OPOC Briefing Paper
Charting progress towards a sustainable Ocean
- with reference to the Framework for Pacific Oceanscape and Sustainable Development Goals 14

1.0 Preamble

The impending publication of the *2050 Strategy for the Blue Pacific Continent* can be expected to refocus and expand progress on sustainable development of the region. In many ways the *Pacific 2050* will reflect a new start for the region in dealing with multiple contemporary challenges. However, it is also timely to reflect on what has been achieved over the last years and learn lessons which can be effectively employed to make delivery of *Pacific 2050* more efficient and effective.

The onus on the Ocean to support sustainable development in the region was reaffirmed by the PIF Leaders Ocean Statement of 2021. Furthermore, Leaders explicitly positioned ecosystem integrity as a prerequisite to sustainable development of the Ocean. Leaders stated that "the potential of the Ocean to meet sustainable development needs is enormous; but only if our oceans can be restored and maintained to a healthy and productive state". Whilst *Pacific 2050* will provide a more detailed and nuanced take on sustainable development for the ocean, the overall framing has been clearly defined by Leaders already.

In relation to our Ocean, the tracking of our achievements and outcomes has been patchy and not fully comprehensive. At this juncture, and even with significant investment in ocean governance and management, our Ocean probably faces more severe threats than it has previously, especially in relation to climate change. However, we are fortunate that considerable work and effort has been put into assessing progress in sustainable development of our Ocean.

This briefing note provides overview of recent progress, drawing mainly on the Blue Pacific Ocean Report (BPOR) 2021 and SDG14. These two sources of information provide important windows into progress in oceans and provide a base to reflect on how *Pacific 2050* can be best delivered. This note is designed to provide an accessible overview, more detail can be found in the source documents to which links are provided.

The subsequent section of this brief focusses on the Blue Pacific Ocean Report (BPOR) 2021 which is a recent and substantive assessment of progression in the Ocean, and also provides a recent review of progress with the Framework for Pacific Oceanscape (FPO). The third section provides a review of the reporting and progress related to SDG 14. The final section provides conclusions emerging from the BPOR and SDG 14 which are relevant to the POA meeting and future steps.

2.0 The Blue Pacific Ocean Report (BPOR)

The Blue Pacific Ocean Report (BPOR) 2021 was prepared by the Pacific Ocean Commissioner for the Pacific Islands Forum Leaders. BPOR is a "first attempt" at the regional level to compile a comprehensive, multi-facetted, cross-cutting, and holistic review and stock-take of the state of affairs of ocean governance in the region.

The BPOR examines in an integrated manner the progress of implementation of key regional and or international ocean initiatives in the key ocean sectors. BPOR serves as a useful resource in supporting regional and national ocean policy development and decision-making into the future. Central to the BPOR is the assessment of progress in the flagship regional policy, the Framework for Pacific Oceanscape (FPO).

Assuring consistent stocktaking, monitoring and coherence in reporting is key to positive progress. This is especially important as the region has been so severely impacted by the COVID-19 pandemic. Economic sectors particularly hit include tourism, fisheries, and maritime transport. It is important the nations across the Region work collegiately to recover from the impact of the pandemic. Monitoring coupled to adaptive planning will be vital to ensure trajectories for recovery and to mitigate future shocks of a similar nature.

The BPOR concludes that progress on implementing action is **MODERATE**. BPOR recognises a number of key drivers which are providing enduring gains over the last years across dimensions of governance and management. However, key pressures are also identified which include climate change, pollution, and impacts of land-based activities. The table below summarises the BPOR key drivers and pressures:

Key Drivers	Key Pressures
• A collegiate move to resolution across 48 national EEZ boundaries in the face of SLR. • Preserving ocean biodiversity and the wealth of ecosystem services. And the challenge of creating equitable systems for ocean ecosystem service accounting. • Celebrating and relieving stress upon unique species. • Integrated governance and coherent plans, activities, and measures.	• The cumulative impacts and threats posed by climate change. • Increase in marine pollution coupled to a lack of effective control measure, including but also beyond plastics and marine debris. • Managing the land-ocean interface and the impacts of land-based activities.

BPOR also provides an overview of the services provided by the Ocean through a set of topics related to our Pacific peoples and their ecosystems (and noting the vitalness of ecosystem integrity from the Leader's Ocean Statement, mentioned above):

Service provided	Summary notes
Food	Pacific people consume about 3 to 5 times more fish than the global average. Most of it is generated from coastal fisheries, the lifeline of food security for many people in the region. Coastal fisheries are critical for the regional fight against malnutrition and non-communicable diseases. However, with growing populations and dwindling coastal resources that are subject to increasing pressure.

