

# Towards sustainability: The feasibility of a sustainability hub in Clare and the Mid North, South Australia

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## Abstract

Sustainability is an increasing focus for local governments and communities, especially regional areas in Australia and internationally. Climate change impacts are increasingly significant and adaptation agendas are required to meet the social, economic, and environmental needs of existing and future generations without exhausting natural resources or degrading the quality of the natural environment. Sustainability hubs and centres are being advanced as one mechanism to educate the broader public about and encourage (climate) sustainability in practice that is meaningful and transformative. This paper reports on a feasibility study of a potential Sustainability Hub in South Australia's town of Clare and the Mid North region. The study found that local aspirations to establish a sustainability hub in the region are a foundation of its feasibility and makes seven recommendations to ensure the hub evolves into a place that is practical, functional and services this community's needs including defining the scope and location of the hub, a clearly articulated management structure, and ideas around how to secure ongoing community engagement. These recommendations provide a framework that will determine the sustainability hub is not only sustainable in its own right but will also strengthen the region's climate change adaptation capacity by enabling its citizens with the knowledge and skills to make sustainable choices and put sustainability into practice.

## Keywords

Sustainability, Sustainability hub, Climate change adaptation, Community sustainability, Community gardens.

Sustainability is frequently referenced in association with climate change adaptation using new methods and technologies, signifying the ability of people to meet the social, economic, and environmental needs of existing and future generations without exhausting natural resources or degrading the quality of the natural environment; sustainability is central to global resource conservancy. Local governments are in a primary position to address these goals and indeed across Australia are piloting initiatives in their communities, leading education and practice around sustainability, both internally and externally.

This paper reports on a project initiated by the Legatus Group in South Australia – an amalgamation

of 15 local council members that work together to progress mutual goals and aspirations – to do a feasibility study into a potential sustainability hub for Clare and the Mid North of South Australia. The Legatus Group actively supports the awareness of climate change issues and in 2017 developed a Climate Change Guide for council use. The Legatus Group Climate Change Adaptation Plan 2018 to 2021 includes an action previously identified in the Integrated Vulnerability Assessment Plan 2011, to establish a knowledge centre for regional climate change information and a pilot site for an eco-building/township.

The Legatus Group through the Yorke and Mid North Alliance manage the Climate Change Sector

Agreement in partnership with the Northern and Yorke Natural Resource Management (NYNRM) Board, Regional Development Australia Yorke and Mid North, and the SA Government. As one of the projects this sector agreement included a sustainability hub. The principal aim of the project was to establish whether a sustainability hub, based in the regional town of Clare (see map), but representative of the broader Mid North region of South Australia, was feasible. The goals of the project were fourfold:

1. identify the opportunities and challenges associated with establishing a sustainability hub in Clare to represent the Mid North region of South Australia;
2. establish the reasons behind the failure to progress the Goyder Line Sustainability Centre (GLSC);
3. determine the viability of a sustainability hub in Clare; and
4. present recommendations for the continued success of a sustainability hub in Clare that will represent the Mid North region.

The notion of a sustainability hub is an ambiguous one. The concept of sustainability is difficult to define and how it is then translated by individuals, communities, organisations, and government varies with each situation. Indeed, in Australia, there is no standard or legislative definition (Herriman et al., 2008). As such, a sustainability hub or centre is subjective and will be comprehended and brought to fruition in different communities in different ways. Despite the ambiguity, successful moves towards sustainability depend on how well it is governed and how local communities are involved.

The idea of sustainability was given global recognition in the 1960s and 1970s when the international community started to address the environmental and developmental challenges faced globally. Initially the term was used in reference to environmental conservation and other environmental concerns identified, such as pollution, smog and the impacts of development on the natural world (McElwee, 2012). Sustainability related to the recognition that human activities are transforming Earth systems and having far-reaching implications for society. However, in 1987 the Brundtland Report; 'Our Common Future', written by the World Commission on Environment and Development (WCED) defined sustainability adopting a human-needs focus: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (taken from McElwee, 2012, p. 3).

This human-focus linked social systems such as livelihoods and economics to sustainability and the report continues to inform scientific research about sustainability to this day (Chhetri and Chhetri, 2010). The environmental and human development challenges faced by the global community were viewed to be interconnected and therefore measures towards sustainability require simultaneous and mutually reinforcing management approaches (Chhetri and Chhetri, 2010). 'Agenda 21', which came out of the UN Rio Earth Summit in 1992, espoused the term 'sustainable development' highlighting the roles of consumption, production, and trade, as well as gender equality in sustainability (McElwee, 2012).

Sustainability is multifaceted and recognises that human activities are consequently transforming the Earth's systems (Kennedy, 2007). The nature-society dynamics therefore include a broad range of stakeholders and their complex interactions across geographical scales (Chhetri and Chhetri, 2010). But sustainability is difficult to measure, and uncertainty lies in how sustainability is achieved, what timeframes are applicable, and what the criteria and indicators are that comprise sustainability (Clammer, 2016; Franklin et al., 2011). Subsequently, the breadth of what sustainability represents makes it a difficult concept to clarify and explains the range of forms through which sustainability is rendered at local levels.

Sustainability in relation to environmental conservation and development carries expectations and assumptions; economic, social, and ethical, leading to numerous benchmarks and expectations (Kennedy, 2007; Whitesides, 2012). Additionally, the inextricable link with quality of life is demonstrated by the interchanging of such terms as 'environmental quality, liveability, quality of life and sustainability', and the importance of the natural and built environment to people's quality of life. As an overall concept embraced by the global community, sustainability, resonates with people and decision-makers as something to aspire to, and is seen to be something that will make a community, and the world a better place (Whitesides, 2012).

In Australia, the legacy of Agenda 21 brought this global concept to the local sphere when the Australian Government committed local councils to preparing long-term strategies to achieve sustainability in consultation with their local communities (Kupke, 1996). In an early reflection of the initial on-the-ground responses to Agenda 21 in South Australia, Kupke (1996) found that despite sustainability programs active in one form or another throughout the state, it was down to key individuals to drive the programs, that funding tended to be discretionary and likely

to decrease and therefore not facilitating long-term planning, and that training in environmental management was inadequate and information exchange poor. More than 20 years later, sustainability remains a focus for Australian local councils, yet there is still more to be done to achieve sustainability targets (Fallon and Sullivan, 2014).

Sustainability is often translated in Australian local governments as a response to top-down State and Federal initiatives to reduce greenhouse gas emissions, carbon mitigation and to implement adaptation policy to adapt to impacts of climate change (Fallon and Sullivan, 2014; Zeppel, 2013). The lack of consistency and legislation relating to the environment and climate change at the Federal and State has meant that any sustainability initiatives are often reflected through neoliberal tenets with strong emphasis on improved efficiency and economic outcomes, short-lived, with the on-the-ground responsibility devolved to local government and underfunded (Brueckner and Pforr, 2011; Dollery et al., 2008; Pini et al., 2007). Moreover, legal, economic, and political constraints mean that local government is often inhibited in its decision-making powers; they lack constitutional status, they are the least resourced tier of government and periodically politically undermined by state governments (Strengers, 2004).

