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**NSW Independent Planning Commission Panel**  
**Bylong Coal Project**  
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### **The Bylong Coal Project** **Implications for Australian & Global Climate Change**

Dear Mr Kirkby

In your consideration of the Bylong Coal Project, I draw your attention to the fact that the greatest risk to the Australian community from the development of the project has been largely ignored, namely its potential impact on local and global climate change.

Passing reference is made in the Final Assessment Report to the mine's greenhouse gas emissions. The assumption that State, National and International climate policy, let alone the overwhelming scientific consensus on the dangers the world, and particularly Australia, now face from climate change, have no bearing on the decision to allow the mine to proceed, in current circumstances is criminally negligent.

The recent Intergovernmental Panel on Climate Change (IPCC) report on the impact of 1.5°C and 2°C warming above pre-industrial levels 'sent a stark reminder to humanity about the existential threat posed by climate change. To avoid worst outcomes, global emissions must be cut by half by 2030, and to zero by 2050. This is an unprecedented task, requiring a reduction rate of at least 7% annually; no country has achieved more than 1.5% previously. The only possible response is emergency action to transform our social, economic and financial systems.

Unfortunately the IPCC tend to underestimate the risks to which we are now exposed. This is highlighted in another recent report entitled: "*What Lies Beneath: The understatement of existential climate risk*"<sup>ii</sup> (copy attached) co-authored by David Spratt and myself.

This publication collates what scientists, decision-makers and other stakeholders have been saying, often behind closed doors, about the culture of failure and scientific reticence in which climate policy-making has become embedded. It is a story that must be understood if we are to have any hope of addressing the existential climate risk which humanity now faces. The report analyses why:

- Human-induced climate change is now an existential risk to human civilisation: an adverse outcome that will either annihilate intelligent life or permanently and drastically curtail its potential, unless dramatic action is taken. The bulk of climate research tends to underplay these risks, exhibiting a preference for conservative projections and scholarly reticence.
- Reports of the IPCC, including the most recent one referenced above, around which international negotiations have been based, also tend toward reticence and caution, erring on the side of "*least drama*", and downplaying the more extreme and more damaging outcomes. This is dangerously misleading with the acceleration of climate impacts globally.
- Potential climatic "*tipping points*" are a particular concern; the passing of critical thresholds which result in step changes in the climate system. Under-reporting on these issues is contributing to a "*failure of imagination*" in our response to climate change.

In the foreword, Professor Hans Joachim Schellnhuber, founder of the Potsdam Institute for Climate Impact Research, adviser to German Chancellor Angela Merkel and to Pope Francis, calls the report a "*critical overview by well-informed intellectuals who sit outside the climate-science community*", highlighting crucial insights which may lurk at the fringes of conventional policy analysis but which have a new resonance when "*the issue is the very survival of our civilisation, where conventional means of analysis may become useless*". He says: "*climate change is now reaching the end-game, where very soon humanity must*



choose between taking unprecedented action, or accepting that it has been left too late and bear the consequences”.

The purpose of the report is to highlight that the crucial moment is now, to understand why that is so, and to encourage a fundamental emergency reframing of our approach to climate action.

The rationale for emergency action is as follows:

- **Dangerous climate change is occurring at the 1°C temperature increase already experienced.** 2°C now represents the boundary of extremely dangerous climate change.
- **To stay below the upper 2°C temperature increase limit of the Paris Climate Agreement, global emissions would have to peak no later than 2020 and be reduced by around 7% annually thereafter.** To meet the lower 1.5°C target requires even more rapid reduction. By contrast, emissions continue to rise in line with worst case scenarios.
- **Probabilities used to define the carbon budget to stay below the Paris objectives are unrealistic.** The IPCC uses 50 to 66% chance as the norm. Not good odds for the future of humanity. Carbon budgets, and emissions reductions, should be based upon a realistic chance, at least 90%, of reaching the goals. On that basis, there is practically no carbon budget left today to stay below 2°C, let alone 1.5°C.
- **Climate inertia means that allowing continued fossil fuel investment today, such as the Bylong coal mine, with associated emission increases, risks locking-in irreversible, existential climatic outcomes.** By the time the climatic impact of these investments becomes clear, it will be too late to take action and avoid extensive stranded assets.
- **Atmospheric aerosols produced by burning coal and oil are cooling the planet by around 0.3 to 0.5°C.** As these concentrations reduce with the phase-out of fossil fuels, a commensurate one-off increase in temperature is likely, further compounding the problem of staying below warming limits.
- **IPCC scenarios still rely heavily on carbon removal from the atmosphere as a prerequisite for meeting the 1.5°C target.** The degree of dependence on such negative emissions technologies, none of which exist at scale today, is extremely dangerous, creating a false sense of security that there are easy solutions when none exist.
- **The recent IPCC summary report understates key risks in moving from 1.5°C to 2°C warming.** For example, a likely rise in climate-driven refugees, the danger of exceeding tipping points that could push the world on to an irreversible path to a “Hothouse Earth”<sup>iii</sup>, cryosphere risks such as Antarctic ice sheet instability and loss of the Greenland ice sheet being triggered, leading over time to multi-metre sea level increase. Exceeding 1.5°C poses huge risks both for humans and natural systems.
- **Despite three decades of intense activity by NGO’s, progressive business, governments, official bodies and international organisations,** it is virtually impossible to now limit temperature increases to the lower 1.5°C limit of the Paris climate agreement, and probably to the 2°C upper limit, unless state and non-state actors across the globe unite in support of fundamental change

This is summarised in the attached short presentation.

