

MELBOURNE PURE CASE STUDIES

REGIONAL INNOVATION SYSTEMS THEME

INTRODUCTION

Melbourne PURE has undertaken a series of case studies of regionally-significant initiatives in which higher education institutions (HEIs) have been engaged. The purpose of the case studies has been to understand better the conditions and the factors which shape effective engagement by HEIs with key stakeholders in the Melbourne region. Each case study has been chosen because it contributes to a larger theme which has been identified as a key priority for Melbourne: regional innovation systems; 'green' jobs'; and social inclusion and active citizenship.

This paper has two purposes: firstly, to provide some conceptual framing of the regional innovation systems theme: what its key elements are; and, how higher education institutions (HEIs) are relevant. Secondly, to draw together the insights from four case studies which have been undertaken on regional innovation in the Melbourne region, in October-November 2009.

IN BRIEF:

- 'Society's interest in innovation stems from its central role as a sustainable source of long-term economic growth and thus improving welfare'
- Both Australian and Finnish reports on national innovation systems place emphasis on *national innovation systems*: the institutional and dynamic relationships that link businesses and non-government organisations with universities, government, suppliers and key stakeholders in generating, sharing and applying new products and ways of doing things.
- There is a very substantial body of research which illuminates the importance of locality in framing opportunities for innovation and enhanced economic performance, pointing to the idea of *regional* innovation systems.
- Two key issues recur in the literature: the importance of knowledge exchange, especially where it is tacit, not codified in an easily transferable form; and collaborative action to invent, design, produce and distribute. The former is influenced very much by proximity.
- Underpinning this research has been the question of how policy interventions can influence the effectiveness of regional innovation systems.
- *Venturous Australia*, the Australian report on innovation, stresses the importance of human capital for innovation, emphasising the themes of maths / science / technology; creative arts; and teacher quality.
- In the face of the ongoing challenge to improve economic performance and generate new employment, regional networks have sought to generate a more focused approach to their local innovation systems through establishing organisations which have a responsibility for coordinating regional action.

- From the case studies, these organisations have a clear role in relation to their regional innovation system, albeit recognising that local systems are open and connected to broader economic, cultural and political dynamics.
- There continue to be many opportunities for HEIs to contribute to regional innovation systems, if the challenges can be addressed.

MAKING SENSE OF 'REGIONAL' INNOVATION SYSTEMS (RIS)

In 2008, the Australian Government initiated a review of the national innovation system. Published as *Venturous Australia*, the Government responded with a policy paper, *Powering Ideas: an innovation agenda for the 21st century* in May 2009, outlining an innovation policy agenda until 2020. Both the initial inquiry and the policy response emphasised the significance of innovation for Australia, and raised a number of questions about the current innovation system. In *Powering Ideas*, it was asserted that Australia needs innovation,

... to revive productivity growth, we also need it to tackle the many pressing economic, social and environmental challenges facing Australia and the world. We need innovation to create better products and services, higher levels of comfort and security, richer experiences, and new forms of social engagement (2009, 13).

As was noted in *Venturous Australia*, innovation is much more than investment in research and development, and commercialisation; businesses and workplaces, public sector included, need to be 'consistently innovating – not just with next generation products, inventions and technologies, but in their operations, organisation, relationships and business models' (2008, x).

Australia is not alone in this respect. In a recent evaluation of the Finnish evaluation system, the authors commented that 'Society's interest in innovation stems from its central role as a sustainable source of long-term economic growth and thus improving welfare' (Veugelers 2009, 5).

Both the Australian and Finnish reports place some emphasis on *national* innovation systems. In both cases, this refers to the institutional and dynamic relationships that link businesses and non-government organisations with universities, government, suppliers and key stakeholders who engage with the processes of generating, sharing and applying new products and ways of doing things. Both imply that the national policy and resource frameworks and inter-relationships are the major context within which innovation occurs. The Finnish report, for example, focuses on issues related to governance, whereas the Australian policy framework outlines seven National Priorities.

Both acknowledge that innovation is a tricky process: 'complex and risky' in Powering Australia, 'art rather than science' in the Finnish evaluation. This reflects in no small way the framing of innovation as an outcome of relationships which often involve multiple stakeholders with multiple sets of interests. Only the Finnish report, however, acknowledges the significance of the regional dimension of innovation: the geography of industry, R&D and governance which can both facilitate and frustrate the design and development of appropriate relationships, particularly those which affect the linking of innovative ideas with technical and social production.

Yet, there is now a substantial literature about the regional aspects and context of innovation. *Regional* innovation systems have become an increasingly significant focus of research and of policy over the last two decades. This has arisen from the view that interaction is critical to knowledge exchange and learning, which in turn, are significant elements of innovation processes. Notwithstanding the communication possibilities now available and the emergence of 'virtual communities', regional environments and spatial proximity have been seen as critical resources for understanding the formation of clusters and their potential significance in facilitating the kinds of interactions that lead to innovation and hence to increased economic activity.

While there are a number of prominent writers whose work has received a lot of public attention (Porter 1990, 1998 and Florida 2002, for example), there is now a very substantial body of research which encompasses all kinds of theoretical perspectives, industries and locations which illuminates the importance of locality in framing opportunities for innovation and enhanced economic performance. The research shows great variety in clusters and how organisations network, depending on historical, industry, cyclical, cultural and regional circumstances. Much of it has focused particularly on small and medium enterprises, their relationships with large organisations, and the potential value of collaboration in enhancing their prospects for growth and increased profitability.

Across different national settings and industry sectors, the studies also raise as many questions as they answer, about such issues as scale, diversity in type of organisation, the roles of intermediaries, variations according to industry sector and cultural influences. Frames of reference vary so often in many of the studies that it can be very difficult to develop a coherent perspective on many of these issues.

Two key themes recur in the debates about the regional character of innovation processes, and particularly about the relationships amongst organisations within a region: the importance of knowledge exchange, especially where it is tacit, not codified in an easily transferable form; and collaborative action to invent, design, produce and distribute competitive products and services. In these respects, at least, regions matter and 'news about the death of geography is much exaggerated' (Berry 2003, 55). This seems to be relevant particularly where proximity can enhance innovation at different points in supply chains.

