

EXPLANATORY NOTES FOR COST CURVE DIAGRAM

1. Technical capacity for abatement is shown by the red line.

The Emissions Reduction Fund (ERF) Green Paper shows an emissions reduction cost curve prepared by ClimateWorks, as Figure 1.5. That cost curve is used as the background for this diagram.

The ERF Green Paper examined the cost curve and “found technical potential for around 60 Mt of annual emissions reductions to occur in 2020 through projects that would deliver net financial savings to investors. These projects include energy efficiency and fuel switching opportunities, as well as actions in the agriculture and forestry sectors. Climate Works also identified the potential for a further 80 Mt of annual emissions reductions, at a higher cost in the energy generation sector.”

The technical cost curve has been emphasised as a red line on the attached sketch.

2. Notional capacity for abatement of the Emissions Reduction Fund is shown by the blue line

Technical cost curves are a useful tool in estimating what emissions abatement might be available but it is unlikely that the Emissions Reduction Fund will be able to access all of these abatement options because it reduces the incentive for polluters to bid by:

- being a voluntary grants program
- making the tax payer pay for abatement not the polluter which means the polluter may not be able legitimately to pass through an increased price signal, to users of their product that might trigger additional abatement behaviour
- requiring a complex baseline/benchmark be set from which additional abatement will be measured
- being only available for a maximum of five years funding if bidders are successful
- having the total funds capped, and
- giving no certainty to participants on future abatement programs as the Government has made it clear ERF will only run to 2020.

All these issues are likely to reduce the capacity of the program to deliver the level of abatement shown in figure 1.5. Not only is the capacity to abate reduced because the full capability of the cheapest abatement options is not mobilised due to the problems listed above, but also for a given amount of abatement required more expensive options have then to be accessed to make up the shortfall. This means less abatement is achieved and total abatement is at a higher cost than that of the technical cost curve shown in red.

A notional cost curve has been drawn as a blue line showing this reduction in capacity to achieve abatement by a voluntary grants program of this type.

3. Notional capacity for abatement of an Emissions Trading Scheme is shown by the green line

Because a market mechanism, such as an emissions trading scheme, makes the polluter pay, all emitters have an increased incentive to reduce their emissions. Consequently instead of a technical curve being prepared that shows the abatement options thought of only by a specialist or a group of

specialists, all the participants affected by the pricing of carbon emissions, either directly or through cost pass through, begin thinking of a myriad of options to abate their emission costs. So under an emissions trading scheme more abatement options appear than were thought of through a technical capacity analysis. Increased options for abatement emerge because:

- the scheme is legislated and participation is compulsory
- there is an incentive to find more abatement options because the polluters pay (not the tax payer)
- no baselines/benchmarks are required
- the program can be run for the long term
- abatement cost pass through can occur which indirectly abates emissions further
- the only funds the Government need supply are for administration of the scheme (not for purchasing the abatement)
- the policy can be made cost neutral to industry or the Government, and
- future policy certainty is generally guaranteed as much smaller Government budget funds can be required, yet effectiveness is increased over voluntary grants programs.

All these issues are likely to increase the capacity of the policy to deliver abatement beyond a technical capacity analysis and at a lower cost because many more options are examined by polluters as they seek to reduce their costs. Notionally a curve has been drawn as a green line showing this increase in capacity at reduced cost.

While this green line cost curve is largely notional at this stage, it does indicate the experience of other market mechanisms whereby abatement costs in practice have been less than estimated costs from technical analyses done prior to operations commencing.

For example the Mandated Renewable Energy Target (MRET the earlier name for RET) showed higher costs from technical studies prior to operation than were revealed after the market mechanism started operation. A similar thing was observed prior to that with the US sulphur trading market mechanism.