



**Regional
Development**
Australia
I L L A W A R R A

Green Jobs Illawarra

Final Report

September 2013



Office of
Environment
& Heritage



Industry &
Investment

INTRODUCTION

In February 2009, the South Coast Labour Council commissioned a multi-disciplinary team of economists, human geographers, sociologists, educationalists, environmentalists and statisticians from the University of Wollongong to develop a plan for a Green Jobs Strategy.

The subsequent report, *Power to the People: Building Sustainable Jobs in the Illawarra*, formed the basis of a submission to the NSW Premier, Nathan Rees, on 16 March 2009. It outlined the funding requirements for a two-phase Green Jobs Illawarra (GJI) strategy. On 16 April 2009, at the Illawarra Jobs Summit convened to examine employment conditions in the region in a recessionary environment, the NSW Premier announced a \$390,000 funding package to deliver the GJI initiative over a three year period.

The first phase of the GJI initiative was to provide an action plan for green job generation and industry development in the Illawarra, being the Local Government Areas of Kiama, Shellharbour, Shoalhaven, Wollongong and Wingecarribee. The second phase of the GJI initiative was to appoint a project manager to implement the recommendations of the action plan.

Methodology

A Project Steering Committee representing community and government stakeholders came together in early May 2009 and developed a Project Overview and Workplan. This set out the aims of the Project, a detailed description of the tasks involved, and timelines for their completion. Three project officers were then appointed by the Project Steering Committee to research and assist in the preparation of the action plan. The methodology adopted was evidence-based within the tight time constraints of a short (twelve week) project. A review of the literature and the relevant legislation was carried out, and more than 50 industry and community representatives and academics were interviewed. A Community Forum, held on 16 July 2009, was attended by some 40 people, and a Renewable Energy Forum, held on 28 July 2009, also attracted forty industrialists and academic specialists.

An independent review process was also undertaken of the final draft of this report. The project team focussed on the following key areas of activity:

- Manufacturing
- Construction and Retrofitting
- Renewable Energy and Power Generation
- Research and Development
- Skills and Training
- Infrastructure and General Community Employment Opportunities

Steering Committee

The Green Jobs Illawarra Project Steering Committee comprised of representatives from the following organisations who all retained their commitment throughout the duration of the project:

- University of Wollongong
- Office of Environment & Heritage
- South Coast Labour Council
- Australian Industry Group
- Industry & Investment NSW
- TAFE NSW – Illawarra Institute
- State Training Services
- Department of Premier & Cabinet
- Southern Councils Group
- Illawarra Business Chamber

FOREWORD

Climate change is a subject that evokes strong and passionate responses not just from political, media and scientific circles but indeed from the broader community as well. It was in this challenging environment that Green Jobs Illawarra was established and funded as a three year project under the auspices of RDA Illawarra. Whilst the political climate changed dramatically in the course of those three years it is a great credit to the ability and determination of our Project Manager Katrina Skellern, the RDAI team more broadly and the GJI Steering Committee consisting of business, unions, education and government representatives that the project was able to meet many of its objectives and play a very significant role in the ongoing transformation of our region.

From Green Streets to Clean Technology clusters and from Green Teams to Green Technology Expos, the GJI project has left its mark on the development of the Illawarra and strategic choices facing the region. Perhaps its greatest and hopefully ongoing impact has been in creating the space for sustainable industries to emerge and grow and for existing industries to adapt and transition into new markets. The underlying premise of Green Jobs Illawarra is that these types of transformations rarely happen on their own – they need planning, capital and the support of key stakeholders and the broader community. The GJI project has laid the groundwork for this transformation and it is now up to all of us to continue this journey.

