Australian Dairy Industry Council Inc.

7 February 2014

Energy White Paper Taskforce
Department of Industry
GPO Box 1564
CANBERRA ACT 2601

Email: EWP@industry.gov.au

Dear Sir/Madam,

**SUBMISSION FOR ENERGY WHITE PAPER – ISSUES PAPER**

I make this submission on behalf of the Australian Dairy Industry Council (ADIC), the peak industry body representing the whole of the dairy value chain – dairy farmers and manufacturing companies.

Australian dairy is a $13 billion farm, with the manufacturing and export industry directly employing 43,000 Australians and indirectly providing a livelihood for more than 100,000 people in service industries. Compared to other primary producers, the Australian dairy industry is disproportionately exposed to electricity costs due to the industry's high power needs in milking machinery, cool milk storage, and intensive milk processing procedures. The dairy industry also recognises that its potential to grow may impact on greenhouse gas emissions. There is a strong link between the industry's target to reduce emissions intensity by 30% by 2020, and the industry's use of electricity.

The dairy industry takes an interest in the Energy White Paper Issues Paper with particular reference to the following terms of reference:

i. Policy and regulatory reform to secure reliable, competitively and transparently priced energy
ii. The appropriate role for government in the energy sector, particularly with regard to new energy sources
iii. Opportunities to drive the more productive and efficient use of energy

ABARES has identified that electricity accounts for 2.4% of total dairy farm operating costs, compared with 0.8% in livestock/cropping enterprises. This is because dairy farming's chief energy source is electricity, while cropping, sheep and beef grazing mainly rely on transport fuels.

Energy usage patterns and costs in dairies over time are highly complex and highly specific to each farm business. They reflect factors such as:

- Size of the herd, and type of milking system
- Milk production systems, whether seasonal or milking all year around
- Age and operating efficiency of plant such as milking machines and refrigeration
- Seasonal conditions, which may affect the timing, number of cows milked, and irrigation pumping
- Environmental policy decisions pushing dairy farmers to install new, more energy-intensive irrigation technologies to reduce water use and increase environmental flows in rivers
- Upgrades or efficiency measures undertaken to reduce consumption and therefore costs
- Renegotiation of tariffs or contracts with energy companies to reduce costs

Analysis commissioned by Dairy Australia indicates that typical dairy farmers are now spending between $20 to over $100 a day on electricity to power their dairies. Rising tariffs, additional levies such as the carbon price and renewable energy schemes, and increasing network charges have contributed to daily costs rising 33-100% for many farms since 2010. Similarly, large dairy farms with

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milking herds of more than 600 cows are paying between $75 and $300 a day for power, up from between $50 and $150 in 2010. Daily energy consumption over the period has remained fairly steady.

The industry is a large user of both electricity and gas in manufacturing. Some dairy processing companies are among the top 300 energy users in Australia, and some companies were therefore liable for the carbon tax. Their international competitiveness is highly sensitive to changes in energy costs. Unreliability of supply in the regional areas where most factories are located is also a concern as power interruptions result in significant costs to production continuity, supply, and food safety. Unreliable power supplies also affect farmers, who can lose milk and subsequently income if, for example, milk cooling is not operational.

The dairy industry is a price taker in domestic and international markets and is unable to pass on any increases in energy costs.

i. Policy and regulatory reform to secure reliable, competitively and transparently priced energy

The Issues Paper on p11 notes that household electricity prices have risen 59% over the past four years, mainly due to significant investment required for new and ageing network infrastructure to ensure reliability of supply. The cost of increased investment in network infrastructure is also passed onto farm businesses.

The reliability and capacity of power supply in many regional areas remains inadequate. In fact, the lack of capacity in the delivery network in some regional areas is restricting the potential for growth at some major Australian dairy processing sites. A significant investment to upgrade the infrastructure is required to enable manufacturing growth.

The dairy industry would support policy reform and investment in infrastructure upgrades so that regional areas enjoy the same reliability and capacity of electricity supply as urban areas, without a price premium for a service that urban Australians take for granted.

The dairy industry wants to see a more competitive market in regional areas, where farmers and manufacturers frequently have less choice in electricity suppliers than in urban areas, and are therefore limited in their capacity to switch supplies and negotiate better deals.