Underpinning much of this research has been the question of whether policy or other interventions can influence the development and effectiveness of regional innovation systems. This is a critical question for governments and for HEIs, in understanding how best to develop their relationships with particular companies, industry sectors and regional

clusters - and local government and community networks. As the literature above suggests, implementation of innovation is framed increasingly by a much more inclusive understanding of partnerships, much more than science and technology. Access to skilled labour, reliable regulation standards, logistics, and collaborative marketing are examples of factors which can have important influence on innovation processes.

Furthermore, this raises questions about how HEIs can support a framework for innovation that is broader than a focus on science and technology alone. This is particularly important where there is growing interest in public sector innovation, and in elaborating a more coherent approach to economic, social, cultural and environmental development.

RELEVANCE OF HEIs TO RIS

Both the Australian and Finnish innovation reports comment directly on the importance of HEIs, indeed education at all levels, in innovation systems. The Australian review was careful to acknowledge parallel work by the Bradley Review of Higher Education and the Council of Australian Governments (COAG) on higher education, early education and vocational education and training. However, the Report stresses the importance of human capital for innovation, emphasising the themes of maths/science/technology; creative arts; and teacher quality.

In relation to universities, the Review noted the decline in public funding and recommended that by 2010, public investment in research should return to 1993-94 levels as a percentage of GDP, and that by 2020, Australian funding should match that of the top quartile of the OECD. This was necessary for universities to be able to produce research, without having to divert teaching resources for it. Noting that commercialisation is not a major objective for universities, they indicate that Universities '... more commonly play a role of commercial significance through provision of vital research advancement, workforce training and substantial international links' (Cutler 2008, 87).

Similarly, the Finnish Review (Veugelers 2009) supported the orientation towards a 'broadly-based innovation policy'. The Review explores the complex processes into which public interventions attempt to foster new arrangements.

Innovation processes occur over time and are influenced by many factors. Because of this complexity, firms almost never innovate in isolation. In the pursuit of innovation they *interact* with other organizations or groups of actors to gain, develop, and exchange various kinds of knowledge, information and other resources. These actors or *organizations* – also called '*players*' – might be other firms (suppliers, customers, competitors) but also universities, research institutes, investment banks, public agencies, and individual customers (2009, 13).

The Review supports the reforms implemented to the Finnish higher education system, offering greater flexibility, greater interdisciplinarity, clearer institutional roles, stronger international linkages and more effective development of university inventions.

The role of HEIs in regional innovation systems has been articulated most clearly in the report of the OECD Review of HEIs in their regions in 2007. Based on studies in 14 regions, the Review concluded that higher education is important not only in the provision of new graduates entering local labour markets, but also the provision of professional development and contribution to lifelong learning. They also described the ways in which HEIs can engage in partnerships with other regional stakeholders to address a range of local development opportunities, in social, cultural and environmental domains.

More generally, the specific studies of regional innovation systems draw attention regularly to the ways in which key university resources can be critical to new developments. Just as often, they report on the lack of accessibility of universities to external organisations, especially small and medium enterprises.

In the face of the ongoing challenge to improve economic performance and generate new employment, regional networks have sought to generate a more focused approach to their local innovation systems through establishing organisations which have a responsibility for coordinating regional action. As a means of investigating the contribution of HEIs to these initiatives, the PURE project has explored the formation of four examples:

- G21, a regional alliance of organisations in the five municipalities centred on Geelong;
- Northlink, in the northern suburbs of Melbourne;
- The South Eastern Melbourne Innovation Precinct, covering the Monash, Kingston, Knox and Greater Dandenong municipalities; and
- Leadwest, covering most of the western suburbs of Melbourne.

An overview of the preliminary learning from the individual case studies is attached.

INSIGHTS FROM CASE STUDIES

While the analysis of the learning and implications of these case studies will involve further work, a number of preliminary observations can be identified.

In the first place, each of the examples has set out to encompass active participation from local government, higher education and industry. Other partners, especially state and federal government agencies, have been involved in some more so than others. Typically, local governments, rather than university or TAFE stakeholders have offered more energy and leadership in the development. Where local government support for an initiative has been limited, the perceptions of success have been less. On the other hand, where the three levels of government are seen to be supportive, the likelihood of policy and funding success is much greater.

Secondly, university involvement has been important, if 'secondary' and sometimes ambiguous to local government and/or industry. However, the engagement has not always been clearly defined or utilised, and at times it has been undermined by internal tensions over rationalisation and growth. From a university perspective, the advocacy role and research data provided by the case study groups has been beneficial for the

universities to harness support for major grant programs. TAFE institutions have been involved from time to time, but the examples of full engagement with the regional organisations are exceptions rather than the rule.

Typically, the formal networks have begun with one or two key people seeing an opportunity, and then enlisting other organisations and stakeholders in the initial development phase. Their aims have focused on economic, environmental and social action without any specific mention of innovation, yet there has been a clear desire, even hunger, for knowledge transfer and skills development. As the initiatives have developed, more formal agreements and Memoranda of Understanding embracing governments, industry and HEI's have been essential to overcoming divergent views.

The critical success factors across the case studies, taken together, include:

- Strong and persistent champions, with strong local networks;
- A holistic approach to strategy;
- Bringing government, industry and education together;
- A consistent emphasis on sharing knowledge about broad regional issues, and learning about technology;
- Sufficient resources for the tangible outcomes which they have set themselves to achieve (the absence of both volunteer time and funding are significant restraints); and
- Supporting networking and collaboration as a foundation for ongoing activity.

Each of the regional organisations is at a different stage in its development, sense of identity and influence. Notwithstanding these differences, the case studies have demonstrated that each has a clear role in relation to an identifiable regional innovation system, albeit recognising that these local systems are open and very much connected to and influenced by broader national and international economic, cultural and political dynamics.

OPPORTUNITIES AND CHALLENGES

The case studies have confirmed that there continue to be many opportunities for HEIs to contribute to regional innovation systems, if the challenges can be addressed. This will not be easy as the current policy environment poses potentially contradictory expectations on the higher education sector. The stronger orientation of researchers towards publication in esteemed international journals, rather than cross-sectoral collaboration and industry problem-solving is a key example of this tension.