Arthur Rorris
Chair
Green Jobs Illawarra

Green Jobs Illawarra Project Report

Overview of Key Outcomes – 1/7/12 – 30/6/13

	Recommendations (as stipulated in Green Jobs Illawarra (GJI) Action Plan)	Outcome/Status	Stakeholders
1	<p>Green Street Project The construction of a 'street' of 8-10 building lots in the Illawarra to enable the construction of display homes that utilise a diverse range of available and experimental technologies to meet or exceed a range of sustainability criteria including:</p> <ul style="list-style-type: none"> • 6 star energy efficiency building rating • Harvesting and conservation of water to meet 100% of household requirements • Domestic power generation to meet 100% of net household power requirements <p>This project could be undertaken either through the purchase of privately owned land or through Landcom's existing stock with the costs of land acquisition and construction to be recouped through the sale of the properties at the end of the display period.</p> <p>It is anticipated that this project would enable the participation of apprentices in the building trades, developing and demonstrating green skills. Additionally, this project would provide an opportunity to monitor and document social behaviour in relation to energy efficiency and general sustainability principles.</p>	<p>Towards the end of 2010 and prior to the state government elections in March 2011, the Department of Premier & Cabinet (DPC), Housing NSW and Landcom met with the GJI Committee to finalise concept design plans and appropriate sites for the potential location of the Green Street Project.</p> <p>Community Housing Ltd (CHL) was commissioned to carry out some preliminary concept plans containing the ideas from the Green Street project and other ESD principles from within the experience of the design team.</p> <p>At the beginning of 2011, an appropriate site was chosen in Robert Street, Corrimal, northern suburbs of Wollongong as a desirable site for the location of the Green Street Project. This land met all the relevant criteria for such a project and was also existing NSW Government land. CHL developed an initial design scope that included 10 demonstration affordable housing properties and 15 – 20 extra yield on the same site. The estimated cost of each dwelling was \$270,000 per townhouse + \$40 - \$50, 000 for ESD initiatives.</p> <p>Negotiations were then entered into within the NSW Government to ascertain the potential transfer of this land for the project (to CHL at this time) based on the strong policy emphasis of affordable housing initiatives.</p> <p>This process stalled when NSW Government elections were called in March 2011. At the RDA Illawarra Summit in October 2011, the Minister</p>	<p>Landcom</p> <p>Office, Environment & Heritage (OEH)</p> <p>Treasury</p> <p>UOW</p> <p>TAFE/DET</p> <p>LGAs</p> <p>Land & Housing Corp (LAHC)</p>