Well-being and Health	In addition to providing food services which can help in offering proper nutrition for people, coastal and ocean ecosystems are home to a myriad of genes that may unlock lifesaving medical solutions. Threats and pressures on the environment and its resources can amplify gender inequality and power imbalances in communities and households.
Connectors (Transport and Communications)	The ocean is a connector, for species as well as for human societies. The Blue Pacific Continent was settled millennia ago by seafarers who traversed the open ocean.
Climate Regulation	The world's oceans produce about half of the world's oxygen and absorbs over 90% of excess heat accumulated in the climate system. The ocean is also a significant carbon sink absorbing a third of global carbon emissions. Already, the ocean is on a path of acidification
Water Cycle	About 85 per cent of surface evaporation and 77 per cent of surface rainfall occur over the ocean. Consequently, the ocean dominates the global hydrological cycle.
Ecosystem services	Ecosystem services reflect the influence of natural processes on society's well-being and livelihood. An ecosystem services approach illustrates this relationship best through assessing a monetary valuation of a service to human societies. Agreeing an approach to ecological ocean accounting that is both equitable and widely understandable is challenging.
Leisure & Culture	A healthy ocean, in particular a healthy coast, is a significant economic asset. The tourism industry relies heavily on these values as main drivers for visitors. Tourism in the region is a substantial provider of income and employment opportunities.
Iconic biodiversity	The main Iconic Species of the Pacific Ocean are – 58 species of cetaceans (whales, dolphins, porpoises), whale species include sperm whale, blue whale, humpback whale. Also, dolphins as well as dugongs. Six different marine turtle species. Sharks and rays including, whale shark, great white shark, shortfin, and longfin mako, porbeagle and spiny dogfish. Manta rays are recorded. Seabirds. Eels. In addition to playing important cultural and ecological roles, these species also provide substantial economic services through eco-tourism related activities, such as diving or whale watching.

Of particular note in BPOR is **climate change**: the cumulative impacts of climate change pose the greatest threat to the Ocean. Climate change will cause a multitude of change to the Ocean (see Annex 1 for more details). The potential intensity of these impacts is depended on emissions scenarios (or how much Greenhouse Gas humans emit through their activities).

Important implications of climate change for the Pacific include:

i. A decline in fisheries catch undermining livelihoods.
ii. Reductions in human security due to SLR demonstrated by; risks to people living in low living areas, with some island nations likely to become uninhabitable.
iii. Risk to the integrity of national EEZ and continental boundaries.
iv. Degradation of almost all warm-water coral reefs.
v. Long-term loss and degradation of marine ecosystems.

Ocean acidification[1] is also a direct threat to ecosystems and species with calcified structures and foundations, in particular coral reefs. Over the last 200 years, the ocean's average surface pH has decreased by 0.11. The effect of acidification of the ocean waters are presently not fully understood but may be increasingly significant.

Also of particular note is **marine pollution** which causes all kinds of negative ecological and socio-economic impacts. Pollution can put entire ecosystems and species at risk and the people who depend on them for livelihood and economic development. Marine pollution requires the involvement of everyone, at all levels, to be effectively addressed. The most effective control measure remains prevention and avoiding waste generation.

The primary forms of pollution across the Pacific Ocean are:

- Plastic pollution and marine debris. - including ghost fishing gear.
- Nutrient run-offs from agricultural land.
- Land-based pollution from industrial, and human settlements
- Ship- and fishing-sourced pollution, including oil spills
- Nuclear pollution, WWII wrecks and unexploded ordnance
- Underwater noise pollution

The BPOR also reported specifically on a total of 23 FPO indicators employed in the 2020 FPO Report Card[2] (a summary description of FPO can be found in Annex 2). Fuller information, including data source, regional and international experts' details and summary rating of progress can be found in BPOR (see BPOR Annex 7). The table below is a summary of indicators against levels of progress:

Status in 2020	FPO indicator
Significant positive change	Status of the 4 main tuna stocks against target and limit reference points Number of Ocean policies established for implementation in Pacific Island Countries Number of Ocean initiatives with capacity building focus implemented in the Pacific
Moderate positive change	Contribution of Tuna to Food Security Value of tuna fishing access fees to Pacific EEZs Direct employment in the tuna fishing industry Proportion of national exclusive economic zones managed using ecosystem-based ecosystems Recurrent budget allocated to coastal fisheries management Deposit of charts and/ or lists of geographical coordinates for baselines and outer limits of maritime zone with SG of the UN under UNCLOS Proportion of organization types and sectors represented on the Pacific Ocean Alliance list

[1] Ocean acidification is not caused by climate change, it is caused by an increase in CO2 levels in the atmosphere caused by burning fossil fuels.

