# CLIMATE CLUBS AND THE ALLIANCE OF SMALL ISLAND STATES (AOSIS): FRIENDS OR FOES?

PENEHURO FATU LEFALE<sup>1</sup>

Abstract: Every country is a polluter and a victim of anthropogenic climate change. Inextricably linked, every greenhouse gas emitted from every corner of the world changes the atmospheric composition of the climate system. Viewing the climate change problem from this lens, every person from every country must play its part in mitigating and adapting to climate change. And every country is a developing country, in the sense of universality as conveyed by "Transforming Our World: the 2030 Agenda for Sustainable Development" (2030 Agenda). Goal 13 of the 2030 Agenda specifically recognises the United Nations Framework on Climate Change (UNFCCC) as the primary forum of global climate governance. However, progress for legally binding quantified emissions reductions limitations (QERLs) mitigation targets under the UNFCCC-style multilateralism framework has yet to produce an effective response to the threat of global warming. The gap between currently pledged QERLs trajectories and global emissions levels consistent with limiting global warming to 2°C Celsius above pre-industrial temperatures remains large. It is therefore not surprising that a growing number of minilateralism-style proposals (e.g. climate clubs) have emerged in the literature as a way forward to promote QERLs actions in the post 2015 Paris Climate Summit era. This paper explores how climate clubs could potentially assist in catalysing greater international cooperation for effective QERLs actions. The paper then specifically investigates how the Alliance of Small Island Developing States (AOSIS) could assist in pioneering emerging international cooperation efforts to establish climate clubs to fast track QERLs actions. What makes AOSIS's epic quest to be a member of the international climate clubs movement so important is the question of whether it can help navigate the international community towards using climate minilaterism-style clubs to complement UNFCCC-style multilaterism in the post 2015 Paris Climate Summit era.

**Key words**: climate clubs; multilateralism; minilateralism, mitigation, international cooperation, SIDS, AOSIS.

<sup>&</sup>lt;sup>1</sup> External Affiliate Researcher, Joint Centre for Disaster Research (JCDR), Massey University, Wellington, New Zealand. Director, LeA International, Wellington, New Zealand. Email: <u>pene.lefale@outlook.com</u>

# 1.0 Climate Clubs and AOSIS

"We know the truth that many nations have contributed little to climate change but will be the first to feel its most destructive effects. For some, particularly island nations...climate change is a threat to their very existence." President Barack Obama, November 30, 2015.<sup>2</sup>

This paper explores how climate clubs could potentially assist in catalysing greater international cooperation for effective QERLs actions from a Small Island Developing States (SIDS) perspective. The paper then specifically investigates how the Alliance of Small Island Developing States (AOSIS) could assist in pioneering emerging international cooperation efforts to establish climate clubs to fast track QERLs actions.

Subject to how one defines climate clubs, one could argue the Alliance of Small Island States (AOSIS) is an ad hoc type of *climate club*. AOSIS is a coalition of small island and low-lying coastal countries that share similar development challenges and concerns about the environment, especially their vulnerability to the adverse effects of climate change.<sup>3</sup> It functions primarily as an ad hoc lobby and negotiating voice for Small Island Developing States (SIDS) within the United Nations system. AOSIS has a membership of 44 States and observers<sup>4</sup>, drawn from all oceans and regions of the world: Africa, Caribbean, Indian Ocean, Mediterranean, Pacific and South China Sea. Thirty-nine are members of the United Nations, close to 28 percent of developing countries, and 20 percent of the UN's total membership. Together, SIDS communities constitute roughly five percent of the global population.

AOSIS members contribute very little to anthropogenic climate change, but are the first to feel its most destructive effects (as President Obama describes it), which derails their development gains. While many AOSIS members have committed to significant emission reductions and are scaling-up the share of their energy budget using renewable energy sources, their national actions alone will not protect their citizens from extreme weather

 <sup>&</sup>lt;sup>2</sup> Remarks by President Obama at the First Session of COP21, Paris, France, November 30, 2015. <a href="https://www.whitehouse.gov/the-press-office/2015/11/30/remarks-president-obama-first-session-cop21">https://www.whitehouse.gov/the-press-office/2015/11/30/remarks-president-obama-first-session-cop21</a>

<sup>&</sup>lt;sup>3</sup> Alliance of Small Island States; About AOSIS (2015). <u>http://aosis.org/about/</u>.

