# **TEMPLATES TO TACKLE TODAY'S PREDICAMENTS**

Can the National Cabinet rebuild and decarbonise Australia?

**SIMON CORBELL OF ENERGY ESTATE** ponders whether Australia can potentially develop a national cabinet such as the one [hastily] developed to deal with the threat of the pandemic.

How we respond to the critical challenge we face which Is the decarbonisation of the Australian economy as part of an economic recovery package needs to be explored, he says.

How we can structure a national cabinet to deal with the task?

"The success of dealing with the pandemic has been driven by the clear and present danger to the health of the Australian population," the former ACT Minister told the Stimulus Summit.

The modelling released by the Australian government a few weeks ago demonstrated that without clear and immediate action to address the fundamental threat to public health in the nation, the consequences to our broader health care systems and well-being was very significant.

"This compelled all of the first ministers to come together in a framework that was quite unprecedented. It was an enhancement of the existing COAG framework which is evidence-based and focused on expert advice.

"They overcome much of the processes seen in COAG where so much of the energy meetings are focused on procedures rather than outcome, and that speaks to the first ministers."

#### Simon Corbell listed the key attributes for the National Cabinet's success during the pandemic thus:

- Evidence-led public policy focus
- A process that saw frequent and rapid information sharing and advice and coordination of Commonwealth, State and Territory actions, unlike COAG
- Coordinated but not uniform actions across States, with recognition of Federal and State/ Territory policy jurisdiction, and
- Reduced process and high levels of cooperation less about agenda and formality and more emphasis on rapid decision making.

"The challenge is whether we can make that work when we look at the decarbonisation of Australia and the recovery from pandemic. We are dealing with long-term consequences.

"The impact of COVID-19 is immediate and short-term, whereas the impact of climate change is ever growing and incremental. The impact will only continue and be ever-increasing over time until we achieve zero emissions," said the architect of the ACT's 100 per cent renewable plan.



The risk we face is a return to business as usual in a 'gas fired recovery' and this is the wrong direction to take. It introduces new risks relating to price, emissions (flaring/fugitive), and supply chains of delivery of fuels.

"A transition to gas also means we reduces resilience to external shocks. A gas-fired recovery is neither sustainable nor regenerative – it does not give back to the environment or the economy in a way that is sustainable or does good."

Removing environmental red tape is necessary otherwise we risk biodiversity recovery and ecosystem services protection of water, air and food, he says.

"In short, a gas-fired recovery [as enthusiastically proposed by the Federal Energy Minister] puts us back on the path to decline and degradation."

Simon Corbell advocates the cabinet focus on the complementary forces of resilience and regeneration in the pathway to decarbonisation, a program that will benefit the economy, society and the environment.

Resilience needs to be developed through supply chains, robust financial models, cities, communities and heavy industry.

Building a national focus on resilience is a unifying concept which reaches across climate change, the bushfire royal commission and rising global economic nationalism. The response to the bushfire royal commission is something governments will also have to address in coming months, as well as rising global economic nationalism and threats to supply chains and free trade that is so important to the Australian economy.

We have already succeeded in some of this and could adapt the National Disaster Risk Reduction Framework Investment Priorities to the task of decarbonisation and stimulate investment and regulatory decisions by targeting high priority local and national significant risks.

## Investment in stimulus projects is designed to target broader outcomes

High emissions intensity in heavy industry and trade-exposed employment sectors could become the focus in broader outcomes, for example storage, export facility and clean water, and protecting existing industry and regional economies, extended supply chains, and updating inadequate transmission networks.







So there is something we could easily adapt to the task of decarbonisation in a bipartisan manner, the framework is there, Corbell said. This will lead to improved local employment, productivity, social connectedness and skills development. Investment helps limit future costs associated with climate change impacts.

The other key prong is Regeneration: in the choices we make not just to reduce climate impacts but work to regenerate the damage created focusing on outcomes.

The means to regenerate the environment and the economy can be delivered through a package of measures "that give back to the environment and economy – with the more invested in them, the more benefits":

- Mega-scale and distributed RE projects that generate surplus electricity for low cost heavy industry processing and manufacturing, transport and new export markets
- Support for new technologies eg carbon absorbing cement, carbon negative plastics, biogenic building materials, and carbon negative landscaping
- Recharge depleted aquifers and rivers from urban water reuse and zero carbon desalination
- Restore soils and the nitrogen and phosphorus balance in bioregions through circular economy principles for urban and agricultural waste streams, regenerate biodiversity through biophilic habitats on buildings and carbon farming investments.

