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Australian Energy Market Commission (AEMC)
Discussion Paper on Renewable Energy Zones (REZ)
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(e) submission via AEMC website

AEMC Discussion Paper on Renewable Energy Zones (REZ)

The Australian Forest Products Association (AFPA) welcomes the opportunity to make a submission on the Australian Energy Market Commission's (AEMC) Discussion Paper on Renewable Energy Zones (REZ).

AFPA is the peak national body for Australia's forest, wood and paper products industry. We represent the industry's interests to governments, the public and other stakeholders on the sustainable development and use of Australia's forest, wood and paper products.

The forest products industry is one of Australia's largest manufacturing industries with an annual turnover over \$23 billion. It contributes around 0.5% to Australia's gross domestic product and 6.6% of manufacturing output (see [here](#)). Around 80,000 people are directly employed along the industry value chain with a further 100,000 jobs supported through flow-on economic activity.

Our renewable forest industries with their regional focus and supply chain have the potential to assist the objectives of facilitating Renewable Energy Zones, reducing emissions, underpinning jobs, communities and economic growth.

The Discussion Paper

The Discussion Paper focuses on facilitating Renewable Energy Zones (REZ) and identifies:

- Incentives to coordinate generation infrastructure
- Incentives to coordinate generation and generation infrastructure
- Incentives for efficient transmission infrastructure.

A regional industry already focused in hubs

Our renewable forest industries have a large geographic spread that provides much needed jobs, skills, economic activity and community cohesion in many rural and regional areas across Australia. Forest industries are the keystone employer (more than 4% of the workforce) in more than 17 regional towns across Australia.

As detailed in [the Forest Industry Advisory Council Strategic Directions Issues Paper](#), a strengthened regional approach for our industries: *'would allow the sector to focus its development in line with the resource and value-chain characteristics of a particular region'*. Further, *'encouraging the establishment of forest industry hubs could strengthen regional development of the forest industry and improve its productivity, profitability and competitiveness.'*

The forest industry hub model envisages a group of closely located businesses that are connected through their value chains, use of resources, technology, complementary products and workforce needs (Aguilar et al. 2009¹). The hub model seeks to encourage collaboration and positive competition among businesses and improve research, innovation, productivity, resource use and business development outcomes (Aguilar et al. 2009).

We are supportive of incentives to facilitate Renewable Energy Zones (REZ) and see that our forest industry hub approach integrates well with the principles for facilitating REZ.

Broader pathways for emissions reduction

Trees are a sustainable biological resource that produce renewable wood and paper products, including emerging new and innovative products such as biomaterials, biochemicals and bioenergy. They also provide multiple benefits, including the carbon stored over time in the growing forests, renewable wood products, economic activity, jobs and environmental benefits. In addition, relative to alternative materials such as steel, aluminium and concrete, wood products have very low embodied energy, with very low fossil fuel energy inputs used in their production.

AFPA recognises the proud social, economic and environmental record of our renewable forest industries and the inherent environmental strengths of our products as a renewable resource with a high propensity for recycling, a low carbon footprint and responsible sourcing from sustainably managed forests and fibre waste streams.

¹ Aguilar, FX, Bratkovich, SM, Fernholz, K, Garrard, A, Grala, RK, Leightley, L, Martin, W & Munn IA 2009, *The status of and opportunities for business clustering within the forest products sector in the US*, prepared for the US Endowment for Forestry and Communities Inc., Greenville, South Carolina, available at usendowment.org/businessclusteringhome.html (pdf 2.40mb).

AFPA actively promotes the important role our forest industries can play in reducing emissions, transitioning to a carbon constrained future, and assisting the Government achieve ambitious national targets – while having a positive impact on regional Australia jobs, communities and economic growth.

The significant potential for our forest industries to contribute to climate change mitigation was acknowledged in the 4th assessment report of the International Panel on Climate Change (IPCC), which stated:

A sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.

