**VANUATU SUSTAINABLE ENERGY INVESTMENT FORUM**

**2ND SEPTEMBER 2021**

**MELANESIAN HOTEL, PORT VILA, VANUATU**

A group of people posing for a photo

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1. **BACKGROUND**

The low access to electricity, the untapped renewable energy resources and the large population presents a huge challenge in Vanuatu’s effort to fight the covid19 pandemic and other natural disasters. On the flip side of it, the situation also presents great investment opportunities in the sustainable energy market for Vanuatu.

In September 2019, PCREEE and the Department of Energy jointly organized a National Energy Dialogue (NED) where the meeting took stock of the status of the NERM, progress, challenges and opportunities. Thereafter PCREEE supported DoE to set-up the Sustainable Energy Association of Vanuatu (SEAV) by developing the SEAV Constitution and convened the first Annual General Meeting (AGM) to elect the office bearers.

One of the important recommendations that transpired out of the NED is the need to organize a National Investment Forum (NIF) where project developers and investors can meet and discuss priority projects to achieve the NERM targets. The NIF will also create a platform where the Government can listen and understand from the project developers and investors the barriers to accelerate SE investments in the country.

Therefore, in a joint-collaborative effort and with an effort to contribute to mitigating the covid19 pandemic in Vanuatu and the region and fast-track investments in Sustainable Energy, the DoE, URA and the PCREEE will be conducting a Sustainable Energy Forum in Port Vila Vanuatu on 2nd September 2021. While the Forum will was conducted in Vanuatu, other Pacific Island Countries were also invited to join virtually and participate.

The NIF is complementary to the on-going initiatives within the Department of Energy and other PCREEE related support to the Vanuatu Government on Sustainable Energy including the trainings on renewable energy, electric mobility and support on entrepreneurship and business start-ups.

**Forum Objective**

The forum was designed to create a platform where the Renewable Energy developers, project investors, financiers, policy makers and regulators come together to discuss and pave the way forward to accelerate investments in the sustainable energy sector.

**Meeting Participants**

There was about 32 participants who were physically present at the meeting with about 8 other participants who were able to participate virtually. Of all the participants attended, 28% were female participants. Attendance sheet is attached as Annex 5

1. **OPENING SESSION**

The meeting was graced with statements coming from Senior Vanuatu Government officials and the Pacific Community, SPC.

The meeting started with the welcome remarks from Mr Antony Garae, Director of Energy Department in Vanuatu. Mr Garae acknowledged PCREEE and URA for their support in the first energy forum and urged participants to continue to liaise with each other and to explore ways of making use of the financial resources and technical expertise that are now available to them to realize Vanuatu’s energy and development aspirations. The SPC Regional Director Melanesia, Ms Mia Rimon reiterated that the establishment of the PCREEE is a special vehicle to support the Pacific Island Countries to achieve their national energy targets including their Nationally Determined Contributions (NDC). “SPC is a trusted partner in Vanuatu and will always be here to assist.”

The official opening statement from the Ministry of Climate Change was indeed important. In opening the SEIF, the Acting Director General of the Ministry of Climate Change Abraham Nassak stated that the Forum came about the right time when this country needs it the most. “The current covid19 pandemic has put pressure on all aspects of Vanuatu’s sustainable development,” he said.

“We need to do business differently and smarter in order to spring back and build stronger, better and be more resilient and access to sustainable energy must be an integral part of this development.”

1. SESSION 1: Vanuatu’s Energy and Climate Landscape

In this session, four presentations were made. The first focused on providing an update on the National Energy Roadmap implementation status, the Nationally Determined Contributions and concluded on suggesting some way forward on mobilizing investment in Sustainable Energy.

The second presentation was from the Utility Regulatory Authority (URA) of Vanuatu, and it provided an overview of the legal and regulatory functions of the URA and the role it has played and will continue to play to support private sector investments in Vanuatu’s electricity sector.

The final presentations under session 1 comes from the two private electricity utility companies in Vanuatu – Unelco and Vanuatu Utility Infrastructure (VUI) Ltd. The two utility companies presented on their investment plans to increase renewable penetration in their respective grid network and help contribute to the national energy policy of providing 100% access to electricity from renewable energy sources.

