



6th Making Cities Liveable Conference

in conjunction with the



Sustainable Transformation Conference



Presenter Abstracts

Novotel Melbourne St Kilda
17–19 June 2013

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Mr Mark Andrew

Consulting Human Factors Engineer, Scenario

Adopting interaction design thinking within place making: the case of affordance when designing walkability

This paper demonstrates the concept of affordance as a design goal, and maps the application of affordance in interaction design to place making. The example of walkability is examined, and criteria are developed for enriching place making processes from analogous design domains.

Affordance is a quality of an object or environment, which shapes how people behave. The term is used in many fields including perceptual, cognitive, and environmental psychology and in interaction design. The term has garnered popularity in interface usability fields that foster the 'easy discoverability' of possible decisions, actions and outcomes. Affordance has been embraced so openly by designers that the verb afford is now used 'to suggest' or 'to invite', rather than its original definition.

A key objective in interaction design is to encourage people to carefully look at their surroundings. 'Carefully' is context-specific, and may focus on searching, exploration, safety, enquiry, learning or perceptual sensation, depending on the interaction space and the context. Users of social media, for example, take their social place with them, and photograph and share their lived experiences, providing immediate commentary on their experiences. Their lived experience is reviewed on-line, critiqued, and democratised in an open-access, egalitarian manner, unbounded by market analysis, because the user's market is continually reconstituted through original personal expression.

Physical place making offers analogous opportunities for shaping the lived experience, and affordance is a crucial 'language bridge' for sharing design approaches. This paper will expand on the notion of 'suggestion' and 'invitation' in terms of urban design, and develop a framework for walkability through analogous design approaches. Illustrative cases will include: cognitive models for establishing decision options, affect and sensibility; the use of navigation design principles; and rich pictures for describing the lived experience in both interaction design and place making.

Dr Ronald Aspin

Senior consultant, Aspin Group P/L

Making the best use of high speed broadband to increase your sustainability and profitability

Possible conference issue this paper addresses: Will current business structures respond to sustainability issues or do they need to adapt. There can still be a tendency in some companies to think of the internet in terms of emails, web searching, a bit of cloud computing and maybe some online training. However, the availability of high speed broadband has revolutionized the use that can now be made of the internet in business.

This paper focuses on the use of high speed broadband technology and tools as another string in the bow of businesses seeking to improve sustainability in their Organisational Development, Marketing and Customer Support. The adoption of broadband technologies and tools has the potential to increase productivity, improve safety, reduce costs, train staff and educate clients. With the ongoing roll-out of the National Broadband Network these possibilities are even more realistic.

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Using a range of case studies the presentation will demonstrate how broadband technology and tools can:

- produce high learning outcomes through the quality of the training material
- increase productivity for both the learners and the trainers through more efficient use of time and resources
- increase safety through the simulation of potentially dangerous work environments
- demonstrate your company and products in an appealing informative way
- how to educate and train your clients It is a misconception that cost is barrier, as many companies already have the necessary software and hardware.

The paper will discuss the range of tools available that make access to multiple international, regional and remote sites simultaneously and in real time possible.

Mr David Baggs

CEO & Program Director, Global GreenTag Pty Ltd

Sustainable built environments require meaningful metrics for sustainable procurement

Sustainability requires products, technology and systems that create meaningful change in the built fabric of our cities. Sustainability is also not just about carbon or energy, its about aggregate life cycle impacts of every item in the supply chain. Procurement processes are not delivering the needed change due to a variety of factors and a major fact is the lack of meaningful, simplified life cycle analysis (LCA) based metrics to feed into the design and procurement processes that underpin the built environment whether that be infrastructure, buildings, interiors, landscapes and operations.

This paper presents the various existing or emerging LCA based systems in the marketplace and provides options for meaningful, 'whole of sustainability' metrics suitable for each of these categories across a broad range of product categories to enable organisations with major procurement processes to take the lead in understanding understand how to design green procurement processes from the ground up to deliver the positive development and sustainability outcomes the planet needs.

Dr Bhishna Bajracharya

Associate Professor of Urban Planning, ISDA, Bond University

Co-Authors: Dr Linda Too, ISDA, Bond University. Mr Isara Khanjanasthiti, Bond University

A Framework for Creating Active and Healthy Communities: A Case Study of Gold Coast

Poor modern lifestyle choices have led to a burgeoning health concern for various government agencies prompting urgent review and action. Whilst the health sector has the primary role in addressing health issues, town planning can also contribute to better health by providing supportive environments for an active and healthy lifestyle. Local councils and other decision makers have a fundamental role in promoting healthy lifestyles among local community members through city planning and implementing physical activity and health programs.

This research paper has two primary objectives. First, it aims to develop an integrated framework for promoting active and healthy living in local communities. Second, the paper will test the framework's robustness with its application in a case study of the Gold Coast city.

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The paper will also discuss the challenges and opportunities for promoting healthy living in the Gold Coast. There is potential for this framework to be considered by other local councils and relevant authorities to build active and healthy communities.

Ms Suzanne Barker

Director, Town Matters Pty Ltd and Deakin University

Embracing Rigour - Developing a Community Engagement Framework for Strategic Urban Planning

Local governments are increasingly seeking new ways to engage with communities through a variety of productive avenues. Yet strategic planning lags behind with an accepted method to consult and engage with communities about proposed policy changes. When engagement methods are used which go beyond those which are legislated for, the process often involves members of communities who are familiar with planning processes, or have time to participate, thereby excluding large sections of the community.

In addition, consultation methods often lack rigour in data collection upon which major strategic decisions are based, thereby undermining government's capacity to make quality and informed planning decisions. This paper will examine the policy imperative of urban intensification, the backlash which it has generated within local communities, and the need that it creates for developing effective community engagement processes.

The aim of the research is to assist local government urban planners with their community engagement practice in order to form policies which are acceptable to the affected communities. The paper proposes a community engagement framework which introduces rigour within the community engagement process by drawing on research methods from psychology and political science.

Mr Dan Barr

Senior Project Officer - City Building & Economic, Gold Coast City Council

Catalytic change - a review of the impact light rail is having on the City of the Gold Coast and lessons for other city's considering light rail

In a years time people will be using light rail on the Gold Coast to move between work and home; study and play; and dinner and drinks. This will have enormous ramifications on the lifestyle of locals and the experience of visitors, allowing the city to contract and expand at the same time. However, the successful effort to secure funding from the three levels of government for city building transport infrastructure has generated change even before the system is up and running.

This is best demonstrated by the City's expanding ambition evidenced by planning to stage the 2018 Commonwealth Games and iconic projects such as the Broadwater Marine Project and Gold Coast Cultural Precinct. Culturally, we are also seeing change with a recognition that the City is rapidly evolving from a series of coastal villages joined by a single road in the 1960's to a City with grand plans for a comprehensive network of light rail in the next twenty years. In the built environment, significant transformation is underway with an emphasis on people-focussed place making and a review of the amount of space allocated to private vehicles.

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This is complemented by market driven forces adopting a style of architecture that complements the light rail system in the form of plazas and retail frontages. Similarly, the introduction of light rail is increasing the level of “urbanity” through the heart of the city forcing a re-think across policy settings such as public realm, alfresco dining, built form, public art, private investment and car parking. This paper captures and details the changes that the introduction of light rail is having on the City of the Gold Coast including the expected and unexpected; and the positive and negative.

Dr Jeya Bavan

Team Leader - Buildings Applied Research and Susta, AECOM

Change.... Lack of . . . a standard definition for sustainability, standard definition of boundaries, policies that incentivise the end users and manufacturers, and unified carbon metric

There are more barriers than initiatives that promote sustainability. Very often the industry struggles with the definition of sustainability; the definition pretty much sits with the user. Further complications arise depending on its application; that be buildings, communities, infrastructure or businesses and then trying to set the boundary at each level makes the algorithm non comparable. Even if one defines the term sustainability and identifies its boundaries, what metrics will one use?

How often is embodied energy accounted for? This is further compounded by the lack of robust policies that endorse sustainability. The evidence based statistical data of rising greenhouse gas emissions should cause serious concerns to any citizen, but who and why will someone want to do something about it today? Government is well placed to make the influential decisions but their concern over the communities’ reaction to aggressive policies inherently prohibits any party from enforcing robust policies.

The use of decision making tools would assist governments and policy makers in understanding the impact of a policy on the community/industry. The models could be constructed to demonstrate real systems in which the dynamics of social, economic, awareness and technology aspects could all be integrated. The use of such tools will

not only provide evidence based policies but will also inform our industry the impact of such policies. However ultimately, education and awareness plays a key role in engaging and implementing policies. We need aggressive governments and passionate voters to hurdle over the barriers and promote sustainability if we are truly to make a difference to our little ones.

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Mr Tim Bennett

Managing Director, Managed Growth (australia) Pty Ltd

The Garden of Villages - a new approach to Regional Development in Peri Urban Areas

Garden of Villages™ is an integrated system that delivers sustainable regional development. It is a leading innovative and wholistic approach to tackling the issues of food and water security - a paradigm shift in the way that village and farm development is integrated, facilitated by new funding structures, advanced training programs, and the application of clean technologies to farming methods.

We take the seeds of the world's best master planned sustainable cities and cross them with our experience in rural towns, and with developing and operating intensive sustainable farms. The resulting vigorous hybrid is the Garden of Villages™. Integration of food, living centres, energy production, industry, water capture and recycling establishes new paradigms. Garden of Villages™ has been designed to transition regional and rural areas close to growing cities into vibrant, secure food growing, processing and distribution centres.

These village scaled "food baskets" protect and enhance land of high agricultural value, produce high quality clean fresh food, catch rainfall and reuse water after appropriate treatment, generate energy from solar and gas sources, are hubs for light food processing and preparation of food for market that minimises waste in rapidly growing cities, and provide quality employment in regions. We are building our first Garden of Villages™ in the Mary Valley, Queensland. We have support of universities and we are identifying master farmers and supporting technology businesses to participate.

The project has earned recognition and support of local, state and federal government. Over time we will help create a global network of sustainable productive family based farms and villages producing and securing food, water, energy and homes for millions while managing waste efficiently and effectively.

Dr Julian Bolleter

Assistant Professor, Australian Urban Design Research centre

Made in Australia: The Future of Australian Cities

Made in Australia: The Future of Australian Cities The Australian Bureau of Statistics predicts that Australia's current population of 22.3 million could grow to 62.2 million by 2101. Of course, many things could change between now and then but for the purposes of planning we think it is prudent to take this figure seriously. So what does this big number mean? It means we would need to house an extra 40 million Australians over the course of the next 87 years. This means building the equivalent of an extra 10 Sydneys - one every 9 years!

There is currently no national plan for this growth. Even following consultation of Australia's entire current city planning frameworks, we found that a sum total of only 5.5 million people are accounted for. This research aimed to address the resettling of the 34.5 million 21st century Australians which are simply missing from the collective intelligence of the nation's planning.

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In order to address this lacuna, we initially consulted the ABS forecasts for the mid-century populations of Australia's major cities. From the total 2100 projection of 62.2 million we subtracted these numbers and were left with 23,061,839 people.

We then conducted an analysis of the national landscape to arrive at an answer as to where these people might live so that Australia remains ecologically resilient, socially amenable and economically productive. We don't claim to have the right answer to the question of Australia's settlement patterns but we do offer an ideologically neutral exploration of the matter – we offer an environmentally precautionous approach but one that is nonetheless optimistic about the prospect of designing and constructing better cities as the century unfolds. The material presented reflects over two years of research work and is to be published in a major new book in 2013.

Mr Mark Boulet

Manager - Green Steps program, Monash Sustainability Institute

Green Teams that Work

Green teams have a bad reputation. Set up with the best of intentions in many organisations, they seem to stagnate due to lack of support, skills and focus. As a result, their effectiveness and contribution to an organisation's sustainability performance is often questioned. Yet staff engagement in an organisation's sustainability efforts is vital and complements green policy, infrastructure and procedures.

'Green Teams' and 'Eco-champions' can provide an effective way of tapping into staff interest and participation in sustainability initiatives. They just need time, love and care! The Monash Sustainability Institute's Green Steps program equips participants with skills and knowledge to improve the sustainability performance of their organisation. We have partnered with a number of organisations to create unique programs for their green teams.

These focus on skills training, team building and the development of staff-led projects, and provide an innovative model to engage staff, build sustainability capacity and improve environmental performance. Based on projects with the City of Yarra, the YMCA, Wannon Water, Monash University and the National Australia Bank, this presentation will ensure you walk away with the following outcomes: A better understanding of how staff engagement fits into the sustainability program of your organisation; new principles to utilise when forming (or reviewing) your organisation's green team; ideas to focus the work of your green team and to give it direction and; examples of how other organisations have engaged and involved their staff Focusing on the often poorly understand and underutilised area of staff engagement in environmental sustainability; this presentation will enable you to get the most out of your green team or committee and make staff involvement an effective part of your organisation's sustainability program.

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Mr Mark Boulle

Lecturer and PhD candidate, Central Queensland University

Co-Author: Mr David Robinson, CQUniversity

The Social Sustainability Imperative. Exploring the Social Sustainability of Local Councils in Australia

This paper is the first in a series examining the social sustainability of local councils in Australia. The aims of this research are to understand how, and the extent to which local councils in Australia incorporate, monitor and report for social sustainability; as well as to determine the effectiveness of applying a conceptual framework for social sustainability at local government level.

Findings from this research may provide a compelling evidence base and argument for the investment of public funds in appropriate social initiatives. The first stage of the research involved the development of an online questionnaire based on a conceptual framework for social sustainability proposed by Cuthill (2010). The questionnaire has recently been delivered to the over 450 local councils in Australia.

This paper introduces Cuthill's conceptual framework and discusses the rationale for the study. Firstly, to its detriment, the social dimension of sustainability has received less attention in research and practice than environmental and economic dimensions of sustainability. In practice, neglect of social sustainability may lead to increased negative pressures on society including the weakening of family and community values, household financial stress, cultural intolerance, public apathy and distrust of political processes. Fixing these societal problems in retrospect may be even more costly (Casey 2005).

Secondly, there is a significant, leading role for governments to play in sustainability. Adapting and evolving cities into more sustainable and liveable environments largely hinges on the appropriateness and effectiveness of governance across all three levels- in Australia federal, state and local (ADC 2011). Local councils in particular have the potential to deliver immediate, grassroots answers to sustainability issues in communities (Borg 2010). They have the ability to be more flexible than other levels of government and are closer to their constituents, the community and ecological functioning (Doyle & Kellow 1995; Graymore, Sipe & Rickson 2010). For these reasons, this research attempts to understand the current state of social sustainability in the local councils of Australia.

The second stage of the research will involve analysing the results from the online survey. The third stage- the main focus of the study- will involve semi-structured interviews with councils to extend these findings and gain a complete picture of the social sustainability of local councils.

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Mr Richard Brecknock

Director, Brecknock Consulting

Vitality & Viability: recipe for a liveable city

This paper will propose that for a city to truly achieve a position of liveability it must address the interconnected factors that come together to create urban vitality. Vitality is the very 'stuff' of a city or precinct, it is the power and energy of a place; it is its character and identity; it's a place's competitive advantage; and it is about recognising that creativity and innovation are critical elements in achieving place based vitality.

The presenter will draw on aspects of the 'Creative City' work of both Charles Landry and Richard Florida and present a framework that can be applied by city planners and civic leaders in Australia. This framework is based on a "V&V Framework" that allows for the understanding of the interrelated elements and a means of measuring the outcomes. The Framework is structured around five Domains, 'Distinctiveness' – 'Openness' – 'Resourcefulness' – 'Competitiveness' & 'Governance'. Within each of these Domains are a range of potential criteria that provide for both objective and subjective evaluation that can take a cultural, social, environmental or economic perspective.

The criteria relating to vitality involve levels of activity while viability is concerned with long-term self-sufficiency, sustainability, adaptability and regeneration. The paper will specifically explore how we can utilise this approach to consider the impact of cultural thinking, planning and acting on the city and conversely, how do we measure the impact of city development and decision making on the cultural life of the city.