Examples of mega projects include the hybrid CSP Vast Solar plant – Australian technology enabling minerals processing at Mt Isa mines, and the Central Queensland Power project for a 2GW wind, solar and storage plant to support heavy industry.

"These types of regenerative projects are creating good and playing to our strengths in minerals and exporting capacity... it's a shift from sustainable development to regenerative development," Corbell emphasised. In response to a query fielded by **Giles Parkinson** about the adoption of a national cabinet structured for and applied to health to issues of climate change and energy, Corbell said

"The key is a shift away from process thinking – we have too much by way of procedure we feel we have to meet before making an actual decision. Energy ministers, as we saw this morning, generally agree on things and what we need to do is shift toward outcomes – if we do that there is real potential."

In a similar vein **Jonathan Upson of Canadian Solar** later commented that the Morrison government is succeeding with bipartisan policies based on the science of COVID-19 ... "And they would continue to gain popularity with the electorate if they adopted policies based on the science of climate change."

To which he added: "Voters who are paying taxes to achieve the necessary future surpluses want and deserve stimulus measures that enable new investment and jobs, reduce air pollution, lower electricity prices and respond to the climate crisis."

#### Heavy Industry and Renewable Energy benefitting each other

Aluminium smelting is notoriously energy intensive: the electricity required to make a single kilogram of aluminium could power an average house for most of a day. And consider the magnitude consumed with Australia's annual aluminium production of around 1.5 billion kilograms.

In a Summit address that generated enormous interest, **Simon Holmes à Court** outlined the opportunity for Australia's four aluminium smelters that are "choking on their emissions and struggling under the weight of uncompetitive prices arising from a decade of politicised mismanagement" to pursue a more financially viable and sustainable future.

The solution lies in retrofitting machinery in a manner witnessed during a trip to Trimet's aluminium smelter in Germany, he says. Trimet is testing EnPot technology, developed by New Zealand company Energia Potior, to turn its smelters into a 'virtual battery' and delivering gigawatt-hours of flexible capacity.

The technology which is best described as enhanced temperature regulation via an insulated, heat-exchanger jacket enabling whole potlines – the row of electrolytic cells used in the production of aluminium – to operate indefinitely within a range 25 per cent below to 25 per cent above their normal operating point, has reportedly increased production efficiency by 7.8 per cent.

Importantly too, the retrofit has created a new grid services business, with the production line capable of compensating for fluctuations in the power grid, making it easier to manage intermittent renewables.

Voila, energy-draining aluminium smelters are transformed into gridbalancing supremoes.

Most of this demand 'swing' can occur instantly, providing a highly valuable service to the grid, much like the Tesla megabattery in South Australia that has been profitably providing for almost two years, said Simon Holmes à Court who is Senior Adviser, Energy Transition Hub.

Unless strategic action is taken, Australia's four aluminium smelters will disappear, taking thousands of jobs with them. And a massively valuable grid stabiliser opportunity will be lost.

Simon Holmes à Court reminded us that capping global warming to  $1.5^{\circ}$ C requires every coal-fired potline in the world to be repowered or shut down well before 2050.

"With our unparalleled clean energy resources, technology and leadership, Australia and its smelter workers can emerge on top.... we just need to cross a chasm to throw aluminium a lifeline," he says.

Read Australia's aluminium sector is on life support. It can and should be saved by Simon Holmes à Court in The Guardian of October 31, 2019.

#### **Revitalising North Queensland**

Among other Summit highlights **Oliver Yates of Bronze Boar Investments** emphasised the "fantastic asset" that is North Queensland, an area unlikely to see a resurgence in its otherwise bustling tourism and education sectors until a COVID-19 vaccination is developed.

It is an area that has the potential to become a major growth engine for diversified Australian exports. Near term project opportunities could involve around \$15 billion of capital investment and create more than 8,000 construction jobs and more than 7,000 enduring and diversified jobs when the facilities are in a steady state of operation, says Yates who co-authored the *Future North* report.

The report calls for the establishment of a new North Queensland Development and Diversification Fund, based on the hugely successful Clean Energy Finance Corporation.

Visit www.smartenergy.org.au to view the Future North plan in full.



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