

Challenges to Building Climate Resilient Blue Green Economies

Harmful greenhouse gas emissions (GHG) from the Pacific region are miniscule in a global context, and yet Pacific Island countries and territories (PICTs) are facing the sharp end of the climate crisis. The upcoming United National Climate Change Conference, COP 21, presents a significant opportunity for the global community to act decisively on reducing (GHG) emissions. Decisions taken or not taken in Paris will have profound impacts on the lives and livelihoods of Pacific people.

The biggest challenge to keeping temperature rise below 1.5C relies heavily on the global community taking responsibility and adopting a binding agreement at COP 21. The biggest emitters have to agree to timely emissions reductions in an open and measurable way. To be realistic, keeping below 1.5C will be difficult unless the world goes on a 'war footing' and dedicates large sums of money to GHG mitigation. Cuts to GHG emissions in the order of 65-80% by 2030 and 90% by 2040 are needed if we are to have a slight chance of keeping below 1.5C, assuming favourable climate sensitivity. In short, the world needs to cut its reliance on fossil fuels altogether, stop deforestation and reduce methane emissions, if we are to have a chance. We have to urgently find alternatives to fossil fuel and significantly increase energy efficiency at all levels.

Pacific Leaders have shown strong leadership in advocating for global action to reduce GHG emissions. There will be several statements from the region (e.g. Polynesian Leaders Statement, Pacific Island Forum Leaders Statement, Pacific Islands Development Forum; Suva Declaration) in Paris but it is important that our message is united, strong and consistent. We must continue to push for the global community to do the right thing. We must also act together if we are to make an impact at the global level.

The Pacific Community is one of many partners assisting island member states to prepare for, and adapt to, climate change and its impacts. As the Pacific region's principle scientific and technical development organisation, we have a large portfolio of projects in climate change and disaster risk reduction. We are also actively supporting Pacific Community members to pursue new approaches to sustainable development.

The Pacific Community

Within the region, there are several important challenges in transitioning from traditional (brown) economies heavily reliant on fossil fuels to climate resilient blue green economies. Green growth, or low carbon development, improves economic and social performance at national, sub-national, community, enterprise and other levels, while at the same time reducing both the net emissions of GHG and vulnerability, while increasing resilience. Fiji produced its "Green Growth Framework" in June 2015.

The Pacific Islands' fossil fuel industry is valued at around USD 6 billion (this figure includes all assets associated with the fuel industry such as fuel farm tanks, distribution pipes, service stations, distribution networks (ie tankers, trucks etc) and this is why the gaps created by departing oil majors are rapidly taken up by new oil players.. It is our second largest area of expenditure after food, a commodity that is mostly consumed for our power generation and transport. In 2001, renewable energy accounted for 26% of the power generation in all PICT grids, of which 97% was from from hydropower. Seventeen of the 22 power utilities still rely on petroleum fuel for 98% of electricity demand. Transport, where the majority of the region's fuel imports is concerned, is 100% dependent on petroleum products. In 2013, Pacific Leaders took the historic decision and adopted the Majuro Declaration on Climate Leadership, including specific national targets for renewable energy. Generally, some progress has been made, but most nations remain well below these targets. Currently, apart from Tokelau, only Fiji, Papua New Guinea, Samoa and Vanuatu have significant shares of renewable energy as part of the total electricity supply (60%, 66%, 37% and 15% respectively) A lot more investment is needed if these targets are to be achieved.

In terms of systems preparedness for promoting and sustaining blue green economies, there are other significant challenges for the region. These include:

- Continuing heavy reliance on fossil fuel – the Pacific region is the highest oil-dependent region in the world, importing more than a billion litres of oil at total cost of more than US\$800 million every year;
- Slow progress on renewable energy and undue reliance on development assistance;
- Limited access to capital for investment;
- Remoteness of islands with small populations lacking economies of scale resulting in the highest fuel prices in the world leading to high power prices and transport costs;
- Human resources and skills mix mismatch with the requirements of blue green economies;
- Human behaviour also requires adjustment to reduce dependency on fuel industry commodities such as large vehicles, air conditioning etc.
- Regulatory and policy frameworks undeveloped, and
- Infrastructure needed to support blue green economies e.g. 70% remain without access to grid electricity.

Yet, PICTs arguably have the highest per capita potential for renewable energy than any other region of the world – abundance of sunshine, sufficient rainfall to support hydropower, wind, wave, tidal and geothermal potential. Furthermore, favourable weather conditions allow for more trees to be planted in some PICTs to act as carbon sinks. Papua New Guinea has the third largest rainforest in the world. The Pacific Ocean itself is a natural sink for the absorption of carbon dioxide.

The Pacific Community is working very closely with development partners and members to make progress on a range of development objectives for, and with, our members. Our energy programme focuses on assisting members to achieve their renewable energy targets and broader energy efficiency strategies. Our transport programme focuses on shipping standards, ports operation, safety and seafarer training.

Given the big ocean that we live in, marine transport will remain a key focus of our work. That will not change anytime soon. In 2014, Pacific ministers encouraged a shift towards higher quality fuels and the need to investigate alternative sources of energy to support the shipping industry. Together with the Pacific Regional Infrastructure facility (PRIF) and the Pacific Power Association, the Secretariat have just completed a study to look at the feasibility of using the cleaner liquefied natural gas and liquefied petroleum gas for power generation and transport.

For the Pacific region, the stakes are high.

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