Mr Ed Brown

Associate Director, AECOM

Sustainable Investment Guidelines - linking sustainability into the investment decision

The single largest investor in capital works is the public sector, but it's the same sector that struggles with some of the fundamentals of sustainable investment. Key challenges include:

- the prioritisation of construction over operational spends
- a lack of focus on long term benefits realisation at the expense of immediate delivery pressures
- a narrow definition of sustainability, often singularly toward environmental (as opposed to social or economic) issues
- and a fundamental disjoint between sustainability and the investment decision.

Major Projects Victoria and AECOM have tackled the issue by developing guidance that explains why and how to embed sustainability into investment decisions. This guidance will (subject to approvals) form a core part of the Investment Lifecycle Guidance – the suite of documents that provide the 'rules' for all public capital projects across Victoria.

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The document seeks to achieve a paradigm shift – away from a mindset where sustainability is something additional and cost additive ; toward recognition that sustainability is simply a vehicle to create a better project. The guidance focuses on:

- linking everything back to clearly identifiable benefits (quantified or otherwise)
- putting sustainability on the agenda from concept stage by providing a set of prompts to consider
- gradually building the robustness of the objectives such that they form an explicit part of the business case and the investment decision.

This way of thinking is of relevance to all organisations (public and private) procuring capital works.

Mr Greg Bruce

Executive Manager, Integrated Sustainability Services (Department), Townsville City Council

Townsville Smart City Solar City - a fundamental transformation in the way business and citizen engagement occurs and is conducted to create city-wide and effective sustainability

In Townsville we are creating a paradigm change in the way sustainability business and citizen engagement occurs in cities, in order to drive effectiveness and efficiency in sustainability uptake. We are moving beyond the silos that have emerged from the accidental misapplication of triple bottom line approaches, into an "integrated sustainability framework for action".

It is now a proven and successful "emergent learning city" model for change that utilises systems-based (non-linear) approaches. These are more ecologically or human ecosystem based and match the "Systems of Systems" (IBM - Townsville Smarter City Challenge 2011) from a technology and people perspective. We adapt and apply key learning and experiences with people themselves, that mean they become involved in their own transformative action.

Our model is based on the scientific fields of cognitive psychology, applied neuroscience and leadership, social sciences and systems thinking, as well as our own experiences and learning's in implementing city-wide sustainability.

The subsequent "Designed System for Change" (or change system) is a living system characterised by three interwoven aspects of basics, design and emergence. Where it is the way people interrelate with each other, how they support each other and subsequently act together by choice that matters, not the objectives or ideals they may have originally had.

This appears to be a mirror of the IBM Smarter Cities concept of "instrumented, integrated and intelligent", and in our case is - communicating sustainability (sense); involving participants together; and subsequently building their capacity to act for themselves. We work with multiple sectors and interests from school students/teachers, university and other researchers, businesses, NGOs and government to implement a Smart City, Solar City that involves people and builds their own capacity in partnership/collaboration with others (an ecology of utility).

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Mr Chris Buntine

Senior ESD Engineer, Aurecon

The Opportunities and Challenges of designing Sustainable Precinct Infrastructure

The Australian commercial Property industry has been transformed over the last 10 years with most new commercial buildings now being designed to achieve high Green Stars and NABERS ratings. Many existing buildings are now being upgraded to improve their energy and water ratings and to create healthy and comfortable environments for building occupants.

Increasingly developers and government land agencies are looking beyond individual green buildings to developing mixed use precincts which are being designed to help reduce the cost of going green whilst helping the occupants lead more sustainable lives. These precincts are being designed with precinct scale energy, water and waste systems which minimise non renewable resources by optimising energy and water use efficiency, and utilising waste as a resource.

This presentation will discuss the design of infrastructure for sustainable precincts. What are the opportunities which precinct scale shared infrastructure can bring to new and established communities to reduce energy costs and carbon emissions? What are the challenges to design, finance and operate infrastructure that will grow as the precinct grows. Who will own and operate these central infrastructure assets and what governance structures have to be put in place to ensure that interests of the precincts occupants are protected.

The paper will draw on both local and international case studies to discuss the latest thinking in precinct infrastructure design, it will also discuss how some of the new Sustainable Community rating tools such as Green star communities and One Planet Living account for the benefits that shared precinct infrastructure brings to the community. The presentation will also discuss what computer modelling tools can be used to test different scenarios for the design of precinct scale infrastructure

Mr Steven Burgess

Principal, MRCagney

The Streets that Make Kids Wii

It is becoming more and more obvious that in an effort to make it easier to drive cars, we have made our streets unfit for use by a very important user group – children. We are often confronted with people lamenting the days of their youth and the extremely important and competitive cricket and kick to kick or “touch” football confrontations in their street.

Those days have gone they say, kids are too lazy now. I don’t believe it is the case. The issue is that the art of designing streets for people has been lost. We design them for cars and not for people. Places for machines not children. Electronic games filled a space in the market created by our poor infrastructure design...didn’t it?

This presentation will discuss how the lost art of street design has led to the electronic games alternatives to street play, and what might be done to get kids back outside exploring their neighborhood.

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Mr Hugh Butcher

Greenhouse Programs Leader, Yarra City Council

Realising emissions reductions - The success of a multi-pronged approach

The carbon mitigation journey is one that is shared almost universally in local governments across Australia, yet the results are not always equal to original expectations. Yarra City Council is leading the way in emissions reduction and low-carbon local energy generation through a mixture of policy settings, organisational engagement and leading edge targets which allow innovative and financially prudent activities to be funded and implemented. These actions contributed to Council being recognised as the Victorian Sustainable City 2011 by Keep Australia Beautiful.

The levels of success for Yarra have significantly evolved over the years demonstrating the need for long term visioning and commitment. Much of the momentum began in 2004 through the participation in the Cities for Climate Protection program, and by 2008 had resulted in setting three challenging targets: carbon neutrality by 2012; 50% reduction in energy used by 2015; and 25% local low carbon energy generation by 2015.

These targets were coupled with the establishment of the Adaptive Assets Program to invest in any action, which has a less than 10 year payback (being seen as financially better to take the action than not). As well as opening avenues to funding not previously accessible, this resulted in the employment of Australian local government's first Greenhouse Accounting Officer.

To date Council's progress towards its targets include: A certified carbon neutral organisation under the national program administered by Low Carbon Australia, and becoming the first Council in Victoria to do so; Over 22.5% reduction in energy used; and Generating nearly 10% of its own energy needs from local, low carbon sources. The success and lessons from Yarra's story to date is one of strong policy, capital investment and engagement across the entire organisation and is relevant to both local governments and organisations generally.

Ms Philippa Charlton

Team Leader Sustainability and Environment, MWH

Co-Authors: Julia Agostino, La Trobe City Council

Responding to emerging challenges

Australia accounts for 1.5% of global greenhouse gas emissions, but per capita emissions are over four times the global average. Paradoxically, Australia is extremely vulnerable to the impacts of climate change. The Australian Government's climate change policies will ultimately place pressure on emissions intensive industries to reduce emissions.

The Latrobe Valley economy is reliant on the coal mining and coal-fired electricity generation. Latrobe Council realises that the region will need to make significant changes to adapt to a low carbon economy. MWH has developed a road-map for the region to diversify its economy and manage the transition.

While the policy has been tailored to Latrobe City's characteristics and needs, the approach and policy template has broader application to other regions facing the challenges presented by, what now seems to be an inevitable, low carbon future.

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Mr David Coleman

Senior Specialist - Policy, Whangarei District Council

Co-Authors: Mr Paul Dell, Whangarei District Council.

Whose Living Room Is It? How local views of the role of their 'living room' shape the way local planning for public places is undertaken and influence the preferred outcomes

Civic spaces and parks represent our shared living rooms, but are they for residents or for visitors? This question resides at the heart of debates about the form and function of public facilities, reserves and other public places.

Whangarei District Council (WDC) and its communities are grappling with this question as enhancements are made to our sense of place. Sense of place is important as an integrating theme that helps connect local issues to wider district and regional issues. Local aspirations for enhancement tend to be proactively articulated by resident associations and citizens lobbying their council representatives or reacting to council plans. Whilst this may be effective in securing preferences for a 'vocal' community, there are substantive risks that implementation is uneven and that district-wide priorities often 'trump' local demands and choices.

WDC recognized that different avenues for identifying and addressing community preferences were necessary, which resulted in the village/community planning programme being initiated. This programme provides opportunities and incentives for communities to prepare their own plan. At its core, a set amount of capital funding for public facilities that address community priorities is ring-fenced.

Funding is released following completion of a village plan. Pilot locations in the Whangarei District include Otangarei and Parua Bay. Otangarei is an urban suburb with high poverty levels. Parua Bay is a wealthy rapidly growing coastal township. Our experience has revealed that local views of their 'living room' weighs heavily on choices made locally.

Parua Bay is recognised as a growth node and resident preferences take into account both population growing and opportunities for economic growth. Conversely, Otangarei has little thought of population growth or economic growth, and residents concerns relate to the quality and safety of existing facilities. These differences are reflected in approaches to village planning and different in preferred outcomes.

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Ms Monique Conheady

Founder of Flexicar, Flexicar

A look in to the future: seamless transport services

Imagine a world where the public transport network and ticketing systems seamlessly integrated with carsharing and bicycle use. How would our lives, our health, our bank balances and our communities improve if banks provided cashless payment cards for an integrated transport system? What would Australia's urban cities look like if government agencies publicly funded carsharing spaces as seen in London, Chicago and Switzerland? Publicly funded bicycle schemes are exploding across the globe and cities with clear policies and targets for carsharing are achieving the best sustainability results, so how can Australia capitalise on these innovative practices and make them our own?

Drawing from her Churchill Fellowship research study, Monique will discuss the phenomenon of transport possibilities afforded to Australia in the future using examples of what works from the United Kingdom, France, Switzerland, Germany, USA, Hong Kong and China and Singapore. The talk will also look at a future of transport integration with wireless technology and data services, "apps" and real time parking optimization, comparing our car sharing laws to the rest of the world and presenting opportunities for Australia to demonstrate a leadership role in a future of seamless transport services.

Mr David Cooper

CTO Public Sector, Asia Pacific and Japan, Hewlett-Packard (HP) Enterprise Group

Sustainability as a catalyst for innovation

How challenges of improving citizen services and increasing employee productivity can be addressed by aligning with a better environmental sustainability outcome. Key enablers and constraints to a better future for our citizens, workforce and planet. How a flexible, mobile and connected workforce can be more productive and less energy demanding. Lowering energy footprint and operational costs with next-generation data centers. Examples from HP's own sustainability transformation, and how this generated better outcomes for employees, customers and the company bottom line.

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Mr Ed Cotter

Managing Director, BioRegional Australia

One Hour for One Planet - Interactive Workshop

What is One Hour for One Planet? One Hour for One Planet is a fun and interactive workshop that introduces the concept of One Planet Living and how participants can apply these simple principles in their own day-to-day lives.

One Planet Living is a model and approach based on 10 principles that provides a framework to make sustainable living easy, affordable and attractive for all. Participants will be introduced to the concept of ecological footprinting as a way to identify their own specific impacts. They will then get the chance to create a personalised One Planet Action Plan, plus gain access to BioRegional's online resource portal and community network.

This unique approach to sustainability and the creation of One Planet Action Plans can not only be applied to large scale development projects or the operation of a business, but as a set of guiding principles on sustainability for individuals. What is One Planet Living? Acting sustainably can seem complicated and confusing but the strength of One Planet Living's visionary and holistic approach lies in its simplicity – people intuitively understand it, they remember it, and can retell it to others.

Rooted in the science and metrics of ecological and carbon footprinting, it uses 10 One Planet Principles to address key issues and assist organisations develop their own action plan – through the guidance of the One Planet framework. The One Planet framework can be seen as the 'DNA' for sustainability. It provides a unifying approach that links business, government and individuals to create a common language.

Mr Tim Cotter

Regional Manager, AusIndustry

Sustainability is the biggest opportunity and challenge that business faces

The Northern Inland Sustainable Business Network (NISBN) is an exciting regional initiative aimed at providing hands-on, practical and local assistance to business as they embark on the sustainability challenge. The Northern Inland region covers the 13 Local Government areas of Armidale Dumaresq, Glen Innes Severn, Gunnedah, Guyra, Gwydir, Inverell, Liverpool Plains, Moree Plains, Narrabri, Tamworth Regional, Tenterfield, Uralla and Walcha Councils.

The main focus of NISBN is to provide: initiatives targeting carbon footprints, energy and resource efficiency, and alternative energy and industry development support for new green industries; information about Government programs; and cooperation between Government agencies to provide support to our region's business.

NISBN is a unique partnership formed between AusIndustry, TAFE NSW - New England Institute, NSW Trade & Investment, NSW Office of Environment & Heritage, NSW State Training Services and the University of New England.

There are currently 140 members in NISBN across all industry sectors and organisational size and sophistication. NISBN is a best practice model for the three pillars of sustainability: awareness, education and action. It expertly brings together all tiers of Government, business leaders and education for real behaviour change. This introduction to NISBN will provide key learning's and steps for action in establishing sustainable business networks and clusters throughout the hundreds, if not thousands of regions (both metro and rural) in Australia.

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Now heading into its fourth year of operation NISBN provides an avenue for information sharing, best practice sustainability initiatives and the promotion and support of organisations at all stages of the "sustainability challenge". For more information visit www.nisbn.org.au and explore the many exciting sustainability projects and initiatives taking place in regional NSW.

Mr Tim Cotter

Owner, Awake

Embedding Sustainability In Organisational Culture

Leaders are increasingly recognising that an effective sustainability strategy requires everyone to be engaged and aligned, and for sustainability to be embedded in the culture of the organisation. This raises questions as to how we define a culture of sustainability, how we measure it, and how we create it.

Environmental and organisational psychologist Tim Cotter will present a model which defines the key elements of a culture of sustainability, including the 13 key enablers that need to be present in order for such a culture to develop. These enablers are a combination of the psychological and attitudinal drivers of sustainable behaviour, as well as the support mechanisms that encourage sustainability within the organisation.

This workshop will outline the impact of the presence and absence of each of these enablers, and the ways in which leading organisations ensure that they deliberately foster a mindset of sustainability within the culture. Finally, the key steps involved in embedding sustainability in organisational culture are presented, with examples of best practice in leading organisations. The aim of the workshop is for attendees to receive a structured and research-based overview of the essential elements, and key steps, required to embed sustainability in their culture.

Mr Jonathan Daly

Team Leader, Behavioural Design, GHD

Desegregating urban space in the age of sharing

Over the course of the last 100 or so years, we have seen the systematic privatisation of urban space driven largely by architectural and urban planning practices that responded to the rise of car culture in our cities. With the gradual realisation that this paradigm is broken, and a growing groundswell for policies that support 'people and place', there is a renewed sense of the value of public space.

Delivering liveable cities at a time of unprecedented urbanisation presents us with both the greatest opportunity and challenge for a sustainable, resilient and prosperous future. How can we deliver cities that are denser, greener, and smarter, while maintaining their liveability? The answer, I believe, will largely be determined by the quality of our public space.

As the density of our cities grows, the demands placed on public space will increase but at the same time its availability will be heavily constrained. How can public space be individually allocated to simultaneously serve the social, business, and mobility needs of its citizenry? It can't. Public space must be multi-functionary, serving the many needs of many disparate groups, all at the same time.

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In short, public space must, as it was originally intended, be shared. From the rise of collaborative consumption to the evolution of shared mobility systems, 'sharing' will underpin the liveability of our cities. The shift from privatised urban space to truly public space will require a significant cultural adjustment for many cities, particularly those with a strong ethos of self-interest, self-entitlement and ownership.

This talk will explore the cultural issues that underpin the success and failure of public space in the context of Australian cities, and contrasted against global experience. The concept of behavioural design will be introduced as an approach to designing public space that enables coexistence, by closing the gap between design intent and actual, rather than assumed, human behaviour.

Ms Helen Day

Studio Director, ASPECT Studios

Co-Author: Ms Kirsten Bauer, ASPECT Studios

Making more of streets

Streets make up the single largest public space in our urban environment. There are well founded links between the quality of urban environments and quality of life, no matter which Liveability Index you favour⁽¹⁾. Wonderful public streets are at the core of the world's most liveable cities.

Progressive municipal leaders are making more of new and existing streets. Cycle paths, generous tree canopies, pedestrian, outdoor cafes, wildlife streets, shared spaces and reclaimed service laneways are on the rise. Well-designed streets make a positive contribution to the lives and livelihoods of citizens, investors, traders, visitors and natural systems.