<sup>&</sup>lt;sup>4</sup> Ibid. **Members are**; Antigua and Barbuda, Bahamas, Barbados, Belize, Cape Verde, Comoros, Cook Islands, Cuba, Dominica, Dominican Republic, Fiji, Federated States of Micronesia, Grenada, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Nauru, Niue, Palau, Papua New Guinea, Samoa, Singapore, Seychelles, Sao Tome and Principe, Solomon Islands, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu. **Observers**; American Samoa, Netherlands Antilles, Guam, U.S. Virgin Islands and Puerto Rico. Member States of AOSIS work together primarily through their New York diplomatic Missions to the United Nations. AOSIS functions on the basis of consultation and consensus. Major policy decisions are taken at ambassadorial-level plenary sessions. The Alliance does not have a formal charter. There is no regular budget, nor a secretariat. With the Permanent Representative of Maldives as its current chairman, AOSIS operates, as it did under previous chairmanships, out of the chairman's Mission to the United Nations.

events and rising sea levels that threaten their economies and way of life, and in some cases, their very existence.

AOSIS has exercised pioneering leadership on climate change, particularly on the urgency of deep cuts in greenhouse gases (GHG) emissions since 1990. Notwithstanding their *negligible* contributions to global greenhouse gas emissions, AOSIS members are epic proponents on actions to address climate change. AOSIS vast experience as an ad hoc states climate club and their ongoing political crusade on climate change make it all the more reasons for AOSIS as a whole or its individual Members to lead international efforts in Pioneers Alliances for Climate Action via climate clubs.

# 2.0 Climate Club: Strategic vision and objectives

**Vision**: A decarbonised global economy by 2050 that can also withstand climate shocks.

**Mission:** To mobilise international coalitions and resources to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

- a) Holding the increase in the global average temperature to well below 2 °C above preindustrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
- b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;
- c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development.

# Principles:

Strongly reaffirm the principles and objectives set out in the UNFCCC, the Paris Agreement/COP21 Outcomes, SDGs Agenda 2030 and the Marrakesh Agreement Establishing the World Trade Organization (WTO).

# **Objectives:**

- 1. To reduce global GHG emissions to at least [X]% by 2030, [Y]% by 2050 and [Z]% by 2100.
- 2. To reduce global average per capita emissions by [X]% by 2030, [Y]% by 2050 compared with the levels in 1990 and 2010 respectively.

- 3. To eliminate investments in inefficient fossil fuel subsidies by at least \$[X billions] by 20[YY].
- 4. To agree an 'international target carbon price' (e.g. at a minimum domestic carbon price of \$25 per ton of CO2) by 2025.
- 5. To incorporate climate mitigation and resilience considerations into ALL Overseas Development Assistance and Investment decisions by 2020.
- 6. To insensitive investments towards low-carbon growth opportunities
- 7. To establish a platform for strategic climate clubs dialogues.
- 8. To eliminate inefficient fossil fuel subsidies by [x\$ billion] by 2030.

# Motivation

The selected AOSIS Members (Samoa, Fiji, Singapore, Seychelles, Trinidad and Tobago), representing four geo-political regions of AOSIS (Pacific, South China Sea, Indian Ocean and the Caribbean) have all made significant progress to address climate change since becoming parties to the United Nations Framework Convention on Climate Change (UNFCCC).<sup>5</sup> Their 2015 Intended Nationally Determined Contributions' (INDC) submissions reveal their continued willingness to implement QERLs policies and measures (PAMS) at national levels as part of their contributions to international mitigation actions.

