

Nauru's Submission to the UNFCCC – Workstream 2

May 2014

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1. General description of policy and/or technology intervention(s)

Following Nauru's independence in 1968, Nauru possessed the highest GDP per capita in the world (U.S. Department of State n.d.) and high household energy demand (IRENA 2013). However, Nauru experienced a major financial crisis and the island is still recovering until today. The energy sector suffered due to lack of maintenance for the generators and struggled to keep up with the financial demands of the importation of petroleum.

Nauru is heavily dependent on imported petroleum. The average fuel demand for the Republic is 10 million litres per year (Nauru Energy roadmap 2013), and the 2013 – 2014 national budget indicated that AUD\$25 million was allocated for purchasing of imported petroleum. This was 26% of Nauru's total expenditure budget during the said financial period (Nauru Budget 2013). Seventy percent (70%) of the imported petroleum is used for power generation and the remaining is used for transportation (land, sea & air), cooking and commercial users (NEPF 2009).

The following sections will specifically discuss Nauru's renewable energy and energy efficiency projects, which were funded and implemented through the European Union's REP – 5 Program. The discussion will identify experience, remaining barriers, and strategies to overcome barriers and support implementation. Other renewable energy and energy efficiency projects in Nauru not mentioned here are highlighted in the IRENA Report as attached and in Annex 1 of this submission.

2. Experience with Renewable Energy:

The REP – 5 Program for the renewable energy in Nauru was implemented in late 2008 and aimed to reduce dependence on imported petroleum (SPREP 2012).

The program provided Nauru a 40 kWp grid-connected solar PV system on the north and south roof of Nauru College (shown in figure 1). The system became operational on the 4th of October 2008, and is still operating today. The PV was composed of 7 SMA SMC5000A inverters (5,000W), 196 Solarnova SOL 206 GT modules (206 Wp polycrystalline), and 28 Solarnovan SOL 200 GT modules (Wp polycrystalline) (Mccracken 2009).

The program also created a Renewable Energy Unit, which is currently operating under two separate ministries. The Department of Commerce, Industry and Environment (CIE) is handling the policy implementation

while the Nauru Utilities Corporation (NUC) handles the implementation of renewable projects.

Today the solar PV system on Nauru College is producing 4,500 kWh per month or 54,000 kWh per year (Analysis of the Nauru College PV system 2010, pp 2) and is contributing to the overall less than 1% of electricity being produced from mix of renewable sources.

Figure 1: REP - 5 Program PV system at Nauru College (South roof)



Source: (Mccracken 2009).

2.1 Climate benefit:

According to Nauru's Energy Roadmap, Nauru's CO_2 emissions are 25,735 tons per year, based on total fuel imported into the Republic in 2009. (Nauru Energy roadmap 2013)

The latest NUC bulletin reiterates that the solar PV system was producing 4,500 kWh per month, therefore, saving 1,300 litres of fuel per month (NUC 2014). This fuel saving is equivalent to 3.55 tons of CO_2 per month, therefore, the quantity saved which is equivalent to 42.6 tons of CO_2 per year has the potential to minimize Nauru's total CO_2 emissions.

This project clearly signifies the potential of renewable energy to reduce heavy dependence on imported and expensive petroleum. Most importantly, this also signifies the potential of large – scale renewable energy program to be used as mitigation opportunity for Nauru and other SIDS.

2.2 Co - benefits:

The co-benefits of the solar PV program that will be discussed here arise from the generation of 4,500 kWh per month of renewable electricity, which saves 1,300 litres per month of petroleum fuel.

According to the (Analysis of the Nauru College PV system 2010, pp 2), billing data obtained from the Education Department from July 2009 to March 2010 shows that Nauru College consumes on averagely slightly less than 5,300 kWh per month. Given the fact that the solar program was producing 4,500 kWh per month, the PV system therefore reduced the Education Department's electricity bill by 85%, or \$900 per month (\$10,800 per year) at the current electricity rate of AUD\$0.20/kWh (Analysis of the Nauru College PV system 2010, pp 2). This was significant and clearly signifies the potential of renewable energy in reducing financial burdens from conventional energy system.

The 'Analysis of the Nauru College PV system – October 2008 – February 2010' highlighted that the solar PV was producing 4,500 kWh due to externalities, such as grid faults. If the grid faults and other externalities were eliminated, then the system would have produced 5,250 kWh per month (63,000 kWh per year) (shown in figure 2), for savings of \$1,050 per month on utility bills (\$12,600 per year). This again signifies the potential for renewable energy to reduce government expenditure on paying for imported petroleum and using conventional electricity (Analysis of the Nauru College PV system 2010, pp 2).

