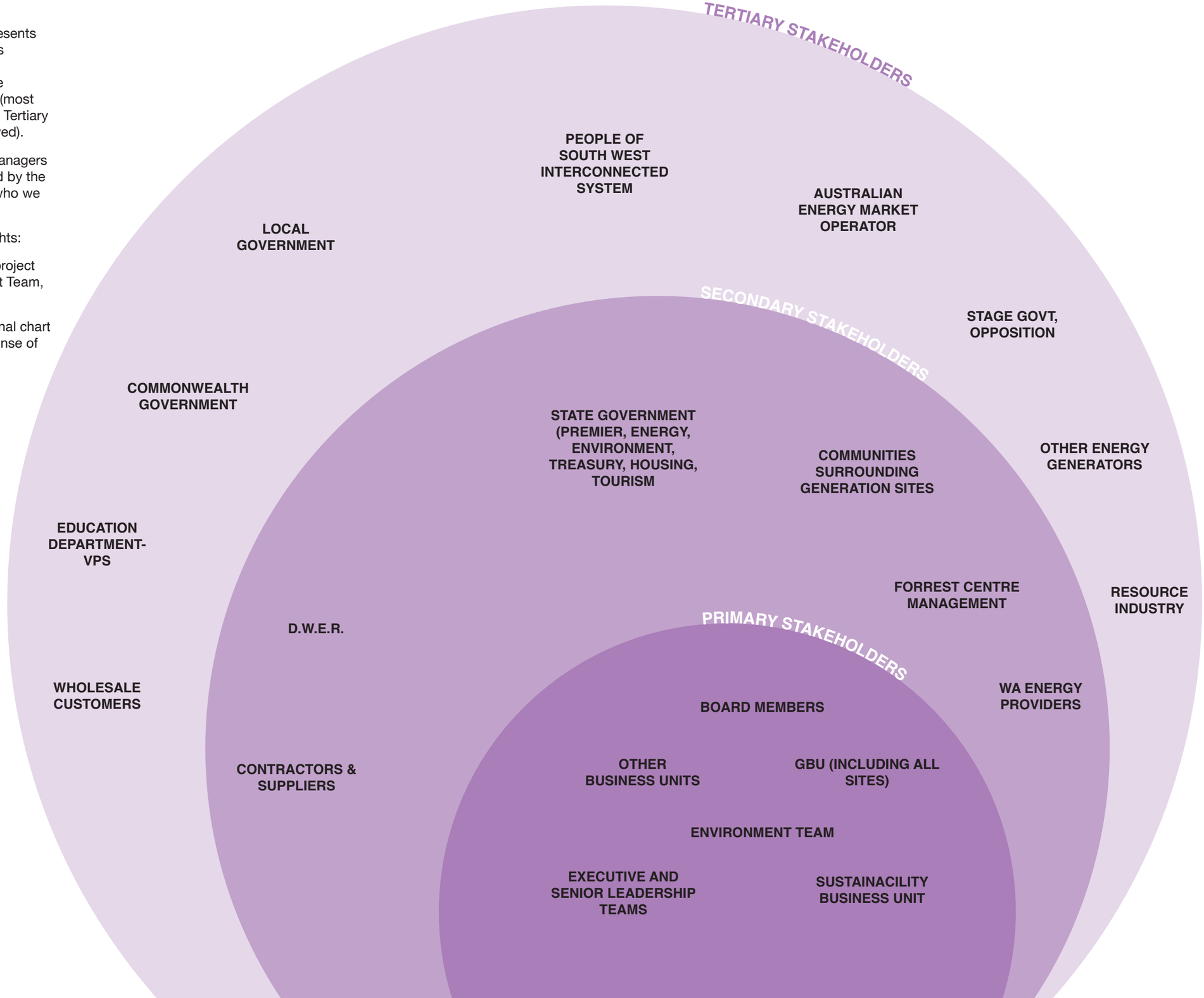


Figure 14: Stakeholder Map

INTERVIEWING VERSUS CONVERSATIONS - DIFFERENT APPROACHES

Interviewing is a key method of conducting qualitative research with users. Interviews encourage sharing of stories and experiences. They allow researchers to observe deeper contextual meanings, which can aid in developing outputs that seamlessly meet the needs of stakeholders (Quesenbery & Brooks, 2010). Importantly, interviews occur in a context that is typically unnatural for the participant. Adopting more loosely structured, casual interview techniques can help participants feel more at ease in sharing their perspectives (Wilson, 2014)

We aimed to conduct interviews in a manner that felt like a conversation. We switched between group settings for more generalised conversations and individual conversations for more personal topics.

Over the course of our research, we interviewed:

Synergy staff from the Environment Team, Health and Safety Team, Sustainability Planning, Organisational Development, Generation (Muja, Pinjar, and Collie), Technology and Transformation, Customer Experience and the Learning Academy.

Non-Synergy staff from the resources, human resources and mining sectors, and members of the general public.

We analysed data from these interviews to identify commonalities, themes and anomalies which contributed to the synthesis of research insights.

IMMERSION (SITE VISITS)

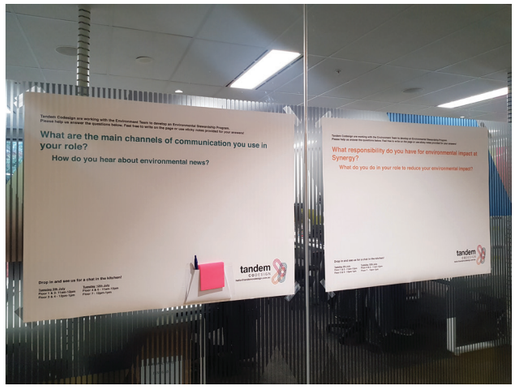


Figure 15: Interactive Posters installed across levels of the Forrest Centre

ENGAGEMENT TECHNIQUES (COMMUNICATION)

During our time spent on sites, through interviews and via journey mapping, we were able to test and observe Synergy communication strategies to assess their effectiveness.

Below is a summary of our main findings:

- Staff primarily utilised email for official communication
- Often waiting for responses which could be delayed by out of office time or missed due to heavy workloads
- Posters can be seen in communal spaces
- Created and installed posters which posed questions for staff in communal areas, providing pens and sticky notes
- Lacked engagement, even when alerted through an Edison Article
- Most engagement on Level 6 after announcement in Sharewall
- SBU Sharewall
- Sharewall online did not provide space for much engagement or interaction as most people's cameras and mics were off
- Sharewall in-person provided great opportunity to meet people face-to-face, drew attention to our questions and posters in the same space, and have people ask us questions, some prompted, some not
- Conversations in communal spaces

Over the course of our research phase, our presence in communal spaces led to invaluable interactions which advanced the project.

Being visible, and available for conversations whenever there were passersby meant that people could share thoughts or ideas they had as they came, rather than taking the time to write them out in an email.

It also meant that engagement for the project could be extended beyond the Environment Team as we were able to engage in conversation with people of different levels of the Forrest Centre.

Spending time within the context of an organisation is one of the most effective ways to develop a holistic view of how teams operate (Stickdorn & Schneider, 2011, p. 156). It is the key to understanding challenges from a staff perspective and observing said challenges in real time. Immersion allows us to gain an understanding of dynamics within and between teams, where words might not align with actions. It also helps us understand which touchpoints (moments staff interact with the organisation) are crucial to the problem space.

Our site visits in Stage One were:

- The Forrest Centre for 16 weeks across multiple levels, but with a focus on Level 6
- Two Days in site at Kwinana/Cockburn
- One day at Pinjar
- Previous experience at Muja

The time we spent across these sites helped build rapport with staff that supports interviewing outcomes. Getting to know staff this way supports ease of research through having direct access. Additionally, it builds understanding of organisational culture through first-hand observations and experiences. It is essential to understanding discrepancies between what is reported to be happening and what is actually happening.

Figure 16: Site visit to Kwinnana/Cockburn Power Station

REVIEW OF SYNERGY WEBSITE

Strengths	• Customer centricity in terms of information architecture • Clear that website is primarily used for bill paying and account access • There is available information about renewable energy and wind power on the website • Interactive electricity. Calculator to contextualise the impact of household usage on electricity bills. Gamification in this way is engaging
Weaknesses	• Messaging around renewable or green energy only acknowledges the product Synergy supplies, not what the organisation is doing to reduce its footprint. • Vision, Values and Purpose of Synergy do not mention environmental sustainability, rather focus on cost reduction • Information about renewable energy is not present on the homepage and takes at least four clicks to access when searching • Using the search term 'sustainability' in the search bar brings back 19 results with the most recent post being from 2021. The results do not directly relate to Synergy's action on sustainability • The sustainability charter accessible through the website mentions only leading and lagging indicators and refers to sponsorship and community partnerships as the ways to enhance sustainable business • Messaging around reducing energy usage is focused on cost reduction, not reducing environmental impact
Opportunities	• The website's inbuilt electricity calculator focuses on how to save money by reducing energy usage. It could be linked instead to how to reduce carbon footprint or be more environmentally responsible • Prioritising sustainability and environment in information architecture • Tweaking messaging around cost reduction to include reducing environmental impact • Clear definition of vision and goals for environmental impact of the organisation in the Who We Are page
Threats	• Prioritising sustainability and environmental impact in the information architecture may compete with bill paying functions for retail customers • Lack of sustainability messaging may be a deterrent for wholesale customers moving past the landing page

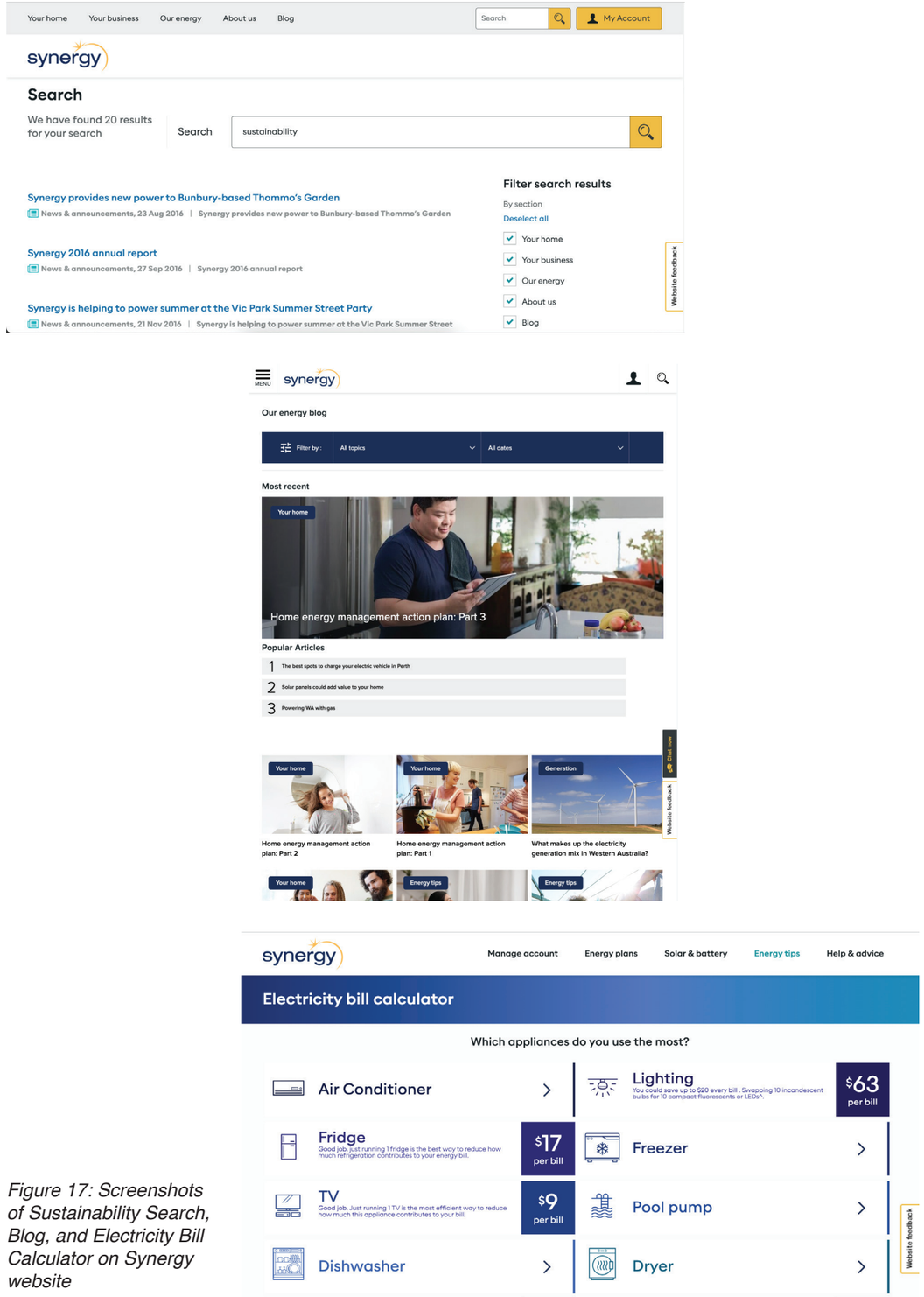


Figure 17: Screenshots of Sustainability Search, Blog, and Electricity Bill Calculator on Synergy website

Precedent studies

A LEADING SUSTAINABLE GLOBAL ENERGY COMPANY

AN BRAND THAT MAINTAINS A CLEAR COMMITMENT TO FIGHTING CLIMATE CHANGE THAT IS FOLLOWED THROUGH WITH ACTION

A GOVERNMENT TRADED ENTITY THAT SHARED CLEAR MESSAGING AROUND COMMITMENT TO CLIMATE ACTION

AN ORGANISATION THAT ALIGNS IT'S VISION AND VALUES WITH GLOBALLY RECOGNISED SUSTAINABLE DEVELOPMENT GOALS AND COMMUNICATES THEIR POSITION PUBLICALLY

AN ORGANISATION THAT PERSONALISES CLIMATE CHANGE AND USES VISUALISATIONS TO MAKE SENSE OF COMPLEX SCIENTIFIC INFORMATION

It is important to look beyond the scope of Synergy and examine the impact that other organisations are having in a similar problem space. Assessing strategies that have been effective as well as those that need improvement is helpful when identifying and re-framing opportunities for this project. The below organisations and their operations are context-specific and therefore successful outcomes cannot be considered *directly* transferable to Synergy:

ØRSTED

What is the organisation?

Ørsted is a Danish energy provider with a vision for a world that runs entirely on green energy, however its beginning was worlds apart. Previously known as DONG Energy, it was one of the most fossil fuel-intensive energy providers in Europe. After a reassessment of its trajectory and mission, Orsted embarked on a 10-year transformation journey and it is now one of the largest renewable energy providers in the world, primarily powered by wind generation. Following this journey, it has reduced its carbon emissions by 86% and it is in an even stronger financial position. The company's aim is to be a catalyst for green energy transformations across the globe by sharing and scaling infrastructure and sharing lessons and insights from its business.

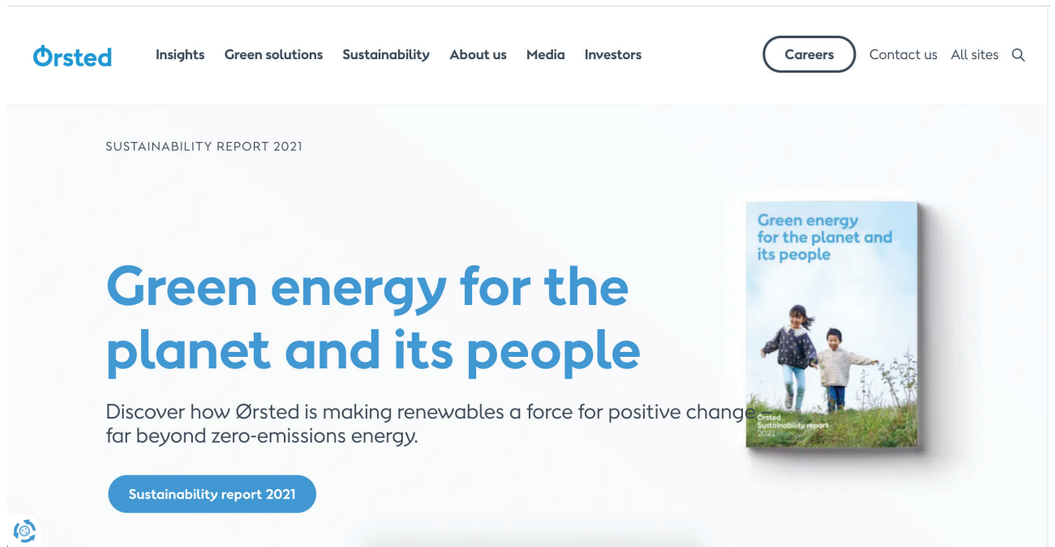
What is it doing well?

- Based its net zero emissions target on the Science Based Targets initiative (SBTi) which are more ambitious than government regulations.
- The SBTi is a partnership between CDP, the United Nations Global Compact (UNGC), World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative drives ambitious climate action in the private sector by enabling organisations to set science-based emissions reduction targets in line with limiting global warming to not exceed 1.5°C above pre-industrial temperatures.
- Ørsted aims to deliver a net-positive biodiversity impact from all new renewable energy projects it commissions from 2030 at the latest.
- Despite being an energy provider, external communications (particularly the website) deliver a clear environmental message through information architecture, sharing research, targets and climate achievements.

What can we learn from it?

- Power of sharing environmental wins and news stories via external communications. Promotes confidence that the organisation is committed to change
- Transparency about environmental targets and goals, communicated using visual language and tools to break down complex data so it is digestible for stakeholders

Figure 18: Landing page of Orsted website



PATAGONIA

What is the organisation?

Patagonia is a clothing and outdoor wear company founded by a group of surfers, climbers and minimalists in business to save the planet. It started making climbing equipment in the late 1950s but rethought, re-designed and introduced equipment that would preserve the rock faces the owners loved so much after realising previous products were causing damage. Since then, Patagonia, driven by founder Yvon Chouinard has sought to inspire, innovate and implement solutions to the environmental crisis, putting the planet above profit. In September 2022, Chouinard announced his plans to turn over all profits to fighting climate change.

What is it doing well?:

- Clear commitment to environmental values
- Consistent and cohesive brand messaging across platforms that puts values before product
- Transparency about business practices and objectives/goals for the future
- Celebrating the wins and acknowledging where they can do better
- Commitment to go above and beyond
- “Purchasing offsets to get to carbon neutral doesn’t erase the footprint we create and won’t save us in the long run. If our goal was to cut emissions from our owned and operated stores, offices and distribution centers, we’d be good. But the bulk of our emissions—95 percent—comes from our supply chain and materials manufacturing. We take responsibility for all of it.”
- Investment in community initiatives to support a global shift in reliance on fossil fuels
- Creating of Environmental Profit and Loss metrics that calculate the impact of each product to drive product choices, improvements, and system changes.
- Building processes in both product manufacturing and general business practices through the lens of sustainability and the triple bottom line, ensuring people are looked after and are thus in a position to look after the planet.

What can we learn from it?

- While Patagonia is privately owned and primarily produces products rather than services, there are important things we can learn in terms of clear commitment to environmental stewardship
- Connecting words to actions is important. Seeing commitment to environmental values through investment and action
- Impact that can be made when considering the whole supply chain rather than just localised actions. Can we measure the full picture?
- There is value in going above and beyond regulations and business requirements through creating positive impact rather than minimising negative impact
- Hiring and engagement of staff on the basis of values that reflect a strong commitment to the environment ensures these values are communicated internally and externally to all stakeholders.

“At Patagonia, we appreciate that all life on earth is under threat of extinction. We’re using the resources we have—our business, our investments, our voice and our imaginations—to do something about it.”

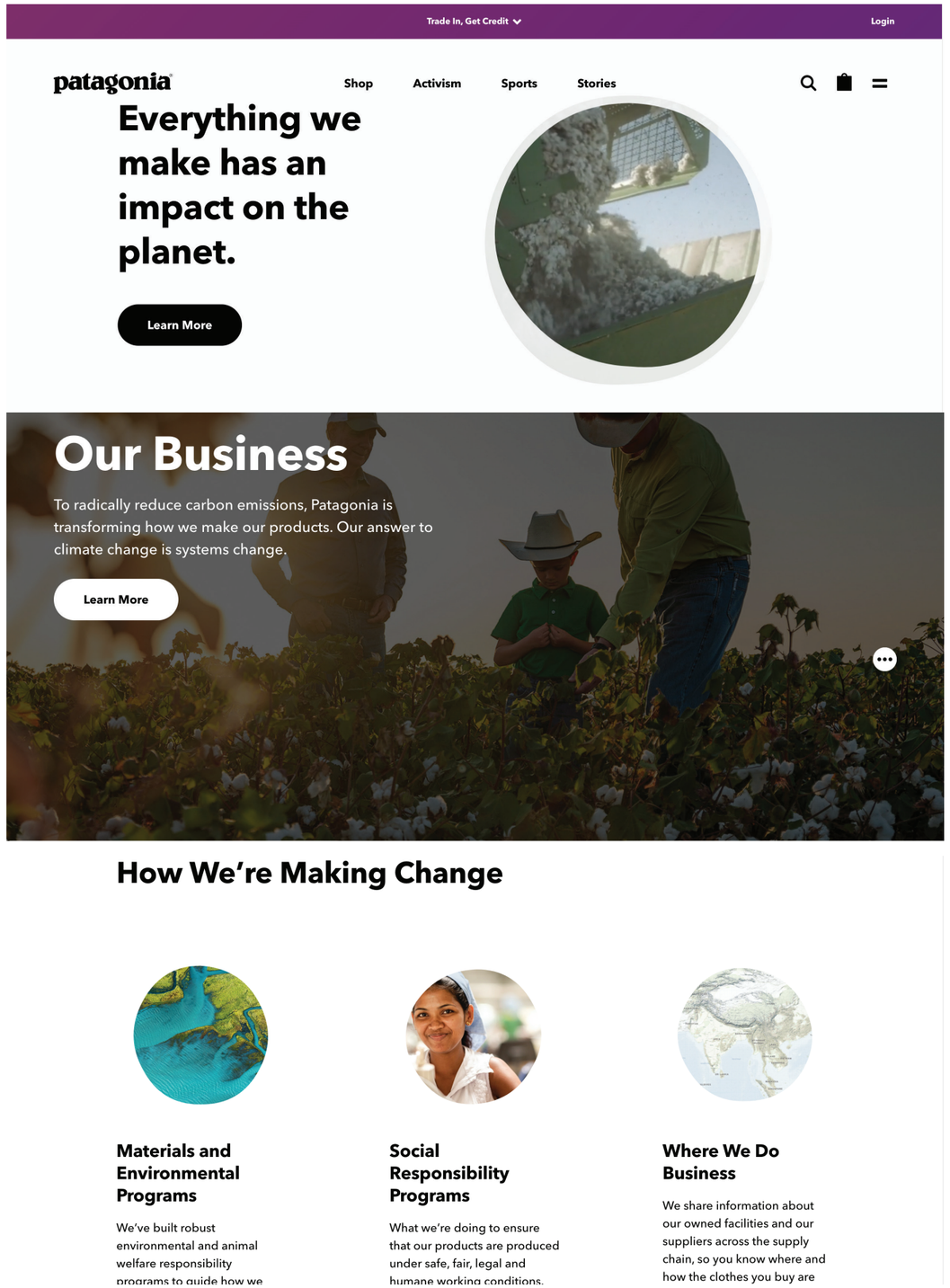


Figure 18: Screen captures of Patagonia landing page

WATER CORPORATION

What is the organisation?

