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The Research Director  
State Development, Infrastructure and Industry Committee  
Parliament House  
George Street  
BRISBANE QLD 4000

## **WWF Submission to the Liquid Fuel Supply Amendment Bill 2014**

Dear Research Director,

WWF-Australia welcomes the opportunity to provide the below comments regarding the Liquid Fuel Supply Amendment Bill 2014.

### **1. Introduction**

WWF considers reducing current global dependency on fossil fuels by transitioning to biofuels is an effective measure to mitigate climate change impacts. However, WWF is very concerned about the wide range of social and environmental adverse impacts that can potentially be caused if biofuel feedstock production is not properly managed.

Due to these concerns, WWF will only support biofuel feedstock production that is verified to be environmentally, socially and economically sustainable. In addition, WWF advocates that biofuel production and use must be part of a broader approach, which includes other renewable energy resources, demand management strategies and aligned climate change mitigation measures.

Under its biofuels policy, WWF advocates that:

- Direct and indirect greenhouse gas emissions associated with biofuel feedstock production must be fully assessed, which includes consideration of the GHG emission profiles of different feedstock crops, soils, land use changes, agricultural practices and of supply chains.
- Biofuel feedstock production should not be established through conversion of natural areas such as forests, wetlands and rangelands.
- Biofuel feedstock production should only be established following the engagement of stakeholders in land-use and water-use planning processes.
- Comprehensive short, medium and long term approaches to reducing/mitigating the indirect effects arising from land-use change associated with biofuel feedstock production must be implemented
- The relationship between biofuel feedstock production, environmental requirements, food production and other relevant factors should be continually monitored and assessed to ensure that adverse social, environmental and economic impacts are avoided in all stages of biofuel supply chains.

## **2. Key issues and recommendations**

### **2.1 Exacerbating the decline of the Great Barrier Reef (GBR)**

Highly elevated sediment, pesticide and nutrient levels in catchment runoff resulting from the agricultural and other development activities that have occurred since European settlement in reef catchments are the

major non-natural cause of the decline of the GBRs health and extent (over 50% of the GBRs coral cover has been lost over the last 27 years).

While all development activities in catchments contribute to Reef impacts, marine water quality degradation agricultural practices is by far the most significant pollution source accounting for around 90% of loads. Crown of Thorns Starfish outbreaks is a key example of adverse impacts to the Reef resulting from poor marine water quality.

To improve marine water quality, the Queensland and Australian Government have invested significant public funds over the last 15 years in programs aimed at changing farming practices in reef catchments to reduce agricultural pollution. While some progress has been made, the nutrient, sediment and pesticide reduction targets introduced under Reef Plan have are still somewhat off from being achieved.

As the targets to reduce agricultural pollutants have not been met, any expansion of agriculture for either food or biofuels feedstock production in Reef catchments will exacerbate the decline of the GBR unless it is rigorously controlled and regulated.

Examples of the adverse economic, social and environmental impacts that could occur if the expansion of agricultural production in GBR catchments is not strongly controlled include:

- Increasing marine water quality degradation, which will cause more Crown of Thorns Starfish and algal outbreaks - potentially resulting in a phase shift of the GBR ecology
- Inability to meet Reef Plan water quality improvement targets, which will adversely affect the Outstanding Universal Value (OUV) of the GBR World Heritage Area (WHA) – thereby increasing the risk that UNESCO will place the GBR on the World Heritage Area ‘in danger’ list
- Jeopardising the \$6 billion GBR tourism industry and its 63,000 jobs
- Impacting commercial and recreational fishing as well as indigenous cultural values

Due to the above noted and other potential adverse impacts, agricultural expansion for food or biofuel feedstock production in GBR catchments should not occur unless it is rigorously planned and assessed.

#### **Recommendation:**

- Biofuel feedstock production in GBR catchments should not occur unless all potential economic, social and environmental adverse impacts have been avoided.
- Any development in Reef catchments needs to achieve a net benefit under government policy – which would mean mitigating and offsetting all pollution load increases.

## **2.2 Life Cycle Analysis (LCA)**

While adding ethanol to transport fuels will reduce vehicle GHG emissions, there is a significant risk that any derived GHG emission reduction benefits will be lost as a result of the GHG emissions that can be generated from biofuel feedstock production and processing.

To ensure any GHG emission reduction benefits are not lost, biofuel feedstock production and processing should undergo a Life Cycle Analysis (LCA), which assess GHG emissions generated from:

- Converting natural ecosystems to biofuels production.
- Agricultural practices, including machinery fuels, chemical fertilisers and irrigation electricity use.
- Biofuel feedstock processing and transportation.

In addition to assessing embodied GHG emissions, Life Cycle Analysis can also be utilised to assess other factors, such as adverse social and economic impacts potentially caused by:

- Converting current food crop production to growing biofuel feedstock crops.
- Ecological degradation of the GBR, which can cause impacts to the tourism and fishing industries.
- Increased competition for available water resources, which can adversely affect existing water users.

**Recommendation:**

A full Life Cycle Analysis should be conducted on biofuel production, processing and use prior to its commencement – especially in GBR catchments.

**2.3 Standards, principles and accreditation**

Established in 2007, the Roundtable on Sustainable Biomaterials (RSB) is an international initiative that brings farmers, corporations, non-governmental organizations, experts, governments and other parties together to address social, economic and environmental issues associated with biofuel production, processing and use.

To address associated issues, the RSB has developed a set of principles and standards to ensure that potential adverse social, economic and environmental impacts arising from biofuel production and use are avoided and mitigated. Under its accreditation framework, the RSB provides third party verification that participating entities are sustainably producing, processing and using biofuels.

Given the potential adverse implications noted in 2.1 above, WWF-Australia strongly advocates that biofuel production, processing and use in Queensland must align with global best practices to ensure that any adverse social, economic and environmental impacts potentially caused by biofuel production and processing (especially in GBR catchments) are avoided and mitigated.

Further information about the Roundtable on Sustainable Biomaterials from: [www.rsb.org](http://www.rsb.org)

**Recommendation:**

Queensland biofuel production, processing and use must implement global best practices and be accredited by an independent third party.

**3. Conclusion**

As there is a significantly high risk of adverse social, economic and environmental impacts occurring, it is essential that biofuel production, processing and use in Queensland undergo a full feasibility and impact analysis before proceeding. If a biofuel industry is to be facilitated there will need to be clear benchmarks set in law, which align with global best practices. The potential impact on Reef water quality in particular need to be carefully considered and managed.

WWF-Australia would appreciate the opportunity to discuss the above and other issues associated with biofuel production and processing with the Committee.

Yours sincerely,

Sean Hoobin  
National Manager Freshwater  
WWF-Australia