

# **KEY ENVIRONMENTAL ISSUES IN NSW**

## **NSW Public Sector Executive Development Program**

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I've been asked to speak to you today about the key environmental issues in NSW.

You will see from my talk that the environment is at the very top on the government's reform agenda at the moment.

Sustainability has been debated for well over a decade now, not only in Australia, but across the globe. The issues of water, biodiversity and climate change are set to dominate geo-politics in the 21<sup>st</sup> century.

But the hallmark of this debate so far has been a lot of hot air and very little tangible actions. We're seeing major global conflict beginning over water resources in Africa, we sit by and watch the world procrastinate over climate change, and the Biodiversity Convention signed in 1990 sits on shelves gathering dust whilst the world's biodiversity disappears before our eyes.

One of the major reasons for the procrastination is that sustainability is seen as anti-development, anti-growth. And because of this, governments are too often being forced into difficult compromises where both sides believe they are losers.

In this paradigm, status quo usually prevails, in which our environmental assets are guaranteed to continue to degrade.

I want to come back to this theme in a minute.

But first let me give you just a few statistics to put this conversation in context.

### **Climate Change**

Let's start with climate change: over the past century human activity has increased CO<sub>2</sub> levels in the atmosphere by over 30%. That increase in little over a century has already created a 0.6°C increase in average global temperatures and it has locked in another 0.5°C over the coming decades.

A trivial figure to most people. As Professor Tim Flannery said the other night at the Sydney Futures Forum, most people could not even detect a 0.6°C change.

Trivial except that scientists believe that it has already caused a drop in rainfall over southern Australia. In the last 20 years, rainfall in Perth has already fallen by 15% over that experienced over the previous 70 years. Significantly, this 15% drop in rainfall has resulted in a 30 to 50% reduction in runoff. As you may have seen in

Monday's *Australian*, scientists believe a similar trend is now starting in eastern Australia.

The difficulty for global warming is that we have not reached a steady state in our emissions growth. We still live on a planet where almost half the world's 6 billion people live on less than \$2 a day. If the developing world were to reach our standard of living, using our technological pathway, we would need to reduce current emissions by 60% worldwide just to stabilise emissions.

Yet emissions across the western world are still rising – and Australia has the highest per capita emissions of any country. Just imagine if China and India increase their per capita greenhouse emissions to our levels.

If a 30% increase in CO<sub>2</sub> concentrations produces a 0.6°C shift in little over one century and this induces climate shifts such as we've experienced in Perth, what will happen if we increase CO<sub>2</sub> levels by 100% or 300%?

When it comes to environmental issues – there is none bigger confronting humanity than the prospect, however remote, of climate shifts as a result of global warming.

## **Water and Biodiversity**

Water and biodiversity are the other two big environmental issues.

A few statistics will put these in a global context for you:

- 50% of the planet's forest cover has already been cleared;
- over 40% of the earth's population is living in water-stressed river basins; and perhaps the most stunning statistic of all:
- after only just over a century of industrialisation, already 40 to 50% of the earth's total biological productivity is diverted to human use.

We are without any doubt, in the middle of one of the greatest extinction processes the earth has experienced in its 4 billion years of existence.

I'm sure you get the picture.

Fresh water is fundamental to all life on earth and biodiversity is not just an issue of tigers, polar bears and thylacines going extinct. It's much more than these aesthetics – it's about maintaining the health of environmental systems that underpin our civilisation.

In a report published in *Nature* in 1997, Robert Costanza's team estimated that the total value of ecosystem services to the global economy was around US\$33 trillion a year – nearly twice the value of global gross national product of US\$18 trillion.

We have built economies that don't value ecosystems services on which our life support systems depend.

These ecosystem services are finite resources on a finite planet. We cannot continue to deplete this natural capital without serious consequences for our civilisation.

The reason I'm giving you a global perspective, rather than just concentrating on New South Wales, should be obvious to you by now. The issues we are dealing with in New South Wales are the same as those confronting the rest of the world.

If clearing of the endangered Cumberland Woodland around Sydney was the only ecosystem we made extinct; very few people would care. I certainly wouldn't.

But the Cumberland Woodland is but one of countless examples across the world of the destruction of biodiversity. And for that reason, the Cumberland Woodland takes on a different perspective.

