The Emissions Reduction Fund (ERF): Problems and Solutions

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1. What is the Emissions Reduction Fund (ERF)?

The ERF is the centre-piece of the Australian Government's climate policy. It is comprised of three main elements:

- a carbon offset crediting scheme, which provides for the issuance of Australian carbon credit units (ACCUs) to projects that avoid emissions of greenhouse gases or sequester carbon dioxide (CO_2) in trees, soils or geological formations;
- a purchasing scheme, whereby the Clean Energy Regulator (on behalf of the Australian Government) voluntarily purchases ACCUs from eligible offset projects; and
- the 'Safeguard Mechanism', which imposes emission obligations on designated large facilities that can be met through the relinquishment of ACCUs.

In simple terms, the purchasing scheme and Safeguard Mechanism are intended to provide the demand for the abatement supplied by the offset scheme. Demand from the voluntary market, where companies, state and local governments and others seek to offset their emissions for marketing, social licence and altruistic purposes, provides a further source of ACCU demand.

2. Integrity of credited abatement

For the ERF to serve its purpose of incentivising abatement that helps Australia meet its international climate change obligations, the offsets must have environmental integrity. While there is a need to balance integrity and efficiency, to the extent possible, ACCUs should represent 1 tonne of carbon dioxide equivalent (CO_2-e) avoided or sequestered that would not otherwise occur. In shorthand, the abatement must be 'real' (there must be a reduction in emissions or increase in long-term sequestration) and 'additional' (it must not have been likely to occur anyway). If the credited abatement is not real and additional, the carbon market will effectively involve trades in nothing. It is the equivalent of people being paid for services that have not been provided.

Under the *Carbon Credits (Carbon Farming Initiative) Act 2011* (CFI Act), all offset methods are supposed to meet six offsets integrity standards that are intended to ensure the integrity of the credited abatement. These standards include that the projects covered by the methods should result in abatement that is 'unlikely to occur in the ordinary course of business', the methods should be 'supported by clear and convincing evidence', and the estimates, projections and assumptions in the methods 'should be conservative'. The need for methods to be assessed against these standards is intended to ensure the abatement that is credited is real and additional.

3. Overview of the problems

The ERF's carbon offset crediting scheme is currently suffering from a distinct lack of integrity. People are getting ACCUs for not clearing forests that were never going to be cleared; they are getting credits for growing trees that are already there; they are getting credits for growing forests in places that will never sustain permanent forests; and they are getting credits for operating electricity generators at large landfills that would have operated anyway.

The problems are most evident in the ERF's three most popular methods: avoided deforestation; human-induced regeneration; and landfill gas. These three methods account for approximately 75

per cent of the ACCUs issued to date, and the majority of the ACCUs purchased and contracted by the Clean Energy Regulator through the purchasing scheme.

- *Avoided deforestation*. The avoided deforestation method provides credits to landholders in western New South Wales for not clearing forests. The problem with the method is that it is based on a flawed assumption that anybody who sought and obtained an invasive native species property vegetation plan (INS PVP) – a type of clearing permit that used to be issued by the New South Wales Government to clear remnant or mature regrowth of invasive native woody vegetation species – between 2005 and July 2010 would have acted on the INS PVP and cleared the relevant forests within 15 years. In the abstract, it seems plausible that people who went to the trouble of getting an INS PVP would act on them during their 15-year terms. However, this ignores the fact that more than 250 INS PVPs were issued between 2005 and July 2010, which authorised the treatment of more than 2 million hectares of woody vegetation, mostly in the west of the state where the projects are located. Historically, clearing rates of remnant and mature regrowth forests in western New South Wales have averaged around 2,000-3,000 hectares per year. The data show that the amount of clearing authorised under the INS PVPs was far more than could reasonably be expected to have been cleared within 15 years. For the method's 15-year clearing assumption to be true, the historic clearing rates would need to have increased by between 750% and almost 13,000%. Contrary to the offsets integrity standards, the method is not supported by clear and convincing evidence, its assumptions are not conservative and the abatement credited under the method is not unlikely to occur in the ordinary course of business.
- *Human-induced regeneration*. The human-induced regeneration method provides landholders with credits for regenerating native forests by changing land management practices. When it was created, the assumption was that projects would be located in areas that had previously been cleared of forest and where grazing pressure and repeated clearing were suppressing regrowth. However, most projects are located in the arid and semi-arid rangelands in areas of remnant native vegetation that have never been cleared. Two main integrity problems have arisen with the method:
    - the Clean Energy Regulator has misapplied the method by allowing proponents to include substantial amounts of pre-existing mature woody vegetation in the areas that are credited, which is contrary to the law and is resulting in substantial over-crediting (i.e. the credited abatement is not real); and
    - by allowing projects to be located in areas that have never been cleared, the method is crediting fluctuations in tree cover that are due mainly to rainfall rather than changes in land management (i.e. the credited abatement is not additional and permanent).