 Party	Signature	Ratification	Entry into Force		
Fiji	9 June 1992	25 February 1993	21 March 1994		
Samoa	12 June 1992	29 November 1994	27 February 1995		
Seychelles	10 June 1992	22 September 1992	21 March 1994		
Singapore	13 June 1992	29 May 1997	27 August 1997		
Trinidad and Tobago	11 June 1992	24 June 1994	22 September 1994		

Table 1: Selected AOSIS Members – current status of ratification of the UNFCCC

Source: http://unfccc.int/essential\_background/convention/status\_of\_ratification/items/2631.php

Notwithstanding their commitments in pursuit of the objective of the Convention and being guided by its principles, most AOSIS Members (e.g. Pacific Small Island Developing States (SIDS)) presently spend 25% of their foreign exchange on imported fossil fuels. Thus energy independence of SIDS by decarbonizing the global economy while at the same time withstand climate shocks (e.g. extreme weather events) is a game changer path to meeting their sustainable development goals (SDGs) by the end of the century, which will in turn reduce their vulnerabilities, enhance their capacity to adapt, and develop resilience to face the multitude of other challenges they are confronting. In addition, SIDS can serve as models and examples for bigger nations.

<sup>&</sup>lt;sup>5</sup> http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2979.php

#### Coherence with national strategies/priorities

**Fiji:** Fiji's commitments to implementing the Convention are outlined in their National Climate Change Policy of 2012. Fiji was also a signatures to the Barbados Plan of Action 1994, the Mauritius Strategy 2005-2015, the 2014 SIDS Accelerated Modalities of Actions (S.A.M.O.A) Pathway (SAMOA PATHWAY) and other related regional and international initiatives to combat climate change (see Table 2 below for a brief summary of Fiji and other selected AOSIS countries' efforts to address climate change).

Samoa: Samoa is fully committed to the UNFCCC objectives and it embraces all opportunities to fulfil them.<sup>6</sup> It welcomes support from the global communities who share the same need to make the world a better place to live through establishing suitable adaptive and mitigative mechanisms. Samoa is committed to reducing its greenhouse gas emissions and at the same time pursue a low carbon emission development pathway which would have significant economic benefits. The Energy sector, which accounted for 50% of total GHG emissions in 2007 is targeted for emissions reductions in their INDC submission and in particular the electricity sub-sector. The National Energy Coordinating Committee<sup>7</sup> has set a target for Samoa to generate 100% of its electricity from renewable sources by 2017. This ambitious target is supported by a combination of policy level actions and development projects. In 2007 total emissions from the electricity subsector were 44,214 tCO<sub>2</sub>-e and represents emissions from diesel-fuelled thermal plants. Renewable energy contributed 48% of total electricity requirements in 2007. However, by 2014, renewable energy sources including solar photovoltaic, wind and hydropower contributed only 26% of total electricity generation due the impacts of Tropical Cyclone Pam. The two sectors that contribute most to Samoa's emissions are road transport and livestock farming, which, in 2007, accounted for 27% and 25% of total CO2-e emissions respectively.

<sup>&</sup>lt;sup>6</sup> Supra note 14.

<sup>&</sup>lt;sup>7</sup> The Committee is chaired by the Prime Minister and comprises key Cabinet Ministers and chief executive officers of ministries and agencies in the energy sector.

Member	National/ Regional Strategies	Top two Priority Sectors	INDC (Mitigation commitments) <sup>8</sup>	CO2 emissions (Mt CO2) (2013)	Ranking <sup>9</sup> CO2 emissions (2013)
Fiji	<ul> <li>INDC Submission (2015)<sup>10</sup></li> <li>NEMS (1993)</li> <li>NCCP (1992)</li> <li>SAMOA PATHWAY (2014)<sup>11</sup></li> <li>MSI (2005)<sup>12</sup></li> <li>BPOA (1994)<sup>13</sup></li> <li>NCs<sup>14</sup></li> </ul>	<ul> <li>Energy (Power generation and energy efficiency improvements economy wide)</li> </ul>	Renewable energy share in electricity generation to approach 100% by 2030 from around 60% in 2013. In addition an indicative reduction of 10% CO2 emissions for energy efficiency improvements economy wide will be sought. These measures will reduce CO2 emissions in the energy sector by around 30% from BAU by 2030.	1.5	155

# Table 2: AOSIS Selected Members National strategies/priorities, INDC mitigationcommitments and their CO2 emissions ranking in 2013.

