

Concept Note Cover Page

Country (ies): Federated States of Micronesia

Location within the country (ies): 4 States – Chuuk, Kosrae, Pohnpei and Yap

Concept focus:

Climate change adaptation

Sustainable energy

Both

Project type:

Type 1 – 200,000 Euro maximum budget

Type 2 – Maximum budget is the country allocation; requested budget = EUR 325,000

Total requested budget:

Duration of project: 24 months

Contact point: Hubert Yamada, Assistant Secretary, Department of Resources and Development, FSM National Government; Email: _____; Tel: _____

Support for PDD development:

Yes, consultant(s) or organisation(s) to be engaged: **Secretariat of the Pacific Community (SPC)**

No

Undecided

Concept Note – Description (4 pages maximum)

1. Project title

Enhancing investments in renewable energy and energy efficiency technologies in the FSM

2. Background and rationale (max ¼ page)

In 2009 FSM spent US\$40m to import diesel for its domestic consumption. Most of this is used for electricity generation resulting in an average tariff of about US\$0.43 per kWh, which for the average wage earner can be a challenge. The national energy policy has set a RE target of 30% and EE target of 50%. The current priorities for the FSM as outlined in the respective state action plans identifies the need to increase the penetration of renewable energy – noting that there is only one energy policy for the FSM with four state action plans.

Potential funding for the FSM over the period 2014 – 2020 is about US\$47m in grants for energy sector development. A portion (EUR 325,000 equivalent to about US\$405,000) of this is from ACSE. FSM's current total capacity (conventional) is 12.1MW. Based on current activities, by December 2014 installed RE capacity will be 1.9MW. The recent concluded ADB technical assistance on strengthening of the legal framework and investment plans has recommended 6MW of RE for Pohnpei and 2.5MW of RE for Chuuk. This is in addition to the already approved 1.5MW for Yap. Further, for Kosrae a 1.65MW is envisaged. These tallies to 13.55MW for the FSM (equivalent to about 2.71MW net of RE or 70% of the RE target).

In addition, some states have amended regulations to allow for additional small scale grid-connected RE systems from the public and private sectors. EE campaigns and demonstrations have been planned for public entities such as hospitals and government offices. To showcase the anticipated impacts of these interventions specific equipment and including demonstration of EE retrofitting are required so as to pave the way for upscaling in the near future.

3. Objective(s)

Contribute to enhancing energy security in the FSM with the focus on achieving the national energy policy target for renewable energy and the reduction of fossil fuel use for power generation. This will further enhance sustainable livelihoods through potential reduction on electricity tariff.

4. Expected project outcomes (max ¼ page)

- a. Increased penetration of renewable energy
- b. Increased investment on small scale RE installations for grid connection
- c. Reduced demand for diesel use in electricity generation
- d. Improved electricity services
- e. Achieved national energy policy targets on RE and EE

5. Targeted outputs (max ½ page)

Activities	Outputs
a. Preparation of specifications and tendering for the supply of net metering equipment	Net metering equipment purchased (150 meters)
b. Agreement between participating consumers and power utility finalized and signed	Net metering equipment installed at participating consumer premises
c. Prepare tender documents, advertise and purchase prepayment meters	300 prepayment meters acquired for power utilities
d. Conduct energy audits for all FSM state hospitals	Audit reports available
e. Carry out EE retrofitting works at selected premises – as recommended by the energy audit	Reduction in electricity bills realized

6. Beneficiaries (max ½ page)

Direct: Four FSM state power utilities – improved services

Indirect: General public (consumers) – reliable and stable power; long term benefits = reduced tariff

Key Stakeholders: National and state governments; state power utilities; implementing partner(s); equipment suppliers; consultant(s)

7. Indicative budget (max ½ page)

The indicative budget outlines specific budget lines that directly links to the proposed outputs of the project.

Item	Indicative Budget (EUROs)
Prepayment meters	103,000
Energy auditing and retrofitting	100,000
Net metering equipment	50,000
<i>Other budget items as required</i>	
Project management costs*	21,210
Travels, training, meetings, workshops**	38,000
Monitoring, evaluation and financial audit	7,000
Communication and visibility	5,000
Co-financing / In-kind contribution (optional)***	
TOTAL	324,210

*at 7% of total direct costs

** This budget line includes all project related meetings such as project steering committee meetings, training, workshops related to the proposed outputs, etc. Notably that a stand-alone steering committee meeting in the FSM involving all states will cost approx.. US\$12,000

***In kind contribution from SPC in technical assistance towards the development of concept note and the PDD equivalent to an estimated 10 working days. Similar in kind contribution from the FSM national government Department of Resources and Development. Further in kind contribution would be from the participating power utilities.

