

# NSW Rail Access Undertaking

## Submission to Independent Pricing and Regulatory Tribunal Review

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*IPART's legislation requires it to consider "social impacts" and "ecologically sustainable development" when determining prices for access to infrastructure. IPART has not sufficiently addressed the environmental and health damages caused by coal freight on assets covered by the NSW Rail Undertaking. IPART is required to consider these matters when regulating access charges for coal rail freight.*

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May 2019

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# Introduction

The Australia Institute welcomes the opportunity to comment on the *NSW Rail Access Undertaking- Review of the rate of return and remaining mine life- Draft Report* ('Draft Report').

The review assesses aspects of charges that apply to access several rail networks in NSW. Specifically, it considers the rate of return Government-owned RailCorp, can use in calculations of access charges to the rail assets it owns and manages.

Some of these rail networks serve coal mines in the Hunter Valley, the Lithgow region and coal-fired power generation at the Erraring and Vales Point power stations. Despite the impacts of these activities on climate change, and the potential for climate policy to impact on these industries, climate change is not mentioned in the draft report. IPART has both a legislative and moral obligation to consider these broader social and environmental implications within their review of the rate of return remaining mine life.

# Legislation and guidelines

The *Draft Report* predominately involves economic consideration of the NSW Rail Access Undertaking. The Undertaking is established under the *Transport Administration Act 1988 (TAA Act)*, Schedule 6AA and Section 99(C). These provisions set out how a rail infrastructure owner may access and vary an undertaking.

The *NSW Rail Access Undertaking* states that

legislation relevant to this Access Undertaking includes ... The Independent Pricing and Regulatory Tribunal Act<sup>1</sup>

*The Independent Pricing and Regulatory Tribunal Act 1992 (NSW) (IPART Act)* establishes and governs IPART, setting out primary functions and responsibilities. Section 15(1) requires IPART, in making determinations and recommendations, to consider a range of matters;

In making determinations and recommendations under this Act, the Tribunal is to have regard to

(f) the need to maintain ecologically sustainable development (within the meaning of section 6 of the *Protection of the Environment Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment,

...

(k) the social impact of the determinations and recommendations<sup>2</sup>

*The Protection of the Environment Administration Act 1991* NSW defines ecologically sustainable development as:

ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision-making processes...

[including] the precautionary principle...

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<sup>1</sup> (s1.4) Rail Infrastructure Corporation and Rail Corporation NSW (2017) *NSW Rail Access Undertaking* <https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/nsw-rail-access-undertaking.pdf>

<sup>2</sup> *Independent Pricing and Regulatory Act 1992 (NSW)* s 15(1)

inter-generational equity...

environmental factors should be included in the valuation of assets and services... polluter pays... the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste<sup>3</sup>

Despite IPART's requirement to have regard to "the need to maintain ecologically sustainable development" and the "social impact" of its recommendations and determinations, the Draft Report does not consider the climate change or health impacts caused by the coal transported on the rail networks under their projected operations.

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<sup>3</sup> *Protection of the Environment Administration Act 1991 No 60, NSW*, s6.2<https://www.legislation.nsw.gov.au/#/view/act/1991/60>

# Climate Change

## PARIS AGREEMENT

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Climate change and climate policy are inadequately assessed in the 2014 review consultants' reports referenced in the Draft Report.<sup>4</sup> Neither contains the word 'climate' and have only limited discussion of carbon pricing. Large changes in climate policy have occurred since those reports were written, in particular Australia's inclusion in the Paris Agreement and increasing urgency from the science.

IPART is required to consider ecologically sustainable development and should consider Australia's obligations under the Paris Agreement. In signing the Paris Agreement, Australia, along with nearly 200 other governments, agreed to respond to the threat of climate change by "holding the increase in the global average temperature to well below 2°C". Further, all parties agreed that current national policies to 2030 were insufficient and would have to be increased.

The Commonwealth Government has ratified this treaty, the goals of which are widely shared, including by the NSW Government.