Other general opportunities include:

- The development of models and resources to support effective Interaction between HEIs with the small and medium enterprise (SME) sector is an ongoing challenge. Where successful examples have emerged, the relationship has depended on a couple of individual efforts rather than systemic arrangements;

- Resourcing mechanisms which help to address the persistent difference in the timeframes expected by industry, and that required typically for formal research. This is necessary for industry to be able to deliver quick responses to rapidly changing technologies, yet also altering the sense for academics that they would be punished for not publishing straight away;
- The development of more explicit yet adaptable models of multidisciplinary cross-sectoral engagement with representatives throughout the supply chain, to identify critical design, production and distribution issues which can be enhanced by learning and knowledge exchange. This would help to deliver appropriate and effective approaches and skills for problem-solving; and
- The development of a clear model for the secondment of academic staff to economic development bodies. Current examples have had varying success rates; full secondment under one employer agreement appears to be the most viable option.

More specific ideas and examples emerge in the different examples. At present each of the four regional organisations operate with little awareness of the orientation and activities of the others. There might be some value in general, and particularly for HEIs with campuses which link across different regions, for some kind of an intervention which facilitates sharing of learning amongst regional organisations that share broadly similar objectives.

While the focus of this analysis has been very much on regional activities and collaboration, as indicated earlier, the regional innovation systems are open and are heavily dependent on state, national and international economic systems. Greater sharing of perspectives across the regional entities might be a useful foundation for policy advice to state and national governments.

Similarly, given the presence of some HEIs with campuses in quite distinct regional settings, there might be useful lessons from bringing together the perspectives of regional innovation organisations to review more general systems and collaboration arrangements. In Australia and beyond, the search for effective arrangements that maximise the contribution of HEIs to their regions continues.

REFERENCES

Berry, M. (2003) *Innovation by Design: The Economic Drivers of Dynamic Regions* Melbourne, lab.3000, October.

Cutler, T, Chair (2008) *Venturous Australia: building strength in innovation*. Report of the Review of the National Innovation System, Melbourne, Cutler and Company.

Florida, R. (2002) *The Rise of the Creative Class: and how it's transforming work, leisure, community and everyday life* New York, Basic Books.

OECD (2007) *Higher Education and Regions: Globally Competitive, Locally Engaged* Paris

Porter, M. (1990) *The Competitive Advantage of Nations* New York, Basic Books.

Porter, M. (1998) 'Clusters and competition: new agendas for companies, governments and institutions' in M. Porter (ed) *On Competition* Cambridge, Ass. Harvard Business School Press.

Veugelers, R et al (2009) *Evaluation of the Finnish National Innovation System – Full Report* Helsinki, Taloustieto, on behalf of Ministry of Education and the Ministry of Employment and the Economy.

Attachment 1

PURE CASE STUDY REPORT

G21

THEME: Regional Innovation Systems

INTRODUCTION

Melbourne PURE has undertaken a series of case studies of regionally-significant initiatives in which higher education institutions (HEIs) have been engaged. The purpose of the case studies has been to understand better the conditions and the factors which shape effective engagement by HEIs with key stakeholders in the Melbourne region. Each case study has been chosen because it contributes to a larger theme which has been identified as a key priority for Melbourne: regional innovation systems; 'green' jobs; and social inclusion and active citizenship.

The learning which results from the case studies will be shared with the other 17 regions which are participating in PURE internationally, especially those with which Melbourne has common interests in the key themes. It will be used also to identify opportunities for policy development, for new initiatives, and for enhancing the HEI contributions to the existing initiatives.

The particular initiative which is the subject of this case study, G21, contributes to understanding of the regional innovation systems theme.

BACKGROUND TO INITIATIVE

G21 is the largest and most comprehensive of the initiatives explored in this project, offering an insight to an organisation which has facilitated innovation in a range of local sectors, including well-being and health, and not only education and economy. It was established in 2002 in recognition of the need for much greater coordination amongst the various municipalities. Following the abolition of the Geelong Regional Commission during the 1990s, multiple large organisations from different sectors had become involved frequently in representations to the Victorian Government seeking resources to support one kind of initiative or another. It had become apparent that each had some kind of more general vision of the region's future, beyond their own sectional interest, and that the region would be served better if there was a more coordinated approach. G21 was the result.

G21 describes itself as an alliance of a variety of independent organisations with a shared vision for the future of Geelong. Its membership includes over a 100 community and business organisations, and the Victorian Government, and it has a mailing list of over 10,000, many of whom are local residents.

STRUCTURE AND FUNDING SOURCES

G21 is governed by a Board of 10 people, including five from each Council and five who are elected at the Annual General Meeting. The five Council representatives are either the Mayor or the Chief Executive Officer, while the elected members are typically from diverse sectors with leadership roles. Core funding is provided by the local government authorities: Colac Otway, Golden Plains, Greater Geelong, Queenscliffe and Surf Coast, whose nominees form the core membership of the Board for G21.

As an alliance, G21 is a collaborative voice for the region that provides:

- A platform for the region to speak with one voice to all levels of government.
- A forum to discuss 'big picture' regional issues across interest groups and municipalities.
- Efficiency through facilitating multi-agency collaboration and sharing of information and resources.
- More resources from all levels of government and the private sector through the co-ordination and prioritisation of regional projects, and
- Alignment of the objectives of major regional organisations with those for the sustainability of the region (see the Geelong Regional Plan: a Sustainable Growth Strategy, 2009).

The core of G21's activities is its Pillars, which derive from its early days in 2002, when leaders of key regional organisations, such as Barwon Health, volunteered to lead networks that would focus on priority projects, and deliver results. The Pillars identified 24 projects as a focus for the Geelong Regional Strategy in 2003; 21 of those projects have since delivered on their objectives, or made significant progress. In 2005, however, it was recognised that there was a need for a single framework which would enable the Pillars to collaborate on issues of common interest. This led to the development of the Geelong Regional Plan in 2007. The Plan offered a 50-year vision for sustainable growth in the region, with five key Directions:

- Direction 1. [Protect and enhance our environment](#)
- Direction 2. [Create sustainable settlements](#)
- Direction 3. [Strengthen our communities](#)
- Direction 4. [Refocus our economy](#)
- Direction 5. [Make it happen.](#)

The Pillars are the principal means of project implementation. There are eight Pillars: Arts and Culture; Education and Training; Health and Well-Being; Economic Development; Planning and Services; Transport; Environment; and Sport and Recreation. Each Pillar draws together a significant network from diverse organisations with an interest in that area. Typically, the Pillar Leader will be a prominent member of the group, and will serve as a key liaison person with the Board.

