18 December 2017

Turning waste into energy

The Northern Alliance for Greenhouse Action (NAGA) is pleased to take this opportunity to submit feedback to the *Turning waste into energy* consultation.

NAGA is a network of nine northern Melbourne metropolitan councils working to achieve significant emissions abatement and energy cost savings by delivering effective programs and leveraging local government, community and business action. Our council members include the cities of Banyule, Darebin, Hume, Manningham, Whittlesea, Yarra, Melbourne, Moreland, Moreland Energy Foundation Limited, and Nillumbik Shire Council. NAGA formed in 2002 to share information, coordinate emission reduction activities and cooperate on research and develop innovative projects.

The Victorian Government has recognised the need to decarbonise Victoria's energy sector, and has developed an ambitious Victorian Renewable Energy Target (VRET) of 25% by 2020, and 40% by 2025. The NAGA councils have a strong interest in promoting and facilitating renewable energy, and recognise that producing energy from municipal waste has a role to play in that generation.

NAGA supports policy that aligns with the current waste hierarchy which favours waste avoidance, reuse and recycling ahead of energy recovery. We note that a key factor in encouraging waste to energy projects is a requirement for long term contracts between waste to energy plant builders and owners and waste suppliers, in order to provide investment certainty. However, we also note that in some mature waste to energy markets, such as Sweden, this has led to perverse outcomes in which countries have had to import waste from neighbouring nations in order to provide steady revenue streams for plant investors. Critics of waste to energy plants also note that while mature markets have strong recycling rates, these are constrained in reaching their full potential by the economic drive to ensure sufficient waste is available for waste to energy plants.

Consequently, NAGA recommends that policymakers should consider a cap on the amount of waste to be diverted to waste to energy projects. This approach has been applied by municipal waste authorities in Flanders, Belgium resulting in an increase in reuse and recycling rates, while providing certainty for investors. This cap should be at a level low enough to ensure that reducing the amount of waste being produce continues to be incentivised.

In addition, we recommend that food and garden organics and flexible plastics recycling should be part of all household collections before access to waste to energy is allowed for these streams. Similarly, waste from industrial sources should preclude recyclables such as tyres, e-waste and cardboard. NAGA would also encourage the Victorian Government to preference technology with the least harmful environmental outputs. While all waste to

energy processes have residual wastes, some of these are more harmful than others depending on the treatment the waste has been through e.g. incineration produces toxic furans and dioxins, particularly from PVC containing plastics and other materials when they burn. Rather than trying to control the release of these toxins into the environment it would be preferable to prioritise a treatment process that does not produce them in the first place.

A recent feasibility study into a regional waste to energy facility in Hepburn Shire, conducted by the Central Victorian Greenhouse Alliance, found there are many existing regulations around the location and design of waste to energy facilities. The study that found many of these regulations require very strict planning approvals and EPA requirements once certain thresholds have been passed. However, as waste to energy is a relatively new sector many of these regulations are non-specific and do not consider the many different technology and design solutions available for waste to energy projects and are acting as barriers to investment. NAGA recommends that the current regulatory requirements are reviewed in order to ascertain what is appropriate for different scales of waste to energy facilities considering the latest technological advancements. In addition, we recommend that the Victorian Government work closely with waste to energy projects currently being funded through the SV Waste to Energy Infrastructure Fund to evaluate the appropriateness of the current regulatory regime.

One of the great opportunities in the sector is the advancement of Combined Heat and Power and the roll out of district heating systems. There is very limited uptake of these projects in Australia. Doncaster Hill in the City of Manningham is advanced in developing a district heating system, however has come across a number of regulatory barriers in relation to sharing energy across property boundaries and complex rules around private and public ownership. Lessons from this project should be considered in order to make district heat options more widely accessible and adopted in new and retrofitted precincts and other settings.

Please contact David Meiklejohn (david@naga.org.au) if you would like further information, case studies or any clarification regarding the issues raised in this letter.

Yours sincerely

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The views represented in this submission do not necessarily represent the views of all NAGA members individually.