The International Energy Agency shows that energy policy can meet the goals of the Paris Agreement while maintaining economic growth and eliminating energy poverty. To do so, coal use must go into sustained decline.<sup>5</sup>

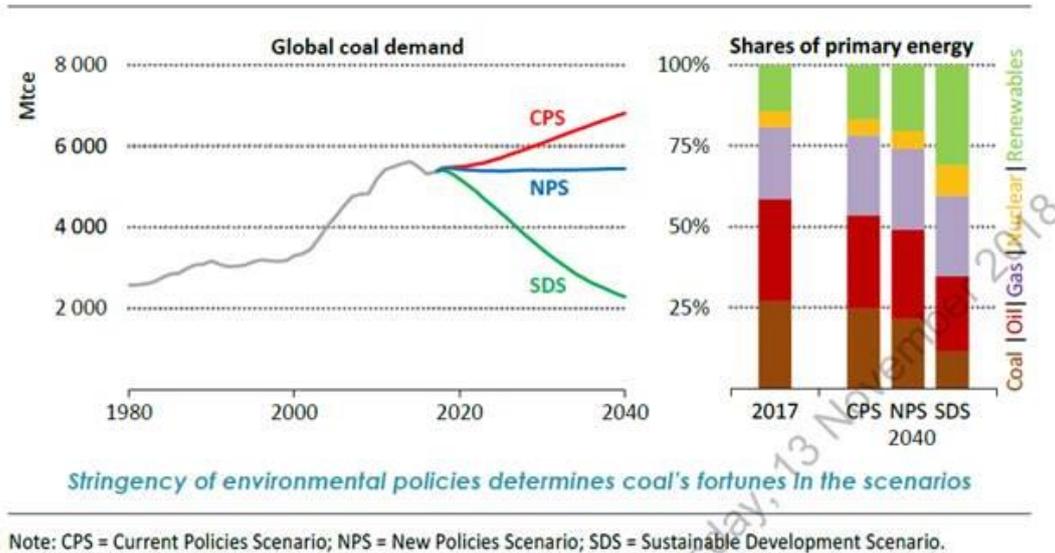
The coal market is expected to decline dramatically if climate policies are implemented in line with the Paris Agreement. Figure 1 below shows the International Energy Agency (IEA)'s estimates for global coal demand under its three modelled scenarios. The green line labelled "SDS" represents the 'sustainable development scenario' in line with the Paris Agreement:

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<sup>4</sup> Frontier Economics (2014) *Economic life of Eraring Power Station and Vales Point Power Station*, [https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/consultant\\_report\\_-\\_frontier\\_economics\\_-\\_advice\\_to\\_ipart\\_on\\_economic\\_lives\\_of\\_eraring\\_power\\_station\\_and\\_vales\\_point\\_power\\_station.pdf](https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/consultant_report_-_frontier_economics_-_advice_to_ipart_on_economic_lives_of_eraring_power_station_and_vales_point_power_station.pdf);  
Sapere Group (2014) *IPART 2014 review of remaining mine life under the NSW Rail Access Undertaking—FINAL report*, [https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/consultant\\_report\\_-\\_sapere\\_research\\_group\\_-\\_ipart\\_2014\\_review\\_of\\_remaining\\_mine\\_life\\_under\\_the\\_nsw\\_rail\\_access\\_undertaking\\_-\\_final\\_report.pdf](https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/consultant_report_-_sapere_research_group_-_ipart_2014_review_of_remaining_mine_life_under_the_nsw_rail_access_undertaking_-_final_report.pdf)

<sup>5</sup> IEA (2018) *World Energy Outlook 2018*, [www.iea.org](http://www.iea.org)

**Figure 1: IEA coal demand estimates**



Source: IEA (2018) *World Energy Outlook 2018*, [www.iea.org](http://www.iea.org)

Figure 1 shows that under the SDS scenario – roughly in line with the Paris Agreement – coal demand declines significantly in the years ahead, reducing by two thirds by 2040. This would have a major effect on the Hunter Valley industry as the IEA expects the volume of traded coal to decline from over 1,100 million tonnes per annum (Mtpa) in 2017 to 815Mtpa in 2025 and 518Mtpa in 2040.<sup>6</sup>

The Draft Report makes no consideration of the impacts of such a decline on the NSW coal industry, nor that such a decline is required to meet the stated goal of both Commonwealth and NSW governments.

IPART should have regard to the social impact of coal production, especially where inconsistent with internationally agreed policy goals.