Additional resources are sought to support project implementation. G21 itself has eight staff at present, three of whom are supported by the core funds and the others by project funding. Significant in-kind support is provided by many of the organisations which participate in G21's activities, and overall, the organisation depends heavily on continuing goodwill. Several projects are funded at present by different state government departments.

MAIN ACTIVITIES

As a regional alliance, G21's core activities are focused on information, coordination and communication, planning and advocacy. These activities underpin the more focused project activity that is led by one or the other of the Pillars. Maintenance of detailed and comprehensive demographic and other statistical information about the region is a key priority. This reinforces the legitimacy of G21's role as an advocate, because it can demonstrate that the positions which it adopts are grounded in evidence.

Each Pillar organises itself according to its own agenda and projects, seeking where possible to integrate existing activities in the region. For example, the Health and Wellbeing Pillar has responsibility for the Primary Care Partnership funded by the Victorian Department of Human Services, such that G21 is responsible for its deliverables, and has a strong connection with individual and community initiatives. This informs other projects. For example, the Pillar has released recently the *Community Health and Wellbeing Profile 2009*, as an accessible and current document for use in planning and implementing services in the region. A substantial and attractive document, it presents detailed information under the broad headings of community capacity, socioeconomic factors, environmental factors, health behaviours and health status.

G21's main achievements have been the delivery of projects that would not have happened without its support, especially in planning and strategic development. The chief characteristics of the G21 role, apart from providing the evidence, are its capacity to pull together all of the significant stakeholders whom might be affected by an initiative, and to gain access in the political process of representation to state and federal governments. In this respect, the alliance always has a holistic view, so that it tries to position issues in relation to each other and to the priorities which have been identified in the planning process. G21 has credibility with governments which facilitates constructive dialogue.

Maintaining collaboration is a constant challenge as most of the larger organisations are subject to regular pressures in their own sectors which can be quite distracting. There are also some other initiatives such as the implementation of the new Regional Development Australia entities which can confuse and create tension. Part of the skill in maintaining the alliance is bringing these issues into the open and ensuring that they are discussed carefully.

ROLE OF HIGHER EDUCATION INSTITUTIONS

Deakin University and Gordon TAFE College, as the two key, local HEIs, have been integral contributors to G21 since its inception. The Deakin Vice Chancellor was the first Chair of the Board, and senior Deakin staff have been involved consistently since. Deakin is large and diverse, and while a number of senior academics have been involved in specific activities, its contribution has tended to come from individuals rather than from an institutional commitment. The perspective of others in G21 is that the local Deakin staff are much more grounded and able to contribute to 'real world' projects than has been their previous experience with other universities. Deakin has also funded a very interesting relationship with Enterprise Connect (EC), where an EC staff member has been seconded to the University to work on a series of projects to build relationships between government, business and university.

The Gordon Chief Executive Officer has been influential in the Education and Training Pillar, along with other senior executive staff. Given the level of change in both state and federal policy, particularly in implementing Skills Reform, it is difficult at times for Gordon to contribute to broader issues. However, being successful in a contestable market will depend on their capacity to develop strong partnerships, and they see G21 as an important partner. They work very closely also with the City of Greater Geelong.

As the only examples of local HEIs, there was some perception that work was required for them to be focused on broader regional issues, and not only their own agendas. Other partners were keen to have their involvement even where an issue was not directly relevant to them.

MAJOR ACHIEVEMENTS

G21 is very much a work in progress. From the circumstances a decade ago, of quite disparate and at times competing interests, to the initial development of a Regional Strategy and then the Regional Plan, very significant progress has been made in building a cohesive and comprehensive approach to regional development. The role of G21 as an advocate for the region is well-recognised by government. While work continues on developing a more comprehensive governance framework that will extend to project implementation, G21 can point already to an impressive list of achievements. On their website (www.g21.com.au), they mention initiatives such as:

- **A National Award for Innovation** in Regional Planning and Development;
- **The G21 Geelong Region Plan** – a sustainable growth strategy for the Geelong region that looks towards 2050. Endorsed and supported by local and State Government, and involving participation of hundreds of regional stakeholders, the Plan is the agreed framework for the future development of the Geelong region;
- **G21 Region Demographic Profiling and Forecasting System** – through a grant from the Department for Victorian Communities, each G21 Council now operates a demographic profile and forecast system that provides easy to access, reliable data for planning and decision making by the public and private sector alike;
- **G21 Integrated Public Transport Strategy**;

- **Regional Marketing Strategy** – developed through the collaboration of Local Government, State Government, tourism authorities, media owners, business networks and private agencies;
- **Regional Marketing Program 2008-2009** – funded by a range of private and government agencies and including market research, newspaper inserts, campaign website and television commercial;
- **Regional Sustainability Indicators** – the indicator system now underpins the new G21 Plan and will measure the progress of the region over time. The indicators have been built around extensive research;
- **BioGeelong** - biotechnology cluster development;
- **Geelong Region ICT cluster development;**
- **Regional Community Strategy;**
- **Roads Projects** – support for funding campaigns for the Geelong Ring Road and the Princes Hwy West duplication and upgrade from Waurin Ponds to South Australia;
- **Telecommunications Needs Assessment Report** – highlights both the wealth of telecoms infrastructure in the region AND the need for business and the community to do more with it. Major spin off projects are now taking shape through public and private investment
- **G21 Region Energy from Waste Framework** – the framework has identified pathways to use agricultural, industrial and commercial ‘waste’ for energy and has identified nine projects for further development;
- **Healthy Communities** – the first ever “Planning For Healthy Communities in the G21 Region” has been endorsed by all Councils providing a common framework for Municipal Health Plans;
- **Healthy Ageing Forum Program** – exploring the many positive facets and challenges of this world wide challenge with the findings to be implemented through public and private sector actions.