  Human-induced regeneration projects currently account for approximately one third of all registered ERF projects, almost 30% of all issued ACCUs and more than 50% of all ACCUs contracted through the ERF purchasing scheme, worth approximately $1.5-$1.6 billion.
- *Landfill gas*. The landfill gas method provides credits to landfill gas operators for capturing the biogas emitted from solid waste landfills and burning the methane (CH_4) component of the gas using either a flare or an electricity generator. Where projects combust the CH_4 using a flare, they will typically need ACCUs to make the operation financially viable. Projects with electricity generators are more complex because, even when they do not receive ACCUs, they can earn money from the sale of electricity and renewable energy certificates (large-scale generation certificates (LGCs)). The data suggest that, generally, most small to medium sized landfills require ACCUs to be financially viable. The integrity problem lies with the large landfills – sites like Lucas Heights and Eastern Creek in Sydney, Woodlawn, Mugga Lane in the ACT and the Hallam, Wyndham and Melbourne Regional landfills in Melbourne. The largest 20 sites account for 70% of the credits issued under the landfill gas method and they do not need credits to

remain viable. In 2018, the Emissions Reduction Assurance Committee (Integrity Committee) formally advised that the crediting period for generation projects should not be extended because the abatement was not likely to be additional – in essence, the projects are financially viable without ACCUs because of the revenues they earn from electricity and LGCs. Under the legislation, the Minister cannot vary a method to extend the period over which projects get credited if the Integrity Committee has previously recommended against it. To get around this restriction, the Minister recently made a new method that grants these projects a 5 year extension to their crediting period – something that, if it does not breach the law, is certainly contrary to its spirit and intent. A particularly problematic feature of this new generation-only method is it allows all of the large generation projects to continue to use their historic 'baselines' (the benchmarks against which they are credited). Most of the large sites have baselines of 0% and 24%, below the minimum 30% level recommended by the Integrity Committee in 2019.

The problems with the avoided deforestation, human-induced regeneration and landfill gas methods are symptomatic of broader, systemic integrity issues associated with the design and administration of the ERF's carbon offset crediting scheme.

4. Solutions

The ERF's carbon offset crediting scheme is an indispensable part of the policy framework required to ensure Australia achieves its net zero target in a cost-effective manner. Abandoning carbon offsets would substantially increase the cost of achieving the target and forego the many environmental and social co-benefits that can be generated from a well-functioning offset market. However, significant reform is needed to ensure the ERF generates real and additional abatement and performs its intended functions.

4.1 Prevent further harm

Unless action is taken in a timely manner, a substantial number of low integrity ACCUs will be generated over the coming months and years, hindering the economic transition and doing further damage to the international and domestic reputation of Australia's carbon market. This can be avoided through two key measures.