	<ul> <li>BPoA (1994)<sup>13</sup></li> <li>NCs<sup>14</sup></li> </ul>		around 30% from BAU by 2030.	
Samoa	<ul> <li>INDC submission (2015)</li> <li>NEMS (1993)</li> <li>NCCCT</li> <li>NCs<sup>15</sup></li> <li>SAMOA PATHWAY (2014)</li> <li>MSI (2005)</li> <li>BPoA (1994)</li> </ul>	<ul> <li>Energy (power generation)</li> <li>Agriculture</li> </ul>	Aims to reduce its GHG emissions from the electricity sub sector through the adoption of a 100% renewable energy target for electricity generation through to the year 2025. <sup>16</sup> Economy-wide emissions reduction conditional on external international assistance.	0.2 196

<sup>&</sup>lt;sup>8</sup> Intended Nationally Determined Contributions (INDCs) <u>http://unfccc.int/focus/indc\_portal/items/8766.php</u>

<sup>&</sup>lt;sup>9</sup> <u>http://www.globalcarbonatlas.org/?q=en/emissions</u> Carbon dioxide emissions from the combustion of fossil fuels, cement production and land use change over multiple decades, including their drivers.

<sup>&</sup>lt;sup>10</sup> Fiji INDC submission (2015).

http://www4.unfccc.int/submissions/INDC/Published%20Documents/Fiji/1/FIJI iNDC Final 051115.pdf

<sup>&</sup>lt;sup>11</sup> SIDS Accelerated Modalities of Actions Pathway (S.A.M.OA)

http://www.sids2014.org/index.php?menu=1537

<sup>&</sup>lt;sup>12</sup> Mauritius Strategies for Implement of the Barbados Programme of Action (1994) https://sustainabledevelopment.un.org/conferences/msi2005

<sup>&</sup>lt;sup>13</sup> Barbados Programme of Action (1994) <u>http://www.un.org/esa/dsd/dsd\_aofw\_sids/sids\_pdfs/BPOA.pdf</u>

<sup>&</sup>lt;sup>14</sup> Fiji National Communication Reports (<u>http://unfccc.int/resource/docs/natc/fjinc2.pdf;</u> <u>http://unfccc.int/resource/docs/natc/fjinc1.pdf</u>

<sup>&</sup>lt;sup>15</sup> Samoa National Communication Reports <u>http://unfccc.int/resource/docs/natc/samnc1.pdf;</u> <u>http://unfccc.int/resource/docs/natc/samnc2.pdf</u>

<sup>&</sup>lt;sup>16</sup> Samoa's commitment is conditional on reaching the 100% renewable electricity generation target in 2017 and receiving international assistance to maintain this contribution through to 2025.

Seychelles	• • •	INDC submission (2015) <sup>17</sup> NCs <sup>18</sup> SAMOA PATHWAY MSI (2005) BPOA (1994)	•	Public electricity, land transport and solid waste management (LULUCF is excluded)	Aims to reduce its economy-wide absolute GHG emissions by 122.5 ktCO2e (21.4%) in 2025 and estimated 188 ktCO2e in 2030 (29.0%) relative to baseline emissions	0.7	165
Singapore	• • •	INDC <sup>19</sup> NCs <sup>20</sup> SAMOA PATHWAY (2014) MSI (2005) BPoA (1994)	• • •	Energy Industrial Processes and Product Use Agriculture LULUCF Waste.	Intends to reduce its Emissions Intensity by 36% from 2005 levels by 2030, and stabilise its emissions with the aim of peaking around 2030.	18	86
Trinidad and Tobago	• • •	INDC <sup>21</sup> NCS <sup>22</sup> SAMOA PATHWAY (2014) MSI (2005) BPoA (1994)	•	Transportation Power generation Industry	Aims to achieve a reduction objective in overall emissions from the three sectors by 15% by 2030 from Business as Usual, which in absolute terms is an equivalent of 103,000,000 million tonnes of CO2e.	49	62

