# A climate sharing system to end the Australian power crisis

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A University of Adelaide researcher is proposing Australia use a "climate sharing system" to help solve the current power crisis. The system will transform a national liability into a national asset.

The architect of the system, Professor Mike Young, is Professor of Environmental and Water Policy with the University of Adelaide's Centre for Global Food and Resources. He played a leading role in creating Australia's water sharing system, which is now internationally regarded as global best practice.

Rather than using a carbon tax or an emissions trading scheme, Professor Young suggests we learn from our water and fisheries management experience and develop a climate sharing system. He says the water system model is easily adaptable to suit our current energy needs.

Professor Young's system advocates for the creation of "climate shares", which would be allocated to all power stations and other greenhouse gas emitters in proportion to their current emissions. The annual emission allocations are then made in proportion to the number of shares held by emitters, but systematically reduced over time.

"The water sharing system brought wealth to much of rural Australia. The system structure encourages investment and the search for more efficient ways to work within defined limits," says Professor Young. "It worked for water – I see no reason why it wouldn't work for energy."

To make sure that everyone benefits and the impact of transitioning to a low carbon economy is as minimal as possible, Professor Young proposes that a community return initiative should become a major pillar of the climate sharing system. Community returns work by auctioning between 1% and 3% of shares every year. The proceeds of the sale are then distributed to the community on an annual basis.

"Ideally, the Federal Government would establish a climate sharing system in partnership with state and local governments," Professor Young says.

"The system is surprisingly simple and easily understood. Every investor and every emitter is given a carbon account that looks just like your bank account. Emission allocations are credited to this account. As you use them, they are debited."

In 2016, Australia's greenhouse gas emissions amounted to almost 540 million tonnes of CO2. One third of these emissions came from electricity generation.

"Shareholders would discover they could pay for emission reductions by mortgaging their shares, and once they have reduced emissions, sell off their surplus shares. In the water sector, these features have made us one of the world's best water managers – we can do the same with carbon emissions," he says.

Professor Young says the flow-on effect for the energy industry of a climate sharing system would be significant. "Sharing systems like these bring certainty and confidence to industry. They expedite change and encourage innovation. A new set of partnerships between the existing and renewable energy sector would soon emerge. This would extend quickly to include the energy used to produce heat in factories. The need for government involvement and expenditure in the sector would be

much less," he says.

"Unlike conventional emissions trading schemes, a climate sharing system locks in a commitment that enables all involved to plan with certainty."

As is currently the case for water, an authority or board would need to be established to manage and enforce the system, with penalties for emitters that don't keep their carbon account in the black.

"Conceptually, the introduction of climate sharing could bring wins for business, for the finance sector, for government and for the environment," Professor Young says.

"As we have found with water and also fisheries, bi-partisan commitment to a climate sharing scheme would do much to bring confidence back to the energy sector, helping Australia to avoid the electricity crisis that commentators are currently predicting."

Provided by University of Adelaide