Local government too is susceptible to climate change because of the proximity to on-the-ground effects and has overwhelming challenges as the authority carrying out day-to-day climate change and sustainability-related policy. Nursey-Bray (2010), for example, discusses that land use planning policy and development assessments are challenged by urban development and pressure on local resources, as well as environmental impact management such as erosion and water management. Land use and development policy, the maintenance of infrastructure, such as stormwater and water supply, waste, roads and public amenities, are all susceptible to the effects of climate change (Fallon and Sullivan, 2014).

With this complexity in mind, governing for sustainability is no easy task, but local councils are well-suited to the task because of their proximity to their communities (Collins, 2010). As 'place shapers', local council initiatives play a role in shaping the regional responses to climate change by increasingly making efforts to incorporate sustainability into their decision-making, even to contributing to lowering greenhouse gas emissions; up to 50% in a local area (Dollery et al., 2008; Flowers and Chodkiewicz, 2009). But, despite its ambiguous meaning, sustainability is something that people and their communities strive to achieve. Local governments and their communities

are pivotal in the success of sustainability programs, such as planning and the built environment, energy, food production and agriculture, water management, education, and community gardens, outlined in Table 1.

## Research method

This project used an extensive desktop study and primary data gained from semi-structured interviews. Additionally, the study explored various case study examples to present the range of possibilities for a sustainability hub design. This study gained ethics approval from the Human Research Ethics Committee at the University of Adelaide (HREC approval number: H-2019-033).

The desktop study explored secondary data, such as documents and other resources where the data had been collected by others and provides insight into the discussions, both academic and otherwise, on all issues on and around sustainability (Gray, 2013). Documents reviewed included academic literature, and government and NGO documents and websites relating to the GLSH, sustainability and sustainability centres or hubs. All searches related to sustainability, sustainability hubs or centres, local government and sustainability practices, and community sustainability practices.

Audio-recorded semi-structured interviews provided the primary data for the research. Semi-structured interviews, a useful qualitative data-gathering method, informed the analysis by providing 'access to the subjective interpretations people attach to their objective circumstances' (Dunn, 2000; Packer, 2011, p. 52). In total, 14 interviews were conducted: 5 people from the current sustainability hub working group; 6 people who were involved with the Goyder's Line Sustainability Hub (GLSH); 3 people from existing sustainability centres/hubs. Participants were contacted via e-mail; their details provided by the CEO of Legatus, the previous Climate Change Coordinator for the Yorke and Mid North Regions (details of their position provided below), and from the websites of the existing sustainability hubs. Interviews were arranged and conducted at a convenient time and location for each participant, and each interview was audio-recorded with the participant's consent.

The study included an extensive compilation of sustainability hub/centre case study examples from Australia and internationally. The case studies provided the feasibility study with examples of successful sustainability hubs and the opportunity to explore the commonalities and differences embedded in each different context (Baxter, 2016; Gray, 2013; Yin, 2015).

**Table 1. Synopsis of considerations for sustainability.**

Energy	<p>Renewable energy is often viewed as the future of energy supply in the future, despite the drivers not necessarily being environmental (Curran, 2018)</p> <p>The environmental impacts of renewable energy are not necessarily clear-cut (Savino et al., 2017)</p> <p>Persistent advances in renewable energy technology and the ensuing substantial reductions in cost have made them competitive with fossil fuel generation (Say et al., 2018)</p> <p>Politically, there is a deficit in funding and political will, which affect the modification of existing structures to allow for new actors and technologies (Simpson, 2017)</p> <p>The socio-economic and political processes producing many of the environmental issues that we face require as much transformation as energy technologies do and exemplifies a political reluctance to move away from fossil fuels (Curran, 2018; Falk and Settle, 2011; Martin and Rice, 2012; Simpson, 2017)</p> <p>When government has developed incentive schemes, or when communities have taken initiatives in the uptake of renewables, the results are positive, reduce the cost of electricity for users, and increase knowledge about energy consumption and how to reduce it (Havas et al., 2015; Hicks and Ison, 2011; Rajgor, 2006)</p> <p>In areas of population growth, community-based energy projects meet the increasing demand for electricity, whereas in areas experiencing a decline in population they act as an income source which facilitates new enterprises and jobs attracting people back into the area (Hicks and Ison, 2011)</p> <p>Examples: The Australian Government Solar Cities initiative (Havas et al., 2015; Townsville City Council, 2013); Off-grid and fringe-of-grid renewable energy projects funded by the Australian Renewable Energy Agency (ARENA) (Herteleer et al., 2018); Sustainable energy initiatives by remote island community, Lolland, in Denmark (Magnoni and Bassi, 2009); Germany's transition to a low-carbon energy system (Rommel et al., 2018)</p>
Water	<p>Water management is highly contested because of conflicting values relating to it as well as multiple users relying on it (Clay and Albers, 2016; Richter, 2014)</p> <p>In cities and urban areas water issues arise because of the close vicinity and intensity of human activity and water sources (Clay and Albers, 2016)</p> <p>Integration of reducing demand, raingardens and rainwater tanks on housing sites, bioretention trenches and swales and on-site wastewater treatment plants providing recycled water are key to ensuring sustainability in urban water systems (McLean, 2004)</p> <p>Good maintenance of water systems provides innumerable benefits and services to society and natural processes, but only if enough water is allocated to enable those natural systems to work (Richter, 2014)</p> <p>Sustainable water management needs to include: a shared community vision, limits on total consumption, allocation, monitoring and enforcement of allocations; investment in water conservation; enabling water trading; reduce water consumption if too much is used; learn and adjust as you go (Richter, 2014)</p>
The built environment	<p>Environmentally friendly buildings exploit daylight and use natural ventilation and other passive forms of environmental control including reducing demand for energy and minimising carbon emissions (Bothwell, 2015)</p> <p>Energy performance of buildings is crucial with large-scale, even global impacts by reducing demand on mechanical service systems and heating and cooling and the number of power stations to generate electricity (Bothwell, 2015; Gorse, Johnston, et al., 2016)</p> <p>Whatever definition is used, sustainable built environments include broader aspects of sustainability concerning environmental, economic and social concepts, such as, protecting biodiversity, conserving resources and limiting pollution and buildings, typified by their reduced use of resources such as energy, materials and water (Bothwell, 2015; Khosrowshahi and Ghodous, 2016)</p> <p>Sustainable buildings should have small ecological footprints connected to 'their construction, their life in use and at the end of their life' (Sassi, 2006)</p> <p>Buildings have a greater social responsibility and should contribute positively to the social environment, and enhance their surrounding environment, and psychological and physical well-being (Sassi, 2006)</p> <p>The 'triple bottom line' (social, environmental, financial) of sustainability is applicable to construction encompassing attributes of sustainable buildings (Gorse, Thomas, et al., 2016)</p>