8. Project management (max ½ page)

The Department of Resources and Development (RND) of the FSM national government is the lead national agency with the four state power utilities as the national implementing agencies. The SPC will be the contracting party for this component. Management support will be provided by the SPC Regional Energy Programme of the Economic Development Division through the SPC North Pacific Regional Office. A National Coordinator¹ will be recruited and placed at the RND. There will be one steering committee for the FSM ACSE. Given the scope of the FSM ACSE (IOM and SPC as the contracting parties) the proposed members are: RND (Energy and OEEM²), SPC, IOM, Department of Education national government, National Coordinator and the National Authorising Officer.

As outlined in the national energy policy and respective state action plans, all energy projects implemented in the FSM have been channelled through the mentioned lead national agency and the national implementing agencies. Of recent are the: EDF-9 funded REP5 programme and the near concluding North-REP. There are additional partners that have recently finalized arrangements for the development of the energy sector through these agencies such as the World Bank. SPC as the proposed Contracting Party has the responsibility for the financial and management of the implementation – associated costs are included in the project management fees.

¹ The National Coordinator will be shared with the other component of the FSM ACSE by IOM.

² Office of Environment and Emergency Management

9. Complementarity and replicability (max ¼ page)

Intervention	Complementarity to other programmes	Potential replication
Installation of net metering equipment	Demonstrates the practical component of net metering – for states that have adopted a net metering legislation	Could be extended to states where net metering legislation are in the process of been adopted
Acquisition of prepayment meters	Enhances the revenue collection of power utilities as outlined in earlier studies (KEMA report) to minimize technical and non-technical losses at the utilities	Additional prepayment meters to be acquired for power utilities
Energy auditing	Promotes EE for buildings	To be conducted in other government offices
EE retrofitting	Demonstrates the investment and short payback timelines for EE measures	Further investments in high cost EE measures such as retrofitting of air conditioning systems

10. Sustainability and risks (max ¼ page)

The proposed activities are current priority areas for the four state power utilities which addresses a gap in the current funding already flagged to increase the penetration of RE and enhance EE. In terms of risks the following summarises the current foreseen risks with mitigation and contingency options. Other risks such as transportation and logistics are not considered major as the activities are implemented on the main islands (centres) of each state.

Risks	Mitigation	Contingency
Technical specifications of equipment not to international standards	These will be developed using current best practices by the participating power utilities	ACSE and SPC advisers will provide support in developing /verifying the specification
Financial and management	Use of SPC policies and guidelines which are compliant to EU standards	-
Delay in reporting	As a major task of the National Coordinator	SPC to provide the necessary support in terms of financial documentations including vetting of reports
Technical and institutional	Technical assistance will continue to be provided by SPC with the respective power utilities providing the institutional support	Strengthen power utilities through training for personnel on specific skills that will contribute to the management /operation and maintenance aspects.
The interventions are sustained and replicated as applicable	Power utilities will be responsible for the O&M of equipment.	Ongoing training of power utility personnel will enhance the know-how and better scheduling of maintenance activities.

It is noteworthy that lessons learned and training provided by earlier interventions such as North-REP to power utilities in particular are taken in to account. Sustainability approaches (such as provision of infra-red cameras to identify transmission losses which will then lead to development of maintenance schedules) set by previous interventions will be further enhanced to ensure that these are maintained for the ACSE activities.

The respective utilities are to sustain the interventions and given that the ACSE interventions are to maximise the revenue collection for utilities (directly and indirectly) utilities therefore will ensure that these mechanisms are maintained and fully utilised.

11. Timeline for planned measures (max ¼ page)

The timelines are based on activities that will be implemented on the main centres (islands) in the respective states in FSM. As such transportation and logistics will not be as complicated as it would have in the case of the islands.

Activities	2015				2016			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Signing of agreement between FSM, ACSE and contracting party (PDD completed and approved)	■	■						
Procure for equipment (prepayment meters and net metering) includes tender preparations and advertising			■	■	■	■		
Energy Auditing and audit report			■	■				
EE retrofitting			■	■	■	■	■	■
M&E and Reporting			■	■	■	■	■	■
Financial audit							■	■

12. Stakeholder engagement in concept note development (maximum three sentences)

Stakeholder participation has been from the outset in developing FSM’s energy action plans to meeting its national energy policy RE and EE targets. The ACSE component has been discussed in recent (August 2014) North-REP steering committee meeting. Given the high costs to carryout a specific consultation for ACSE, additional consultations will be conducted as the opportunity arises with the IOM component and current national energy steering committee meetings – further discussions will be held during the North-REP Project Steering Committee meeting in February 2015 in Pohnpei.