	<p>The Green Street concept could also be applied to a retrofitting project for the social housing sector. Maintenance, repair, and upgrading of social housing units are part of an ongoing program faced with the difficult problem of energy efficient expenditure reducing the overall level of maintenance provision. Funding structural refurbishment in the social housing sector embracing solar roof panels, solar hot water units, rainwater collection, and grey water recycling would complement the Green Street proposal.</p>	<p>for the Illawarra, then Minister Greg Pearce, offered the Corrimal site to the project. In December 2011, RDA Illawarra worked in partnership with the Minister and the Department of Finance & Services to prepare a funding submission for \$2.2million from the National Building Liveable Cities Program to assist in providing 50% of the funding contribution for the project. The remainder of the project cost was to be funded by the NSW Government \$1.64million and CHL \$560,000. In April 2012, although the project application was considered strong and favourable, the project bid was not successful.</p> <p>On 28th May 2012, GJI convened a project steering committee meeting to consider other options to progress the Green Street project.</p> <p>Following this meeting, it was decided to present the land and project to the 'market' to ascertain interest to work in partnership with RDAI to bring Green Street to life! A Registration of Interest process and document were prepared to invite interested stakeholders and developers to two information sessions to consider the development. In November 2012, an Expression of Interest (EOI) was then opened for relevant consortiums to present their strategic ideas and costings for Green Street project and business model. Seven EOIs were received and a panel shortlisted these submissions to present to the Minister to then consider the project for tender.</p> <p>Following this, RDAI then worked closely with LAHC, UOW and other stakeholders to develop a relevant business model to ensure the project could be moved to its next phase – Tender. However, due to a change of Minister, restructuring and requirements of LAHC for the project, Green Street is still in the negotiation phases.</p> <p>Current/Future Actions: Due to the GJI project finishing in September 2013, Green Street now lacks a dedicated coordination resource. OEH has provided \$20,000 to</p>	
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		<p>RDAI for the UOW to commence work on the ESD principles for the Green Street project. Next steps include:</p> <ul style="list-style-type: none"> • Funding is required asap to resource the project management of Green Street from a technical and social point of view • Commitment is required from relevant Ministers (OEH, T&I, FACS) to prioritise this project for the region • RDAI to consider if this project remains one of the key priorities of the region • Proponents to be forwarded a letter advising on the status of Green Street • Meetings to be organized with relevant Ministers to progress Green Street asap 	
2	<p>Iconic Public Buildings The scoping and establishment of retrofit projects focusing on iconic public buildings in the region such as a Town Hall or a major civic building to showcase the use of renewable energy technology and sustainable construction.</p>	<p>Green Building – Retrofit Projects</p> <ul style="list-style-type: none"> • Commercial/Industrial – Environmental Upgrade Agreements (EUA), partnership with Wollongong City Council, (WCC) \$200,000 Office of Environment & Heritage Grant Awarded to WCC. • WCC completed feasibility with State Government funding. Outcome: considering other models but still keen to consider an incentive for environmental upgrades of commercial scale buildings and model being facilitated via ClimateWorks Australia. • Worked collaboratively with the Property Council of Australia (PCA) and the Green Building Council of Australia (GBCA) to advocate for Green Star ratings for new and existing buildings for the region. Showcased opportunities where appropriate. • Worked with OEH to facilitate NSW Government funded building retrofit pilot upgrading ‘front of house’ buildings. • Supported local government building retrofit funding submissions as part of the Clean Energy Future program • Residential - Low Income Household Energy Efficiency Grants Program Round 2 application with regional consortium approx. \$2.3 million submitted. Submission successful. 	<p>DoP OEH Southern Councils Group (SCG) Wollongong City Council (WCC) UOW/TAFE Trade Assoc. Enterprise Connect (EC)</p>

		<ul style="list-style-type: none"> ○ Implementation of Energy Efficiency in the 3rd Age now underway ○ Overall \$3.5 million project ○ 2.5 years in duration ○ Aim: To reduce energy consumption amongst low income older people whilst maintaining quality of life and thermal comfort in their accommodation ○ To enhance the adaptive capacity of older people to reduce their energy consumption and barriers facing them i.e. lack of financial capacity & accurate information on alternatives ○ Engage local supply chain <p>Working closely with UOW Sustainable Building Research Centre (SBRC) – 6 star, green star rated building at Innovation Campus. GJI worked with the SBRC to assist in the ‘bridge’ facilitation between industry and the university. GJI connected industry and supply chains to the SBRC to develop green technology products.</p> <p>Current/Future Actions:</p> <ul style="list-style-type: none"> ● Continue to work closely with Southern Councils Group to coordinate access to funding opportunities for local government through the clean energy future program ● EE3A Project Manager appointed to work with a regional consortium and will progress the project based at RDAI for the duration 	
3	<p>Transforming Manufacturing and Engineering Industry</p> <p>Investigate funding sources to enable an assessment of green technology opportunities for manufacturing and engineering industries in the region. This assessment would include an analysis of each technology to identify market gaps and the capacity of local companies to take advantage of the opportunities.</p>	<p>Steering Committee of relevant industry stakeholders established</p> <p>Stage 1 – Assessment/Mapping of Technologies – completed by UOW student and funded by Enterprise Connect (EC) and UOW</p> <p>Stage 2 – Opportunity Analysis: Engaging leading customers in renewable energy and energy efficiency markets to identify gaps and opportunities the</p>	<p>OEH</p> <p>AI Group</p> <p>I3Net</p>