**Key takeaways**

* The Updated National Energy Roadmap has a target of reaching 100% access to electricity by 2030. Access to electricity is divided into three main areas- access in and near concession areas, access in off-grid areas and access by public institutions. The definition of access to electricity for Vanuatu is not restricted to just connecting to the grid electricity but is extended to having portable solar home systems and other modern forms of energy to provide lighting and charging capabilities.
* The Updated National Energy Roadmap and the Revised NDC have ambitious targets of achieving 100% RE target by 2030. As of 2019, 78% if electricity generation still comes from thermal energy while the rest is RE. A huge challenge (mostly inherent) remains to achieve 100% RE generation by 2030. However, efforts are underway through national projects and programs to achieve the RE target
* The NDC for Vanuatu is conditional on funding and technical assistance from the development partners. The NDC has an Implementation Roadmap adopted in 2019. However, renewed effort needs to happen to secure funding and timely assistance to support and implement NDC Roadmap.
* URA has a key role in determining the maximum electricity tariff in the concession areas and imposing safety and reliability standards.
* When determining tariff, URA ensures a ‘least cost generation’ strategy where the investment can provide the lowest overall cost for the consumer served by the respective utility. Therefore it is important to consult the URA from the preliminary stages of investment planning through to the completion and commissioning stage. URA can help provided indicative tariff for RE investments that could be used to solicit finance from aid donors and investors.
* Unelco has exclusive right to generate, distribute and sell electricity within the island of Efate including its off-shore islands. It is currently serving 16,000 customers with a peak demand of 13MW and an installed capacity of 38MW (3.4MW wind, 2.4MW solar, 4MW coconut fuel and 21MW diesel). However, by 2030 it needs to displace 60GWh of energy from diesel use. Unelco has a comprehensive plan of achieving 100% RE for its Efate concession area but needs assistance from the Government and development partners to realise their plans. One of which the Government needs to structure a comprehensive coconut for fuel strategy and provide grants to implement it. Grants are also needed for investments in RE so tariffs can be reasonable for customers.
* For VUI, up to 70% of its power generation comes from hydropower. Negotiations are underway for an additional hydropower system that could make Luganville 100% green powered. The challenge for VUI is for its other concession areas like Saratamata and Sola where it has no hydropower potential and is operating 100% on diesel fuel. However, plans are in place to install solar + battery storage so some level of RE is fed into it to reduce diesel dependence.

1. **SESSION 2: Planning and Evaluating Energy Infrastructures**

The first presentation under Session 2 is from Peter Stokes from the Inloc Group and he presented on their plans for the Forari Bay Green Development project. It is a big plan to be achieved which will create huge economic benefits to the country. Part of the development is to create a new manufacturing facility for renewable energy products (locally assembled).

The second presentation was a case study on the Iririki solar project and was presented by Mr Paul Makumbe from Sunergise. The presentation not only covered the lessons learnt from the Iririki solar project but also lessons learnt from projects implemented in other Pacific Island Countries.

**Key takeaways**

* Sunergise is a leader in full-service solar power systems for businesses and governments, providing custom design, financing, installation and monitoring. It has projects in New Zealand, Vanuatu, Marshall Islands and Fiji and had won several national and international awards for successfully delivering on projects.
* Financing for RE in the pacific is not fit for purpose and some serious thoughts needs to be put in place to design a system that works
* Regulator environment can be a huge challenge to the project progress implementation and financial closure especially in determining a tariff that works for the Utility, the private investor and the electricity customer(s). Supporting the URA and enhancing regulation in Vanuatu would therefore be a key consideration to accelerate renewable energy investments in Vanuatu.
* There is local technical capacity and local solutions that should be supported and promoted during the project design, implementation, operation and maintenance.

1. **SESSION 3:** **Technical Assistance and Funding Opportunities**

Session 3 focuses on the national, regional and international technical and financial opportunities that are available to support investments in Vanuatu’s sustainable energy sector. There were about five presentations and most were virtual presentations except for the National Green Energy Fund where the presentation was done in person.

