Regional Leadership in Tackling Climate Change

The Honourable Mike Rann CNZM
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Dr Pachauri, distinguished international leaders, ladies and gentlemen,

I want first to acknowledge Prime Minister Manmohan Singh's warm welcome as well as his challenge to us this morning.

This Summit and leadership by India will play an important role in building a stronger coalition for genuine climate change action in the lead up to Rio in June. India has, in my view, been unfairly stigmatised internationally over climate change. Yours is a country that has done particularly well in the area of climate change mitigation having become conscious of the problem of greenhouse gas emissions in the early 1990s, well before many other industrialised nations.

Today, despite being an acknowledged economic powerhouse, India remains one of the lowest greenhouse gas emitters per capita on the planet. But it also stands as one of the most vulnerable nations in the G20 to the impacts of climate change.

I'm involved with the Climate Group as a member of Tony Blair's International Leadership Council, and its report last year indicated that India's water supplies, agriculture, food production and infrastructure will all suffer if emissions continue to rise.

However from great challenges arise great opportunities. These were detailed by the report of India's Expert Group on Low Carbon Strategies for Inclusive Growth. Measures that need to be embraced include more efficient appliances to reduce electricity demand; the greater use of railways to transport goods; mass transit strategies to move passengers; plus better access to non motorised transport; more fuel efficient vehicles as well as advances in technology for heavy emitting industries such as the steel, cement, oil and gas sectors.

And, of course, the introduction of more fuel efficient, less polluting power plants. This is an area where South Australia, with 40% of the world's known uranium, can help now that the Australian Government has changed its policy to enable the export of Australian uranium to India, a move I have keenly supported.

I have no doubt that India is not only up to the challenge, but can provide inspirational leadership for others to follow as it has in ICT, smart technologies and in many other areas.

This afternoon we are focusing on climate change action by State and regional governments who are too often ignored by international conferences. This makes no sense given that the majority of government decisions affecting the environment and our climate are made at the regional level.

For some years I have co-chaired the Climate Group's States and Regions network comprised of sub national governments around the world. It is quite clear that in most nations regional governments are often the policy innovators as well as the "test beds" or laboratories for climate change action. That was certainly the case in Australia until recently, with the former conservative government of John Howard aligning itself with George Bush in first denying the scientific evidence for global warming and then decrying action to address climate change as contrary to the national interest. This made no sense because Australia, like India, is among the nations at greatest risk from global warming.

In my state, we face the potential loss of high production farming land that remains a foundation pillar of our economy as well as serious threats to our precious water resources because of the already marginal nature of our rainfall. That's why, following one of the worst droughts in Australian history, with a catastrophic impact on flows down the River Murray and on the rural economy it sustains, my government invested in building a desalination plant, totally powered by renewable energy, that will provide up to 50% of our capital city's water needs as an
insurance policy for the future.

Fortunately the vacuum at the top nationally, in Australia, on climate change is no longer the case. The first act of the Rudd Labor Government after it was elected in late 2007 was to sign the Kyoto Agreement and late last year the Gillard Labor Government secured the passage through Parliament of legislation to set a price on carbon. In a package of measures this legislation is designed to cut CO2 pollution as well as drive investment in clean energy. The new law will make Australia’s biggest polluters pay for the greenhouse gas emissions they create.

The new carbon pricing mechanism is being rolled out in a way that minimises its impact on business, jobs and on our economy while compensating Australian families through both tax cuts, and pension increases for any consequent increase in costs. The Federal Government has expanded its Renewable Energy Target to ensure that 20% of Australia’s electricity will come from renewable energy sources by 2020. Its Carbon Farming Initiative will also provide new economic opportunities for Australian farmers while supporting productivity and enhancing the resilience of our landscape. I am particularly interested in this initiative given my involvement with the Ecological Sequestration Trust, which is looking at regional pilots in Australia, India and elsewhere, using new technologies to sequester CO2 from industry and improve the fertility of soils at the same time.

Australia’s carbon pricing will begin on July 1st this year. The Government will also legislate to create a $10 billion Clean Energy Finance Corporation with a charter to drive innovation through commercial investments in clean energy involving loans, loan guarantees and equity investments.

Until this recent action by our current Federal Government, Australia’s States had to fill the policy void at the national level, including our advocacy for a national emissions trading scheme and our commissioning of Professor Ross Garnaut to undertake a major study on the future impact of climate change on Australia in much the same way as Lord Stern did in Great Britain.

I first spoke about climate change in Parliament – the greenhouse effect and the perils posed by chloro-fluorocarbons back in 1989 - to the derision of my opponents. Many of them just couldn’t understand why a hole in the ozone layer over Antarctica had any relevance to South Australia, the driest state on the driest continent with a land mass bigger than Texas and twice the size of Spain.