Education	<p>High-quality education supports sustainable communities (Bierbaum et al., 2011)</p> <p>Education for sustainability facilitates positive attitudes around sustainability and provides tools, knowledge, relevant skills, and competency in leadership and decision-making to incorporate it into everyday life (Brown, 2012)</p> <p>Education for sustainability programs provide authentic and transformative learning experiences on issues such as energy, waste, water conservation and biodiversity (Flowers and Chodkiewicz, 2009)</p> <p>Education programs councils are targeting in Australia include water efficiency, conservation, demand management; waste management; pollution prevention and recycling; energy efficiency; climate change awareness; ecosystem and conservation awareness; efficient transport systems; gardening</p> <p>Learning needs to be learned in ways that are meaningful and transformative, i.e. experiential and hands-on with real, tangible and on-the-ground outcomes (Ripple, 2012)</p>
Agriculture	<p>People value locally grown produce and are willing to pay more for it (Knigge et al., 2016)</p> <p>Sustainable agriculture thrives commercially and socially, is knowledge-intensive, and uses low-input, renewable and local resources including a range of food production types; organic and biodynamic, natural systems farming, agroecology, holistic management, and urban and community-supported agriculture (Mauro, 2010)</p> <p>Food hubs and local markets are a commonality within sustainable food systems (Connelly et al., 2011; Franklin et al., 2011; Knigge et al., 2016)</p>
Community gardens	<p>Community gardens play a role in producing fresh food, spaces for community connection, disseminating knowledge and technology, promote recycling, renewable energy, conservation, and biodiversity (Flowers and Chodkiewicz, 2009; Stocker and Barnett, 1998)</p> <p>Community gardens provide positive outcomes for poor and disadvantaged communities in cities and rural areas providing positive community experiences and healthy food alternatives (Ferris et al., 2001; Hagelman et al., 2016)</p> <p>Green urban spaces are associated with connecting city people to their environment and promote wellbeing and health equity, and influencing their attitudes towards environmental sustainability (McLean et al., 2016; Metcalf et al., 2016)</p>

Three case studies are presented in this paper; two are community-based examples from South Australia, the Adelaide Sustainability Centre and the Mount Pleasant Natural Resource Centre, and the third is the Sustainability programme from the Townsville City Council, Queensland. In-depth evaluations of each case study example were gained from information gained through interviews and online research. Each case study example provided insight into the structures and management profiles and an overview of the various ways in which sustainability is interpreted, disseminated, showcased and put into practice in a hub or centre.

## Context

In 2008, a climate change forum was held in the Yorke and the Mid North, illustrated in Figure 1, to increase understanding of climate change and its relevance for the local communities in the region. The forum highlighted that a collaborative effort between key regional bodies was needed as well as distinguishing information scarcity relating to the vulnerability of the region

to climate change. As a result, a partnership was developed between the Central Local Government Region (now Legatus), Regional Development Australia Yorke and the Mid North, and Northern and Yorke Natural Resource Management and the 'Regional Climate Change Steering Committee' was formed, initiating a vulnerability assessment to be conducted to consider the economic, social, and environmental implications of climate change.

The alliance was established in part to enable the agencies to work together in managing and mitigating climate change across the region. The region represents the largest of the local government regions in the state and consists of approximately one-quarter of South Australia's regional population, which is in decline and with most people living outside the regional centres. The region is characterised by diverse landscapes of coastline, agricultural land, and mountain ranges. Its economy contributes around 3% of the gross state product through agriculture, viticulture, mining and forestry along with a growing tourism market, health and community services, and manufacturing. The region covers an area of approximately

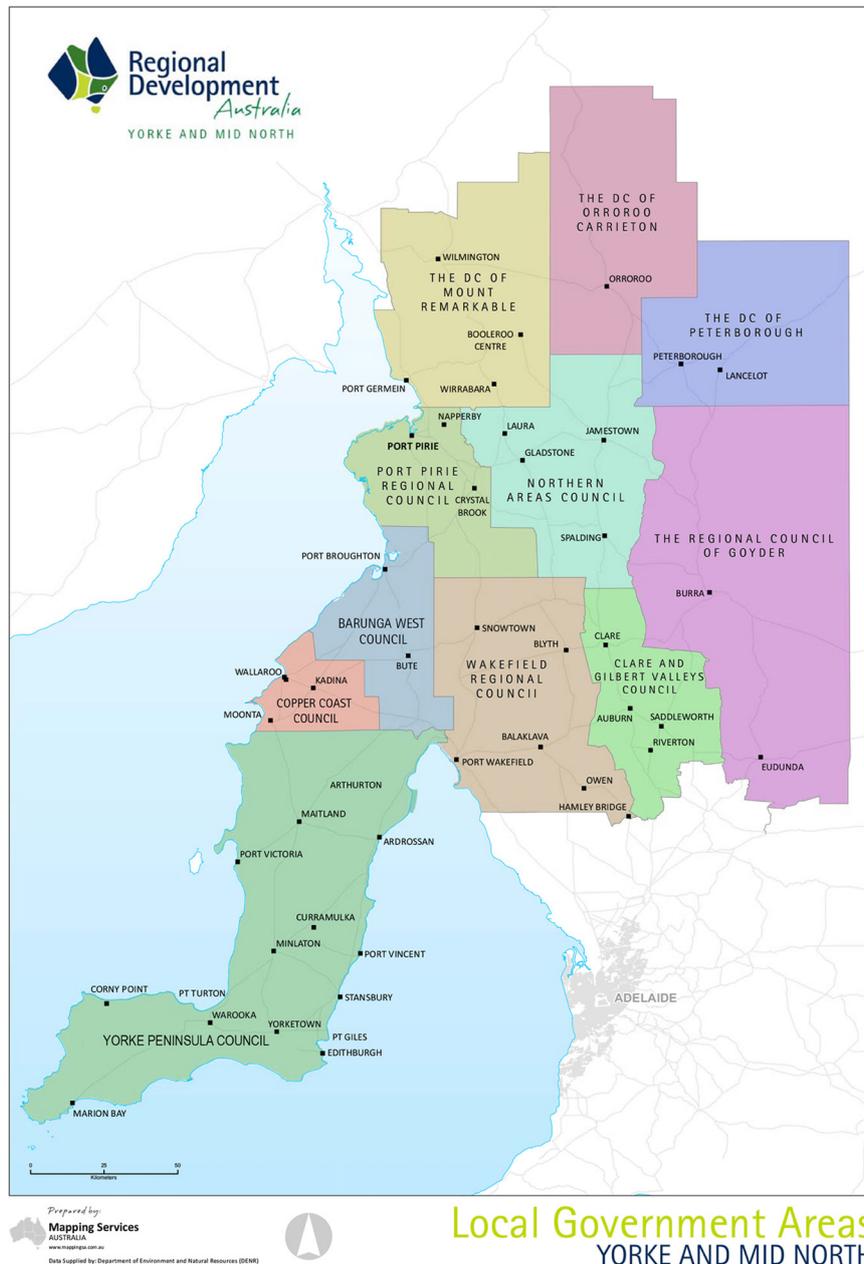


Figure 1: Map of the Yorke and the Mid North Government Region (Yorke and Mid North Regional Sector Agreement, 2007) ([www.yorkeandmidnorth.com.au/wp-content/uploads/2019/05/RDA-Local-Government-Boundaries-Map-high-quality.png](http://www.yorkeandmidnorth.com.au/wp-content/uploads/2019/05/RDA-Local-Government-Boundaries-Map-high-quality.png)).

34,930 square kilometres and is bound by approximately 760 kilometres of coastline.

