Submission to the Revised Russell Vale Underground Expansion Project (MP09\_0013)

By Jonathan Milford, CASES, on 24 Oct 2020

We consider that the global heating climate change effects of greenhouse gas emissions were not properly costed and were vastly underestimated. Hence, they were wrongly dismissed as being insignificant and were trivialised in the cost benefit analyses.

Four mistakes were made in the impact assessments:

1. An arbitrary historical ‘Carbon Price’ was used to calculate external costs instead of a more realistic estimate based on accredited international research. Rather than ‘average carbon price of $13.98 per tonne of CO2e abated’, a more realistic figure for external costing would be the ‘global social cost of $US417 per tonne of CO2e’, from Katherine Riske in Nature Climate Change, Oct 2018, which converted and indexed would amount to approximately $A60 per tonne.
2. Only the Scope 1 and 2 greenhouse gas emissions were used in the Cost Benefit Analysis (CBA): the much larger Scope 3 emissions were excluded. All GHG emissions contribute to global heating and affect the climate, unless the coal recipients burn it using Carbon Capture and Storage (CCS) to reduce the Scope 3 emissions. Instead of using 1,523 Kt as the ‘Greenhouse gas emissions attributable to the UEP’, the figure used in the CBA should have been 11,148 Kt, the GHG emissions affecting the public at large.
3. For the NSW CBA, the global external costs were minimised by the proportion of the NSW population to the global population. However, it is obvious that NSW is suffering more from heating and climate change than the world at large: Australia as a whole is 1.4 degrees C hotter as compared with the 1.1 degrees global average. Also, more than half of external costs are attributed to damage to the environment, rather than to people’s health. The forests and wildlife in NSW have suffered far more from the unprecedented bushfires in the last year than the people. The NSW *Guidelines for the economic assessment of mining and coal seam gas proposals* were published in 2013 andshould be amended to reflect these present facts.
4. There was no CBA for the Public at Large. Since pollution and GHG emissions affect the world’s oceans and atmosphere, a CBA should be done for the World environment. In this CBA the full external cost of emissions should be added to the cost side of the analysis. If the costs exceed the benefits, the World would want the proposal rejected or approved with conditions that would reduce the costs to be less than the benefits. A typical condition that could be imposed is to restrict the sale of the coal extracted to customers who employ Carbon Capture and Storage (CCS) when it is burnt.

From 1 and 2 above, the total external costs are estimated as approximately $669million, rather than the $7.7million quoted in the CBA. ‘Attributing the GHG costs based on the NSW population, consistent with the Guidelines, results in an attributed GHG cost of $0.019million to NSW in NPV terms’ should be corrected to $1.65million.

From 3 above, we suggest that this should be increased by an exponential factor to reflect NSW’s increased vulnerability to global heating and climate change, to $16.5million, in the NSW CBA.

Adding a World CBA from 4 above, with the full external costs considered, it is clear that, from the World’s point of view, the project might not be of sufficient benefit to NSW and Wollongong Coal’s customer(s) to exceed the overall world costs. The calculations of benefits to customers should be done. If the resulting World CBA shows overall costs exceeding benefits, the project should be rejected or only approved with conditions attached to mitigate the damage to the world’s people and environment. Since CCS is extremely expensive to fit retrospectively, unless the customer(s) already have it installed, one would expect that the project would not go ahead.