

Letter

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The power of public health officers to curb greenhouse gas emissions

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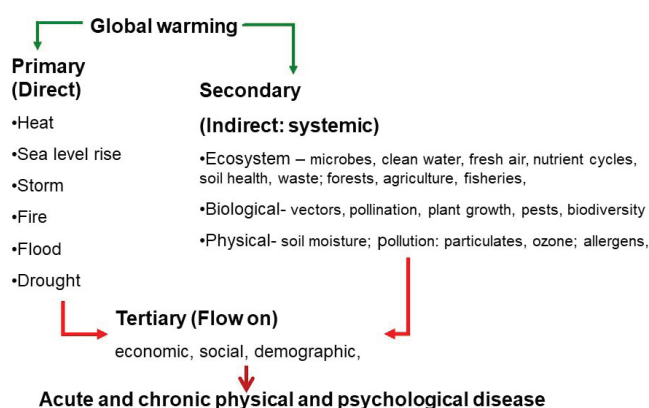
Fossil-fuel greenhouse gas (GHG) emissions drive global warming and already impact population health (summarised in Figure 1).^{1,2} Awareness of the urgent need to act is gaining momentum. The potential co-benefits from reducing GHGs and altering societal practices frame climate change as 'the greatest global health opportunity of the 21st century'.³

Global warming mitigation in Australia is stalled raising a pertinent question: how can the public health system promote action? One way forward may be by using existing public health legislation. Accordingly, we reviewed the scope for public health officers (Chief Medical or Health Officers or other public health medical officers) in Australia to enforce measures that will reduce GHG emissions and, consequently, health harms.⁴ Within all Australian state and territory public health Acts we identified numerous powers that enable public health officers in Australia to act in the public interest against fossil fuel-generated pollution where it infringes public health. These powers are summarised in Table 1. If used effectively these powers could change energy producers' operations and shape the behaviour of energy consumers in order to protect and improve the public's health.

As well as reviewing Australian public health Acts, we sought international examples of public health agencies using their legislative powers to act against fossil-fuel generation and use.

Internationally there were no examples where public health officers exercised public health powers directly to reduce fossil-fuel use and GHG production. However, in the UK, health impacts were a factor leading to the Scottish government not approving hydraulic fracturing.⁵ In England, the merging of public health into local government councils provided opportunity for public

Figure 1: Global warming health effects.



Adapted from: McMichael Anthony J, 2009, *Climate Change in Australia: Risks to Human Wellbeing and Health*, Austral Special Report 09-035. The Nautilus Institute, RMIT, Melbourne, Australia; adapted from figure 1, p4, and

Butler C & Harley D, 2010. *Primary, secondary and tertiary effects of eco-climate change: the medical response*. *Postgraduate Medical Journal*, Vol. 86, pp 230-234.

Table 1: Summary of available public health officers' powers in Australian public health Acts.

Power	ACT	NSW	VIC	SA	QLD	WA	NT	TAS
Ensure environmental health	√	√	√		√	√	√	√
Appoint environmental officer		√	√			√		√
Monitor air and water quality	√	√	√		√	√	√	√
Early detection/prevention PH risks	√	√	√	√	√	√		√
Draft policy			√	√	√	√	√	
Investigate (seizure etc)	√	√	√	√	√	√	√	√
Report without defamation	√	√			√	√		√
Improvement notices and enforcement orders	√	√	√	√	√	√	√	√
Initiate criminal prosecuting		√	√	√	√	√	√	√
Cease operation orders	√	√	√	√	√	√	√	√
Withdraw powers from local council				√		√		√

health to drive projects that reduced GHG emissions.⁶ These examples demonstrate that there is opportunity for public health officers to use existing legislation and regulation to effect GHG reduction. The lesson from the Ontario phase-out of coal electricity generation shows that where the public health system supports a societal change for health reasons, it makes that change more possible.⁷⁻¹¹ Overall, these cases demonstrate the importance of health leadership in public debate.

Based on our review of public health Acts and international precedents we suggest Australian public health officers might look at actions for curtailing fossil-fuel use and reducing greenhouse gas production in these areas:

1. Monitoring and publicising local links between ambient temperature, air and water quality and health impacts

2. Quantifying the cost to the healthcare system of continuing fossil-fuel production and consumption in Australia
3. Strengthening links between public health and other departments, particularly energy and environment
4. Taking an oversight role across all of government to ensure a 'health-in-all-policy' approach is being taken, especially regarding GHG emissions
5. Monitoring and reporting on the activities of industries and companies that have major GHG emissions.

Frumkin¹ and McMichael¹² define public health as an applied discipline, to prevent illness, injury and premature mortality, and to promote health and wellbeing. This establishes a professional expectation on public health officers to act where necessary.

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Our review of Australian public health Acts and the international examples show there is considerable scope and indeed a legislated mandate for public health officers to use the Acts to effect powerful and robust change to promote the public's health. While not explicit, logically this includes protecting the public from the threats to health from air pollution, greenhouse gas emissions, global warming and climate disruption. We do recognise that public health officers operate within bounds of Ministerial oversight and discretion, and that using the Acts in the manner suggested will require creative use of definitions and provisions within the Acts, negotiation with the Minister and use of windows of political opportunity. The key point therefore is not whether the Acts are able to be used but whether public health officers would use them in this way.

The implications for public health are clear. This legal mandate creates a community expectation that public health agencies will exercise their powers and fulfil their responsibilities to protect and enhance the public health of Australians in relation to global warming by using their powers, as has been done overseas. Future generations will judge whether our current public health officers fulfilled the community expectation of their duties. It is up to our current public health officers to decide how they would like posterity to judge them. Therefore, we invite public health officers to explore constructive use of their powers to create change. As a basis for further discussion, we commend our report⁴ to you.

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