This highly visual presentation will focus on the value of notable streets in the life of urban communities. We will showcase real examples of street environments that make lives better for people. We will share a mix of projects that have contributed positively to the life of urban communities including our own design projects in Australia and impressive street projects from around the world that we've researched.

Projects from ASPECT Studios will include the award winning Knox Liveable Streets Plan (Knox), Angel Place and Ash Street, (Sydney), Victoria Harbour (Melbourne) streets and Halprin Way – City Street (Dandenong). (1) Economist Intelligence Unit (EIU)- The EIU's Global Liveability Report, Mercer - Quality of Living Survey, Monocle- Most Liveable Cities Index

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Ms Cilla de Lacy

Manager Liveable Communities, Water Services Association of Australia

“Using less, paying more” Making the case for water efficiency in Australia amidst record capital investment and record floods

Major capital investment in desalination and recycled water in response to the Millennium drought caused a steep increase in water prices just when community water conservation efforts stepped up. But with the drought now broken in eastern Australia urban water utilities are now faced with customers “using less but paying more” as utilities strive to recover large capital costs.

Suddenly water efficiency has become very unattractive with utilities shrinking or in some cases abandoning their water efficiency programs. This response ignores the long term drying trend predicted for southern Australia and the fact that Australian urban water utilities are in the ‘forever’ business. It also ignores the strong link between water efficiency and energy efficiency.

The Water Services Association of Australia (WSAA) has developed a water efficiency position paper that clearly articulates the long term strategy for maintaining investment in water efficiency as part of a portfolio response to addressing demand for urban water.

The paper acknowledges the strong support from customers for utilities to maintain investment in water efficiency, market opportunities for new products and services to reduce demand and the potential to delay costly investment in capital projects through proactively and incrementally investing in cost effective water efficiency options.

With annual water savings across Australian cities now totalling about 350GL some would think that no more can be done. But more can be done if the industry can maintain and build on behavioural changes in its customers, work closely with the energy industry on appropriate policy, regulation, research and education programs to reduce use of water and energy, use smart technology and customer segmentation studies to empower and target customers to make more informed choices about water and energy use, and mandate water efficiency standards in commercial buildings and tenancies legislation for all states and territories.

If the scientists and meteorologists are right the next drought will be longer and more extreme. But WSAA hopes that its impacts will be barely felt because the industry and government, in response to this position paper, will have proactively invested in water and energy efficiency measures designed to build climate resilience in households and businesses.

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Mr Colin Dominish

Industry Director for Communications and Utilities, Aurecon

Will urbanisation break the big cities?

Currently, about 60 million people move into cities every year. That's more than one million more people arriving every week, in a city somewhere in the world, each with an expectation of better access to jobs, better education for their children, better health-care and a better quality of life. And this trend is only increasing - in 1950 one in four people lived in cities, it is currently over two in four and in just 20 years it will be close to three in four. This is an issue weighing heavily on the minds of governments, the private sector and NGOs, and it's an issue that that differs by geography.

Statistically we have very clear data to show that personal earnings, infant mortality and education levels all improve with increasing levels of urbanisation. Of course people sense this and they respond by relocating to the cities. On the flip side, we also know that cities can be dangerous, congested and polluted. The trick is to find ways to minimise or eliminate those negatives, while we enhance the positives.

In his presentation, Colin Dominish – Industry Director for Communications and Utilities at Aurecon looks at the future challenges, how to broker discussions between government and private entities on where precious investment dollars should be spent. What are the options for delivering “cradle to grave” infrastructure plans with innovative approaches to maximise the benefits and minimise the costs of solving the conundrum presented by everyone wanting to live in the one spot?

Colin looks at how urbanisation won't break big cities if solutions are adopted and implemented quickly and efficiently. The opportunity is not to contain urbanisation, but to understand how it is possible to enhance urban resilience, quality of life and economic growth in parallel.

Prof George Earl

Dean, Institute Sustainable Development & Architecture

The Role of the Affordable Housing Sector in Urban Sustainability

The affordable housing sector in recent times has experienced significant growth with the introduction of the NRAS (National Rental Affordability Scheme) program. As a result the major providers have a responsibility to implement not only affordable housing and robust economic investment vehicles but also holistic long-term sustainability models. These models should incorporate utility sustainability for occupation affordability (water gas power).

Built form sustainability to provide investors with long-term investment security by way of an alignment with various green building codes and real estate consumer demands. Finally social sustainability to provide an urban environment devoid of the problems experience during the period of major social housing development by state governments such as enclave approaches to housing mix, lack of social amenity/infrastructure and employment opportunities.

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This paper provides an overview of the work being undertaken by the National Affordable Housing Consortium one of Australia major NRAS providers to address the above issues and also discusses how this work is being transferred in to upcoming state housing stock transfer initiatives. Keywords Housing Affordability, Urban Sustainability, Housing Stock Transfer Professor George Earl Dean, Institute of Sustainable Development & Architecture: Bond University Chairman, National affordable Housing Consortium

Dr Jessica Edquist

Research Fellow, Monash University

Streets as public space: Effects of 'Shared Space' road designs on safety and mobility

'Shared space' is an approach to road design in which vehicles, pedestrians and cyclists are not physically segregated but are free to move throughout the road space, negotiating right of way with other road users via eye contact and social norms. Theoretically, the result should be lower vehicle speeds and increased mobility for all. However concerns have been raised that road users may not adapt to the new protocols, and vulnerable pedestrians may be at particular risk in such environments.

The present review examined the effects of Shared Space designs on injuries and active travel at eighteen sites. Results varied widely. It is therefore important to understand the usage of such areas and the behaviour of road users in more detail when considering conversion of a public road to a Shared Space design.

Miss Yolanda Esteban

Lecturer in Architecture and Urban Design, Deakin University

Co-Author: Mr John Rollo, Deakin University

Modelling Urban Growth Futures within Inner Metropolitan Melbourne

In the light of the Victorian State Government's move towards the development of 'Plan Melbourne', a new metropolitan planning strategy currently being prepared to take Melbourne forward to 2050, the following paper attempts to address the issue of how an inner city target of 90,000 new dwellings will impact on existing inner Melbourne activity centres.

Working with the prospect of establishing a more compact city within the inner Melbourne region, the paper will focus on key suburbs within the Port Phillip area. Through the application of a 'Housing Variance Model' based on household structure and dwelling type, the paper will attempt to assess the impact on urban morphology as capacity is progressively altered through a range of built form permutations.

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Dr Vyt Garnys

Managing Director and Principal Consultant, CETEC Pty Ltd

Co-Authors: Mr Jack Noonan, CETEC Pty Ltd. ,

Energy and IEQ Cost Savings Arising from Office Building Sustainability Upgrades

With about 80% of the annual cost of an office building going to staff salaries and benefits, small changes in occupant productivity (caused by inadequate IEQ) can have a significant cost impact. It has been over ten years since The Chartered Institute of Building Services Engineers (CIBSE) showed that per office building, staff costs are 100-200 times the energy costs for the building.

Furthermore, continued research has shown that staff costs are also 20-44 times the heating, ventilation and air conditioning (HVAC) running cost. Consequently, a productivity increase of 2-5% can offset this entirely. Following the success of several productivity studies on commercial and government buildings, the team assessed four government office buildings before and after specified environmental upgrades. Examples included upgrades of lighting and air conditioning systems.

Using NABERS Indoor Environment and working closely with tenants and facilities managers, the costs and benefits relating to both energy and staff productivity were tracked over a period of time. While savings of up to \$20/m² were seen based on energy, indoor environment savings were in excess of \$100/m². The productivity increase attributed to building upgrades averaged over the 4 buildings in the in this study yielded 0.9% increase for approximately 2000 employees. This equates to a financial benefit in the order of A\$3M per annum and up to A\$40M in 10 years, which can be offset against running costs or capital expenditure.

This study has wide ranging implications for the industry. Using a business case based on productivity gains and corporate performance, building engineers, property managers, building owners, and facility managers will be appropriately equipped with the economic justifications of upgrading plant and equipment that affects the indoor environment of their occupants.

Rick Garotti

KPMG

Co-Authors: Leigh Holford, Manidis Roberts/RPS

Climate impacts– analysing infrastructure interconnectivity and flow-on effects for Australian cities

Manidis Roberts, KPMG and The Climate Institute (TCI) collaborated to undertake an exercise to credibly identify, quantify and cost, climate impacts on city infrastructure (Melbourne) as a result of extreme heat event. We modelled the impacts on infrastructure and their interdependencies under a specified climate event.

This provided a case study of the flow-on impacts of the damage to infrastructure from future climate events. We explored the interdependencies that play out between businesses and infrastructure owners and operators under future climatic conditions, such as an extreme heat, sea level rise or extreme rainfall events. The exercise identified nodes of interconnectivity and interdependency and where there are critical infrastructure vulnerabilities to future climatic events.

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It also analysed flow-on effects throughout the economy of any resulting disruption to services and performance of assets as a consequence of these events. There have been very few exercises of this nature carried out to date, and this now forms an important body of research for the TCI Resilience Flagship Project and more widely. An analysis found businesses and organisations are largely unprepared for a heatwave event of magnitude. 2030 predictions doubling both frequency and severity of impacts would severely overstretch budgets, infrastructure capacity, coping ranges and system interactions and would be unmanageable.

The potential impact on individual businesses in terms of effect on total revenue was calculated. The exercise also shows that the responsibility for planning and actions to reduce vulnerabilities lies with multiple parties and not just those initially impacted. Systems resilience rather than sector resilience is required.

Ms Susan Germein

Consultant, Rivers Learning

Co-Author: Ms Gitanjali Bedi, Swinburne University of Technology

Leading and Learning for Sustainability

To cope with a changing world, an entity must develop the capacity of shifting and changing - of developing new skills and attitudes; in short, the capability of learning - A De Gues, The Living Company
It's accepted that people are the most important ingredient in any organizational initiative but it's also accepted that the 'people stuff' – changing values and behavior – is the most difficult aspect of organizational change. This difficulty is evident both at individual and cultural levels.

In response to the UN Decade of Education for Sustainable Development (2005 – 2014), the Australian Government articulated a framework of principles for educating people and organizations towards sustainability. (Living Sustainably: a National Action Plan, published 2009) These have been widely articulated through the VET sector but could gain more traction in the wider business community.

One can compare the embedding of sustainability to the optimal trajectory of a WHS culture in the organisation. For both areas, success depends on value shifts and behaviours that are both compliant and discretionary in nature, and where concern for best practice is evident from the top down (through policy and leadership) and from the bottom up) through participation and ownership.

Along with other change models relevant to the particular organizational context, the Education for Sustainability (Efs) principles provide a useful framework for changing values, attitudes and behavior towards sustainability. Incorporating these ideas into organizational change efforts will bring with them effective learning and change leadership towards sustainable business.

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Mr Ben Giles

Principal, Ben Giles Architect

Living with Density

As Australian cities deal with increasing residential densities there is a growing need for more apartment buildings, small-lot housing and other compact residential types. All indicators suggest a continuation of this trend as pressure for housing and land close to metropolitan centres heightens. However widespread community resistance to medium-density housing and apartment living leaves these as a compromised stepping-stone to a (detached) house.

Moreover, it is commonly expected in Australian mainstream society that children should be raised with access to private gardens. This is partly a resistance to change and partly a perceived decline of the so-called 'Australian way of living'. Further negative sentiment is fueled by media descriptions of urban regeneration projects as 'concrete towers' and 'urban ghettos'. Added to this is paranoia of the imagined dangers of children playing in public spaces. These distractions preclude genuine debate about denser living options for our future. What is this resistance and where does it come from?

This presentation will describe how a growing number of families are opting for small-space living and choosing metropolitan amenity above suburban detached housing. It will reflect upon the opportunities and constraints of apartment living for families and discuss potential benefits including: health and reduced obesity rates; increased sense of community; and a future of more sustainable and liveable cities. Further, it will highlight case studies of family apartment living; solutions for recreation and play other than private gardens and computer games; and the reclaiming of public space (streets) for outdoor play.

Finally, a range of architectural design recommendations will be presented that can assist in influencing the future design of apartment and medium-density housing for better family living.

Mr Colin Gillam

Managing Director, Surpass Energy P/L

Co-Author: Mr Steve Carter, IRES Asia Pacific P/L

The Third Industrial Revolution - Independent Distributed Energy and Transport Systems

Electric Vehicles provide clean and efficient transport systems – bus, car, bike, ferry EV also can be used as mobile energy storage/backup energy storage – EV can be charged during day from solar to provide additional backup energy for peak day/night if required with smart systems ensuring energy left for travel the next day and top up power from off peak electricity Integrated with solar they can provide zero emissions transport – plug in charging stations can be located almost anywhere with stations having their own battery storage to fast charge vehicles for increased range.

Stations can be located at supermarkets, shopping centres, work sites as well as commercial charging stations. Customers with solar can sell power to other customers rather than to big distributors so distributed energy systems rather than centralised improves energy security. This needs to be managed by progressive distribution networks The E-revolution is soon to become a reality in Australia.

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Electric vehicles and devices will explode within the space of ten years offering those who are ready, equipped and capable of understanding the bigger picture, employment and development opportunities that will parallel the early industrial revolution. With the introduction of eVehicle, eBike, eScooter and eBus, solar energy capture and energy distribution infrastructure will also offer a major investment portfolio prospect for organisations seeking returns for their members.

Ms Genevieve Graves

Manager, Sustainable Transport, RACQ

Co-Authors: Dr Ian Jeffreys, RACQ. Mr Michael Roth, RACQ

Reducing transport emissions – so many problems – one successful solution: Report on a study of Queensland motorists trained in eco-driving and it's applicability to cities of the future

In 2011-2012 RACQ conducted research with 1,426 participants in a randomised, controlled trial educating motorists about fuel efficient eco-driving. Eco-driving is about changing driver habits to minimise fuel consumption. Eco-driving has three aspects – driving behaviours, trip planning and vehicle maintenance. The research used an experimental approach to examine the efficacy of five different treatment options including: on-line learning; classrooms; driving lessons; classrooms plus driving lessons; and half day intensive workshops.

The research examined how these different options affect driver behaviour in all age cohorts and in metropolitan and non-metropolitan settings. The combined effect of all the eco-drive training across the whole sample was a statistically significant 4.6% reduction in fuel-use. This equates to an average reduction of 0.51 litres per 100km. The least intensive training, the online learning achieved a 4.5% or 0.5 L/100km fuel-use reduction. If sustained, this would account for an average yearly fuel saving of about \$100 for each individual, with greater savings achievable for drivers of larger vehicles and travelling longer distances.

This paper discusses the research findings and the policy implications for our community engagement professionals, urban planners and traffic engineers. In Brisbane the average household annually spends \$1,850 on electricity and \$4,400 on fuel for each vehicle. Governments and electricity providers have effectively encouraged and helped consumers to reduce their electricity consumption. Liveable cities of the future need to broaden this approach to also include other large contributors to greenhouse gas emissions, such as transport. Big gains are possible by driving more efficiently; using alternative transport and ensuring our cars are well maintained.

This paper talks about the research that tells us how to do it. With few short-term and cost effective options to reduce transport emissions, it is imperative that eco-driving be considered for a population wide education strategy.

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Ms Diana Griffiths

Senior Associate, Arup

Informed Design Thinking

Modern cities are complex and diverse systems and metropolitan areas with similar geographic size and population are far more than the number of people they house or the amount of land they occupy. Effective design and planning for the future of our cities requires an understanding of the interrelations and synergies that will impact on the resilience, health and liveability of the communities they support.

This presentation will outline an approach that builds connections between placemaking and sustainability benefits, an integrated methodology that highlights the interface between the way a place is designed and how it performs. Developed by urban designers, systems engineers and sustainability experts, it shows the links between a wide range of factors and highlights the benefits of applying systems-thinking and modern technology to increase our understanding of the interconnectedness of many of the environmental, social and economic factors that make up our cities.

The approach taps into the measurable data of places, allowing project teams to combine 3D software, mathematical analysis tools and GIS as an integral part of the design process. Using this approach a wide range of quality, people-focused factors can be assessed such as the walkability, accessibility and vibrancy of a place. As a conclusion, the presentation will illustrate the benefits of applying this method to a range of projects, from transit-oriented developments that seek to encourage mixed-use development and strengthen multi-modal transport use through to inner city precincts that aim at sustainable densification and compact urban form.