The Water Corporation is a State Government-owned enterprise and the principal supplier of water, drainage, sewerage, and bulk irrigation services in Western Australia.

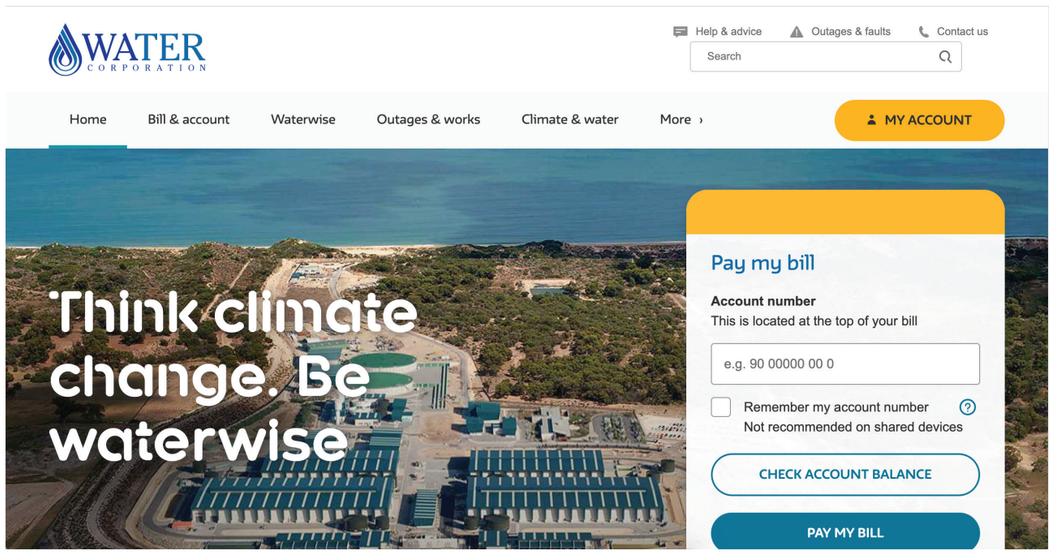
What is it doing well?

- Sustainability is at the forefront of the Water Corporation's Purpose with the 3 pillars of their vision aligning with People, Profit and Planet
  - » Safe for all
    Our people and the community want our products, assets and operations to be safe for all, as no one should suffer harm from our business.
  - » Lowest total cost
    Our customers and Government want us to deliver services they value, at the lowest whole of life cost, whilst keeping bills affordable and contributing back to the State.
  - » Lowest environmental impact
    Our community and Government want us to reduce the impact our operations have on our environment to preserve it for future generations.
- Linking reduction of water use with environmental stewardship rather than just financial savings
- Environmental messaging prioritised and accessible through website

What can we learn from it?

- Being a GTE (like Synergy), the Water Corporation shows clear environmental messaging without having to discuss the specific details of government decisions through external messaging channels
- Linking reduction in resource use to environmental impact in a context-specific way so customers know the difference their usage makes
- Water corporation's water usage comparison tool gamifies the experience of reducing consumption against neighbourhood usage levels. These principles could be applied to the customer-facing energy usage tool on the Synergy website.

Figure 19: Screen captures of Water Corporation landing page



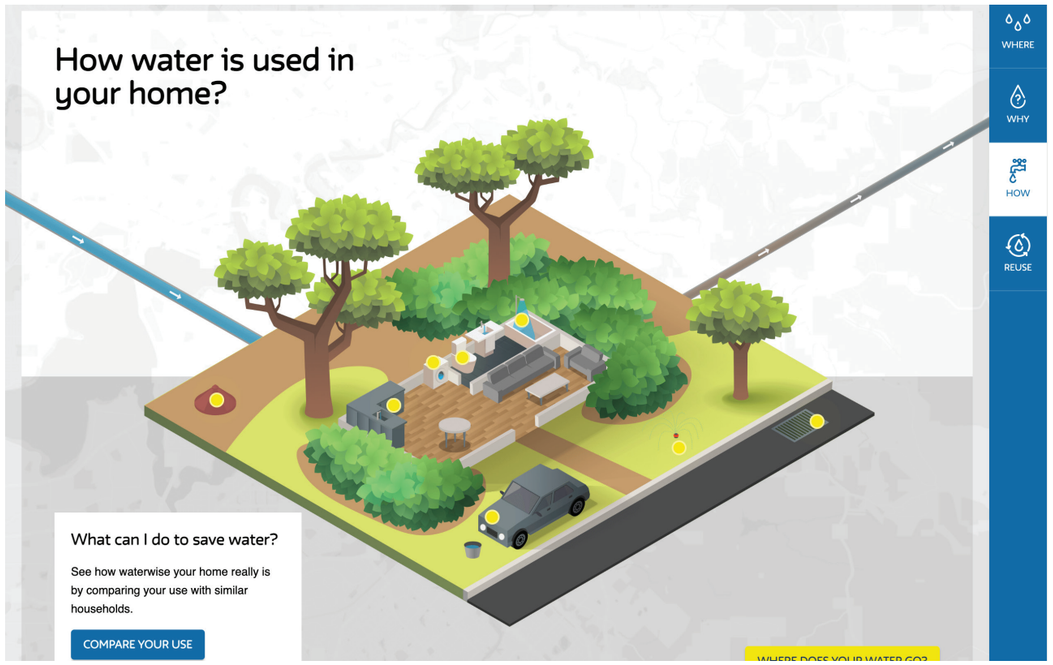


Figure 20: Screen captures from Water Corporation Calculation Tool

AURECON

What is the organisation?

Aurecon is a design, engineering, and asset management consultancy based in Melbourne, Australia, helping its clients to think forward for the future.

What is it doing well?

- Transparent communication of goals and initiatives
- Alignment with Sustainable Development Goals for holistic approach to sustainability, to help understand outcomes of all projects through this lens
- Sustainability committees across its sites to support implementation of goals and initiatives at local levels. These align with the overall Aurecon Blueprint (strategy)
- Clear approach to the environment with targets for net zero by 2050 and a comprehensive strategy around how to measure and achieve this.
- Understanding of its commitment to the environment through direct impact (business operations) and indirect impact (operations of clients), and taking responsibility for both.

What can we learn from it?

- Shouting from the rooftops about the positive impact its work is having on all external platforms
- Transparent and clear communication of its vision and purpose which highlights environmental commitment
- Evaluating all projects against sustainability and environmental targets

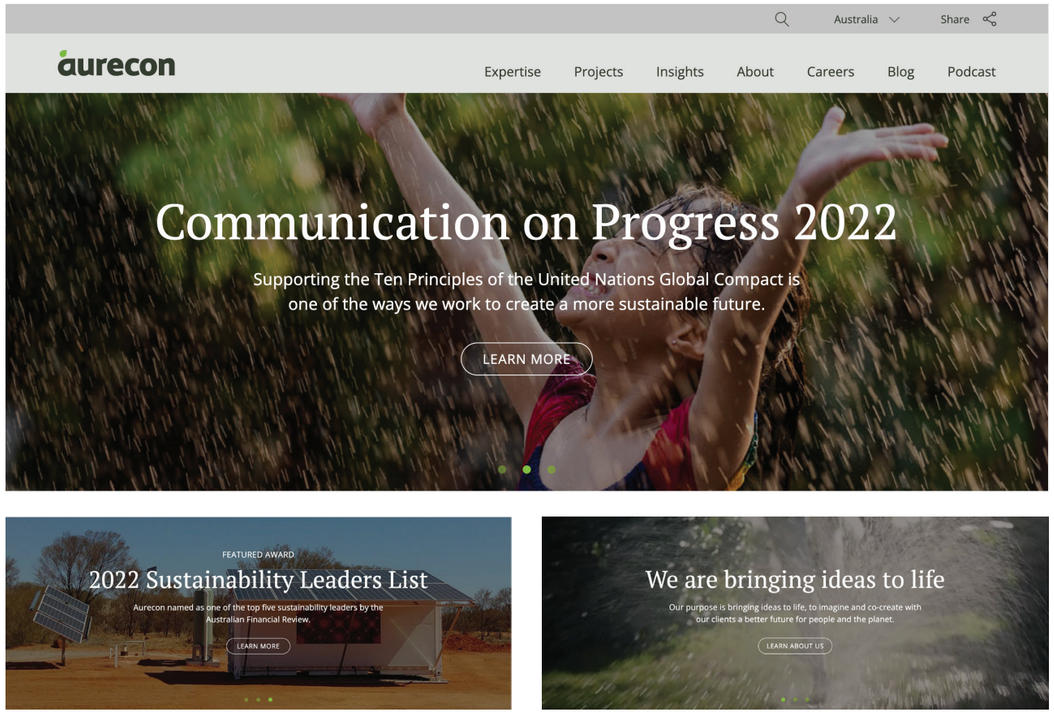


Figure 21: Screen captures from carousel of Aurecon website landing page

THE CLIMATE COUNCIL

What is the organisation?

The Climate Council is an independent, community-funded organisation founded in 2013 in response to the disbandment of the Australian Climate Commission. It is made up of the “country’s leading climate scientists, health, renewable energy and policy experts, as well as a team of staff, and a huge community of volunteers and supporters who power our work”. It shares information and advice with the public around climate change based on the most up-to-date scientific information.

What is it doing well?

- Similar to Synergy’s tools to show how to reduce power usage and the Water Corporation’s tools to show water consumption, The Climate Council use visual tools to make the impact of climate change personal. The Climate Risk Map uses postcodes to show how homes will be impacted by climate change between 2030 and 2100. This tool takes the extra step in showing how changes to climate will personally effect the lives and homes of individuals and families around the country
- Building on this tool is the tendency to use visualisations to communicate complex information that is often inaccessible or unengaging for the general public. Information around climate change is often complicated, generalised, or so frequently forced on people that they switch off. As a communications organisation, The Climate Council works to simplify information shared in its resources so that it is easily digestible and enjoyable to consume and learn from.
- Messaging around reducing electricity usage is framed in terms of saving carbon emissions rather than purely dollar savings.

What can we learn from it?

- How we can frame climate change as something personal and in need of immediate attention through our actions
- Value of visualising complex data so it is easily accessible for all
- How a clearly outlined stance on climate action can filter into all organisational messaging

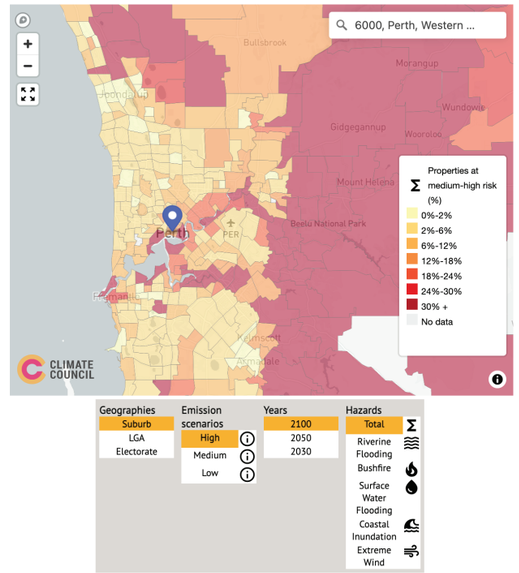


Figure 22: Climate Council Climate Risk Map

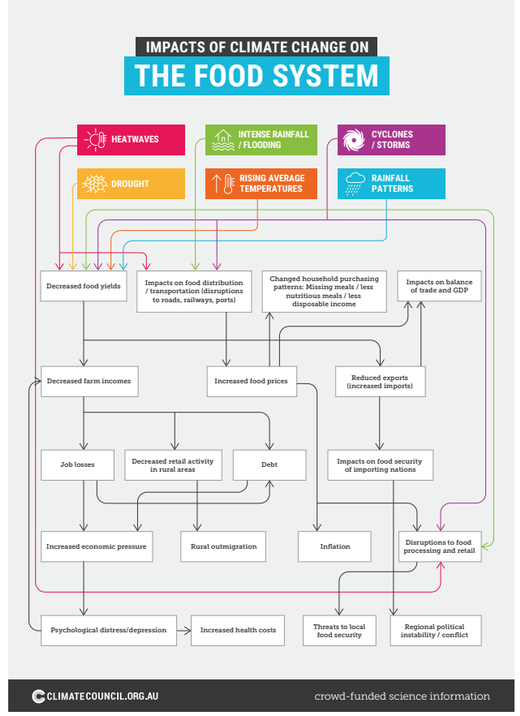


Figure 23: Climate Council Food System Infographic simplifying complex impact of climate change

WHAT DID WE DISCOVER?

Findings from Ethnographic Research

Below is a summary of our findings based on our research across four Synergy sites. Further research is required to understand the organisation better but from this initial discovery period we were able to find some key trends and patterns in the data that are listed here. This fell into the categories of:

1. **Key Challenges for the Environment Team**
2. **Key Problems with Orgasniational Structure, Leadership and Communication**
3. **Front Facing, Recruitment & Inductions**
4. **What is Working Well**

1.

Key Challenges for the Environment Team

INTRODUCTION

The following information includes the critical findings uncovered through our research, particularly those around the environmental team, which has helped us shape a pathway for Synergy to reach its goal of becoming environmentally mature. The data in this section reveals existing systemic barricades and complex staffing behaviours which are restricting Synergy moving towards becoming environmentally mature. Importantly, the focus of our research around the environmental team has allowed us to uncover what organisational format needs to be designed so that we can help the team overcome the critical issues that are currently obstructing them from successfully messaging Synergy's environmental strategy to the rest of the organisation. Findings related to the Environment Team fell into the following categories:

- AN ENVIRONMENTAL CULTURE OF COMPLIANCE AND OBEDIENCE
- THE CAPACITY OF THE ENVIRONMENT TEAM
- CHALLENGES WITH CURRENT COMMUNICATION SYSTEMS
- THE SEPARATION BETWEEN THE ENVIRONMENT TEAM/SBU AND GBU

AN ENVIRONMENTAL CULTURE OF COMPLIANCE AND OBEDIENCE

Synergy is under pressure to comply with a large number of licences and regulations to prevent environmental damage, such as exceedances in emissions, or, more commonly, technology failures that measure these emissions. Penalties are faced when breaches of these licences occur, resulting in monetary fines and damage to Synergy's reputation among wholesalers and shareholders. From our research, this focus on complying with legal requirements and avoiding the repercussions of failing to do so has inevitably resulted in a culture of fear, blame and shame for environmental reporting, an overload of pressure and responsibility on the environmental team, and reactive systems and attitudes towards the environment.

"Constant focus on compliance to licences is creating a culture of obedience."

"The penalty of enviro breach would be a lot lower than the cost of stopping production - the cost is more so the image and reputation with wholesale and shareholders."

"Enviro work doesn't generate money, it costs money."

The following are issues that stem from this culture of compliance and obedience:

- A Culture of Blame and Shame

When environmental breaches occur, they are reported to the Synergy Board and the environment team is held accountable. The fear of the consequences of these environmental breaches creates pressure on staff to comply. This fear and pressure results in reactive behaviour starting with upper management and rippling out to all levels of the environmental team, resulting in a culture of blame and shame among staff for making mistakes with environmental reporting.

"Need to create a safe space for enviro reporting - don't want people to be afraid of blame."

"Need to change from being held accountable to being empowered."

"Need to create a safe space for environmental reporting where it is encouraged and there is no fear."

“Enviro Team Leaders are getting pushed really hard by the Board. There are a lot of different pressures.”

- Reactive Environmental Systems

The focus on avoiding the negative consequences of environmental breaches has resulted in a reactive reporting system that does not allow for proactive thinking. Environmental issues that arise are reported through Empower and mistakes are corrected. However, there are no systems set up that encourage staff to think innovatively and proactively to not only reduce environmental impact but also create positive impact. This can be seen with processes such as cleaning the seawater at the Kwinana/Cockburn GTGD site, where seawater is currently returned to the ocean in the same state that it came in. The process currently meets compliance needs in a reactionary approach but it doesn’t consider the level of pollution that may already be occurring in Cockburn Sound from the surrounding industries in the area. There is an opportunity to return cleaner seawater to the sound and improve the surrounding environment which is currently not being acted upon.

The reward system at Synergy, or Amps as they are known, are points that are given out for environmental reporting of hazards and incidents. While the Amp system is a positive way of encouraging people to report and reduce the fear of blame, there are no rewards or systems set up to celebrate, compliment and encourage proactive thinking around environmental impacts.

“The environment is an afterthought; it comes into the spotlight when something goes wrong, then once the problem gets resolved it dissipates - like a dust storm.”

“How can we use small incidents like a single drop of oil as a learning opportunity and not a penalty?”

“Is it a legal requirement or not - people don’t have time for anything beyond what is required.”

“There is a lack of complimenting and encouragement.”

“The environment is how we do business, it’s not an add-on. Enviro staff get treated as if their work is an add-on to something else.”

“Penalty culture [that] has been driven by legislation. Let’s talk about the actual impact on the environment rather than just a legislation requirement.”

- Disconnection to Impact on the Ecosystem

There is an emphasis on the main consequences of an environmental breach being a monetary penalty, damage to Synergy's reputation, and loss of licences rather than the short or long-term impact to the eco-system and the underlying reason for the licence requirement being in place. This can be seen throughout many systems and communication streams including the environmental inductions, the reporting system, and the rewards system. This disconnection between actions and their impact may contribute to the lack of proactive thinking and personal responsibility for environmental damage.

> *"Penalty culture that has been driven by legislation. Let's talk about the actual impact on the environment rather than just a legislation requirement."*

THE CAPACITY OF THE ENVIRONMENT TEAM:

- Under-Resourced and Time-Poor

The reach expected of the environmental team is not achievable with their current capacity, resources and skill sets. According to our insights, the environmental team is exhausted and overworked due to their large workload, the pressure to comply with legal requirements and an overreliance on the team for environmental reporting. This results in the team being time-poor and therefore unable to spend time on the communication and education side of their role, or taking more proactive approaches.

> *"You can't expect people to perform when they're so heavily under-resourced."*
>
> *"We are growing and we have had a lot of change."*
>
> *"We don't have time to communicate. We don't have time to sit down and make awesome presentations and educate people. And education is key for change."*
>
> *"The environment team is exhausted".*

- Over-Reliance on the Environmental Team

There is a push for other staff to take responsibility for environmental reporting. However, despite the environmental staff having an advisory role and only being in the position to 'influence' behaviour on-site, they are more motivated to deal with environmental problems than operational staff. This is because such problems may result in a licence breach, which is the environmental team's responsibility, and could create more work for them.

> *"Site staff are time-poor and environmental staff end up picking up the slack." (e.g. to avoid breaches.)*
>
> *"The environmental team gets the blame first and has to deal with the people who get angry."*
>
> *"The environmental team are the dam that catches everything."*
>
> *"The environmental team aren't accountable for anything, it should not be their responsibility to fix problems."*
>
> *"Rationalising different workloads so that they fit better - projects get dumped on the environmental team (e.g. project Carnaby)."*
>
> *"We overstep our mark and do more than we need to because people know that we will."*

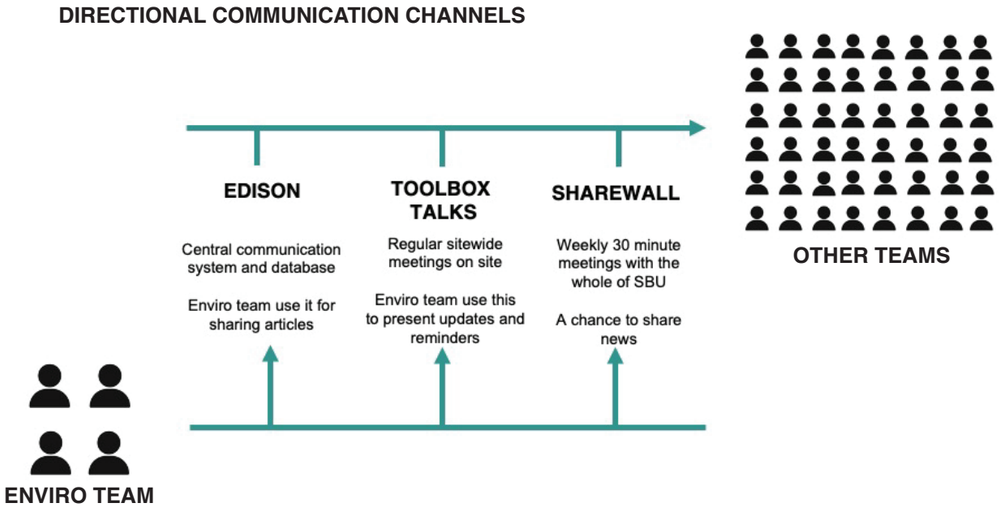


Figure 24: Channelf of Communication used by the Environment Team to share Environmental Information with other teams

- Communication Role of the Environmental Team

The environmental team mainly consists of technical experts (environmental scientists, engineers, data analysts etc.). However, a key role in their job is communication, relationship building and influencing behaviour. Unlike other positions at Synergy, the environmental staff are in a unique position where they are required to regularly travel to Synergy's different sites and share their knowledge and expertise about reducing environmental impact with the onsite staff. The strategic communication and relationship building that is necessary for this role is a highly skilled area of expertise that requires training and resources. The environmental team is not skilled in this area.

Due to the focus on reporting, legal compliance and the technical side of the role, these communication skills are currently lacking within the team. There is a need to build up an effective and communicative environmental team, but there is a lack of resources available to do this.

> *"Moving between the sites is a diplomatic role."*
>
> *"We have two jobs: changing the behaviour of staff and the logistical environmental science job, these are very different."*
>
> *"Environmental staff need to influence other people and systems, it's part of their job."*
>
> *"Relationships need to be prioritised. As someone who is a leader, you need to meet people on their level."*
>
> *"Relationships are important for creating respect for environmental officers."*

<u>Key Skills needed for Environmental Staff</u>

Relationship building - establishing rapport with co-workers and staff on site.

Communication skills - sharing environmental knowledge clearly and effectively.

Social skills and emotional intelligence for establishing trust and proactive project environments.

CHALLENGES WITH CURRENT COMMUNICATION SYSTEMS

Alongside the lack of strategic communication skills in the environmental team, the current systems are not set up to communicate environmental information effectively. Miscommunication is common with many accounts from environmental staff that the information they have shared has been misinterpreted or not clearly understood, with many follow-ups and corrections required for clarification.

> *"You can't just condense it all into two sentences and expect these people that have no environmental background to understand and be able to make informed decisions."*

> *"Every single day there is (communication) difficulty… for whatever reason you have to pick up the phone and talk to people."*

- Lack of Open, Discussional Sharing Space

There seems to be a lack of open, discussional sharing space in many of the meetings that we have been a part of, such as the EMS meetings (onsite morning standup meetings, Sharewall). A common theme with these meetings is that they follow tight agendas and time limits. This structure does not allow for open discussion of ideas, information sharing or critical thinking.