**Singapore**: As one of the most globalised economies and a trading nation with no indigenous resources, Singapore is heavily dependent on the global supply chain for its food and energy security. Its economic activity and emissions are also highly sensitive to the volatility of regional and global developments.<sup>23</sup> Even so, Singapore's early actions to reduce emissions, despite its lack of alternative energy options, have allowed it to achieve one of the lowest emissions intensities globally while still maintaining economic growth. Singapore ranks favourably at 113th out of 140 countries. Singapore's mitigation efforts include a green growth strategy, promoting low carbon trajectories, and pursuing new energy efficiency

<sup>&</sup>lt;sup>17</sup> Seychelles INDC Submission (2015).

http://www4.unfccc.int/submissions/INDC/Published%20Documents/Seychelles/1/INDC%20of%20Seychelles. pdf

<sup>&</sup>lt;sup>18</sup>Seychelles National Communication Reports <u>http://unfccc.int/resource/docs/natc/sycnc2.pdf</u>; <u>http://unfccc.int/resource/docs/natc/seync1.pdf</u>

<sup>&</sup>lt;sup>19</sup> Singapore INDC Report (2015).

http://www4.unfccc.int/submissions/INDC/Published%20Documents/Singapore/1/Singapore%20INDC.pdf <sup>20</sup> Singapore National Communication Reports <u>https://www.nccs.gov.sg/sites/nccs/files/NCBUR2014\_1.pdf;</u> <u>http://unfccc.int/resource/docs/natc/sinnc1.pdf;</u> <u>http://unfccc.int/resource/docs/natc/sinnc2.pdf</u> <sup>21</sup> Trinidad and Tobago INDC report (2015).

http://www4.unfccc.int/submissions/INDC/Published%20Documents/Trinidad%20and%20Tobago/1/Trinidad %20and%20Tobago%20Final%20INDC.pdf

 <sup>&</sup>lt;sup>22</sup> Trinidad and Tobago National Communication Reports <a href="http://unfccc.int/resource/docs/natc/ttonc1.pdf">http://unfccc.int/resource/docs/natc/ttonc1.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc1.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc1.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc1.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc2.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc2.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc2.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc2.pdf</a>;
 <a href="http://unfccc.int/resource/docs/natc/ttonc2.pdf">http://unfccc.int/resource/docs/natc/ttonc2.pdf</a>;

measures over and above those already extensively deployed. Singapore will continue to invest significantly in research and development to explore new innovations in low carbon technologies. These efforts entail economic and social opportunity costs, but nevertheless will be funded domestically. Singapore recognises its responsibility to contribute to international collaborations to address climate change<sup>24</sup>. Singapore also works closely with many partners<sup>25</sup> to provide platforms to share experiences, best practices and technical knowledge on climate change and green growth issues. Singapore has also broadened and deepened its own technical cooperation programmes to share experiences with other developing countries. To date, Singapore has conducted programmes for over 10,700 officials from other countries in climate change and sustainable development issues alone.

**Seychelles:** Seychelles is vulnerable to the impacts of climate change and climate variability, and it gives priority concern for adaptation to climate change as communicated in their INDC. Given that Seychelles is a net sink, its contributions to climate change mitigation to contribute towards the objectives of the UNFCCC will be the co-benefit of enhancing its energy security and reducing its energy bill. Seychelles stated categorically in its INDC that it will "reduce its economy-wide absolute GHG emissions by 122.5 ktCO2e (21.4%) in 2025 and estimated 188 ktCO2e in 2030 (29.0%) relative to baseline emissions."