OPPORTUNITIES AND CHALLENGES FOR HEIs

One of the great advantages of the G21 context, with its strong emphasis on grounded evidence and longer term, comprehensive planning, is that educational strategies, like health, can develop within a more holistic framework. Partnerships become and coordination of activity becomes a starting point for action, rather than a secondary or tactical consideration. This will be very important for both Deakin and Geelong in responding to the Victorian Government’s planning for tertiary education, particularly when pathways is likely to be a major theme.

For both Deakin and Gordon, involvement in the Education and Training Pillar is a very practical means of engaging with people in schools. These relationships will be very important in addressing the policy targets related to increasing participation.

Another possible area for development will be attracting students from other regions, including international students. The G21 context facilitates conversations about related issues such as affordable housing, public safety and transport.

Beyond these, there are clear opportunities for Deakin in particular to support local initiatives for sustainability and urban planning that supports social engagement. However, progress with these initiatives will continue to require some cultural change in order to get government, business and the university working together more coherently.

Attachment 2:

PURE CASE STUDY REPORT

SOUTH EAST MELBOURNE INNOVATION PRECINCT

THEME: Regional Innovation Systems

INTRODUCTION

Melbourne PURE has undertaken a series of case studies of regionally-significant initiatives in which higher education institutions (HEIs) have been engaged. The purpose of the case studies has been to understand better the conditions and the factors which shape effective engagement by HEIs with key stakeholders in the Melbourne region. Each case study has been chosen because it contributes to a larger theme which has been identified as a key priority for Melbourne: regional innovation systems; 'green' jobs; and social inclusion and active citizenship.

The learning which results from the case studies will be shared with the other 17 regions which are participating in PURE internationally, especially those with which Melbourne has common interests in the key themes. It will be used also to identify opportunities for policy development, for new initiatives, and for enhancing the HEI contributions to the existing initiatives.

The particular initiative which is the subject of this case study, the South East Melbourne Innovation Precinct, contributes to understanding of the regional innovation systems theme.

BACKGROUND TO INITIATIVE

The South East Melbourne Innovation Precinct (SEMIP) is in its early days. An initiative supported by the Victorian State Government's Department of Innovation, Industry and Regional Development, SEMIP is seeking to prompt greater economic activity through developing closer networks amongst the small and medium enterprises and two of Australia's premier research institutions, Monash University and CSIRO, in the south eastern corridor between Clayton and Dandenong. It began with a meeting between representatives of the Australian Synchrotron, Monash University and CSIRO (Clayton campus) to explore opportunities. This precinct area has 40 per cent of Victoria's manufacturing activities, and the aim is to grow stronger clusters and connections across the precinct, and to spread greater understanding about the knowledge assets which are available, so that small and medium enterprises (SMEs) in particular will begin to use them.

The early part of the process has been somewhat organic, getting people together around the table to commence talking about possibilities. A context report was commissioned by

the group involving interviews of the various stakeholders. This report led to the development of a draft strategic plan to enable the region to become a leading destination for learning, working, living and investing; providing ongoing opportunities for businesses and researchers to share knowledge and explore ideas and new applications. Alongside this initiative, the Victorian Department of Innovation, Industry and Regional Development is expanding its Dandenong office to 20 people, providing a more localised approach to engaging with business in the region and to understand better the supply chains in the region. This offers an opportunity also for closer collaboration with the Federally-funded Enterprise Connect.

In October 2009, SEMIP was launched formally by the Victorian Minister for Innovation, who signed a Memorandum of Understanding with the other key partners involved in the initiative.

In the longer term, the ambition is for SEMIP to be recognised globally as the “innovation business and knowledge capital of the Asia-Pacific”. It will be recognised as an exciting place to live and work, and will showcase the resource as a means of attracting further investment. The key technologies will include chemicals, polymers, machinery and equipment with applications in transport, health, construction and the environment.

STRUCTURE AND FUNDING SOURCES

The SEMIP Steering Committee includes senior representatives of the Australian Synchrotron, Monash University, CSIRO, the Small Technologies Cluster with four local government authorities; Greater Dandenong, Knox, Kingston and Monash and the state government, working in consultation with industry and federal government representatives. The state government has provided initial facilitation and administrative support. In the longer term, it is envisaged that industry will become the major membership and the key driver of SEMIP.

Early funding has come through small contributions from the partner organisations together with some grant funding. Significant in-kind support has come from all of the partner organisations.

MAIN ACTIVITIES AND ACHIEVEMENTS

The principal achievement to date has been establishing a forum in which the different kinds of stakeholders are continuing to collaborate. The cultural differences exist, but the parties are beginning to fund areas of common interest and potential. While it has taken some time to get to this point, this initiative is also more ambitious than earlier efforts.

Local government has been very supportive and has become a key driver for network development. Their capacity to connect with a wide range of stakeholders means that they can play a crucial role with this kind of development, helping to clarify agendas and to build linkages. As part of this, they can help to identify the real strengths of a cluster.

To date, the Steering Committee has developed a Strategic Plan that has identified the potential for significant long-term job growth for the Victorian and Australian economy. The next step is to begin to marshal the educational resources of the knowledge centres in conversation with industry. Consequently, SEMIP is introducing two types of Knowledge Clubs as interactive events for discussing business innovation issues and exploring new knowledge and technologies. The first is a series for key regional leaders focused on business innovations, seeking to develop a group of people who can exercise regional leadership beyond the circumstances of their particular organisation. The second is for technical specialists or managers to explore issues related to innovation capability, providing a forum for companies and researchers to share resources as a basis for applying 'clever' ideas. It is seen as an opportunity to brief people on new ideas and developments, as well as on new applications of existing knowledge or technology available in the South East region. Outcomes of these industry pilot events will also inform the priority of future SEMIP activities.

ROLE OF HIGHER EDUCATION INSTITUTIONS

Monash and CSIRO senior management have been involved from the outset, while Swinburne has become involved more recently through individual academic staff. They are starting to recognise that when writing big grant applications, it can help to be able to tell a story about the broader region and context within which a particular project will contribute.

Beyond this, there are many examples of staff within the universities or CSIRO who are linked in one way or another with local firms. These relationships work variably, dependent very much on the personal links that get established. In the absence of the personal dimension, it seems to have been much harder to see mutually beneficial partnerships develop.

