

**Towards COP25, Madrid Spain ~ 2-13 December 2019:
Resolving Conflict Over the Future of Coal**

***A UN Treaty risk management pathway for the international
trade in coal to assess compliance with Paris Agreement goals***

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KEY POINTS

- 1. At the UN Climate Change Summit 2019, the UN Secretary-General highlighted the need for accelerated action on emissions and strategic planning for future use of fossil fuels and coal-generated energy.**
- 2. To address the future of coal, the Paris Agreement must be implemented in a manner to reflect equity and for emission reductions to be undertaken on the basis of equity. Implementation will require a pathway that promotes fairness and justice.**
- 3. A new UN treaty is needed to complement the current climate change treaties with commitments to ensure that the international trade in coal does not pose an unacceptable risk for transitioning to the goal of net zero emissions by 2050.**
- 4. To evaluate whether coal will pose an unacceptable risk for securing the future by reaching the goal of net zero emissions by 2050, fairness and justice will prevail if decision-making is based on the best available, relevant and reliable scientific evidence.**
- 5. Global R&D into CO₂ removal strategies needs to be accelerated for it to be the source of scientific evidence for effective decision-making on the key issues confronting the future of coal - within UN timelines for reaching the goal of net zero emissions.**
- 6. As a variant of the “polluter pays principle”, funding for this global R&D would be a key commitment in any “International Trade in Coal/Fossil Fuels Treaty”. A “risk management levy” would have to be paid on each tonne of coal either exported or imported by each country.
The levy would be applied to fund R&D throughout the globe
for projects defined and managed by the IPCC.**

Overview

A key concern raised at the Summit by the UN Secretary-General related to the need for the UN to “*keep pushing*” the world’s largest emitting economies for greater ambition and accelerated action to address the climate crisis; and to strategically plan for the future use of fossil fuels and coal-generated energy.

For example, accelerated action to cut emissions, halting construction of coal-fired power plants and scaling back or ending fossil fuel subsidies.

Strategic planning for the future use of fossil fuels and coal-generated energy

should be considered within the framework of the following facts:

- ❖ Coal currently supplies around **38% of total global electricity**. In 2040, it will still be the largest single source of **electricity generation at 26%**.
- ❖ The global average annual atmospheric concentration of CO₂ in 2018 averaged 407.4 ppm. A Report of the **International Energy Agency (March 2019)** “*found that CO₂ emitted from coal combustion was responsible for over 0.3°C of the 1°C increase in global average annual surface temperatures above pre-industrial levels. This makes coal the single largest source of global temperature increase*”.

*The issues identified at the UN Climate Change Summit,
together with these findings,
warrant review an analysis at COP25
to address the polarised global opinion
over the future of coal.*

Two **positions** that exist for the future of coal reflect the “**interests**” held i.e. “**needs**” and “**concerns**” that need to be satisfied in the outcome:

- ☑ **Concern** over potential significant environmental and economic impacts from the climate crisis having lasting consequences for future generations has led to a **position** supporting the immediate shut down of all coal plants and to leave most existing reserves in the ground.

- ☑ *The **need** for coal by many major emerging economies to provide reliable energy for rapidly growing populations in pursuit of economic development and poverty eradication has led to a **position** supporting extraction and burning of coal to continue as has been done in the past.*

Comment:

Any new pathways or practical actions to address the future for coal, directed at reducing CO₂ emissions to essentially zero by mid-century, must consider the international trade in coal.

Global CO₂ emissions are indirect or direct impacts caused by the export and import of coal.

The UN Climate Change Summit highlighted the need for science to prioritize R&D and to focus on the evaluation and application of carbon dioxide removal technologies to enable national CO₂ emission reduction targets in action plans to achieve carbon neutrality by 2050.

**International Trade in Coal and UN Climate Change Treaties:
The Scope for a Parallel with Global Biodiversity Conservation?**

Could a pathway to boost ambition for climate action within the framework of the Paris Agreement goals be adopted for coal-generated power and international trade in coal, based on an existing UN model?

*Specifically, the UN model
for addressing another major global environmental problem:*

The conservation of biodiversity.

*Two linked UN International Treaties, having
quite different goals, exist.*

The ***Biodiversity Convention (1992)*** focusses on management measures taken by UN Parties for the conservation of endangered species whilst allowing for sustainable use of the components of biodiversity.

The complementary UN treaty for biodiversity conservation aims to ensure that international trade does not risk the survival of wild animals and plants: ***Convention on International Trade in Endangered Species (1973)***.