**Key takeaways**

* Camco clean energy is a proven investment manager with a focus on renewable energy. It is based in London, England with over 30 eyars of experience in renewable energy investment and is also a Green Climate Fund accredited entity. Camco established the Transforming Island Development through Electrification and Sustainability (TIDES) as a financing vehicle to support innovative energy projects in Vanuatu and the pacific. It gives private sector access to a portfolio of energy projects focused on three key areas – grid connected projects, commercial and Industrial projects and mini-grids. This is inline with Vanuatu’s development aspirations
* ADB established the Pacific Renewbale Energy Program (PREP) as a financing and donor-backed guarantee program for private sector investment in renewable energy projects in the Pacific. It offers up to 99% partial risk Guarantee, Letter of Credit (LoC), Technical assistance (TA) and ADB Debt Financing.
* The Private Financing Advisory Network (PFAN) is hosted by UNIDO and supported by Australia, Sweden, Norway, US and others. PFAN looks at addressing the barriers in SE investment by bridging the gap between the limited supply of investor-ready projects and low investment levels. PFAN can support private sector in Vanuatu who wish to invest in RE through project preparation, market creation and de-risking for sustained growth and scale-up. PFAN is already supporting Fiji with its Rural Electrification Fund
* National Green Energy Fund – This is a home-grown financing vehicle for Vanuatu established to accelerate NERM implementation of achieving 100% access to electricity and 100% RE generation by 2030. Its products include lending, guarantee and grants for RE&EE projects. The Vanuatu government is the currently the main source of its funding and development partners are already to trust the system and putting money into it. NGEF is already supporting over 35 solar PV projects with 15 systems supporting cooperatives and 20 systems in primary schools.
* GET Invest and ElectriFI Pacific Window are also sources of finance and financial expert for technical support in sustainable energy investments for Vanuatu. While these firms are based in Europe, they offer invaluable support to the Pacific including Vanuatu.
* FESRIP and PCREEE – The Framework for Energy Security and Resilience in the pacific (FESRIP) 2021 – 2030 has the long-term goal of access to secure, robust, sustainable and affordable electricity, transport fuel and household energy services that are resilient to climate change and natural disasters. This document will assist PICTs to develop and implement their national energy sector priorities and goals. PCREEE is the regional vehicle to support RE&EE development within PICTs and is now in its 2nd operation phase with four strategic programmes – RE&EE business startups, RE&EE for sustainable mobility, RE minigrids and EE investment. PCREEE is therefore able to provide technical support to Vanuatu’s sustainable energy development aspirations.

1. CONCLUSION AND WAY FORWARD

All in all, the Sustainable Energy Investment Forum for Vanuatu was delivered successfully with so much interest for private sector investment in Vanuatu’s sustainable energy sector. The workshop was well attended with overwhelmingly 40 people, 32 of which were able to participate physically at the meeting. There were representatives from the Government, the private sector (project developers, financiers, investors) and the electricity regulator. Others from the region were able to participate virtually.

There is so much opportunity for investment in Vanuatu’s sustainable energy market and technical and financial support is available through various national, regional and international organizations. Participants were also able to benefit from key lessons learnt from past renewable projects in Vanuatu and the Pacific region especially on the key challenges of SE investments and how it can be overcomed. While there is no absolute roadmap to accelerate SE investments in Vanuatu to achieve the NDC and NERM targets, here is need for further dialogue between the Government, private sector, financiers, project developers and investors alike to develop or align policies and regulations that could promote and accelerate private sector investment in the SE market in Vanuatu.

Some of the local participants and potential investors in Vanuatu felt that the half-day session was insufficient and that the meeting invitation has not reached all potential investors and private entrepreneurs in the sustainable energy sector. A follow-up forum is therefore necessary in the near future.

1. ANNEXES

Annex 1: Concept Note and Agenda

 

Annex 2: Draft Invitation Letter



Annex 3: Speacial Remarks from the SPC Regional Director, Melanesia – Ms Mia Rimon



Annex 4: Opening Remarks from the Acting Director General, Mr Abraham Nasak



Annex 5: Meeting Participants

 

Annex 6: Workshop Presentations



Annex 7: Press Release on the Vanuatu Sustainable Energy Investment Forum



Annex 8: Follow-Up Questions and Answers

The following are questions raised by the members of the Vanuatu Chamber of Commerce with answers from the DoE with support from SPC PCREEE.

1. What is the definition of access to energy: is it 3 kilowatt of energy? More or less?

This is a question that was asked during the SEIF and I tried to answer from an access to electricity perspective. There are many access indicators:

* Access to electricity – number of household or domestic electricity consumers / total number of households in the country
* Access to modern energy – includes rural households with access to portable diesel generators, kerosene, LPG and even dry cell batteries are regarded as modern energy sources

People have even broken down access according to be quality and quantity of energy you can access. For instance:

* Access to energy through off grid solar is of a different level to access to grid-connected electricity.
* Access to electricity for lighting only is different from access to electricity for lighting and cooking and cooling, etc. The former being for low income people whilst the latter is for well-off people.

I don’t know whether Vanuatu has classified access according to 3 kilowatt, etc.

The NERM’s vision of electricity ‘access’ encompasses pico solar lighting products, solar home systems, micro-and mini-grid connections, and grid connections.  Such systems are assumed to constitute electricity ‘access’ under the NERM, as they provide the minimum functions of lighting, mobile phone charging, and a radio

1. What is the definition of 'carbon credit framework.' It is a big topic with mega dollars behind it and it will be the private sector that would implement it. It is a big topic with economic potential for many of our challenged businesses to possibly transition into and there is a lot of funding for current businesses to borrow from to make the transition; therefore the scope of the awareness needs to be expanded.