As Premier, I appointed myself to the portfolio of Minister for Sustainability and Climate Change, the first in Australia, as well as Minister for Economic Development, in order to demonstrate that a commitment to the environment was not inconsistent with a commitment to creating jobs; and that strong economic growth could be achieved while at the same time reducing our State’s CO2 emissions.

We sought advice from Professor Tim Flannery – environmentalist, climate change activist and a former Australian of the Year. Tim advised me to first embrace community education by installing solar panels on the roofs of our most prominent public buildings including the Museum, Art Gallery, Parliament, Adelaide Airport and Royal Adelaide Showgrounds (which produces so much power it is officially registered as a power station!) and in hundreds of schools. We also sought the help of Dr Pachauri’s IPCC colleague, the late Stephen Schneider, and from prominent UK based environmentalist Herbert Girardet. Both were Adelaide Thinkers in Residence who addressed Cabinet and worked closely with me and our senior public servants to develop policy and legislation. Their work lead to the passage in my state of Australia’s first solar feed-in legislation, which established a scheme that paid householders, a premium rate for power generated from their roof top installations. This was designed to encourage a more rapid take up of solar power, which makes sense in a climate like ours.

We also passed Australia’s first Climate Change legislation that not only established targets for renewable energy, but also created a mechanism for my government to enter into voluntary sector agreements with industry groups, individual companies, organisations and even regions in order to reduce their greenhouse emissions. I have signed over twenty such agreements with groups as diverse as the wine industry (which was keen to demonstrate to customers in Europe and the US that it could not only produce world class wines but that they were environmentally conscious in doing so), to the concrete industry, local government and even the Anglican Church.
We also streamlined and made our regulatory environment more consistent and transparent to provide for more investment certainty. This has made it easier for energy companies to gain quicker approvals to build wind farms in South Australia in order to take advantage of Federal schemes and quotas, rather than in other states where the wind was strong but not the political will.

We also campaigned aggressively to convince renewable energy companies that we were hungry for their business and would make them welcome. We introduced payroll tax rebates for the construction of large-scale renewable energy projects. We also put millions of dollars into research, including into what I believe has enormous potential for generating truly emissions free power from geothermal “hot rock” sources deep under the South Australian desert. The energy produced would be base load electricity without the variability issues that affect wind and solar.

So what are the outcomes of this legislative and regulatory reform? Well, when I was first sworn in as Premier in 2002 there was not one single operating wind turbine. Today, with only 7.2% of Australia’s population South Australia has 54% of the nation’s installed wind power; easily leads per capita in the take up of household solar power and has about 90% of Australia’s geothermal development (even though there’s a lot of desert in other Australian states).

We were able to gain ‘first user’ advantage by putting in place a regulatory framework that was specifically tailored to geothermal developments, just as we had changed land use planning systems to make them more straightforward for wind power developments. Many of our turbines are manufactured by India’s giant Suzlon company which has been a great partner in South Australia’s leadership in renewables.

So, with no hydroelectric power South Australia now produces about 22% of its electricity from renewable energy, principally wind, followed by solar energy.

I am told that if South Australia was a nation and not a state we would be second only to Denmark in the amount of wind energy we generate per capita. South Australia reached the Federal Government’s 20% by 2020 renewable energy target 9 years ahead of schedule, and we are now aiming for 33% by 2020 instead. We have also seen our CO2 emissions drop faster than any other mainland state, during a time of strong economic and employment growth.

South Australia is not resting on its laurels. To further maximise our advantages we are looking to the power of innovation to accelerate the development of our biomass and bio-diesel industries, and through world leading research at the Waite campus of the University of Adelaide on drought and salinity resistant crop varieties.

Another area that presents significant challenges in reducing carbon emissions in my home state, as it does here in India, is how we can improve energy efficiency. Just one example of this is the massive spike in electricity usage caused by cooling demands on the hottest days of summer. That’s why we decided to apply Australia’s toughest energy efficiency standards for new air conditioners. Another initiative we have been looking at is a more enlightened policy for roofing materials or “cool roofs” as they are better known. It has been estimated that, under certain conditions, the use of lighter colored roofing material can deliver significant reductions in peak energy demand.

We also need to rethink our industrial futures. The South Australian Government recently acquired the 60-hectare former Mitsubishi automotive manufacturing site in Adelaide that will be transformed into Australia’s first dedicated hub for new, clean-tech industries that will not only drive innovation but also create jobs. At the heart of this development will be a Sustainable Industries Education Centre that will specialize in training more than 8,000 students a year in the skills required for the ‘clean and green’ jobs of the future.