An article on [**Independent Australia in April 2013**](#), was first posted by the author to propose an ‘*International Trade in Fossil Fuels*’ Treaty and its R&D applications, as a complement to the UN climate change treaties: -

- ❖ *The existing UN climate change treaties at that time (UNFCCC, Kyoto Protocol) and now the Paris Agreement, focus on management measures to reduce emissions.*
- ❖ *A new treaty to complement the climate change treaties with commitments to ensure that the international trade in coal did not pose an unacceptable risk for achieving the UN climate change treaty’s long-term temperature goals was warranted.*
- ❖ *A further commitment under such a treaty could be imposed on coal exporting countries to ensure that coal mining development proposals did not have adverse impacts on sustainability and national food security e.g. e.g. no mining on prime agricultural lands.*
- ❖ *One example for a key commitment in any “International Trade in Fossil Fuels/Coal Treaty” would be for each country to pay a levy¹ on each tonne of coal they either exported or imported to fund a “risk management approach” to decision-making for the future of coal under the Paris Agreement.*
- ❖ *The levy would be applied to fund global R&D projects to address “coal-climate change risks” as defined by the IPCC.*

Examples of R&D direction could be:

- (i) *Development of environmentally sound low-carbon technologies e.g. Carbon capture, utilization and storage (“CCUS”) technology; High efficiency advanced ultra-supercritical steam power plants; supercritical carbon dioxide plants...*
- (ii) *Developing sustainable technologies for renewable energy, combustion, next-generation solar photovoltaic, novel energy storage technologies...*
- (iii) *“[**Carbon Dioxide Removal Strategies**](#)” e.g. Soil carbon sequestration; Afforestation and reforestation; Bioenergy with carbon capture and*

storage; carbon mineralization; direct air capture; enhanced weathering; ocean fertilization...

- (iv) Clean Development Mechanisms in developing countries by enabling investment in sustainable development projects that reduce CO₂ emissions.

Conclusions: Objective Guidelines for Decision-Making on the Future of Coal

1.0 Implementation of the Paris Agreement is required “to reflect equity”; emission reductions are to be undertaken “on the basis of equity” ...: Articles 2.2 and 4.1.

The Preamble of the Paris Agreement “notes the importance for some of the concept of ‘climate justice’, when taking action to address climate change”.

“Equity” is a relevant consideration for achieving climate justice.

Applying equity as a “fair treatment” guideline to achieve climate justice should mean that no country that has ratified the Paris Agreement should bear a disproportionate share of the negative environmental consequences – ecological, economic, social, cultural - from action plans and measures taken to reach net zero emissions by 2050.

Equity and climate justice should be seen as cornerstones for objectively evaluating the key issue determining the future use of coal-generated energy: Whether coal will pose an unacceptable risk for transitioning to the goal of net zero emissions by 2050?

*The **plain** and **legal** meanings of ‘**equity**’ are similar:*

“fairness”, “justice”.

To address the future of coal, the Paris Agreement must be implemented in a manner to reflect equity and for emission reductions to be undertaken on the basis of equity. Implementation will require a pathway that promotes fairness and justice.

To evaluate whether coal will pose an unacceptable risk to secure the future by reaching the goal of net zero emissions by 2050, fairness and justice will prevail if decision-making is based on the best available, relevant and reliable scientific evidence.

The goal of the levy is to accelerate global R&D for it to be the source of scientific evidence for objective decision-making on the key issues confronting climate change risk and the future of coal - within UN timelines for reaching the goal of net zero emissions.

***The foundations for this pathway –
the “International Trade Treaty’s” research levy,
climate change R&D and equity –
are interdependent and mutually supporting.***

2.0 At the Climate Change Summit the UN Secretary-General raised the need for larger nations to expand their ambitions with new commitments to cut their emissions.

But is this the appropriate direction when considering the future of coal-generated energy?

Are there more equitable options for determining the future of coal, other than to focus on larger nations only to reduce emissions?

There is an alternative model - based on the ***“polluter pays” principle*** – posted by the Author. Its focus is not simply on the ***“larger nations”*** or on the ***“developed-developing country”*** divide – but on the UNFCCC Parties that export and import coal who are also the major contributors of global CO₂ emissions. For example: -

- ❖ ***In 2016, the world’s top five countries that imported coal - together with the top five countries that exported coal – contributed almost half of the global CO₂ emissions in 2017.***
- ❖ ***In order, the world’s top 5 countries that imported coal (in brackets - their % of global CO₂ emissions in 2017) were: PR China 27.2%; India 6.8%; Japan 3.3%; South Korea 1.7%; Chinese Taipei (? %).***
- ❖ ***In order, the world’s top 5 countries that exported coal (in brackets - their % of global CO₂ emissions in 2017) were: Australia 1.08%; Indonesia 1.3%; Russia 4.7%; Colombia 0.2%; and South Africa 1.3%.***

SOURCES:

International Energy Agency (2017)

World Economic Forum (2019)

World Coal Association- World Coal Production (2018)

Statista (2019)

***Consideration of a “risk management levy”
paid on each tonne of coal,
either exported or imported by each country,
as a funding model for global climate change R&D
into clean coal technology
warrants consideration
at COP25, Madrid Spain, 2-13 December 2019
for its application commencing with an update for:
(a) Cumulative historic CO₂ emissions up to 2018
by exporters and importers of coal; and
(b) Contributions to historic global temperature rise
by these exporters and importers of coal.***

End Notes:

¹ The R&D research levy proposed on global exporters and importers of coal has its basis from agricultural R&D in Australia, post-World War II.

Australian primary producers – wool, beef and lamb, wheat, sugar-cane, coarse grains... - were all levied on the market value of their annual farm or property production. The funds levied were then made available to research organizations (Federal, States, Territories, Universities) for R&D.

The outcome from this pathway was for Australia to punch well above its weight, internationally, by being highly competitive in agricultural and livestock exports – in an era of limited free trade agreements.