Australia's flagship climate policy, the Emissions Reduction Fund (ERF), has come in for fresh questions over whether the emissions allowances offered to big businesses will wipe out much of the progress made elsewhere.

This voluntary scheme – the central plank of Australia's efforts to reduce greenhouse gas emissions by 26-28% below 2005 levels by 2030 – allows interested parties to reduce pollution in exchange for a proportion of the A$2.55 billion fund.

Read more: ***The government is miscounting greenhouse emissions reductions***

So far, through successive rounds of "reverse auctions", the scheme has secured 191.7 million tonnes of emission reductions, at a price tag of A$2.28 billion.

As the budget for this scheme is nearly exhausted, it is important to ask whether it has been a success, or whether Australia's carbon policy needs a radical rethink. Overall, the answer seems to be the latter.

Safeguards not so safe

Much of the problem stems from the ERF's safeguard mechanism, which puts limits on the greenhouse emissions from around 140 large polluting businesses. Under the mechanism, these firms are not allowed to pollute more than an agreed "baseline", calculated on the basis of their existing operations.

The mechanism is described as a safeguard because it aims to stop big businesses wiping out the emissions reductions delivered by projects funded by the ERF. But it doesn't appear to be working.

The government has already increased the emission baselines for many of these businesses, for arguably specious reasons. Some firms have been given extra leeway to pollute simply because their business has grown, or even just because they blew their original baseline.

Worryingly, on February 21, 2018 the federal government released a consultation document which favours “updating baselines to bring them in line with current circumstances” and suggests that “to help prevent baselines becoming out-of-date in the future, they could be updated for production more often, for example, each year”.

It doesn’t take a genius to realise that if baselines are continually increased over time, the fixed benefits of the ERF will inevitably be wiped out.

This underlines the importance of having a climate policy that operates throughout the economy, rather than only in certain parts of it. If heavily polluting businesses can so readily be allowed to undo the work of others, this is a recipe for disaster.

Contract problems

Even within the ERF process itself, many emissions reduction contracts have already been revoked. This is worrying but also avoidable if the contracts are written correctly.

It is important to note that these contracts run for around seven years, and thus it is possible that the planned carbon reductions never eventuate. Currently only about 16% of the announced 191.7 million tonnes of emissions reduction have actually been delivered.

For the ERF to work effectively, the government needs to know the “counterfactual” emissions – that is, firms’ emissions if they decided not to participate in the ERF. Yet this is completely unknown.

This means that projects that successfully bid for ERF funding (typically the cheapest ones) ma y not be “additional” . In other words, they may have established these emissions reduction projects anyway, with or without funding from the taxpayer.

Another problem with the ERF is that it is skewed towards projects from lower-polluting sectors of the economy, whereas heavily polluting industries are underrepresented. The largest proportion of signed contracts have involved planting trees or reducing emissions from savannah burning.

Meanwhile, the firms covered by the safeguard mechanism are largely absent from the ERF itself, despite these firms accounting for around 50% of Australia's greenhouse emissions.

The bare fact is that Australia's flagship climate policy doesn't target the prominent polluters.

A different way

Australia's climate policy has had a colourful past . Yet the economics of pollution mitigation remain the same.

If we want to reduce pollution in a cost-effective way that actually works, then we must (re-)establish a carbon price.

This would provide the much-needed certainty about the cost of genuine pollution reduction. This in turn would allow all major polluters to make strategic, long-term investments that will progressively reduce emissions.

Instead of spending A$2.55 billion to pay for modest emissions reductions that might be cancelled out elsewhere, creating a carbon price will allow for the generation of tax revenue that can be used for a host of purposes.

For example, distortionary tax rates (such as income and corporation tax) could be lowered, or the revenue could be used to fund better schools and hospitals.

A clear example of such a success can be taken from the northeastern states of the US. The Regional Greenhouse Gas Initiative is a cap-and-trade market that sells tradeable pollution permits to electricity companies. Estimates have shown that US$2.3 billion of lifetime energy bill savings will occur due to investments made in 2015.

To tax or cap?

If the ERF is to be replaced, what type of carbon price do we want? Do we want a carbon tax or a cap-and-trade market?

While advantages exist for both, most evidence shows that carbon taxes are more efficient at driving down emissions. Moreover, taxation avoids the potential problems of market power, which may exist with a small number of large polluters.

Read more: ***Australia’s biggest emitters opt to 'wait and see' over Emissions Reduction Fund***

A carbon price would also remove much of the political rent-seeking that is encouraged by Australia's current policy settings. A simple, economy-wide carbon tax would be more transparent than the safeguard mechanism, under which individual firms can plead for leniency.

With the ERF fund almost empty, the federal government should ask itself a tough question. Should it spend another A$2.55 billion of taxpayers' money while letting major polluters increase their emissions? Or should it embrace a new source of tax revenue that incentivises cleaner

technologies in a transparent, cost-effective way?

Ian A. MacKenzie does not work for, consult, own shares in or receive funding from any company or organisation that would benefit from this article, and has disclosed no relevant affiliations beyond their academic appointment.

Authors: Ian A. MacKenzie, Senior Lecturer in Economics, The University of Queensland

Read more http://theconversation.com/australias-emissions-reduction-fund-is-almost-empty-it-shouldnt-be-refilled-92283