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ENVIRONMENT | RENEWABLE | SUSTAINABLE

Project Manager  
Queensland Biofuel Mandate  
PO Box 15456,  
City East Qld 4002

3rd July 2015

Dear Sir/Madam,

I welcome the Queensland Government's move forward with the '*Towards a clean energy economy: achieving a biofuel mandate for Queensland*', discussion paper and steps forward to encouraging biofuel use and production through policy for Queensland.

I, Larissa Rose, Environmental Consultant and Education Facilitator of Glowing Green Australia have strongly supported and advocated the significant benefits of having a biofuels mandate that positions Queensland and Australia as a cleaner energy economy.

I submit the following comments to a proposed Queensland Biofuel Mandate.

### **Proposed Liquid Fuel Supply (Biofuel Mandate) Amendment Bill 2015**

I commend the Queensland Government on taking the first step towards the goal of breaking the stranglehold of petroleum imports into Australia through a biofuels mandate. This fundamental step forward to securing a domestic renewable fuel industry is paramount to standing alongside the 60 other countries that see the necessity for such policies.

The development of a biofuel policy will not only enforce the much needed use of biofuels within the Queensland fuel mix, it will also transform Queensland's ability to capture significant bio-manufacturing, while underpinning strong economic growth in scientific research, innovation and technical advancement for future second generation commercial development.

The myriad of benefits that biofuels deliver have been well documented, however foremost have been the health benefits, domestic liquid fuel security and strengthening economic platforms through regional investment and job stimulation.

## Government Policy

The development of an integrated, long-term policy framework for biofuels will address economic incentives for health, energy, fuel security, environment, agriculture and reduce greenhouse gas emissions and costs in road transportation. A strong, bi-partisan focused policy will ensure that the industry can develop to the full potential and scope necessary to establish Queensland as a leading bio-economy state. Strong Commonwealth and State transport policies that not only achieve strategies to reduce motor vehicle transportation and gain fuel efficiencies, but embed robust policies that target specific emphasis on transitions to cleaner fuels through the use of flex-fuel vehicles (FFV) throughout Queensland and Australia are imperative. These policies must send clear signals that deliver outcomes for industry.

Some considerations with policy:

- \*It sets long-term targets and goals for regulating Co2 emissions as biofuel percentages increase
- \*Ensuring harmonisation of biofuel standards, regulation and sustainability criteria is applied across all markets, direct and indirect industries and supply/value-chain
- \*Initiate and support structural funds in key regional areas where biofuel projects await development
- \*Commission independent research to establish the impact of biofuels integration into energy markets by tackling specific barriers in the supply chain – ensuring environmental and social implementation
- \*Biofuels being ranked on rigorous sustainability criteria which reflect total resource efficiency – assisting with consumer confidence and delivering high level policy dialogue
- \*Specific approaches to life-cycle analysis, greenhouse gas balances and sustainability criteria defined and detailed

## Environmental

Stringent environmental assessment (EA) reporting and ecological impact assessment (EIA) and collation of data are practises that will provide sustainable biofuel agricultural production. The environmental triggers and parameters measured and the quality of the assessment used to extract data need to align and comply with current legislative set standards and global ISO standards. Further revision and curtailing of current environmental legislation will need to be adjusted to ensure biofuel production and manufacturing are implemented in compliance and regulatory procedures.

There is a similar need for harmonization in assessing the broader environmental and social impacts of feedstock crops to ensure that results are transparent and consistent across a wide range of systems. Direct land use change (dLUC) and indirect land use change (iLUC) issues are very much a component of biofuel production. The environmental performance and assessment of biofuels lifecycle is especially important in the case study of biofuel production.

Working off the existing commonwealth and state environmental regulations and EA policies, environmental topics regarding land use and degradation, biodiversity, water use and management and air quality (production facility odours) flow onto socio-economic platforms. Consideration must be articulated through environmental policy, with these impacts.

The extent of such impacts depends on how biofuel feedstocks are produced and processed, the scale of production and, in particular, how they influence land-use change and their intensification. The vision for international trade capabilities for the future will need to be considered in long-term environmentally sustainable practices for a bio-economy for Queensland.

Comprehensive understanding of land-use change, and proper assessment of greenhouse gas balances are essential in order to ensure that feedstock crops have a positive and sustainable impact on climate-protection efforts that Queensland and Australia ensure to attain.