The morning standup meetings that we have observed act as a checklist and are not engaging. In comparison, however, the GTGD stand-up meeting had lots of engagement and great comradery among staff with sections such as call-outs where staff could give recognition and thanks to positive work by any of their teammates.

> *"Site managers are good at opening the floor to ideas and opinions but sometimes you see that they really have to squeeze it out of workers."*

> *"The lack of sharing is more due to time pressure and agendas".*

> *"A lot of the information sharing is informal and happens in the kitchen." (Onsite employee.)*

> *"I have questions but would rather ask one on one than share them in the big meeting."*

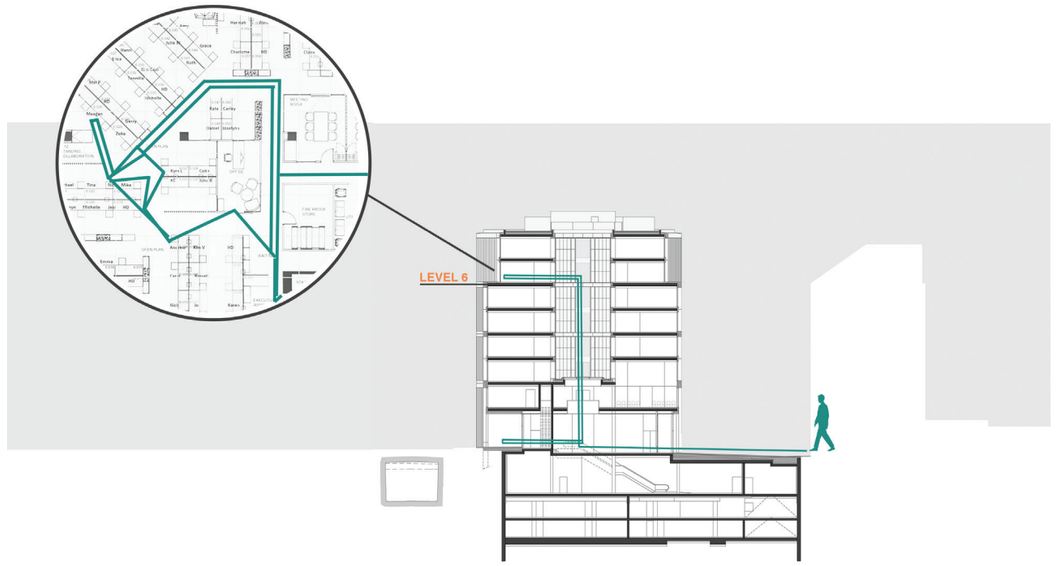


Figure 25: Heat map of Environment Team Routines in the Forrest Centre, highlighting their isolation

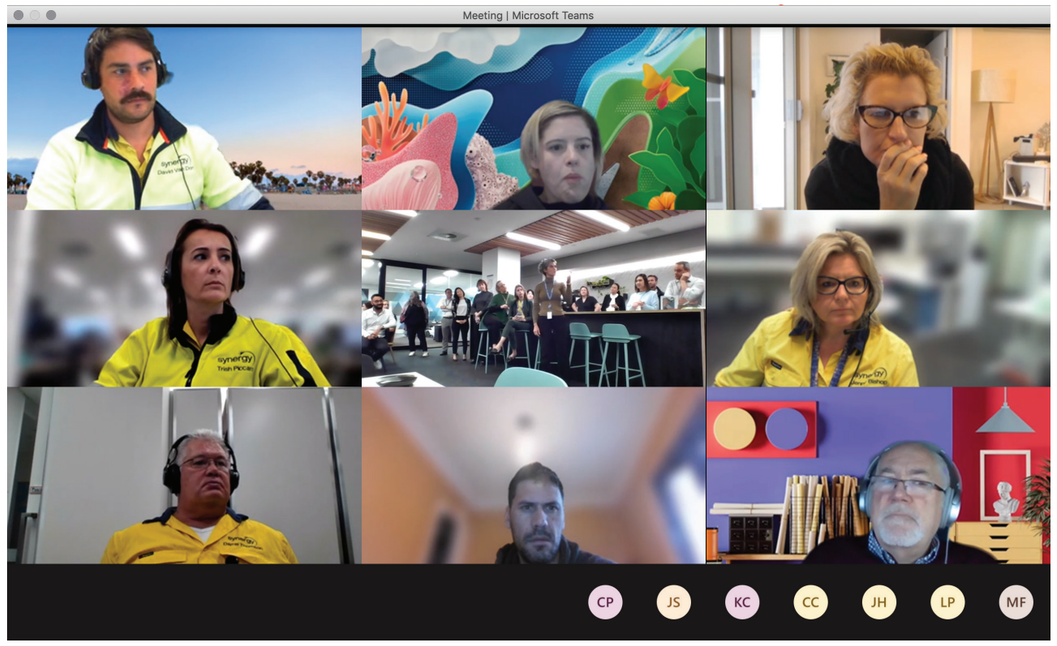


Figure 26: Online Sharewall Presentation

- Sharewall

Online meetings such as Sharewall have a top-down approach; large numbers on a Teams call format with a short time slot for each speaker leaves little room for engagement, open discussion of ideas or critical thinking from staff. There is also no way for the presenters to know if staff are listening.

In contrast, when a Sharewall was presented in person we observed an increase in engagement. In general, our findings show that digital interfaces don't promote relaxed, at ease conversations where individuals express their opinions and ideas.

"It's the same 10 people that still speak every week on Sharewall."

"Would like to have more attendance and engagement on Sharewall."

"It's information giving not information sharing." (Sharewall)

- Email Overload and Lack of Online Engagement

From our findings, it is apparent that Synergy employees receive an excessive number of emails. As staff are generally time-poor this results in little engagement in any email content. Furthermore, we have found that onsite employees do not access their computers as much as Forrest Centre employees or onsite managers due to the hands-on nature of their work. We also found that Edison is rarely accessed by site staff compared to Forrest Centre staff. Onsite, the preferred method of communication is often in person as everyone is in close proximity to one another.

A key example of environmental information being lost through poor online engagement is the one-page environmental reports that are disseminated to onsite staff via email and discuss relevant topics such as the difference between environmental hazards and incidents. These reports receive very little feedback so there is currently no way to tell whether staff are reading these emails, or how much of the information is being understood. Digital data is being collected but this data only reveals how many people clicked on something; it does not reveal whether it was actually read, if it was interpreted correctly and most importantly whether it was actioned based on this understanding.

"I don't read info sent to me internally - I have no time and it's usually the same people sending information."

- Lack of Environmental Information Prioritisation

A key observation made from our site visits and interviews of onsite employees was that environmental information is not a key priority compared to other topics such as health and safety. While sitting in on stand-up meetings at Pinjar we noted that environmental information is only mentioned if it is relevant to the activity happening that day. According to our insights, it is difficult for onsite environment staff to get information across to staff due to the lack of time and prioritisation of environmental information during meetings. Subsequently, environmental staff are required to follow up with missed information outside of meetings.

"The environment is still a poor cousin to health and safety."

'People are busy and there is an element of stalking that goes on." (Referring to trying to discuss environmental-related information with staff onsite.)

"I know everyone is busy but I really hate the word busy because it's about priorities."

THE SEPARATION BETWEEN THE ENVIRONMENT TEAM/SBU AND GBU

Our insights show a current lack of trust and transparency between onsite staff and the Forrest Centre's environmental staff. There are many contributing factors to this problem including physical distance, transient relationships, lack of transparency, ineffective communication, and the separation between GBU and SBU and their conflicting priorities.

- Physical Distance and Transient Relationships - FC and On-Site Staff

The transient nature of the Forrest Centre staff with regional sites is detrimental to creating trust and building relationships between staff cohorts. There have been accounts of some Forrest Centre environmental staff not being welcome on site. Forrest Centre staff say that face-to-face communication with site staff is important. There are, however, onsite environmental officers who do have these communication skills and are making a positive impact on environmental culture, in particular at Muja. As onsite environmental staff are always there, trust and relationship building can happen with more ease. Forrest Centre staff, in contrast, are always at a distance creating a disconnected dynamic that is difficult to navigate.

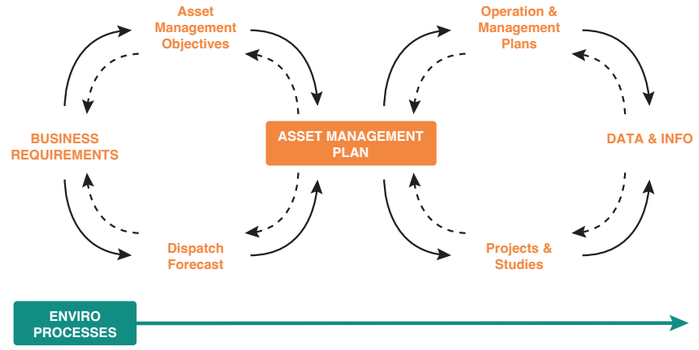


Figure 27: Infinity diagram demonstrating separation of GBU and Environment Team processes

"It's hard to work as a team."

"Relationships are important for creating respect for environmental officers."

"Some people aren't welcome onsite."

- Top-down Approach and Lack of Cultural Consideration

Our insights show that onsite staff don't like the top-down approach at Forrest Centre. This is often viewed as Forrest Centre staff visiting a site and telling site staff what to do without fully understanding what's happening onsite or communicating why they are there through the broader strategic context. It is important for staff visiting sites to take into consideration the site culture and adjust their strategy for communication before suggesting changes.

"People at Muja don't want people to come down from the city to tell them what to do and then disappear again."

"No one likes being told what to do"

"You can't just come from the Forrest Centre as a seagull, as they say, crap on people and fly off."

"Some staff do not understand that the culture of sites needs to be taken into consideration before changes are suggested and implemented."

"People on site don't appreciate people they don't know coming in and telling them what to do."

- Conflicting Priorities and Environment Advisors Perceived as a' Policing' Role

Our insights show a difference in the priorities between onsite operational staff and the environmental staff. This may be due to the lack of integration and transparency between the two business units, GBU and SBU, resulting in operational staff not taking full responsibility for environmental impacts. Inadequate integration results in the environmental team taking on the role of holding onsite staff accountable for incorporating environmental aspects into their work and projects. This outcome, along with the transient nature of their relationships onsite, has resulted in the environmental team's role being perceived by onsite staff as a policing role; they are 'always creating barriers to their work'. Pushback has occurred and questioning from site staff asking environmental staff to justify themselves. This has resulted in a tension onsite, and created a responsibility for environmental staff who do have good relationships onsite to mediate when issues arise.

"I always get the comment: 'Are you sure?'" (Environmental staff referring to onsite staff's reaction to their input.)

"The environment is how we do business, it's not an add-on. Environmental staff get treated as if their work is an add-on to something else."

"Here onsite all the time but not really one of the crew." (Referring to the environmental team and H&S being part of SBU, not GBU.)

“You can’t just condense it all into two sentences and expect these people that have no environmental background to understand and be able to make informed decisions.”

“There is a clash of priorities and urgency.” (Between environmental team priorities and operational priorities.)

“Staff on site seem to be more focused on avoiding a blackout rather than an environmental breach. They would prefer to keep the power on even if it means harming the environment.”

“There is a divide between the Forrest Centre and Muja … It’s their job to produce electricity and it’s our job to make sure they don’t mess it up along the way.”

“Every aspect of our job is making people aware of environmental standards. It needs to come from management.”

“What can you do to stop the ‘us and them’ attitude? The communication needs to come from the top.”

- Lack of Communication and Transparency

The lack of communication and understanding seems to go both ways; there is no transparency between Forrest Centre staff and onsite staff or appreciation of the pressures that both sides are facing. Forrest Centre staff are not taking into consideration the culture of other sites, operations and time pressures of staff before suggesting changes, while the onsite staff don’t understand the pressures from the Board, upper management and legislative requirements that the environmental team is faced with. This is a problem we have noticed throughout the whole organisation which will be discussed in more detail in the following section: Organisational Structure, Leadership and Communication.

“There is a struggle to balance Board requirements and realities of sites.”

“I don’t think Forrest Centre (staff) understand the complexity of the plant at Muja.”

“I think people underestimate the miracles that it requires to keep that plant generating electricity…”

- The Nature of Environmental Impact: Intangible, Long-term and Impersonal

Unlike health and safety, the environmental impact creates small and incremental damage to the ecosystem over a long period of time and is therefore not visible or immediately disruptive. The nature of this impact creates a disconnection between the actions causing the impact and the actual damage that will eventually result from it. This is very different to health and safety incidents, which have immediate and potentially devastating personal impacts on people and are a key motivator for creating a safe and proactive culture. Other more immediate problems are therefore prioritised before the environment such as health and safety issues and power generation to avoid blackouts.

Environmental reporting has been rolled out in tandem with the health and safety reporting model but we currently believe that this is only reporting on the effect of licences and breaches and not a full understanding of environmental impact. This problem may be further exacerbated by the focus that Synergy has on compliance.

“If we have an environmental breach, no one died and no one is going to jail, and we didn’t black out the state.”

“No one will go to jail for environmental breaches like they might if they are not keeping workers safe. The only person affected might be the Minister.”

“Environmental incidents don’t currently have the same immediate and visible impact” (compared to Health and Safety Incidents).

CONCLUSION

The combination of all of these challenges – the top-down approach with the lack of communication and relationship-building skills in the environment team, and the lack of transparency and ineffective communication systems – are all contributing to the challenges the environment team is facing. The problems and challenges we discovered here revealed larger organisational obstacles that prompted further research and will be discussed in the next section.

2.

Organisational Structure, Leadership and Communication
Summary of Findings and Key Challenges

INTRODUCTION

The following information captures data that we gathered during our research when we noticed larger organisational problems that were attributed to many of the smaller issues that were arising. As the environmental team is connected to the larger Synergy organisation and all of its structures/systems, addressing these underlying organisational problems is key for the environmental team to operate at its best. This will improve the environmental maturity of the organisation and the structure and efficiency of Synergy as a whole. It is important to note in this section that organisational structure, leadership and communication are all intrinsically linked; problems in one of these areas will inevitably result in problems in others.

Research shows that workers' satisfaction with their job is, on average, higher in a flatter organisation than in a hierarchical organisation (Powdthavee & Frijters, 2017). One emerging view of corporate hierarchy is Holacracy. Holacracy is a system of corporate governance whereby members of a team or business form distinct, autonomous, yet symbiotic, teams to accomplish tasks and company goals. The concept of a corporate hierarchy is discarded in favour of a fluid organisational structure where employees have the ability to make key decisions within their own area of authority (Bernstein, et al., 2022). The goal of a Holacracy is to ensure that those responsible for completing the work have the authority to decide how that work should be carried out. Holacracy benefits are the promises to harness agility, transparency, accountability, employee engagement and innovation. It also potentiates greater efficiency. The main criticisms are that the model does not allow for sufficient lateral communication. Also, its use is still emerging and there is insufficient evidence of Holacracy's advantages to have confidence in what it can potentially deliver (Gouveia, 2016). Although Holacracy might not be appropriate for an organisation like Synergy, it is worth noting the empowerment that staff gain through creating their own goals. Findings related to the Environment Team fell into the following categories:

- **STRUCTURE & LEADERSHIP**
- **TRANSPARENCY & COMMUNICATION**
- **IMPLEMENTATION PROCESSES**

HOLACRACY CASE STUDY: MORNING STAR (HAMELL, 2022)

Morning Star is the world's largest tomato processor, handling between 25% and 30% of the tomatoes processed each year in the United States. Central to the workplace is that every employee at Morning Star is responsible for drawing up a personal mission statement that outlines how he or she will contribute to the company's goal of "producing tomato products and services which consistently achieve the quality and service expectations of our customers." Personal mission statements are the cornerstone of Morning Star's management model. Staff are responsible for the accomplishment of their mission and for acquiring the training, resources, and cooperation needed to fulfil it. The mission statement is negotiated annually in something known as a Colleague Letter of Understanding (CLOU) with the associates who are most affected by his or her work. A CLOU is, in essence, an operating plan for fulfilling an employee's mission. CLOUs change from year to year to reflect changing competencies and shifting interests. Over time experienced colleagues take on more complex assignments and offload basic tasks to recently hired colleagues.

Using a CLOU means that staff are empowered to make their own choices for what is needed to achieve their goals. That includes obtaining the tools and equipment. At Morning Star, there is no central purchasing department or senior executive who has to sign off on expenditures; anyone can issue a purchase order. There is no hierarchy and no titles. In any area of expertise, some colleagues are recognised as more competent than others, and these differences are reflected in compensation levels. While there is internal competition, the rivalry is focused on who can contribute the most.

At the end of each year, every colleague develops a self-assessment document outlining how he or she performed against CLOU goals and KPI targets. Colleagues then elect a local compensation committee; about eight such bodies are created across the company each year. The committees work to validate self-assessments and uncover contributions that went unreported. After weighing inputs, the committees set individual compensation levels, ensuring that pay aligns with value added.

This model results in a collection of naturally dynamic hierarchies. There is no singular formal hierarchy; there are many informal ones. On any issue some colleagues will have a bigger say than others will, depending on their expertise and willingness to help.

STRUCTURE AND LEADERSHIP

- Unclear Organisational Structure

Synergy is a complex organisation with many different moving parts; generation, commercial, retail, wholesale etc, as well as many different site locations each embedded within different community cultures. There is no clear organisational structure outlining where each unit sits available for all staff. Any structures suggested have been disputed with there being many different perceptions among staff about what this structure should look like and, specifically, the hierarchy of these units.

"Many drivers, no pilot… no one knows who's directing or who's on top."

- Lack of Direction from Leadership and Inconsistency of Expectations

Alongside discovering that there is an unclear structure within the organisation, leadership roles and directions were also found to be unclear. Many staff mentioned issues with leadership such as they are not sure who to report to or who the decision makers were. There also seemed to be confusion around individual work expectations and a desire for more consistent procedures to align everyone to the same end goal.

> *"General lack of leadership at Synergy with people not knowing who to report to."*
>
> *"Leaders need to fully articulate their commitment to the environment".*
>
> *"Need better direction and idea of end place."*
>
> *"People aren't clear who the decision-makers are."*
>
> *"There seem to be different rules depending on who you are and which plant you work at. There are a lot of personalities that cloud management. Sometimes actions happen based on an off-the-cuff comment rather than a consistent procedure/process for everyone."*
>
> *"If everyone knows the standard at the start then it's much easier to ask people to do things as the expectations are there."*

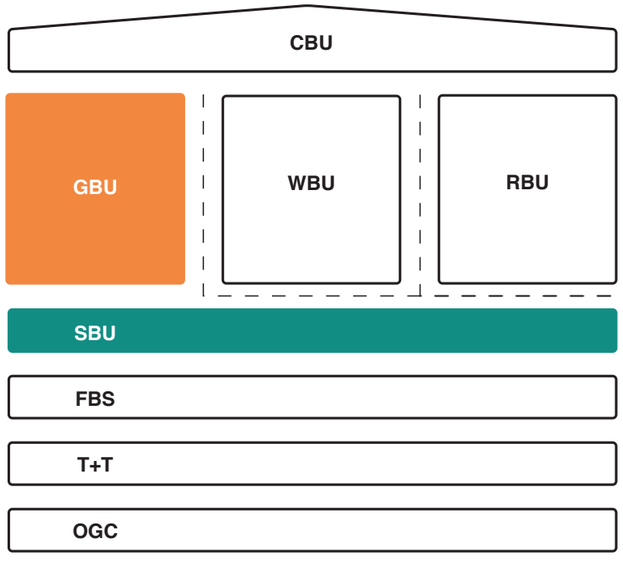


Figure 28: One iteration of an organisational chart they spurred debate amongst staff over the structure of Synergy

TRANSPARENCY AND COMMUNICATION

- Siloed Business Units

Furthermore, our findings show that Synergy is siloed with ineffective communication and low levels of transparency between business units and staff knowing very little about what is happening outside of their team and business unit. A key indication of this was when our team interviewed staff outside of SBU including people in many different management positions. We found there was no awareness of the Environmental Stewardship Project, despite the relevance that this project has to many teams and areas within Synergy outside of the SBU.

> *"I have no idea what goes on outside of SBU."*
>
> *"Need more organisational sharing and access to key stakeholders."*
>
> *"Lots of people at the Forrest Centre have never stepped foot on site."*

- Leadership: Top-Down/One-Way Communication

Our findings have also shown reports of limited communication from leadership around why strategies, work concepts and projects are happening. The result of this appears to create one-way communication that does not allow feedback and input from all staff. Our insights indicate that staff, particularly onsite, want more substance and understanding about why decisions are being made and how the work and tasks being given fit into the larger organisational strategy. Smaller initiatives can cause frustration when staff don't understand the motivation or larger strategy that is behind them. This is very apparent when it comes to the Forrest Centre versus site dynamics (explained in the section above). Onsite employees don't like the top-down approach of being told what to do by Forrest Centre staff without a clear understanding of what the larger goal or reasoning for it is. (A specific example of this is Muja staff being required to report 15 hazards/incidents per month but not fully understanding why this is necessary or important.)

> *"The board is making all these decisions but when was the last time that the board got on a minibus and went down there (to Muja) and had their board meeting down there?"*
>
> *"There's a lack of senior ownership of it. There's a lot of talk of people going into meetings at high levels and stuff, but you don't really see those managers coming out and actually explaining, 'this is what it means to me'."*
>
> *"They will come out and say this is our strategy and that's it … there's a disconnect between what comes out there and where it flows down to people who actually have to implement things."*
>
> *"What can you do to stop the us and them attitude? The communication needs to come from the top."*
>
> *"In other organisations, leadership teams were more personally attached to those values and talked about it personally, and how it is important for them… (Synergy) leaders have a lack of personal connection or investment in the strategy."*

- Challenges with Freedom of Information

Through our research, we found a lack of transparency is a key factor contributing to the limited levels of transparency between top management and other levels of staff. There is intense secrecy within top management partly due to government restrictions on sharing information due uncertainty around the last election and ongoing State Government announcements that relate to energy and emissions targets. This secrecy is creating misunderstanding and distrust between employees and top management.

> *"Government-owned makes things so much more complicated as there is a fear of information being leaked to the opposition."*
>
> *"Freedom of information is a huge issue with Synergy."*

- Missed Opportunities for Sharing Positive Environmental Stories

From our interviews, we uncovered many positive stories about staff and their environmental involvement at Synergy. These stories however are not being actively shared with all staff which is a missed opportunity to build a culture of pride for employees who are working in an environmentally conscious organisation. In addition, sharing such stories presents the opportunity to create a culture that celebrates the positive environmental impact and encourages proactive environmental thinking. Sharing these positive staff stories between all sites could also help to build a more relatable and

personal connection between the employees who work at different sites.

> *"Need to leverage good news stories more."*

> *"We found a rare orchid onsite (at Muja) and lots of people (staff) were genuinely interested, getting involved and coming to check on it."*

IMPLEMENTATION PROCESSES

- Organisational Strategy Implementation

Reported confusion around leadership direction can impede the implementation of ideas and the effectiveness of collaboration and codesign within Synergy. High-level organisational strategies are not being translated clearly into actionable steps across teams. For example, the environmental strategy has been shared across sites and teams; however, there seems to be little clarity around how staff are implementing this strategy in their daily tasks and roles.