OPPORTUNITIES AND CHALLENGES FOR HEIS

SEMIP provides a unique opportunity in Australia, given the collocation of the Australian Synchrotron, CSIRO, the Nano-fabrication facility and Monash University. While it would still be possible without SEMIP, SEMIP does provide the formal infrastructure and relationships to enable linkages to be made relatively easily, and to shorten timelines. It still has some way to go to become an integrated cluster precinct!

The great opportunity is building the linkages with industry. The cultural differences continue to be major issues, but over time and with continued dialogue, it is anticipated that considerable progress can be made. One of the early challenges has been managing expectations, so that people do not leap to negative conclusions too quickly.

From the SEMIP perspective, it is very important to have the legal and business areas of the university involved, as it is often this kind of expertise that is more valuable to SMEs than the scientific knowledge. In the past, SMEs have known little about the resources

available at Monash, or how to gain access to them. This will depend on Monash being able to involve a much broader cross-section of the university than has occurred to date.

This is one means of Monash addressing the major communication problems with local industry which it has had in the past. From the Monash perspective, there seems still to be a greater interest in relationships with large organisations rather than SMEs, but it is considered possible that a partnership with a major corporation might then lead others to follow.

There is an opportunity also for other universities and TAFE, including Swinburne and Deakin which are close at hand, to become involved at a later stage. As the conversation around SEMIP takes hold, the demand for support with a broad range of expertise will increase steadily.

Attachment 3:

PURE CASE STUDY REPORT

NORTH LINK

THEME: Regional Innovation Systems

INTRODUCTION

Melbourne PURE has undertaken a series of case studies of regionally-significant initiatives in which higher education institutions (HEIs) have been engaged. The purpose of the case studies has been to understand better the conditions and the factors which shape effective engagement by HEIs with key stakeholders in the Melbourne region. Each case study has been chosen because it contributes to a larger theme which has been identified as a key priority for Melbourne: regional innovation systems; 'green' jobs; and social inclusion and active citizenship.

The learning which results from the case studies will be shared with the other 16 regions which are participating in PURE internationally, especially those with which Melbourne has common interests in the key themes. It will be used also to identify opportunities for policy development, for new initiatives, and for enhancing the HEI contributions to the existing initiatives.

The particular initiative which is the subject of this case study, NORTH Link, contributes to understanding of the regional innovation systems theme. A separate paper outlines the concepts and issues which arise in relation to this theme.

BACKGROUND TO INITIATIVE

NORTH Link has its origins in the economic difficulties which have affected Australian manufacturing since the 1970s, reflected in increasing levels of unemployment, particularly amongst young people. It has its origins in a number of regional associations which have developed since the 1980s. NIETL (Northern Industry Education and Training Link) was formed in the context of debate about the restructuring of the Australian manufacturing industry in the mid-1980s, bringing together education, industry, local and state government representatives who were concerned about economic prosperity, employment and the importance of manufacturing in the northern Melbourne. Issues of unemployment and lack of skills were important drivers for these initiatives. Around this time, several local government authorities set up the Northern Regional Commission. In 1993, the Northern Area Consultative Committee was a federal departmental initiative established, as in many other regions, with a focus on employment outcomes, becoming more generally-oriented after the change of Government in 1996.

In 1995, the relationships amongst the various organisations became more complicated and tense when the Northern Regional Commission established the Northern Regional

Economic Development Organisation, as New Edge—Melbourne's Northern Economic Wedge Inc, which then began trading as NORTH Link in 1996. The 'Regional Economic Development Organisations' were to be provided with substantial federal funding, but this altered after the change of Government in 1996. For a period, however, there was some uncertainty about the roles of different organisations, and about how they should connect with each other. There were questions also about whose interests were being given priority.

NIETL and NORTH Link formed a close partnership, effectively a merger, in 1997. In one sense, this was not a significant change: throughout their history, there was overlapping Board membership, and a clear commitment to collaboration. Whereas the former had focused on supporting industry learning and linking schools and other organisations into industry projects for regional development, the latter had an economic development focus which emphasised attracting business and lobbying for infrastructure. Initially separate Boards and activities continued, but over time, the organisations came to work more as one, even though local government tended to identify more with 'NORTH Link', while education and industry identified with NIETL. Over a decade later, NORTH Link is very much a regional partnership of industry, education and government that aims to develop and promote northern Melbourne's regional economy (see Badenhorst 2009 for a fuller account of this background).

STRUCTURE AND FUNDING SOURCES

NORTH Link has a Board and staff, with Mick Butera as Executive Director. The Board members are very 'hands on', and its work is assisted by a number of committees, with sub-committees being established also to implement specific projects, including the achievement awards. The structure is not so much a formal framework, but one in which networking is strongly encouraged. Some people suggested that NORTH Link is not so much an organisation in itself, but rather a means of enabling the community to achieve its visions.

Its funding comes from its key members, local government and higher education institutions, together with tendered projects and network activities. Business members also sponsor particular activities. Apart from the local organisations and business, it has been supported by the Victorian Department of Innovation, Industry and Regional Development (DIIRD). Some of the key participants have been involved for many years, and were originally connected with one or the other of the antecedent organisations.

There is a strong belief among some participants that the Chair needs to be someone from local industry with a business background that has no vested interest or favourable advantage. This reflects the view that the business leaders tend to be focused on outcomes and not easily distracted, which helps to bring a broader constituency along in the same direction. Other members of the Board represent different types of organisations and sectors. This cross-sectoral membership has been regarded as a real strength in both understanding and engaging with the issues faced in northern Melbourne. Not all local government authorities have contributed with the same enthusiasm, but the outer suburban municipalities have been particularly active.

MAIN ACTIVITIES AND ACHIEVEMENTS

The main activities have focused on supporting networking, bringing business, local government and the HEIs together. The interest amongst business in learning from others was articulated regularly, and by some of NORTH Link's earliest members, who are still involved. Breakfast seminars, industry tours, achievement awards and similar events are well-attended, with the right balance of guests coming together, with strong linkages to government policy. These have been oriented towards building a strong 'improvement' culture.