Currently, the GoN spent AUD\$1,246,381 for capacity building (scholarships and staff training) and an estimate of AUD\$7 million for health. Both of these expenditures are notably less compared to what was being spent on imported petroleum. Therefore, expanding renewable energy could provide opportunity for Nauru to significantly invest in other areas, such as education, health and infrastructure, which are also crucial for sustainable development (Nauru Budget 2013).

Furthermore relating to finance, the solar project currently save the college \$900 per month and has the potential to return initial cost of the solar PV program. The initial cost of the REP – 5 solar project was EU\$300,000 (funded by EU). Based on the saving calculated, it would have taken 41 years for the GoN to recoup the initial cost. This highlights the potential of renewable energy to produce electricity without expensive cost over the long run if well maintain.

Nauru College PV System - Potential energy production

7,000

4,000

3,000

Oct-08 Nov-08 Dec-08 Jan-09 Feb-09 Mar-09 Apr-09 May-09 Jun-09 Jul-09 Aug-09 Sep-09 Oct-09 Nov-09 Dec-09

Actual energy production

Actual energy production

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Figure 2: Potential energy production at 100% grid availability

Source: (Analysis of the Nauru College PV system 2010, pp 2)

The installation of the PV systems also provided local contractors an opportunity to enhance their capacity through a short-term training provided by the installation contractor. The project further added a training kit for science teachers to teach students about photovoltaic technology. Both trainings enhanced capacity, which will be essential for the transition period in the future from using conventional generators to renewable generators and appliances.

Lastly, the program had increased public awareness of renewable energy and the associated benefits. In combination with the energy efficiency program, which was also funded by REP – 5, this slowly led to a positive change in behavior from the general population as well as from government officers.

2.3 Financial costs:

As mentioned, the 9^{th} EU Development Fund funded the solar PV installations as part of their REP – 5 programs.

REP – 5 provided EU\$1.5 million to the Government of Nauru for both renewable energy and energy efficiency programs. The estimated cost for

the solar PV program was EU\$300,000 at an installed cost of EU\$6.37 per Wp (Mccracken 2009).

2.4 Remaining barriers:

The technical barriers associated with the solar PV are listed below:

- i. Barriers associated with the electricity grid.
 - a. The grid's poor quality adversely affects the PV system. During installation, the inverter settings were changed and these resulted in faults occurring occasionally. Most faults appear to be caused by the grid frequency going out of range.
 - b. Nauru College is connected to the national grid to ensure that power is provided when the solar PV are not in use. Because the solar PV system needs electricity to operate, the performance of the PV system is impacted when the grid is not available during power outages.
 - c. Load-shedding of electricity during shortage of fuel supply or generator breakdown affects the PV system, since the system depends on electricity for it to operate.
- ii. Barriers associated with equipment
 - a. The web box power supply continues to being damaged by ants and stopped recording data. The web box also stops recording when the grid is unavailable. In addition, the web box is not connected to the internet, which makes remote monitoring impossible.
 - b. The solar radiation sensor was placed on the north roof and therefore radiation measurements are only accurate for the north roof arrays and less so for the south roof arrays.
- iii. The financial barriers associated with the program are as follows:
 - a. The grid's instability has therefore cost the PV system \$150 per month in lost fuel savings.

2.5 Strategies to overcome barriers and support implementation:

Based from the barriers outlined above, the following strategies listed below will assist to overcome them and support implementation:

i. Long-term and official capacity building and institutional building in the renewable energy sector should be implemented in order to

- ensure continued utilization and maintenance of renewable energy projects.
- ii. Nauru College should be taken off the national grid since grid instability is affecting the solar PV program. The college should power its electricity from its own diesel-solar hybrid installations. This may also alleviate the problems with load shedding caused from shortages of national fuel supply.
- iii. The web box should be connected to a UPS unit to keep it powered when the grid is unavailable, and the web box should be applied with ant prevention substance, such as insecticide. The web box should be connected to the internet service to alleviate the problems associated with data collection.
- iv. A separate solar radiation sensor should also be placed on the south roof for effective and accurate data collection.
- v. Future feasibility studies on renewable energy sources for Nauru should take into consideration of climatic barriers (such as the sun's geographical location during summer and winter, salt spray, etc.) to ensure that the renewable energy equipment being installed in the Republic suited best for Nauru's harsh conditions.