> *"The environmental strategy doesn't have tangible actions on it … people could be aware but not necessarily acting on it."*

> *"People want to actually be part of implementing the final solution. People actively help design and implement this transition."*

- Challenges with Collaboration and Follow-through

A key finding that was uncovered during our research process was the issue with ideas not being implemented at Synergy. We are aware of the Continuous Improvement system at sites and the success this has had at Muja with 100 ideas implemented since beginning one year ago. Despite this, we still uncovered that the implementation of ideas is a general problem at Synergy (this may be a site-specific problem rather than across every site as the Continuous Improvement system appears to be working at Muja). This can be seen specifically with initiatives such as Green Champions where many great ideas come through but never get implemented. This may be due to time-poor staff, limited resources and dysfunctional processes which are hindering the actioning of ideas.

> *"Is it going to get implemented? Do people have time to implement it?"*

> *"There's been so much good work done in the past, like amazing work that needs to be implemented but people don't have time to implement it. So it's like what is Synergy's plan after this to actually implement it?"*

> *"Synergy really struggles with identifying solutions - you can identify all the risks in the world but what are you going to do to fix it?"*

> *"Taking action but 'not getting the effect out of it. People aren't clear who the decision-makers are."*

> *"It's hard to sustain interest. There are great ideas but lack of implementation and follow-through" (in regards to Green Champions Committee).*

CONCLUSION

The broader problems mentioned in this section are contributing to the challenges around establishing effective environmental stewardship within the organisation. Although Tandem Codesign was not hired to develop a new organisational structure, the existing structure and its subsequent barricades (such as top-down approaches, limited transparency, one-way communications and confusion around leadership roles) are restricting the organisation from reaching its goal of becoming environmentally mature. These insights therefore triggered further research to explore how these organisational problems may be overcome, the results of which will be discussed in upcoming sections.

"They will come out and say this is our strategy and that's it … there's a disconnect between what comes out there and where it flows down to people who actually have to implement things."

3.

Front-Facing, Recruitment, Procurement Processes and Inductions - Summary of Findings and Key Challenges

INTRODUCTION

Our research started within the environmental team however, we soon realised that Environmental Stewardship impacts many different areas of the organisation. One area where the importance of strong environmental communication is particularly evident is the front-facing end of Synergy. Messaging that goes out to customers plays a significant role in establishing Synergy's values and organisational identity. This in turn, affects the type of staff, customers, contractors, suppliers and project opportunities that are attracted to the organisation.

Another reason why the front end of Synergy has become a key focus in our project is due to the growing societal demand for action on climate change. There are expectations for large and influential organisations such as Synergy to communicate their environmental impact beyond simply producing green energy e.g. reducing carbon footprints, or making the process of producing solar panels greener. This change can be seen in the "green swing" in the recent federal elections, the new state government announcements around the environment as well as changes happening within Synergy. This includes the recent addition of the a new pillar to the organisational strategy encompassing a sustainability and social focus. With this growing expectation and attention put on Synergy, it is more important than ever for Synergy to communicate with the public and its customers about the actions being taken in the organisation to be environmentally conscious and sustainable.

Findings have been grouped into the following categories:

- **FRONT-FACING**
- **HIRING PROCESSES, TRAINING AND INDUCTIONS**
- **THE BACKEND: PROCUREMENT AND PRODUCTION PROCESSES**

FRONT-FACING

- Inadequate Outward Environmental Messaging and Positioning

As identified in our exploration of the Synergy website we noticed limited or 'hard to find' outward-facing information available regarding Synergy's environmental news, projects and positioning. However, from our interviews, we uncovered many positive stories regarding environmental impact, ranging from small-scale events such as finding rare orchids on site, to large-scale projects such as the EV highway and battery stations. We are aware that Synergy has faced restrictions on what can be shared with the public and their staff due to confidentiality around government announcements however, positive messaging should still be a priority, even if details are lacking.

> *. "Need to leverage good news stories more."*
>
> *"Synergy hasn't been overt enough with sharing its environmental positioning and projects with the public."*

- Public Perception of Synergy

Our team asked interviewed a range of people from the general public questions to gauge public knowledge about Synergy's environmental achievements and goals. These informal interviews included people whose ages ranged from 15 to 75 to look at public understanding across several generations The majority of answers were in a consensus of very little understanding of Synergy's environmental position or action. It is apparent that the public knows little about the organisation's work towards sustainability and renewable energy. We also noticed attitudes and reactions of scepticism towards Synergy and that their environmental initiatives.

> *The most common response we gathered followed this sentiment "I don't know anything about Synergy and the environment"*
>
> *"Synergy are the people who bill for Western Power"*
>
> *"Aren't they still using coal-fired plants?"*
>
> *When hearing the term 'environment' a member of the public brushed straight over the reference to Synergy, replying "I've never thought to look [into what Synergy does for the environment] but I do know that the Water Corporation is active in terms of climate change and I'm impressed by that"*

- The Website and Critical Customer Touchpoints

This section of research discovery has been noted in our methodology however it is aso important to note who this lack of clear messaging directly relates to customer knowledge. During our time spent navigating Synergy's website, we again found very little information regarding sustainability. Inputting the term 'sustainability' in the search bar brings back 19 results with the most recent post being from 2021. The results do not directly relate to Synergy's action on climate. The most relevant search result is the Sustainability Charter which mentions only leading and lagging indicators and refers to sponsorship and community partnerships as the ways to enhance sustainable business. Messaging around renewable or green energy only acknowledges the product Synergy is supplying, not what is being done by the organisation to be more environmentally conscious. Even so, this information is not present on the homepage and takes at least 4 clicks to access when searching. Not only is the website lacking in sustainability messaging but other service touchpoints such as Synergy bills and emails are lacking in sustainability information and messaging. Overall, messaging around reducing energy consumption is focused on cost reduction, not reducing environmental impact. In comparison to other energy companies in Australia, Synergy's inadequate environmental positioning and messaging becomes very distinct.

- Collaboration Between Teams and Transparent Organisational Communication

As previously mentioned, during our time talking to staff we learnt of many exciting and positives initatives that are planned for the future or past achievement which we see as a missed opportunity by Synergy to leverage more out of these "good news stories". More collaboration and communitcation is needed between the customer experience team and the environmental team to share these positive stories. This is where improving communication and transparency throughout the organisation will promote the process of information sharing allowing all staffing teams to be fully knowledgeable of Synergy's systems and processes at all times.

- Recruitment

Recruitment of environmentally minded staff is also affected by the lack of clear public messaging around Synergy's sustainability goals and achievements. As an example, during our interview sessions across the different floors of

Synergy, our team talked to a new employee who was very passionate about the environment. This staff member shared that they had originally turned down an opportunity to apply for a job at Synergy because they felt that Synergy did not align with their personal environmental stance. After being convinced by the recruitment agency to look at Synergys' plans for the environment, this staff member changed their mind and agreed that Synergy was the right place for them. Clearly front-facing messaging can align Synergy with people who are environmentally conscious and who can bring that passion the workplace. Influencing behaviour and instilling environmental values and mindsets into existing staff is a challenging process that requires time for staff to evolve. Recruiting staff who already have that mindset is an instant injection of influential environmental consciousness into Synergy in the meantime.

> *"We need people who can hit the ground running. Recruitment ads should be targeted towards these people."*

> *"It's difficult to influence behaviour with staff already on site."*

> *"I care about the environment … There was no way I was going to work for Synergy. After the recruitment agency showed me Synergy's plans for the environment I was quite impressed and realised it was actually the perfect place for me."*

HIRING PROCESSES, TRAINING AND INDUCTIONS

- The Hiring Process

While interviewing employees who have recently joined Synergy we found that there is limited or no consideration of people's environmental views and positioning during Synergy's hiring process. Many staff said that during their interviews there were no questions regarding their environmental values. The hiring process has many opportunities to reinforce environmental values in staff and filter out those who are not aligned through interview questions, job descriptions, cover letters etc. Similar to recruitment, by embedding and reinforcing environmental values right at the start of the employee journey at Synergy this environmentally conscious thinking can become embedded in the organisation rather than seen as just an add-on or upskill further down the line.

> *"Environmental attitudes need to be instilled right at the start of the journey at Synergy"*

> *"There should be a criteria for being environmental in interview questions e.g. What do you do in your everyday job that demonstrates that you are environmentally conscious?"*

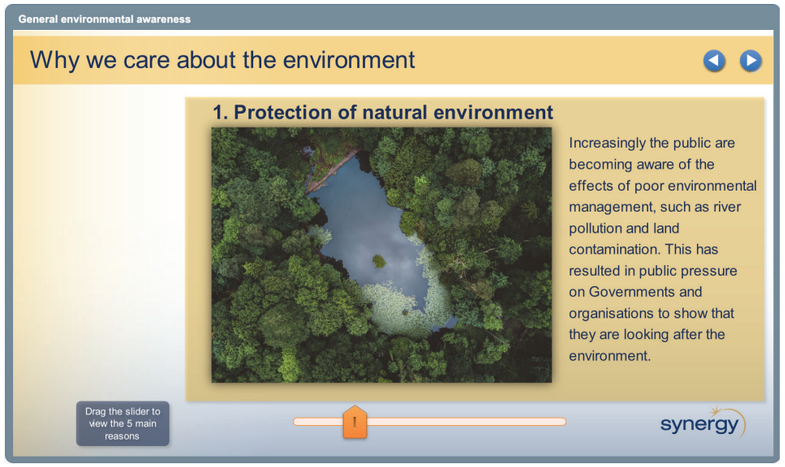
- Environmental Inductions

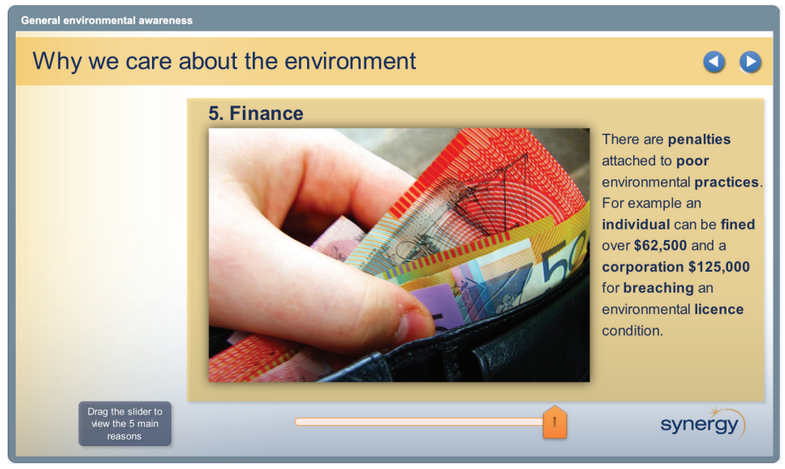
<u>The Content: Focus on Compliance</u>

Our team completed Synergy's environmental inductions and found that the content focused on minimising negative impacts rather than creating positive impacts. The message shared in these inductions is that legal compliance and corporate commitments is the main reason why it is important to protect the environment. Synergy's potential impact on the environment and its ecosystems are completely missing from all inductions. For example, the consequences of environmental incidents are explained in the context of breaching an environmental licence and receiving a fine. There is currently no explanation of why the environmental licences are in place as well as what the short and long-term effects an incident has on the surrounding flora and fauna.

<u>The Format: Repetitive & Unengaging</u>

The format and structure of these inductions are repetitive with very few engaging activities or visual elements such as videos, animations etc. We also found that the questions and activities did not evoke critical or proactive thinking. Most induction activities required a basic common sense to answer them correctly rather than a deep understanding of the environmental impact at Synergy.





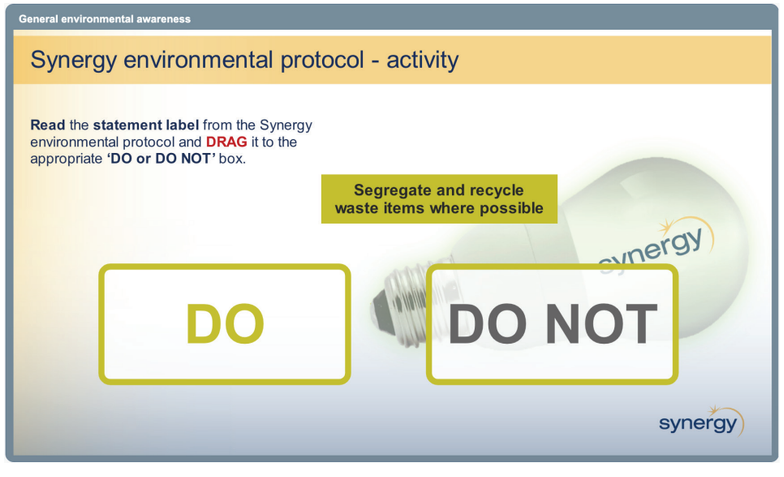


Figure 29: Screen captures of Synergy's online General Environmental Awareness Training

“There are companies out there that are trying to go not just carbon neutral but carbon negative. Why aren’t we aiming for that?”

THE BACKEND: PROCUREMENT AND PRODUCTION PROCESSES

- Procurement Processes on Site

During our research, we could not find in-depth environmental considerations within procurement processes. In other words, there seemed to be no evaluation process to determine whether external suppliers and contractors align with Synergy’s environmental strategy. In addition, contractors and suppliers entering Synergy’s procurement system are approved for the scope of their initial activity at Synergy. However, after being approved for that one activity they are in the system permanently and don’t need to be re-approved even if their activities change or increase in scope. Therefore, Synergy is not capturing the full risk assessment for site activities and their changing environmental impact. An attributing factor to why this may be occurring is the time pressure on staff to get suppliers and contractors approved. Delays in approvals may lead to project delays. The development of a thorough procurement process would also ensure that contractors become regular trusted partners of Synergy through their alignment with Synergy’s values. This arrangement would reduce transient contractual partnerships and instead create more effective long-term working relationships with contractual partners that could be sustained for many years to come:

> *“People don’t understand how the risk of activity can differ depending on the site.”*
>
> *“There’s lots of pressure to accept contractors and get approval to avoid pushing projects out.”*
>
> *“Only approving a supplier for one activity and not taking into account that enviro impact may change depending on the activity.”*
>
> *“Contractors often greenwash their actual position.”*
>
> *“Hard to manage contractors’ behaviour because they are in and out a lot. Sometimes contractors have a key role.”*
>
> *“Contractors are very transient and don’t make relationships. This reflects in their work as they often don’t take ownership.”*

- Environmental Impact of all Back-end Processes

During our interviews, we noted a strong concern and awareness coming from staff about the environmental impact of all back-end processes at Synergy. As mentioned in the introduction, this concern is also coming from the general public with a growing awareness of tactics such as greenwashing creating an interest in how 'green' products are being produced Questions from the public such as "how materials are sourced to manufacture solar panels?", or "How long do solar panels and batteries last and how are they disposed of at the end of their life?". Show concern and proactive thinking about these production processes. However, within the organisation there is little knowledge about production processes, highlighting the lack of transparency and knowledge flow within Synergy.

All products and processes in an organisation like Synergy should be assessed for environmental impact. Further research is needed here to establish what the current selection criteria are for products, processes and suppliers and how they might be improved to ensure all outside suppliers for Synergy are meeting the same environmental standard. More understanding is also needed of how manufacturing processes such as the sourcing of materials, disposal of waste etc. The concern that has arisen from staff indicates an opportunity for connecting passionate staff with work and projects in this particular area.

"I don't know what happens with wholesale and retail. With wholesale, are they buying clean energy? I certainly hope so. Do we expect our wholesalers to be meeting the same standard as us?"

"How are we changing the carbon that we are putting into the atmosphere? Why aren't we trying to do better or why aren't we trying to hit zero? There are companies out there that are trying to go not just carbon neutral but carbon negative. Why aren't we aiming for that?"

"Are we absolutely guaranteeing that what we're implementing is going to be better and not creating more problems elsewhere at the expense of something else that's more easily hidden.."

"Are we thinking long-term? How long does the battery last? Is it cheaper to buy a new car than to replace the battery?"

SUMMARY

Having a strong environmental position and clear outward facing messaging at Synergy will ensure a collective understanding around what Synergy stands for environmentally. It will create pride and positive culture towards environmental impact within Synergy. It will align all staff with environmental values and encourage proactive environmental thinking. It will attract staff who value the environment and already have proactive environmental thinking in place. It will assist in the development of long-term trusted partnerships with like-minded organisations who are aligned with Synergy's environmental strategy and it will filter out contractual partnerships with organisations who engage in greenwashing or efforts to disguise their poor environmental practices.

"I care about the environment ... There was no way I was going to work for Synergy. After the recruitment agency showed me Synergy's plans for the environment I was quite impressed and realised it was actually the perfect place for me."

4.

What Is Working Well
Summary of Findings and Key Challenges

INTRODUCTION

Throughout the research phase of this project, our team discovered many elements within Synergy that are working well. By investigating these areas we can better understand why these things are successful and how they might be expanded upon or adjusted to work well in different areas throughout the whole organisation.

Findings have been grouped into the following categories:

- **THE SUCCESSFUL HEALTH & SAFETY CULTURE TRANSFORMATION**
- **ENGAGED AND PROACTIVE STAFF CULTURE**
- **PINJAR: COMMUNITY AND PROACTIVITY**
- **ORGANISATIONAL CHANGES**

THE SUCCESSFUL HEALTH & SAFETY CULTURE TRANSFORMATION

We have looked into the highly praised health and safety culture transformation to understand why it works so well, how the environmental culture currently compares and how similar ideas and processes might be implemented in the Environmental Stewardship project to ensure its success.

- Mindset Change

A fundamental aspect of the health and safety transformation was the implementation of a neuroscience 'Belief-based leadership' program. This gave staff the tools to change their mindset and how they thought about health and safety rather than being told what to think about and what to do. Through this program staff were able to develop self-awareness about how they can manage their response to situations prompting a transition away from the attitude of "this is out of my control" to an empowered attitude of "what can I do?". The benefits of this program went beyond the H&S culture at Synergy and extended to building on people's life skills, positively impacting their personal life and relationships etc.

> *"You can't train culture".*

- Leadership Driven

A major element of the success of this transition is the engagement of leaders and their personal accountability and promotion of health and safety values. Key messages are continually reinforced by all leaders on all levels, helping to embed the new mindset throughout all systems and people on site.

> *"Health and Safety culture transition has been led by management and promoted by leaders."*

> *"The supervisors who push a safety message lead by example which trickles down to the guys on site who complete the work."*

- Long-term Incremental Change Process

This transition was a long-term process that took years of consistent and incremental work to see the change occur. According to our insights, it took about 6-8 months to develop true belief around what was initially wrong with the health and safety culture, and another 3 years of implementing the mindset transition to see real change in the organisation. This culture change required patience and persistence and to this day still requires constant engagement and improvement. Consistency of addressing health and safety has been created by embedding it into daily communication systems across sites including pre-start meetings and toolbox talks.

> *"Health and safety is pushed a*
>
> *cross the beginning of every meeting (on site)."*
>
> *"There are toolbox talks on site every Friday. The topics do change but three quarters would be about health and safety."*

- Personalisation

To personalise the health and safety risks to all staff, a variety of tools and systems were put in place. This includes the slogans such as the 'Big 5' which aims to connect why health and safety is personally important to each staff member depending on their values. Health and safety is discussed at the beginning of all morning meetings where there is a discussion of activities happening on site as well as what staff may have noticed outside of work.

> *"The Big 5 slogan is: I work safely for … my wife, dog, kids. It depends on the person and what big 5 is important in their life."*
>
> *" It could be about something that you saw on the weekend, it doesn't have to be linked to work." (referring to Health and Safety topics discussed at the beginning of morning meetings)*

- Key Differences between Enviro and H&S

There are many similarities with the health and safety transition that can be considered for the implementation of environmental concepts. However, there are key differences between health and safety and the environment which are important to consider:

Health & Safety incidents are tangible and immediate whereas Environmental impacts are long-term and intangible making them less personal.

Environmental hazards are more nuanced and may not be as easy to pick up whereas health and safety consider personal risk and therefore may be easier to identify.

> *"Environmental incidents don't currently have the same immediate and visible impact"*

ENGAGED AND PROACTIVE STAFF CULTURE

Throughout our research, we have discovered positive initiatives and culture at Muja. Although our team has not yet been able to visit the Muja site yet during this stage of the project, all team members have been to Muja on other projects and our interviews with staff have given us insight into the proactive, positive staff culture despite the upcoming closure of the station in 2030. This culture change can be seen in the gallop scores measuring staff engagement which have incrementally been increasing every few months since 2019. In the following section, we explore some of the attributing factors to why this culture change has been so successful.

- Workforce Transition Team

In lieu of the Muja station closing, there was an introduction of a dedicated workforce transition team on site which has created targeted and consistent change in the staff culture.

- Leadership Promotes Staff Engagement

Leaders at Muja appear to have strong values for staff engagement, community and proactive thinking which are therefore actively and constantly being promoted onsite and embedded into systems onsite.

> *"I am passionate about engagement and continuous improvement" - Muja Management*

> *"Nothing about us without us". The motto at the top of the whiteboard at Muja*

> *"Everyone looks after each other (at Muja)."*

> *"Muja encourages innovation and new ideas to come in."*

- Proactive Culture & Continuous Improvement

Muja encourages a proactive and agile culture through systems such as Continuous Improvement. Since it's been running there have been 180 continuous improvement ideas lodged at Muja with 100 being of these implemented (as of July 2022). A great example of a proactive environmental initiative is the re-use of the fly ash wastage for road bases and other construction projects.

- Positive Change in Environmental Culture

Muja is transitioning from the environmental policing culture to a more collaborative and proactive environmental culture. According to our insights, the culture at Muja used to be "I'm not environmental staff therefore it's not my problem." Environmental issues were then 'handballed' over to the environmental team who would then come onto site and tell staff what they needed to be doing. This created the perception of the 'Environmental police people' who were always telling staff what to do. This change may be partly due to environmental officers becoming part of the leadership team; a change into a more proactive approach to reporting as well as onsite environmental staff with good communication skills at Muja creating better relationships with on-staff.

> *"Why has the culture improved onsite?" - Environmental officers who are a constant voice encouraging people to do better and who engage directly with the front line to work collaboratively on solutions."*

> *"Compared to 10 years ago people onsite are more concerned with why an environmental incident has occurred."*

- Local Pride and Connection to Natural Environment

Muja is situated in the small rural town of Collie. This means that unlike any other site at Synergy, its staff are embedded in a tight-knit community creating a family-like environment where everyone looks out for each other. There is a shared community pride among the people of Collie. Many of the people who live there choose to do so because they have an appreciation for nature and enjoy recreational activities such as bush ewalks, fishing in the Collie River etc. The community likes to get involved in projects that add value to their town such as the desalination of the dam.

> *"It is important to be able to connect to the environment and community" - Muja employee*

"Why has the culture improved onsite?" - Environmental officers who are a constant voice encouraging people to do better and who engage directly with the front line to work collaboratively on solutions."