Ms Alexandra Harrington

Chief Operating Officer, The Warren Centre for Advanced Engineering

Urban Reform - delivering successful infrastructure to connect people, jobs, goods and services

The Warren Centre for Advanced Engineering developed the Urban Reform project to identify the key drivers in delivering successful infrastructure outcomes. Through an industry wide consultative process, the key drivers were identified as governance, vision and policy, strategic planning and implementation. These principles are being examined through a series of case studies to identify best practice strategies in delivering successful infrastructure outcomes.

CONNECTIVITY has involved studying projects, including the M7, Regional Rail Victoria, Road and Rail in SEQ, High Speed Rail and The Second Sydney Airport; RESILIENCE, has in hand issues of Future Making, Engagement, Risks and Responsibilities, Sustainability and Resilience in Planning, Urban Systems, Emergency Planning and the future \$value of sound decision making and will be completed in early 2013. PLANNING for GROWTH has commenced its work to inspect our record at precinct, town and city, and regional scales and will present to a colloquium in April 2013. CONNECTIVITY examined the decision making process to successfully connectivity people, jobs, goods and services.

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An analysis of 5 key projects in Australia identified in a unique and very effective method the critical importance of governance, vision and policy, strategic planning and implementation and included:

- Two major proposals as yet unrealised – a Greater Sydney Airport and a High Speed Rail service connecting the major eastern cities
- Two regional infrastructure initiatives – the Regional Rail Plan in Victoria and the South East Queensland (SEQ) Regional Plan
- The completed WestLink (M7) Motorway project in Sydney's west. Each project was benchmarked using an evidenced based approach and senior contacts within each project to identify how it performed against the four key pillars of governance, vision and policy, strategic planning and implementation.

The Connectivity study demonstrated clearly the critical nature of the four key pillars as best practice requirements to delivering successful infrastructure outcomes.

Prof Margarita Hill

Landscape Architecture Department, College of Architecture & Environmental Design

Sustainable Community Design Strategies in the USA

This paper adds to the body of work that examines case studies and best practices that successfully implement sustainable development strategies at the neighborhood or community scale. It seeks to examine new approaches to sustainable community development that are integrative in nature and exhibit a wide range of sustainable urban design strategies including: energy savings, environmental and water conservation, greenhouse gas emission reductions, recycling, waste management, economy and cultural responsiveness.

The paper provides a geographic cross-section of exemplary sustainably designed communities in the three regions of the U.S.: the West, the Midwest, and the South. Thus, it will discuss innovative strides being made to achieve a more sustainable urban form in: Civano, Arizona (West region), Prairie Crossing, Illinois (Midwest Region) and Glenwood Park, Georgia (South region). Some of these “success stories” are documented and promoted through a vehicle of a United Nations conference, Habitat II, by way of the Best Practices and Local Leadership Network.

The methodological framework for the study employs primarily a case study method as a research strategy in order to describe the emerging trends and approaches of sustainable community design and management practices at the community scale and the neighborhood scale.

The paper will characterize the major design and planning elements of the project. It will identify the range of goals established for the project by the different stakeholders and project partners, and examine the processes by which they moved towards these goals. It will also elaborate on the quality of the outcomes in achieving a range of sustainable urban development strategies. Finally, the paper will discuss the degree of success across a range of variables and discuss the progress made in regards to the transferability of the experience.

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Mr Alex Hole

Group Leader Mechanical & ESD, JHA Consulting Engineers

5 steps to creativity and innovation in building design

Innovation and sustainability are often considered harmonious concepts however the reality for building and building services designers is that there are pressures separating these. To continue to evolve sustainable design outcomes however, innovation is vitally important. True Innovation can be both rewarding and risky. New concepts and designs require rigour to ensure that design outcomes realise the vision of the designer and user. Equally the innovation might require the user to evolve and develop their expectation for their built environment. Where innovation fails is where there has not been sufficient resource or time spent in understanding and mitigating risks.

This talk sets out a framework for applying creativity and innovation to building design and most importantly identifying the mechanism for pivoting the design for optimal outcome. Taking real examples from current innovative projects we will explore how some cutting edge, yet often quite basic solutions have been applied, borrowing from both principles established in other unrelated sectors and from first principles assessment of human comfort needs.

The talk will also touch on examples of misguided innovation to give balance and depth to the issue at hand. This talk identifies that there is room for creativity and innovation still, even in an industry that has been applying sustainable design tools to projects for many years.

A/Prof Kathi Holt-Damant

Associate professor, Queensland University of Technology

Co-Authors: Dr Mirko Guaralda, Queensland University of Technology. A/Prof Barbara Adkins, Queensland University of Technology

Urban jungles: Making cities healthy places for Australians with neurodiversity

Our cities are designed to gather for the needs of the average person. While urban design takes into consideration most evident forms of differences (for example, vision and mobility), a strategy to promote a democratic and inclusive environment has not been widely proposed for open spaces.

For some navigating the urban environment can be challenging like navigating an impenetrable jungle. Many people with disabilities are neurodiverse, i.e. their sensory needs are very different from the general population in the way information about space is processed through language, sound, images, light, texture, taste and movement. It is assumed this is a situation that challenges only a fraction of Australian population, but the way we process information changes in time; older people generally lose skills in perceiving contrast, in seeing in reduced light, and in smell and taste; they may have decreased hearing, and experience changes in balance and equilibrium. In many cases older people face the same challenges of neurodiversity.

This paper documents a pilot project developed with the support of Logan City Council and engaging candidates within the Master of Urban design at the Queensland University of Technology. This preliminary investigation discusses the relationship between neurodiversity and the built environment.

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The Logan Central has been used as case study to map physical attributes, barrier and challenges in the navigation of the built environment, specifically for people with disabilities, but also taking in consideration the broader population. The research starts drafting how the way many places are designed and built can be very alienating and inhibit accessibility to people with movement and sensory differences.

The integration of all individuals – mainstream, those with disability, differences and multigenerational populations – strengthens the social and economic fabric of Australia, allowing its citizens to live healthy, productive, and fulfilling lives.

Mr Nathan Islip

Team Leader - Urban Design, City of Casey

Co-Author: Mrs Yogeshwari Biju, City of Casey

LIVEABLE- "Evolving the density models to address our growing pains"

Like it or not, our population is growing, and the decision makers of society continue to wrestle with the dilemma of accommodating the dreams of this next wave of new home owners. However cracks are starting to appear in the bricks and mortar as society leans on the comfort of conventional housing models.

Beneath suburban utopia's veneer lie some dark ills that are of grave concern to the social planners and urban designers. Family violence, youth suicide and mortgage stress have been directly linked with sprawl, and it is evident that the dream is actually unliveable. Typically attention is turned to the opportunities of densification, however the majority of successful and vibrant higher density models tend to be CBD and inner suburban contexts, with a significantly different demographic profile and a paradigm that is receptive to alternate housing and living models.

This paper aims to better understand the impacts of urban consolidation on liveability by finding common ground between the inner Melbourne and outer suburban Casey contexts, and then articulating where the differences lie, what definitions need to be reconsidered, and how this needs to be physically manifested in the outer model. The study includes an assessment of the raft of benefits of alternate models, which extend far beyond basic higher yields, reaching into the viability of our transit networks, the efficacy of our efforts towards a sustainable city, and the physical and emotional health of our community.

Growth can be in harmony with liveability, and this has a clear built form outcome. Invariably the solutions lie not simply in built form, but in a more foundational shift in the psyche of our society. While not all questions can be answered, the paper seeks to sharpen the dialogue, elucidate the opportunities and pave the first steps for a liveable society.

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Mr Sasha Ivanovich

Architect, SIA Architects Pty Ltd FHSIArchitects Pty Ltd

A prototype for 21st Australian Sustainable City - City of Masdar

A new paradigm is called for in the design of cities in the this 21 century as climate change, expanding mega cities, shrinking natural resources, the information/electronic revolution and the shift to carbon neutral energy sources call for new solutions in the making of our cities. Planning initiatives and implementation of sustainable urban settlements, harmonious and balanced with the natural environment, have their beginnings in the 1990's. Fifteen years later the Dongtang City Project (Shanghai), Chinese 1st carbon neutral city was proposed and soon after the City of Masdar in Abu Dhabi, United Arab Emirates. The Dongtang City project has been abandoned.

In 2007 the State of Abu Dhabi in the United Arab Emirates launched their Masdar 'Carbon Neutral' City Plan and the Masdar Institute of Science and Technology (MIST). Five years later the City of Masdar, with the Institute, associated with US MIT1 at its centre, is in construction. Masdar with its multiform initiatives in sustainable urban planning, carbon sequestration, clean technology, innovation and research as a pure concept and an unique prototype, promises a model for the making of a 21st city based on sustainability principles embodying city planning, infrastructure transport and urban design programs with the potential to inform the shaping and making of cities across the world, geared to meet the challenges before us.

This paper will provide an outline of the policies, methodologies , planning and implementation initiatives and resulting outcomes coming from Masdar and it will examine in which way these can contribute to the debate on urban design in Australia. Masdar is a 'green site' initiative. There are only a few comparable examples in Australia and where 'sustainability in urbanism are radically tested. 'Green site' planning in Australia where new cities are created, is relatively uncommon but the principles applied at Masdar are arguably universal. They transcend pure design and encompass governance, innovation initiatives, economics and market economics.

Ms Suzette Jackson

Director, Innate Ecology

Adaptation and Regeneration of Regional cities - the place to be

Since the early days of Rome as a city of 1million people, feeding the city populace and transporting food from regional areas has been an ongoing challenge driving local economies globally. For Rome, in the early days of megacities, this meant conquering cities and countries surrounding the Mediterranean so that food could be transported quickly by boat. Food miles in those days required short trips by water rather than long trips by land, to ensure speed of delivery and quality of product at the journeys end.

While the means by which we transport food to our cities and obtain the food source may appear more civilized today, it was the pressure of establishing new cities in Australia in early to mid 1800s which led to economic decisions based on using all the natural resources and prioritizing port access. So much so was this done by the local authorities and business groups in Geelong that large tracts of waterfront land and piers into the shallow harbor were built to gift to international companies in order to attract them to setup in Geelong. The priority was not the ecological balance but business development to meet the future needs of the city.

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Today the inner harbor of the city of Geelong is surrounded on both sides by industries owned by companies from other continents with old processes that leach toxins to the local soils, water bodies, flora and fauna. These companies do not have vested interest in our ecology or economy! What are the regional planning regulations that led to our regional cities being developed as they are today? Why is Geelong still following the urban planning dictated in 1960's and 70's? Is locally grown sustainable food the key to rebalancing our urban and regional ecology, and regenerating our regional cities?

This paper looks at the influences on our regional cities today and in the past, and seeks to engage the community in the adaptation and regeneration of our cities now and in the future. How do we adapt to a future that supports the people, community, businesses and the surrounding region?

Mr David Jarratt

Director, WSP Built Ecology

Resource Intensity and Next Generation Urban Infrastructure

In the midst of the huge advances in new urbanism pioneered by leading urban designers globally, new thinking in municipal infrastructure has unfortunately been less evident. Urban designers and town planners have not traditionally been required to consider resource intensity as conventional urban infrastructure has been up to the task of supplying whatever is required. However, the bio-physical planetary boundaries described by the Stockholm Resilience Institute (such as climate change) are forcing us to reconsider the environmental impact of the built. Next generation urban infrastructure is critical if our future cities are to adequately address these challenges.

The focus of infrastructure engineering has typically been on peak demand – governing the size of pipes, transformers and treatment plants – yet the principal environmental impact comes from the overall resource use of the built environment. The quantified assessment of resource intensity is missing from the master-planning process.

This paper explores some concepts for assessing resource intensity through urban design. Having assessed the resource intensity implications of the urban form, an infrastructure design team can be freed to consider alternative municipal or precinct systems which are better suited to address the resilience of cities. Aside from being designed purely from a peak perspective, energy, water and waste infrastructure is seldom linked, even though the energy, water and waste systems themselves have substantial common ground.

Through alternative infrastructure (water re-use systems, decentralised tri-generation systems, wetland-based water treatment etc) the fundamental links between water, waste, energy and ecology can be optimised. This paper explores some of the opportunities and benefits of next generation urban infrastructure and some new frames of reference for urban infrastructure design.

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Mr Adam Johnson

Garbologie

To create a world without waste

We are not doing too well in waste management, or at least, in returning valuable materials to the productive economy. Significant quantities of materials continue to be produced as waste, and a significant proportion of these wastes continue to go to landfill. And we keep falling short of an adequate solution. What if, instead of looking for the solution, the infrastructure and incentives that will make it happen, we set our bar high?

To create a world without waste. And rather than considering waste as one big problem that needs big infrastructure to solve, we approach it as a myriad of little problems. With these two mind tricks of a lofty aspiration and the problem chunked down, our thinking starts to shift.

We start to think about targeted solutions. We start to think of the immense opportunity embodied in waste. We start to think about nimble entrepreneurial types rather than deep balance sheets to fund massive projects. And what if we took this to the next level by utilising social media, new economy tools and organisational structures that encourage innovation throughout the organisation?

We then start to create a knowledge infrastructure that acts as a fast breeder reactor for new solutions, a swarm of businesses that can move together, transferring materials between themselves as they add progressively more value, but still self-optimising. This paper is not about to set out the waste processing solution (though it will give many examples of solutions). Instead, it will talk about a way of seeing waste and resources that perhaps enables others to recast the problem, and hopefully leads to a new breed of waste entrepreneurs, and a new dynamic for our cities.

Ms Shasi Johnston

Managing Director, Coefficiency

Co-Authors: Ms Susannah Wallman, Coefficiency. Mr Matt Clear, Connections UnitingCare

Avoid the Pitfalls, Celebrate the Successes – Stories from Not for Profit Leaders

This interactive workshop will use the real life experiences of five leading organisations from the not for profit sector to answer some fundamental questions about the motivations, challenges, benefits and outcomes of their sustainability journey.

One of the key supportive factors for organisations considering to improve their sustainability is to hear the real experiences of others organisations similar to theirs who have already gone down this path, and use this to guide their own practice. Using the experiences of these leaders, change management theory and the views of the delegates, we will establish a collective list of what works, what to avoid and where to start within the context of a not for profit organisation. There will be a particular focus on how to support staff teams to assess and change their behaviours in the workplace.

The workshop will conclude with a question and answer session where delegates will have an opportunity to ask Matt Clear, Manager of Community Relations for Connections UnitingCare about the organisation's journey towards sustainability, and the effective manner in which they have embedded this issue into the core values of the organisation.

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The video content used in this workshop comes from the Leadership in Sustainability Series, a peer education resource for not for profit decision makers considering to improve their organisation's sustainability. The organisations showcased in this series were selected for their demonstrated commitment towards reducing their environmental impacts. They have used a number of different methods and support services to assist them on their journey to achieving their sustainability goals. The organisations showcased are Connections UnitingCare, FSG Australia, The Point Preschool, Women's Health in the North and www.youthconnections.com.

Ms Gwyn Jolley

Deputy Chair, Healthy Cities Onkaparinga

Growing Healthy Cities in Australia: challenges and solutions

This paper examines the challenges to the future growth of Healthy Cities in Australia and proposes some solutions. We draw on the theory and practice of Healthy Cities and, in particular, on 25 years of experience from the long-running Healthy Cities Onkaparinga in South Australia.

The challenge Health promotion emphasises empowerment and participation of communities in addressing health and wellbeing issues, uses a range of strategies including medical, behavioural and community development, and is concerned with equity.

The WHO Healthy Cities project has been described as 'health promotion in action' but has received limited support in Australia. Federal and State policies and strategic plans suggest support for prevention and health promotion but these are seldom followed by implementation strategies and resources. It seems that short-term political thinking, current economic constraints and the enduring power of the medical model all combine to prevent investment in health promotion.

Health promotion initiatives, such as Healthy Cities, struggle to provide evidence of effectiveness when dominant evaluation methods rely on clinical outcomes attributed to a specific intervention. Solutions Individual and community empowerment are key facets of health promotion. Engagement of communities in planning, implementation and evaluation of health services usually leads to calls for a greater focus on prevention and promotion.

