

Summary: Coal and Gas Mining in Australia - Opportunities for National Law Reform

Report by the Australian Network of Environmental Defender's Offices, 2012

Nine national reforms to protect communities, food security, health, water, climate and biodiversity from the impacts of unsustainable coal and unconventional gas mining in Australia

1. Protect agricultural land by strengthening the legislative force of National Food Plan and Australian Food Council
2. Improve air quality regulation by establishing a National Environment Protection Authority
3. Ensure consistent regulatory standards through a National Mining Policy Statement
4. Reform relevant export control laws
5. Protect water resources from impacts of coal and unconventional gas mining
6. Improve regulation of chemicals used in coal and unconventional gas mining
7. Improve biodiversity protections
8. Protect world heritage areas from impacts of coal and unconventional gas mining
9. Require comprehensive and accurate accounting of all emissions from coal and unconventional gas mining

Specific recommendations to implement each of the above reforms are summarised below.

Protect agricultural land by strengthening the legislative force of National Food Plan and Australian Food Council

Similar to existing precedents for food related Commonwealth legislation (such as the *Food Standards Australia New Zealand Act 1991*), we recommend:

Draft new legislation to address the current regulatory gap in terms of protecting land for food production. The new Act would include 4 key purposes:

- a. To provide a legislative framework for implementing the goals of the National Food Plan. This could involve a Commonwealth umbrella Act that sets relevant standards that State and Territory legislation must meet.
- b. Provide statutory recognition of the role of the Australian Council on Food and clarify that the ACF has a statutory role in advising the Minister on any developments that are likely to impact negatively on food production. Include a legislative requirement that the relevant Minister approving the activity must take into account the advice from the ACF.
- c. Provide for mandatory exclusion zones (applying to both unconventional gas development and coal mining development) including around prime agricultural land used for food production. Offence provisions should also apply.
- d. Make it an offence for a constitutional corporation to engage in unconventional gas development on food producing land without the prior written consent of all individuals with an ownership interest in the land.

Improve air quality regulation by establishing a National Environment Protection Authority

Schedule 4 of the IGAE explicitly states that an agency of the Commonwealth is responsible for developing National Environment Protection Measures for air quality, water quality and so on. These measures are to be tabled in the Commonwealth Parliament for disallowance,ⁱ while legislation is to be passed ensuring that the measures apply in each jurisdiction.ⁱⁱ Thus there is scope for the Commonwealth, in consultation with the States and Territories, to develop more stringent, binding measures. The following recommendations for national reform could therefore be undertaken on air pollution drawing on the existing NEPC and NEPM cooperative model, and underpinned by constitutional powers including in relation to regulating corporations and implementing international standards (external affairs).

1. Establish a national Environment Protection Authority (**EPA**) to administer an Australian *Clean Air and Water Act*. The EPA should be established to have three core functions: setting national standards for States and Territories to implement; assessment/concurrence roles for relevant developments such as coal and unconventional gas mining; and compliance and enforcement. The EPA's responsibilities for regulating air, water and land pollution should be specified in the legislation as enforceable duties. These duties should require that the EPA sets and reviews lists of pollutants and emissions standards, and imposes best practice standards on all licenced facilities to be implemented through State and Territory legislation.
2. In the absence of a new *Clean Air and Water Act*, strengthen implementation of existing standards in the following ways:
 - a. NEPM standards (and the enacting legislation in each State and Territory) should be immediately updated to incorporate an annual average for PM10 of 20 $\mu\text{g}/\text{m}^3$, to make the current advisory standards for PM_{2.5} mandatory and to require the standards to not be exceeded, with exceptions made for natural events.
 - b. NEPM should be revised to require polluters to introduce a program of ongoing pollution reduction where all polluters are required to achieve proportional reductions in emissions.
 - c. NEPM, or an equivalent standard, should be introduced for all major emissions.
 - d. Health Impact Assessment (HIA) should be adopted as part of the environmental impact assessment (EIA) process. This should include comprehensive mandatory assessment of cumulative impacts and a requirement to link air quality monitoring and local pollution reduction targets.

Ensure consistent regulatory standards through a National Mining Policy Statement

The following recommendations for national reform could be undertaken by way of intergovernmental agreement.

1. Develop a National Mining Policy Statement, the implementation of which is to be coordinated through an Intergovernmental Agreement on Coal and Unconventional Gas Mining Impacts.