3. Experience with Energy Efficiency:

The REP-5 program also supported energy efficiency activities in Nauru. The program was aimed at addressing the issue of high – energy consumption, as there historically has been no incentive for energy efficiency and conservation in Nauru. The REP-5 energy efficiency program contained four elements: 1) the creation of energy efficiency officer positions, 2) the development of the Nauru Energy Efficiency Action Plan, 3) the implementation of an awareness campaign and 4) the installation of prepayment meters.

The program created two energy efficiency officer positions in 2007. The officers oversaw the energy efficiency actions contained in the Nauru Energy Efficiency Action Plan (EEAP). The EEAP was finalized in 2008, and was implemented until 2010. The EEAP was developed under the REP – 5 program.

Prior to the installation of prepayment meters, the program developed energy efficiency awareness campaigns, which were delivered by the energy efficiency officers (shown in figure 3). Since that this was a demand side strategy, NUC implemented campaigns to ensure that the communities accept the reason of paying for electricity from the installed prepayment meters. Most importantly, the campaigns were aimed to increase awareness on the importance of energy efficiency and

conservation.

The most successful element of the program was the installation of prepayment meters. Prepayment meters (shown in Figure 4) were supplied to the NUC as part of its reform strategy, which aims at recovering its generation costs through a mix of demand-side management and a user-pay tariff structure (EU 2010). Installation of 1,800 prepayment meters in homes and businesses was conducted in 2009. Proliferation of inefficient appliances and behavior was exacerbated by un – disciplined usage of electricity in the households due mainly to the previous tariff structure: a cash payment of AUD\$5 per month with the rest being paid for with Bank of Nauru cheques at a rate of AUD\$0.30 per kWh (NEPF 2009). In addition, to the installation on the meters, the REP – 5 program also developed new electricity fees. The current NUC fees for 2013 – 2014 financial year are listed below:

- i. Domestic electricity <300 kWh is at AUD\$0.10 per kWh;
- ii. Domestic electricity > 300 kWh is at AUD\$0.25 per kWh;
- iii. Commercial electricity is standardized at AUD\$0.40 per kWh; and
- iv. Industrial electricity is standardized at AUD\$0.50 per kWh

However, the project ended and funds to require for continuation of campaigns and the contracts of the energy efficiency officer also ceased

Figure 3: Energy Efficiency officers in front of energy efficiency murals at NUC



Source: (http://www.rep5.eu/Project_Countries/Nauru

Figure 4: Single – phase prepayment meter and remote keypad



Source: (http://www.rep5.eu/Project_Countries/Nauru)

3.1 Climate benefit:

Notwithstanding the successful installation of the prepayment meters, there were no programs for monitoring the emission reductions resulting from the program (Nauru Energy roadmap 2013).

However, data highlighted that there was a significant drop in energy demand immediately after the successful energy efficiency installation. The current energy demand today is 370 kWh per month, compared to previous demand of 900 kWh (Nauru Energy roadmap 2013). Despite lack of data, this drop in energy demand represents a significant reduction in carbon emissions.

3.2 Co – benefits:

Since the installation of the prepayment meters, public reaction has been positive, as the NUC is now able to provide 24 – hour access to power, and customers are willing to pay for the improved level of service. The project also resulted for the electricity demand being dropped to 370 kWh per month, hence addressing energy insecurity issues that were previously common.

Having access to 24 – hour electricity had provided co – benefits such as longer hours of study for students, food preservation through

refrigeration continues (alleviating food insecurity), water continues to flow (alleviating water insecurity and health related issues), public and road safety was reassured through electrification of streetlights, and many more not to mentioned that all contributes towards sustainable development.

The new tariff structure also provided domestic revenue for the GoN and supported the government in meeting some of its domestic expenses. For example, revenue for cash power from domestic prepayment meters generated AUD\$1,144,422 for the 2012 – 2013 financial year (Ms Verenaisi provided details in an email on the 19 May 2014).

The success of the energy efficiency campaign was highlighted from the commercial sector, which has a substantially higher level of energy efficiency than either the residential or government sectors (Nauru Energy roadmap 2013). This is because businesses are more likely to understand the economic benefits of improved energy efficiency and their return on investment through lowered electricity costs.

3.3 Financial costs:

The total cost of the prepaid meter project, including supplies and installation, was EU\$1,180,000. The total cost of the other energy efficiency activities, including the drafting of the EEAP, was EU\$150,000 (REP – 5 2010).