PINJAR: COMMUNITY AND PROACTIVITY

- Community Culture

During our team's site visit to Pinjar there we found that there was a great community culture with self-driven initiatives such as selling canned drinks onsite with profits put towards a staff gathering outside of work. There is also the 'Call Out' during the GTGD meeting section where staff can give positive recognitions and thanks for work well done as well as giving thanks to their workmates for their help and support.

- Proactive Thinking & Environmental Awareness

During our interviews, there were many suggestions made from staff onsite for proactive environmental approaches ranging from small-scale environmental initiatives such as recycling old uniforms to large-scale ideas such as capturing heat haze - a valuable resource produced from gas turbines that is currently wasted.

There was overall a genuine caring attitude and concern for wildlife fauna and flora by staff onsite. Many staff interviewed were aware of environmental issues such as climate change and genuinely wanted to make a difference.

ORGANISATIONAL CHANGES

- The New Strategy

The new organisational strategy that is being rolled out includes the addition of a 4th Pillar: Social Value. The strategy includes big targets such as the reduction of 2021 emission levels by 80% in 2030 and becoming carbon neutral by 2050. These changes follow the appointment of a new CEO and state government announcements regarding the transition away from coal-fired power in WA. Synergy is clearly repositioning itself to align with these initiatives and changes in world views.

- Addition of the 4th pillar, Social Value to the new Organisational Strategy
- Reduction of scope 1 and 2 emissions by 52% since 2004
- Renewable Energy Projects being developed at Synergy - battery projects, EV highway solar panels and wind farms, and other T+T projects.
- The new monthly board reports of environmental news and updates including lead indicators, hazards, emissions, percentage of waste recycled etc.

- New Environmental Team and Strategy

Most members of the environmental team are relatively new and we have noticed there is a strong enthusiasm and passion for their work towards creating positive environmental change at Synergy. The development of an environmental strategy - this is the first time the environmental team has created its own strategy. This includes the pillars - protect, remediate, inspire.

> *"Immediately I've felt that in the team that I'm in, everyone is very engaged." (New Enviro Team member)*

- Small Scale Initiatives

Throughout our research, our team have noticed positive small-scale initiatives taking place across many different sites. Some examples include hard hat recycling at Kwinana, collecting recycling for container change bins at Pinjar and coffee lid and soft plastic recycling across sites. This shows that there is environmental passion and interest by proactive staff who are taking the initiative to organise these initiatives. While there are valuable small-scale initiatives in progress, these ideas are not being implemented consistently and cohesively across the organisation. Relying on passionate people to volunteer (like Green Champions) is not enough to shift the organisation into an environmentally conscious mindset across the 1000-strong staff.

SUMMARY

Synergy staff have shown that they are capable of adapting their behaviour to adopt innovative approaches to organisational structures and systems. A range of Synergy staff have revealed their care for the environment through their cultural connections such as staff living and working at the Muja site in Collie. Time is needed to build understanding of environmental impact among staff and the individualised action that could be taken to overcome it. Staff need education on how to identify their own personal responsibility for instigating environmental stewardship and what that means for individual and team roles within Synergy. Overall, Synergy staff have demonstrated that they are enthusiastic about addressing their environmental concerns but they need strong leadership to clarify how they can get involved to drive positive change around environmental stewardship. Pathways which address how this might happen are explored in our concepts section.

WHAT DID WE DESIGN?

The following outputs have been developed based on the insights from our 20-week discovery phase. You will notice that all outputs require further deeper research and codesign sessions with essential staff and pilot testing in order for the output to be delivered successfully.

How to Approach the Outputs

ADDRESSING 5 KEY GOALS

Based on insights from background and ethnographic research, the following 5 goals have been devised to respond to opportunities and strengths that were identified that would help build the Environmental Maturity of the organisation. Each output has been designed to address two or more of these goals.

1. **CLARITY OF FUTURE GOALS**
   Making sure that all teams and individuals at Synergy understand what the organisation's goals actually are and how they relate to them.

2. **CLEAR COMMUNICATION OF INTENTIONS**
   Communicating how these goals will be achieved at an organisational, team and individual level. Making sure that everyone knows what they need to do in order to achieve their goals.

3. **CODESIGNING HOW GOALS WILL BE ACHIEVED**
   If staff are part of the process of developing their own plan for how to achieve their goals, they will be better positioned to achieve them.

4. **A COLLECTIVE PRIDE IN COMMUNITY AND THEIR WORK**
   Fostering more pride in what Synergy are currently doing to help the environment will help generate positivity around future goals.

5. **EMPOWERMENT OF INDIVIDUAL KNOWLEDGE**
   Encouraging staff to draw on their own skills and knowledge to achieve goals.

Look out for the above icons on the following pages that link each output to the corresponding goal.

Codesign is an essential part of the process as it will enable staff to take ownership of what they have built which establishes pride, leadership, a strong sense of community and therefore a natural sustainability of the output. Pilot tests of the concepts are also essential before implementation to scrutinise the new system and make adjustments before they are launched across the whole organisation. Availability of specific staff is critical to embedding the proposed concept into existing Synergy systems. We are not yet able to predict staff availability for concept development and roll out stages therefore we cannot fully understand how this unknown variable will affect the concept implementation timeline that we have suggested.

While our design process is a tried and tested one that we have used many times before, the outputs below have been developed and customised specifically for Synergy based on our observations, interviews, conversations and related research over a 20 week discovery period. These outputs are designed to help shift the environmental mindset of Synergy however further research, facilitation and engagement is necessary to ensure they succeed.

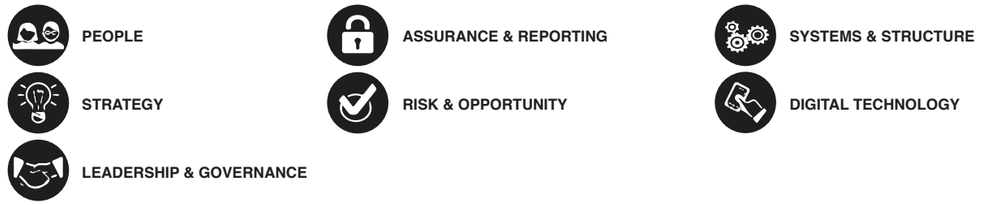
We have divided the output timelines into these 4 categories:

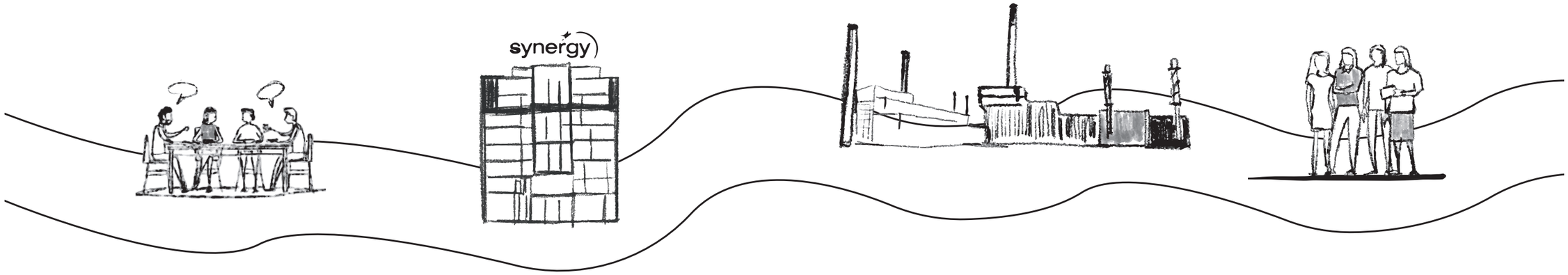
FIRST STEPS
This stage is where we gather information and staff that we need to prepare for the pilot or prototyping and testing stage. It will involve further research including interviewing, codesign workshops and desk research.

QUICK WINS
Where possible we have added a quick win which allows for a rapid and easy shift in attitudes for staff that will assist in achieving the KPIs associated with the EY auditing. Please see the key below for icons associated by EY Levers that have been considered when designing each output.

EARLY IMPLEMENTATION
In this part of the process we will codesign the outputs with relevant staff and develop a pilot test for an appropriate team, site or business unit. The pilot test will occur during this period with potential adjustments being made before it can be applied to the whole organisation.

ONGOING ENHANCEMENT
This extended stage proposes intermittent engagement overtime to allow for continuous improvement of the output to ensure it becomes successfully embedded into Synergy procedures.





JOINING SYNERGY

- 4. COMMUNICATION
- 5. HIRING PROCESSES

INDUCTION TO DAILY OPERATING

- 2. PERSONALISING ENVIRONMENTAL STRATEGY
- 3. ORGANISATIONAL DESIGN
- 4. COMMUNICATION
- 6. PROCUREMENT PROCESSES

SITE SPECIFIC ACTIVITIES

- 1. INTEGRATION OF TWO CURRENT SYSTEMS INTO ONE
- 4. COMMUNICATION
- 6. PROCUREMENT PROCESSES
- 7. ENVIRONMENTAL CHAMPIONS

REGULAR TEAM ACTIVITIES

- 2. PERSONALISING ENVIRONMENTAL STRATEGY
- 3. ORGANISATIONAL DESIGN
- 4. COMMUNICATION
- 7. ENVIRONMENTAL CHAMPIONS
- 8. INCENTIVES TO DRIVE MOTIVATION

Figure 30: Alignment of proposed outputs with the employee journey

LINKING OUTPUTS TO THE EMPLOYEE JOURNEY

In order to understand the significance of the 8 outputs we have proposed it is helpful to think of them in relation to the employee journey at Synergy. This is divided into two distinct parts; Beginning of the Employment journey (this includes Joining Synergy and Induction to daily operating) and Established Employment (this includes daily operating, site specific activities and regular team activities). Outputs that fall into the Beginning Employment part of the journey are crucial to establishing attitudes in employees from the outset of their employment. This sets the tone to attract and retain employees that align with Synergy's environmental values. Outputs that relate to Established Employment in the organisation play a role in up-skilling, motivating, and developing environmental values in existing employees. Organisational culture is not something that can be shifted overnight (we know that shifting Health and Safety Culture took 3 years), but we believe this multi-directional approach will pro-actively contribute to increasing the Environmental Maturity of Synergy.

1. Integration of Two Current Systems into One

How might we integrate the current EHS reporting processes to frame environmental risks as health and safety risks?

GOALS 2 3

KEY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

This concept looks to explore how we might integrate environmental language, understanding and action into similar existing processes such as health and safety reporting.

BACKGROUND

- Health and safety have developed an efficient reporting system identifying, reporting and actioning health and safety hazards. Environmental reporting currently sits outside of this system as it has only recently been introduced.
- The development of this output looks to merge health and safety reporting with environmental reporting in an effort to streamline work processes and generate an understanding that most health and safety hazards are also environmental hazards.

WHAT WE'RE PROPOSING

- This concept looks to develop cultural and site-specific language to prompt the identification of environmental hazards within health and safety hazards and their impact on the ecosystem overall. We know the importance of using language that resonates with staff as an effective way to engage them. We experienced this first hand in our kick-off session where we used word association activities to explore the meaning of 'Environmental Maturity'. This activity highlighted the importance of building understanding of complex terms through individual exploration and resulted in excitement around the project rather than the dread that had previously been elicited by the term.
- We then propose an exploration comparison of these two processes to understand if they could be streamlined, integrated or improved to reduce workload and free up capacity of the Environment Team.

HERE'S WHAT WE NEED FOR SUCCESS

- **Software development:** Whilst we have currently observed an overlap between environmental and h&s reporting there appears to be limitations in what the software, Empower can provide. This limitation may be overcome with software development during integration of the two systems.
- **Research:** For this concept to be successful we would require a deeper qualitative research process within all sites to better understand current reporting methods as well as potential resistance to the changes that we propose.
- **Co-design Partners:** Site staff who engage in reporting as well as management staff who overlook this reporting so that we incorporate and design for any cultural nuances which may affect how staff identify, communicate, report and action H&S/Environmental hazards.

IMPLEMENTATION TIME-FRAME:

- **First steps:** Strategy codesign workshops for the essential codesign partners to determine who should be involved in the pilot test.
- **Quick win**: A communication of the concept to the broader organisation to indicate that an upcoming change is occurring to reinforce the importance of the environment on personal health and safety.
- **Early implementation:** A pilot test (3 months from pilot test launch). We would nominate one site for a pilot test of the concept to examine and adjust the new system before it is launched across all sites.
- **Ongoing enhancement:** (12 months) Whilst we recommend a continuous ongoing enhancement for any organisational system, we foresee that twelve months should be ample time to adjust system specifics, ensure that all staff are comfortable with the expanded reporting system and that an environmental mindset is becoming common among staff who are using it.

QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Staff working on this concept raised the problem that by combining the two systems, Health and Safety may dominate the Environment or that the good work of Health and Safety will be diluted.
- Staff also mentioned that environmental issues were long-term (e.g. chronic illness rather than immediate incident). The environment also required a balancing act where some impact is acceptable, however this is less so for health and safety.

Our response: Ideally, by integrating these two systems in an effective way, the success of the Health and Safety system can be translated to the Environment without being diluted and these differences can be taken into account.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

Health and safety reporting is successful in part because the impacts have been framed as "personal". By moving environmental reporting at Synergy into the same system it helps staff understand that environmental impacts are personal too. This is one of the most successful ways to improve motivation around environmental stewardship as evidenced by members of the public who were personally impacted by climate change voting for parties with strong environmental policy in the last election (Climate Council, 2022).

Figure 31: Relating environmental risks to personal contexts through codesign of reporting systems

2. Personalising Environmental Strategy

How might we help Synergy staff to understand the Environmental Strategy within the context of their own work?

GOALS 1 2 3

KEY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

This concept looks to directly inform and potentially adjust staff perceptions around environmental stewardship. We look to embed Synergy's environmental strategy within all business units from top management down to operational levels.

- The purpose is to outline how the environmental strategy integrates into all roles, team and individual, within the organisation.
- This will empower all staff to individually understand their personal impact or their 'why' when it comes to environmental stewardship, practice and mindset.

BACKGROUND

- Based on research insights, we understand there is difficulty acitoning specific environmental strategies outide the Environment Team due to lack of sense making and translation to different operating contexts.
- This process therefore looks beyond assisting staff to be informed of Synergy's Environmental Strategy and instead seeks to empower staff to action environmentally driven project opportunities which they should then be able to identify due to their shift in mindset around environmental impacts within their roles.

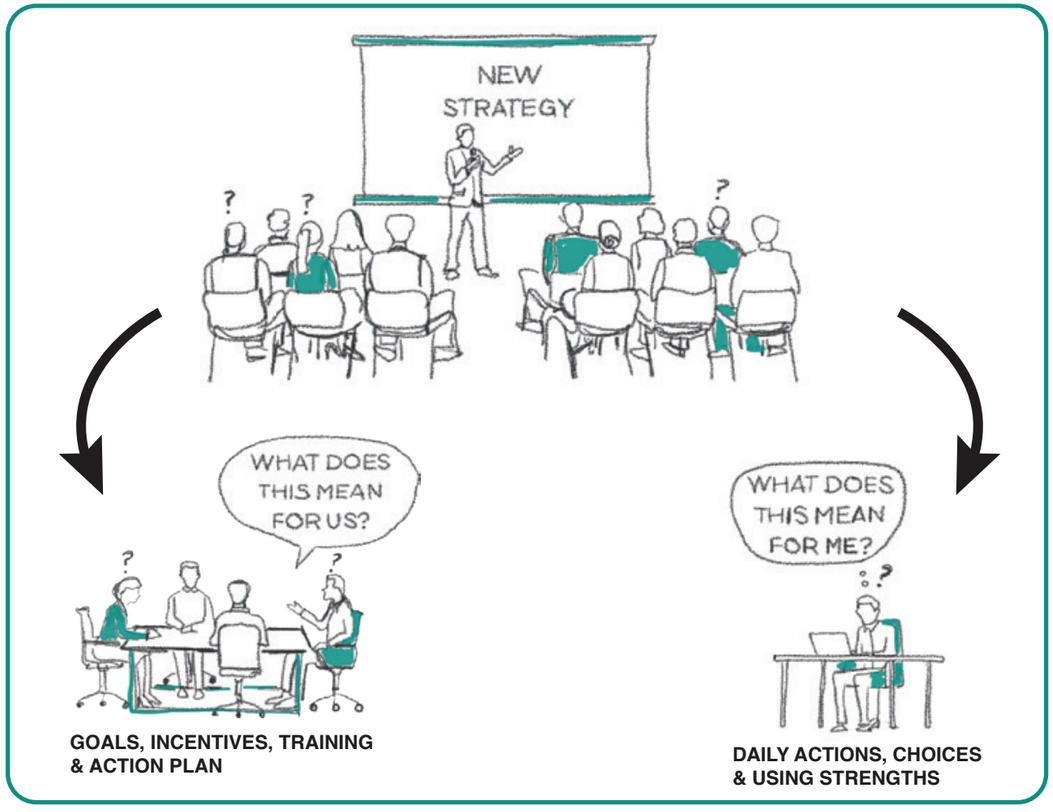
HERE'S WHAT WE NEED FOR SUCCESS

- **Research:** We have identified that teams function differently across the Synergy sites. Therefore, we would need further qualitative research to better understand how each team might wish to engage in communication and education for implementing Synergy's environmental strategy into their teams and individual roles. We would also need a deeper qualitative research process within all sites to better understand how Synergy's environmental strategy might be integrated and actioned by Synergy staff.
- **Co-design partners:** Co-designing will need to occur with all levels of staff to explore how the new environmental strategy not only affects individual roles but how it can assist staff and their associated teams to identify environmental practice opportunities within Synergy.

IMPLEMENTATION TIME-FRAME:

- **First steps** (1 month): One site and one specific area of the organisation would need to be nominated for the pilot test of the concept. A codesign workshop would be run to examine the environmental strategy, and establish team goals
- **Early implementation** (3-6 months): From the experience of the pilot test of the codesign workshop a more refined version will be formulated and then the workshops will be launched across all teams and all sites.
- **Ongoing enhancement** (12 months):To determine whether the initial goals are appropriate for 12 months after the implementation there will be some follow up to ensure that the goals remain in focus and need any changes.

Figure 32: Translating broad organisation wide strategies into individual and team actions and goals



QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Understanding gained by defining the ways in which each team across the organisation approaches working in an environmentally conscious way can be used to inform future staff induction activities and updating role descriptions and even job advertisements.
- The recently created Environmental Team Strategy could be integrated into this concept in conjunction with Concept 8: Incentives to Drive Motivation, by giving awards/AMPs for specific actions taken under each of the strategy 3 pillars: Protect, Remediate and Inspire.
- Defining staff expectations around environmental attitudes for recruitment and induction levels which link in with concept 5: Hiring
- Integrating with the Environmental Team Strategy into the rollout of the new Organisational Strategy as it is already very environmentally focused.
- An Environmental Section could be created in staff Employee Performance Plan.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

Synergy-wide strategy and goals around sustainability need to be quite general in its language as a way of allowing it to be applied to many different contexts. The problem with this type of goal is that it is vague and open to misinterpretation. It is important for each business unit, site, team and individual to know how those goals relate to them. The exercise of redefining in a personal way is an important way to motivate staff as they will actually understand what to do and how to do it.

3. Organisational Design

How might we structure Synergy staff and teams to promote transparency around environmental goals and increase the efficiency of teams?

GOALS 1 2 4 5

EY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

This concept endeavours to develop an organisational structure that reframes hierarchy to promote individual empowerment and project transparency for all staff across all positions.

- The creation of a staffing layout that improves transparency and ensures two-way staffing communications will also allow for individual empowerment of all staff which is essential for the environmental stewardship program to succeed.
- Repositioning staff into spaces that connect with all teams and management will provide more effective organisational spaces for collaborative project development and cohesive strategy alignment with Synergy's environmental policies.
- The purpose of this innovative organisational structure is to motivate staff from all areas to become proactive rather than reactive within their processes at Synergy. It will allow staff to move from simply following Synergy procedures to identifying and actioning environmental stewardship from within their own role.

BACKGROUND

- Currently, the organisational structure of Synergy is siloed into many teams and management levels.
- This structure is perpetuating a top down flow of information ensuring that lower levels of staff cannot engage in deep collaboration with upper management or other teams across the organisation.
- Project opportunities and areas of improvement are unable to be seen within the current structure.
- There is a feeling that business units' goals are not aligned with the company's high-level goals

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:** Organisational change is complex and requires time to shift into new working arrangements. Synergy has a 1000 strong staffing cohort which requires deep analysis to better understand how change might be brought about incrementally - to avoid disruption to current workloads.
- **Co-design Partners:** Staffing representatives from all teams and departments would need to come together to codesign how this new structure might work. We would also nominate to engage with staff from behavioural management.

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Interviews with upper management to determine the makeup of their team to determine which team would be best used for a pilot test. Further ethnographic research with staff to determine to better understand how change might be brought about. Further desk research into existing successful organisational design models of a similar nature to try to find systems that might align with Synergy. ensure an alignment with Synergy systems.

- **Early implementation** (6 months):Codesign sessions with staff who have been identified from the deep research phase to design a new less siloed organisational structure.
- **Ongoing enhancement** (12 months):Combination of observation and interviews to measure the success of this concept and make any adjustments needed.