Many communities also recognise the importance of the social determinants of health and the need for cross-sector efforts to make urban environments more supportive of healthy lifestyles. Health promoters should act to enable grass-roots action from communities to bring pressure to bear on politicians and policy-makers to take a longer-term view of health promotion as an investment for health and wellbeing across all sectors of government. Recognition of the different types of evidence appropriate for community-based initiatives and the complexity of evaluation in this setting is also needed.

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Ms Joan Ko

Senior Consultant, Arup

Delivering large scale retrofit of homes: global case studies on what works

In Melbourne, more than 80 per cent of the buildings that will exist in 2020 are already here today. The challenge of upgrading millions of homes for energy efficiency is one that all cities face. We identified over 20 examples of major community-scale retrofit programmes from the United Kingdom, the United States, Australia and Northern Europe. We interviewed the people who delivered those programmes to understand how the schemes were financed, and identify the factors that drove or limited success.

As we studied the literature and spoke to people to unearth the unpublished data, it became clear that large scale retrofit was not the research challenge we envisaged but rather a design challenge. Our global search did not yield any program that systematically and comprehensively addressed energy efficiency in existing buildings. Our review did allow us to identify a number of archetypes for retrofit programmes, as well as the financial tools that crossed the most successful programs.

Through our review, we drew conclusions on: the role of cross subsidies, such as between energy efficiency and renewable energy interventions; the potential to target low income households through existing initiatives; the difficulties of creating sustainable 'green' employment; and the limited applicability of Energy Service Companies (ESCOs). We are now using these findings to help a London organisation design a delivery model for a community retrofit scheme.

Amadis Lacheta

Sustainable Business Officer, City of Darebin

Local Government in partnership with business- achieving real environmental impact reduction

Business is traditionally a difficult sector to engage in sustainable action. Hume and Darebin Councils have developed innovative programs, fostered business and stakeholder capacity, relationships and networks to enable resource efficient and resilient businesses.

Mr Jeff Lassen

Principal, Synergies Economic Consulting

Liveability Indices – an expats lonely planet guide or a facilitator of change?

Indicators are an old concept but we have seen a booming indicator industry over the past 20 years. Liveability has not been spared this trend – there are over 100 different indexes produced on liveability worldwide. Liveability indicators typically consist of a number of common components, with a large number of indicators classified into groups and those groups of indicators further combined into a single, aggregate index. There is significant variation in the individual indicators and groups chosen for each of these indices, even though they all claim to measure liveability.

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Liveability – whether a place has it or not – has become part of the everyday vernacular. It is a term that resonates with individuals, communities and service providers. For such a commonly used term, you could be forgiven for thinking that there was a generally accepted understanding of what is liveability. However by its very nature, liveability is a highly subjective and dynamic term. Each community will define liveability differently. Even at an individual level we all value factors such as employment opportunities, amenity, education and cultural activities differently. Despite these variations, liveability indices developed in conjunction with their community can actually be facilitators for change or a framework for identifying solutions to challenges facing a community.

Liveability indicators can be more than a marketing term selling the virtues of a location; they can be an effective tool for leaders – government or business – to develop strategies and enable effective leadership and planning programs.

Mr Kim Lawrance

Development Director, Mirvac Pty Ltd

Co-Authors: Dr Rocio Bona, Mirvac Pty Ltd

Mulataga Community Consultation Process, a Key Component to Developing Liveable Communities in regional areas

In late 2011, Mirvac embarked on an adventure to transform Mulataga, Karratha's first coastal residential suburb, into a desirable, liveable and affordable community of approximately 2,000 dwellings. This paper describes the project team's commitment to create a truly sustainable community by actively engaging stakeholders on matters that directly impact upon the way people will live, recreate, work, study, and use services within the proposed development.

Underpinned by strong growth in the resource sector, the Pilbara region has been a major contributor to WA's economy since the 1960s, however, the development of sustainable regional communities to support the area remains a challenge. Key challenges include developing and maintaining the community fabric, attracting residents, involving community, the increasing cost of living and social divide, indigenous wellbeing, under-provision of social, cultural and recreational facilities, and transit worker integration (FIFO).

It is well documented that engaged communities are the best source of knowledge about their own issues and will seek the development of outcomes that are more holistic, integrated, and creative for their needs. What makes Mulataga special is the need to consider an incredibly diverse group of stakeholders, often with contradictory views, in a location where the traditional housing response to market demand is challenged due to the high cost of delivery. In April 2012, the Mulataga project team developed and implemented an ambitious three-day Planning Design Forum. Run in partnership by Mirvac and LandCorp, the forum brought together members of the community, the traditional owners, local and state government representatives as well as experts in a range of disciplines vital to the success of the project.

The forum was successful in aligning stakeholders' points of view early in the process, and producing a preliminary design concept for Mulataga that responds to the local landform and environment, reflects the needs and aspirations of the local community, celebrates the heritage of the Pilbara region, and more importantly, addresses affordability through the provision housing variety and sustainable product delivery strategy.

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Mr Alastair Leighton

Associate Director - Design + Planning, AECOM Australia Pty Ltd

Environmental Design for Better Community Health – An Ambitious Big Picture Approach

This paper asserts that a more ambitious approach is required to more effectively tackle the complex issues associated with community health and achieve enduring and sustainable change. This presentation will assess some current approaches to preventative healthcare and provide alternative strategies geared to achieving powerful and enduring generational change.

We will take established research from the arenas of health, recovery and climate and apply this to what we know about the complex environmental settings where problems exist. We will then present snapshots of a more ambitious and collaborative approach that could be taken to environmental design, that would apply the results of thoroughly researched and tested best practice to addressing the complex underlying causes of the issues within a more open and extensive framework. As part of this, we will illustrate a range of different scenarios where a holistic approach to environmental design can make a tangible difference in the formation of profoundly beneficial habits, based upon a new governing psychology of trust and release.

This is characterised as a 'new permission dynamic', based upon a culture of messy possibility, directed towards unlocking the latent potential of communities through an enabling infrastructure of integrated environmental design principles. This paper will also discuss how a range of different budgets from diverse areas of Government can be better aligned to achieve the same objectives. For example, the establishment of productive avenues of fruit trees as part of a community environment, aligned with walkable routes to and from school, could suggest simple measures to enhance our response to obesity, with other embedded community and environmental benefits. A powerful expression of this approach to the design of urban areas should urgently be created as an exemplar to explore, explain and inspire a new approach to community health and cohesion in all types of environments, with research-building potential.

Ms Kate Luckraft

Studio Director, ASPECT Studios

Children in the city: why it is important that we create opportunities for play in urban environments

It is widely documented that contemporary children are increasingly living in denser urban areas, with decreasing private open space. This puts increasing importance on our public spaces to provide opportunities for children to play, and in areas that we would not have traditionally thought that children would be playing. Parallel with our shrinking private open space, is an increased focus on improving our inner city areas and a desire to make them more 'liveable'.

Most city centres have had multiple masterplan and vision documents prepared by the governing authority or international consultants and one striking commonality across all of these 'visions' is the ambition to make the city an engaging and dynamic place that is a desirable place to be and consequently provides a physical space that supports a healthy economy.

To create more 'liveable' cities, we need to address the needs of the whole community, and to provide spaces that appeal to children and provide them with opportunities to play. By providing spaces for children within our cities, we provide a communal gathering place and the surrounding retail areas benefit greatly. A space full of children and their carers becomes the centre of a wider hub of interaction and retail activity.

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The whole precinct, becomes known as a 'playful space' where there are opportunities for people of all ages to participate in or watch the activities on offer. The discussion will cover the following areas: How do we learn about children and their needs? How do children move/play/interact with the spaces within cities? How do children perceive cities? What is on offer for young people in inner urban areas (ie Sydney or Melbourne CBD) How can we address the lack of opportunity and create richer urban areas?

Case studies from Sydney, the UK, Europe and the USA will be presented to show differing approaches to providing opportunities for play through integrated play elements, programmed events, public art projects and 'playable spaces'. "Good cities have built-in opportunities for play and self-expression. Simple solutions are often the most convincing" Cities for People, Jan Gehl, 2009

Mr Peter Maganov

Manager, Sustainability and Strategic Waste, Randwick City Council

Local Councils responding to Climate Change - just don't call it adaptation or mitigation!

As with many local Councils around Australia, Randwick Council in Sydney's Eastern suburbs has been developing and delivering comprehensive environmental programs via an innovative environmental levy program for 8 years. Many of these programs involve close collaborations with neighbouring Councils and are targeting community and operational initiatives aimed at responding directly or indirectly to the impacts of human-induced Climate Change.

Over the years these initiatives include: providing financial incentives for energy changes in local homes; the first attempts to establish carbon trading between 12 NSW Councils; installation of 1330kilowatts of renewable energy including small scale wind; recycled and waste water re-use projects saving around 450 million litres of potable water a year; and major programs aimed at achieving measurable behavioural change in community sectors coving households, businesses and schools.

Working on the practical responses that respond to Climate Change issues is not always premised or articulated around Climate Change. The measures underway and their results however are often those identified by researchers and policy-makers as fundamentally important or necessarily creative as a means of responding to changes underway from increased greenhouse gases altering our climate over coming decades.

This presentation brings forward the practical responses underway and some of the results of projects and measures implemented 'on-the-ground' by Randwick City Council, more often than not in the face of uncertainty surrounding Climate Change scenarios, scepticism by decision-makers at different levels, and strong expectations by the community and other tiers of government that the changes that need to be made to adapt and respond to Climate Change will be implemented primarily at the Local Government level around Australia.

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Ms Sarah Mahmoud

Senior Public Transport and Mobility Officer, RACV

RACV Noble Park Staff Travel Strategy

RACV's head office is based in Noble Park; which is 26 km south-east of Melbourne's central business district. With over 1,100 staff based at this suburban location and limited public transport options staff are heavily car depend for their journey to work. A RACV Noble Park staff travel strategy is being developed, due for completion in June 2013, with the aims of: - Understanding more about staff travel needs to and from the site; - Encouraging staff to adopt more sustainable modes of travel; and - Improving the utilisation of existing RACV Noble Park facilities (i.e. car parking.)

The steps to develop the staff travel strategy include:

- Establishment of a Reference Group with members from across the organisation to oversee development of the travel strategy and encourage support from other departments.
- Traffic surveys of the Noble Park car park to verify occupancy.
- Online survey of all Noble Park staff to determine if staff would consider using a more sustainable mode of transport and potential barriers they would encounter.
- Focus groups to investigate methods RACV could implement to encourage staff to use a more sustainable transport mode.
- Development of a tailored travel strategy which summarises the research conducted and includes an action plan with initiatives to encourage staff to use more sustainable transport.
- Communication of the travel strategy to staff and an invitation to a launch event.

This presentation will outline the steps RACV used to develop the staff travel strategy and key findings for the organisation. This would be relevant to other organisations who want to learn more about the process of developing a staff travel strategy therefore encouraging staff to use more sustainable transport modes.

Mr Tony McBurney

Director, integratedDESIGNgroup

Places Not Yet Realised recapturing patterns from the past to inform possibilities for progress

Towns are planted in times of vision and growth. Commonly, the expectations embedded in the genetics of our regional centres remain unfulfilled. Periods of stagnation or decline often dilute 'the dream', and/or differing settlement paradigms mask the potential. Through the next decade several 'game changers' in technology, demographics and aspiration will necessitate and could facilitate a resurgence in positive regional development. 'Empty towns' lie in wait of fulfilment; 'places of promise' can re-emerge from the backwaters of 20th century stagnation.

Regional development must not be a mere hastened transfer of utopian suburban dormitories, rather, a rediscovery of the essence of vibrant community and regional urbanism. Australia's First Inland City, Bathurst, serves as a case study of what was intended, what happened along the way, and what the future could become for the Premier exemplar of Regional Development. The 'empty' satellite villages nearby wait to be revealed in a new context of globalised population. What was your home town intended to be?

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Mr Ian McBurney

Owner, Live Ecological

People and Change: the path to sustainability

Want to be uplifted and challenged? This is a fast paced and inspiring look at the fast growing green economy, the state of the planet, the largest people movement in human history and the latest thinking on behaviour and organisational culture change. In development for over ten years and delivered with Ian's trademark humour, passion and clarity, he delivers a vibrant mix of stories, AV, info and interactivity that inspires, excites and challenges us to change.

A future sustainable society will be better for us in nearly every way. We'll be more local and connected, happier, healthier, more profitable and more proud of who we are. At the conference, Ian will be launching "Talking ecological", a sustainability conversation card set developed with Innovative Resources for executive teams, green teams and sustainability facilitators.

A/Prof Robert McGauran

Director, MGS Architects

Co-Author: Mr Evan Granger, MGS Architects

Strategies for creating productive and liveable knowledge cities

The Victorian Government recently released a discussion paper – 'Melbourne, let's talk about the future' – as part of its forthcoming Metropolitan Planning Strategy. A key strategy raised in the paper is the need for government to support and build on Melbourne's emerging 'knowledge economy' through the development of employment and innovation clusters, or knowledge cities. This recognition of innovation precincts is mirrored at a federal level with the timely release of 'A Plan for Australian Jobs', which aims to advance a variety of employment and innovation precincts throughout the nation, including a manufacturing-focused precinct at Clayton in Melbourne's south-east.

University campuses often form the engine room of knowledge cities; driving research and innovation, creating education-industry linkages and ensuring the transfer of knowledge between precinct partners. Examples include Melbourne University within the Parkville Biosciences Precinct and Monash University within the Clayton Technology Precinct. As a key driver of Melbourne's knowledge economy, universities make a significant contribution to both the Victorian and Australian economy. While this gradual change in strategic thinking is welcome, current planning policies fail to recognise the value of existing employment and innovation clusters, and the important role that university campuses play within them.

Many municipal councils are unaware of the value and opportunities that knowledge cities and university campuses offer and consequently do not provide a supportive framework for the successful development of these areas. State governments too have been slow to consistently incentivise partnerships and investment in these nodes of opportunity. We compare and contrast local, national and international case studies to develop a framework of best-practice land use strategies, which help to create integrated, sustainable and ultimately, liveable knowledge cities. This research will assist councils in realigning their strategic policy to support the development of liveable knowledge cities and serve to strengthen relationships between 'town and gown'.

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Mr Peter McLean

Chief Executive Officer, Keep Australia Beautiful National Association

The Science of Litter

In 2005/2006, Keep Australia Beautiful, through the support of the Australian Government re-established the national Litter Index which is Australia's only nationwide count of litter. Now in its seventh year, the trend data is highly useful to understand where litter is more prevalent, what types of litter are present and where the locations can be found.

There are 983 sites samples twice annually by both volume and items count across 8 site types in all States and Territories. The information provides reliable base line data on litter across Australia, assists governments, businesses and community organisations in the development of policies and programs that will reduce litter and provide increased pride in communities across Australia.

The 2011/12 National Litter Index has identified key market, demographic and behavior trends and when overlaid with the Branded Litter Survey some very interesting and useful information can be extracted to assist with campaign development and assisting governments in formulating best practice strategies to prevent litter. There is a lot more than meets the eye with litter so come and learn just how litter influences livable communities.

Mr Simon McPherson

Director, SJB Urban

Co-Author: Miss Lauren Clerey, SJB Urban

Place Quality Assessment Tool

Context Melbourne's six Central Activities Areas (CAAs) and central Geelong are places that will continue to undergo significant development over time. The state government is required to track progress and outcomes which result from public sector investment in the CAAs. Project The aim of this project was to develop an assessment tool for public spaces in the six CAAs and central Geelong, to allow the state government to reliably and consistently measure place quality over time, as the CAAs develop through government and private sector investment.

SJB Urban prepared an innovative and unique tool, which comprises 54 criteria, grouped under six themes and 18 categories, covering aspects such as safety, accessibility, activity levels, usage patterns, diversity, and comfort and amenity. We assessed eight (8) selected places in each CAA, by daytime and evening, using an iPad interface that uploads automatically to a central database. Each criterion contains specific definitions and instructions, to ensure consistency as the tool is applied every two years. Through this project we rigorously assessed and defined the principles and criteria which define the quality of public space, working with a diverse departmental stakeholder group.