[2] Compared to 14 indicators used in 2016

	Relative proportion of participation by regional, national and local level stakeholders at POA face-to-face meetings Number of open regional and sub-regional organisations ocean forums held Proportion of PICTs above the overall global ocean health index benchmark Sustainable fisheries as a proportion of GDP in Pacific Islands and Territories Coverage of protected areas in relation to marine areas National coastal fisheries roadmap or strategy in place Household participation in fisheries and aquaculture (disaggregated by urban / rural) Proportion of households who consume fish
Little of no change	Number of PICT signatories to relevant multilateral agreements Number of political/country statements that reinforce or promote the FPO's role in the regional ocean policy framework User rights of coastal communities defined in legislation Volume of fresh fish consumed per person per annum
Declining change	Stock status of key indicative coastal fisheries species

A majority of indicators show "moderate positive change", with some significant change associated with tuna, ocean policy development and capacity building. A small number of indicators showed more concerning progress. These seem to be in two main areas – firstly, higher-level national governance associated with country support for the FPO and to multilateral agreements – and secondly, to coastal fisheries in relation to stock, food supply and user-rights.

3.0 Sustainable Development Goals (SDGs)

The 2022 assessment by UNESCAP states that the Pacific is not on track to achieve any of the 17 SDG Goals by 2030[3].

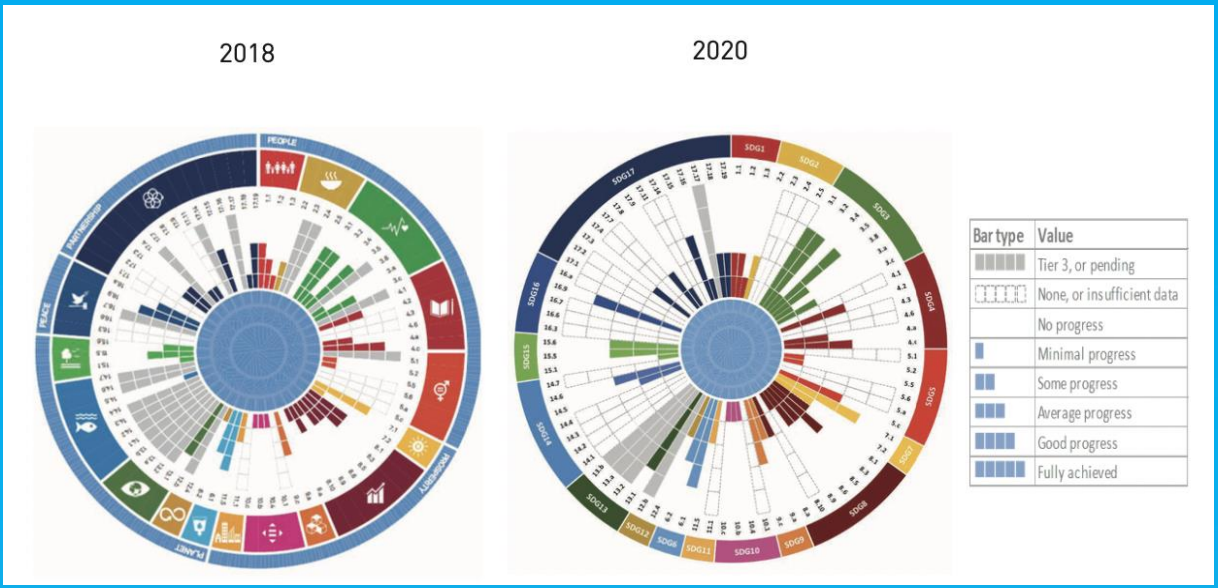
Insufficient data is available to report on the SDG 14 Goal in any substantial or consistent way at a regional level. This is predicated by insufficient monitoring and reporting by member countries, obviating a consolidated regional perspective.

The only two SDG 14 targets which have adequate information for regional reporting are: SDG 14.5 (*By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information*), and SDG 14.6 (*By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported, and unregulated fishing…).* Both SDG 14.5 and 14.6 targets have an identified deadline for achievement two years ago, in 2020.

However, UNESCAP note some good action in SDG14.1 (marine pollution) mainly because of improvements in beach litter collection and coastal eutrophication[4].