**Trinidad and Tobago**: Trinidad and Tobago is the most industrialized economy in the Englishspeaking Caribbean. It is the leading Caribbean producer of oil and gas, and its economy is mainly based upon these resources. Trinidad and Tobago also supplies manufactured goods, mainly food products and beverages, as well as cement, to the Caribbean region. Even though other products are also manufactured, oil and gas is the leading economic sector and accounts for 40% of Gross Domestic Product (GDP) and 80% of exports. Trinidad and Tobago does not contribute largely to the total worldwide GHG emissions. In fact, as of 2013, Trinidad and Tobago was ranked 62nd of all the countries if they were classified by total national GHG emissions. The Government recognises the legally binding commitment of all Parties to achieving the objective of the UNFCCC (Article 2) and the need for mitigation action by all Parties regardless of their quantum of emissions. The mitigation efforts of Trinidad and Tobago along with those of all Parties will collectively contribute to the reduction of global

<sup>&</sup>lt;sup>24</sup> Singapore hosts regular international forums such as the World Cities Summit, Singapore International Water Week, Singapore International Energy Week, and the Singapore Green Building Week/International Green Building Conference, for the sharing of experiences in city planning, climate change adaptation, transport, as well as waste and water management. Singapore also actively shares its developmental experiences as an island city-state in the C40 Cities Climate Leadership group (C40) Partnering the United Nations Environmental Programme (UNEP), the Building and Construction Authority (BCA) of Singapore established the Centre for Sustainable Buildings – a first in Asia – to support regional efforts to develop green building policies and actions (Singapore INDC report (2015)).

<sup>&</sup>lt;sup>25</sup> UNFCCC Secretariat, ASEAN member states, the United Nations Development Programme (UNDP), the World Meteorological Organisation, the US Government, the UK Government, UK Carbon Trust, the Australian Department of Foreign Affairs and Trade and Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (Singapore INDC, 2015)

atmospheric concentration of greenhouse gases and the achievement of the objective of the UNFCCC.

#### "Identity crisis"/multiple faces in climate clubs

All five countries share common characteristics. Their emissions are minimal compared to other parties (see Table 2 above). Three are currently net sinks. And under the Business-As-Usual scenario, they are expected to become net emitters by between 2024 and 2025. The contributions of the five countries are considered fair and ambitious. With their pledged contributions, three will remain net sinks in 2030. The fairness of their contributions also relate to the fact that as SIDSs, adaptation remains their highest priorities. Notwithstanding, all five countries have placed equal importance on mitigation and adaptation. They recognise developing low carbon based economies would not only go to meeting their INDC mitigation targets but also towards achieving their SDGs – a win-win-win strategy. To this end, all five countries have already laid the required and necessary policy and legislative frameworks for climate actions at the national level. They have also committed to 'unconditional' mitigation actions consistent with the implementation of their National Development Plans, National Climate Change Policies and related Strategies.

#### Ways and means to overcome implementation gap

All five countries INDC submissions described in detail the planning processes they used when developing their INDCs. It is an all-inclusive process of engaging relevant stakeholders in and outside governments through a number of dialogue and rounds of stakeholders' consultations. Each stated a "whole of government" approach process enabling them to produce genuine national ownership of their INDC and also highlighted synergies with other UNFCCC-related processes.<sup>26</sup> The ownership issue is absolutely vital to the successful implementation of any programmes in any country. Ownership, based on trust and genuine partnership, ensures that all stakeholders are committed to work together to achieve national INDC targets. Another noticeable finding is all countries frame their INDCs from a sustainable development' lens rather than from a climate change (environmental) lens.<sup>27</sup>

<sup>&</sup>lt;sup>26</sup> See countries National Communications, Biennial Update Reports, National Adaptation Planning, and Nationally Appropriate Mitigation Actions (NAMAs).