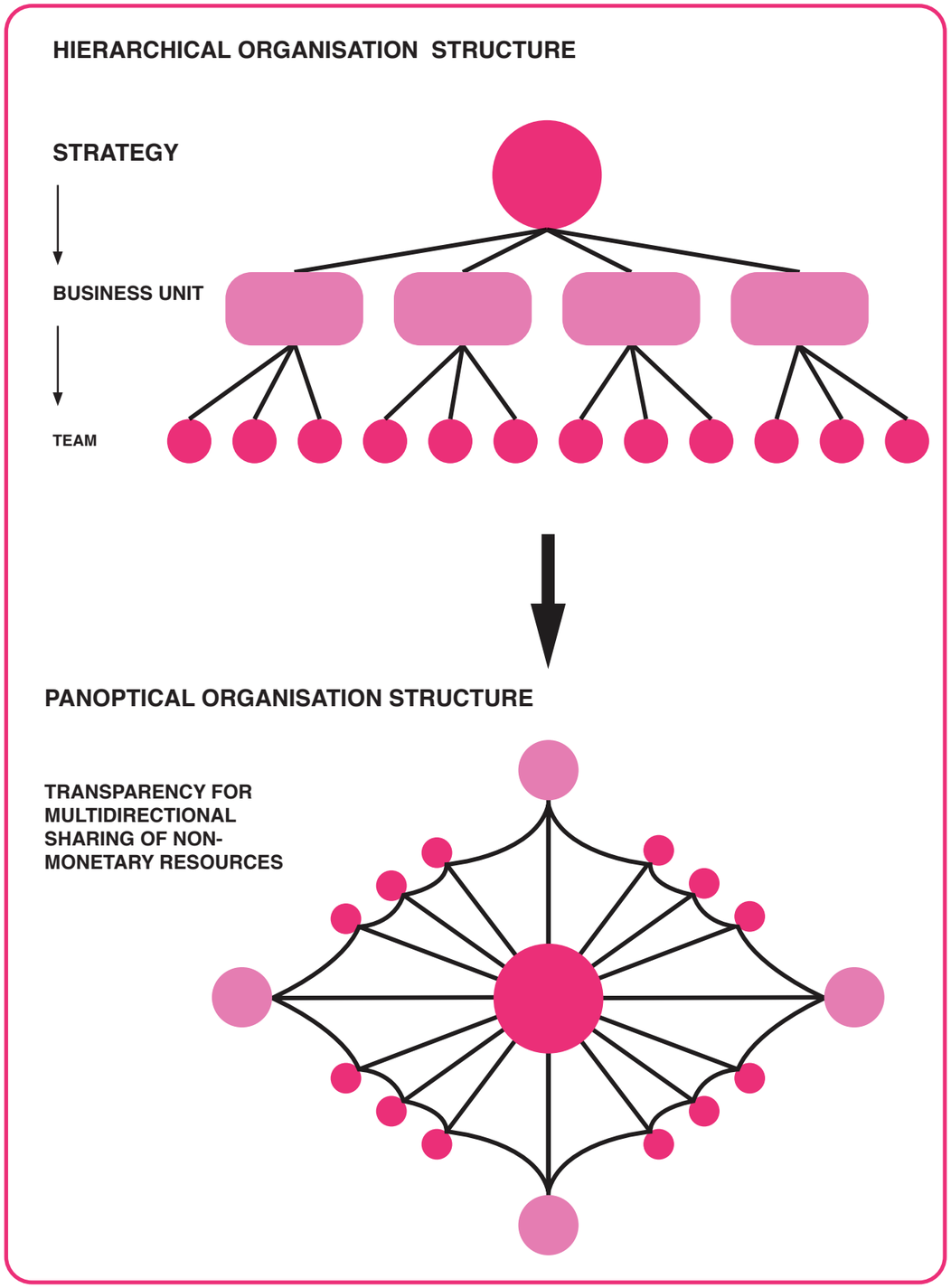
QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Suggestions around leadership were made including that organisational design should empower all individuals to be environmental ambassadors similarly to how Health and Safety currently is.
- It was mentioned that managers don't understand their environmental responsibilities and that the business unit's goals are not aligned with Synergy's high-level goals.
- A concern raised was that increasing organisational transparency may be a higher priority than changing organisational structure. However, these two concepts go hand-in-hand. The aim of redesigning the structure will ideally increase transparency if implemented effectively.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

While redesigning organisational structure might not seem directly related to shifting environmental attitudes it is directly related to how knowledge and ideas are shared. If staff are siloed into separate divisions, how do they know what their colleagues are doing or how to access information that might help them to change. Increased transparency across teams allows for sharing of non-monetary resources (knowledge, motivation, capacity and ideas). In this way, Synergy staff are able to harness their strengths and work cross-functionally to address environmental concerns that impact their roles. Without this structure, the apathy that comes with a sense that no one really sees what they are doing leads to demotivation and a sense that little actions don't count for much. We believe that increasing collaboration and movement of staff will also help to align business units in the way they prioritise and approach improving their environmental impact. Similarly to Concept 2, when goals and priorities are clear and aligned, Synergy are in the best position to establish themselves as a leading organisation when it comes to Environmental Maturity.

Figure 33: Shifting organisational structure to create transparency



4. Communication

How might we deliver environmental information in a way that is engaging, accessible and relevant for all Synergy staff?

GOALS 2 4

KEY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

The current environmental team are not skilled in the area of communication therefore they are not able to communicate their messaging effectively More effective interactive spaces and accessible language is required for effective delivery and uptake of environmental information.

Part 1: Channels

- Create a strategic communication system to assist the messaging around environmental stewardship and ensure staff receive environmental information in a way that integrates seamlessly into the way they carry out their roles. This includes face-to-face spaces as well as digital spaces.

Part 2: Content

- Closer collaboration between the environment team and the strategic communications team to translate scientific info into relevant and engaging content for the rest of the organisation. This would involve looking to 'translate' policy into language that resonates with context of staff and using visualisation to make sense of complex information

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:** Deep research into the current communication system. In this first phase Tandem Codesign has not had access to internal Synergy communications which means that the issues in full have not been identified. More research into this area is needed.
- **Co-design Partners:**Staffing representatives from all teams and departments would need to come together to codesign how this new communication system might work. The communications team would also be essential in terms of engagement on this concept to provide critical insight into the current communication system overall.

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Exploration of existing examples in Synergy of teams turning jargon heavy policy into plain English relevant to various roles within different sites. For example: We know that Pinja staff are passionate about Bush Forever around their site and the wildlife there, how can we show the impact on the things that they care about as a motivator? We would harness existing systems such as Sharewalls as a way to begin to promote the new way of presenting information to improve efficiencies in existing systems before we look at new systems of communication.
- **Quick wins** (3 months): A plan for how environmental messaging could be better implemented internally. This would include examples of data visualisation to personalise information, running of an in-person Sharewall with an agenda item to inpack an environmental policy or practice to ensure staff understand how it relates to them, visualisation of existing environmental data to support this.
- **Early implementation** (6-12 months):The new communication plan would be launched in phases over a 12 month period. The staff involved in the codesign of the plan would also be part of the implementation of it. Codesign sessions would explore better ways to engage staff in environmental information and communications would occur during this period for a better understanding of successful communication channels. For example: From our preliminary research we know that emails and Edison articles are not the most successful way of engaging staff and face to face communications are preferred.
- **Ongoing enhancement** (12 months): Combination of observation and interviews to measure the success of this concept and make any adjustments needed.

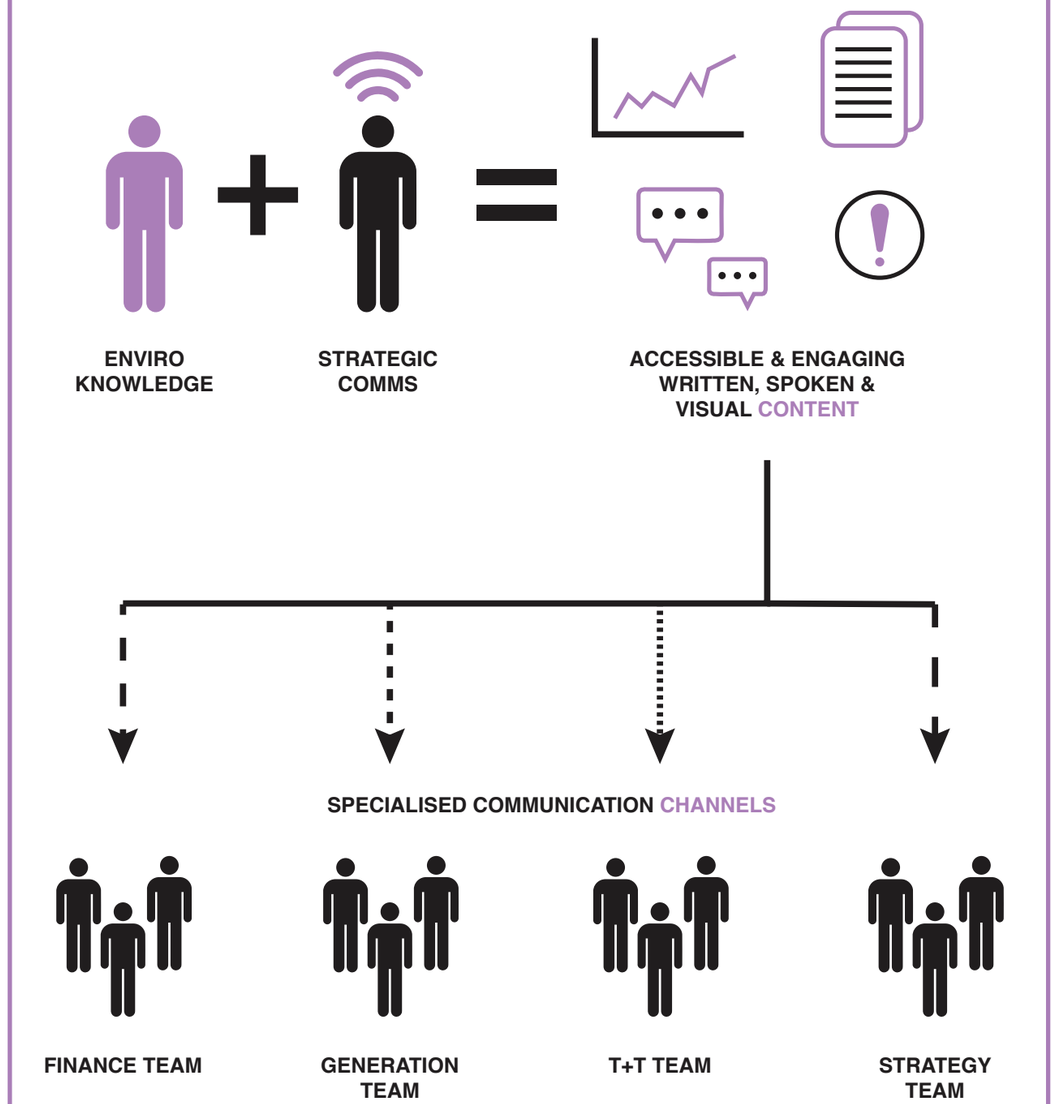
QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Staff were confused around the differences between the way we propose improving communication in terms of channels and content. This is why we have added the "quick win" of having an example of how a successful Sharewall might be conducted and some examples of how data could be visualised more clearly and in a way that shows personal impact, using language relevant to each team.
- The question was raised of how Synergy can utilise communication skills that already exist within different staff and teams. For example, written communication skills lie within the communications team but more specific engaging communication skills sit within the marketing team.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

There is much research that shows that data is much better used as a motivator and communication device if it is presented in a way that is easily understood and given a personal context. This approach can be useful to shift attitudes about Synergy and the role it plays in the environment. It can be used to not only communicate ways that goals have been achieved externally and internally but demonstrate what is left to do. Additionally, there is little active uptake of communication of this type of environmental messaging in passive systems like emails, stories in Edison and online meetings where staff can switch off. Some of the best information sharing occurs face-to-face in Synergy and this approach needs to be harnessed within the context of sharing environmental data.

Figure 34: Creating specialised environmental messaging with targeted, intuitive delivery



5. Hiring Processes

How might we attract and retain staff who align with Synergy's environmental values?

GOALS 1 2 3

KEY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

Part 1: External Messaing
This concept endeavours to develop external messaging via website, social media and other communication avenues that align with desired future employees.

Part 2: Hiring Staff With an Environmental Ethos
By vocalising Synergy's environmental ethos via job advertisements, selection criteria and interview processes, potential staff will recognise the importance of their own environmental stance.

Part 3: Staff Inductions
Synergy also needs to develop staff inductions and initial training processes that educate and align staff with Synergy's environmental values. This will create an in-depth understanding for all incoming staff across the organisation (not just from an operational and licensing perspective) on how they can be environmentally responsible and proactive in their roles.

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:**

  Part 2: Further research and understanding of the current hiring system used at Synergy to better understand the current language used and requirements for employment at Synergy.
  Part 3: Further research and understanding of all induction systems to examine their current format before development could commence.

- **Co-design Partners:**

  Part 1: We would need to work with the customer relations team to better understand Synergy's outfacing messaging communications and how they might be improved.
  Part 2: Initial interviews and then codesign of hiring language and requirements of staff with relevant staff.
  Part 3: We would also need to partner with teams who are responsible for the development of the induction programs, staff from behavioural management

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Interviews with key staff and analysis of the existing systems.

- **Quick wins** (3 months):

  Part 1: We recommend that positive environmental messaging is permanently featured on the Synergy home page and on the letterheads of Synergy bills as a good starting point. A simple tagline/campaign needs to be developed to associate Synergy with their environmental goals.

  Part 2: We recommend that all job descriptions and selection criteria include wording that gives importance to their environmental goals.
  In the interview process questions should be developed that elicit answers about the environmental ethos of the candidate.

Figure 35: Building environmental mindsets into hiring, recruitment and training processes

- **Early implementation**

  Part 3: Alongside the Learning Academy Team, we propose developing two induction programs (the environmental team induction and another team induction with no connection to the environment team) to gauge their effectiveness when prompting education and proactive behaviour upon completion.

- **Ongoing enhancement** (12 months): Combination of observation, interviews, and review of digital induction data should be used to assess impact of inductions.Completion by existing staff will be an important comparative point.

QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Staff suggested defining expectations of the Strategy to new employees for reaching environmental targets at the induction and recruitment level.
- Socially responsible activities could be shared back out to our community and WA public through ideas including using customers' monthly energy bill to share Synergy's wins such as the reduction in emissions, decreases in incidents and carbon offsets targets.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

Setting the standard that the environment is a top priority at Synergy is essential at all stages in the staff recruitment and induction. This means that new staff that start working for Synergy start with an attitude that will infiltrate through to existing staff.

6. Procurement Processes

How might we ensure that Synergy considers the environmental impact of its purchasing habits and procurement of contractors?

GOALS 1 2 4

EY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

This concept looks to explore how we might support the introduction of the ESG framework to the procurement of contractors who are hired to support Synergy's operations. This is to ensure that all associates of Synergy provide products and service offerings that align with Synergy's environmental strategy.

Part 1: Contractors
Examining the procurement processes used to determine the alignment of Contractors with Synergy's environemntal operating requirements and values. As contractors are such a large presence on site, it is crucial to amply environmental values in this cohort.

Part 2: Supply Chain of Products
Understanding the environmental impact of the supply chain for all resources purchased by Synergy. This would allow development of selection criteria for these various types of supplies used throughout the organisation sites to ensure Synergy is supporting businesses that have positive environmental and social impact that align with Synergy's values. This would also involve upskilling of the Supply Chain Team to carry this role.

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:**

  Part 1: We have observed that many procurement opportunities often occur in a reactive setting which ensures that staff have little time to investigate and therefore source environmentally aligned suppliers. This limitation may be overcome by introducing additional personnel to support a deepened inquiry into the values and belief systems of existing and potential product and service contractors. This could be established as an audit of existing procurement partnerships.

  Part 2: Supply chain assessments like Life Cycle Analysis (LCA) are time consuming, expensive and require specialist knowledge. We would research existing software that might help staff complete analysis by using question prompts that empower them with knowledge about what it is they may be ordering or using at Synergy.

- **Co-design Partners:** Procurement staff along with any staff members who make critical decisions about who to contract services or purchase resources from for Synergy operations, Supply Chain Team and the Sustainability Planning Team.

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Interviews with key staff and analysis research into the current procurement system and models of supply chain analysis. Codesign sessions with key staff to develop changes to the procurement system for testing.
- **Early implementation**: We would nominate one site for a pilot test of the concept to examine and adjust the new system before it is launched across all sites.
- **Ongoing enhancement** (12 months): Success of concept to be measures by initual auditing of procurement method to establish a baseline, followed by interviews of staff, and 12 month/2 year audit on contractors and resource suppliers to gage whether environmentally adopted mindsets have actioned the procurement of providers of products and services who align with Synergy's environmental strategies. We would use this time for positive messaging around the high environmental standards of the procurement system within the organisation and externally.

QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- Staff raised the question of how this concept could be expanded to not only consider the environmental impact of Synergy's purchasing habits but the wider sustainability impact, coinciding with the addition of the 4th pillar of Social Governance to the new organisational strategy.
- Upskilling of supply chain team would be a key part of the implementation process as well as creating more opportunity for staff to contribute ideas for suppliers and be part of this process rather than just being passive consumers of the products.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

If Synergy upholds a high standard of environmental compliance and leadership as an organisation, it is important that this extends to contractors who work for Synergy. Additionally, examining everything about the organisation right down to the washing liquid used in the kitchens is an essential part of making sure that the messaging around the importance of the environment is ubiquitous.

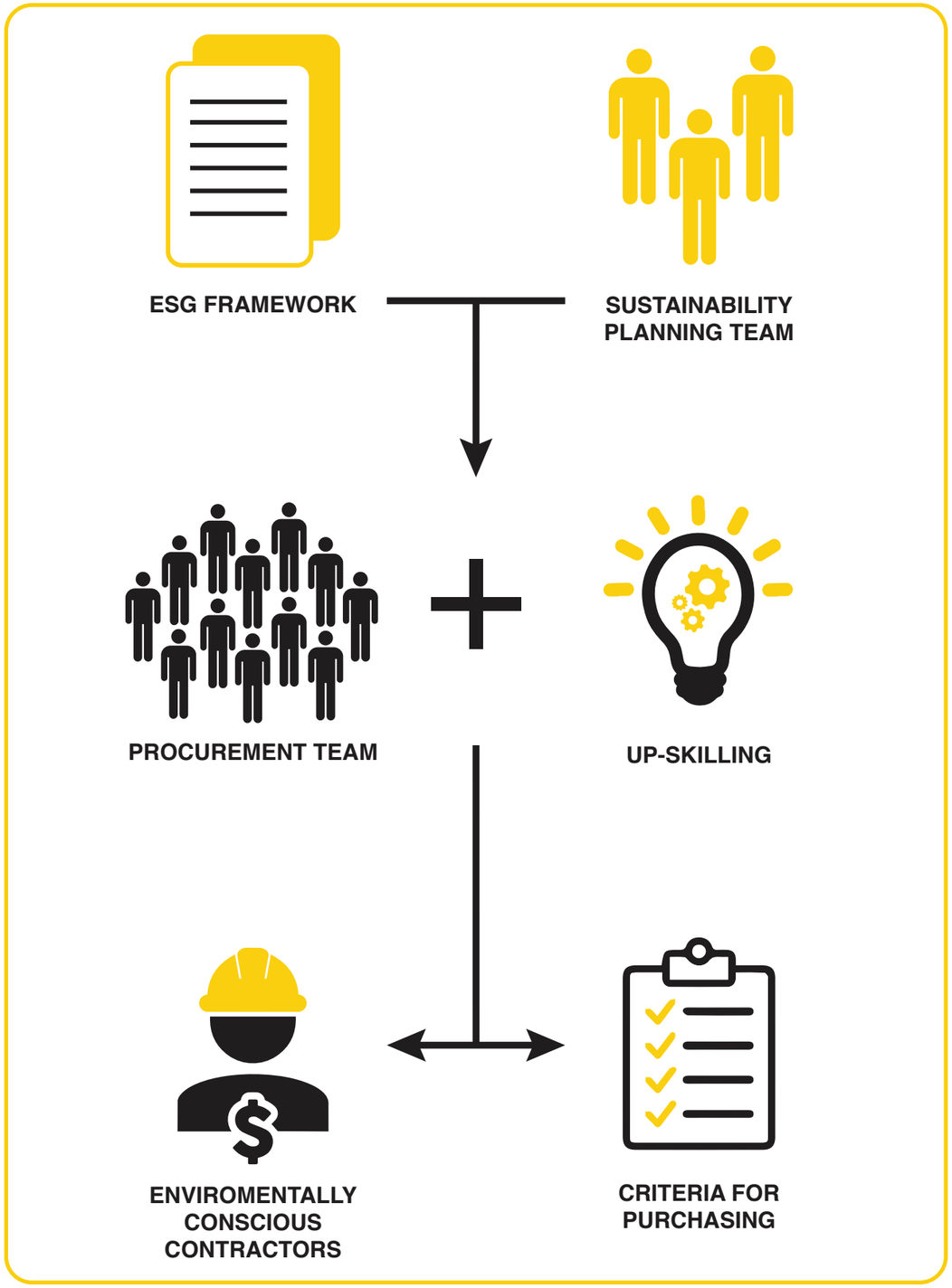


Figure 36: Developing environmentally responsible contractor and supplier pools

7. Environmental Champions

How might we embed environmental mindsets in each team throughout the organisation?

HERE'S WHAT WE'VE DESIGNED

This concept looks to activate environmental stewardship within individual staff and their associated teams to ensure environmental consciousness is embedded across all sectors of the organisation of Synergy.

- This idea proposes to nominate one staff member from each team across the entire organisation to be an environmental influencer or champion for their team. They would engage directly with the environmental team to workshop strategies to implement in their own team. To bolster the effectiveness of the environmental champion, we advise linking workshops to the current continuous improcement system to include the whole of the Forrest Centre

- **Note:** This concept would coincide with the expansion of the Continuous Improvement system across the organisation. This will ensure ideas are resourced appropriately and have dedicated staff for their implementation, resulting in follow-through of projects.

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:** For this concept to be successful we would require a deeper qualitative research with all teams to understand how they operate and what training would be needed. We suggest that the environmental team play an advisory role to support team representatives and SME's.

- **Co-design Partners:** The Environmental team, the Continuous Improvement team, Green Champions and representatives from all organisational teams (environmental champions), and nominated representatives from all organisational teams.

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Interviews with key staff to determine who should take on this role and how many staff are needed across the organisation. Codesign sessions with the environment team and the nominated staff to develop the system, and develop skills for staff involved. Additional research will be carried out to further understand the Green Champions meetings and Synergy's approach to Continuous Improvement.

- **Quick Wins** (1-3 months): Each team should nominate one staff member to join Green Champions, to start generating ideas and building skills for the role. This should help to take the burden off the environment team and shift the awareness and importance of Synergy's environmental goals into the broader organisation.

- **Early implementation** (6-12 months): We suggest commencing the concept with two teams to pilot test the environmental influencer format in a comparative arrangement. Data drawn from these initial tests would assist in supporting the testing of further teams before the concept is introduced to all teams across all Synergy sites.

- **Ongoing enhancement** (12 months): Combination of observation and interviews to measure the success of this concept and make any adjustments needed. 3 monthly environmental influencer workshop sessions to support representatives and their teams to continually improve, customise and streamline their approach to environmental stewardship. 12 month/2 year review of the environmental influencer program (continuous improvement)

QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- The Continuous Improvement System is currently working well for sites because they're not being told what to do, and can own their ideas. Forrest Centre can incorporate this system as well to empower teams and staff.

- The key to success for Continuous Improvement is passionate people being able to find each other in the organisation who have similar ideas. This would be supported by Concept 3: Organisational Design and creating more transparency and communication streams between different teams and business units.

- Transparency around the budget for Continuous Improvement would also be needed to understand how much is currently spent on CI and how much value they have received from it.

