

Australia's *New Green Economy* equation: Can environment + enterprise = a sustainable future?

ABOUT THIS DISCUSSION PAPER AND OUR PROCESS

The Total Environment Centre and its corporate sustainability arm, Green Capital, have produced this discussion paper on *The New Green Economy* to drive debate surrounding the rise of a new global economic paradigm. Our objective is to identify, test and promote key action areas to accelerate the transition to a genuine green economy for Australia. Through our *Emerging Green Economy* events we will draw on the views of our speakers, panelists and audiences – including sustainability leaders from across the business, government, academic and community sectors – to shape a final report, *The New Green Economy Guide*.

Introduction – is a transition underway?

From energy to transport, water to waste, buildings to broadband, Australia has the potential to participate in *The New Green Economy*. This mirrors an accelerating conversation around the world about transforming the high-polluting, resource-depleting economic growth model of the industrial age to a cleaner, greener post-industrial alternative. Not only for traditional environmental protection reasons, but in particular to respond to the big interconnected economic and social challenges of our age like climate change, declining energy security, pressure on food and water, over-population and poverty alleviation.

Our *discussion paper* proposes that a real and timely change process demands integrated solutions that combine environment and enterprise, and that are guided by clear economic and social transition strategies. Technological fixes and reform of the financial system need to be matched by simultaneous social transformation in the way we think and live. Traditional resource extraction for carbon-based energy and fuels, minerals, agricultural products and water, must be related to our homes, work, consumption, waste, mobility and communications instead of being discussed and managed separately. This means putting resource sustainability and renewable options, and clean industrial reform at the centre of the processes that shape our society, in areas ranging from national economic policy-making, to corporate strategies and business plans, to local and regional community visions.

Developing a policy context

Currently the Australian political process is too-often mired in looking after the old high consuming, polluting economy, or alternatively sees politicians jumping on the bandwagon of a new one with populist, ad hoc and short-term measures promising quick-fix 'green jobs' and 'green new deals' for economies in hard times. This is a failure of the political process, business and community attitudes when what we urgently need is a vision for long-term, sustainable economic reform, and a framework for action to deliver it. Even the biggest ticket item on the current environmental-economic reform agenda, the Carbon Pollution Reduction Scheme (CPRS), is only one tool for change and is no cure-all. Whatever final form the CPRS takes, assuming it does happen, the

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emissions trading regime it fosters will require many complementary measures and other initiatives to turn market intervention into real economic transformation for a low-carbon, environmentally sustainable society.

Even in the post-industrial developed world, there is a well-documented failure of market economies to properly value natural resources as assets and to account for their loss as a significant cost to the economy, culture and the environment. Similarly, human-transformed resources which are not recycled through recovery and re-manufacturing constitute an untenable waste of finite supplies which isn't being properly accounted for on society's balance sheet. Consequently, Australia must urgently step away from the phony debate about whether we have a choice or not to advance into a new type of economy, and instead act decisively to deliver a more sustainable growth path by implementing a well thought-out national strategy for resource use and management, industrial reform and ecological protection and restoration.

To this end, to proactively shape *The New Green Economy*, TEC believes it is imperative that governments, business and the community create support systems and ground rules for the growth of Australia's green industries by promoting investment, delivering incentives and driving innovation; building infrastructure and community and business capacity to deliver sustainability. Policy-makers also must collaborate with community and business interests at local, national and international levels to remove obstacles to reform, which include: the illusion of change created by short-term greenwashing; the inertia of embedded policies and practices such as subsidies and taxes that create incentives for environmental harm; conventional business culture and resistance to sustainability innovation; and the readily-observable backlash from vested interests in carbon-intensive, higher-polluting and resource-depleting industries which are failing to adopt substantial reform.