3.4 Remaining barriers:

The remaining barriers that will be discussed here are based on findings from the Energy Roadmap that corresponds to the energy efficiency campaigns and the prepayment installation.

Despite the successful story of the installation of prepayment meters, the tariff is still heavily subsidized by the GoN with a very high 'lifeline' allocation of 300 kWh per month. This provided the residential sector the opportunity to not pay for the full cost of electricity consumed, hence resulting in continuous energy inefficiency (Nauru Energy roadmap 2013).

In addition, the GoN could further encourage its communities to become more energy efficient. For example, there are no stringent importation tariffs for inefficient appliances, nor any system in place to phase out inefficient appliances. Thereby, residential sector can afford to continue to pay the relatively low cost of inefficient energy usage (Nauru Energy

roadmap 2013). Creating incentives to purchase energy efficient appliances could create even more energy savings.

Another barrier relating to the prepayment meters was non – technical losses, such as inaccurate meters, meter tampering or by – passing, theft, meter reading errors, irregularities with prepaid meters, administrative failures, wrong multiplying factors, and others. These non – technical losses are significantly high at 15.77% (Pacific Power Association 2012). Eliminating these losses has the potential to further enhance energy efficiency.

In addition, the contracts of energy efficiency officers were not renewed. This was significant, as this had resulted in the termination of the energy efficiency awareness program.

Lack of available and accurate data was also significant as this prevents the effectiveness to calculate the carbon emission reductions from the program.

3.5 Strategies to overcome barriers and support implementation:

The Energy Roadmap identified that investment in energy efficiency to reduce the demand for generation will be more cost effective than installing new diesel generators or new solar investment needed to meet the same demand. Therefore, there is potential to increase energy efficiency by to reconsidering the existing artificially low tariff structure and gradually reducing subsidies on conventional electricity (Nauru Energy roadmap 2013).

Reducing subsidies on electricity may provide the opportunity to increase subsidies for renewable energy, such as a feed – in tariffs. A feed – in tariff for renewable energy may provide the opportunity in reducing heavy dependence on imported petroleum and conventional electricity, as well as contributing towards the renewable energy goal of producing 50% of electricity from renewable sources by 2020.

There is also potential to continue to increase energy efficiency in Nauru through continuing awareness programs such as that in the REP-5 program. These measures cannot be dependent only on external short – term funds, but need the GoN to domestically support this initiative (Nauru Energy roadmap 2013).

There is potential to increase energy efficiency through enhanced enforcement of the NUC Act. The act advises the general public to refrain from tampering pre paid meters or utilizing by – pass of electricity. Penalty fees are also associated with the act, thereby this will create

incentive for the public not to cause unlawful act (NUC 2014)

Addressing the common problem of lack of available and accurate data for effective monitoring and evaluation phase can enhance institutional capacity. This will be crucial for the future success of existing projects, as well as for emerging initiatives.

4. Future we want for Nauru's Energy Sector

The future for Nauru's Energy Sector is embedded in the Energy Roadmap 2013 – 2020. The Roadmap was developed as an implementation plan for energy sector development that supports a whole –of – sector approach.

A key driver in initiating and implementing the Road Map was Nauru's ambitious goal of reducing the country's high reliance on imported fossil fuel by producing 50% of its electricity needs from renewable sources by 2020. Energy efficiency and conservation are also highlighted as key drivers for the Roadmap.

Given the significant potential for renewable energy in Nauru, Nauru has adopted a Renewable Energy Action Plan (attached in Annex 2). This plan lists the specific activities—including feasibility studies, siting, and installation—needed to scale up large scale solar in Nauru to 8.5 MW. It also contains strategies for investigating other renewable energy resources and capacity building programs for the operation and maintenance of renewable energy systems. Similarly, Nauru has adopted a Demand Side Energy Efficiency Action Plan (attached in Annex 3). Like the Renewable Energy Action Plan, this plan lists activities, time frame, and financing needed to achieve Nauru's energy goals.