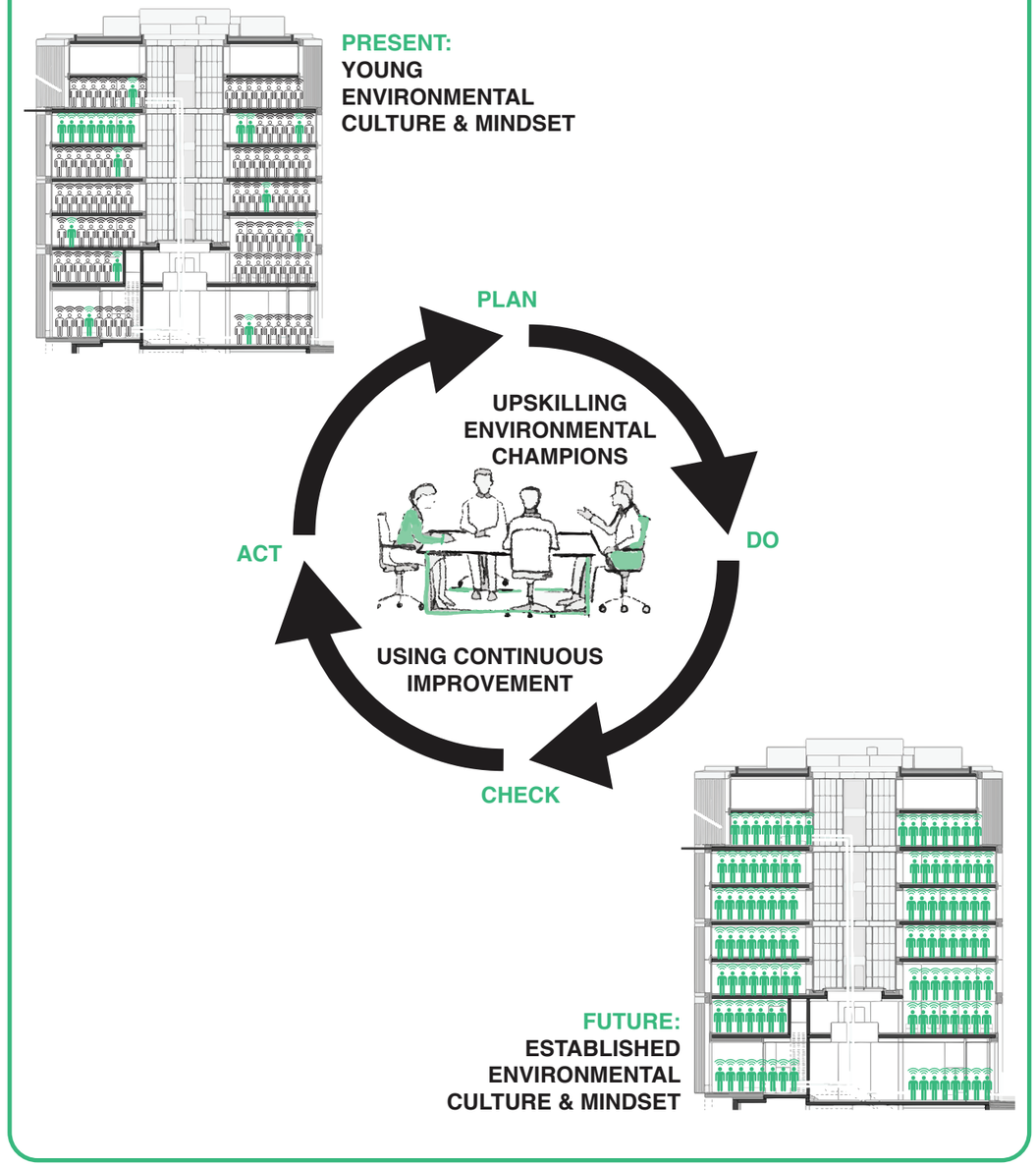
- Although Continuous Improvement does exist in some areas of Forrest Centre (eg. T+T), there is currently no process in SBU where staff can input an idea as there has been little attention, time or interest in this.

- A suggestion was made for including an area of innovation into Employee Performance Plans. There is also potential for Senior Leadership to integrate Continuous Improvement into their KPIs like Health and Safety is.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

Without staff embedded across the whole organisation who have an environmental leadership role the environment team cannot reach every team or have influence in areas that they do not fully understand themselves. We have learned that there is tension in parts of the organisation and resistance to the environment team, so by having a representative who can help with messaging in each team the information will be delivered in the language appropriate to that team and will be better adjusted to the context of their roles. It will help shift staff thefrom a reactive rather thanto a proactive culture around environmental compliance which is a large contributor to the existing negativity around the environment in some parts of the organisation. Additionally, knowledge from other divisions of the organisation is essential for the success of environmental change. Ideas related to improved environmental practice are much more likely to be actioned and followed up on if they are shifted into a central and pre-existing system like Continuous Improvement.

Figure 37: Using Continuous Improvement to build environmental mindsets across the organisation



8. Incentives to Drive Motivation

How might we motivate and empower staff through team and individual incentives rather than a focus on compliance?

GOALS 1 2 3 4

EY LEVER

YEAR 1 | YEAR 2 | YEAR 3

HERE'S WHAT WE'VE DESIGNED

This concept looks to incentivise staff and teams to encourage an environmental mindset through active competition either with themselves or with others.

- This strategy intends to reduce environmental impact by creating a playful but competitive environment for staff to measure their personal impact and team project impact.
- Individual staff and teams could set goals to reach such as reducing scope 3 emissions, reducing waste, engaging in more environmentally focused practices, etc and be rewarded once they reach them. (For example, think Apple watch exercise rings which allow you to set exercise step targets to reach or banking apps which allow you to create saving goals).
- This concept aims to move Synergy beyond reactive legislative compliance towards proactive environmental action.
- It also aims to build a positive team culture and nurturing comradery that takes pride in their work through reward for their incentivised results.
- Individual and team incentive concepts might vary across teams and sites in terms of personal interests and the goal settings that would be attached to those interests. This challenge can be overcome by allowing staff and staffing teams to create their own incentive goals to reach.

HERE'S WHAT WE NEED FOR SUCCESS

- **Research:** Deeper qualitative research process with all teams to better understand each team and what kinds of customised incentives might work for them. Research into ways that we could incorporate incentives into existing systems. We know that there is already an incentives system with AMPS, so we would start with this. We are seeking to elevate the incentives beyond the AMPS system and to gamify the incentives to make it more of a competition.
- **Co-design Partners:** Staff who know about the implementation of the AMPS system, staff from human resources and behavioural management, T+T Team

IMPLEMENTATION TIME-FRAME:

- **First steps** (3 months): Research into existing rewards systems and alternative approaches. Codesigning what a successful incentive system might look like for individuals and teams.

- **Quick Wins** (3 months): From the codesign workshop a simple version of the reward system would be trialled using a non-software reliant system (for example through emails, posters and meetings) to do an initial pilot test.

- **Early implementation** (6-12 months): We suggest commencing the concept with two teams to pilot test the new reward system. Data drawn from these initial tests would assist in supporting the testing of further teams before the concept is introduced to all teams across all Synergy sites.

- **Ongoing enhancement** (12 months): Interviews, engagement rates, 3 monthly workshops to support teams with the uptake, and 12month/2 year review of the incentive programs could be used to track effectiveness.

QUESTIONS AND INSIGHTS FROM CODESIGN SESSIONS

- This concept could be linked to Concept 4: Communication through visualising data and sharing this internally with staff to show successes or areas needed for improvement with environmental targets. Visual data could also be shared outwardly to the community for clarity and transparency.

- Implementing this concept effectively may rely on research into the psychology behind team incentives and having an in-depth understanding about what motivates staff at Synergy.

- The focus of providing incentives should be to share environmental responsibility rather than creating pressure on individuals alone to do this. This concept could therefore be linked to Concept 2: Personalising Environmental Strategy, as a way to implement the goals set for each team.

HOW DOES THIS IMPROVE SYNERGY'S ENVIRONMENTAL MATURITY?

Recognition of teams and individuals who have made a positive impact in an organisation is a great way to positively reinforce change. By setting goals related to the environment in teams and individually it shifts the challenge from something that must be done to something that can be rewarding and enjoyable for staff who are still struggling to motivate themselves to change their behaviour.

Figure 38: Utilising captured data and team strategies as incentives to drive motivation and celebrate wins

WHAT HAPPENS NEXT?

We understand that the Environmental Stewardship Program is one in a portfolio of many projects underway at this transitional time for Synergy following acceleration of the transition to renewables and the release of the current 2022-23 Strategy. By proposing a connected service system, it is beneficial to note the shared resources, data, and ideas that link the 8 outputs.

THE SERVICE SYSTEM MAP

The following service system map (see next page) highlights the connections between the 8 proposed outputs. These links have been classified as Data/ Resources, Ideas or Motivation. Whilst 8 outputs may, at a glance, seem overwhelming or resource intensive, we have shown how designing each in relation to one another results in sharing of resources and knowledge.

Supporting the entirety of the system is the Organisational Design that will provide the foundation for the collaborative and agile way of working that is encouraged by the rest of the system. Whilst this output is a cornerstone for the system, it is also the concept that we believe will take the most time to develop and implement. To clarify, whilst it retains a high level of importance, it does not necessarily mean it should be implemented first nor independently of the rest of the system.

Of more pressing importance in the timeline of implementation is the Personalisation of Environmental Strategy and the Communication System. At this transitional stage for the organisation following the release of the 2022-23 Strategy, we believe that these two outputs will have the most impact in supporting effective implementation of the strategy and gently introducing staff to the ways in which the Environmental Stewardship Program is relevant to their role.

Beginning with these three outputs sets a solid foundation of knowledge, research and employee investment which will support the delivery of the remaining outputs.

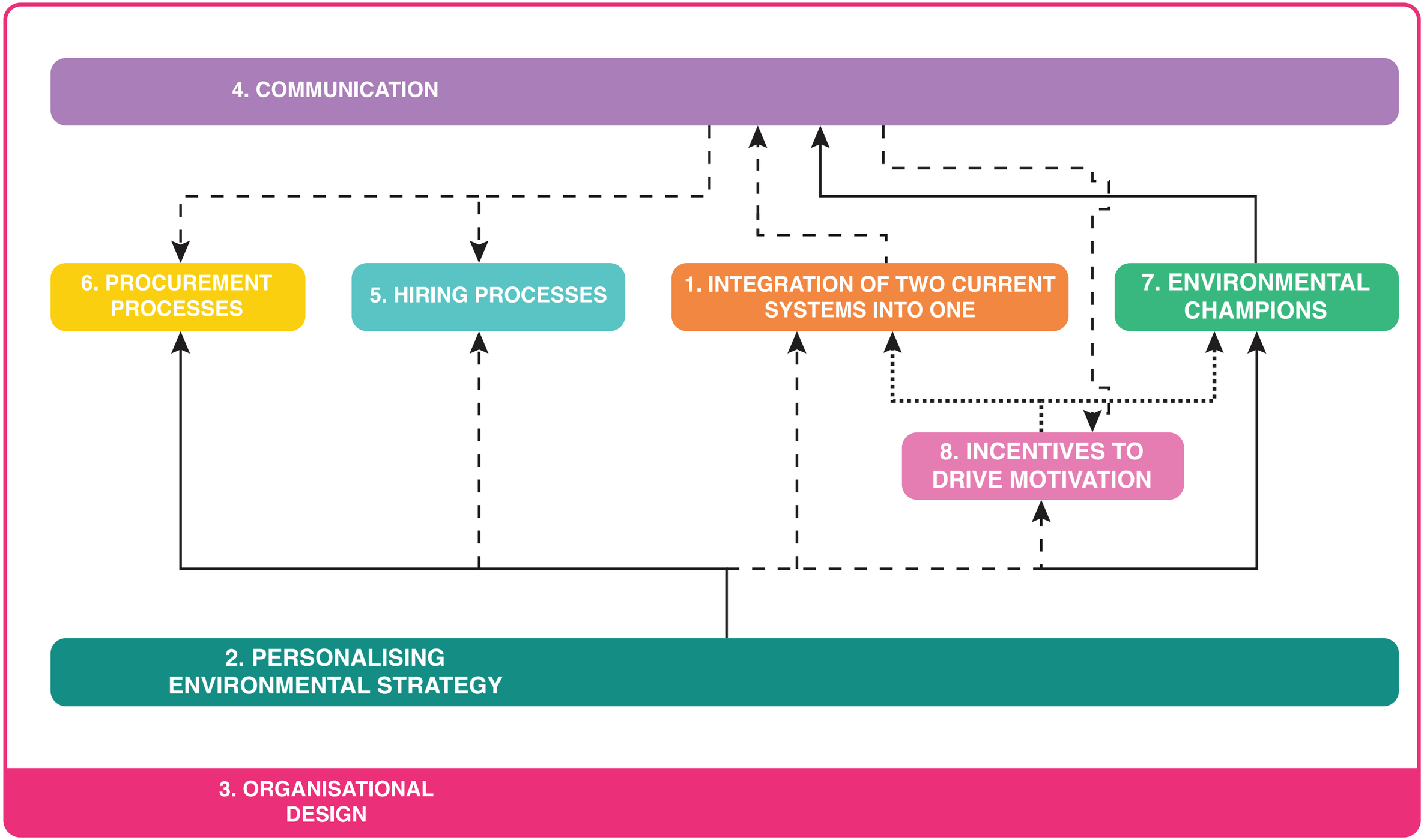


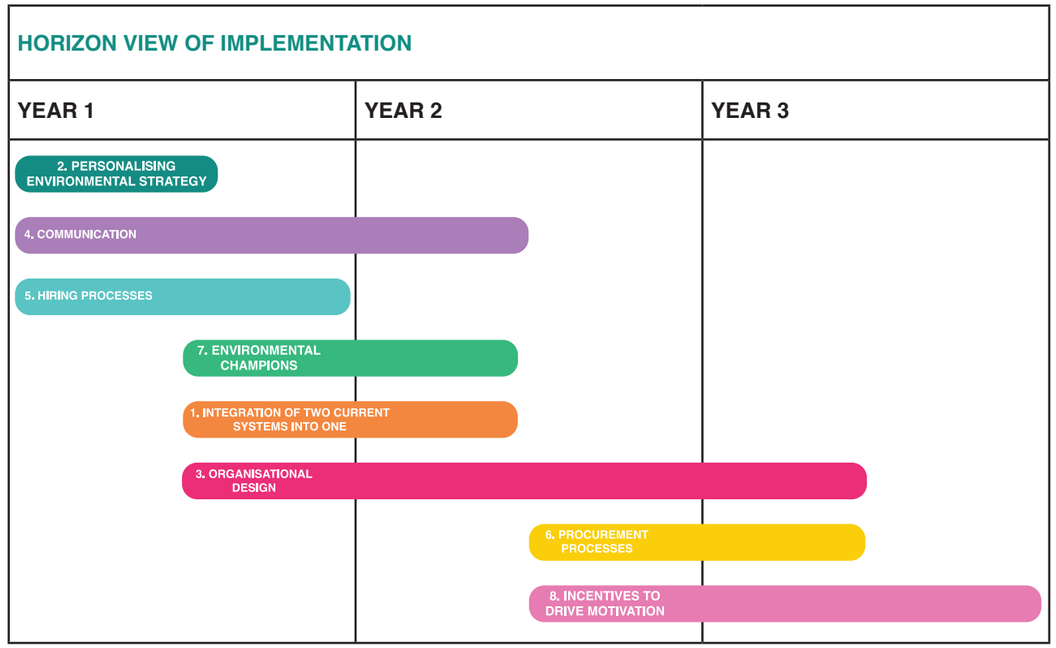
Figure 39: Service system map showing the connections between each output

Timeline for Implementation

Based on the preceding Service System Map and the prioritisation of outputs based on their level of impact in the system, we recommend the following schedule for implementation.

This Horizon View captures the suggested sequencing for implementation. Year 1 looks to build the foundations for communication and investment from employees whilst also delivering quick wins in effective Strategy Implementation and Hiring Processes. Year 2 looks to focus on development and implementation of processes that will support Environmental Maturity whilst applying knowledge of research to commencement of work on Organisational Design. Year 3 looks to use data collected from previous outputs to deliver systems to support integration of outputs in the long-term by solidifying processes and incentivising commitment.

In order to understand what is achievable for the organisation, we require further collaborative planning with the Executive Team to schedule the outputs against other organisational priorities.



Looking Ahead

Following submission and review of the comprehensive Proposal Document, Tandem Codesign requests that a collaborative planning session be scheduled with members of the Executive Team that would be interested in implementation of proposed outputs. This session should cover the following:

- Discussion of relevance of the outputs in regards to organisational priority
- Clarification of scope for accepted outputs
- Prioritisation and scheduling of accepted outputs for implementation
- Exploration of stakeholders and co-design partners for accepted outputs
- Documentation of required resources and access for accepted outputs

We thank you for the opportunity to consult on such an important piece of work and look forward to discussing findings and future planning for implementation!

Conclusion

As Stage 1 of this project ends, Tandem is excited to share the findings of this discovery phase and the proposed concepts to be implemented. We look forward to continuing to work with Synergy to dive deeper into each of these concepts and further understand how best to create positive change in this organisation. Organisational change is not easy. In particular making changes to green behaviour is difficult. Ik & Azeez (2020) state that it “requires complete overhauling of the entire system because it will touch all aspects of the organisation and likely to alter the status quo with a possibility for change resistance”. Obstacles like lack of teamwork, leadership, or rigid workplace cultures make implementing any changes a challenge.

There are also other factors such as human fear and overconfidence that come into play when organisations try to implement some changes, which makes it even more challenging for them to do it successfully. Irving Calish and Donald Gamache (2020) state that effective change management should focus on positivity. Essential is “an environment that does not punish mistakes” and rewards for success that are far greater than the penalties for failure. Understanding the human side to change management is essential. People are motivated by different things. Some people are more motivated by the desire to contribute to a greater cause and be a part of something bigger rather than the logic that the change would be more successful or productive (Cameron & Green, 2019).

By focusing on the people who work at Synergy and how they work, we believe that positive shifts can come. Throughout this project, our immersive people-oriented method for research has proved itself and can be seen by the relationships and trust built between tandem and synergy staff which has allowed us to bring forward true data. These concepts which are developed around this true data will ensure that the needs, desires and motivations of synergy and its staff will be met. Additionally, the proposed changes will have benefits beyond the scope of the environmental stewardship project and increase the overall efficiency and current systems and culture of Synergy in the long-term.

Better systems and communications within Synergy are particularly important as we are in a time of great social, environmental and economic change. Through organisational structural change and transparent communication, all staff and teams can work together towards the vision of a sustainable future for WA and for the planet. These changes will enable Synergy to operate in an optimal way to achieve a shared environmental vision. As mentioned in the introduction successful sustainability within a company “goes hand in hand with greater collaboration among many groups both internal and external to the operation.” With more codesign and a change from reactive systems to one that nurtures individual empowerment a new culture at Synergy can emerge that celebrates the environment. Although Synergy is just one energy company operating in an isolated nation, it is a large organisation with many employees in various locations and communities around the state. This wide-reaching influence gives Synergy the potential to create large-scale social change toward a sustainable future for generations to come.

REFERENCES

Abc.net.au. 2022. One of the Coalition's fatal errors? Ignoring young people. [online] Available at: https://www.abc.net.au/news/2022-05-24/young-people-mattered-at-this-federal-election/101092692 [Accessed 7 July 2022].

Adams, C., Frost, G., & Webber, W. (2004). The Triple Bottom Line: A Review of the Literature. In A. Henriques & J. Richardson (Eds.), *The Triple Bottom Line*. London: Taylor and Francis.

Agarwal, A., & Narain, S. (1993). *Towards Green Villages -a strategy for environmentally sound and participatory rural development in India Environment and Urbanization*. In W. Sachs (Ed.), Global Ecology: A New Arena of Political Conflict: Zed books.

Antonacopoulou, E. P., & Güttel, W. H. (2010). Staff induction practices and organizational socialization: A review and extension of the debate. *Society and business review*.

Aras, G., and D. Crowther. 2009. Corporate Sustainability Reporting: a Study in Disingenuity?. *Journal of Business Ethics* 87 (1): 279–288.

Bakker, C. A., Wever, R., Teo, C., & Clercq, S. D. (2009). Designing cradle-to-cradle products: a reality check. *International Journal of Sustainable Engineering*, 3(1), 2-8. Doi: 10.1080/19397030903395166

Basurto X, Blanco E, Nenadovic M, Vollan B (2016) Integrating simultaneous prosocial and antisocial behavior into theories of collective action. *Sci Adv* 2:e1501220. https://doi.org/10.1126/sciadv.1501220

Beelitz, A., and D. M. Merkl-Davies. 2012. "Using Discourse to Restore Organisational Legitimacy: 'CEO-Speak' after an Incident in a German Nuclear Power Plant." *Journal of Business Ethics* 108 (1): 101–120.

Bennett, N. J., Whitty, T. S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S., & Allison, E. H. (2018). Environmental stewardship: a conceptual review and analytical framework. *Environmental management,* 61(4), 597-614.

Bernstein, E., Bunch, J., Canner, N. and Lee, M., 2022. Beyond the Holacracy Hype. [online] Harvard Business Review. Available at: <https://hbr.org/2016/07/beyond-the-holacracy-hype> [Accessed 7 July 2022].

Bjorn, A., & Strandesen, M. (2011). The Cradle to Cradle Concept-Is It Always Sustainable. Paper presented at the

Bonda, P., & Sosnowchik, K. (2007). Sustainable Commercial Interiors. New Jersey: John Wiley and sons.

Brandon, P. S., & Lombardi, P. (2005). Evaluating Sustainable Development in the Built Environment. Oxford: Blackwell Science.

Brundtland, G. (1987), Our Common Future: The Report of the 1987 World Commission on Environment and Development, Oxford University Press, Oxford.

Business Council of Australia. (2004). Seeing between the lines: looking beyond the horizon.

Calish, I & Gamache, D. (2020) How to overcome organizational resistance to change. Management Review. 70

Cameron, E., & Green, M. (2019). Making sense of change management: A complete guide to the models, tools and techniques of organizational change. Kogan Page Publishers.

Cameron, S. and McAllister, I. (2019). The 2019 Australian Federal Election: Results from the Australian Election Study. Canberra: The Australian National University.

Carayannis, E. G., & Campbell, D. F. (2010). Triple Helix, Quadruple Helix and Quintuple Helix and how do knowledge, innovation and the environment relate to each other?: a proposed framework for a trans-disciplinary analysis of sustainable development and social ecology. International Journal of Social Ecology and Sustainable Development (IJSESD), 1(1), 41-69.

Carayannis, Elias G; Barth, Thorsten D; Campbell, David FJ (2012). "The Quintuple Helix innovation model: global warming as a challenge and driver for innovation". Journal of Innovation and Entrepreneurship. 1 (1): 2. doi:10.1186/2192-5372-1-2. ISSN 2192-5372.

Carter, A. J., Pisaniello, J. D., & Burritt, R. L. (2010). *Government sustainability policy in Australia: moving from rhetoric to effective implementation*. University of South Australia, School of Commerce, Centre for Accounting Governance and Sustainability.

Cetas, E. R., & Yasué, M. (2017). A systematic review of motivational values and conservation success in and around protected areas. Conservation Biology, 31(1), 203-212.

Connell, K. Y. H. (2000). Sustainability knowledge and behaviors of apparel and textile

Connelly, S. (2007). Mapping Sustainable Development as a Contested Concept. Local Environment, 12(3), 258-278. doi:10.1080=13549830601183289

CSIRO, Our Future World: Global megatrends that will change the way we live. The 2022 Revision. Canberra: CSIRO.

Dailey, W. (2016). Cone Communications Millennial Employee Engagement Study.

Deegan, C. 2004, March. "Environmental Disclosures and Share Prices – A Discussion about Efforts to Study this Relationship." Accounting Forum 28 (1): 87–97.

Diez-Busto, E., Sanchez-Ruiz, L., & Fernandez-Laviada, A. (2021). The B Corp movement: A systematic literature review. Sustainability, 13(5), 2508
doi:10.1108/14676371211262335

Dowling, J., and J. Pfeffer. 1975. "Organizational Legitimacy: Social Values and Organizational Behavior." Pacific Sociological Review 18 (1): 122–136.