Evidence of change

Around the world there is mounting evidence of *The New Green Economy* taking shape. Recent examples that deserve further investigation include:

- The US State of Washington (with an economy similar in size to NSW) assigning a leading economic agency to develop its 'green economy strategy framework', starting with a January 2009 discussion paper, and defining it thus: 'The green economy is best thought of as the "greening" of our existing economy through the development of new products, techniques and services that promote environmental protection and/or energy security.' (See case study 1)
- The global market for environmental industries is predicted by advisers to the German Government to reach \$US4400 billion in revenues a year by 2020, by which time they are forecast to be Germany's largest industrial sector (See case study 2)
- The United Nations Environment Program's Green Economy Initiative, introduced in 2008, states that mobilising and re-focusing the global economy towards investments in clean technologies and 'natural' infrastructure (such as forests and soils) is the world's 'best bet' for real growth, combating climate change and triggering an employment boom in the 21st century
- President Barack Obama's framing of climate action and carbon trading for the US as a matter of jobs and energy security: 'Climate change and our

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dependence on foreign oil, if left unaddressed, will continue to weaken our economy and threaten our national security. My presidency will mark a new chapter in America's leadership in climate change that will strengthen our security and create millions of new jobs in the process.'

- Corporate initiatives such as US retail giant Walmart, which in July 2009 announced moves to place environmental disclosure requirements on all of its 100,000-plus suppliers. (See case study 3)
- The UK released its Low Carbon Transition Plan in July 2009, outlining how Britain will cut emissions set out in the nation's Budget of 34% on 1990 levels by 2020. It says a 21% reduction has already been delivered – equivalent to cutting emissions entirely from four cities the size of London – and proposes that 'transforming the country into a cleaner, greener and more prosperous place to live is at the heart of economic plans for Building Britain's Future'.

Understanding the Green Economy

The New Green Economy has three inter-related dimensions:

1. There is a rapidly growing number of identifiable 'green-focused economic activities'
2. There is a massive transition process of 'greening the main economy' under way – targeting a global economy that already has GDP of over \$US60 trillion a year (about \$US1 trillion for Australia alone)
3. The ultimate objective of 'an economy that is green', which includes an 80-90% reduction in carbon emissions by 2050 and sustainable use of resources in closed-loop industrial systems.

Traditionally, the 'green' (or at least 'greenish') economy has been based on environmental management and solutions industries. With more recent developments, this means there is an 'old green economy' in areas like water and waste water treatment, air pollution control and waste management; with the 'new green economy' growing rapidly in areas like renewable energy, energy efficiency, carbon strategy and management, environmental markets, the smart electricity grid, clean industrial processes and re-manufacturing, and ecological restoration.

The constituent parts of a green economy are themselves subject to scrutiny and plenty of argument, and TEC notes that not all of the industries, infrastructure, products and services that are typically included within the 'environmental sector' broadly defined are universally accepted as being 'green'. For example: sea-water desalination; carbon capture and storage for coal-fired power generation; land-filling of waste without resource and energy recovery; and many biotechnology/genetic modification applications.

Table 1 is a summary of components of The New Green Economy that can emerge, and looks at how it needs to be built on mainstream economic themes.

SHAPING THE NEW GREEN ECONOMY		
<p>Includes ... FIXING THE OLD & SOMETIMES BAD</p> <p>Traditional environmental industries need to continuously improve as well as expand. These have mainly focused on preventing or remedying bad environmental impacts, originally in water and waste, with some 'solutions' coming under environmental scrutiny themselves.</p>	<p>Plus ... CREATING THE NEW & FREQUENTLY GOOD</p> <p>New environmentally-superior policies, products and processes are required, focusing primarily on business delivering more positive outcomes for the environment while still profitably meeting the demands of customers and consumers.</p>	<p>And ... REDEFINING THE OPERATING SPACE</p> <p>The basic roles of key 'actors' in the economy must change e.g. government policy-makers, professional firms, regulators, businesses, trade unions and even the environmental movement and related NGOs such as consumer advocates, social agencies etc.</p>
<p>EXAMPLES</p> <ul style="list-style-type: none"> - Water & waste water treatment - Waste management & recycling - Air pollution control - Toxic, hazardous and radioactive contamination remediation - Marine pollution control - Noise and vibration control - Natural area management - Mine-site rehabilitation - Land and forest management - Early eco-tourism - Environmental planning and engineering services 	<p>EXAMPLES</p> <ul style="list-style-type: none"> - Renewable energy (e.g. solar, wind, bio) - Energy/fuel efficiency - Environmental monitoring & management systems - Carbon management & climate strategy (mitigation/adaptation) - Environmental markets (including carbon trading) - Green building - Smart grid & online/telecom services - Clean transportation (public transit, alternative vehicles) - Organic agriculture - Re-manufacturing - Corporate sustainability & CSR - Education and training - Green/sustainable design and architectural services 	<p>EXAMPLES</p> <ul style="list-style-type: none"> - Economic agencies like Treasury, Tax Office becoming engaged on environment, climate action etc - Green groups presenting solutions & playing consumer watchdog roles - New business-community alliances to re-think the economy and especially energy policy and services - Business 'commercial regulation' of supply chains - Financial sector using environmental and social screening for investments - Professional services e.g. legal, accounting, business strategy, marketing & media
THE FOUNDATIONS FOR WHOLE-OF-ECONOMY REFORM		
COMMUNITY ... engaged and empowered communities actively leading sustainable change		
REGULATION ... controls and bans are key drivers of environmental industries & solutions		
MARKETS ... evolution of environmental trading regimes and other market-based instruments		
EMPLOYMENT ... creation of new roles, skills development, real 'green collar' jobs growth		
TRADE ... access to regional and global markets for greener goods and services		
INVESTMENT ... securing funding through borrowing and equity for the sustainability transition		
INNOVATION ... technological and societal/cultural advancement towards a sustainable future		
INCENTIVES ... grants, rebates, subsidies and taxation treatment to support greener outcomes		
INFRASTRUCTURE ... building greener & also testing projects for their overall sustainability		
PROCUREMENT ... government 'green procurement' rules & business preferential purchasing		
NETWORKED ... harnessing IT & broadband networks to lower the impact of economic growth		