Of course, we've known these issues for decades now. Coming back to what I said earlier, one of the major reasons for the lack of action is that sustainability is seen as anti-development, anti-growth.

You either clear Cumberland Woodland or you stop development in Sydney, right?

Wrong.

### **The NSW Government's Reform Agenda**

Let me turn to the government's reform agenda, as I see it as a relative newcomer to the public service.

We have seen a dramatic shift in thinking over the past 2 years or so, and this shift has helped us unlock ourselves from this anti-development straightjacket the debate was caught in.

The NSW government has embarked on a major overhaul of its institutions for managing natural resources, for managing fresh water resources and for dealing with greenhouse gas emissions.

What is significant about these reforms is that they are built on a different paradigm:

- one where conservation and growth are mutually supporting objectives;
- where sustainability becomes more than just a green agenda - where it becomes a triple bottom line agenda;
- where wealth creation and biodiversity conservation are both seen as progress; and
- where our production systems are being tailored to the natural cycles of Australia's droughts, floods and fire.

These reforms recognise that the challenge for environmental sustainability is to set signals that both encourage growth and at the same time draw market decisions towards better environmental outcomes.

Innovation and forward planning are they key to unlocking the triple bottom line sustainability agenda.

Let me turn to some specifics:

## **Natural Resource Management Reforms**

Over the past 12 months you have seen a radical overhaul of land and water management across New South Wales.

Premier Carr saw that the current system was not fixing the damage caused to our landscapes, because we were still broadscale clearing native vegetation whilst billions of dollars of tax payers money was building bureaucracies instead of helping farmers plant trees and repair damaged rivers.

These reforms have the support of farmers and environmentalists because they cut red tape, they focus on outcomes, they reward innovation, they provide resource security for farm businesses, and they are built on the best scientific advice.

We have established a Natural Resources Commission headed by Tom Parry to oversee the reforms, we have transferred \$100 million into 13 new locally managed Catchment Management Authorities, and we have directed over \$400 million of incentives to go to farmers and irrigators to drive the reforms.

This is a globally significant experiment we are embarking on.

Complementing the native vegetation reforms are changes to threatened species management by Bob Debus, which mirrors this philosophy. It will shift the focus away from a species by species, site by site approach, to one of addressing extinction processes at a landscape scale.

This focus away from site by site assessment towards regional biodiversity planning, delivers a win-win outcome, because identifying and protecting high priority habitat then allows us to cut red tape by 'switching off' the Threatened Species Act in areas of lower conservation value.

## **Water Reform**

New South Wales is driving a similar agenda with water reform.

Last August, COAG signed an historic \$500 million National Water Initiative that will revolutionise the way we manage water resources in Australia. Craig Knowles worked closely with the Deputy Prime Minister, John Anderson, to deliver this initiative which will, for the first time, put more water put back in the Murray River and create a water title system to suit Australia's unique environment.

This agreement contains some remarkable changes:

- It has agreed to improve the security of water access entitlements and return overallocated systems to sustainable allocation levels;
- It has agreed to ensure ecosystem health by implementing regimes to protect environmental assets at a whole-of-basin, aquifer or catchment scale;
- It has agreed to ensure water is put to best use by encouraging the expansion of water markets and trading; and
- It has agreed to encourage water conservation in our cities, including better use of stormwater and recycled water.

A framework will be established to address water use where water is intercepted before entering ground or surface water systems due to changes in land use (for example, large scale plantation forestry, changes in agricultural use, harvesting of surface water flows, revegetation for salinity control, et cetera). In other words, a water title system based on the hydrological cycle.

Two weeks ago, Minister Knowles introduced into Parliament changes to the NSW Water Act to operationalise many of the National Water Initiative reforms.

For irrigators:

- Most water licenses will be issued in perpetuity – a profound and fundamental change 200 years in the making;
- Water license holders will have a fixed share of the total volume of water available, providing greater asset security especially when gaining finance for investment;
- The amendments will give the access licence register the same status as the Real Property Act register; and
- The register will improve the efficiency of trading water.

