



I write to comment on the additional material presented to the IPC Panel regarding the Tahmoor South Development, specifically

- The letter dated 9 April from proponent to the Dept
- The letter from the Dept dated 12 April 2021

I am particularly concerned about the Greenhouse Gas (GHG) emissions from this project. The recent report from the Climate Council, *“Aim High, Go Fast – Why emissions need to plummet this decade”* lays out the need for urgent and dramatic reduction in GHG emissions this decade. The Tahmoor mine, if approved, would have an enormous GHG footprint of 93.8 CO<sub>2</sub>-e. Even with the proposed abatement specified in the DPIE 12 April letter, there would still be more than 20 Mt of Scope 1 and 2 emissions. I do not support approval of this project, however, if the IPC Panel does approve it, I urge you to include not only a limit to the allowable emissions but strict criteria that are concrete and measurable. Recent approvals have let the community and the environment down in this respect and I would like to refer you to the Russell Vale Mine case as an example.

The Russell Vale Underground Expansion Project (UEP) of Wollongong Coal Ltd (WCL) was approved by the Independent Planning Commission in December 2020. The Draft Air Quality and Greenhouse Gas Management Plan was recently sent to the Community Consultative Committee (CCC) for comment. Many members of the community are concerned that the draft plan is alarmingly deficient in specific measurable targets/goals for both greenhouse gas emissions (GHG) and air quality measures. The draft plan circulated to the CCC does not commit to *any concrete measures to address Scope 1 and 2 emissions*. Instead it uses vague and non-committal language, such as that it will “consider efficiencies”, it will “review ....opportunities”. Most concerning are the fugitive emissions, which comprise 99.6% of the Scope 1 GHG emissions. WCL makes no commitment to address these emissions. This is out of step with community expectations.

To illustrate this, I attach 3 documents:

- Attachment 1: Relevant Conditions of Consent for Russell Vale
- Attachment 2: Excerpt from Russell Vale Draft GHG and Air Quality Management Plan
- Attachment 3: Excerpt from my submission/comment on this draft plan as a CCC alternate member

I note that the Russell Vale GHG Plan is still in draft form, having not yet been approved by DPIE. However, I hope you will see from the following documents that the IPC’s conditions of consent for Russell Vale have led to an ineffective and inadequate GHG Management Plan. I urge you to do better for Tahmoor.

Yours sincerely,

Kaye Osborn  
Secretary, Illawarra Residents for Responsible Mining Inc (IRRM)

## APPENDIX 1

### Conditions of consent

#### Terms

Russell Vale's current 'Development Consent' defines these key terms:

- Feasible** Means what is possible and practical in the circumstances
- Reasonable** Means applying judgement in arriving at a decision, taking into account mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
- Minimise** Implement all reasonable and feasible mitigation measures to reduce the impacts of the development

#### Condition B9 (d) (iii)

Develop an 'Air Quality and Greenhouse Gas Management Plan' that **describes the measures that would be implemented** to ensure (iii) **best practice management** is being employed to:

- **minimise** the development's Scope 1 and 2 greenhouse gas emissions;
- improve the development's energy efficiency; and

#### Condition B8 (a) (iii)

The Applicant must take all reasonable steps to **improve energy efficiency** and **reduce Scope 1 and Scope 2 greenhouse gas emissions** of the development

APPENDIX 2

## Greenhouse gas management measures proposed by Wollongong Coal (Draft GHG Management Plan)

*The following section is verbatim from WCL’s draft plan*

Condition B9(d)(iii) requires WCL to employ best practice management to improve the project’s energy efficiency and minimise GHG emissions.

WCL is required to describe the measures that would be implemented to ensure that the Scope 1 and Scope 2 GHG emissions generated by the project are minimised, and do not exceed the criteria listed in Table 4.3.

No established measures are available for controlling fugitive GHG emissions from the mine operations. However, it should be noted that Russell Vale Colliery is a ‘low gas’ mine.

**GHG emissions are mainly minimised by:**

- regular servicing and maintenance of plant, vehicles and mine equipment; the diesel trucks and buses used on site are maintained serviced in line with the intervals and procedures recommended by the original equipment manufacturer (OEM).
- performing pre-start inspections at each shift on mobile plant and vehicles; and
- tracking electricity bills and fuel usage.

WCL will continue to seek operational energy use efficiencies where commercially feasible, and will review renewable energy opportunities as new technology is developed and becomes viable.

