



## COVER SHEET FOR SUBMISSIONS

### Overview

Feedback is invited on the discussion paper: *Updating the 2009 National Waste Policy: Less waste, more resources*. Submissions should be provided by 5pm (AEST), Friday 5 October 2018.

### Contact details

### ***Updating the 2009 National Waste Policy: Less waste, more resources***

<b>Organisation</b> (if applicable)			Centre for Air pollution, energy and health Research (CAR)
<b>Title</b>	<b>Ms</b>	<b>Name</b> (required)	Ana Porta Cubas
<b>Position within organisation</b> (if applicable)			Knowledge and Translation Broker
<b>Postal address</b> (required)			431 Glebe Pt Rd, Glebe, NSW
<b>Email address</b> (required)			ana.porta@sydney.edu.au
<b>Phone number</b> (optional)			



## Confidentiality and publication

Unless you indicate that your submission is confidential, it will be treated as a public document. It may be published in full on the Department's website, or included in a published summary report of submissions.

If you do indicate that your submission is confidential, it will not be published on the Department's website.

### Is this a confidential submission?

Yes  No

(If yes, please clearly mark each page of your submission 'confidential')

## Privacy

The Department will deal with personal information contained in, or provided in relation to, submissions in accordance with its Privacy Policy ([www.environment.gov.au/privacy-policy](http://www.environment.gov.au/privacy-policy)).

Contact information is collected for the purposes of identifying authors and in case we need to get in touch with you in relation to your submission. Contact information and other personal information contained in submissions may be used, and disclosed within the Department and to other persons, for the purposes of updating the 2009 National Waste Policy, for related purposes, and otherwise as required or permitted by law. Submissions may also be shared with other Government agencies.



**If you are making a submission which contains the personal information of another person**, and you have *not* obtained the person's consent to their information:

- being included in your submission; and
- being used and potentially published by the Department for the purposes set out in this notice,

please de-identify or otherwise remove the personal information before providing your submission to the Department.

### **Liability**

The views contained in published submissions are the responsibility of the authors and should not be taken to represent the views of the Department or the Australian Government. Publication does not in any way constitute endorsement of the views of the authors.

The Department does not verify the information contained in published submissions and makes no representation or warranty about the accuracy, reliability, currency or completeness of any material contained in submissions.

The Department disclaims liability, to the extent permitted by law, for any liabilities, losses, damages and costs arising from any information contained in published submissions.

### **Freedom of Information**

A request may be made under the *Freedom of Information Act 1982* for access to a submission, including a submission marked 'confidential'. Such requests, including determining whether information is exempt from release, will be handled in accordance with provisions of the Act.

### **Submission instructions**

Submissions are due by 5pm (AEST), Friday 5 October 2018. Late submissions may not be considered.

Where possible, submissions should be sent electronically, preferably in Microsoft Word or other text-based formats, to the email address below.

All submissions must include this cover sheet.

Submissions should be sent to:

Email: [nationalwastepolicy@environment.gov.au](mailto:nationalwastepolicy@environment.gov.au)

Post: GPO Box 787, Canberra ACT, 2601



## **Submission from the Centre for Air pollution, energy and health Research (CAR)**

**Date:** 5 October 2018

Thank you for the opportunity to comment on the *Updating the 2009 National Waste Policy: Less waste, more resources* Discussion Paper.

The Centre for Air pollution, energy and health Research (CAR) brings together researchers at the forefront of their respective fields to research the impacts of air pollution and new forms of energy on health.

### **CAR is supportive of reducing Australia's waste via the proposed waste hierarchy**

CAR is supportive of the use of the waste hierarchy (Figure 2) for decision-making processes. Specifically we agree that emphasis should be on reducing waste in the first place- i.e. Principle number 1 of the circular economy- rather than on energy recovery. Furthermore, when trying to increase Australia's waste recovery rate to 80 per cent CAR suggests this hierarchy should be adhered to. That is, CAR does not recommend the increased uptake of waste to energy recovery at the expense of waste avoidance and reduction.

### **Health impacts of waste to energy processes need to be considered in decision-making processes**

Our stance is because further investigation needs to be done on the health impacts of waste to energy processes. Initially waste to energy may seem like a viable economic option for both reducing waste and generating relatively cheap electricity. However, greater thought needs to be given to longer term economic costs derived from potential health impacts to the population. Any combustion of material will generate pollutants which may be deleterious to human health and combustion of waste is no exception.

Of primary concern in waste to energy processes is the release of dioxins and furans given their toxicity, ability to accumulate and production from combustion. Additionally the release of heavy metals such as lead, cadmium, thallium and mercury is problematic. It appears however, that levels released are highly dependent on feedstock and any mitigation strategies put in place by waste to energy plants. The key therefore is better integrating likely health impacts from particular plants or technologies into decision making process around waste to energy and waste disposal more generally.

In this same vein, CAR is supportive of Strategy 11 to better manage chemicals and hazardous waste to minimise their health impacts.

More broadly, CAR feels that although we must transition to newer energy sources (such as waste to energy) the health impacts of these new technologies must be investigated, and this must be done from a life cycle point of view. These findings should in turn inform



management strategies to mitigate any health impacts. As such, we are undertaking a program of research investigating the links between energy transitions and health.

### **Product stewardship is important in mitigating any negative health impacts of waste disposal**

CAR supports the Discussion Paper's Strategy 4: 'Product stewardship' under Principle 2 of the circular economy. CAR has previously provided a submission to the *Proposed national approach to product stewardship action on environmental impacts of products* which can be found via <http://www.environment.gov.au/submissions/protection/product-stewardship/national-approach/car.pdf>

Under Strategy 4, CAR particularly supports the end-of-life management system for photovoltaic panels and batteries. But much like our previous submission on stewardship we recommend that the management system have an emphasis on the health impacts of photovoltaic panel disposal and that it be extended to look at all stages of a panel's lifecycle rather than just the end-of life stage.

### **About CAR**

The Centre for Air pollution, energy and health Research (CAR) is a Centre of Research Excellence funded by the National Health and Medical Research Council. CAR brings together over 30 researchers at the forefront of their fields to investigate how air pollution and new forms of energy affect our health. Our vision for a healthier community is the driving force behind our research.

CAR supports teams of researchers in the fields of epidemiology, exposure assessment, toxicology, chemistry, biostatistics and clinical respiratory medicine to pursue collaborative projects and to develop their capacity. We are based in seven of Australia's leading universities and research institutions.