Case studies – a few examples

1: WASHINGTON STATE – A GREEN ECONOMY STRATEGIC FRAMEWORK

Washington State on America's north-west Pacific coast is becoming an international leader in elevating the 'green economy' to a strategic economic development priority for its \$US350 billion-a-year economy. Washington, capital city Seattle, is a little smaller than NSW in economic activity and population terms, and larger than both Victoria and Queensland. This progressive US jurisdiction has appointed a leading economic agency, its Department of Community, Trade and Economic Development (CTED), to develop a green economy strategic framework. The first major step was a discussion paper published in January 2009.

CTED is strongly focused on economic opportunity, claiming that the global market for green-economy technologies is projected to reach \$US2.74 trillion by 2020. The main opportunity areas it identifies are renewable energy (solar manufacturing, wind power development and bio-energy), green-building design, smart-grid technologies, solid waste and recycling, and water conservation. It argues there is a strong role for government and good public policy, saying: 'Public policy not only determines regulatory requirements, but it also opens markets. Government policy can provide:

- Long-term commitments
- Consistency between rule-making, enforcement and policy goals
- Targeted, gradually declining subsidies
- Publicly sponsored research and development
- Markets through incentive, education and regulation
- Industry standards
- Workforce preparation

'A swift and significant transition to a post-industrial, greener and more sustainable economic model will be achieved with strong leadership, rather than incremental steps.'

2: GERMANY'S VIBRANT ENVIRONMENTAL INDUSTRY

On behalf of Germany's Federal Ministry for the Environment, in 2008 international strategy consultants Roland Berger compiled the second "environmental atlas of Germany". The Green Tech Atlas 2.0 found that the German environmental industry has easily surpassed all growth forecasts, stating: 'By 2020, it will be the country's foremost industry, accounting for 14% of GDP. The economic crisis will slow this development only briefly, as forceful growth is being driven by three megatrends: global population growth, industrialisation in the emerging countries and the worldwide desire to increase prosperity. Accordingly, revenues from environmental industries will more than double to EUR 3,100 billion (\$US4,400 billion) over the next 11 years. German manufacturers are benefiting more than others from the global green recovery that will inject fresh vitality into the world's languishing economy.'

'Environmental technology is the lead industry in the 21st century,' says Professor Burkhard Schwenker, CEO of Roland Berger. 'Environmental technologies already contribute about 8% of Germany's gross domestic product. By 2020, this figure will have risen to 14%.'

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3: WAL-MART'S BIG SUPPLY CHAIN INTERVENTION

US-based transnational retail giant Walmart (whose slogan is 'Save Money. Live Better.') earned \$US406 billion in revenues in 2008, making it a global market force in its own right with over 100,000 trade suppliers. The company's sales are actually larger than those estimated for the whole environmental industries sector in the US (\$US300 billion-plus a year in 2007).