In the light of regional climate projections (an increase in average temperatures across seasons, resulting in more hot days, fewer frosts, harsher fire-weather, a decrease in winter rainfall juxtaposed to an increase in extreme rainfall events) the Central Local Government Region Integrated Climate Change Vulnerability Assessment – 2030 was released in

2011. The report found that the natural environment was most sensitive to potential climate change and will have the least adaptive capacity, particularly flora and fauna. Water dependent systems that place conflicting demands on water resources, although vulnerable, have possible management options through improved water efficiency, recycling, and desalination adaptive response. Economic capital is less vulnerable with adaptive capacity in the ability of the various

sectors to adapt to changing conditions. Social capital also has a level of vulnerability, particularly in relation to human health from susceptibility to climate variability, and education is crucial for developing adaptive capacity.

This report related only to the time period 2011 to 2030 considering only the climate change impacts predicted for that time. Recommendations for what would be needed to respond to these vulnerabilities are presented in Box 1.

### **Box 1. The Mid North vulnerability assessment's recommendations for responding to climate change vulnerabilities.**

#### Environmental capital

- Protect the land and the local ecosystems
- Protect local icons (such as pigmy bluetongues and dry land grapes)
- Recognise that the landscapes we value, have value
- Renewable energy
- Improve and adapt housing
- Integrated design and planning processes
- Protect remnant vegetation, increase biodiversity
- Manage coastal effects
- A healthy, vibrant natural environment

#### Economic capital

- Enhance local economic viability
- Protect the key local industries
- Find funds to resource locally approved change
- Manage tourism to maximise benefit and minimise negative impacts
- Manage new industry to maximise benefit and minimise negative impacts
- Focus on valuing and improving agriculture
- Funding for agricultural and ecological research and extension
- Renewable energy
- Integrated design and planning processes

#### Social capital

- Protect the communities – celebrate local difference
- Protect the local cultures as they are but do not fossilise them. Change is welcome if it is in keeping with local spirit
- Protect local icons (such as pigmy bluetongues and dry land grapes)
- Vibrant communities – attracting young people and families
- Leadership empowerment
- Training and education – support and facilities
- Connect people – transport, broadband internet

The vulnerability assessment resulted in a focus on the recommendation to use education to inform the community on these issues and build skills to adapt. The Central Local Government Region and the NYNRM Board created the role of Climate Change Coordinator for the Yorke and Mid North Regions. This position was responsible for administering the Regional Alliance's climate change steering committee to investigate ways in which the region could address the vulnerabilities to climate change found in the report. It was from this committee that a 'sustainability hub' emerged because a gap was identified between the research undertaken into rural sustainability and the ability of rural communities to access that information. Connecting the community with that knowledge building was central to the vision of the hub. A working group for the Goyder's Line Sustainability Hub was established and included members from all the South Australian universities, the Australian branch of the University College London, a representative from TAFE SA – Yorke and the Mid North, along with the Mid North Knowledge Partnership.

### **Lessons learned from the Goyder's Line Sustainability Hub**

As one of the project requirements the study explored the events that took place within the Goyder's Line Sustainability Hub (GLSH). This previous attempt at a sustainability hub in the region highlighted important considerations in ascertaining the feasibility of such a hub. The aspirations behind the GLSH were similar to those for a new hub in that they both aim to connect community with sustainability to adapt to climate change. But importantly, the GLSH was contextually the same; the same region and the same complexities of demography, industry mix, and economy. In this way, the GLSH provides an example with the same intricacies, challenges, and opportunities faced by the current exploration into a sustainability hub in the region.

The GLSH working group operated between 2013 and 2015. Various approaches to establish the hub were pursued, including the commissioning of a feasibility study, research grant applications, developing a memorandum of understanding, and establishing a website. Both the website, a depository of research and publications relating to climate change adaptation and sustainability in and for the region, and the working group were disbanded in 2015. Interviews with members of the GLSH working group brought to light issues that are important considerations for the future creation of a hub in the region.

Fundamentally the GLSH did not have a clear central vision for the working group on which to base

discussions and decision making. The overarching vision of the hub was not refined, but rather aspirational and not the priority of one organisation or person. This lack of clarity and leadership resulted in limitations to building a strategy, funding and partnership opportunities, and the opportunity to move the aspiration to a structured, on-the-ground project. With all the challenges faced by the GLSH working group, the lack of a clear vision made it difficult for its members to define the scope of the hub and establish an overarching strategy for its implementation, as this participant explained:

I was trying to get my head around the purpose and where we were going – where it would go [...] There was a lot of discussion about a lot of things, but I was struggling to get anything concrete. (Participant 2)

This lack of clarity made it difficult for the GLSH working group to establish the scope and strategy for their hub. Although the GLSH was envisioned to connect research opportunities and outcomes to the community, uncertainty remained in how this gap would be filled, and how academic research focus could respond to the community's needs in a regional context:

I never formed a strong opinion on how best to make that link – whether it be a physical centre or whether it was online or something else. What is tricky is that people access information from all sorts of places (global online) and don't necessarily look regionally for that information. But we need regional specific information and we need a one stop shop because people are overwhelmed with knowing where to get the right plausible information from – how to bridge that gap was where I found it difficult. (Participant 1)

In considering a future hub in the region, the community's ability to access information about sustainability will be of key importance. It is clear from the GLSH experience that working out if and how information will be disseminated and how to make that information accessible and usable is not necessarily straightforward. Therefore, such decisions about scope will provide a foundation for a future hub.

Partnerships are another consideration. Important partnerships can provide a hub stability in funding, but they also influence the character and function of a hub. Partnerships were seen to be important for the GLSH to establish a stable funding base: "a key lead group that would pick it up and run with it, but it would have given it a base to grow from whereas we didn't have that funding base – a stable base" (Participant 1). However, there was also no consensus on who those partners should be and what role they would have:

At the time, there was a mixed opinion about having an outside partner as the key partner because as soon as you bring in, particularly industry, that changes the flavour – because they have an agenda. Looking back – there was a huge difference of opinion around the appropriateness of bringing in industry into that – some thought we just need their money, and we just want it started and if that's what it's got to be [...], but people were very conscious of what that would mean going forward and [...] taking it to another level from what was felt was needed at the time. (Participant 1)

Problematic too, was a lack of clarity over the role of the partners. Industries approached were hesitant at the time of the GLSH and were unwilling to commit to buy in because they were not sure what was expected of them in the partnership. For the academics on the working group, a key problem was the lack of clear funding opportunities to put research projects into practice. From this perspective, the academics in the group did not necessarily see themselves as invested in the rollout of the hub and working collaboratively together, but rather as providers of information or advice:

We did try to have a workshop with some of the people that were working in that space at that time. So, a bit of interest but they were unsure about getting into that space – they weren't sure what was in it for them. And some strained relationships with community in those early years. There's a lot of different industries coming in and doing their work – they don't have the ongoing visual presence. (Participant 1)

The other thing that didn't occur was there wasn't buy in. The three universities did not come to the table with money that said ok, well we're going to support this hub. [...] Universities are always under so much pressure to deliver high-quality research outcomes [and] get big government grants, that they often tend to focus on certain things; things that will deliver the goods. Partnerships between universities are also difficult. Probably more interested if they were approached for the research. (Participant 4)