In Adelaide we are also massively investing in new and extended city and suburban rail and tram infrastructure to reduce car use, as well as backing a big expansion of designated bike paths, which must now be incorporated as part of all new road infrastructure projects. That’s where better city planning and design will play a key role internationally in making our cities more sustainable. In South Australia we have been assisted by Canadian architect, Professor Laura Lee, another of our Thinkers in Residence (www.thinkers.sa.gov.au), whose strategy for integrated design we have embraced. It’s not only about the better design of buildings but about the spaces in-between. Professor Lee’s strategy is about making intelligent investment decisions and
with a more integrated way of addressing the complex economic, environmental and social challenges facing our cities and communities.

We are also planting millions of trees in a series of urban forests throughout Adelaide to cool and beautify our city as well as reduce our carbon footprint. I am therefore pleased that the Climate Group’s member states and regions have endorsed my proposal to plant a billion trees collectively, with Quebec and Scotland leading the charge with pledges of a hundred million trees each. I was impressed that a recommendation for a “Green India Mission” that places emphasis on increasing the volume and density of existing forests, as well as increasing the area under tree cover, is also included in the Expert Group’s Report.

In Adelaide we are also trialing low emissions LED lighting in public places and I’m inspired that Kolkata is doing the same but on a much larger scale.

And beyond our capital city in the past decade we have increased our vast wilderness protection areas by 26 fold and in my last days as Premier we introduced special legislation to protect the unique and beautiful Arkaroola area of the Flinders Rangers for all time and have moved to give it and the majestic Nullabor Plain world heritage protection.

At Rio it is imperative that we commit to advancing the technological as well as the political and policy race to tackle emissions. That’s why since retiring as Premier I have become involved with the UK headquartered Ecological Sequestration Trust, founded by ARUP’s highly respected Peter Head CBE.

The Trust, which is a not for profit charity, is aiming to prove through regional demonstrator projects the sequestering of CO2 in ways designed to improve water, energy and food security. In particular the Trust wants to make its methodologies widely available as ‘open source’ material. In this way the Trust wants to accelerate the application of low carbon technologies and fast track new business opportunities that are economically as well as ecologically sustainable, particularly in emerging economies.

The Trust is now actively pursuing large scale demonstration projects in India, Africa, China and elsewhere to prove that resilient urbanisation can progress using coal and gas for base load power but with very low net carbon emissions. The Trust wants to accelerate the large-scale deployment of integrated new technologies, such as algal bioreactors, to sequester carbon and advanced anaerobic digesters to produce valuable new revenue streams. The projects that the Trust is looking at including a new eco-city development, a new industrialised zone and a region of rapid urban development close to an existing mega-city. The Trust’s aim will be to:

- Reduce energy demands by 50%
- Obtain 30% of coal / gas power station energy from local biomass
- Use 40% of power station CO2 emissions productively
- Increase net local food production by 30%, despite agri-urban land use change
- Reduce greenhouse gas emissions by 80% over business as usual

We are not talking about some abstract theoretical model. Indeed, the “farming of CO2” is occurring right now in Australia with huge opportunities for millions of hectares of farm lands to sequester countless millions of tonnes of CO2 as soil carbon each year. Soil carbon sequestration at Clover Estate in the south east of South Australia has demonstrated that this approach can be a win-win for the Australian economy, Australian farmers and the environment, as well as producing more and healthier food, by reducing chemical and synthetic fertilizer use while at the same time increasing soil fertility.

I am pleased that the Ecological Sequestration Trust is in advanced negotiations to select regional demonstration projects here in India. Once again, I am sure States and regions will lead the way.

Ultimately it comes down to leadership, and I have seen that here in India, including the embrace of wind-power in States as diverse as Tamil Nadu and Rajasthan. I have also been impressed with the work of the Chief Minister of Gujarat, Mr Modi on climate change and look forward to working with him and other Chief Ministers in the future.

I have no doubt given our long friendship, forged in two world wars, through our roles in the Commonwealth and with Australian resources needed by India for its development; that our two countries’ futures are inextricably linked. Working more closely together in tackling climate change not only makes sense but will make history.
I look forward to working with TERI, Indian States and businesses to demonstrate, as we have in South Australia, that economic growth and environmental sustainability are not mutually exclusive.

It’s through political and policy leadership, and a willingness to tackle the challenges of climate change through practical initiatives, that sub national governments are able to lead by example; including (at times) by trial and error, share best practice innovations with each other, and exert influence and sometimes pressure on national governments to do likewise.

Let us remember the words of Mahatma Gandhi... "A small body of determined spirits fired by an unquenchable faith in their mission could alter the course of history".

I look forward to working with you in the future.

The Ecological Sequestration Trust has been established as Company Limited by Guarantee and not having Share Capital, under the Companies Act 1985-2006 (Registration No: 7611969). The Trust is registered as a Charity with the Charities Commission (Registration No: 1143397).