The work practices that will be used to control GHG emissions associated the project are summarised in Table 7.1. This table provides a summary of the key potential risks along with appropriate mitigation measures to manage those risks.

**Table 7.1 – Greenhouse gas risk assessment and management actions**

Identified risk	Unmitigated likelihood	Unmitigated consequence	Management and mitigation
Venting of coal seam gas (CSG) contributing greenhouse gas.	High – will happen.	High – contributing to GHG emissions from site.	The feasibility of mechanisms and technological processes to capture fugitive CSG in the ‘Western Mining Area’ will be formally assessed in the future. Based on the outcomes of the assessment, it is expected that WCL will investigate opportunities to capture and/or re-use ventilation gases. The feasibility assessment is expected to be undertaken as part of the next major

			approvals process, which includes mining in the Western Mining Area (expected to be undertaken by 2025).
Incorrect reporting of GHG emissions.	Low – unlikely to happen.	Medium - reporting obligations not met, resulting in fine.	The inventory of emissions developed for the EA will be maintained, as per the Basis of Preparation (Wollongong Coal, 2021c). Emissions and abatement strategies will be reported annually as part of internal environmental reporting and NGER obligations.
Excess fuel use contributing to GHG emissions.	Moderate – could happen.	Low - fuel use contributes a comparatively small component of total GHG emissions for the project.	As required for new or upgraded equipment the efficiency the upgraded mobile and fixed equipment will continue to be considered during procurement for fuel-powered equipment. As older mobile plant and fixed equipment is replaced it is anticipated that there will be fuel or power efficiency gains associated with upgraded equipment. Consequently, GHG emissions will be minimised.
Air pollutant emissions from spontaneous combustion event	Low – unlikely to happen	High – contributing to GHG emissions from site.	Air pollutant emissions will be minimised in accordance with the Air Quality or Dust or Other Contaminants and the Spontaneous Combustion Principal Hazard Management Plans and TARPS. Since 1880s this mine has not had a propensity to spontaneous combustion events; however should they occur it will be managed as per the Spontaneous Combustion Principal Hazard Management Plans and TARPS which will limit GHG emissions by emergency sealing of the mine.

## APPENDIX 3

### Excerpt of my submission to Wollongong Coal Ltd regarding Russell Vale Mine Air Quality and Greenhouse Gas Management Draft Plan, March 2021

#### Greenhouse Gas Emissions

Wollongong Coal’s draft GHG Management plan – if approved in its current form – will not contain any legally enforceable conditions that will guarantee any emissions reduction from the Russell Vale Project.

Specifically, the following commitments, promises and aspirations put forward in the Draft Management Plan **do not guarantee any reduction in GHG emissions**.

Table 1

Russell Vale GHGEs	Analysis of proposed ‘mitigation’
Scope 1 - diesel	<ol style="list-style-type: none"> <li>1. No commitment to upgrade any vehicles or equipment now to more fuel-efficient models.</li> <li>2. Nor is there any concrete commitment to do this in future. WCL pledge only to 'consider' efficiency if (or when) new equipment is purchased.</li> <li>3. They do commit to track fuel usage and to "regular servicing and maintenance of plant, vehicles and mine equipment" including diesel trucks and buses used on site, however - assuming this happens routinely at present – there’s no evidence that this will reduce fuel usage beyond business as usual</li> <li>4. It is not clear if the sum total of this activity will reduce projected consumption of diesel at all.</li> </ol>
Scope 1 - fugitive emissions	Fugitive emissions will not be mitigated at all. The plan states: <i>“No established measures are available for controlling fugitive GHG emissions from the mine operations.”</i>
Scope 2 - electricity	<ol style="list-style-type: none"> <li>1. WCL pledge to track electricity bills and service equipment</li> <li>2. WCL promise to ‘consider’ efficiency if (or when) new equipment is purchased, however there are no specific pledges with SMART goals</li> <li>3. There is no commitment to switch to renewable energy or buy power through the GreenPower program</li> <li>4. WCL ignore current GreenPower schemes and current, economically viable renewable electricity technologies and make only the following commitment: WCL say they will “review renewable energy opportunities as new technology is developed and becomes viable”</li> </ol>
Scope 3 - transport and combustion of coal	There are no conditions of consent which require any action on this issue from WCL.

Given the above assessment, it is clear that actual measurable GHG emissions reduction resulting from this plan are likely to be non-existent.