[3] https://www.unescap.org/sites/default/d8files/knowledge-products/ESCAP-2022-FG_SDG-Progress-Report.pdf
[4] https://www.unescap.org/sites/default/d8files/knowledge-products/ESCAP-2022-FG_SDG-Progress-Report.pdf

All the SDGs touch the Pacific and need to be consistently reported upon. Working towards realising the targets enshrined under SDG14 "life below water" is significant to the whole region. The SDG wheels below provide a snapshot of overall progress, and document progress in SDG 14.5 and 14.6 between 2018 and 2020, as seen below:



Reporting of SDG 14 does not provide complete and insightful information on progress towards sustainable oceans at the regional level. While there is evidence of some progress in SDG 14 targets, progress towards 2030 needs to be stepped up to meet most SDG 14 targets. The insufficiency of information on most SDG 14 targets means that broad statements of progress in oceans in the region are not substantiated.

There is also limited evidence or dialogue on levering the co-benefits of meeting SDG 14 targets, to other SDGs. The Voluntary National Review process for periodic national reporting on SDG progress to the High-Level Political Forum of the UN may be an opportunity for leverage on the "indivisibility" of the Goals to accelerate progress to 2030. An approach to a SDG 14 accelerator, leveraging the "indivisibility" of the Goals, has been developed for the region[5].

The Pacific Data Hub also published a dashboard Progress Wheels for Pacific Islands Countries/Territories on SDG14 and all other SDGs[6]. There has been limited regional engagement of regional organisations, particularly technical organisations in the work of data improvements and reporting, at least for most SDG14 targets. Progress has just been made on SDG14.5, SDG14.6 and SDG14.B. The organisations involved in data collection methodology includes SPREP, UNFAO & SPC Statistics. There is an urgent need to increase regional intervention to support Member Countries on implementing and reporting on other SDG14 targets.

[5] https://www.unescap.org/kp/2019/sdg-14-acceleratora-methodological-guide
[6] https://pacificdata.org/dashboard/sdg-14-life-below-water

4.0 Concluding comments

The BPOR report of 2020 delivered the most comprehensive review of progress in our Ocean since the publication of FPO in 2010. Careful use of relevant indicators identified "moderate progress in many areas" as well as more exemplary progress. In addition, areas of insufficient progress or backward reversion have also been identified, and these can become priority candidates for addressing in the future.

SDG 14 reporting demonstrates limited further insight into progress in our Ocean, this is mainly due to insufficient monitoring and reporting. SDG 14 reporting misses some of the main developments in the region over the last years, some of which are related to setting out a robust policy platform and associated capacity for ocean governance as portrayed by the FPO indicators.

However, the SDGs set an important direction for sustainable development and provide potential to promote more integrated approach to accelerate progress in multiple SDG delivery; mobilising these opportunities may be an imperative.

The FPO stands out as the flagship regional policy, and this was reaffirmed in the Ocean Statement of Leaders in 2021. However, since its publication there have been significant developments such as *The Blue Pacific* narrative of 2017, the imminent *Pacific 2050 Strategy for the Blue Pacific Continent*, the first substantive reporting on FPO in BPOR and the impact of the COVID-19 pandemic.

The way that FPO flexes to these contemporary developments will be vital to maintain and raise ambition for our Ocean for the next years. We are at a juncture to our future, and the collective constituency of the POA has responsibilities to set future direction and agendas to achieve the Ocean we want.

Annex 1. The projected impacts of climate change on the ocean (from BPOR)

Climate change parameters: observed and projected impacts to the Pacific Ocean

Change and impact	Observed	Projected
Sea ice change	Decrease with levels likely unprecedented for at least 1,000 years	Continued decrease
Sea Surface Temperature	Ocean warming likely more than doubled	Continued ocean warming
Marine heat waves	Likely doubled in frequency and intensity	Increased frequency, duration and intensity of marine heat waves
Deoxygenation	1970-2000: upper 1,000m of the water column loss of oxygen from increasing ocean stratification, changing ventilation and biochemistry	Very likely to be defined by oxygen loss across 59-90% of the ocean surface by 2031-2050 (RCP 8.5)
Sea Level Rise	2006-2015 = 2.5 x rates of 1901-1990	(RCP 8.5): Medium confidence that 'multi-meter' sea level rise could occur in the long term (100+ years) Extreme sea level events such as surges from tsunamis and cyclones will increase with sea level rise and marine heat waves (10-fold increase)
Extreme weather events	Increase in annual global proportion of category 4 or 5 tropical cyclones	Low lying cities and small islands at almost all latitudes will experience severe events annually by 2050

Please note the above projected climate change impacts are drawn from IPCCAR5. Since publication of the BPOR the IPCC has published AR6 and the projections may have changed a little.

Annex 2. Summary of the Framework for Pacific Oceanscape (FPO).