		<p>region's manufacturing and engineering sector could fill = Interviews conducted during June/July 2012</p> <p>Stage 3 – Map the supply chain capability of the Illawarra to uncover local and regional SMEs that could fulfil these requirements, 55 companies interviewed. Report completed September 2012</p> <ul style="list-style-type: none"> • Clean Tech Illawarra formed to progress the actions of the Mapping the Connections project via its Implementation Plan • Terms of Reference for Clean Tech Illawarra established • Clean Tech customers visited Illawarra to present business opportunities on three separate occasions • Partnership with i3net to deliver relevant industry events <p>Current/Future Actions:</p> <ul style="list-style-type: none"> • Build capacity and capability across Illawarra companies to meet supply chain demand and opportunities by: <ul style="list-style-type: none"> ○ Supporting and facilitating Clean Tech Illawarra in partnership with NSW Trade & Investment ○ Identifying a toolbox of strategies with regional stakeholders i.e. marketing, skills updates, funding, re-tooling ○ Clustering with Illawarra networks i.e. i3net ○ Link with major supply chain gaps ○ Industry forums & specific capability workshops with Enterprise Connect ○ Renewable Energy Day November 2013 in conjunction with UOW, Sustainable Building Research Centre and the Illawarra Flame House ○ Due to RDAI resource constraints, NSW Illawarra Trade & Investment NSW to take on the role as 'facilitator' of Clean Tech Illawarra as of September 2013 	<p>EC</p> <p>Innovative Regions</p> <p>Relevant Assoc.</p>
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5	<p>Green Technology Innovation Advisory Service Establish a Green Technology Innovation Advisory Service (GTIAS) for small and medium sized firms in the Illawarra, linking local firms to University of Wollongong expertise. This service would be complementary to existing Commonwealth Government and University of Wollongong innovation initiatives.</p>	<p>Illawarra Energy Advisory Services - Round 1 application with Illawarra Business Chamber consortium approx. \$670,000 submitted and unsuccessful. Feedback was positive and asked to resubmit in Round 2. Official feedback provided to IBC.</p> <p>Worked closely with IBC February 2013 to submit for Round 2. Bid unsuccessful.</p> <p>No further action on this project</p>	<p>OEH DTIRIS UOW SCG</p>
6	<p>Professional Development Short Courses (link to Rec 20, Green Skills Training) Specialised courses for local manufacturing organisations be offered, promoted and developed by TAFE as a matter of urgency in order to improve the overall resource and cost efficiency of production operations and improve their capacities to manufacture new environmental products in line with the objectives of the Manufacturing Skills Industry. These specialised courses should include training for employers and employees in sustainable workplace auditing.</p> <p>While the inclusion of sustainability units in TAFE Illawarra training courses will lead to a general upgrading of skills in the regional workforce, it will take some time before this knowledge becomes commonplace in the majority of local businesses. Thus, the immediate priority is to provide additional short courses to increase sustainability skills and knowledge in the existing workforce, focusing on the major concentrations of regional employment. A number of these courses have already been developed.</p>	<p>\$150,000 funding commitment for green skills and training courses provided by TAFE. Modules available include:</p> <ul style="list-style-type: none"> • Environmental Management Auditing • Carbon Management Levels 1,2 &3 • Electricity and Water Efficiency • Sustainable Kitchens • Sustainable Child Care Centres • Sustainable Building Sites <p>Courses delivered and funding expended and acquitted (see attached report)</p> <p>Current/Future Actions:</p> <ul style="list-style-type: none"> • Continue to promote Green Skills Program to key industry sectors, i.e. construction, commercial, industrial and manufacturing, child care and local government • Continue to adapt the green skills program to meet the changing requirements of the target sectors 	<p>DET (TAFE) OEH RTOs</p>

