



Life Sciences Queensland

Thursday, 2 July 2015

The Hon. Mark Bailey MP  
Minister for Energy and Water Supply  
Queensland Government  
PO Box 15456  
City East, QLD 4002

Dear Minister,

**RE: June 2015 Discussion Paper**

The challenges of the 21<sup>st</sup> century have created new socio-economic and resource challenges; changing demographics and an ageing population; technological breakthroughs, consumer expectations and the impact of digital disruption; rapid economic growth and urbanisation in Asia and the developing world, and; a scarcity of natural resources and the challenge to protect biodiversity.

The convergence of these challenges has served as the catalyst for the emergence of what is termed 'the bioeconomy'.

The OECD broadly defines the bioeconomy as "the set of economic activities relating to the invention, development, production and use of biological products and processes". The benefits of research and innovation in this field are expected to simultaneously help address economic, social and environmental challenges of the world today.

Importantly, the bioeconomy has the potential to stimulate a resurgence of growth in rural areas, offering the farming sector a higher level of self-sufficiency, less dependence on existing petroleum-based energy sources and the opportunity to exploit biomass materials to produce high value bioproducts and create new industries.

Located in the tropics, Queensland has significant competitive advantages in the development of a bioeconomy, with many established and emerging feedstocks, expertise in cultivation and processing, established industrial precincts, extensive infrastructure and logistic support, strategic location in the Indo-Asia-Pacific and stable socio-political environment.

The potential of the bioeconomy to make major economic contributions is proven. Brazil has leveraged its well established sugarcane industry and decades of investment in the development of the ethanol industry to build a global centre for bio-based plastics which to date has attracted over US\$2 billion in investment from major chemical companies. In the US in 2013, the biobased products industry contributed \$369 billion to the US economy, creating 4



Life Sciences Queensland

million American jobs with the multiplier factor of 2.64 (ie for every 1 biobased products job, 1.64 more jobs are created in the US).

The opportunity is real, however it takes decades of planning, commitment and cooperation which eclipses several election cycles. Bipartisan support and long term vision is critical to the success of this endeavour.

The Queensland Government's Advance Queensland policy emphasises the need for research focussed on the stimulation of new areas of industry employment, specifically highlighting industrial biotechnology with the ambition of utilising the biofuel mandate to open the door to unleash this potential.

The significance of this priority was demonstrated with Premier Palaszczuk's recent visit to the Pentagon and at the annual international BIO convention in the US. The Government also recently released the discussion paper, *Towards a clean energy economy: achieving a biofuel mandate for Queensland*, which outlines key issues associated with the proposed mandate and provides details on the Government's approach.

In addition, the Federal Government's *White Paper on Developing Northern Australia*, released by the Prime Minister on 18<sup>th</sup> June 2015, represents the most comprehensive attempt yet to think through the development possibilities of the north. It sets out a policy platform for realising the full economic potential of the north, exploring ways to capitalise on the region's strengths, provide the best regulatory and economic environment for business and identify critical infrastructure for long-term growth, public and private planning and investment.

This follows the 2014 launch of the Deloitte and Corelli study, *Economic Impact of a Future Tropical Biorefinery Industry in Queensland*. This study outlines opportunities from biorefining for Queensland, including export revenues, economic growth, diversification of the agricultural sector and stimulating advanced manufacturing.

Importantly, the biorefinery opportunities modelled in this study are expected to increase Queensland's gross state product by more than \$1.8 billion annually by 2035 (in today's dollars). Over the modelled period in net present value terms, the industry's contribution is \$21.5 billion.

### **What is Life Sciences Queensland Ltd's role?**

Since its inception in 2011, Life Sciences Queensland Ltd (LSQ) has been advocating for the development of a bioeconomy in Queensland and as an industry association it plays an important role in promoting the capabilities of its Members and providing them with a platform to collaborate with each other and the world.

LSQ's core mission is to help Members do business and it takes a strategic approach that if the Government's policies and strategic imperatives create an environment conducive to



Life Sciences Queensland

investment, business activity for Members will follow. LSQ recognises this current policy direction as being one such instance.

At the World Congress on Industrial Biotechnology in 2011, LSQ was involved in initial discussions with stakeholders around the possible involvement in the US Navy's 'Great Green Fleet'. This dialogue has continued, including at the Pentagon in June this year.

Again this year, as for the last five years, LSQ has coordinated Queensland's presence at the World Congress on Industrial Biotechnology and this year is encouraged by the possibility that for the first time, the delegation may be led by a senior public official.

It is noteworthy that through its continued efforts to showcase Queensland as a key stakeholder in the bioeconomy, LSQ has been invited to become a Member of the Roundtable on Sustainable Biomaterials, a Geneva-based independent and global multi-stakeholder coalition which works to promote the sustainability of biomaterials.

LSQ's aim is to utilise these high level international fora to bring attention and visibility to the emerging sector in Queensland and ultimately, with a favourable policy environment, generate investment and collaboration opportunities for its Members.

The State Government plays a critical role in fostering these new industries and the economic diversification of the State. LSQ recognises this key role, however it strongly advocates that for it to be most successful, there must be strong bipartisan support.

LSQ stands ready to work with all of our elected officials to bring this opportunity to fruition.

Yours sincerely,

Mario Pennisi  
**Chief Executive Officer**  
**Life Sciences Queensland Ltd**