The work allowed us to look closely at public spaces, and what makes them work or fail. This project delivered a product which, to our knowledge, is unique in the world, assessing public space against a full range of criteria, not just the physical elements of a place. This piece of work far exceeded client expectations, and has been described by the client team as 'ground-breaking' and 'potentially invaluable'. We look forward to the opportunity of sharing this piece of research and its findings with the Liveable Cities Conference delegates.

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Mr Glenn Menner

Manager Community Development, Mount Alexander Shire Council

Local communities shaping their future: how a small rural council is working with, rather than 'doing to' local communities

This paper focuses on a community planning project in central Victoria, where Mount Alexander Shire Council is working with communities to enable them to articulate their needs and aspirations for the future through the development of local community action plans. In 2011 Council received funding from the Victorian Government to support local communities across the Shire to develop nine local or township-based community action plans by May 2014.

The Local Community Planning Project seeks to provide a more localised approach to identifying community priorities through active community participation and ownership. The project has a strong focus on community engagement across the spectrum (inform/consult/involve/empower) and aims to build the capacity of local communities to shape their future. The project will provide Council with a better understanding of the make-up of its local communities and the things that they value and require in the future.

The project entails six discrete stages:

1. Pre-planning (develop local community profiles of each town)
2. Community engagement (ensure range of voices are heard)
3. Community action planning (community members to drive process)
4. Draft plan development (needs to be representative of community priorities)
5. Plan validation (process to endorse plan)
6. Plan implementation (driven by community) At this point of the project, there are up to six towns involved across the different stages.

The focus has been on working with smaller towns of a population size of 200 to 1000 people. The first three towns involved, Harcourt, Newstead and Taradale, have each taken a different tack and required flexibility on the part of Council in terms of community ownership and direction. The challenge will be when Council commences pre-planning for Castlemaine, which is the major population centre for the Shire, with around 7000 people. By June 2014, it is expected that each town in the Shire will have its community action plans in place that represent the interests and desires of its diverse communities for the future.

Mr John Miller

Principal, HASSELL

Co-Authors: Mr Chris Melsom, HASSELL

Healthy Active by Design

Our paper addresses the wider question of how the environment and buildings contribute to healthy outcomes. Chris Melsom, a planner and urban designer will discuss the macro scale of planning and urban design while John Miller, an architect will discuss buildings themselves. Our objective is to provide delegates with an overview of the international research evidence regarding a healthy environment and the reduction of chronic disease. We will show how this can be used for practical design guidance on planning and architecture with recent examples.

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Chris is leading a project in Western Australia which will produce the Healthy Active by Design online guide to assist local authorities, agencies, designers, developers and the community to understand and imbed healthy objectives in physical planning.

The project was commissioned by the National Heart Foundation in collaboration with the Physical Activity Taskforce. The consultant team includes the Centre for Building Environment and Health at UWA, Aurecon and Bouncing Orange. The project has undertaken an international research review of the evidence linking the environment to chronic disease. Chris will explain this and how the team is now translating the research into a series of practical and implementable outcomes. John is interested in buildings themselves. He will discuss recent research such as New York City's Active Design Guidelines regarding approaches that can be taken in building design to improve health and wellness. He will also provide examples from current projects. This includes Medibank Headquarters currently under construction in Melbourne, where the client wished to put wellness at the heart of the building.

A/Prof Caroline Miller

Associate Professor, Massey University

Planning Positively for an Ageing Population in New Zealand

There are constant references in academic literature to the aging of New Zealand's population and this is sometimes represented in the popular press as the arrival of a silver tsunami. However, awareness of the issue has not as yet led to similar informed debate on how the issues of this aging population will be addressed and how urban areas may need to be altered to remain liveable. In particular the planning community seems to have taken a limited interest in the needs of an aging population despite an upsurge in interest in and use of urban design to create more liveable and healthy living environments.

This paper will look at what change is needed in the New Zealand planning system to both acknowledge the aging of the population and to plan positively and flexibly for it. It will look at how urban areas can be better designed to both meet the needs of an aging population, particularly to allow them to age in place while still providing good quality liveable environments for the balance of the population.

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Mr Damon Moloney

Senior Sustainability Consultant, Umow Lai Pty Ltd

Buildings of Tomorrow

Sustainable building design has come a long way in the last 5 to 10 years with an ever increasing focus on energy efficiency and an increased ability to target occupant amenity in buildings. The current state of the art already includes features such as trigeneration, black water treatment, and high levels of indoor environment quality. Many new sustainable buildings have already exceeded the maximum performance benchmarks of Green Star and NABERS along with carbon neutrality or zero energy design. From these performance levels we must ask What's Next for Sustainable buildings.

This paper provides a look into the future of sustainable buildings. How can we make buildings of all varieties even more efficient and more suited to the demands of the occupants? There is an increasing range of "smart materials", innovative methods for generating energy and improved ways of thinking about delivering comfort to building occupants. New infrastructure including the electrification of transport, energy storage systems and the "internet of things" will potentially change the way energy is managed across the building stock and the way buildings are designed and used.

Mr Howard Nielsen

Principal Consultant, NACC Sustainability

Having a real go at sustainability!

Many large corporates cut corners while attempting to 'have a go at being sustainable.' Two medium sized community owned organisation in Brisbane are showing many larger businesses just what it takes to have a real go. This workshop aims to draw forward the key elements of what businesses can do practically to be more sustainable.

Establishing a sustainability roadmap, reporting against international sustainability benchmarks and implementing audited environmental management systems are just par for the course for these organisations. They are using internationally accepted knowledge systems for their staff professional development and are experimenting with online stakeholder feedback regarding their sustainability achievements and aspirations.

Carbon pricing has led to a focus on sustainable purchasing and workplace eco-efficiency as a means to carbon proof their organisations. They have both embarked on a Sustainable Leadership Program which engages their senior executives and team leaders in an in depth process which develops their personal resilience and leadership capabilities within the context of building a sustainable business in a cost-cut world.

This workshop will expose the processes being used and the core elements which appear to make things work. The session will provide recorded insights from people from each organisation and the workshop process will enable participants to develop their own mini-roadmap to 'having a real go at being sustainable.'

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Mr Charles Nilsen

Manager Urban Design + Architecture, City of Monash

Streets For People: Making Monash Liveable

The paper presents two case studies involving the rehabilitation of public space and reclaiming streets for community use by humanising and socialising the public domain. Both of these innovative projects are located in highly visible locations within the city of Monash, Melbourne, and have been completed.

The presentation discusses the planning and design principles, design techniques, underlying objectives and lessons learned in relation to mitigation of climate change impacts and urban heat island effect, intelligent management and use of storm water to sustain the landscape, improve habitat, bio-diversity and storm water quality, as well as the community and economic benefits of the projects. The paper also refers to applied water sensitive design research and partnering opportunities.

The presentation emphasises the value of human centred and evidence based design, as well as integrated multi-disciplinary design and innovative design techniques including psychological traffic calming, water sensitive design and ecologically sustainable design to achieve high quality outcomes.

Key Words

Public space rehabilitation and rejuvenation, reclaiming streets for community, psychological traffic calming, improving bio-diversity, habitat and storm water quality, water sensitive urban design, human health and liveability.

Mr Jack Noonan

Marketing and Relationship Manager, CETEC Pty Ltd

Co-Author: Mr Charles Nilsen, City of Monash

A Case for Healthy, Green and Affordable, Community Buildings

This paper is based on two [2] recently completed innovative public building projects. It presents an illustrated case study of an affordable and ecologically sustainable community hub that has been designed to achieve a 5 star NABERS rating for indoor environment quality [IEQ], energy efficiency and water conservation at a capital cost equivalent to conventional buildings. The second case study discusses the design approach and findings associated with a comprehensive retrofit of an existing preschool in the City of Monash.

The paper presents the findings and lessons learned from the NABERS rating assessments, as well as an analysis of the planning and design processes, including the design elements, which have contributed to very innovative, affordable, sustainable community facilities and a healthy working environment. The paper also explodes the myth that “healthy and green” costs more. The community hub does not employ conventional air conditioning and the analysis will include human comfort parameters. The community hub is a response to a needs analysis undertaken by the local community.

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The resulting 1200 square meter building provides a multi-function hub for five [5] resident community groups and agencies, as well as facilities for non-tenant community groups. Importantly, the assessment process incorporated occupant satisfaction feedback through a worldwide benchmarked survey. The building has already been adopted as a template for similar developments by other communities and municipalities. The preschool retrofit demonstrates how buildings that were built in the nineteen sixties and seventies can be intelligently and sustainably upgraded to greatly improve indoor environment quality, occupant comfort and health, as well as energy efficiency.

Mr Simon Oxenham

Managing Director, Convic Design

Our Youth Are in Crisis 5 biggest challenges in designing a better future for our young people

With our young people facing ever greater challenges With the average young person spending more than 8hrs per day connected to digital media, lifestyle diseases reaching epidemic proportions and a staggering decline in participation rates of traditional sports there has never been a more important time to bring awareness to the issues they face. The aim of this paper is to explore the question of how we integrate our young people back into our communities and concludes that it is through deepening our understanding of the current landscape of our youth and responding with conscious design.

Mr Robert Perey

Director, Knowledge.Index Pty Limited

Co-Author: Dr Louise Metcalf, Pax Leader Labs

Leadership for complex systems: a public sector case study

Despite the growing awareness of environmental problems caused by human behaviour and the concern that negative impacts need to be curtailed, there is still a lack of direction and momentum across all levels of society to effect change for sustainability. One of the biggest barriers to creating change has been a lack of appropriate leadership Making 'headway' in sustainability is characterised by inertia, a kind of stop – start progress and sometimes regression of sustainability practice adoption and adaptation. Implementation of sustainability calls for new ways of understanding and approaching the complex systems requiring adaptation and change within which we live.

An important consequence of this is the need for different styles of leadership to overcome sustainability's inertia. One of the possible models for successful sustainability leadership is 'complexity leadership'. Complexity leadership differs from the more familiar understanding of leaders as heroic individuals. It takes up and extends the awareness of leadership at all scales in multi-level systems, from formal leadership roles to just in time leadership to system emergent leadership that may mean whole groups taking on the leadership role Here we present a case study of a year long program to facilitate the development of 'complexity leadership' in a group of project managers drawn from a selection of local councils in New South Wales.

A key criterion for participant selection was a live local project for sustainability, making the training in the program immediately useful. The program was part of a wider strategy to embed sustainability into day to day behaviours and decision making across all scales of community and government when dealing with water usage and disposal.

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Mr Damien Perusco

City Cleaning Sales Manager, Tennant Australia

Sustainable City Cleaning

As the world's population continues to increase beyond seven billion inhabitants, we are seeing a global trend of more densely packed cities and increased urbanisation.

Best practice urban planning aims to create environments that support a better quality of life for their inhabitants. Outcomes include more mixed use urban developments incorporating residential, commercial, retail and recreational capacity in the same precincts, and even in the same buildings. This enables inhabitants to work, shop and play in the same area that they live.

Existing cleaning methodologies are not meeting the needs of the changing population and local authorities must find new ways to maintain these environments.

This presentation will highlight recent trends and technologies that have occurred in how the world's cities are cleaned to meet the demands of new mixed use city environments. Conventional cleaning methodologies will be challenged and new sustainable cleaning technologies will be explained. Sustainable approaches include lithium-ion battery technology, disruptive technologies such as chemical-free cleaning and a new ideology that takes cleaning from a hidden process to a highly visible and educational one.

Mr Luke Poliszczuk

Business Development Manager, SolarFund Commercial / Urban Group Energy

Breaking the Commercial Solar Split Incentive Barrier

Widely recognised in economic theory, the issue of split incentives between owners and tenants when it comes to the uptake of energy efficiency measures and renewable energy technologies is still not deeply understood. In addition, there remains a lack of empirical evidence and detailed case studies to help overcome this potentially significant barrier to both energy efficiency measures and renewable energy.

This workshop will investigate case studies in Australia of commercial and industrial solar applications, as well as financing tools used to break the split incentive barrier to solar photovoltaic system installations in leased commercial and industrial premises. First, we will look at the current state of commercial solar in Australia, including market statistics, rebates, pricing trends and other factors.

Next, the group will discuss general market barriers to renewable energy technologies, including market, policy and regulatory, financial, and capacity barriers. We will examine split incentives between owners and tenants in the commercial and industrial space. Finally, we will look at ways to overcome the split incentive barrier through various financing options for commercial solar installations, and provide an introduction to power purchase agreements (PPAs) within the Australian context: how PPAs work, potential PPA structures and Australian case studies.

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Mr Roy Ramage

Economic Development Officer, City of Victor Harbor

Councils & Suburbs Will Become Energy COOPS?

A solar retrofit program run by the council which has seen 4,000 houses in the City of Victor Harbor (40% of total homes) and a further 5,000 houses in neighbouring precincts, install a minimum set of 1.5 kWh roof mounted solar panels. The City Of Victor Harbor now delivers over 8 megawatts of power from its rooves and under federal law, can, register as an independent power company with multiple sites recognised. The economic/ecological impacts are far reaching and continuous.

Ratepayers now save in the order of \$1.4m pa in power bills and save over 3,000 tons of carbon gas. Solar technologies combined with domestic wind turbines afford immediate and continuous economic growth while offering insulation against the parlous state of traditional energy suppliers together with the continual reduction in carbon footprint. Batteries are playing a crucial role in load shifting with the developing smart grid providing a raft of economic opportunity.

Ms Ellen Regos

Project Officer, Metropolitan Waste Management Group

Engaging on Waste - Developing Strategies that Work to Minimise Waste

A highly interactive session designed to give your business a taste of waste and examine the principles required in developing strategies to better engage with management and staff on waste minimisation. Start the process by better understanding the waste streams and current methods and opportunities for minimisation and recycling in your business. Set some short and long term objectives that will provide the framework for action. Learn how to create an engagement plan that is unique to your business and that will motivate staff to 'recycle right' at work. Find out what practical tools and resources are available to assist with implementation of a whole of business waste reduction strategy and how best to monitor and evaluate success.

Mr Mike Ritchie

Company Director, Mike Ritchie and Associates Pty Ltd

Landfill Carbon Pricing – revenue and risk

Landfill Carbon Pricing – revenue and risk 1. Examining the current state of pricing of landfills in the market 2. Why are different landfills charging such different rates – the answers revealed 3. Claw backs and reasonable costs 4. Identifying reasonable versus unreasonable price adjustments to carbon 5. Advice for landfill users 6. Advice for landfill owners 7. What does the recent changes to emissions factors mean for pricing 8. Pricing now for an emission in 2038 with both proximity, emission factor and carbon pricing uncertainty all in the mix. This talk will cover all of the above and more.

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Mr Mike Ritchie

Company Director, Mike Ritchie and Associates Pty Ltd

Australia - Driving Progress in Resource Recovery

Australia has a unique waste market internationally. While Australia is a highly urbanised nation, its population centres are vastly distant from each other and international markets for recycle. Australia is also unique in its abundance of a available land and its almost complete absence of waste to energy facilities. Currently, Australia recovers marginally more than it sends to landfill with 52% of the nation's waste recovered (EPHC, National Waste Report, 2010). The leaders in recovery, at 58%, are the construction and demolition sectors, where a relatively uniform and heavy waste stream makes recovery simple and economical. Behind this is the commercial and industrial sectors, which is the most varied waste stream, with 56% recovered. Finally, the municipal waste sector recovers 40% of waste nationally, although this varies greatly between urban and rural areas. Current national drivers for resource recovery include State Government landfill levies (high in NSW but absent in Queensland, Tasmania and the NT), growing commodity prices particularly for metals, South Australia's unique bans on recoverable and/or problematic materials to landfill, a national carbon price on landfill which incentivises diversion of organics and finally state resource recovery targets.

Local governments nation wide are currently focusing on reducing organics to landfill via a the introduction of a third bin for organics, or where present, creating a combined food and garden organics collection. Typically, the use of household source separation can divert two thirds of municipal waste from landfill by mass. Further diversion requires the use of an alternative waste technology, meaning all waste undergoes some form or recovery prior to landfilling. Recovery of wastes from the commercial sector remains low hanging fruit, with many commercial operations sending all of their waste to landfill. Typically, additional diversion from commercial operations can be achieved through source separation. However, businesses require a commercial driver to achieve this, such as weight based charging for residual waste. Across the nation, significantly improvements in resource recovery could be achieved via the construction of new infrastructure. New infrastructure required includes composting facilities (particularly in Victoria), dirty material recovery facilities for commercial waste (particularly from offices), waste to energy facilities for energy recovery of recycling residuals and higher quality centralised landfills with gas capture.