Industry, in any situation when you get people from various backgrounds, with multiple socio-economic sectors represented, there are potential issues because different sectors understand concepts differently. So, I think that for the academics in the group it would have been fine to have industry involved but there was probably concern about how much industry was going to expect to get out of it when it wasn't really about providing industry with resources but providing communities with resources. (Participant 5)

The complexity of the region is another consideration for a future sustainability hub. The diversity

of sub-districts defined by different local economies and demographics make decisions regarding a target audience particularly challenging. Geographically too, the spread of the region makes decision making difficult regarding the locality of a physical site for a 'hub'. The interviews revealed that the complexity and diversity of the region was a difficulty in defining the scope and function of the hub. The diversity of communities; their needs, their livelihoods, their vulnerability to climate change all vary, bringing complexity to decision making about how best to address these vulnerabilities, and how best to connect to the community. For example, the differences between the viticultural and agricultural districts within the region were explained by this participant:

But we need regional specific information and we need a one stop shop because people are overwhelmed with knowing where to get the right plausible information from – how to bridge that gap was where I found it difficult. [...] Diversity of the region – a centre that looks at viticulture but has no relevance to those half an hour north and it has no relevance, as with coastal issues – [we] grappled with the large scope of the region and to make it regional and accessible to people. How do we cover all that without then getting spread so thin that it really doesn't meet the specific needs of the people? (Participant 1)

Another lesson from the GLSH experience is that there is a need for a sustainability hub to be overseen by a person and organisation. This was a particular concern for people on the GLSH working group; it was understood the GLSH did not progress because there was not anybody to take responsibility in getting the hub to the next level, and there was no funded position. The Climate Change Coordinator was pivotal in coordinating GLSH working group meetings, capturing information in the background, and ensuring that goals were being worked towards, but ultimately, the GLSH was not their only priority, and over time their role shifted. As a result, the meetings were often *ad hoc*, and it was difficult for the group to maintain the momentum:

If somebody had the drive, then there could be those opportunities but again, having someone, or an organisation that is going to go out and sell it. (Participant 1)

Keeping the momentum was the biggest challenge – the time that it takes to make more formalised agreements meant that momentum was lost. While the focus was on crossing the t's, it meant that members of the group shifted positions and moved on and not necessarily being replaced. It felt like the moment had passed – the opportunity missed. (Participant 3)

[...] it didn't take on the next step – you do need to do that. You need to sit down as a group and formulate ideas as to what you want to do and where you want to go, but once you've done that, you've got to take the next step and put it into practice, and you've got to have somebody who will be responsible for doing that. I don't think that hub ever quite got there. (Participant 4)

It didn't have a key person and a key focal point – the reality was that it was just a communication of information sharing and we never got one project that emanated out of that – it was all people bringing their existing work to the table – which works for a little while, but then there was no common purpose. (Participant 6)

Funding is a fundamental need for a sustainability hub. The interviews revealed, almost unanimously, that attaining funding for the GLSH was a considerable problem. It was thought that money would be a way in which to get something off the ground. Various issues were barriers to securing funding: no direct alignment with funding, varying agendas, and criteria issues with funding applications. For example, the broadness in scope – regional issues rather than specific issues, posed problems for getting people to the table:

Trying to look at opportunities for grant funding and for going for a large research project, but it wasn't specific – it wasn't a particular stream of learning it was about a region. It wasn't about finding a wheat variety – it was about tackling regional issues. So just trying to work out the scope and the methods of the delivery. Not being decisive enough to say well let's just get this one sorted. No direct alignment with funding, different agendas, and loss of momentum. A bit of this a bit of that and looking at funding opportunities, nothing fitted in properly to any of the criteria. (Participant 1)

Funding was a huge issue. Part of the discussion was, where would we go for funding, and at the time there was not a whole lot of support at a national level for anything, sustainability, environmentally oriented. [...] we did have some interest at the State level from a couple of different agencies who were interested in sharing it, but we never got funded [...] Part of the problem is that what we were doing straddled the boundaries of different government agencies and so each one was saying, oh, this would be really good, we could really use this, but somebody else could pay for it. So, people liked the idea and it certainly would have been a good contribution to what GLSH was trying to do but the funding was tricky because of the agency and department limitations on what funding could be spent for. (Participant 5)

Having the resources to put into the project was also a problem for the agencies involved in the Regional Alliance:

Money is a key issue; we don't allocate funding to it. We're funded by government, but the funding is based on a certain amount of KPIs and the discretionary spending is the money we'd make on other projects. If there was a way that we could raise funds that could go into research that were valuable and also be realistic that our region is very commodity driven – have a levy basis on wine and grain and so they do provide money that does go towards research and development, it's just not money managed locally. So, the funds are more likely to be focused on more populated areas, but if a university were in the region then you could add and invest because it's tangible for people. (Participant 6)

The GLSH also demonstrated that undertaking projects is important in getting a sustainability hub off the ground. The interviews highlighted that there was no specific project to associate the community with the hub, which contributed to the lack of progression of the GLSH:

My recollection of it was that we would sit around telling each other what research we were doing. And there was talk about what needed to be done by way of research or what could be done, but my recollections are that it never seemed to get much beyond that. (Participant 4)

A project can reflect the purpose of the hub and be a channel for funding applications:

What is needed – it goes back to the purpose. Why are we gathering? You need a clear purpose – this is what we want to do – not what we could do. Somebody – needs to articulate why; what do you want to do with it? Then you can sort out the broad agreement from the top – the broad agreement from the big stakeholders and then say now can we have the foot soldiers – and then get them together to say how. (Participant 3)

Aligning with the literature presented above, community involvement is an imperative aspect of implementing a sustainability hub that both represents and connects with the community. In endeavouring to make the GLSH regional specific and a conduit for connecting community with sustainability, community was envisaged to be at the heart of the hub. The idea was that the GLSH would be something the community would embrace, knowledge produced could be captured and put into practice by the community, and the community would feel the hub was theirs and something they could access. However, the community was never consulted or invited to take part in the working group and in this way, it is apparent that the community was intended to be an end user of the hub. Indeed, the interviews highlighted that the working group was not clear about how to involve community:

The difficulty with having a regional solution is how do we work together and support expertise and

community-based solutions, but at the same time, it's got to be the community involved [...] And also, the community needed to see that there was a need for it is the other key element to it because if they're not going to use it and it's not meeting their needs well then what's the point? [...] We don't want the hub to replace existing groups who are already doing a great job at driving change at a local level – so it was about how the hub could support those groups. Maybe link what is happening to research opportunities and other grants etc. (Participant 6)

Despite the challenges faced by the working group and the difficulties in finding a clear path for the GLSH, there were successes which continue to be foundations for the new and developing visions of a sustainability hub in Clare:

The success was that a room of great thinkers from a range of positions came together. It was a privilege to be in the room with those people – there were some different thinkers discussing the possibilities of collaborations that didn't previously have a space for that to happen – that was a success. (Participant 3)

So, what we did do is we launched and we have between the three parties a regional planning day every year, and so we launched the Goyder Sustainability Hub (Website) and we tried to get researchers up at that time and or businesses who were working in and around climate change adaptation and it was quite successful. (Participant 6)

Although it did not progress, the experience laid the important foundations for a future hub. The groundwork was done for a sustainability hub in the region – particularly the consensus around the idea that continues to this day. The present effort to develop a sustainability hub demonstrates the sustained willingness and intent; namely, that the original idea had substance and the opportunity remains. Importantly, the GLSH provided key considerations for a future sustainability hub in the region.

