

Low-emission's missing link: reverse auctions for clean power

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When it comes to reducing emissions, most serious analysts agree: the market works best, but the market is not enough.

The International Energy Agency, the OECD, leading British climate economist Nicholas Stern, and Australian government adviser Ross Garnaut are among many analysts who conclude that market mechanisms need to be complemented by policies that will enable low-emissions technologies to begin producing power at large scale and low cost.

Step beyond carbon pricing

In other words, there is a further essential step that government must take in order to ensure Australia meets its emissions targets over the next 40 years. A new Grattan Institute report, [Building the bridge: a practical plan for a low-cost, low-emissions energy future](#), sets out what that step might be.

The problem that a carbon price alone cannot address is the great difficulty of getting low-emissions technologies into the marketplace at large enough scale to produce substantial amounts of power. That is because early investors face high costs, low returns, and the risk of competitors free-riding on their initiative.

They also require a reliable, long-term carbon price to underpin their investments. Yet the carbon price is inherently uncertain because it depends on the decisions of governments. If they do not keep making decisions that constrain emissions, the carbon price will not rise sufficiently to make low-emissions technologies competitive with traditional sources of power such as coal and gas.

Allocate contracts through low-bid auctions

To overcome this problem, the Grattan Institute's report proposes that government contracts with project developers to deliver low-emission electricity at a price that makes the technology viable. Contracts would be awarded through reverse auctions (meaning the lowest bid wins) held every six months.

Technologies such as large-scale solar thermal energy that are out of the R&D stage and ready to proceed to market would bid for power contracts in specific categories. A successful bidder would receive two payments: one that covers it for the risk of investing in an unproven technology, the other for the risk that the carbon price will not be high enough to match the long term climate change targets that would make the technology commercially viable.

A strength of our auctions proposal is that it would support a range of low-emissions technology options. This is important when no one or two technologies have yet emerged that can meet Australia's emissions reduction needs. Also, the market would choose these technologies, rather than government picking winners, which it is ill-suited to do.

The proposal has other major benefits for both parties. Investors can proceed with firm contracts, while government is able to use competitive market pressures to drive down cost.

To ensure that only credible projects are awarded contracts, proponents would be required to secure finance before bidding and to post a refundable bond. The guarantee of repeated auctions over a 10-

year period would provide opportunities for technologies that lose in one round to come back again in later rounds.

Over multiple rounds, technologies that show they are reducing in cost will gain further support. Technologies that do not will have support withdrawn.

Get projects up and running

The critical goal is to get projects up and running. All experience shows that as technologies are deployed, their costs fall. As that happens, and as the carbon price rises in order to meet the long-term emissions reduction target, government support would fall away. This is a key design factor: the intent of the auctions scheme is to produce commercially viable technologies, not to provide long-term subsidies as too many recent policies have effectively done.

The difference between the Grattan scheme and existing policies such as capital grant schemes, feed-in tariffs and the Renewable Energy Target is that the former is designed expressly to get low-emissions technologies into the marketplace at lowest cost. It works closely with a carbon price, whereas existing policies are generally superfluous, and even tend to increase the cost of meeting our emissions reduction targets, once a robust carbon price is in place.

Auction schemes are not without risk. Companies can bid unrealistic prices and then fail to deliver the projects. Our proposal contains several safeguards against this. They include the refundable bond, a requirement for commercial credibility and payment only on delivery.

Works with Coalition policy, too

A change of government would lead to changes in the policy environment. The Federal Opposition's Direct Action Plan would award tenders for emissions reduction through an Emissions Reduction Fund. While a market mechanism with a carbon price is unquestionably the best way to address Australia's climate challenge, Grattan's auction proposal could work with the Direct Action Plan to enable it to achieve its objective.

The proposal seeks to build a bridge between the current carbon market and the market for low-emissions technologies Australia needs. It has a cost, but it frees up constrained investment and innovation now in order to avoid much greater cost in the long run.

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