### **Education Campaign**

Working in the environmental education field confirms my understanding of the leading difference that face-value contact and engagement with an audience can provide when promoting informed outcomes on otherwise unknown issues. My experience teaching environmental topics to primary and high school students and more specifically facilitating lessons on biofuels, has provided notable impacts not only on the students, but more specifically on the school teachers. The point of contact through face to face education has broadened the teachers' understanding, whilst myth busting their past perceptions.

Addressing and dealing with key impediments, like the lack of consumer awareness and knowledge to make a choice at the E10 bowser (point of sale), has been highlighted as one of the crucial issues of uptake of ethanol blends. The effectiveness of other countries and the consumer uptake creating strong demand, has been the multi-platform education programs and stringency on only offering ethanol blended fuels.

The evidence on creating consumer uptake through education and awareness campaigns, whilst supported by industry was defined in the Queensland Governments 2005 commissioned campaign, undertaken by the Phillips Group. Titled 'Increasing industry and consumer confidence in ethanol-blended fuel', the campaign delivered strong objectives and outcomes over a two year period, increasing consumer confidence in E10 blended fuel.

The framework and details of this campaign should become a key component to building and delivering an even more significant consumer confidence and education campaign, to align with the Queensland government's rollout of a biofuel mandate policy this year.

An appropriate mechanism to further develop key messages can be extracted from the 2005 campaign, that highlights the branding and promotion aspect over the two year period:

*Encouraging consumer purchase/repeat purchases through a resonant and industry-led, point-of-sale campaign was critical.*

*Elements included:*

- 1. campaign identity—development of +e logo and tagline ethanol—powered by nature*
- 2. marketing collateral—creation and distribution of point-of-purchase material, signage and give-aways*
- 3. +e ambassadors—active consumer engagement by teams of +e ambassadors at 210 fuel outlets across Queensland*
- 4. major events—showcasing broad-based acceptance at major consumer events: V8 Supercars, Indy 300 Champ Car event, 2007 Brisbane Motorshow and the Exhibition*
- 5. industry cross promotions—endorsement of E10 at North Queensland Cowboys games in 2006-07 and partnership with Holden Performance Driving Centre.*

*Radio and print advertising was employed to raise awareness, to support local activities and the campaign roll-out.*

Cooperation with key decision makers, peak industry bodies and stakeholders is crucial for stimulating the market and for development of effective education campaigning.

A suggestion could be made for the Queensland government to facilitate a ‘Towards a clean energy economy: Biofuel and Bio-economy’ conference or workshop day that would bring together government, industry, manufacturers/producers, growers, mechanical engineers and consumers (public) in constructive awareness dialogue and exposure to public figures that could be ambassadors for the use of biofuels and flex-fuel vehicles. Part of the role of this type of event would be defining what a Queensland bio-economy is and exposing the community to the benefits of bio-manufacturing products.

Development of awareness and education campaigns should be on-going, as the industry builds and even when consumer choice is maintained. As higher percentage phase-in periods roll out, the need for further consumer certainty will also be greater.

The United States deliver a very simple and emotive sense of ownership to the consumer about their smart choice of using ethanol blended fuel:

‘Ethanol provides you with Environmental, Economic and Energy Security’

This is clearly labelled on bowsers, encouraging individuals to act smart and choose sustainable actions for the country. Identifying key instruments that will compel consumers to act differently is a progressive process that can be achieved in the Queensland context.

## Value Chain

Even more paramount for biofuel industries is the flow-on significance of bi-product manufacturing, which provides products to assist in production of quality export materials. The biodiesel industry produces a bi-product in its production called 'crude glycerine', which is used to grow high value nutritional yeast products. An uncertainty in crude glycerine volumes can disrupt or even inhibit the scalability of domestic bio-technology industries, resourcing to overseas production or crude glycerine importation. A biodiesel mandate will sure up the future of these industries and their advancement.

## Conclusion

An ethanol and biodiesel mandate need to roll out simultaneously to both reinforce and send a clear signal that Queensland is securing a clean energy economy of the future. The Queensland governments move to phase-in a two percent target is a great move forward, however is lacking the level of certainty that the industry is seeking. An initial ethanol percentage level of three percent would begin to stimulate the industry to start moving forward, whilst delivering some of the fuel performance and health incentives benefits. Capturing the path towards sustainable domestic transport fuels is fundamental to developing climate action plans for the future of Australia.

Kind Regards

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Glowing Green Australia