## Case studies

The case studies (Case study sustainability centres) are three existing examples of sustainability in practice within local communities in Australia: the Adelaide Sustainability Centre (ASC), the Mt Pleasant Natural Resource Centre (MPNRC), and Townsville City Council.

The ASC and the MPNRC are community-based centres with a focus on disseminating sustainability to the public. They are part of a network of community-led natural resource centres (NRCs) within the Adelaide and Mount Lofty Ranges NRM region. These

centres are community owned and operated that engage and respond to their community in a variety of ways. They provide a range of community and environmental services including reference material and referrals, volunteer programs, workshops, training and field days, meeting space, information, recycling, resources, and equipment. Each centre has their own individual team and agenda but are united in a focus on driving behaviour change, sustainable living, and environmental connection. The centres are funded in part by the Adelaide and Mount Lofty Ranges Natural Resources Management Board and run by part-time coordinators and volunteers. The Townsville City Council is not a centre but is a network and systems-based framework in which sustainability is built within the Council's operating framework.

The three examples importantly provide the feasibility study with references of different ways in which the public can be connected to and educated about sustainability and sustainable practices. They exemplify methods that work to change community behaviour in relation to sustainability in the long-term. They have different operating, funding, and management systems. They also cater to the public in different ways and look to connect to different groups of people. The information gained from these case studies therefore brings depth to understanding the various aspects needed for a successful sustainability hub in Clare and the Mid North.

## Case study sustainability centres

### Adelaide Sustainability Centre

The Adelaide Sustainability Centre (ASC) is a working physical site as well as having an extensive website. It is operated by an advisory board, has one paid employee and a team of volunteers. The centre is a public space and community-focused hub that seeks to connect people and provide information and learning experiences that facilitate sustainable living and connecting people with their environment.

The centre has various ongoing activities where it connects with the community, such as workshops and film nights and provides a home for many community groups. It also acts as a link to other places or sites related to all things sustainable, through a website and its physical centre.

The ASC has an environmental focus but in acknowledging their city location, that focus is on energy efficiency, waste, and planting for biodiversity and land management. For the ASC, sustainability is about looking at the actions that can be undertaken to leave the planet in a better way than you found it.

Therefore, the centre focuses on facilitating change at the point at which people make decisions.

Each of the natural resource centres (NRCs) has different funding models, but coordinators are funded by the NRM Board. The NRM funding has specifications such as provision for public access to NRM information and services. Through a funding agreement with the NRM board, the Conservation Council hosts the ASC, giving the centre an independent, community voice and the ability to be responsive to the needs of the community and to work peer to peer rather than from a position of authority. The coordinator also has full autonomy in managing the site including hiring and organising staff and volunteers, media and publishing, and programming and management of the centre. This autonomy is thought to help with community connection. An advisory group supports the coordinator through quarterly meetings by providing information, acting as networkers and connections to community as well as being ambassadors for the Centre.

Internal research on the impact of the Centre found that awareness events alone do not translate into action in that they are not transformative; they translate to intention but not to action. Instead, when the workshops are structured with learning outcomes embedded in them, they are more likely to have transformative outcomes for those who participate, such as hands-on and take-home experiences; e.g. having the plants, the knowledge, and the habitat from a native bee workshop. Phone surveys revealed 85% of people changed their behaviour and six months later that behaviour was sustained.

Importantly, the workshops are fun, making the centre less daunting and intimidating.

Challenges include finding an audience and getting people through the door. Accomplishing successful volunteer systems where people feel involved and are eager and happy to come along requires support systems and is about community and not just 'doing the work'. A lack of resourcing for paid staff or being able to support volunteer staff is a barrier to successful impacts.

Key points to a successful sustainability centre:

- A diversity of funding, especially if reliant on government funding.
- It is important to structure budgets to make a small profit that can be put back into the Centre to allow opportunities to be developed such as funding the Centre to be open more or to appoint a project officer.
- It is important to be aware of trends and rising issues and identifying a unique role. For example, there are several places now running

beeswax wrap workshops – so gaps need to be found in the market; find the niches that will have the biggest impact with the small amount of resources and focus on those.

- Partnerships and peer support are important. The ASC is part of the Natural Resource Centre Alliance. The coordinators in the Alliance meet quarterly and support each other and share ideas.
- Making sure that opportunities are responded to. For example, the Red Cross was training in how climate change would impact Adelaide and the suburbs; training advocates about adaptation for those in the suburbs. Out of that training, an action group emerged who wanted to run a community conference on climate readiness and preparation. This was an opportunity for the Centre to provide the venue space and support for the conference. From this a partnership was formed whilst broadening the Centre's reach.

## Mount Pleasant Natural Resource Centre

The Mount Pleasant Natural Resource Centre (MPNRC) opened in 2000. From that time, the group has grown from a local council and NRM initiative into an independently run not-for-profit community group and social enterprise. The original group operated on the old Mt Pleasant Council property as a community group section committee under the Council but always had separate partnerships for funding. Currently, funding comes from the Adelaide and Mt Lofty NRM Board and the South Australian Murray Darling Basin NRM Board. After some time, the group wanted independence so then became an incorporated group. The close relationship with the Council continued, particularly because the site is Council land, the Council covers the overheads, arranged by a peppercorn lease agreement. And until recently the coordinator's position was hosted by the Council; now the MPNRC are managing their own payroll which was the next step in having independence.

There are several projects run out of the MPNRC to diversify the funding base as part of the strategic planning and long-term sustainability. Social enterprise brings financial security and increases their independence. 'Recreate' is the new face of the MPNRC. The benefit of these projects is seen through growing the centre and creating jobs, e.g. the funding of two new part-time positions that did not exist before.

Recreate is a creative re-use centre, shop, materials depot, and workshop space that transforms old wares and waste into something of value. Run as a

social enterprise, Recreate brings people together to share ideas around upcycling and waste minimisation as well as providing an important fundraising avenue for the MPNRC.

The MPNRC also has a nursery project and a community garden at the site. The nursery acts as a workshop site, a supply for the community garden, as well as a revenue raiser by selling plants to the public.

Another project is a materials depot where new and used items are donated to the site which are either used to make new items to sell or sorted and sold to the public.

Community engagement projects aim to attract people who would not normally think about waste issues or climate change; engage with people who do not care about climate change and start shifting behaviours. The Centre receives visitors and volunteers who had never recycled, never had a worm farm, never grown vegetables, and climate change has not been on their radar. Interestingly, feedback from people is often that they have learned new ways of doing things, such as re-using materials for something that they would normally have bought new. What the MPNRC has to offer is a gentle way to get people engaged which people enjoy and want to come back and do more.

Similar to the Adelaide Sustainability Centre, the MPNRC incorporates practical, hands-on workshop experiences, such as making something, learning a skill set, building something that can be taken home and put in a garden. The central idea is that the Centre functions as a community centre with people often just staying for a chat. It has a friendly and welcoming atmosphere and people coming in will get offered a cup of tea at which point they find out about the workshops which might lead them to learning to crochet, but also doing a worm farm workshop.