In what may become the biggest example of commercial environmental regulation ever, in July 2009 Walmart announced it will be working to rate and label every product on its shelves in terms of their sustainability performance, thus influencing suppliers and customers. The Walmart Sustainability Index process initially will ask suppliers to answer 15 questions in the areas of energy and climate, material efficiency, natural resources and people and community. In addition, Walmart is seed-funding the creation of an independent consortium of universities that will collaborate with suppliers, retailers, NGOs and government to develop a global database of information on the lifecycle of products ... from raw materials to disposal. Based on the above, its ultimate aim is to provide relevant information on products to enable consumer understanding and choice.

The case for policy leadership

In seeking to accelerate a transition to *The New Green Economy*, TEC sees a need to highlight the role for governments to present strong leadership and strategic planning, and to work with business and the community. The following areas are proposed for government leadership in creating the right policy environment for change:

- Taking action on the greening of the economy as a national economic priority as well as an environmental one, supported by incentives for and investment in innovation which will drive the transformation
- Creating an enlightened economic group from the best thinkers in government, business and the community, which will drive a national strategic framework for green economy development with state/local authority follow-through, addressing the inter-connections across key challenges for water, energy, carbon, waste and land management
- Urgently reviewing all current relevant measures for their capacity to build and embed sustainability including the planned Carbon Pollution Reduction Scheme (CPRS); Minimum Environmental Performance Standards (MEPS); the Environment Protection and Biodiversity Conservation Act (EPBC); the National Electricity Market (NEM); the tax system via the Henry Review; government agencies; national environmental feedback/monitoring; industry plans (e.g. car industry assistance); the national broadband network; energy efficiency; waste policy, product bans, regulation, grants, state and local programs and policies etc.
- Creating a five-year 'kick-start' transition strategy for government and business to compensate for a slow start to any emissions trading regime
- Utilising the power of 'commercial regulation' in value chains through measures including supplier criteria, green procurement, green labeling, and incentives for

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innovation and R&D; focusing on sustainability as core business at the level of product development, production and marketing

- Engaging community/NGO groups in the political process to raise public awareness, and ensure that sustainability is core to developing economic policy-making.

More broadly, immediate focus areas to guide and accelerate the evolution of the green economy include:

- Investment, innovation and infrastructure will need to be reconfigured to help to deliver the transformation, with the financial and stock markets embracing clear incentives for sustainable outcomes and discouraging unsustainable ones
- Education, training and skilling will need to be re-oriented towards higher-paying, more secure and productive jobs in green economy growth areas (not just recession-time work creation schemes)
- Consumer awareness and understanding of greener attributes for products and services will need to rise so that purchasing choices will support sustainable businesses and reward upfront investment in changing production processes and products, *and*
- Government structures and support measures (and also deliberate disincentives such as bans and taxes) will need to be aligned clearly with sustainability.

Conclusion – evolve with the times

The central drama of this new economic direction is not 'if' change will come, but rather how quickly and sure-footedly it unfolds; and, as with all big restructuring challenges, how the potentially disruptive transitional adjustments are managed. The key to change is strong leadership from government and business, driven in turn by vocal demand from the public at the ballot box and the cash register as environmental concern grows further - in order to overcome inertia, greenwashing and any last-ditch resistance from old-economy vested interests.

The powerful and non-negotiable drivers for *The New Green Economy* include climate change, but also extend to energy supply and security, resource constraints in basic areas such as food production and drinking water, public health and well-being, and developing world economic growth ambitions and quality of life needs. The sheer complexity of developing and delivering sustainable solutions across interconnected fields including energy, water, carbon and waste underpins this major economic opportunity, and will drive the growth of many environmental industries and expanding capacity to green the main economy.

The ultimate objective, however, is a future economy that is green and sustainable. Building such a genuinely green economy is essential to any contemporary pursuit of a healthy human society which delivers good quality of life for people now and into the future while preserving the planet's ecological integrity. Yet while change from the old economy model is inevitable, the best of futures for *The New Green Economy* won't just happen. It needs a lot of help from policymakers to set the new rules and objectives for the market, business action to combine environment with enterprise, and constant community pressure to ensure that governments and corporations stay the course.