<sup>&</sup>lt;sup>27</sup> Samoa highlighted their Strategy for Development of Samoa (SDS) the key strategies for development across the priority sectors. The overarching theme for the SDS 2012 – 2016 is *Boosting productivity for sustainable development*. The SDS highlights the importance of the environment as a priority area and has identified the mainstreaming of climate change across all sectors and increased investment in renewable energy as some of the main strategic outcomes. This political commitment to mainstream climate change issues is driving a number of actions that are aimed at not only adapting to the impacts of climate change but also accelerating efforts to reduce GHG emissions.

The highest priority focused area for all countries INDCs is economic inputs (energy inputs in particular). All INDCs submissions stated that addressing economic and related inputs will allow development approaches that reduce emissions, whilst at the same time promoting sustainable development more generally – a point also advocated by many analysts and observers of the climate regime.<sup>28</sup>

Energy-related CO2 emissions, which account for the majority of the five selected countries total emissions are determined by the size of the population, the size of the economy, the energy intensity of the economy and the CO2 intensity of energy supply. Not surprisingly, all five selected countries focused their INDCs on QERLs PAMS to improve energy productivity of their economies and the CO2 productivity of energy provision.<sup>29</sup>

# 3.0 Prerequisites to join a Climate Club

A quick analysis of the literature (e.g. Weischer, et al., 2012<sup>30</sup>; Widerberg and Stenson, 2013<sup>31</sup>; Ott, et. al., 2014<sup>32</sup>; Falkner, 2015<sup>33</sup>; Nordhaus, 2015<sup>34</sup>) reveals a range of views on the potential benefits of countries, alliances and non-country actors (private sector) joining climate clubs.

To better understand what sort of requirements is needed for AOSIS (as a group or individually) to be considered as eligible for climate clubs, it is best to begin with some definitions. A club is defined as 'a voluntary group deriving mutual benefits from sharing the costs of producing an activity that has public-good characteristics.'<sup>35</sup> The gains from a successful club are sufficiently large that members will pay dues and adhere to club rules in order to gain the benefits of memberships.<sup>36</sup> Climate Clubs is defined as 'smaller groups of countries that take action outside of the UNFCCC. It includes any grouping that comprises more than two and less than the full multilateral set of countries party to the UNFCCC and that has not reached degree of institutionalisation of an international organization.'<sup>37</sup>

 <sup>&</sup>lt;sup>28</sup> Otto et al., 2014. Climate policy: road works and new horizons – an assessment of the UNFCC process from Lima to Paris and beyond, ENVIRONMENTAL LIABILITY – Law, Policy and Practice, <u>www.lawtext.com</u>.
 <sup>29</sup> See Table 2.

<sup>&</sup>lt;sup>30</sup> Weishcher, et al., (2012): Climate Clubs: Can a Small Group of Countries make a big difference in addressing climate change? Review of European Community & International Environmental Law, RECIEL 21(3) 2012. ISSN 0962-8797.

<sup>&</sup>lt;sup>31</sup> Widerbery, O and D. Stenson, (2013) Climate Clubs and the UNFCCC, FORES Study 2013: 3.

<sup>&</sup>lt;sup>32</sup> Supra 23.

 <sup>&</sup>lt;sup>33</sup> Falkner, R. (2015): A minilateral solution for global climate change? On bargaining efficiency, club benefits and international legitimacy. Centre for Climate Change Economics and Policy, Working Paper No. 22.
 Grantham Research Institute on Climate Change and the Environment, Working paper Bo. 197.
 <sup>34</sup> Supra note 2.

<sup>&</sup>lt;sup>35</sup> Ibid.

<sup>&</sup>lt;sup>35</sup> Ibid. <sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Supra poto

<sup>&</sup>lt;sup>37</sup> Supra note 27.

The obvious question, then, is what sort of benefits must a club offer in order to be attractive for AOSIS (or its members) to join? Broadly speaking, club memberships should be voluntary, such that members share mutual benefits (e.g. financial rewards). These include sharing the costs of production for an activity that has public-good characteristics and providing gains for members that are sufficiently large that members will pay dues and adhere to club rules in order to gain the benefits of memberships – no 'club hopping.'