2. The National Mining Policy Statement should articulate high level principles in relation to protecting food producing land and the environment etc, and establish the cooperative mechanisms by which the principles will be implemented at a State/Territory level. These elements include:

- Principles
- Goals (with timeframes)
- Uniform national standards
- Uniform State and Territory legislation
- Establishment of technical expert working groups to research, monitor and report on different impacts of coal and unconventional gas mining
- Comprehensive regional assessments
- Process for accreditation of state assessment processes where mandatory national standards are met.

Reform relevant export control laws

Amend the *Customs Act* and associated regulations to prohibit the export of coal or unconventional gas from designated areas that are important to Australia and threatened by extraction for exports. Designated areas should include:

1. Areas important to existing Australian industries such as agriculture and tourism, including food-producing areas and tourism assets (particularly our 16 National Tourism Landscapes),
2. Areas important for the protection of Australian natural resources, including water resources, environmentally significant areas, and cultural heritage sites,
3. Areas important for the protection of Australian communities, including buffer zones around all residential dwellings.

Protect water resources from impacts of coal and unconventional gas mining

1. Amend the water trigger in the *EPBC Act* to cover 'other forms of unconventional gas' including shale and tight gas development, and unconventional coal developments such as underground coal gasification.
2. Review the application of the ANZECC Guidelines, with a view to establishing specific national standards for coal and unconventional gas developments. These standards will provide certainty to industry and the community but should allow the ability to adjust standards to meet the needs of unusual environments, for example naturally saline waterways.
3. As per the Recommendation in part 2, establish a national EPA to administer a national *Clean Air and Water Act*.
4. No further underground coal gasification projects should be approved under *EPBC Act* matters of national environmental significance requirements until successful decommissioning of existing projects has been demonstrated.

Improve regulation of chemicals used in coal and unconventional gas mining

Amend the *National Industrial Chemicals Notification and Assessment Scheme Act* (NICNAS Act) in the following ways:

1. Require NICNAS to undertake a full hazard assessment for all chemicals used in unconventional gas and coal activities, including their impacts on human health and the environment. The assessment should be overseen by an advisory body consisting of industry and civil society representatives.
2. Require compulsory disclosure of chemical ingredients of all fracking and drilling products used by constitutional corporations in Australia.
3. Require the Director to prohibit all fracking and drilling chemicals deemed harmful to human health and the environment.

Improve biodiversity protections

Amend the EPBC Act in the following ways:

1. The Act should include clear criteria for refusal of coal and unconventional gas projects.
2. Apply a sunset clause of 2 years on developing mines after they have been deemed a controlled action to ensure that approvals are consistent with the latest knowledge on matters of national environmental significance.
3. Amend Part 9 of the *EPBC Act* to incorporate a transparent assessment process that takes into account the cumulative impacts of coal and unconventional gas development in an area. This should include a requirement to undertake bioregional assessments of the cumulative impacts of coal and unconventional gas developments.
4. Amend Division 6 of Part 8 of the *EPBC Act* to require the Minister to provide proponents of coal mining development or unconventional gas development with tailored guidelines. A schedule should be added to the regulations outlining guidelines that are specifically tailored to coal mining development and unconventional gas development. These guidelines should include a requirement to undertake detailed pre-assessment studies relevant to the matter of national environmental significance in accordance with international standards of best practice.
5. Amend the *EPBC Act* to provide for exclusion zones around sensitive environmental areas, including critical habitat. These would apply to all forms of development, including coal mining and unconventional gas development.
6. Prohibit mining of areas offset for biodiversity under previous approvals.
7. Amend the *EPBC Act* to provide for a schedule of mandatory conditions of consent to be imposed on approved controlled actions (in addition to other conditions of consent), where the controlled action is a coal mining development or unconventional gas development. The Act is to stipulate that mandatory conditions are to be developed in consultation with appropriately qualified experts.
8. Amend the *EPBC Act* to include broad open standing provisions and provide for merits-based appeals of decisions made under the Act.
9. Delete approval bilateral agreements to ensure the Commonwealth retains an approval role for coal and unconventional gas developments.

Protect world heritage areas from impacts of coal and unconventional gas mining

1. Consistent with the World Heritage Convention, amend the EPBC Act so that it protects the 'OUV of a declared World Heritage property', as well as the 'world heritage values of a declared World Heritage property.'
2. Consistent with the Mission Report for the GBR World Heritage area, amend the EPBC Act so that it prohibits development that is likely to impact individually or cumulatively on OUV of all World Heritage properties in Australia.
3. Prohibit dumping of dredge spoil in the GBR World Heritage area and limit dredging to existing channels only.
4. Require buffer zones prohibiting coal and unconventional gas mining around World Heritage Areas.