Dr Tonya Rooney

Adjunct Professional Associate, University of Canberra

The rise of security fences around Australian public schools – Blocking the pathway to social sustainability

In a move away from the open or low-fenced grounds that have traditionally been a feature of Australian public school design, we are witnessing a growth in the installation of high security fences around public schools. These fences aim to reduce vandalism and improve student safety, yet there is little consideration of the potential wider risks these bring to both the children and the wider community.

The design and placement of these fences does not just alter the physical dimension of local landscapes but also brings changes to the social aspects of community life. These changes may be experienced through restricting patterns of movement in and around the community and preventing access to open spaces. Social impacts may also be felt if fences lead to a heightened perception of fear and risk in the community that in turn discourages children's independent access to their local environment or leads to practices of exclusion rather than those that promote inclusion and cohesion.

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Using the key measures of social sustainability, this paper analyses the potential implications for both children and the wider community that seem to have been ignored in policy decisions on school security to date. It highlights several areas of tension and ambiguity in government responses to security on the one hand and those policies that aim to promote sustainability. A new approach is needed if our school grounds of the future are to be an integrated part of – rather than separated from – an inclusive, safe and healthy community.

Dr Ben Rossiter

Executive Officer, Victoria Walks

Online walking maps, social media and walkable communities

Victoria Walks is an independent walking health promotion charity providing walking and walkability leadership, supports community action around walking issues and promotes walking through online activities, Walking Maps and social media.

This presentation tracks some of the strategies and activities enacted by Victoria Walks to build support for walking and walkability that utilise technology. It outlines the development of a continuously evolving digital ecosystem helping to motivate more people to walk every day, and to value, care for and strengthen urban civic spaces. In this presentation, the rationale taken in developing the interconnected system approach will be discussed, from the initial work to provide for people's need for content, to building a community and initiating conversations relating to walkability.

It will describe the importance of Victoria Walks' Youtube and Facebook presence for helping people to: understand the value of walking; take action and work with local councils to improve walking infrastructure; and form Walkability Action Groups and connect with like-minded people to improve communities.

This presentation will concentrate on how mobile technology, location based tools and social networks encouraged Victoria Walks to develop Australia's first website for walking maps (Walking Maps or www.walkingmaps.com.au) which is at the forefront of using social media in community engagement and health promotion. This new crowd-sourced tool allows people, communities and organisations to a) create maps and tracks, highlighting their features with photography and comments, flagging hazards, and giving them a rating and b) discover, search, download, print and share a walking map.

Walking Maps is a highly innovative tool that connects and builds an online and real world community. Walking Maps has a variety of sectoral uses in health promotion, urban planning, sustainable transport, community development, tourism and community engagement. Importantly, Walking Maps is proving an effective walkability and advocacy tool.

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Ms Manmeet (Poonam) Sandhu

Master of Public Health Graduate Student & Registered Nurse, The George Washington University

Waste Diversion DC - A Clinton Global Initiative University Project 2012/13

Recycling an empty drink container or a paper flyer at an outdoor event should be easy. Unfortunately, in Washington, DC, an event host can gain a Special Event Permit without providing any recycling or waste diversion infrastructure during their event. This lack of infrastructure places the responsibility of recycling at events solely on the attendees rather than being a joint effort.

The outcome - most recyclable or compostable waste generated at these events lands in the trash. This burden negatively impacts the environment and places financial strain on the municipal government. In a time where climate change mitigation is a surmounting priority and government finances are strained, our project, Waste Diversion DC (WDDC), set out to collect the data necessary to encourage the District of Columbia Council Members to change the special event permitting process, such that waste diversion is a mandatory component of all successful applications.

Waste Diversion DC accrued \$10,000 in award money, and hundreds more with in-kind services. On October 7, 2012, WDDC ran an empirical study at 'Taste of DC' a 500,000 person-strong annual food event. We employed and trained 31 low-income workers to assist in our project and enlisted the services of the Department of Public Works.

The outcome of this intervention was clear - when you offer waste diversion stations to event patrons, they will be used; when you staff these waste stations, the items collected are sorted more effectively than stations without support staff. These results were presented to DC Council in the form of a policy recommendation, which also highlighted names of American cities and states that have event waste policies in place.

This presentation will demonstrate the successes and challenges of Waste Diversion DC, along with a progress report for the policy change submission to DC Council.

Mr Richard Seidman

Director, iAccess Consultants

Accessibility - Not so Challenging (if planned for)

The modification of the Disability Discrimination Act 1992 on 1st May 2011 challenged those responsible for the planning and designing of the built environment to ensure that the built environment is accessible by all. The legislation addresses and provides a time line for compliance for the upgrading of accessibility of public transport facilities which is being undertaken to a varying degree of success. Notwithstanding this significant initiative issues of navigation of the built environment by persons with low vision, measures for persons who are deaf or have low hearing or those with a variety of disabilities has yet to be considered.

Many Local Councils have access committees however it is apparent that few Councils' have a thorough understanding of accessible requirements or the content of the applicable legislation Codes and Standards resulting in inconsistency for users navigating the various local government areas. There is however a significant number of positives where accessibility maps have been prepared for use by persons with disabilities to access parts of our great cities.

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To provide certainty the Legislation, Codes and Australian Standards are required to be reviewed to eliminate duplications, errors and confusion. Councils have legislated that a percentage of all residential developments be designed for accessibility and in some LGA's parks and communal facilities have been upgraded.

This paper throws out the challenge to the planners of our city to address holistically making our cities accessible for all and to address accessible design issues of parks, footpaths, playgrounds, signage and wayfinding. In addition accessibility needs to be extended to the cosmopolitan way of life providing consistency in footpath strategies. Finally we propose that an accessible rating system for the elements of the built environment to better inform those with accessible needs of the level of accessibility of our cities.

Ms Nicole Sexton

Senior Strategic Planner, Barwon Water

Regional collaboration for integration of urban and water planning

The Barwon region includes some of the fastest growing areas in Australia. Demand for water, sewerage and recycled water services is increasing. Severe drought, coupled with population growth and uncertainty posed by longer-term climate change, has presented a challenge to the security of traditional urban water supplies. Yet, this same challenge has also presented our region with a great opportunity - the chance to re-think the way in which we plan for and manage the urban water cycle.

The urban water system involves a complex web of players, decisions and solutions operating across multiple dimensions or scales. Historically we have tended to segment and separate key aspects of water management and urban planning. Whilst this enabled organisations to remain focused on delivering their core business effectively and efficiently, it has limited our collective ability to integrate water cycle planning into urban planning.

In recent years, our region has demonstrated extraordinary adaptability in responding to water security threats. We now have a more diverse portfolio of potable water, a highly water efficient community and alternative water solutions at the local scale to add flexibility to the water system. The new challenge is to encourage greater communication and collaboration across agencies to ensure better integration of urban and planning at the strategic level.

The region is the first in the state to establish an Integrated Water Cycle Management Network with the express aim of improving the region's liveability, productivity and sustainability through application of Integrated Water Cycle Management (IWCM). It is a great example of how regions can work together for a shared outcome.

Ms Kate Simnett

Sustainable Transport Officer, Yarra City Council

Providing for bikes in Inner Melbourne - how to allocate limited road space to bikes.

Yarra City Council has been undertaking a stealth mission in the last decade –incrementally snaffling road space. This mission has provided better bicycle facilities for the community and established Yarra's reputation as one of the best cycling cities in the southern hemisphere. On Census day 2011, 8.5% of Yarra residents cycled to work – the highest Cycle to Work rate in Australia!

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Yarra Council has encouraged more people to cycle by calming traffic, reallocating road space, implementing 40km/hr speed limits on 90% of local roads and other innovative treatments to improve the lot of riders. Yarra has taken an inventive approach - installing wide bicycle lanes in locations where the traditional doctrine would dictate that either no bicycle lane or only a narrow bicycle lane could be provided. This has been achieved by narrowing car traffic lane widths. This approach means bike lanes on approximately 45kms of Yarra's streets, resulting in fewer cars in bike lanes, lower traffic speeds, better amenity for residents and greater separation between cyclists and motorists - creating a safer environment for all users.

The road space reallocation has been achieved over the last 10 years in tandem with Council's regular road maintenance program. It has resulted in nearly double the percentage of Yarra residents choosing to cycle to work compared to residents in the nearest Local Government Area. In some areas of Yarra, an impressive 19.4% of people ride to work. As works have been 'low impact' and implemented gradually, there has been little negative impact on the community and a minimum loss of parking. Due to the improvements in cyclist numbers, Council is now considering a project in which parking spaces may be removed to provide better on-road infrastructure for cyclists. Yarra is throwing off the cloak of invisibility!

Mr David Singleton

Director | Global Leader, Planning, Arup

Australia's cities in the 21st century - liveable, sustainable, resilient

75% of Australia's population, 80% of employment and 80% of our GDP are currently based in our cities and the trends are for these proportions to increase. The future of the majority of our population therefore is and will be dependent on the sustainability and resilience of these cities. Development solutions exist for our cities that meet these criteria and that will yield urban spaces that are liveable and exciting. This paper will provide a glimpse of those futures.

Mr Peter Steele

Senior Consultant - Sustainability & Climate Chang, AECOM

Delivering sustainable precincts: what has worked, what hasn't and where to next

Efforts to make cities more sustainable have, for some time, recognised the benefits of considering communities and precincts, rather than just buildings. District energy systems, precinct stormwater harvesting and innovative waste management approaches exemplify the opportunities for sustainable infrastructure at a precinct-scale. Tools and verification programs such as Green Star Communities and One Planet Communities can provide a clear vision of the possibilities, and the benchmarks of success. However, the challenges in attempting to finance, deliver and operate these precinct-scale approaches are not yet resolved.

For many projects, the initial vision of an integrated, sustainable and viable infrastructure system fails to be realised. Delivery challenges faced can include access to appropriate finance, effective delivery vehicles and cost recovery mechanisms, active and passive regulatory barriers, and inadequate industry experience. Project experience, research and innovation create a rapidly changing landscape for sustainable precincts, and responses to these challenges are constantly evolving.

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This paper will provide a snapshot of current practice, highlighting progress made to date and the challenges that remain. Using several examples of local and international projects that AECOM and the speaker have worked on, as well as the most recent thinking of the company's leading experts, it will draw together practical lessons and highlight opportunities relevant to all levels of government and the private sector.

Mrs Amanda Stirrat

Health and Well being Officer, City of Greater Geelong

Food Security - Building the Local Picture

For a community to be considered food secure, all people, at all times, must have physical and economic access to sufficient, safe and nutritious food. Good health and well being and the ability to live life to its full potential is dependent on this. Food insecurity is a growing issue one that has impacts not only on individuals, families and communities but also the natural environment.

Planning for a strong regional and local food economy with a healthy and sustainable food system is a key to addressing the issue and can be driven by the economic potential of strengthening regional and local food systems, the risk to food supplies from climate change, peak oil and the limited availability of land and water and the risk to population health from increasing rates of obesity and other diet related diseases. Building a local food security picture is required to advocate for this need to change at a local government level who are strategically placed to make a major impact to communities.

To build the local food security picture, existing and new data collection was undertaken through a number of methodologies. Key findings found that food insecurity was a pressing issue within this local government area particularly for those in "at risk" groups of food insecurity. This was shown by the demand that has been placed on emergency and community relief services.

Poor physical and economic access to healthy foods, limited transport to healthy food outlets and high access to an abundance of high fat takeaway outlets. Recommendations have been to utilise the '4 Environments for health' frameworks to plan all actions to systematically address the determinants of food security for the whole community, by developing a local government food policy, to support and resource grass roots local food security initiatives and to continue to advocate for food security.

Ms Sarah Tasic

Senior Planner & Sustainability Consultant, Arup

Co-Author: Ms Melanie Koerner, Arup

Public transport infrastructure – transforming cities

If Australia is to continue to compete globally, we must ensure our cities, the power houses of our economy, are efficient and attractive places to live. Achieving this efficiency will require a transformation of our sprawling, car-based cities. In this, improved public transport infrastructure has a key role to play. With the aid of good governance arrangements and comprehensive planning, new public transport infrastructure can promote higher density, functionally diverse urban forms which are more economically productive, healthier, more socially inclusive, more energy and water efficient, less carbon intensive and more resilient.

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So why do public transport projects, which intuitively make sense, fail to add up using traditional economic appraisal methodologies? According to Sir Rod Eddington, Chairman of Infrastructure Australia, 'Getting the prices right means making a comprehensive assessment of the full range of economic, environmental and social impacts of transport policies, including climate change.' Fortunately new approaches to economic appraisal are emerging to make this possible.

These approaches analyse the ways public transport can be expected to shape our cities and then quantify and monetise the wider economic, social and environmental costs and benefits of these transformations to provide a more sophisticated understanding of the true value of public transport. These new approaches are helping decision makers refocus investment in essential city-building infrastructure. Concurrently, mechanisms for capturing some of this value are also emerging, providing opportunities for governments to recoup some of the costs involved and supporting on-going investment. In this presentation we will describe these new approaches with case study examples of where they have been applied and some of the benefits identified.

A/Prof Susan Thompson

Director, Healthy Built Environments Program, City, University of NSW

Co-Author: Ms Rhonda Matthews, NSW Ministry of Health

The Healthy Built Environments Program: Working together to break down health and planning silos

In 2008, the then NSW Department of Health recognised the need to fund and support a Healthy Built Environments Program (HBEP) that would drive interdisciplinary and connected ways-of-working across the built environment and health. A five year \$1.5 million competitive tender process was initiated.

The City Futures Research Centre in the Built Environment Faculty of the University of New South Wales was successful in winning the tender and has now been running the HBEP for over three years. The HBEP is motivated by a vision to plan, design, develop and manage built environments in ways that promote and protect the health of all people.

The Program focusses on three primary areas. First, it fosters cross-disciplinary research using funding from disparate sources to enable the evaluation of healthy built environment initiatives. Second, the Program delivers education and workforce development in both university and professional settings. The third area of work is advocacy for health as a primary consideration in built environment decision-making. This is realised through professional and community stakeholder engagement, dissemination of research and publication of healthy built environment commentary in different journals, on websites and in the media.

This paper provides an overview of the Program's achievements across its three areas of focus as an exemplar in bringing the combined efforts of researchers, educators, practitioners and policymakers from the built environment and health sectors to the prevention of contemporary health problems. The challenges of working in this interdisciplinary space are discussed, highlighting how sometime divergent research traditions, academic and professional goals, together with theoretical and practical understandings, have been negotiated.

The paper concludes by considering how those from the built environment and health disciplines can further promote interdisciplinary and connected ways-of-working to achieve healthy spaces and places for all communities.

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Mr Pete Tickler

Director, Greensense

Talking buildings - the future for occupant engagement in our built environment

Energy is not within the natural language of mainstream for most of us. In general we don't really understand it, we have only the vaguest ideas about where and when we use it and, because of that, we struggle to value and manage our consumption. While we may have some notion that we are wasting energy, we have little sense of being able to actively do anything about it. Whilst this is a widespread problem in the residential sector, it is compounded once you step outside your front door and into someone else's building. Building occupants represent a significant challenge, and a wonderful opportunity, for those of us looking to deliver smarter, sustainable and more amenable building.

Well-educated and engaged building users can contribute towards very tangible performance improvements, as well as less tangible, but equally important benefits related to areas such as employee attraction and retention. Our vision at Greensense is that buildings should talk to their occupants; that they should engage them in a conversation about sustainability; that the 'heartbeat' of the building should be loud enough for everyone to hear. On a hot day, when your building is working hard to keep people comfortable, they should know.

The building should be able to remind people to use the stairs, applaud them when they recycle more and engage its occupants in friendly competition – say, a challenge to see which floor can save the most electricity this month. Learn more about talking buildings and how some of the region's leading organisations are tackling occupant engagement.