At an immediate term, Nauru had highlighted options for fast tracking renewable energy activities and meeting the objectives of the energy roadmap. These includes the following in order of priority:

- i. Rooftop solar PV on government buildings;
- ii. Solar powered street lights:
- iii. Ground mounted solar PV plant;
- iv. Study where applicable and implement solar powered units for water security that is not restricted to reverse osmosis; and
- v. Investigate where applicable and implement the potential for renewable energy waste management strategy that is not restricted to biogas

5. Reference:

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- ii. European Union 2010, REP-5: Support to the Energy Sector in FIVE ACP Pacific Island Countries Nauru, viewed 20 March 2014, http://www.rep5/Project_Countries/Nauru
- iii. International Renewable Energy Agency 2013, *Pacific Lighthouse Renewable energy opportunities and challenges in the Pacific Islands region:* Nauru, IRENA
- iv. Mccracken, P 2009, Grid connected PV in the Pacific: As part of the European Union's Support to the Energy Sector in Five ACP Pacific Island Countries Programme (REP 5), administered by the Pacific Islands Forum Secretariat and managed by a consortium led by IT Power, the Government of Nauru requested that a grid connected PV system be installed on the roof of one of the secondary schools in Nauru, INTERPV
- v. Nauru Energy Roadmap 2013, Nauru Energy Road Map 2013 2020: An Implementation Plan for Energy Sector Development, Government of Nauru
- vi. Nauru 2013 2014 Budget and The Estimates Revenue and Expenditure 2013, *Budget Paper 1*, Government of Nauru
- vii. Nauru Energy Policy Framework 2009, "Reliable, affordable and sustainable energy, enabling the socio economic development of Nauru", Ministry of Commerce, Industry & Environment, Government of Nauru
- viii. Nauru Utilities Corporation 2014, *Nauru Utilities Corporation Quarterly Bulletin*, NUC, volume 1, 31 March, p. 4
- ix. Pacific Power Association 2012, *Quantification of the Power System Energy Losses in the South Pacific Utilities: Nauru Utilities Corporation,* final report prepared by the KEMA International B.V.
- x. Secretariat of the Pacific regional Environment Program 2012, Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP) Nauru Interventions, SPREP, Apia, Samoa, viewed 1 May 2014, http://www.sprep.org/Climate-Change/Pacific-Islands-Greenhouse-Gas-Abatement-through-Renewable-Energy-Project/Page-2
- xi. U.S. Department of State n.d., *Nauru (05/05)*, U.S. Department of State, viewed 23 April 2014, http://www.state.gov/outofdate/bgn/nauru/47518.htm