However, there are a number of major projects of both a strategic and practical kind which NORTH Link/NIETL have also sponsored over time. These have encompassed both major research initiatives, and specific projects, some of which have had a strong campaign focus. Two major reports, in 2003 and 2009, have been particularly useful in defining direction, and in providing legitimacy for NORTH Link's role and its campaigns. An earlier initiative really focused the direction for the stainless steel industry, while more recently, NORTH Link played a key role in advocating for the wholesale fruit and vegetable market to be relocated from the Melbourne ports area out to Epping. The Whittlesea Youth Commitment was another very important initiative which has been sustained now for more than a decade.

NORTH Link also facilitates direct support to small and medium enterprises (SMEs), especially assisting them to develop export readiness, to undertake business improvement, and to harness the benefit of government programs. Its critical success factors have been its capacity to assist business in the region to prosper and grow, and to attract regular government grants. It has supported programs such as the Greenhouse Challenge, and has helped to link key state and federal programs, such as Enterprise Connect, with local firms.

Following from this range of activity, NORTH Link has been successful in shaping government policy. Strong relationships have been forged with key political figures, and the strong evidence base from both the research and the extensive experience has proved persuasive on key issues. In many ways, NORTH Link has been a key 'ambassador' for the northern region.

ROLE OF HIGHER EDUCATION INSTITUTIONS

NORTH Link is housed at La Trobe, which has provided physical resources along with Northern Metropolitan Institute of Technology. Each of these, together with RMIT and Kangan Batman TAFE Institute are represented on the Board. Through these roles, they have contributed concepts and ideas, and facilitated ways of getting closer to the community. They contribute directly to events, and have the opportunity to showcase aspects of the universities' offerings. NMIT's courses have been very useful. Their funding and in-kind support has also been very useful. There have been occasions also where NORTH Link has been able to support university funding applications.

Cultural differences between the universities and the local Councils and industry are still a big factor. The HEIs are not being utilised fully because of this. There are very different timeframes and drivers, which often prevent engagement. The successful HEI-industry projects to date have had been successful where they related clearly to university priorities and requirements.

The HEIs involvement tends to vary according to internal agendas. Especially in the wake of the Bradley Review of Australian Higher Education and the Victorian Skills Reform initiative, the institutions have had to review their strategic positioning and seek stronger industry engagement. NORTH Link can be a key resource for this, especially in relation to key industry sectors. As population and industry growth occur in the northern corridors, the strategic relevance of the northern region grows in importance, and hence for the HEIs.

Another issue is that most of the HEIs have multiple campuses and are managed by very large bureaucracies. This makes it difficult for enterprises outside the university to really engage and know the right people or avenues to access. Multiple management layers make it difficult to build effective working relationships, especially when the key people engaging with industry are not particularly senior. Many HEI academics are unwilling to change their structures or programs, thus limiting the level of interest and ability to engage.

Overall, there were a range of comments that the HEIs were not listening to what business wanted and not delivering the appropriate training to meet their needs. There was a sense that they were driven to concentrate on their own futures and protecting what they currently delivered rather than being able to make a robust assessment of business. Even their capacity gain feedback was unclear to some respondents. In short, there was a broad belief that there was a lot of work to do to improve the relevance of programs and courses for businesses and industry. The Universities and TAFEs are well placed to do this but are struggling with the priority.

OPPORTUNITIES AND CHALLENGES

As is indicated in the recent research report on Melbourne's north, there are still a range of challenges, not least from declining manufacturing and intensified competition. Having gained the understanding, NORTH Link is now examining the kinds of actions which are needed to take advantage of the opportunities. Environmental issues, and greening both occupations and their skills seems likely to be a key area. As the population in the region is anticipated to grow, there will need to be concomitant growth in educational services and in industry and employment.

It reflects the circumstances of many SMEs that NORTH Link is still working hard to get the message out to the various SMEs in the region, even though it has been in operation in one form or another for nearly 20 years. There are still many companies that do not know of its existence, or what it does. The HEIs have an opportunity to contribute to this.

As NORTH Link's agenda has been driven historically by local government, it has not always been apparent to the HEIs how they could contribute best. Program relevance has emerged from these interviews as a key issue, which could in itself then provide a platform for other kinds of initiatives to develop. Ongoing assistance in sharing knowledge will also be a significant continuing role. There was feedback that more careful listening to business would enable HEIs to enhance the relevance of their resources. As universities seek to increase their commercialisation of research, NORTH Link will be able to assist this.

REFERENCES

- Badenhorst, A. (2009) *Beyond the Region: the Learning Region* PhD Thesis, Melbourne, RMIT.
- North Link/NIETL (2003) *Growing Melbourne's North: developing an integrated economy with NACC, NIEIR.*
- NORTH Link (2009) *Melbourne's North - the New Knowledge Economy* Bundoora.

Attachment 4:

PURE CASE STUDY REPORT

LEADWEST

THEME: Regional Innovation Systems

INTRODUCTION

Melbourne PURE has undertaken a series of case studies of regionally-significant initiatives in which higher education institutions (HEIs) have been engaged. The purpose of the case studies has been to understand better the conditions and the factors which shape effective engagement by HEIs with key stakeholders in the Melbourne region. Each case study has been chosen because it contributes to a larger theme which has been identified as a key priority for Melbourne: regional innovation systems; 'green' jobs; and social inclusion and active citizenship.

The learning which results from the case studies will be shared with the other 17 regions which are participating in PURE internationally, especially those with which Melbourne has common interests in the key themes. It will be used also to identify opportunities for policy development, for new initiatives, and for enhancing the HEI contributions to the existing initiatives.

The particular initiative which is the subject of this case study, LeadWest, contributes to understanding of the regional innovation systems theme. A separate paper outlines the concepts and issues which arise in relation to this theme.

BACKGROUND TO INITIATIVE

LeadWest has its origins in the history of regional development bodies which have been implemented in Australia since the 1970s. The Western Region Commission in particular was a significant example of regional cooperation and coordination which provided important background to the contemporary initiative.

In the mid-2000s, several key organisations in the west resolved that the region needed a collective forum for the development of strategy and expression of a common voice. With G21 as a model for the initiative, five of the six Councils in the western region agreed to provide funding for LeadWest. Some effort was invested in examining regional bodies internationally, leading to the conclusion that the new entity should be established as an independent company limited by guarantee. Council representatives would form a majority of the Board, supplemented by representation from key businesses and institutions in the west. After an initial period in 2007 in which the Board comprised representatives of the five Councils, representatives of Nufarm, Moonee Valley Racing Club, Melbourne West Water and Victoria University also joined the Board. More recently, organisations such as

the Western Bulldogs Football Club, Highpoint Shopping Centre and Olex Australia have become members of LeadWest, so that there are now ten non-Council members, with an aim of securing twenty.

