

# Submission on the AGL APA Gas Import Jetty and Pipeline Project Draft Scoping Requirements

December 2018



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Healthy planet, healthy people.

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Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices to prevent and address the diseases - local, national and global - caused by damage to our natural environment. We are a public health voice in the sphere of environmental health with a primary focus on the harms to health from pollution and climate change.

The medical profession has a proud record of service to the community. This record not only includes personal clinical care, but also involvement in global issues that threaten our future generations. We aim to use our scientific and medical skills to educate governments, industry, the public and our colleagues by highlighting the medical importance of our natural environment.

DEA welcomes the opportunity to comment on the Draft EES scoping requirements for the proposed AGL APA gas import jetty and pipeline project at Crib Point in Western Port Bay, Victoria.

***Description of project:***

*The proposal includes upgrade/modification works to the existing jetty owned and operated by the Port of Hastings, to provide for continuous mooring of a floating storage and regasification unit (FSRU) – a vessel with LNG storage and regasification capacity. LNG carriers, tankers approximately 300 m in length, will moor alongside the FSRU and transfer cargo to the FSRU. The LNG is stored and re-gasified as required to meet market demands. The proposal includes a 56 km, high-pressure gas pipeline to transfer gas to a location east of Pakenham.*

*The import facility project life is anticipated to be approximately 20 years.*

### 3. Matters to be addressed in the EES

#### 3.1 “The EES should assess the environmental effects of all components and stages of the project.”

DEA’s overarching concern is clear evidence of the substantial and rising greenhouse gas footprint of Australia’s expanding gas and oil industry that threatens efforts to urgently reduce emissions and mitigate global warming. Currently Australia is the second largest LNP exporter in the world and expected to be the largest exporter by 2019<sup>2</sup>.

It is not possible to overemphasise the enormity of health, economic, security and environmental costs of an inadequate response to climate change.

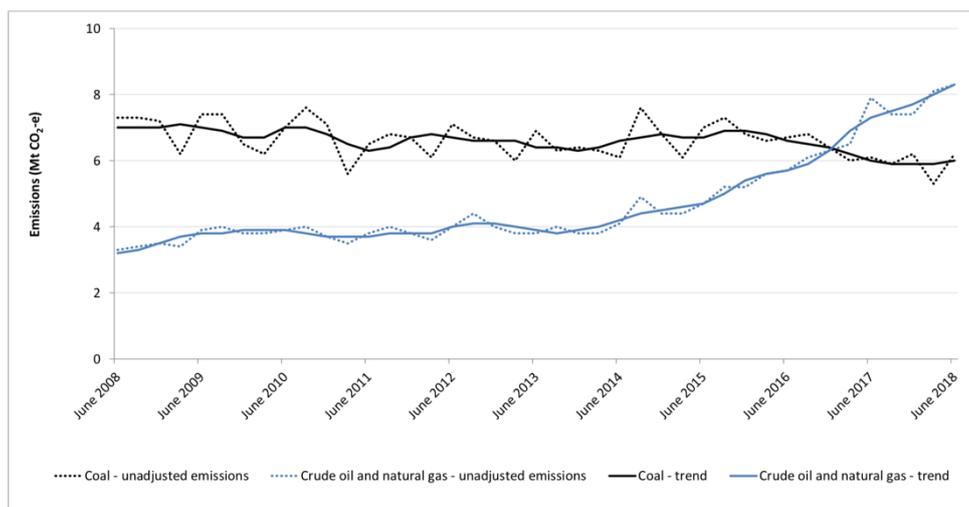
The carbon emissions of the gas industry are often underestimated through:

- Failure to consider the footprint of the entire lifecycle of gas production, transport and use;
- Underestimation of the quantity and duration of fugitive methane emissions;
- Inappropriate application of climate-forcing potency of methane over a 100-year time timeframe (20 times more than CO<sub>2</sub>), rather than the more appropriate 20-year timeframe (86 times higher potency) given the already measurable health impacts of current rapid warming;
- Failure to consider the potential significance of large-scale methane-emitting accidents and leakages that are difficult to stop quickly;
- Failure to incorporate the negative political influences and economic competition between abundant gas from large expansions and low emission renewable energies in the energy market.<sup>3</sup>

The EES must include the impact of this project’s carbon footprint for its entire life cycle, in terms of the greenhouse gas production associated with materials, the construction and maintenance of the project, its operation and its subsequent rehabilitation. The EES must include the energy costs of transport, shipping, the liquefaction of gas and its regasification. The EES must be required to identify where the imported gas is coming from, its life cycle profile, and its cost and impact on national and international emissions<sup>4, 5</sup>. The carbon costs incurred need to be directly compared to relevant alternatives such as extending current or seeking new gas supply contracts with Victorian gas producers.

The project also requires accurate monitoring and assessment of fugitive emissions, which are a direct loss of methane gas into the atmosphere through leakages, spills, accidents, normal wear and tear and improperly constructed infrastructure at all stages of extraction, production, processing, transport, storage, de- and re-gasification and distribution of gas<sup>6</sup>. As monitoring of all these steps is impractical, the problem of fugitive emissions cannot be adequately addressed. When the entire life cycle of gas is taken into consideration, fugitive (leaking) methane emissions greatly diminishes the claimed climate 'advantage' of gas over coal<sup>7, 8</sup>. Fugitive emissions produced from the gas industry are an unacceptable health risk (Health and Climate Change Commission 2015)<sup>9</sup>.