Effective action on climate change must be raised above political infighting if the Federal and State government’s oft-quoted first responsibility to ensure the security of the Australian people is to have any meaning. That security is being undermined by the refusal of successive governments to treat climate change seriously, leading to rapidly increasing economic and social costs. This is most recently evident with the current drought, which is undoubtedly being intensified by climate impact resulting to a large extent from fossil fuel combustion.



The Federal Government currently has no meaningful climate change or energy policy and the NSW State policy is little better:

- The Federal emission reduction target of 26-28% by 2030 based on 2005 levels is wholly inadequate on any fair international comparison, and far lower than required to avoid catastrophic climate outcomes
- It does not constitute policy without a means of achieving even that inadequate target. Achieving the targets will not happen without continued encouragement of low-carbon alternatives to fossil fuels; the development of new coal mines such as Bylong makes the task even harder, and is totally contradictory to Australia's commitment to the Paris Climate Agreement.
- The biggest subsidy in the energy sector, far outweighing any support to the renewable energy industry, is the lack of a carbon price to account for the externalities of fossil-fuel use (ie pollution, climate damage and health impacts). Removal of that subsidy by imposing a carbon price, which is inevitable, does not seem to have featured in the KEPCO considerations, further adding to the risk of the mine becoming a stranded asset, with the serious damage to local communities this implies.
- Rather than being a minor player in the global emission stakes, with our domestic emissions being only 1.3% of the global total as the Federal government continually argues, Australia is the world's sixth largest carbon polluter when our exports are included, as they must be given the climate risks we now face; shortly to become the fourth largest polluter as our LNG exports increase. What Australia does seriously impacts the global climate. The Bylong mine will only make matters worse.
- The irony is that we have far better prospects of prospering economically and socially in a low-carbon world by expanding renewable energy use than by maintaining or expanding the fossil fuel status quo with developments such as Bylong; in the process avoiding much damage to our agricultural and water resources and the communities which depend upon them.
- The Bylong Benefit Cost Analysis (BCA) is seriously deficient in that it takes a narrow and optimistic view of the benefits of coal mine development and completely ignores the far greater costs imposed by the externalities of coal use, both in local environmental and health impact, and more importantly, the climate impact arising from coal combustion. This reflects a fundamental weakness in Australian environmental legislation which does not take a systemic, holistic, approach to assessing the full impact of such developments.
- Arguments that developments such as Bylong are essential to assist in poverty alleviation and encourage economic growth in Asia, and that if we do not supply coal others will, are not valid in a world facing an immediate existential threat from increasing use of fossil fuels, particularly coal.

The critical task now for Australia, and the world, is to cut carbon emissions far more rapidly than current Paris commitments, exiting the fossil fuel era and accelerating the introduction of low carbon alternatives, coupled with demand reduction initiatives. To allow the development of new coal mines such as Bylong in these circumstances is suicidal, morally and ethically bankrupt and constitutes a crime against humanity. I urge your panel to recommend against the Bylong Coal Project development in the strongest possible terms.

Unfortunately I have not been able to participate in recent public hearings due to absence overseas. However I would be pleased to discuss these issues with the panel at your convenience.

Yours sincerely

Ian T Dunlop



### Author

Ian Dunlop has wide experience in energy resources, infrastructure, and international business, for many years on the international staff of Royal Dutch Shell. He has worked at senior level in oil, gas and coal exploration and production, in scenario and long-term energy planning, competition reform and privatization.

He chaired the Australian Coal Associations in 1987-88. From 1998-2000 he chaired the Australian Greenhouse Office Experts Group on Emissions Trading which developed the first emissions trading system design for Australia. From 1997 to 2001 he was CEO of the Australian Institute of Company Directors.

An engineer from the University of Cambridge (UK), MA Mechanical Sciences, he is a Fellow of the Australian Institute of Company Directors, the Australasian Institute of Mining and Metallurgy and the Energy Institute (UK), and a Member of the Society of Petroleum Engineers of AIME (USA).

Ian is a member of the Board of the ARC Centre of Excellence for Climate Extremes based at UNSW, and a member of the Club of Rome.

### References

<sup>i</sup> Global Warming of 1.5°C – Summary for Policymakers, IPCC, 8<sup>th</sup> October 2018:

[http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)

<sup>ii</sup> What Lies Beneath: The Understatement of Existential Climate Risk, Spratt & Dunlop, August 2018:

<https://www.breakthroughonline.org.au>

<sup>iii</sup> Trajectories of the Earth System in the Anthropocene, Steffen, Rockstrom, Schellnhuber et al, PNAS July 2018:

<http://www.pnas.org/content/115/33/8252>

(Note: Hard copy of reports being forwarded by mail)

Yours sincerely