Clubs should also help members reduce their GHG mitigation costs (via facilitating and creating what former UNFCCC negotiator for Sweden, Bo Kjellen, calls "enabling conditions" - meaning that agreement at the international level can only be met when national conditions are favourable for an agreement), which is likely to increase their williness to commit to more mitigation actions.

Implementation and enegry clubs for examples can be conducive to lowering abatement costs of climate change and thereby make international interests of climate change and national interests more prone to action.

Climate Clubs must be conducive to the UNFCCC, not operating outside of the UNFCCC. Questions such as to what extent climate clubs adhere to core norms, principles, and activities of the UNFCCC need to be considered. (e.g. should climate clubs contribute to the implementation of agreements under the UNFCCC such as the proposed Paris Work Programme on Capacity Building (PWPCB) under the (draft) 2015 Paris Agreement) and related international treaties (e.g. World Trade Organization Marrakech Agreement?)).

Climate clubs should also fill governance gaps in the UNFCCC. REDD+, biofuels and black carbon, for example, are climate topics which are discussed in the negotiations, but usually only operatized in climate clubs.

For AOSIS, all three types of climate clubs (energy, state and implementation) are relevant to their needs and interests. But from a decarbonize economic system perspective, energy clubs are the most attractive. The core aim of energy clubs is to spread clean energy technologies and improve energy eficiency. Energy clubs are also particulalry attractive due to potentially high co-benefits (relative pure emissions-reduction initiatives) for example, gain in energy eficiency can reduce GHG emissions and improve energy security.

AOSIS are already engaged in R&D in low carbon and renewable energy technologies and promoting activities aimed at increasing market-update of low carbon and renewable technology. Examples of existing energy clubs already operating within AOSIS regions include;

the Energy and Security Group (ESG)<sup>38</sup>, the Global Renewable Energy Island Network (GREIN)<sup>39</sup> and Small Island Developing renewable energy knowledge and transfer network (DIREKT).<sup>40</sup>

# 4.0 Summary & Recommendations

Despite AOSIS history of limited success in securing outcomes from major multilateral climate change and related negotiations in their favour, AOSIS should not shy away from continuing to push for initiatives that would result in a speedy transition to a decarbonised global economic system. Notwithstanding their commitments in pursuit of the objective of the UNFCCC and being guided by its principles, SIDS currently spend 25% of their foreign exchange on imported fossil fuels. Thus energy independence of SIDS by decarbonizing the global economy while at the same time withstand climate shocks (e.g. extreme weather events) is a game changer pathway to their capacity to adapt, and develop resilience to face the multitude of other challenges they are confronting.

AOSIS should therefore offer their full support to those countries (e.g. Germany, Brazil, India, China, South Africa, Chile, Gambia, Tanzania, etc) and non-state actors working to achieve speedy transition to a decarbonised global economic system. Similarly, those states and non-state actors pioneering alliances for speedy transition to a decarbonised economic system should consider making special concessions to accommodate AOSIS as a group or individually to join future pioneer alliances. For AOSIS, the benefits of joining and pioneering the pioneer alliances are highly uncertain due to lack of information/studies. There is no research to date regarding climate clubs and their potential benefits (and cost and damage) to AOSIS and vice versa. This needs urgent attention. In addition, research should also be conducted into the (potential) effects of international trade and tariffs on the economic welfare of AOSIS regions in a decarbonised world. Similarly, a research into whether a trade-penalty-plus-carbon price regime can operate in the future with rising carbon prices associated with an efficient climate change scheme as suggested by Nordhaus (2015). Moreover, research into the merits of a regime that ties a climate change agreement to the free trading system should also be pursued.

<sup>&</sup>lt;sup>38</sup> <u>http://www.energyandsecurity.com/home.html</u>

<sup>&</sup>lt;sup>39</sup> <u>https://www.irena.org/DocumentDownloads/events/2013/March/GREIN/1\_Jeffrey\_Skeer.pdf</u>

<sup>40</sup> http://www.direkt-project.eu/