The Australia Institute’s report *Meeting our Paris Commitments* shows that the government’s current emissions pledge is not consistent with the Paris Agreement’s goal, and that in order to meet the 2°C scenario, coal power should be phased out by around 2030. The report highlights that:

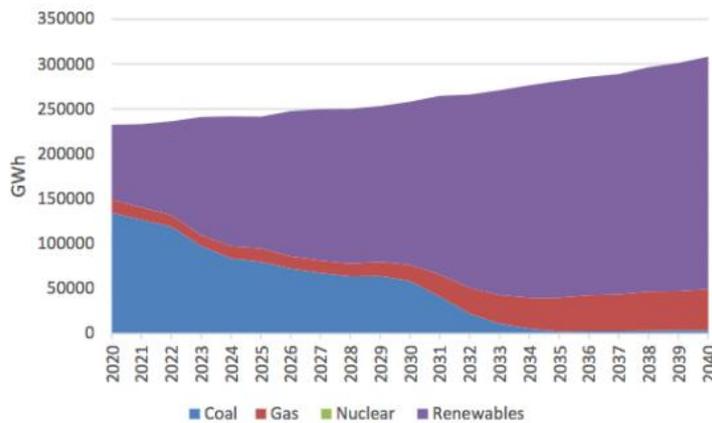
- the government’s emissions targets in electricity alone (26–28%) are too low for our current Paris emissions pledge (26–28% across the economy), because emissions reductions in electricity are more efficient than in other sectors;
- the government’s current emissions pledge is not consistent with Australia’s commitment to the Paris Agreement’s ‘two degree’ goal;

<sup>6</sup> IEA (2018) *World Energy Outlook 2018*, table 5.1, [www.iea.org](http://www.iea.org).

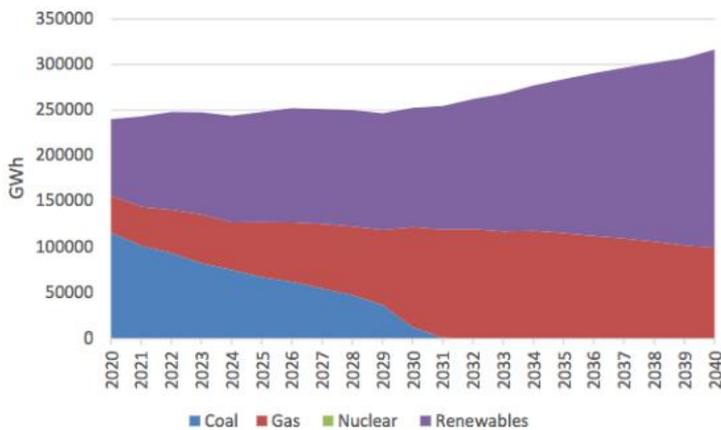
- to take action consistent with the Paris Agreement ‘two degree’ goal, Australia should phase out coal power by around 2030.<sup>7</sup>

The Australia Institute’s report outlines modelling by Jacobs for the Climate Change Authority that considered three different policy mechanisms under a ‘two degree’ scenario. As shown in the figures below, under each scenario, coal is phased out around 2030. (In one scenario, with much higher renewables and lower gas, the coal phase out ends around 2035.)

**Figure 2: Generation mix under CET, 2 degree scenario**

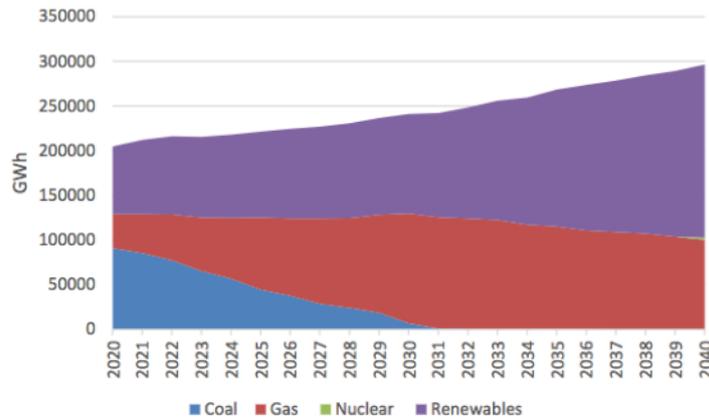


**Figure 3: Generation mix under EIS, 2 degree scenario**



<sup>7</sup> Campbell (2017) Meeting Our Paris Commitment, <http://www.tai.org.au/sites/default/files/P439%20Meeting%20our%20Paris%20Commitment%20-%20TAI%20Climate%20and%20Energy%20Program%20-%20September%202017.pdf>

**Figure 4: Generation mix under a carbon price, 2 degree scenario**



The Draft Report does not consider whether the draft decision on remaining mine life and rate of return are compatible with a 2°C scenario and ignores the policy and technology risks of a faster transition to decarbonisation in line with the Paris Agreement.