<p>8</p>	<p>Sustainable Construction and Training Partnerships</p> <p>Partnerships be developed between NSW TAFE – Illawarra Institute and regional stakeholders to undertake sustainable building projects designed and constructed to teach sustainable building skills, and then used by the contracting party in situ, where it may also be possible to monitor and evaluate innovations included in those buildings.</p> <p>TAFE Illawarra currently has contracts to build demountable cabins for local governments. These provide three work teams of 18 pre-apprentices with training for the first two stages of an apprenticeship, which greatly enhances their employability. On completion the buildings are taken by the contractor organisation while the students usually find employment with builders to complete their apprenticeship. With suitable sponsorship, this program could be used to teach and demonstrate sustainable building skills.</p> <p>Options include:</p> <ul style="list-style-type: none"> • Planned Local Government holiday cabin construction projects. • A small project team be set up between TAFE Illawarra and the University of Wollongong to design a building to be used to both teach sustainable construction skills and act as a public demonstration site for commercial builders and to showcase new residential sustainable technologies and emerging innovations. 	<p>TAFE Illawarra working in partnership with RDAI to develop a sustainable construction course for relevant industry. Application for funding being drafted to submit to Manufacturing Skills Australia.</p> <p>Current/Future Actions:</p> <ul style="list-style-type: none"> • Facilitate the partnership with TAFE Illawarra and administer the funds for the above course 	<p>DET (TAFE)</p>
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<p>9</p>	<p>Green Jobs and the Aboriginal Community</p> <p>The expansion and enhancement of Bushcare and Landcare type initiatives in consultation with the Aboriginal communities of the region focussing on increased Indigenous enterprise formation and employment in green jobs. This should include enhanced support for the delivery of business and project planning as well as ‘on the job’ accredited training, technical research and support services.</p>	<p>Business Plan completed</p> <ul style="list-style-type: none"> • Green Team start-up funding received from Indigenous Coordination Centre (\$90,000) • Ms Kym Shilton, Business Development Manager appointed and commenced 28 May 2012 and ended 28th July 2013. • Berrim Nuru Environmental Services established as trading ‘Green Team’ arm with the LALC • Green Team work crew employing three Aboriginal employees until December 2013 • Two further contracts awarded to Berrim Nuru via Southern Rivers Catchment Management Authority and Illawarra Lake Authority • Four direct jobs achieved for NBN roll out employing Aboriginal people facilitated by Berrim Nuru • Funding proposals submitted as part of Caring for Country and Indigenous Employment Program – awaiting announcements <p>Current/Future Actions:</p> <ul style="list-style-type: none"> • MOU signed in August 2013 and to be reviewed between LALC and RDAI when funding announced • Funding proposal to be negotiated with ICC to ‘top up’ existing funds to continue momentum of the project • Chase current funding submissions following change of Australian Government • Transfer Berrim Nuru to independent company structure, once team has adequate funds/enterprise viable • Launch the business • Officially ‘wind up’ Green Team Steering Committee • Continue to consult with CBWG and RPA groups at their regular meetings 	<p>DECCW</p> <p>DHS (AANSW)</p> <p>T&I (Reg. Devt)</p> <p>Warrigal Employment</p> <p>CMA</p> <p>Illawarra Aboriginal Land Council</p>
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<p>10</p>	<p>Community Engagement in Sustainability Initiatives The NSW and Local Governments to support the establishment of 'neighbourhood climate change/sustainability groups' in each of the region's five local government areas. These groups would promote and encourage community action for adopting sustainable practices at the household and neighbourhood level. Schools and other community groups would be particularly encouraged to participate and play a leading role. This recognises that sustainability practices, including reducing energy consumption, is not just a matter for regulation by governments - households must also be encouraged to be a part of the solution.</p>	<ul style="list-style-type: none"> • Ongoing through other GJI projects . GJI participates in community events and initiatives at the request of community groups i.e. CANs, Council sustainability groups, State and Federal Government working parties, schools, Nature Conservation Foundation, etc 	<p>OEH Schools</p>
<p>12</p>	<p>Advancing Green Jobs Illawarra It is recommended that the Green Jobs Illawarra Project Steering Committee, be expanded to include additional community representatives and continue as a discrete task focussed project group of an appropriate regional organisation such as the newly established Regional Development Australia–Illawarra. It is further recommended that the Project Steering Committee be provided with adequate resources including funding for a project co-ordinator for an initial 3 year period to enable the implementation of the Green Jobs Illawarra Action Plan and the development of a longer term blueprint for regional transformation.</p> <p>The immediate role of the Green Jobs Illawarra Steering Committee and its Project Coordinator would be to oversee the implementation of key</p>	<ul style="list-style-type: none"> • GJI lead brokering and coordination across the 'green' economy agenda within the region • Funding leverage to the region in excess of \$3 million • Direct jobs = 15, created across all the GJI projects with a variety of contract, part-time and full-time appointments • Indirect jobs = ? • Negotiations being held with relevant NSW Ministers to re-package and refund GJI. This is critical now that projects are 'bearing fruit' and to regional competitiveness. 	<p>Steering Committee</p>

