ITEM-25 LMM 8/12/2020 - Newcastle Offshore Wind

MOTION

That City of Newcastle:

- 1. Commends the NSW Parliament, on the recent successful passing of the *Electricity Infrastructure Investment Bill 2020*, paving the way for the creation of the Hunter Renewable Energy Zone;
- 2. Notes that the legislation requires the Minister for Energy and Environment to 'prepare and provide a plan for the NSW renewable energy sector, in particular in relation to the operation of the sector and the manufacture and construction of infrastructure in the sector', in consultation with key Trade Unions;
- 3. Welcomes the recent emergence of large-scale offshore wind infrastructure as a viable renewable energy source with the potential to unlock \$30 billion of investment and create thousands of local, well paid jobs;
- 4. Notes that thousands of highly skilled workers that have traditionally been associated with the resources industry could see their jobs transferred directly into offshore wind, which has the potential to play a significant role in sustaining our state's future energy needs:
- 5. Notes that given the exceptional accessibility of the Port of Newcastle, and our existing local skills base, offshore wind provides a very real opportunity for an entirely new renewable energy infrastructure manufacturing industry to emerge in Newcastle and the Hunter, paving the way for our City to become a renewable energy hub of the entire Asia-Pacific region.
- **6.** Writes to the Minister for Energy and the Environment, the Hon. Matt Kean MP, asking for the both consideration of the inclusion of Offshore Wind in the recently announced Hunter Renewable Energy Zone, and to meet with a delegation of City of Newcastle, industry, business and Trade Union representatives to discuss the opportunities offshore wind presents for environmental sustainability, local jobs and economic diversification.

BACKGROUND:

With the correct legislative and regulatory framework, offshore wind along the coast of Newcastle could unlock billions in new investment in renewable energy infrastructure, creating thousands of local, well paid jobs and providing a significant boost to the local economy.

Importantly, offshore wind provides the perfect opportunity to diversify Newcastle's local economy by pivoting thousands of jobs in the local manufacturing, construction, maritime, transport and logistics industries into the renewable energy sector.

Thousands of highly skilled workers that have traditionally been associated with the resources industry could see their jobs transferred directly into offshore wind, which has the potential to play a significant role in sustaining our state's future energy needs.

At the same time, given the exceptional accessibility of the Port of Newcastle, and our existing local skills base, we see offshore wind as providing a very real opportunity for an entirely new renewable energy infrastructure manufacturing industry to emerge in Newcastle and the Hunter.

It is not unrealistic to expect that Newcastle could become the renewable energy hub of the entire Asia-Pacific region.

City of Newcastle is proposing to lead a delegation of key industry, business and trade union partners to meet with the NSW Minister for Energy and the Environment, to advocate for the inclusion of offshore wind into the newly legislated Hunter Renewable Energy Zone.

Benefits of Offshore Wind

 Offshore wind provides a new and diverse large-scale energy supply of 6,000MW+ to assist NSW in replacing 10,000MW+ of electricity by 2035 due to forecast coalfired power station closures.

Forecast closure of 25,000MW of coal-fired electricity generation Australia-wide over the next 28 years with 10,000MW+ of closures in NSW by 2035.

Replacement of like-for-like coal-fired power stations will be uneconomic and not meet environmental requirements. Offshore wind is a feasible part replacement given large-scale and higher capacity/generation factors especially relative to other proposed new energy sources.

 Offshore wind does not compete for land that may be used for other purposes – especially residential along the NSW coastline and for industrial and agricultural purposes throughout NSW

Offshore wind does not compete for land otherwise used for residential, agricultural or industrial purposes.

Offshore wind does not compete for land in highly populated areas or where land can be used for other beneficial purposes, however it does tap into the strong existing transmission system that is used to move power in these areas.

• Offshore wind accesses available grid and existing infrastructure located close to coal mines and generators which are in proximity to NSW's coastline

Existing grid transmission is built mainly around coal generators, which are located within 100km of the coastline (near offshore wind resource). With many forecast coal closures, there is an opportunity to access grid that will become available over the next decade.

Offshore wind generates close to demand of a growing Australian population (forecast to be 50 million by 2051), living close to the coastline (85% of Australia's population live within 50km of the coastline) and supported by necessary infrastructure.

 Offshore wind blows for longer and is stronger, at peak demand times, ensuring a more reliable generation source than other forms of electricity. Capacity factors often exceed 50%

Offshore wind production is normally at its peak when system/market demand is at its highest. This is usually when the late afternoon sea breezes are blowing or during times of prolonged heat when the cooling 'southerly busters' come from the coast.

 Given the large scale of offshore wind farms, employment and investment is large and can help transition regions and communities.

Offshore wind provides significantly more employment opportunities than other energy projects in the construction and operation phase due to the size of the projects and infrastructure and the need to install and service projects at sea.

Utilising Australia's strong history in energy generation and marine-based industry to transition workers from traditional fossil-fuel based industries that may suffer from impending closures over the coming decades. Offshore wind construction and operation offers transferable skills allowing workforces and communities to transition in case of closures of other industries.

Assisting in delivering the NSW Net Zero Plan

Helping to meet the NSW Net Zero Plan and other related NSW policies through a progressive program of well-considered projects understanding the mid-long term timelines for effective transition.

Maritime Union of Australia Campaign



The Construction, Forestry, Maritime, Mining & Energy Union – Maritime Division (MUA) is campaigning to establish an offshore wind industry to generate electricity for Australian households and industry, and to ensure that the government funds a just transition for maritime workers and all workers and communities that rely on the oil, gas and coal industries. We need significant investment and we need to ensure that we have good union jobs to go to in the low-emissions industries that are already being built.