Annex 1 – Indicative list of energy sector investments in Nauru 2004 – 2017

Programme / Project	Funding	Executing	US \$m	Start (est.)	Finish (est.)	Other comments
		Agency		(est.)	(est.)	
Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP)		UNDP/ SPREP/				Inception workshop November 2007. Budget of 5.2m split by 12 (11 countries and management cost). A total of approx. 60,000 USD has been allocated for Nauru with 47,920 USD spent by end 2012
	GEF	NUC UNEP/	0.06	2007	2013	on solar and wind technical assistance projects (PIGGAREP, 2012). Inception workshop May 2013. Budget of 1.5m for 3 countries
Low Carbon Islands Programme	GEF	IUCN	0.50	2013	2015	(Nauru, Niue and Tuvalu).
PEC Commitment - 132kWp solar						Implementation of the Pacific Environment Community (PEC) Commitment. Budget of 66m split between 14 countries. Nauru
plant (accompanying a reverse osmosis desalination plant)	lanan	PIFS	1 22	2012	2014	project expected to save 60 tonnes of diesel per year, contributing
Strengthening Capacity of Pacific	Japan	PIFS	1.52	2012	2014	to 1.3% of the current energy demand. Funding for solar
Developing Member Countries to Respond to Climate Change	ADB	ADB	0.22	2009		Estimated budget of 3.1 million split between 14 countries.
Capacity Support for Sustainable	ADB	ADB	0.22	2009		Estimated budget of 3.1 million split between 14 countries.
Management of Energy Resources in the Pacific Region	EU	PPA	0.11	2009	2012	Estimated budget of 1.6m split between 14 countries.
Capacity Support for Solar PV						
Stand Alone & Grid Connected Systems and Demand-side	EU	PPA	0.04	2009	2012	Estimated budget of 0.6m split between 14 countries.
Support to the Energy Sector in		IT Power /				EDF9 national budget allocation focus was on grid-connected solar
Five pacific Island Countries - Nauru EDF-9 national allocation -	EU	Nauru govt	2 50	2007	2010	PV, prepayment meters and demand side energy efficiency (IT Power, 2009)
Clean and Affordable Energy for	20	gove	2.50	2007	2010	Estimated budget of 22million split between 14 countries. Difficult
the Pacific Islands	AusAID	PRIF and others	1 50	2009	2012	to avoid double counting as this is implemented by various organisations.
Renewable Energy & Energy	AusAiD	others	1.30	2009	2012	Estimated budget of 1.3 million split between 14 countries but
Efficiency Partnership (REEEP) Pacific Programme	Australia	REEEP	0.09	2007	2012	unclear if Nauru benefitted from these funds as allocation was via a competitive call for proposals.
Solar Home Systems		Nauru				Installed at homes but some are also at churches. 7.8 kWp in total
	Taiwan	govt Nauru	0.10	2009	2009	(60 SHS at 130 Wp each).
Solar Street Lights	Taiwan	govt	0.30	2011	2011	155 units installed, 130W each. Many already not working.
Coping with Climate Change in the Pacific Island Region (CCCPIR)	Germany	SPC/GIZ	0.05	2012	2014	Technical assistance only, no hardware. Budget of 1m split between 14 countries. Approximately 50,000 USD allocated to Nauru.
30 kWp Grid-connected solar PV	,	,				
installation on Government building	Taiwan	Taiwan	0.15	2012	2012	Funding estimated based on cost of 5000 USD/kWp.
EDF-10 national energy assistance - Renewable Energy and Energy		Nauru				EDF10 national allocation funding with focus on grid imrovement for renewables integration, energy efficiency and institutional
Efficiency Programme	EU	govt	2.60	2010	2014	support of the NUC.
Nauru Infrastructure Reform						Support for urgent generation and distribution system projects. The support includes the provision of fuel (4-5m per year) and
Support for NUC	Australia	AusAID	60.00	2004	2017	supplementary managerial staff, technical assistance and physical investments.
Regulatory Reform for improving						
Water and electricity supply in Nauru Pacific Adaptation to	ADB	ADB	0.20	2010	2013	Ongoing technical assistance. Demonstration project targeting the water sector and delivered by
Climate Change (PACC) Demonstration Project – Solar		UNDP/				the Pacific Adaptation to Cliamte Change (PACC) project. 20 solar
Water Purifiers	GEF	SPREP/ CIE	0.08	2011	2012	water purifying units with 4 panels per unit were installed in two districts.
Solar water pumps	Japan	JICA	0.00	2010		160W pumps. Timing of installations estimated, amount of funding provided and number of solar water pumps unknown.
Solar LED handheld lights						Timing of distribution estimated. Amount of funding and exact
distributed to households	Taiwan	Taiwan	0.00	2011		number of units distributed unknown. Timing of distribution estimated. Number of units distributed
CFLs distributed to all households	Taiwan	Taiwan	0.60	2012	2013	unknown.
Technical assistance for tendering of the tank farm management and						Estimated value of technical assistance in person-months. No
operations	PIFS	PIFS / SPC	0.10	2011	2012	contract was concluded following the tender process. Estimated value of technical assistance in person-months and value
Technical assistance and support for capacity building from SPC in						of travel budget provided for Government of Nauru officials for the
the energy sector	Various	SPC	0.05			two year period 2011-2012 (Source: SPC EDD Annual Report, 2011 & 2012)
Government of Japan - Non Project		Nauru				Approximately 1 million AUD per annum has been provided for the pruchse of petroleum imports for the last 4-5 years (Source: CIE,
grant Aid (NPGA)	Japan	govt	5.00	2009	2013	2013)
Pacific Islands Renewable Energy		UNDP /				Regional project of total value 700,000 AUD. Exchange at June 2013 values used to convert to USD. Assumed equal split between 14
Project (PIREP) Pacific Islands Energy Policy and	GEF	SPREP	0.04	2003	2006	PICs) (PIFS, 2013) Regional project of total value 1.6m Eur. Exchane rate at June 2013
Strategic Action Planning						used to convert to USD. Assumed equal distribution amongst 14
(PIEPSAP) project Grant Assistance for Grassroots	Denmark	SOPAC	0.14	2004	2008	PICs (PIFS, 2013) The GGP project for 2013-2014 will be solar water purifiers (PIFS,
Human Security Project (GGP)	Japan	CIE	0.10	2013	2014	2013)
Nauru Third National Communication project	GEF	UNDP / CIE	0.25	2013	2016	Mitigation allocation (50% total funds) (PIFS, 2013).
Environment Resources Adviser						
for CIE Energy Efficeincy Programme for	Australia	CIE	0.15	2012	2014	Mitigation allocation (50% total funds) (PIFS, 2013). Will support actions in supply side energy efficiency. No further
Nauru - EDF10 regional allocation	EU/ADB	ADB		2014	2016	details available at this time.
	TOTAL mi	iiion USD	79.25			