**Table 2: Summary of specific GHG abatement commitments (t CO2-e) made by WCL**

Russell Vale's GHGs	Total projected GHGs (t CO2-e)	% total emissions	Specific abatement proposed by Wollongong Coal (t CO2-e)
Scope 1 - diesel use	6,097	0.1	0
Scope 1 - fugitive emissions	1,412,900	12.7	0
Scope 2 - electricity	103,500	0.9	0
Scope 3 - transport and combustion of coal	9,623,427	86.3	0
	<b>11,145,924</b>		<b>0</b>

It is also concerning to note the statement in the Draft Management Plan,

*“No established measures are available for controlling fugitive GHG emissions from the mine operations. However, it should be noted that **Russell Vale Colliery is a ‘low gas’ mine.**”* (p 46)

given that this contradicts the information provided by Wollongong Coal to the NSW IPC prior to determination where they claim the opposite:

*“The mine will be classified as a **“Gassy Mine”** and generate post mining emissions from stockpiled ROM coal.”*<sup>1</sup>

### **Recommendations – amendment to Draft Plan: Greenhouse Gas Emissions**

#### **Scope 1 fugitives (12.7%):**

WCL claim there are no available measures *“for controlling fugitive GHG emissions from the mine operations”*. The CSIRO describe options that would reduce these emissions at a cost of about \$20 / tonne (about the same cost as buying ACCUs – carbon credits - to offset emissions). There is no evidence that WCL has considered any of these technologies for the current development. According to the conditions of consent, WCL is required to consider *“what is possible and practical”* and then apply *“judgement in arriving at a decision, taking into account mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements”*. WCL has not done this. ***Given that fugitive GHG emissions are the largest component of Scope 1 and 2 emissions, WCL should at the very minimum implement measures to capture and/or reuse these emissions. Furthermore, given that the mine is classified as a “Gassy Mine”, ROM stockpiles should be sampled or monitored for fugitive methane and CO2 emissions. Are there any other post-mining reporting points that need to be identified in the management plan? Measured GHG emissions should be published in the publicly available annual review report.***

#### **Scope 1 diesel (0.1%):**

There are no concrete, Specific-Measurable-Achievable – Relevant-Time-based (SMART) goals or commitments in the draft plan beyond business as usual. There are no specific commitments to upgrade any vehicles or equipment now or in the future to more fuel-efficient models. WCL pledge only to 'consider'

efficiency if (or when) new equipment is purchased. ***It would be reasonable and feasible to replace diesel trucks with locally manufactured hydrogen fuel cell or battery powered trucks and this would be a concrete commitment. Given the significant GHG emissions of this development, merely “considering” efficiency if new equipment is purchased is not enough.***

**Scope 2 electricity (0.9%):**

There is no commitment to switch to renewable energy or buy power through the GreenPower program. Instead, WCL make only the following statement: WCL will “review renewable energy opportunities as new technology is developed and becomes viable”. They do say they will track electricity bills and ‘consider’ energy efficient upgrades, but there are no measurable or enforceable commitments in the draft plan.

***GreenPower is readily available and sourcing 100% renewable electricity would be a positive step that would result in quantifiable reduction in GHG emissions. The Management Plan should include commitments that are transparent, measurable and enforceable, such as the purchase of 100% renewable energy, to address Scope 2 electricity emissions.***

**Conclusion – Greenhouse Gas Emissions**

In conclusion, the measures proposed by WCL in this draft plan are concerning. They are not in step with the serious nature of the climate crisis, which requires an urgent response, nor with public expectations or even the State of NSW’s emissions reduction goals. It is recommended that the plan is revised with clear, concrete and transparent SMART measures for real emissions reductions.

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<sup>i</sup> [https://www.climatecouncil.org.au/resources/net-zero-emissions-plummet-decade/?utm\\_source=Climate+Council+of+Australia&utm\\_campaign=721a8068dd-2104\\_AimHighGoFast\\_%5BRG%5D&utm\\_medium=email&utm\\_term=0\\_03ddb2e5-721a8068dd-66140681](https://www.climatecouncil.org.au/resources/net-zero-emissions-plummet-decade/?utm_source=Climate+Council+of+Australia&utm_campaign=721a8068dd-2104_AimHighGoFast_%5BRG%5D&utm_medium=email&utm_term=0_03ddb2e5-721a8068dd-66140681)