Offshore wind farms could be an excellent source of electricity and jobs for seafarers and port workers. If ships were required to plug into electricity in port it would improve air quality in ports and in the community and increase jobs.

The government needs to invest in developing new zero-emissions ships using hydrogen.

A new hydrogen industry could use renewable energy to power zero-emissions industry and transport and create manufacturing in Australia that was lost when oil refineries were shut down.



The Maritime Union of Australia (L-R Newcastle Branch Secretary Glen Williams, National Research Officer Penny Howard & Newcastle Branch Deputy Secretary Dennis Outram) are leading the advocacy for the development of Newcastle Offshore Wind.

What about workers in fossil fuel industries?

Many Construction, Forestry, Maritime, Mining and Energy Union (CFMMEU) – Maritime Division members work as seafarers supplying the offshore oil and gas industry. We are part of the **Offshore Alliance** successfully organising workers and improving conditions in the offshore oil and gas industry. We work in Newcastle's coal terminals and as port and tug workers in coal export ports in NSW and Queensland.

The MUA is committed to ensuring that jobs and conditions are maintained for members in any transition to reduce greenhouse gas emissions. We will be best placed to secure strong union PAGE 4 OF 7

agreements in future industries if we are a respected part of a big social movement campaigning for these new jobs and industries. We will be able to secure more government investment and support and better protections for workers if a transition can be properly planned with plenty of notice.

A good example is New York State. Unions formed a 'Climate Jobs NY' campaign and the state government has committed to build 9,000 MW of offshore wind, and to require union agreements and local procurement on those projects.

In Queensland the ETU successfully campaigned for the state government to establish a new public renewable energy generator called CleanCo. Any employees transferring to CleanCo from existing state-owned generators CS Energy or Stanwell will maintain their existing conditions, including no forced redundancies or relocations, and any new CleanCo employees will also be on the same terms and conditions.

In Germany, a special Commission, including the union IG BC, has recommended phasing out coal-fired power and brown coal mines by 2038, but conditional on the creation of quality jobs and clear transition pathways for workers. The plan includes a job guarantee with no forced redundancy for any worker and €40 billion over 20 years for regional development, including infrastructure and rehabilitation of mining areas and plants.

Building Offshore Wind in Australia



Offshore wind could play a big role in decarbonising the electricity system in Australia. Three huge offshore wind projects are in the works in Australia:

• Star of the South off Gippsland, Victoria: 2.2 GW in size (20% of Victoria's electricity use). Construction could begin in 2023 and last five years. Our report outlines how we can work to make this project the best possible example of a just transition. In early 2019, the MUA put pressure on the government to approve the exploration licence, which

- the government finally approved in May 2019. This has allowed the project to start collecting the two years of wind data it needs to get to final investment approval.
- Newcastle Offshore Wind off NSW: This could be a huge project built over many years
 as there is about 10GW of transmission capacity close to the coast and significant
 demand for energy in Newcastle's industrial facilities. There is plenty of space in the port
 for offshore wind construction and maintenance.
- The Mid-West Wind and Solar Project south of Geraldton in WA. Up to 1.1 GW in size.

Research has identified a number of sites potentially suitable for offshore wind in Queensland near Bundaberg, Gladstone, Rockhampton, and Mackay. Queensland's transmission system runs along the coast.

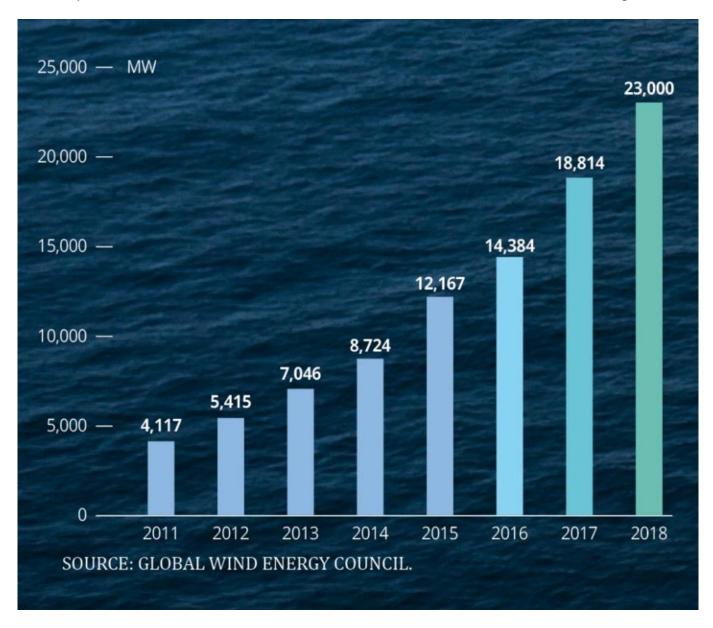
These projects connect the immense renewable energy resources off our coasts with the existing transmission lines, population and industry built near the coast.

Using our offshore renewable resources can provide thousands of transition jobs for offshore oil and gas workers and other energy workers. Offshore wind projects can be located near existing coal fired power stations and transmission lines near the coast, reducing the need to build new transmission lines inland.

The International Energy Agency says that the strength and consistency of offshore wind make it potentially comparable with gas and coal fired power (IEA Offshore Wind Outlook 2019). This means less construction of new energy storage is required to provide a consistent supply of renewable energy.



Sites where offshore wind has been built or is under development.



Global expansion of offshore wind generation capacity.

RELATED PREVIOUS DECISIONS

LMM 20/11/2020 – Hunter Renewable Energy Zone