The major pathways for emissions reduction from our renewable forest industries include:

- the carbon sequestered in growing forests;
- the carbon stored in durable wood and paper products;
- the substitution of high emissions materials (e.g. steel, concrete) with wood and other fibre-based products that have low embodied energy; and
- **the use of woody biomass for renewable energy (including for renewable heat and biofuels), thereby displacing fossil fuels.**

In June 2018, the AFPA launched '**18 by 2030 – Forest Industries help tackle Australia's climate change challenge**' detailing a plan to remove over 18 million tonnes of CO₂-e per year by 2030, by:

- Building Block 1: Storing carbon in new forest plantations.
- Building Block 2: Replanting existing forest plantations to maximise on-going carbon storage.
- Building Block 3: Increasing the use of wood products in the construction of new detached residential houses, multi-rise apartment and commercial buildings to offset emissions.
- **Building Block 4: Reducing emissions from our processing and industrial facilities by being more energy efficient and using renewable bioenergy (both electricity and renewable heat) instead of fossil fuels.**
- **Building Block 5: Reducing emissions in transport by replacing fossil fuels with renewable biofuels.**
- **Building Block 6: Reducing emissions by supporting the use of sustainable biomass for cofiring in existing coal fired power stations.**

The 18 by 2030 climate change challenge document can be found [here](#). AFPA's associated 18 by 2030 website with more information is [here](#).

This ambitious but important goal can only be achieved through the right mix of policies across all levels of government to maximise the carbon-storing and emissions reduction potential of our renewable forests and forest products.

Bioenergy and renewable heat opportunities

Forest product manufacturing continue to experience crippling cost pressures due to ongoing high gas and energy contract prices. Bioenergy is a unique renewable source that can be used across all three energy sectors (transport, heat and electricity). Bioenergy can be both dispatchable and deliver baseload power 24 hours a day, 7 days a week. Biomass waste and residues can partially substitute for coal in coal fired power station units.

Bioenergy is well suited to powering many existing regional manufacturers and communities. Bioenergy assets located in those communities will reduce transmission losses and distribution costs.

A major impediment to bioenergy uptake in Australia has been the sole emphasis on renewable electricity rather than energy (including renewable heat) in previous climate change/energy policies, including the existing Renewable Energy Target (RET) framework. The RET only recognises the renewable energy benefits from electricity production and not the benefits from the generation of renewable heat energy in the large-scale component of the RET, despite recognising solar hot water energy in the Small-scale Renewable Energy Scheme (SRES). This has constrained bioenergy investment in renewable heat and cogeneration opportunities. This policy inequity needs to change.

Policy initiatives that incentivise investment in renewable heat generation are essential to enable our manufacturing industry members to convert away from crippling energy cost increases and grasp the opportunities in the emerging bioeconomy. Additionally, it will release significant volumes of gas back into the pipeline transmission network reducing pressure on gas demand and supply in eastern Australia.

Australia's wood and paper product manufacturing industries use heat energy for a wide variety of applications, including drying, preheating, and process heating (e.g. steam for process drying in papermaking or sawmills).

The significant size and scale of industrial heat energy use represents a unique opportunity for renewable generation. Industrial facilities often take advantage of co-location, waste centralisation and cogeneration.

Recognition of renewable heat energy from industrial processes could potentially:

- generate new investment in several thousand GWh of renewable energy per annum in the wood and paper products sector over the next decade (obviously more as other industry sectors are counted);
- be a significant game changer in improving the international competitiveness of many large manufacturing-based businesses often based in regional Australia; and
- help to strengthen (by providing baseload, dispatchable renewable generation) and diversify Australia's renewable energy mix at lower cost.

A broad range of renewable heat projects should be supported including standalone, cogeneration, new greenfield facilities, existing facilities converting to renewable, and investments in energy efficient upgrades to existing facilities.

AFPA is aware of a pipeline of potential industry projects including conversion of boilers to renewable biomass for process drying of green timber products, board production and paper manufacturing.

The AEMC and the Government should:

- 1. recognise that bioenergy is a unique renewable energy source that can be used across all three energy sectors (transport, heat and electricity);***
- 2. recognise the significant potential of bioenergy to provide secure, affordable renewable energy; and***
- 3. provide for the inclusion of renewable heat-based bioenergy generation projects in the final design of any supportive policy incentive framework.***

New bioenergy and renewable heat projects can support the forest industries to convert away from fossil fuels to affordable, secure renewable energy investments and make a huge contribution to reducing emissions. It would also help sustain Australian manufacturing operations, providing much needed investment and regional jobs.

AFPA is not a prospective new project proponent but we represent an industry supply chain that will potentially have many significant projects if the policy incentive framework and program are well designed, supportive and flexible.

Our renewable forest industries in Australia stand ready to assist the objectives of facilitating Renewable Energy Zones (REZ), reducing emissions, and underpin jobs and vibrant regional communities.

Any further queries on this submission please contact AFPA on (02) 6285 3833.

Yours Sincerely



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