IPART notes that the relevant factors to determining the remaining mine life include

- Origin’s announcement that it will exit coal fired generation by 2032
- Delta Electricity’s effective economic life of the Vales point power station of 2029
- Trends in electricity pricing and government policy
- Declines in BlueScope’s demand for Hunter Valley thermal coal

Consideration of these relevant factors should also involve consideration of Australia’s obligations under the Paris Agreement, and whether the draft decisions on the rate of return and remaining mine life are consistent with a 2°C scenario.

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

In accordance with the recommendations of the G20 Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD), IPART should consider the financial risks associated with climate change, both transition risks and physical impact risks, in making its determinations.

The TCFD recommends that financial actors test and disclose asset resilience under climate-related scenarios, including a 2°C or lower scenario. TCFD was established to help businesses disclose information about the risks posed by climate change,

recognising that disclosing adequate information about climate related risks can avoid the mispricing of assets and misallocation of capital.

TCFD notes that different sectors and industries are more affected by climate related risks than others, listing fossil-fuel dependent infrastructure (such as railways) as one of the sectors with the highest potential exposure to low-carbon transition.<sup>8</sup>

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<sup>8</sup> G20 FSB (2017) *TCFD Final Report* <https://www.fsb-tcf.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf>  
[https://www.unepfi.org/fileadmin/documents/carbon\\_asset\\_risk.pdf](https://www.unepfi.org/fileadmin/documents/carbon_asset_risk.pdf)

# Health impacts of coal

Coal-fired power stations carry serious health burdens. A 2018 study by Ben Ewald, public health lecturer and GP, investigates the health burden of fine particle pollution from electricity generation in NSW. It estimates the burden from individual coal-fired power stations, finding that Eraring and Vales Point make the largest contribution of all NSW power stations to the health burden from power generation.<sup>9</sup> It is estimated that Eraring will contribute to 1,219 deaths, 1,058 low birth weight babies and 1579 cases of new onset diabetes in the Sydney, Central Coast and Hunter region during its remaining years of operation.<sup>10</sup>

The NSW government has acknowledged that pollution from NSW's coal-fired power stations kills people. Commenting on Ewald's study, a NSW Health spokeswoman said similar research conducted by NSW Health identified lower premature deaths from this pollution.<sup>11</sup>

Mitigating the health burden posed by these power stations requires post-combustion capture of SO<sub>2</sub> (a measure which is not currently employed at any NSW power station) or bringing forward the closure of power plants.<sup>12</sup>

The Draft Report does not consider these health effects, and only briefly notes the regulatory risks from social impacts. Greater consideration should be given to the serious health impacts of coal-fired power generation and the possible policy responses to those impacts when calculating the remaining mine life.

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<sup>9</sup> Ewald (2018) The health burden of fine particle pollution from electricity generation in NSW [https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald\\_B\\_2018\\_The\\_health\\_burden\\_of\\_fine\\_particle\\_pollution\\_from\\_electricity\\_generation\\_in\\_NSW.pdf](https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald_B_2018_The_health_burden_of_fine_particle_pollution_from_electricity_generation_in_NSW.pdf) page 4

<sup>10</sup> Ibid, page 5.

<sup>11</sup> Hannam (2018) 'Scandal': NSW coal power plants will kill thousands before they close <https://www.smh.com.au/environment/sustainability/scandal-nsw-coal-power-plants-will-kill-thousands-before-they-close-20181120-p50h66.html>

<sup>12</sup> Ewald (2018) The health burden of fine particle pollution from electricity generation in NSW [https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald\\_B\\_2018\\_The\\_health\\_burden\\_of\\_fine\\_particle\\_pollution\\_from\\_electricity\\_generation\\_in\\_NSW.pdf](https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald_B_2018_The_health_burden_of_fine_particle_pollution_from_electricity_generation_in_NSW.pdf) page 5

# Conclusion

IPART should consider the 'social impact' and 'the need to maintain ecologically sustainable development' when regulating access charges for coal rail freight, in line with the legislative requirements of the *IPART Act*.

Consideration should be given to whether the draft decision on remaining mine life and rate of return are compatible with a 2°C scenario, the effect of projected coal decline on the Hunter Valley coal industry, and the serious health burdens associated with coal-fired power stations (including low birth weight babies, cases of new onset diabetes and premature death).

The cost of damage to the environment and human health should be internalised through pricing, under the ecologically sustainable development requirement.