## Townsville City Council

Townsville is Queensland's largest regional city with a population close to 200,000. The region has a diverse economy; it is a hub for the mining, manufacturing, and cattle industries, defence and government agencies, the James Cook University, as well as tourism. Geographically, Townsville is an intersection of four different biospheres – rainforests to the north, tropical savanna to the west, RAMSAR wetlands to the south, and to the east, the Great Barrier Reef.

Now the Council has a systems focused sustainability agenda, Integrated Sustainability Services (ISS), which integrates management services and policy development. One aspect of this was to include an NRM approach to the department managing the

landscape, Distinct to Parks, which focuses on the management of spaces. This new approach focuses on ecological services. The systems approach is implemented via three teams operating within the ISS.

*The Environmental Management Team* integrates environmental outcomes by focusing strategically across the Council, planning and policy development and the different departments of council. The projects are implemented by the NRM team on the ground.

*The Water Cycle Team* focuses on water conservation in waterways and in the home. In doing so the whole water cycle is focused on, from the top of the catchment to where the water flows into the bay, including the effluent, working with the water utility and addressing the interrelationships within the water systems. This includes educating people around the complex systems around water in Townsville and the Council offers tours of the catchment – school groups and other visitors can participate in tours of the system. The Council has advanced eco-tourism certification for the catchment tours.

*The Carbon Cycle Team* focuses on the energy interrelationships across the city and is responsible for supporting and communicating the interrelationships with energy within the community. A solar city project is an example of the Carbon Cycle Team's role. Part of the Australian Government's leading-edge Solar Cities programme, the project is aimed at trialling new sustainable models for electricity supply. The project incorporates a range of initiatives to reduce wasteful energy usage, increase solar energy usage and cut greenhouse gas emissions by more than 50,000 tonnes. It is from this project that a white roof campaign started. A white roof painters' network was created to help implement the project, aimed at encouraging people to paint their roofs or install white roofs when building new dwellings to keep the house cool and reduce electricity use. This project has been immensely successful with white roofs present across the city.

A physical component of the hub is the Rowes Bay Sustainability Centre. Re-using an old sanitary reserve the old depot is now emblematic of the city in that it contains a wetland and has examples of the woodland and savanna and is located on the foreshore. The old caretaker's building became an opportunity to demonstrate best practice in retrofitting a typical Townsville home, to suit the climate but affordable for the average person. This project fitted in with the Council focus on reducing the burdens on water and energy. The project was achieved with very little money and aimed at doing the small things with a large impact. The retrofitting included painting the roof white, replacing the windows with louvres, solar,

and water catchment, and planting shade trees on the western side of the house.

Learnsapes provide a learning opportunity which start at the dam at the top of the catchment as water flows throughout the city and includes the natural and human made systems of both water and energy flows. Tours end at the Rowes Bay Sustainability Centre bringing all the learned information back into the home. In this way, the Learnsapes introduce and connect the built environment and surrounding natural habitats that may otherwise go unnoticed.

All the projects came out of processes from the Integrated Sustainability Model which is a design system for change and is also part of the hub. The Integrated Sustainability Model includes systems to improve communication, collective social learning, community-based social marketing, experiential learning and systems thinking, networking and smart technology integration. The model is used for funding and project applications and is key to how the Council is managing their environment, developing policy and strategies into the future.

These case studies reiterate lessons learned from the GLSH example: the importance of a clear vision, structured and funded management, partnerships and a clear and involved connection with the community. Indeed, in demonstrating how they achieve these fundamentals, they also demonstrate how these sustainability hubs can be successful. They also demonstrate that there are different ways in which sustainability hubs may be envisioned and put into practice. For example, although the Townsville City Council example is integrated into the local council's operations, it exemplifies the myriad of possibilities regarding how sustainability can be put into practice. The ASC and MPNRC demonstrate importantly how physical sites exist on small but stable budgets with strong community involvement and connection, but also echoing the importance of the coordinator's role in maintaining its viability and success.

## Discussion: the feasibility of a sustainability hub, Clare

Overseen by a working group, the current rendition of a hub in the region is at preliminary discussions with members from the Regional Alliance and the Clare and Gilbert Valley Council. In a continuation of the GLSH, the idea of a sustainability hub remains a vision by the Regional Alliance to engage the community in ways to future proof the region in the face of climate change.

Originally, envisioned in two ways: as a physical and virtual site, initial concepts include taking on



Figure 2: The Clare site suggested for the Sustainability Hub's physical site – Natural Resources Centre – Clare (head office).

board an opportunity to establish a physical hub at the Natural Resources Centre in Clare (Fig. 2), that is currently owned by the Department of Environment and Water (DEW). This site operates as a centre where a range of government organisations and local businesses are based, including members of the Regional Alliance. This site had previously raised interest as a community sustainability centre in conjunction with its redevelopment, including renovating buildings at the back of the site and development of its grounds.

Interviews with members of the current sustainability hub working group revealed an array of ideas and aspirations for a sustainability hub (Box 2). Suggestions included that the site at Clare could be repurposed to showcase sustainability practices as an information and learning site, such as energy efficiency through solar and other aspects of energy use at the site, water efficient practices and the renovations of old buildings into modern facilities with sustainability in mind. A community garden was also a consideration for the site. A sustainability hub was also seen as an opportunity for the on-site agencies to engage with the community and share vital knowledge about sustainability and climate change adaptation. An overriding assertion was that education is key to promoting sustainability and that the agencies have a responsibility to take part in engaging with the community to influence change through knowledge sharing.

The evidence presented above tells a story about how sustainability can be disseminated in ways that are meaningful and transformative, but also shows the dangers of not establishing a clear and manageable vision. The ambiguity of the meaning of sustainability is a foundational challenge. If the hub is to be based on the word sustainability, there will need to be a clear idea of what that means for Clare and the surrounding region; something that resonates with the local community to aspire to that will make the region a better place (Madhavan et al., 2013). Importantly the work already done, the vulnerability assessment and the processes undertaken for the GLSH established a deep-seated idea of sustainability for the region. Indeed, the vulnerability assessment report remains an important document because it raises issues relative to the region that continue to need to be addressed. It is also important to note that the desire for a hub to overcome these vulnerabilities remains.