For the environment:

- Water Sharing Plans have been produced setting out how a water source is to be managed and providing savings for the environment;
- The amendments provide for a clearer definition of environmental water, which opens up opportunities to expand environmental water through investment; and
- The new Catchment Management Authorities will establish trust funds to buy water for the environment.

Changes that industry and environment groups have been calling for for years, in a practical package of reforms that will fundamentally change the way we manage water in the 21<sup>st</sup> century.

## **Greenhouse**

Most recently the government has turned its attention to the urban sustainability agenda, focussing on greenhouse emissions and urban planning and infrastructure investment reform.

How you might ask, do we take an economic powerhouse like the city of Sydney and make it sustainable without jeopardising economic development.

Sydney has an ecological footprint of seven hectares per person. This means that 28 million hectares is required to provide people in Sydney with food, water, energy and waste disposal.

And last week, Craig Knowles released the latest population projections for New South Wales, estimating that by 2050 the state's population could be close to 10

million people - a 40% increase - and that Sydney's population could be as high as 7 million people.

If we are going to make Sydney a sustainable city we have to reduce the ecological impact our economy places on the environment. We will achieve this by directing market forces to deliver the sustainability agenda for us, with government leading with good, long range planning and by encouraging innovation and rewarding clever thinking.

Simply planning where to locate the next housing estate is no longer good enough. It's about creating opportunity and developing 21<sup>st</sup> century markets in sustainability.

A State Greenhouse Strategy is currently under development with a completion date set for December this year. This is being driven out of the centre of government, from the newly established NSW Greenhouse Office located in the Cabinet Office.

The State Greenhouse Strategy will set out action to combat climate change. It will include new initiatives to reduce emissions and prepare NSW for a carbon-constrained future. It will undoubtedly promote a market-based emissions trading scheme – a concept heavily promoted by the Premier.

At the micro level the government has recently launched the Building Sustainability Index housing standard – BASIX. Few people have heard of it yet. BASIX mandates that from July 1 all new houses across NSW will have to use 25% less energy and 40% water.

25% less energy and 40% less water!

It's the "one small step for man ..." solution.

Basix will be extended next year to apply to additions to existing houses, and subsequently applied to commercial and industrial buildings.

Sustainability requirements will also be applied to the Government's own buildings.

At the macro level the government has announced that it will not release more land in Sydney unless the residential Masterplans meet world's best practice in water consumption, energy efficiency, traffic demand management, air quality, and stormwater retention.

Within the next few weeks Minister Knowles will also be announcing major reforms to the planning system which will concentrate on strategic planning for Sydney and high growth regions along the New South Wales coast. By the end of the year we will have a new plan for Sydney and in the next few months we will be making decisions on the direction for future of urban development along the coast.

To help us with this reform agenda, the government is appointing Sustainability Commissioners, including the internationally recognised environmental planner Professor Peter Newman, and the former Governor of the Reserve Bank, Mr Bernie Fraser.

These Commissioners will give advice on new land releases, master plans and transport infrastructure proposals in Sydney.

They will also oversee the major land use and infrastructure planning along the coast, starting immediately with the major growth pressure areas in the

Richmond/Tweed region just south of Brisbane, and the expansion of Newcastle as it emerges as an economic powerhouse in its own right.

They will road test and challenge our assumptions on major infrastructure proposals such as upgrades to the Pacific Highway; they will ensure that these regional plans adopt world class water and energy use technologies and urban design standards; and they will ensure that the extraordinary environments of coastal New South Wales - our forests, rivers, estuaries and beaches - are not degraded as a result of these new development pressures.

These regional land use strategies will be tied to the budget process.

## **Conclusion**

As you can see, the environmental reforms taking place in New South Wales at the moment are quite awesome. They are a recognition of the seriousness of the challenges facing New South Wales and of the public concern for government to address them.

The hallmark of these reforms is that they are application based, not just feel good principles, reports and talkfests.

They also ditch the old paradigm that protecting the environment must be an anti-growth, anti-development agenda. Instead they embrace the triple bottom line agenda:

- where conservation and growth are mutually supporting objectives;
- where sustainability becomes more than just a green agenda - where it becomes a triple bottom line agenda;
- where wealth creation and biodiversity conservation are both seen as progress; and
- where our production systems are being tailored to the natural cycles of Australia's droughts, floods and fire.