Figure 15: Fugitive emissions by quarterly, sub-sector, unadjusted and trend emissions, Australia, June 2008 to June 2018



Source: Department of the Environment and Energy

***Quarterly Update of Australia's National Greenhouse Gas Inventory: March 2018, Commonwealth of Australia 2018, p 15.***

### **3.7 – Draft Evaluation Objectives** **Energy efficiency, security, affordability and safety**

The EES must include the rationale of the project in terms of the need for gas, and the Victorian government's commitment to emissions reduction and a transition to renewable energy. Accelerating new and expanding existing gas developments is counterproductive to reducing greenhouse gas emissions and the importation of gas is contrary to Victoria's renewable energy targets and current energy policy. In June 2016, the Victorian Government committed to Victorian renewable energy generation targets of 25% by 2020, 40% by 2025 and net zero emissions by 2050<sup>10</sup>.

The current abundance of gas on the global market is not acting as a bridging fuel towards renewable energies but is instead competing against the adoption of renewable energies<sup>11, 12</sup>. Prices paid for gas do not include the many externalities – costs borne by communities – resulting from environmental loss, climate impacts, health loss and social conflicts and tensions between those gaining and those losing from developments in their midst.<sup>3</sup>

## **Biodiversity**

The EES identifies key issues of the Crib Point project impacting biodiversity including loss of native vegetation, risks to threatened flora, fauna and marine species, loss of habitat and ecological character, introduction of pollutants, weeds, pathogens, exotic species and pests and a direct threat to the protected Western Port Ramsar site.

Natural ecosystems support our health by filtering our air, providing fresh water and food, regulating our climate, directly improving human health and protecting against the spread of disease and pests. They also foster our mental wellbeing and serve as places of recreation and sources of nature-based jobs in tourism and other vocations. Furthermore, with over one third of all medicines derived from nature, protected ecosystems are a form of innovative capital for future medical advances.<sup>13</sup>

DEA notes that restoration of biodiversity is rarely successful after mining and other projects. Similarly, the use of “offsets” as a trade off in development approvals is not supported, for they fail to provide adequate habitat replacement <sup>14, 15, 16</sup>.

## **Social, economic, amenity and land use**

The EES must include health risk assessments for residents in the local communities close to the proposed project. The EES must include comprehensive baseline monitoring of air and water quality, established prior to project development, independent of industry, and continue throughout development to completion, including biological markers of exposure to potential pollutants in local populations. Results must be transparent and publicly available. Without baseline measurement it will not be possible to determine if project activities were responsible for any subsequent adverse health and environmental effects.

Residents could experience a decrease in air quality, an increase in dust emissions, noise, vibration, lighting and heavy vehicle traffic from industrial activities associated with gas infrastructure, especially during the construction phase. Industry infrastructure brings a loss of amenity, increased risk of traffic accidents<sup>17, 18</sup> and increased exposure to diesel engine exhaust<sup>19</sup>. Diesel exhaust from trucks and heavy machinery

contains particulate matter, nitrogen oxides and volatile organic compounds and is classified as a Group 1 carcinogen by the International Agency for Research on Cancer (IARC 2014).

Health risk assessments must include social impacts resulting from project activities, with baseline studies continuing to both the construction and operational stages. It is very important to recognise that infant and child well-being is highly sensitive to psychosocial and community stressors, including noise, heavy traffic, negative emotions expressed by others and witnessing aggression and conflict and, potentially, fear of pollution. Disturbance of place attachment as a result of unconventional gas development may contribute to loss of wellbeing<sup>20, 21</sup>.

## 4.6 Waste management

The EES must include baseline and ongoing air quality monitoring. Air pollution from heavy shipping contributes a small but important share of the fine particle pollution experienced in coastal areas. This is due to the bunker fuel they burn being the dregs left over from the fuel refining process. It can contain up to 3.5% sulphur, which is 3,500 times higher than allowable in diesel fuel for road use, as well as other contaminants such as heavy metals. Under Annex VI of the MARPOL Convention on marine pollution, DEA recommends the use of low sulphur fuel for shipping within 200km of any Australian city<sup>22</sup>.

The EES must investigate all project risks, including the management and responsibilities incurred from low risk but high impact, large scale methane-emitting accidents, rollovers, spills, leakages, pipeline breaches, fires and marine accidents that are of significant or catastrophic impact, and the financial and environmental responsibility of dealing with such an accident and its aftermath. Such an event requires planning of emergency strategies to deal with major accidents and subsequent health impacts on local residents.

Similarly, the EES requires a full and thorough assessment and emergency planning for the impact of bushfires at or around either the high-pressure gas pipeline the gas import jetty facility. Both are in areas of high bushfire risk.<sup>23</sup>

In February 2014, bushfires sparked a fire in the Hazelwood mine in the Latrobe Valley. The fire comprised a major complex fire emergency and a serious public health emergency. The subsequent Hazelwood Mine Fire Inquiry report said that the owner, GDF Suez was inadequately prepared to manage the fire and called for better regulation, preparation and emergency strategies. The report also stated the cost of the fire was more than \$100 million, a significant amount of which was paid by the Victorian taxpayer. The report made the several recommendations to the Victorian government regarding fire management planning for industry providers.<sup>24</sup>

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