The Goyder's Line Sustainability Hub was initiated because of a gap identified between what was being researched in relation to regional sustainability and climate change adaptation and what was reaching the community, which remains an issue to this day. Importantly, however, the GLSH and the case studies exemplify the importance of a comprehensible framework from which to build the hub, with a clear vision, secure funding and management structures, target audience and community involvement. The GLSH experience in conjunction with the broad range of ideas and agendas facing the

## Box 2. The working group's initial impressions of what a sustainability hub could look like.

### **Concept**

- The site is a showcase of sustainability – a highly efficient, energy efficient space
- Showcases sustainable building design, energy systems, water re-use, sustainable garden design
- Education site for climate change adaptation
- Focus on energy sustainability
- Creating a space that makes climate change adaptation achievable, something that can be put into practice
- It needs to be inspiring and of interest to people
- Provide a platform for passionate people to get involved and contribute
- Focus on delivering things that can be used by ordinary domestic households and small businesses
- Have clear objectives
- Needs commitment
- Investments in the community have value – community well-being is of value
- Develop community's environmental awareness
- Develop climate change awareness
- Focus on education – showing people, especially the younger ones, how we can do things better
- A physical space – a place people can go to – something tangible
- Start small, do not be too ambitious, create some street cred and then track funding – unless you really know it is going to be a winner
- Open for the community to use the meeting rooms and facilities
- Showcasing ways of taking very old buildings and readapting them to modern energy use
- Provide education about wind power and solar and how people can have them in their homes
- Showcase innovative things that people can take on board themselves
- A meeting place, available for the community to use
- A community garden accessible to the community, but also for schools to get involved
- Community garden for education, how to grow food, climate resilient, water-wise, native, and exotic gardens. Food grown used for the site and community purposes
- Education and awareness programs for schools – school groups to be educated about gardens and animals and buildings, and solar and wind power
- Involve the local Aboriginal community in providing courses on traditional sustainable practices
- A training facility for other staff and businesses
- On-site catering available to the community
- Make use of all the buildings on the Clare site
- RDA provide information – about grants, making mission statements, energy audits, businesses sustainability
- RDA – support training and workshops. Support people with grant writing and linking people to opportunities
- Showcase businesses local sustainable business practices
- An 'ideal home exhibition'
- Explore other sites other than the NRM site; potentially other council sites, or other sites across the region

### **Audience**

- The general community
- Need to consider the outreach of the centre – where are the users coming from? – residents of the Clare and Gilbert Valley or further afield
- Landholders, NRM region, local councils, anyone who pays the NRM Levy
- Volunteers and friends' groups
- Older people could come and share their knowledge
- Staff from the site using their skills and facilitating groups, meetings
- The general public

### **Funding/management**

- Grants – start off small to create something that is going to be useable
- The Department would be a key driver of its management and its function. The Department owns the site and therefore responsible to be involved more and take a lead role in this
- Initial vision for the DEW site to become a showcase for sustainability and connect the Department with the community – it would be to bring money to the site, maintain it and make it bigger. The project is now bigger because of the involvement of Legatus and the Alliance

new working group also demonstrate that overcoming the complexity of the region in decision-making regarding the above necessities is no easy task.

The importance of recognising the role of research in addressing the climate change vulnerabilities in the region continues to be relevant today. If this is to continue to be an agenda for the hub it will be important to have in place the above-mentioned framework in order to establish funding and partnership opportunities with industry and universities.

A clear vision will come from defining sustainability in a way that best represents the region, and which will be meaningful for the community (Dollery et al., 2008; Ripple, 2012). The case studies demonstrate the need for clarity and vision. For example, the Adelaide Sustainability Centre's central focus is providing resources to transform people's decision making in their daily lives. The Mount Pleasant Natural Resource Centre's focus is the role of human consumption in influencing climate change and addressing that on a local level through waste management. For Townsville City Council, sustainability is integrated into all Council decision making and management practices. Each vision is used to define their target audience, structure their programs and connect meaningfully with their local community.

For sustainability to be contextual, a range of issues can be addressed. For Clare and the Mid North, issues pertaining to water and landscape management, energy and building efficiency, and waste are relevant. Also pertinent is sustainability concerning agriculture and climate change adaptation. These focuses, integral to the GLSH, also provide a substantial platform to build a vision for this sustainably hub.

The case studies also identified the importance of management structures in the success of the respective hubs. The ASC and the MPNRC demonstrate the importance of clarity in this area with secure funding for their coordinators to take responsibility for the running of the projects and volunteers. In Townsville the sustainability hub is integrated into the workings of the Council and thus funded and managed within the Council structures. The case studies also demonstrate that many examples of management structures are available, such as management/advisory boards or committees, not-for-profit organisation, community-run and operated, or government agency-run. Any management structure should consider the needs of the local community, the availability of resources and the desired outcomes and vision of the hub.

Correspondingly the community-based case studies demonstrated diversity in their funding structures to ensure their sustainability: from the business ventures such as nurseries and re-use shops and workshop programs, to providing functions and conferences, or

relying on grants. Each of the funding models factors in shaping the hub. For example, although community-led operations rely on some type of government funding, income from workshops and other types of enterprises are integral to each site's funding model.

The study also demonstrates the importance of community in the success of a sustainability hub. Whatever the targeted community, community participation is central to the visions and mechanisms of the hubs or centres above. Many rely on volunteer support; however, community input is often integral to programme design. The ASC and MPNRC not only use their guiding principles but community input from feedback surveys and other responses from participants and the community more broadly also guide programme design. Townsville City Council has an extensive community participation process included in its Integrated Sustainability Model. In these ways, community acts as more than an end user of a centre but is also integral to decision-making processes.

The successes of the case studies above, in contrast with the experiences of the GLSH, are that each operates with clearly defined projects that explain and characterise the hub or centre. These examples demonstrate that a sustainability hub can engender a reputation built on an initial project. Moreover, each evolved over time, responding to the needs of the community, and the local environment, to become what they are. This suggests that any future project can start small and grow and evolve.

## Conclusion and recommendations

This paper presented the results of a project that assessed the feasibility of a Sustainability Hub being established in the regional small town of Clare, South Australia. To understand the parameters that would be needed to make it feasible, a range of analyses of other types of sustainably initiatives were undertaken. This included an evaluation of the Goyder's Line Sustainability Hub which revealed a series of pitfalls and concerns that need to be accounted for in any future design of a similar initiative in Clare. Examples of successful case studies of sustainability were then presented as exemplars of how a sustainably hub in Clare may evolve. Ultimately, we argue that a sustainability hub in Clare and the Mid North is feasible on the basis that there is a demonstrable desire to use this platform to address identified vulnerabilities to climate change in the region. However, there are several points needing further consideration. We suggest that a number of conditions need to be in place to progress to the next step, including:

1. a need to clearly define sustainability in/for the context of the hub;
2. ensure there is a clear vision for the hub and outcomes that the hub wants to achieve;
3. ensure there is a defined management structure for the hub – including who will oversee the decision-making and to whom that person will answer;
4. identify ongoing and secure funding streams;
5. decide on a physical space for the hub; and
6. establish processes that ensure community involvement in decision making and in the background processes of the hub.

These recommendations offer a basis on which to develop a future sustainability hub in Clare and the Mid North region of South Australia. Ensuring these factors are considered in the hub's development will ensure its success, that it is sustainable in its own right, but will also strengthen the region's climate change adaptation capacity by providing its citizens with the knowledge and skills to make sustainable choices and put sustainability into practice. A sustainability hub that is developed by and for the local community is ideal for engendering sustainability at a local level and delivering achievable climate change adaptation outcomes.

The feasibility study report, the initial undertaking towards a future sustainability hub, and its recommendations informed the Yorke Mid North Alliance members in their progress to developing a concept plan for a sustainability hub in Clare, triggering the next stage of research: identifying future stakeholders, and what that sustainability hub may look like.

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Mid North region envisions that a sustainability hub is a way of putting this into practice. The feasibility study is part of a process to ensure that the future sustainability hub is functional and successful.

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