The environment and the economy would benefit if the Government showed leadership on solar power.

As South-Eastern Australia sweltered last week with consecutive days of 40-plus temperatures, electricity was rationed and rail lines buckled. In such a climate, it seems incredible that this country trails so far behind others in its attitude to power supplies.

We have huge solar energy potential, our coal-dominated electricity industry is among the most greenhouse intensive in the world, yet we are half-hearted about adopting the former and spend a great deal of effort bolstering up the latter.

In an increasing number of other countries, solar technologies provide power for homes, offices, farms and factories.

The rest of the world is embracing the very solar inventions stemming from Australian research to enable them to secure 21st-century industries and jobs, while Australia clings to its fossil-fuel past.

Australia was one of the early leaders in solar heating and electricity. This leadership was built upon outstanding research and development within CSIRO and the universities, along with early markets provided by government-led organisations such as Telecom Australia.
As a result we were, for a time, one of the world's leading manufacturers of solar hot water systems and photovoltaic (PV) solar panels. Now, however, and despite continuing with world-leading research in some areas, Australia is a very minor player on the world scene.

The global PV industry has been growing at 30-50 per cent a year in the past decade. Billions of dollars are being invested in solar technologies internationally with hundreds of manufacturing facilities being established in countries as diverse as Norway, Germany, Spain, Japan, the US, China, Taiwan, Korea, Malaysia and Singapore. These plants are employing hundreds of thousands of people, and helping deliver a more sustainable energy future.

In contrast, a series of Australian governments has squandered the promising early solar energy industry that developed here.

Many of our technology breakthroughs now look as though they will be commercialised and deployed seemingly everywhere but here. Australia's only solar cell manufacturing facility — run by BP in Sydney — will close in April.

How did this happen and what can be done? In short, the key problem has been a lack of government leadership. And the solution, unsurprisingly, hinges on government leadership.

First the good news. Australian governments have provided significant support for solar research and development and we have some world leading solar technologies including, for example, high efficiency solar cells, concentrator PV systems and stand-alone remote area power systems.

We also continue to be global leaders in solar education, training and standards development.

The problem is that we haven't supported this with coherent and consistent industry development and market deployment policies that bring technologies out of the lab through to commercial success.

Innovation and change always involves risk and often needs government support, particularly in the energy sector, which is dominated by entrenched, politically connected, vested fossil-fuel interests.

Stop-start market policies pandering to short-term political positioning and yearly budget cycles don't build sustainable industries. This is the key difference between Australia and those countries with expanding solar industries, such as Germany, Spain and Japan.

Governments here have seemed far more focused on trying to retain and expand Australia's fossil-fuel energy industries than on supporting the sustainable energy industries of the future.

The Federal Government's embrace of carbon capture and storage to clean up fossil fuels is vital for our own, and the world's, energy future. However, even if technical progress in this area is highly successful, it can only ever be one part of the solution.
The International Energy Agency, for example, foresees a greater role for solar than carbon capture and storage over the coming decades in protecting the climate.

Governments have been too ready to continue supporting well-established and politically powerful industries, such as those built around fossil fuels. Or electrical appliance retailers for that matter.

It's far too easy for government in the current global financial crisis to look for ways to put money back in the hands of these interests and try to shield them from the inevitable changes that a carbon-constrained world will bring.

When government ministers tell the Australian people to use their "economic stimulus" handouts to buy imported, energy-hungry plasma TVs, rather than, say, locally made solar water heaters, you know they are not serious about making changes. This is not leadership. What takes real Government leadership is to support promising sustainable industries of the future that aren't already entrenched or politically well-connected; to build sustainable green jobs for the future, rather than desperately trying to preserve existing jobs, regardless of how unsustainable they might be; and to develop a clear transition strategy from the existing to the new.

This is a true test of leadership and the only way to build a sustainable Australian economy and society for a carbon-constrained future.

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