	<p>recommendations of this report such as the Green Street and iconic buildings retrofit projects and to organise a major conference in the Illawarra on the theme of Green Jobs. The Steering Committee would also be charged with developing medium and longer term strategies for the sustainable transformation of the region's industries such as financing options for major renewable energy and other regional green jobs projects and infrastructure requirements for a transformation to a green economy including:</p> <ul style="list-style-type: none"> • Early access to National Broadband Network and smart grid (energy) initiatives. • Integrated passenger transport systems and freight transport opportunities. • Incorporating green jobs initiatives and strategies into the existing major strategic plans for the Illawarra such as the <i>Illawarra Regional Strategy</i> and the <i>State Plan</i> as well as the strategic directions for the new RDA Illawarra. • The identification of and planning for renewable energy precincts in the Illawarra. 										
<p>13</p>	<p>Green Skills and Training - \$150,000 Allocation It is recommended that the \$150,000 funding commitment for green skills and training be utilised for the following employer/employee short courses to be provided by TAFE Illawarra:</p> <table border="1"> <thead> <tr> <th>Suggested Programs</th> <th>Course Duration</th> <th>Cost per Course per Person</th> <th>Minimum no. of Partic</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Suggested Programs	Course Duration	Cost per Course per Person	Minimum no. of Partic					<p>As per Recommendation 7</p>	<p>DET (TAFE)</p>
Suggested Programs	Course Duration	Cost per Course per Person	Minimum no. of Partic								

Participate in Environmentally Sustainable Work Practices	1 day	\$200	10		20	\$40,000		
Statement of Attainment in Policies, Procedures & Practices for Sustainability	7 days	\$1200	10		1	\$12,000		
Environmental Sustainability in the Workplace	1 day	\$200	10		15	\$30,000		
Saving Energy in the Workplace	1 day	\$200	10		20	\$40,000		
Home Sustainability Assessment	4 days	\$700	10		3	\$21,000		
TOTAL						\$143,000		
<p>These courses will complement the findings and recommendations in this report in relation to skills and training from the Green Street Project through to Green Corps Illawarra.</p>								

CONCLUSION

Green Jobs Illawarra is a key priority within Regional Development Australia (RDA), Illawarra and will continue to lead, broker and coordinate initiatives across the 'green' economy agenda within the region. However, RDA Illawarra cannot do this alone.

The recent funding committed by the Australian Government to RDAI for the Low Income Energy Efficiency Project comprising approx. \$2.3m is a great example of how Green Jobs Illawarra has given this region a coordination capacity that wouldn't otherwise exist, and has thereby enabled an injection of external funds. On this project alone, it's a great payback on the NSW Government investment.

Green Jobs Illawarra (in its current form) has now concluded, but bears its fruits in projects that live on from its legacy. The Climate Change and Sustainability agenda continue to evolve and the Illawarra region cannot afford to take a 'back seat' in the debate and regional transition for a 'greener' future - Can the Illawarra region look to a regional coordination capacity of a similar nature – able to operate across portfolios, across levels of government, and able to pull together government, business and community collaborations? This is a question that RDA Illawarra will continue to pursue with the assistance of NSW and Australian Government support for the ongoing future.

Katrina Skellern
GJI Project Manager

Arthur Rorris
Chair, GJI