

**Submission
No 165**

INQUIRY INTO 'ENERGY FROM WASTE' TECHNOLOGY

Organisation: Australian Pork Limited

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The Hon Paul Green MLC

Portfolio Committee No 6
NSW Legislative Council
Parliament House
Macquarie Street
SYDNEY NSW 2000

Via email: portfoliocommittee6@parliament.nsw.gov.au

Dear Mr Green

**Portfolio Committee No 6 – Planning and Environment
Inquiry into ‘Energy from Waste’ Technology**

Australian Pork Limited (APL) is the national representative body for Australian pig producers. It is a producer-owned, not-for-profit company combining marketing, research & innovation and policy development to assist in securing a profitable and sustainable future for the Australian pork industry. APL works in close association with key industry and government stakeholders.

The Australian pork industry employs more than 20,000 people in Australia and contributes approximately \$3 billion in gross domestic product to the Australian economy. The pork industry contributes approximately 2.13 per cent of total Australian farm production with roughly 1500 pig producers producing over five million pigs for slaughter annually.

APL welcomes the opportunity to comment on the regulatory processes used to manage energy from waste. The following comments reflect industry investment in science, research and adoption through producer extension activities. APL's submission will focus on regulatory processes relevant to the Australian pork industry, including environmentally responsible business operations producing biogas.

APL notes that there are a small number of piggeries licenced by the Environmental Protection Authority (EPA) under the relevant planning requirements. Regulatory processes relevant to managing biogas facilities in the pork industry should consider the breadth of available technology, current investment in research and development and the current adoption capacity of Australia's pork industry. Where possible, the NSW Government should consider options that will avoid perverse outcomes and future regulatory burden on viable, regionally based industries that continue to contribute to reducing impacts on the environment.

In response to the growing interest in biogas technology from Australian pig producers, APL developed the Code of Practice for On-farm Biogas Production and Use for Piggeries¹. The Code of Practice (CoP) aims to provide a framework and guiding platform for the safe design, construction, operation, and maintenance of biogas systems by industry. The code was developed via extensive consultation with EPA representatives from all states, with the exception of NSW, in addition to state and federal gas safety regulators, again with the

¹ http://australianpork.com.au/wp-content/uploads/2013/10/2011_1013-423-CoP-Final-April15.pdf

exception of NSW. APL made numerous unsuccessful attempts to engage NSW government representatives in the drafting process.

The CoP makes reference to international best practice and Australian regulations and standards relevant to biogas production. Producers who use the CoP are responsible for compliance with all peripheral and relevant legislation, including that which is not identified in this CoP. The experiences of Australian pork producers in planning approvals of piggery development, including biogas systems, suggest that the current state regulatory environment requires a collaborative drafting process. In addition to the CoP, industry developed a complementary Gas Safety Management Plan to address site specific considerations, aligning with the biogas code.

APL supports a transparent approach taken by government that reflects the needs of the Australian pork producers who wish to commence or expand business operations, and notes that these piggeries must meet reasonable social, economic and environmental expectations of the wider community.

APL would like to provide the following comments on the energy from waste regulatory environment and potential impacts and opportunities for the NSW pork industry.

Overview

A key challenge faced by the Australian pork industry is the need to maintain local production of high quality food for a reasonable price, and return on production capital invested, without negatively impacting pig welfare, the environment or consumer health. Society more broadly has benefited from investment in rural industries through improved food safety and security, more competitive agribusinesses offering employment opportunities, broader regional economic development, and environmental protection measures. This opportunity needs to be further capitalised by enabling and facilitating the up-take of technology on farm such as energy from waste.

Current investment in science, research and technology by the Australian pork industry

APL was successful in being the lead agency in the Federal Government's Rural R&D for Profit project 'Waste to Revenue: Novel Fertilisers and Feeds' worth \$2 million. Dairy Australia, Sugar Research Australia Ltd, Meat & Livestock Australia and Rural Industries Research Development Corporation also support this project. The project, being carried out by University of Queensland and University of Western Australia, aims to develop new waste technologies that utilise algae, purple phototrophic bacteria and chemotrophs to recapture nutrients in waste as fertiliser and feed products.

In addition to the above, APL led the Federal Government's National Agricultural Manure Management Programme, commissioned the Pork Industry Energy Efficiency Program, and has invested in biogas through the Pork Cooperative Research Centre.

Opportunity for government

Currently, 13.5 percent of total Australian pork production is sourced from farms with biogas systems implemented. The potential for additional uptake is significant, and is economically viable for piggeries with more than 500 sows. Biogas options for smaller piggeries remain a challenge and an area for future investigation. It is important that any new regulatory system does not impede the future viability of biogas for smaller sites.

With the continual rise of energy costs and the Australian pork industry's commitment to reduce its carbon footprint to 1kg of CO₂ per kg of pork produced, investing in biogas has proven to be a viable business option as well as offering environmental benefit. For example, the Federal Government's Energy Regulator, through the Emission Reduction Fund, encourages investment by providing a financial incentive for producers. There are 20 biogas systems on piggery farms across Australia, and 200,000 tonne of CO₂ abated with 10

entities currently generating credits. There is an estimated cost benefit of \$5 per head on a 500 sow or larger operation. To date, \$10.4 million in carbon credits have been contracted through the federal Carbon Farming Initiative and Emissions Reduction Fund.

Not only does the fund assist with reducing payback periods, it provides producers and their lending institutions (such as banks) confidence to invest in the infrastructure in regards to returns and paybacks. Burdensome regulation at the state level would effectively cancel out any benefit provided by these federal initiatives.

There are additional commercial piggeries wishing to capture and utilise biogas. Piggery operations with biogas also have the opportunity to generate large-scale renewable energy certificates (LREC's). These LRECs can contribute to offsetting annual maintenance costs associated with running the on farm energy from waste systems and therefore are another good incentive to assist with the uptake of technology in the long term.

Enforcement through regulation

According to a review of Australian Regulations and Standards for Handling and Treatment of Biogas², there is currently a state of confusion amongst local and state based regulatory authorities and producers wishing to pursue the use of biogas as a sustainable energy source. A consistent approach across all states and territories would be advantageous with Western Australia and Victoria indicating a preference towards incorporating the current industry-led code as the preferred basis of further regulation development.

Biogas is not specifically addressed in NSW, rendering the producer's task of determining regulation requirements difficult and - at times - conflicting. There is wide variation between states and territories on how biogas production is currently regulated, with industrial and gas supply chain networks and other non-networked gas requirements being far too prescriptive and onerous to be applied to on farm production.

APL suggests NSW consider the Code of Practice for On-farm Biogas Production and Use for Piggeries and Gas Safety Management Plan as a model for the development of any energy from waste regulatory framework in NSW.

APL would welcome the opportunity to work with government to come up with a solution for all stakeholders.

Should you have any queries relating to this submission, please contact Deb Kerr, General Manager, Policy

Yours sincerely

Andrew Robertson
Acting General Manager Policy

² <https://australianpork.infoservices.com.au/collections/sg5>