Dr Bethaney Turner

Lecturer in International Studies, University of Canberra

Food in the City: How misunderstandings and knowledge gaps fuel food insecurity

Historically, food has tended to take a "back seat" in the planning of cities "to other urban systems like housing, transportation, employment, and the environment" (Pothukuchi & Kaufman, 1999: 213). Over recent years, urban sprawl in greenfield sites, and efforts to counteract this through a planning focus on inner-city densification/in-fill, have both reduced the land available for food production in urban and peri-urban areas in Australian cities. This has reinforced the positioning of food—and the responsibility for feeding the nation—as a rural pursuit, fuelling a growing disconnection between urban dwellers and the food system.

This paper explores how the adoption of key principles of food sensitive urban planning and design can contribute to facilitating points of (re)connection to the food system in order to work towards the realisation of food security in urban areas. The analysis is grounded in a case-study of the ACT food system which identifies the motivations, risks and benefits of practices of urban agriculture. The findings indicate that the potential for food secure cities cannot be adequately assessed without more robust understanding of the capacity and willingness (on behalf of citizens, businesses and governments) for urban engagement in the four key components of the food system: food production; processing and transportation; consumer access and utilisation; and waste, re-use and post-use management. The paper identifies key ways in which these knowledge gaps can be addressed.

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Mr Tobias Volbert

Landscape Architect/ Project Manager, Playscape Creations

Healthy Cities: Inclusive Design beyond Accessibility

Inclusive Design: What does it mean? Is providing access enough? What should we consider beyond accessibility when we enter into designing a healthy city for everybody? Learning Outcome: Participants will:

- Define the growing demand for inclusive recreational spaces
- Differentiate between meeting requirements and creating an inclusive, multifunctional, multigenerational and healthy playspace design
- Understanding why Sensory Play is important for everybody
- Knowing how play stimulates ALL the senses
- Ideas and examples of how to achieve real outcomes for a better and healthier city

Overview:

1. Background information on current Brisbane activity and developing a wider understanding of Disability with statistics and trend data.
2. Discussion on Autism Spectrum and Sensory Processing Disorders and motor development.
3. Elements of Inclusive Playspace design; - physical access, - design incorporating play activities that support the needs of all abilities - variability – a multifunctional design approach.
4. Best practice success for inclusive open space and playground design and construction.

Feedback from Industry: "Tobias skills and background as a landscape architect are clearly evident as is his knowledge and experience in the sphere of Inclusive Play spaces. Through his presentation he imparts essential knowledge and expands upon the concepts and philosophy of inclusive play, and defines the parameters continually redefine the world of access and accessibility. There is a breaking down the barriers approach where play involves stimulating the senses, where diversity in age and ability, are considered equally and without isolating or discriminating against a user group.

The discussion on the benefits of this holistic approach was both relevant and educational and had parallels that go well beyond the landscape of the playground, and should extend into contemporary Urban Design and the Built Environment." Richard Foster Principal Architect NQ | Department of Housing and Public Works

Mr Ned Wales

Assistant Professor in Urban Planning, Bond University

Co-Authors: Mr Tom Bulic, to_make. Susanne Taylor, SMEC Services PL

Community Consultation for Optimum Development Outcomes

The inclusion for social engagement into urban design and property development planning is not always considered or at best late in the planning approval process. The consequence of poor community consultation can lead to very expensive and lengthy development application timeframes.

This paper examines the windows of opportunity for public consultation on significant development projects using case studies from growth areas such as the far north coast New South Wales and the suburbs of Melbourne. Local governments are often given limited resources to allow for adequate consultation engagement and the property development industry often engages communities as a last resort. The lack of formalized community input at the

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planning phase can result in residence groups and commercial interest actively opposing projects leading to expensive holding cost, highly emotive public hearings and political backlash from lobbyist and stakeholders.

This paper evaluates key gateways for the incorporation of consultation and articulates the warning signs for potential conflict when progressing unfavourable projects. The case studies reveal that at times development proposals may seem benign but during the public notification period they rapidly end up in public outcry, further complexity and potentially inappropriate land uses. In a time when our urban environments need to prepare for climate change resilience and adhere to sustainable planning practices the social consideration and engagement strategies need to be valued where collaboration between communities and the property development industry can work together for innovative solutions. This research will shed light on lessons learned and provide a review of community consultation guidelines that lead to more desirable outcomes in our built and natural environment.

Mr Ken Wall

President and CEO, Geodata Services, Inc.

Sustainability Mapping and GeoDesign - Combining Commercial and Open Source Tools to Help Communities Plan Future Scenarios

Describe techniques applied through GIS, web based community mapping, and collaborative tools to develop future scenarios quantified by community indicators. The project was applied through a US Housing and Urban Development Sustainable Communities Regional Planning Grant. The project, titled Vibrant Futures, covers eleven counties and four tribal nations in a rural sparsely populated region in north central Montana in the US. GIS applied through more than 300 measurable community indicators was combined with regional mapping by citizens using Esri ArcGIS web maps, open source software and fieldpapers.org analog mapping.

The project examined health, fresh food access, economic opportunity, socioeconomic inequity, public safety, housing cost, environmental quality and transportation. Measurable indicators were developed and vetted in community workshops, meetings with local officials, tribal elders, educators, and community leaders. Commercial socioeconomic and demographic data from Esri Community Analyst and local data sources provided a base.

The map data was localized and enhanced through online crowd-sourced web maps, and traditional paper mapping through fieldpapers.org curated by local staff. On bus mapping surveys occurred in the regions award winning rural public transit system serving low income populations. Special focus was placed on using technology, but bridging the gap for users with limited access to it.

Scenario planning was done in regional workshops and compiled into common scenarios for regional sustainability such as preserving the small town rural character and agriculture base, optimized sustainable communities scenario, and a full scale energy development. CommunityViz software allowed the groups to quantify, measure and visualize alternatives. This software runs as an extension to Esri ArcGIS, and has been applied with Australian partners in Queensland, in New South Wales and in Perth. It is the leading planning and GeoDesign GIS software in the world.

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Mr Hamish Wall

CEO, Solmessis

Zero Capex Solar Power for Business & Government

Solmessis is the owner and developer of the proposed 20 Megawatt solar farm located in Barcaldine, Central QLD that achieved development consent in 2012. The site is capable of facilitating a 60 megawatt renewable energy generator.

Solmessis and an affiliated organisation, Renergise have also developed a financial product that allows large energy users such as Shopping Centres, mine infrastructure, schools, clubs, universities, hotels, manufacturing, agriculture and any heavy energy usage facility to install solar energy generation on site for zero capital cost. The distributed solar power generator constructed on site has no electricity cost disadvantages when compared to the coal fired electricity drawn from the grid.

Problem

Many organisations want to implement sustainability strategies. But in many cases, difficult trading conditions may limit availability of capital for non-core expenditure, such as sustainable initiatives. Also, spending cash on projects with a long payback is generally not palatable for the Executive or the Board. It should also be noted that owning, operating and maintaining a power generator requires specialist experience.

Approach

With distributed solar power in mind, Solmessis, has augmented the power purchase agreement model that is widely used in utility scale solar and wind energy projects. In other words, we finance, engineer, build, own, operate and maintain a distributed solar photovoltaic energy generator on site for our client. The system is optimised and only the power utilised on site is charged to the client. The risk of the system operation remains with Solmessis.

Results

We have analysed electricity retail pricing information and data usage sets, across shopping centres, mining, processing, waste, manufacturing, hospitality and the building industry. In most cases on site renewable generation is competitive on current electricity pricing and can be matched. In around 30% of businesses that we have analysed the price can be beaten by around 5-10%. The very large energy users such as mining and some processing for export is difficult to compete with, as their electricity tariff is close to wholesale prices.

Conclusion

If a site is suitable and on-site renewable generation can provide a cost effective solution for a portion of a corporation's power at zero capital cost, this should assist sustainability managers and those interested in corporate social responsibility to implement a project such as this into their overall sustainability strategy. No capital expenditure or increase in operational costs should allow suitable businesses and heavy power usage government infrastructure to move to this model.

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Mr Neale Wardley

Researcher, Victoria University

Assessing whether or not Greenhouse Gas emissions trading has been a success in Europe and the United States

The comparative public policy research considers two case studies on pilot programs for Greenhouse Gas emissions trading. Firstly the large and ambitious European Union Emissions Trading Scheme (EU ETS). Then secondly the somewhat smaller, by way of comparison to the EU ETS, US Regional Greenhouse Gas Initiative (RGGI).

The aim of the research is to establish, using a case study methodology, if the various sectors and individual participants covered by the programs have been in compliance. Then as a result of this compliance, if any, whether or not there has been a reduction in the emissions of Greenhouse Gases in the industrial sectors that are covered.

The EU ETS began in 2005 and there is now compliance data available for the first phase between 2005 and 2008. Also the second phase of the EU ETS between 2009 and 2011. The RGGI has been operational for a shorter period, although detailed data is now available on the first reporting period of the RGGI between 2009 and 2011. At the time when the Kyoto Protocol was established Greenhouse Gas emissions trading was seen as a pillar of action on the effects of climate change.

The Kyoto protocol is currently undergoing serious review in the forum provided by the UNFCCC. Somewhat similarly the preference toward Greenhouse Gas emissions trading as a principle measure has diminished. It was hoped that a market based global approach toward reducing anthropogenic emissions of the Greenhouse Gases Greenhouse Gas would be both effective and efficient. The research seeks to determine if this approach has, in the early stages, borne fruit.

Dr Marci Webster-Mannison

Director, Centre for Sustainable Design, University of Queensland

Growing cities from within: urban agriculture in inner Brisbane

This paper proposes a new way to integrate urban planning and design of our cities with multifunctional agriculture through the development of local infrastructure solutions in response to food production and energy, land, water supply pressures as part of a climate change adaptation strategy.

This paper lays the groundwork for a new way of structuring cities with particular emphasis on the potential to place urban agriculture at the heart of the community. A pilot study demonstrates how this can happen through the retrofit of the inner city Brisbane neighbourhoods situated in the historical catchment of Western Creek.

Ms Kate Wickett

associate, Environment & Advisory Services, Aurecon

Where are we on the journey to Sustainable Procurement for Liveable Cities? “Applying Sustainable Procurement Principles to Procurement Projects”

As the ‘triple bottom line’ continues to be a key consideration across all project types and stages, the definitions of the terms ‘Value for Money’ and ‘Return on Investment’ evolve. In response, government and corporate organisations are increasingly required to address ‘triple bottom line’ issues with respect to the procurement of goods and services.

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To meet this challenge, internal Project Managers, Planners and Urban Designers can benefit significantly from understanding how the application of sustainable procurement principles can support robust sustainable outcomes in a strong governance environment. Kate has recognised an opportunity for Project Managers, Planners and Urban Designers to apply project management principles to sustainable procurement activities and the opportunities this can provide government and organisations to add value to the project, reduce costs for external and internal clients, and inspire sustainability change amongst their goods and services suppliers.

Application of these principles offers significant potential for Project Managers, Planners and Urban Designers in both corporate organisations and government departments to effectively plan and manage sustainable procurement through all stages, resulting in the efficient delivery of vastly improved project outcomes across: Project Conception; Options Analysis; Requirements Determination; Procurement; and Contract Management.

Kate's presentation will demonstrate how the embedment of 'triple bottom line' principles within procurement projects can assist government and organisations in achieving sustainable outcomes that lead by example, set clear priorities, build organisational capacity, remove operational barriers and capture long-term, sustainable outcomes. Aurecon is pleased to support Kate in presenting at the 6th Making Cities Liveable Conference and believe that her session would offer a fresh and engaging perspective on this increasingly emerging issue facing Project Managers, Planners and Urban Designers.

Mr Timothy Williams

Director, Tim Williams Architects

Super Sydney, Articulated Metropolitan Desires

Super Sydney, Articulated Metropolitan Desires Timothy Williams As our governments deliberate over which new areas of farmland to release for housing, which new freeway or other expensive piece of infrastructure to announce; who is articulating a vision for what kind of city is to be achieved, how we are to meet the challenges of the future in a way that expresses the way we want to live together? Following the success of the "The Future of Penrith, Penrith of the Future" project By French/Australian art and urban design collective Campement Urbain, (Sylvie Blocher, François Daune and Tim Williams, which won the 2012 Australian Award for Urban Design for large scale concepts) the Sydney Architecture Festival decided to showcase a metropolitan scale version of the community engagement approach of the project as the keynote event of the 2012 Festival "Beyond Boundaries".

As with the Penrith Project, filmed interviews with individuals of all walks of life were conducted that allowed them to express their hopes, fears and visions for the future of their city. The Super Sydney version of this exercise focused on people's ideas for the future of Metropolitan Sydney. This ambitious and complex community project involved volunteer architects, landscape architects and planners, Council staff and councillors, and of course hundreds of members of the community from all parts of the metropolis.

The collective wisdom unearthed through this project and the surprising insights into the scale of the challenges Sydney faces is inspiring. Excerpts can be seen on the website www.supersydney.org Clues and even answers for what future vision might capture the collective imagination and be worth working towards, can be found in the thoughtful, responsible and articulate ideas of Sydneysiders. Super Sydney shows that individuals can and want to engage on big city issues. Shouldn't they be listened to?

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Beth Worrall

Senior Sustainability Manager, Bupa

How might we create healthy communities within and beyond the workplace?

Today our planet faces some of its biggest challenges ever, with a rapidly growing population, unsustainable lifestyles and austerity measures in place across many of the world's leading economies. From the way we travel to the way we eat to the ways we work, these challenges have profound impacts on health and the health of our planet, along with major societal, environmental and financial impacts. At the same time, chronic diseases, along with obesity, stress and mental illness, are rapidly rising on a global scale. According to the World Health Organisation, the world sees 36 million deaths each year globally as a result of these impacts. This substantial number of preventable deaths cannot be ignored.

We also know that work and workplaces also have a big impact on our health, and workplaces and employers can do a lot to positively influence the health of employees. There is also a vital link between the health of employees and business success, including attracting talent and increasing retention. Given the scale of the challenge, is this enough? What can employers do to improve the health not just of employees but of their families, friends, business districts and cities?

In November 2013, and with the International Diabetes Federation and design agency IDEO, Bupa launched an open innovation challenge with IDEO to explore this question. Using the OpenIDEO platform, we challenged the global community of 40,000+ members with the question: "How can we create healthy communities within and beyond the workplace?" Over the course of the challenge, the OpenIDEO community shared hundreds of stories from around the world and collaborated on solutions to the question through personal insights about their own health.

The winning concepts from the challenge were announced in February 2013 and are available for the wider public, including businesses, NGOs and governments, to adapt and help improve the health of communities globally. Bupa is also working on developing some of the winning ideas to help its goal of improving the lives of sixty million people by 2015.

Health is a tough space to innovate, as it has become a saturated market with smart-phone apps and health-tech incubators. Despite that, the industry has a shortage of strong ideas that go beyond traditional workplace wellness schemes.

This presentation would share our learnings from the challenge about improving the health of communities beyond the workplace, and provide key strategic insights to conference attendees on leveraging open innovation to create healthy workplaces, business districts and cities.

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Ms Kerrie Young

Managing Director, Kerrie Young Property Pty Ltd

The Transformation of Community Housing: "Horizon Housing Company" A CASE STUDY

What will a community housing provider look like in the future? Community Housing Providers are generally charities which develop and manage affordable and community housing rental stock for people on low to moderate incomes, from people on benefits to those earning up to the 40th percentile of income. Usually clients come from State Government Waiting lists, however this is changing.

Affordable Housing is a large and growing sector; as an indication of demand, there are approximately 30,000 people on the Queensland Government Waitlist. Historically, Community housing providers were small, tenant-based, including a large tenant involvement. Providing stock management on properties lease from the State government. Dependent on the state and federal governments for funding. Geographically based - 'community' organisations.

The operating environment has changed. Government wants to deal with fewer organisations with stronger balance sheets. Fewer organisations also means wider geographic areas or operating across state boundaries, with associated regulation. Less funding and more clients mean that orgs need to be able to develop their own funding streams and new funding sources.

Since providers are expand beyond a specific to an area or client, this means multiple providers can offer the same service in the same location, introducing competition. So what does a new organization look like? Horizon Housing Company has grown from a merger of a number of Community organisations into a NFP Housing Provider operating over two States. This presentation will outline the challenges faced by Horizon and its response to rapid growth and change in the sector.