Certainly, there is a lot of climate funding targeting the private sector in order to accelerate the transition to sustainable energy sources. Awareness by the private sector is the key. Happy that the SEIF was able to bring ADB, CAMCO, ELECTRI Fi, PFAN and GET invest to talk about their fund but also how the private sector can access  those resources.

The Paris Agreement which Vanuatu is a party to outlines the international carbon credit framework. However, Vanuatu needs to establish its own framework that aligns with the international framework to ensure that projects contribute to the sustainable development agenda for Vanuatu as well as globally. Private Sector will no doubt be the main driver to accelerate the transition to sustainable energy sources. There is support available through regional and international institutions and some of which have presented during the SEIF.

1. How the energy and renewable energy policy fit in the national Recovery Strategy Plan of the Vanuatu government in COVID-19 crisis times to rebuild the strategic industry sectors of tourism and other services, boost the emerging sectors of productive sector, manufacturing, infrastructure and IT/ecommerce sectors and provide energy and renewable energy under 3 key pillars, accessible, reliable and affordable.

For recovery, rebuilding and at times of disaster and uncertainty, everyone need stable, reliable and cost effective electricity. Need no further clarification.

1. Help the business sector recover especially the electricity market with one of the highest unit cost pe KW in the world – Does it include help fund businesses to Solar Grid connect to help bring cost down?

Power tariff is subject to many variables including the concession contract with the concessionaire. The high costs of fossil fuel is a contributing factor so with more renewables, costs can come down. Independent power producers is an opportunity if the legislation and current concession contract allows.

The current electricity concession contract provides the Utility exclusivity to produce, transmit, distribute and sell electricity to consumers within the concession area. There are many factors that contribute to the high electricity costs. Connecting Solar to the grid will have to be a direct discussion with the Electricity Concessionaire in Port Vila and Santo.

1. What will happen to the small consumers and the use of renewable in lowering tariff rate?

 Renewable energy often does not always lower the tariff rate except that it can improve the reliability of the electricty  system and network - supporting the local economy, reducing carbon footprint,  and providing green jobs. If bigger customers are going renewables through power purchase agreements with the utility to lower their tariff, small consumers may experience flunctuations in the unity price of electricity in Vanuatu especially where big consumers are subsidising the cost of small domestic customers.

1. The URA needs to look on the cost of all the procurement of materials by the 2 utilities.

For URA

1. In the case of the $75 Million Dollars can this not be better spent in helping individual house hold with mini grid connect systems? If you take the lower income earners to be 10,000 of Unelco 16,000 customers this means each lower income household would have around USD $7500 budget for Mini Grid connect system, this is a fortune.

This is not as easy as it sounds.  There are technical, financial and socio-economic issues including capacity building issues tha one needs to address.

Sounds like an interesting model to explore.

1. The main issue here is the poverty trap of the lower income earners in the grid of Unelco and VUI with no possible way of being able to afford the electricity and pay a massive percentage of their disposable income in some case around 25% on electricity with no hope of saving and increasing their lifestyle.

Access to electricity should not be seen as a luxury but as a factor of production. Households should invest their 25% and become more productive and more business oriented and come up with more entrepreneurship activities. Access to electricity alone is not sufficient. People should be taught  income generating skills in handicraft making, tailoring, cooking, fishing, etc, etc,

1. The forum held last week was very informative however it was not sufficient to serve as satisfying public consultation, as many businesses which are interested to attend the forum, have not been invited by DOE. It did not provide answers to the above questions of the businesses and private sector.

 It was just the beginning and this is not a one-off event. PCREEE is happy to have another Forum next year, perhaps during the second quarter of 2022, with more involvement of the business and private sector / VCCI. I will build the Forum to PCREEE’s work plan for 2022.

The continued discussions of how the energy sector can support the business sector and vice versa need to continue.

DoE will coordinate with its partners including PCREEE to organise a similar Forum next year and it can be an annual event to promote networking among the private sector including getting the technical expertise to support private sectors in Vanuatu to accelerate investments in renewable energy and achieve the NERM and NDC targets for Vanuatu.

I wish to ask if the Department of Energy can answer the above questions and that would be fine.

 An option to consider is for DOE to organise another meeting, to invite VCCI and any business members interested to attend the meeting, to provide clear answers as VCCI and business members need a clear roadmap on energy transitioning into renewable energy.

 We certainly want the local businesses to invest in Vanuatu’s energy transition. This however needs a suitable enabling environment and therefore the need to have a balanced participation of govt, businesses and financiers, etc.

Looking forward to receiving your reply

 Thank you.

 Best regards,

 Astrid Boulekone

General Manager

Vanuatu Chamber of Commerce and Industry