Require comprehensive and accurate accounting of all emissions from coal and unconventional gas mining

Amend the *National Greenhouse and Energy Reporting (NGER) Act* in the following ways:

1. To ensure that the NGER methods explicitly apply to all forms of fossil fuel extraction, including oil and all forms of unconventional gas (shale gas, coal seam gas and tight gas).
2. All new CSG and unconventional gas projects should be required to complete baseline and ongoing assessments of gas leakage in the area/region affected by the project to quantify any increased escape of methane from pathways across the landscape. Existing projects should be required to assess current levels of gas leakage in the area/region.
3. NGERS should be expanded to immediately require Method 4 recording of fugitive emissions on all wells and flared emissions and to require assessment, verification and accounting of all emission pathways or changes to emission rates from the landscape.
4. Amend the definition of "emission" in the *NGER Act 2007* to include "Scope 3 emissions" and require reporting of Scope 3 emissions by all companies engaged in the production of energy commodities (producing coal, natural gas, oil and their derivatives and uranium).

Amend the *Clean Energy Act* to include require accounting for Scope 3 emissions by:

- a. Amending the objects of Part 7 and adding a new section to that Part to ensure that all companies engaged in the production of energy commodities (producing coal, natural gas, oil and their derivatives and uranium) for export measure and report their Scope 3 emissions, and that any entity exporting energy commodities with scope 3 emissions above 25,000 tonnes is liable to pay an amount equal to the auction price of Australian carbon unit, if they are exporting to countries that do not have an ETS in place.
- b. Amending Part 7 so that money raised from payment for Scope 3 emissions by energy commodity exporters is to be used to fund the Jobs and Competitiveness program and provide structural adjustment to regions where energy commodities are produced.

Appendix: Constitutional Power to reform

Management, regulation and protection of Australia's biodiverse and resource-rich environment has given rise to a unique set of legal challenges, not least of all because the Constitution of Australia does not expressly empower the Commonwealth to create environmental or resource management laws. The Commonwealth may only pass laws based on 'powers' specified in the Constitution. This means that certain areas may only be regulated by the States and Territories. These powers have been broadly interpreted by the High Court so as to afford the Commonwealth increasing scope to legislate in areas that were once thought to be the sole domain of State and Territory Parliaments. Since Federation in 1901, successive Australian governments and the High Court have examined, defined and redefined the complex relationship between States' rights and Commonwealth legislative powers.

It is now clear that the Commonwealth may rely on a range of constitutional 'powers' to create laws to manage our environment in accordance with the principles of ESD. It is also clear that they may regulate coal mining and unconventional gas development in order to protect Australia's unique natural heritage and food producing land.

The Constitution of Australia

The Constitution does not include a 'mining power', a 'land use power', an 'agriculture power' or an 'environmental power.' As a result, it is necessary to determine which of the other powers may be used to enable the Commonwealth to pass laws regulating coal mining and unconventional gas development for the purposes of implementing ESD. Based on our analysis of High Court cases and/or existing legislation, we are of the view that Commonwealth Government is able to rely on the following powers to regulate aspects of coal mining and unconventional gas development:

- ***External affairs power - s. 51 (xxix)*** - the external affairs power enables the Commonwealth to create laws regulating the environmental impacts of coal mining and unconventional gas development, as long as those laws constitute proper implementation of the environmental treaties to which Australia is a signatory.ⁱⁱⁱ
- ***Corporations power - s. 51 (xx)*** - the 'corporations power' confers broad power on the Commonwealth to legislate in respect of most areas directly or indirectly relevant to the operation of corporations covered by s. 51 (xx). Corporations covered by s. 51 (xx) are 'foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth' (**constitutional corporations**).^{iv} This arguably includes the activities of mining companies and unconventional gas companies, including the construction and operation of ancillary infrastructure. Almost all corporations undertaking coal mining or unconventional gas development (including statutory corporations) would clearly satisfy the definition of a 'constitutional corporation'. Notable exceptions would include incorporated associations that undertake various activities, including mining. However, it is entirely possible that in applying the 'activities test', these entities could still be classified as 'constitutional corporations'.^v