The dairy industry wants more transparent pricing on bills. Most bills opened by dairy farmers combine all charges – consumption, network, environmental fees, and the carbon price – into a single tariff. This has led to confusion among farmers as to the different drivers behind their rising costs, and allowed power companies to obfuscate the extent to which repealing the carbon tax may lower energy costs.

Agriculture is one of the Federal Government's five pillars of economic growth. However, rising energy costs are a constraint since farmers are generally price takers and cannot transfer additional costs to the consumer.

ii. The appropriate role for government in the energy sector, particularly with regard to new energy sources

Government has a critical role in regulating the energy sector to ensure that Australian regional industries can access reliable, secure energy supplies at prices that enable them to remain internationally competitive.

As part of regulating the energy sector, State and Federal governments also play a crucial part in ensuring that the potential risks and effects of development of new energy sources such as unconventional gas are appropriately considered.

The relationship between unconventional gas mining and agriculture is an emerging but important issue. If unconventional gas is to be an important energy source for Australia, the Government's role is to ensure adequate frameworks are in place to enable all risks and potential issues to be fully considered. In particular, we endorse a strong connection between energy policy and agriculture policy as these issues are progressed through the White Paper process. As policy in these two areas is progressed, the dairy industry requests involvement in discussions and consideration of options.

iii. Opportunities to drive the more productive and efficient use of energy

Energy efficiency is a significant opportunity for reducing the dairy industry's energy costs as well as greenhouse emissions, as the industry is a major utiliser of electricity on farm and both electricity and gas in manufacturing. Some on-site energy generation technologies may also supplement energy efficiency (such as cogeneration or solar PV or solar thermal).

Dairy farmers are already embracing renewable energy technologies, with 40% of farms in 2012 having installed some form of renewable energy installation (such as heat pumps or solar water heating).

Dairy farmers have also been quick to take up 1700 energy assessments co-funded through Dairy Australia and the Federal Government's Energy Efficiency Information Program. The audits are identifying many zero or low cost energy efficiency and energy reduction opportunities, as well as options that are more expensive but have significant cost savings and greenhouse gas abatement.

However, for all these opportunities, there are significant capital cost barriers. In many cases, federal and state rebate programs have assisted farmers with the upfront capital costs, thereby increasing their participation.

Unfortunately, the carbon tax and the previous Clean Energy Policy provided few incentives for dairy farmers to invest in these energy efficiency measures, and several State rebate programs are no longer being funded.

Dairy manufacturers are also embracing new clean technology. For example, dairy manufacturing projects that were part of the Clean Technology Food and Foundries Investment Program in the 2012-13 year included more than $25 million investment in equipment upgrades including installing heat exchange, solar PV and/or gas alternatives for water heating and power, and equipment upgrades for refrigeration and lighting. Investment in clean technology is expected to reduce emissions intensity at some dairy plants by up to 50%. Unfortunately, this Clean Technology program is now closed and comparable investment in these types of projects is unlikely to continue.

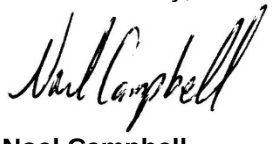
The emerging question is how to finance large, up-front capital costs for equipment upgrades and renewable energy options in tight economic conditions. For example, installing heat recovery pre-heaters and variable speed drives on vacuum and milk pumps on dairy farms has an estimated capital cost of $5000-$17,000, with a 4 – 20 year payback period.

Similarly, for a dairy manufacturer to upgrade to new energy-efficient refrigeration or to switch to solar power could require a capital cost of several hundred thousand dollars with a payback period of 3 – 20 years.

The dairy industry will be making separate submissions on the Direct Action Plan Green Paper, including the design of the Emission Reduction Fund. These submissions will examine in detail the scope for the Government to support further improvements in energy efficiency, and incentives to encourage faster uptake of these technologies in our industry.

The dairy industry considers it crucial that energy-related policy developments such as the energy White Paper and the Direct Action Plan White Paper are aligned in order to reach sensible and efficient outcomes and avoid conflicting future policy directives. To this end, the dairy industry seeks a whole-of-government approach to respective policy developments.

Yours sincerely,



**Noel Campbell**
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