- *Vary or revoke low integrity methods*. The existing low integrity methods must be varied or revoked immediately to stop any further projects being registered. Most notably, the avoided deforestation method should be revoked, while the human-induced regeneration and landfill gas methods should be amended to improve their integrity – something that could be achieved with relatively minor textual changes and corrections to the way the Clean Energy Regulator has interpreted the rules. In the case of human-induced regeneration, projects should be confined to relatively flat areas that have been deforested in the 20-years prior to project registration, where there is a material risk of re-clearing in the absence of a financial incentive to retain the forests. For landfill gas, the main problem with the new method is that the baselines are too low, particularly for the larger sites, which leads to over-crediting. This could be resolved by introducing a new system of tiered baselines, where larger sites get fewer credits than smaller sites on a proportional basis to account for the economies of scale associated with the operation of these projects.
- *Stop crediting low integrity projects and block low integrity credits from the Safeguard Mechanism*. Revoking or varying the methods would stop the registration of any further low integrity projects. However, method changes do not apply retrospectively to existing projects. Without reforms, projects that are currently registered on low integrity methods will continue to receive credits for the remainder of their crediting periods, which in some cases could be more than 20 years. Reforms must be introduced to stop existing low integrity projects from receiving any further credits and to prevent large polluters from using low integrity ACCUs to meet their obligations under the Safeguard Mechanism. The government should also stop entering into

contracts to purchase ACCUs from low integrity projects. These changes will need to be carefully crafted to mitigate impacts on landholders and protect legitimate projects – for example, by having a 2 year transitional period, allowing landholders with human-induced regeneration projects to exit them without paying back credits and by allowing legitimate projects to transition onto new, high integrity methods.

4.2 Governance changes to secure the future of the scheme

Most of the issues associated with the ERF can be traced to three simple governance problems: weak integrity rules; a conflicted regulator; and a lack of transparency.

Strengthen integrity rules

Defenders of the status quo like to argue that the ERF has robust governance arrangements that require all methods to comply with the scheme's six offsets integrity standards. This was the case when the scheme was first introduced in 2011. Methods could only be made if the Integrity Committee endorsed them and the Committee's power to endorse a method was contingent on the method satisfying the offset integrity standards. Similarly, the Minister could not make a method unless it satisfied the offsets integrity standards. These sensible rules were abandoned in 2014 when the ERF was introduced. The Integrity Committee now merely needs to provide its opinion on whether the standards are satisfied and, in making methods, the Minister only has to have regard to the standards. The legislation needs to be amended to once again give the offsets integrity standards primacy in the method development process. Third parties should also be given standing to uphold the standards through judicial review.

Enhanced governance arrangements

A fundamental problem with ERF is that the Clean Energy Regulator has too many roles and too much power across the complete span of the process. It currently makes the methods, staffs the Integrity Committee, enforces the methods and buys the ACCUs on behalf of the Australian Government. The Regulator's powers and functions should be separated and distributed to other agencies. Method development should be returned to the Department or given to the Climate Change Authority and, in either case, methods should be prepared through an open and transparent process that involves public interest groups and independent researchers. The Integrity Committee should be integrated into the Climate Change Authority, to ensure it is staffed by people who are not involved in the development or administration of the methods. The role of purchasing ACCUs should be given to the Department, the Productivity Commission should be responsible for periodically reviewing the operation of the scheme and the Clean Energy Regulator should focus exclusively on regulatory matters.

Increase transparency

Offset markets are complex and require decisions to be made in the absence of perfect information. This makes mistakes inevitable. To provide the public and market with confidence, the ERF's systems and processes need to be open and transparent. The public should be able to see the forests that are being credited, see project baselines and see the project and audit reports that are submitted on project performance. All agencies involved in the administration of the scheme should be subject to a positive duty to regularly publish information on the performance of the scheme and actively seek to involve outside parties that have no financial stake in the operation of the market. A cultural change is needed. The responsible agencies need to open their doors and embrace a culture that encourages the collective identification and correction of mistakes.

Independent inquiry

Restoring confidence in the market will require a range of measures but the process must start with an independent inquiry that is charged with finding out what happened and advising on what needs to be done to restore integrity. The public deserves an explanation for what has occurred and what can be done to ensure this does not happen again.