Dyllick, T. and Hockerts, K. (2002), "Beyond the business case for corporate sustainability", Business Strategy and the Environment, Vol. 11 No. 2, pp. 130-141.

Dzisah, J., & Etzkowitz, H. (2008). Triple helix circulation: the heart of innovation and development. International Journal of Technology Management & Sustainable Development, 7(2), 101-115.

Elkington, J. (2018). 25 years ago I coined the phrase "triple bottom line." Here's why it's time to rethink it. Harvard business review, 25, 2-5.

Ellen MacArthur Foundation, & IDEO. (2017, 20 January 2017). New Circular Design Guide launched by the Ellen MacArthur Foundation and IDEO at Davos. Retrieved from https://www.ellenmacarthurfoundation.

Elliott, J. A. (1999). An Introduction to Sustainable Development (2 ed.). London: Routledge.
Environ Policy, 15, 81-91. doi:10.1007/s10098-012-0481-6
Environmental and Resource Policy (pp. 247-252): RFF Press.

EPA. Learn About Environmental Management Systems. www.epa.gov/ems/learn-about-environmental-management-systems

Estes, J. (2009), *Smart Green: How to Implement Sustainable Business Practices in Any Industry-And Make Money*, Wiley, Hoboken, NJ.

Evans, B., Joas, M., Sundback, S., & Theobald, K. (2006). Governing local sustainability. *Journal of Environmental Sustainability.*

Finkbeiner, E. M., & Basurto, X. (2015). *Re-defining co-management to facilitate small-scale fisheries reform: An illustration from northwest Mexico*. Marine Policy, 51, 433-441.

Freeman, R. E., and J. Mcvea. 2001. A Stakeholder Approach to Strategic Management. Available At SSRN 263511.

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2016). The Circular Economy–A new sustainability

Geng, Y., & Doberstein, B. (2008). Developing the circular economy in China: Challenges and opportunities for achieving'leapfrog development'. *The International Journal of Sustainable Development & World Ecology*, *15*(3), 231-239.
González-Benito, J., & González-Benito, O. (2005). An analysis of the relationship between environmental motivations and ISO14001 certification. British journal of management, 16(2), 133-148.

Gosling, J., Jia, F., Gong, Y., & Brown, S. (2016). The role of supply chain leadership in the learning of sustainable practice: toward an integrated framework. Journal of Cleaner Production, 137(1), 1458-1469.

Gouveia, L. B. (2016). *Holacracy as an alternative to organisations governance.*

Gray, R., D. Owen, and C. Adams. 1996. Accounting & Accountability: Changes and Challenges in Corporate Social and Environmental Reporting. Prentice Hall.

Harvard Business Review. 2022. First, Let's Fire All the Managers. [online] Available at: <https://hbr.org/2011/12/first-lets-fire-all-the-managers> [Accessed 7 July 2022].

Hindle, T. (2008). Guide to Management Ideas and Gurus. London: Profile books.

Ik, M., & Azeez, A. A. (2020). *Organisational Green Behavioural Change: The Role Of Change Management:* International Journal of Entrepreneurial Knowledge, 8 (1), 34-48. International Journal of Entrepreneurial Knowledge, 8(1), 34-48.

Jacobs, M. (1999). *Sustainable development: a contested concept. In A. Dobson (Ed.), Fairness and futurity: essays on environmental sustainability and social justice.* Oxford: Oxford University Press.

Kocmanová, A., and M. Dočekalová. 2012. "Construction of the Economic Indicators of Performance in Relation to Environmental, Social and Corporate Governance (ESG) Factors. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis 60 (4): 195–206.

Lasani, L. (2016). *The Current State of Green Building Standards and Interior Materials; Are These Processes Leading to Stronger Selections of Sustainable Materials?* , University of Waterloo.

Leiper, Q., Fagan, N., Engström, S., & Fenn, G. (2003, March). *A strategy for sustainability*. In Proceedings of the Institution of Civil Engineers-Engineering Sustainability (Vol. 156, No. 1, pp. 59-66). Thomas Telford Ltd.

Lewrick, M., Link, P., & Leifer, L. (2020). *The Design Thinking Toolbox: A Guide to Mastering the Most Popular and Valuable Innovation Methods.*

Leydesdorff, Loet (2012). "The Knowledge-Based Economy and the Triple Helix Model" (PDF). University of Amsterdam, Amsterdam School of Communications Research. arXiv:1201.4553. Bibcode:2012arXiv1201.4553L.

Maas, G. G., Huyghe, J., & Oostra, M. (2011). Criticism on environmental assessment tools. *International Proceedings of Chemical, Biological and Environmental Engineering*, *6*, 443-446.

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370–396. https://doi.org/10.1037/h0054346

McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things*. New York: North Point Press.

McDonough, W., & Braungart, M. (2013). *The upcycle: beyond sustainability - designing for abundance.* New York: North Point Press.

McGlone, T., Winter, J., & McGlone, V. (2011). Corporate Social Responsibility and the Millennials. *Journal Of Education For Business*, Vol. 86, pp. 195–200.
McKenzie, S. (2004). Social sustainability: towards some definitions. University of South Australia.

Medium. 2022. The Most Dangerous Notion in "Reinventing Organizations". [online] Available at: <https://medium.com/@jessicajprentice/the-most-dangerous-notion-in-reinventing-organizations-9032930295e2> [Accessed 7 July 2022].

Mendler, S. F., & Odell, W. (2006). *The HOK Guidebook to Sustainable Design New Jersey*: John Wiley and Sons.

Nolmark, H. (2007*). Re-thinking Sustainable Urban Development in an Era of Globalisation*, Resource Constraints

O'Connor, M. (2006). The "Four Spheres" framework for sustainability. Ecological complexity, 3(4), 285-292.

OECD. (2002). Sustainable Development: Critical Issues. Retrieved from http://www.oecd.org/greengrowth/sustai

Palazzo, G., and A. G. Scherer. 2006. "Corporate Legitimacy as Deliberation: a Communicative Framework." *Journal of Business Ethics* 66 (1): 71–88.

Penin, L. (2018). *An introduction to service design: Designing the invisible* (1st ed.). Bloomsbury Publishing.

Pernick, R., & Wilder, C. (2007). *The Clean Tech Revolution: The Next Big Growth and Investment Opportunity.*

Peters, A., 2019. Most millennials would take a pay cut to work at a environmentally responsible company. Fast Company,.

Peters, T.J. and Waterman, R.H. (2004), In Search of Excellence: Lessons from America's Best-Run Companies, Harper Collins, New York, NY.

Pomponi, F., & Moncaster, A. (2017). Circular economy for the built environment: A research framework. *Journal of cleaner production*, *143*, 710-718.

Powdthavee, N. N., & Frijters, P. (2017). Workers are happier with less hierarchy. LSE Business Review.

Quesenbery, W., & Brooks, K. (2010). St*orytelling for user experience: Crafting stories for better design* (1st ed.). Rosenfeld Media.

Rambaud, A., & Richard, J. (2015). The "Triple Depreciation Line" instead of the "Triple Bottom Line": Towards a genuine integrated reporting. Critical Perspectives on Accounting, 33, 92-116. doi:https://doi.org/10.1016/j.cpa.2015.01.012

Reay, S., McCool, J., & Withell, A. (2011). Exploring the Feasibility of Cradle to Cradle

Republic for Everyone, (2022). Who do you Believe. https://republicofeveryone.com/wp-content/uploads/2022/04/who-do-you-believe.pdf

Rodriguez, S. I., Roman, M. S., Sturhahn, S. C., & Terry, E. H. (2002). Sustainability assessment and reporting for the University of Michigan's Ann Arbor Campus. *Center for Sustainable Systems, Report No. CSS02-04. University of Michigan, Ann Arbor, Michigan*.

Ruff, C. L., & Olson, M. A. (2009). The attitudes of interior design students towards sustainability. *International Journal of Technology and Design Education*, *19*(1), 67-77.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.

Savitz, A. (2013). *The triple bottom line: how today's best-run companies are achieving economic, social and environmental success-and how you can too*. John Wiley & Sons.

Scott, W., R. (2010). Reflections: The past and future of research on institutions and institutional change. Journal of Change Management, 10(1), 5-21.

Scrimgeour, F., & Iremonger, C. (2001). M*aori Sustainable Economic Development in New Zealand*: Indigenous

Singhania, M., & Saini, N. (2021). Institutional framework of ESG disclosures: comparative analysis of developed and developing countries. Journal of Sustainable Finance & Investment, 1-44.

Sorice MG, Oh C-O, Gartner T et al. (2013) Increasing participation in incentive programs for biodiversity conservation. Ecol Appl 23:1146–1155. https://doi.org/10.1890/12-1878.1

Stickdorn, M., & Schneider, J. (2011). This is service design thinking. John Wiley & Sons Inc.

Suchman, M. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." Academy of Management Review 20 (3): 57l–610.

Sußbauer, E., & Schäfer, M. (2019). Corporate strategies for greening the workplace: findings from sustainability-oriented companies in Germany. Journal of Cleaner Production, 226, 564–577.

Tabernero, C., & Hernández, B. (2011). Self-efficacy and intrinsic motivation guiding environmental behavior. *Environment and Behavior*, 43(5), 658-675.

Tanwar, K., & Prasad, A. (2016). Exploring the relationship between employer branding and employee retention. Global business review, 17(3_suppl), 186S-206S.

Tilling, M. V. 2004. "Some Thoughts on Legitimacy Theory in Social and Environmental Accounting." Social and Environmental Accountability Journal 24 (2): 3–7.

Toman, M. A. (2006). The Difficulty in Defining Sustainability. In W. E. Oates (Ed.), The RFF

Van Beurden, P., and T. Gössling. 2008. "The Worth of Values—A Literature Review on the Relation between Corporate Social and Financial Performance." Journal of Business Ethics 82 (2): 407–424.

Walker, A. (2012). *Life-cycle thinking, analysis and design Designing for Zero Waste* (pp. 141-167). New York:

Wigmore, A., & Ruiz, M. (2010). Sustainability assessment in higher education institutions. *Ramon Llull Journal of Applied Ethics*, (1), 25-42.

Wilhelm, T. (2012). The incorporation of sustainable features in commercial property valuation. Journal of

Wilson, C. (2014). Interview Techniques for UX Practitioners : A User-Centred Design Method. Elsevier Science & Technology.

World Commission on Environment and Development, S. W. S. (1987). World commission on environment and development. *Our common future*, 17(1), 1-91.

Wunder S (2007) The efficiency of payments for environmental services in tropical conservation. Conserv Biol 21:48–58. https://doi.org/10.1111/j.1523-1739.2006.00559.x

Yeheyis, M., Hewage, K., Alam, M. S., Eskicioglu, C., & Sadiq, R. (2013). An overview of construction and demolition waste management in Canada: a lifecycle analysis approach to sustainability. *Clean technologies and environmental policy*, *15*(1), 81-91.

Glossary of Terms

ACTORS/CORE ACTORS

Actors among service design projects are the people that contribute and codesign the outputs and outcomes for product and service systems. Core actors are people within specific disciplinary, cultural or power positions that are integral to data gathering and decision making for a project.

AGILE

An iterative and collaborative design philosophy of rapid product and service development and production

BEHAVIOURAL CHANGE

Behavioural change is a description of all the activities involved in stopping existing patterns of behaviour and adopting new ways of working. It is a description of all the activities required for human learning.

BRIEF

A project brief is a document created through initial meetings, interviews, readings and discussions between a client and project team before any work begins. Throughout the project, the creative brief continues to inform and guide the work.

CONVERGENT THINKING

This process is systematic and linear. This kind of thinking is particularly appropriate in science, engineering, maths and technology. Convergent thinking is the opposite from divergent thinking in which a people generates many unique, design solutions to a design problem (Curedale, 2019).

CUSTOMER EXPERIENCE

Customer experience (CX) is everything related to a business that affects a customer's perception and feelings about it. Customer experience (CX) focuses on the relationship between a business and its customers. It includes every interaction, no matter how brief and even if it doesn't result in a purchase.

CASE STUDY

A case study shares what happened throughout the entire project process.This document assists to clarify what happened throughout the project time frame, the results of this project direction and what needs to happen in the future for this project to be sustainable.

CO-DESIGN

Co-design is a participatory process that aims to involve those impacted by a problem in the process of designing outcomes that will meet their needs (Stickdorn & Schneider, 2011). It is based on the understanding that in order to generate services that are valuable and meaningful, we must design with people, not for people (Penin, 2018). Success of co-designing relies on using engagement tools that are tailored to the dynamic of the co-design team, working to create an environment where power is evenly distributed, and emphasis is placed on the value of lived experience (McKercher, 2020).

COLLABORATION

Collaboration is to work with another person or group to achieve or do something; to work jointly with others or together especially in an intellectual endeavour.

COMMUNITY DEVELOPMENT

Community development is a process where community members are supported by agencies to identify and take collective action on issues which are important to them. Community development empowers community members and creates stronger and more connected communities.

CONCEPTUALISATION

the action or process of forming a concept or idea of something; an abstract idea or concept of something.

CULTURE

The ideas, customs, and social behaviour of a particular people or society.

CULTURE IMMERSION

Cultural immersion is when a researcher explores a location or environment for a particular period of time to gain a deeper understanding of a cultural context.

DELIVERABLE

Is something that can be done, especially something that is a realistic expectation. A deliverable can be delivered, especially to fulfil a contract.

DESIGN

To design is to plan and make decisions about (something that is being built or created); to plan and make (something) for a specific use or purpose; to devise for a specific function or end.

DESIGN PROCESS

Is the way by which something can be designed. Design process involves planning and constructing design outputs and outcomes via a series of technically arranged project stages using a variety of creative methods.

DESIGN THINKING

Design thinking is an innovative problem-solving process rooted in a set of skills. It is human centred at its core, encouraging organisations to focus on the people they're creating for, which leads to better products, services, and internal processes.

DIVERGENT THINKING

Divergent thinking is a thought process or method used to generate creative ideas by exploring many possible solutions. Divergent thinking occurs in a spontaneous, free-flowing, 'nonlinear' manner (Curedale, 2019).

EMPATHY

Empathy is sometimes defined as 'standing in someone else's shoes' or 'seeing through someone else's eyes'. It is the ability to identify and understand another's situation, feelings and motives (Curedale, 2013).

EMPATHY MAP

Empathy map is a tool that helps the design team empathise with people they are designing for. You can create an empathy map for a group of people or a persona (Curedale, 2013).

EXPERIENCE DESIGN

The application of design processes with the goal of creating an appropriate experience for the person interacting with the product. This process begins with understanding the needs and wants of the user (Curedale, 2019).

FACILITATION

Facilitation is the art of moving a group of people through meetings, planning sessions, or training, and successfully achieving a specific goal. To facilitate is to help, improve, or make something easier.

FEEDBACK

Feedback is the transmission of evaluative or corrective information about an action, event, or process to the original or controlling source. It is information about reactions to a product, a person's performance of a task, etc. which is used as a basis for improvement.

FOCUS AREAS

Focus areas are the identified project spaces of scope which may need analysis, adjustment or development.

HUMAN CENTRED DESIGN

Is based on a philosophy that empowers an individual or team to design products, services, systems, and experiences that address the core needs of those who experience a problem.

IDEATE

The formation of ideas or concepts into tangible products or services.

IDEOLOGY

The body of doctrine, myth, belief, etc., that guides an individual, social movement, institution, class, or large group.

INDUSTRY

Any general business activity or commercial enterprise.

INNOVATION

Innovation is something new or different that is being introduced such as the introduction of new products, systems or methods.

INSIGHTS

Insights are an understanding of previously unforeseen issues that shed light on or help to alleviate a problem.

INTERVIEW

An interview is a conversation where questions are asked to obtain information (Curedale, 2013).

ITERATIVE

A cyclical process where improvements are made to a concept or idea regardless of the design phase.

JOURNEY MAPPING

Journey maps are used to map the relationship between a customer and an organization over time and across all channels on which they interact with the business. Design teams use customer journey maps to see how customer experiences meet customers' expectations and find areas where they need to improve designs.

METHODOLOGY

A set or system of methods, principles, and rules for regulating a given discipline.

MILESTONE

A significant event or stage in the process, progress and/or development of a project.

Multidisciplinary Combining or involving several academic disciplines or professional specialisations in an approach to a topic or problem

NON-DISCLOSURE AGREEMENT

A non-disclosure agreement is a legally binding contract that establishes a confidential relationship. The party or parties signing the agreement agree that sensitive information they may obtain will not be made available to any others. An NDA may also be referred to as a confidentiality agreement.

ORGANISATION

An organised group of people with a particular purpose, such as a business or government department.

OUTCOMES

The end results, consequences or impacts of a project or issue. Outcomes usually manifest as changes in systems, human behaviours, or both.

OUTPUTS

Outputs are the tangible products that are created to address or communicate a problem, product or system.

PARTNERSHIP

A partnership is an association of persons joined as partners in business, projects or other joint ventures.

PERSONA

A persona is an archetypal character that is meant to represent a group of users in a role who share common goals, attitudes and behaviours when interacting with a particular product or service (Curedale, 2013).

PRECEDENCE STUDIES

The sourcing and contemplation, of related and relative, past and present influences, that aim to serve and provide inspiration and help with the justification of an idea.

PRESENTATION

The sharing of project information in an informative and explanatory setting. Presentations typically include oral presenters supported by visual aids to bring clarity to project specifics such as gathered data, design process, project outputs and outcomes.

PROBLEM STATEMENT

A problem statement is used in research work as a claim that outlines the problem addressed by a study.

PRODUCT

A person or thing produced by or resulting from a process, as a natural, social, or historical result. It can be the totality of goods or services that a company makes available otherwise known as an output.

PROPOSAL

In continuation from the project brief is the development of a project proposal. A project proposal discusses what happened during the development of concepts during the design process and demonstrates the proposed outputs that might be implemented.

PROTOTYPE

A prototype is a rudimentary working sample, model, mock-up or simulation of the actual product.

RESEARCH

A diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, applications, etc.:

ACADEMIC RESEARCH

Academic research is a systematic process of collecting, analysing and interpreting information (data) in order to better understand a phenomenon about which we are interested or concerned. It is a lengthy process, focused, specific, intensive, accumulative and educational.

DESKTOP RESEARCH

Desktop research can be defined as a type of market research where the information about the topic in research is available in printed form or published on the internet, in newspapers, magazines, and government reports is collected and analysed. Desktop research is also known as secondary research.

ETHNOGRAPHIC RESEARCH

Qualitative research study looks at the social interaction of users in a specified environment. The research provides an in-depth insight into the user's views and actions along with the sights and sounds they encounter during their day.

ETHNOGRAPHIC DATA

This can be qualitative and quantitative, including interviews, recordings, photographs, or shadowing over people, customers and/or employees.

PRIMARY RESEARCH

Primary research, also called field research involves collecting data first-hand created during the time of the study. Primary research can include questionnaires and interviews and direct observations (Curedale, 2019).

SECONDARY RESEARCH

Research data that conveys the opinions and experiences of others. Secondary research is the most widely used method of data collection. Secondary research accesses information already gathered from primary research (Curedale, 2019).

QUALITATIVE RESEARCH

Qualitative research seeks to understand people in the context of their daily experiences. It uses ethnographic methods including observation and interviews and seeks to understand questions like why and how (Curedale, 2013).

QUANTITATIVE RESEARCH

Quantitative research uses mathematical and statistical methods. Findings may be expressed as numbers or percentages and uses methods such as surverys and questionnaires (Curedale, 2013).

REFLECTION

Reflection can be defined as a fixing of the thoughts on something or careful consideration. Design reflection is used as contemplation to generate objective perceptions which can be challenging when heavily embedded within a project process.

REPORT

A report is an account or statement describing in detail an event, situation, or the like, usually as the result of observation, inquiry, etc.

SERVICES

Services are the non-physical, intangible parts of our economy, as opposed to goods, which we can touch or handle. Services, such as banking, education, medical treatment, and transportation make up the majority of the economies of the rich nations. They also represent most of the emerging nations' economies. Services are different to products because they are not physical, they change over time, they cannot be owned in the same way that physical products are owned, and they cannot be stored.

SERVICE INNOVATION

Service innovation is the process of making changes, improving and driving growth as a response to customer input.

SERVICE DESIGN

Is a user-centred, co-creative, and multi-disciplinary approach to creating experiences and services that are desirable, feasible, and viable (Stickdorn & Schneider, 2011; Lewrick et al. 2020). There are multiple stages to a service design approach, which can look like this when factoring in design thinking (Friis Dam & Yu Siang, 2021): empathising, defining, ideating, prototyping, and testing. These are not linear, and it is possible to revisit different stages as needed throughout the process.

SERVICE BLUEPRINT

A service blueprint is a tool that helps teams understand how the customer sees or experiences a business service process.

STAKEHOLDERS

A person such as an employee, customer, or citizen who is affected by an organization, society, etc. and therefore has responsibilities towards it or an effect on its success.

STAKEHOLDER MAPPING

Stakeholder mapping is a visual process of laying out all the stakeholders of a project, project, or idea on one map, determining their connection and influence of the project.

STRATEGIC COMMUNICATION

Strategic communication is the process of planning and designing messaging systems specifically to achieve targeted results or impacts from information sharing.

SUSTAINABILITY

Sustainability refers to the ability to be sustained, supported, upheld, or confirmed. Sustainable products and services are not disposable and can be accessed or adapted for use over extensive periods of time.

SYNTHESIS

Synthesis is the act of combining often complex products, materials or components of a project to create a simplified individual entity.

TEST

A test is an observed performance of a product or system to better understand how it might operate realistically. Tests are often coupled with evaluations to identify how a product or service offering might be improved.

TIME LINE/TIME FRAME

A linear representation of important events in the order in which they occurred. Also known as a schedule.

URBAN DESIGN

Urban design is concerned with the arrangement, appearance and function of our suburbs, towns and cities. It is both a process and an outcome of creating localities in which people live, engage with each other, and engage with the physical place around them.

USER

A user is a person who accesses a product or service offering.

USER EXPERIENCE

User experience is where a person has an emotional, physical or psychological reaction to a product or service. Having a deep understanding of users can help a project team to effectively design for the wants and needs of the targeted audience.

VIABILITY

The capacity to operate or be sustained. Within service design this means ensuring products and services are capable of functioning whilst meeting economic, technological and desirability constraints.

VISUALISATION

Visualisation involves creating pictorial imagery which relay nonvisual information such as oral or written language. In a service design context, designers use visualisation to clarify complex data so that it can be understood by all project stakeholders. Examples of visualisations include drawings, charts, maps, etc.

WICKED PROBLEMS

Wicked problems are commonly problems which are unable to be solved by traditional means. This is because they usually incorporate large complicated systems which often shift and change over time.

WORKSHOP

A workshop is a meeting at which a group of people engage in intensive discussion and activity on a particular subject or project.

Get in Contact

Feel free to contact us at anytime with questions or clarification around any area of the project:

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WE LOOK FORWARD TO WORKING

IN TANDEM WITH YOU

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