- ***Trade and Commerce power - s. 51(i)*** - empowers the Commonwealth to make laws with respect to ‘trade and commerce with other countries, and amongst the States.’ The power enables the Commonwealth to regulate interstate and overseas trade and commercial activities of coal mining companies and unconventional gas companies. This would include most aspects of ‘transporting’ goods from one place to another (that is, interstate or overseas). It also includes background negotiations and financial transactions. While Commonwealth legislation regulating trade or commercial aspects of coal mining and unconventional gas in Australia must not advantage or disadvantage operators (including electricity generators, retailers etc.) in one State (relative to operators in other States) (section 92); the power enables the Commonwealth to:
 - regulate those aspects of mineral and petroleum extraction that may impact – positively or negatively – on the export of those products
 - pass laws regulating the environmental impacts of coal mining and unconventional gas activities where the final products are being exported. This may extend to refusing to grant an export licence
 - regulate intrastate trade of coal or unconventional gas (or associated activities) where it is inextricably connected to interstate or export trade.^{vi}
- ***Territories power - s. 122*** - The ‘territories power’ enables the Commonwealth to pass laws that apply to Australian territories, that is the Northern Territory, the Australian Capital Territory, as well as external territories. The ‘territories power’ is a plenary power which means the Commonwealth is not limited to creating laws covered by the other powers in the Constitution.^{vii} For example, it is more than likely that the ‘territories power’ could be relied upon by the Commonwealth to regulate shale gas exploration and production in the Northern Territory.
- ***Incidental power (s. 51 xxxix)*** - The Commonwealth may pass laws that are ‘incidental’ to the exercise of any other powers in the Constitution. Laws that are ‘incidental’ to the exercise of a power generally regulate something that is indirectly connected to a subject regulated by that power. For example, the export of minerals could be described as a legitimate subject of the ‘trade and commerce power’; according to the High Court, regulating the environmental impacts of mining is indirectly connected to this subject. The court was able to reach this conclusion because there was a sufficient connection between the regulation of these impacts and the export of the minerals.^{viii}

In addition to unilateral Commonwealth legislation based on these five Constitutional powers, there are a number of cooperative processes that can and have been used to determine responsibility for natural resource management in Australia. Federal policy coordination and the development of agreements through COAG should be used in relation to strengthening regulation of coal and unconventional gas mining in Australia to ensure such activities are consistent with ecologically sustainable development.

There is therefore no strictly legal impediment to implementing the 10 areas of law reform recommendations contained in this report. Rather, inter-governmental cooperation and political will are necessary if the community’s expectations regarding regulation of these industries are to be met.

ⁱ IGAE, Schedule 4, Cls. 13 – 15.

ⁱⁱ IGAE, Schedule 4, Cl. 16.

ⁱⁱⁱ Australia is a party to a number of environmental treaties potentially relevant to assessing the impacts of coal and unconventional gas mining including:

- Convention Concerning the Protection of World Cultural and Natural Heritage (**World Heritage Convention**);
- Convention on Biological Diversity (**Biodiversity Convention**);
- Convention on Wetlands of International Importance, especially as Waterfowl Habitat (**Ramsar Convention**);
- Convention on Migratory Species (**Bonn Convention**);
- Stockholm Convention on Persistent Organic Pollutants (**Stockholm Convention**);
- United Nations Framework Convention on Climate Change (**UNFCCC**) and the Kyoto Protocol;
- United Nations Convention to Combat Desertification (**Desertification Convention**);
- United Nations Convention on the Law of the Sea (**Law of the Sea Convention**);
- Convention on Conservation of Nature in the South Pacific (**Apia Convention**).
- China-Australia Migratory Bird Agreement (**CAMBA**).
- Japan-Australia Migratory Bird Agreement (**JAMBA**).
- Republic of Korea Migratory Bird Agreement (**ROKAMBA**).

^{iv} See: *NSW v Commonwealth* (2006) 229 CLR 1.

^v See for example *Pellow v Umoona Community Council* (AIRC, SDP, O'Callaghan, PR973365, 19 July 2006) in which it was held that trading activity amounting to 10.64 per cent of overall activity was sufficient for the Community Council to be classified as a 'trading corporation' for the purposes of s. 51 (xx).

^{vi} *Redfern v Dunlop Rubber Australia Ltd* (1964) 110 CLR 194.

^{vii} See for example *Teori Tau v The Commonwealth* (1969) 119 CLR 564; *Spratt v Hermes* (1965) 114 CLR 226;

^{viii} *Murphyores Incorporated Pty Ltd v Commonwealth* (1976) 136 CLR 1; [1976] HCA 20. See also *Burton v Honan* (1952) 86 CLR 169 in which Dixon J argued at 17 that there must be a 'reasonable connection' between the law relying on the incidental power, and the subject of the main power.