Its big challenge is to change the perceptions of the west both within and without. It exists to create opportunity, in the face of its history of disadvantage, and the emphasis on a collaboration and teamwork, all speaking with one voice, is an important theme in this approach. Its outlook is comprehensive, in that it is wanting not only to promote the west, but to achieve significant ongoing economic, social and environmental development.

STRUCTURE AND FUNDING SOURCES

In 2009, following the recent Annual General Meeting, LeadWest formed a Board of nine members, including a representative of each of the founding Councils and of the four business and institutional members which had become involved in 2007. Core funding is provided by the five Councils, supplemented by project resources and in-kind support from other members such as Victoria University. Hobsons Bay City Council has continued to resist the strong wishes of the other councils that it also become a member; its absence means that it is the only part of the metropolitan west not represented through LeadWest.

LeadWest's aspirations place strong emphasis on leadership and on drawing key players in the region together to work collaboratively for its future. There is a very strong sense that a commitment to collaboration is critical to its capacity to address major challenges. More specifically, the company aims to build on the existing social, economic and environmental capacity of the Region and to plan and create a sustainable future for the wellbeing of the communities of the region, through:

- Leadership: Providing leadership to the Council of Melbourne West through identifying issues and taking action in relation to those issues that are of key importance to the wellbeing of the region and its people;
- Planning: The development of a Regional Development Strategy Plan that sets out strategies, objectives and actions;
- Co-ordination: Ensuring a co-ordinated and integrated approach to the development of the LeadWest Regional Strategic Plan that minimises duplication and overlap of initiatives and development programmes;
- Advocacy: On behalf of the Region to secure funding and influence planning and policy decisions to facilitate the activities of the Company;
- Promoting and Marketing: Stakeholders being well informed about regional issues and initiatives;
- Implementation: Ensuring Region plans and projects are implemented.
- Performance Measurement: Setting and monitoring of regional performance indicators, targets and measures; and
- Research: The promotion and commissioning of research into activities which underpin the objectives of the Company (see www.leadwest.com.au/objectives.php#).

LeadWest has three core staff, with others being employed on varying terms to work on particular funded projects. Apart from the Chief Executive Officer, Anton Mayer, there is a Project Officer who drives specific initiatives. It is represented on the new Regional Development Australia committee for the west, but it is still too early to see how this relationship will unfold. Limited time and resources are major constraints.

MAIN ACTIVITIES AND ACHIEVEMENTS

Its principal achievement has been establishing the 'brand', such that government now regards it as a key, legitimate voice for the west, and bringing senior leadership together to set strategic direction for the region. Developing submissions on a range of key issues, especially related to infrastructure such as road, rail and telecommunications, has been an important focus of LeadWest's early work. This has been followed by representation of the west at appropriate meetings. Conducting forums to bring key stakeholders together has been another important focus of LeadWest activity, with a focus on key issues such as telecommunications and education and skills formation.

The early work has had some obvious impact, especially in relation to infrastructure (see the Eddington report on the future of rail and related transport connections, where LeadWest had a major input, including direct influence over government decision-making). This reflects the quality of effort which had gone into preparing the arguments in each case.

The education and skills forum identified the likely scale and significance of skills shortages in the west, highlighting the importance of post-school educational provision. This raises the question of the role of higher education institutions in LeadWest.

ROLE OF HIGHER EDUCATION INSTITUTIONS

Victoria University (VU) is the obvious major Higher Education Institute (HEI) in the west and has a representative on the Board. Its own internal pressures prevent it from playing the kind of role that others might wish to see at this stage, but it needs to articulate a long-term vision as it will be a key catalyst for change in the west, especially in relation to skills formation.

At this stage, there are opportunities which are being missed, partly due to existing government policy settings. However, VU is seen to be able to make a major contribution in each of the areas that are important to LeadWest. The recent education and skills forum highlighted many areas of potential cooperation, and enhanced the foundation for future collaborative action. Some interviewees mentioned other HEIs which could be approached to become involved with LeadWest, such as Kangan Batman TAFE, suggesting that the scale of need would required strong action on several fronts.

As with other regions, cultural differences between the university and council and industry are still a big issue. There are very different timeframes and drivers, which often inhibit engagement. VU, like many other universities, has multiple campuses which can make it difficult to really connect locally, as the appropriate avenues for entry by community or industry can be difficult to identify, and might be quite remote. Most universities have many management layers, which can also inhibit effective working relationships. TAFE offers particular opportunities to strengthen relationships, but there are such pressures on TAFE from Victorian Skills Reform and the extension of contestability, that it is difficult to find time to build the relationships in a way that will foster ongoing cooperation. Many of the HEI staff who do have direct relationships with industry are not sufficiently senior to

gain the kind of institutional support that will be necessary to sustain relationships over the longer term.

OPPORTUNITIES AND CHALLENGES

As with other regions, there are significant opportunities to strengthen the role of not only VU but also other HEIs in supporting LeadWest's initiatives. Most interviewees were quick to point to the significance of skills shortages in the west, and the importance of VU (particularly TAFE) in leading efforts to address these circumstances. But several people commented also on the extent to which VU's research capacity could enhance LeadWest's efforts in most aspects of its agenda, and in some cases, already is.

There was a strong belief that Chair needed to be someone that had the capacity to bring people together, without vested interest or favourable advantage. The drive from business leaders is important as they tend to be focused on outcomes and not easily distracted. VU, similarly, can work across political and sectoral boundaries and help to link people together.

The early messages from LeadWest's founding years have been the importance of collaboration across sectors and organisations, with a commitment to speaking with one voice. This has been supported by evidence-based research, and a strong emphasis on strategy and advocacy for the whole region. VU's membership of LeadWest, and its Board, provides a strong foundation for it to contribute both to sustaining these success factors, and to strengthening its role in specific initiatives. There is an obvious scope for other HEIs also to become involved, as LeadWest strategy develops further.