

EPIC – Renewable energy in Pacific islands: Developing Skills and Capacity

SUMMARY OF RESULTS

By means of a twin-track approach, the EPIC project has developed and accredited 2 joint master programme degrees in Renewable Energy Management in Fiji and Papua New Guinea and established 2 Centres of Renewable Energy to foster stakeholder cooperation, cross-cutting research and general awareness on RE issues. As such, in both countries EPIC contributed to bridging the gap between the existing policies on renewable energy targets and the human and institutional capacities to achieve them.

BACKGROUND

Dependency on fossil fuels hinders economies of the Pacific islands. In fact, in these countries oil reaches 80% of the total energy consumption. This phenomenon exacerbates the pre-existing vulnerability to climate change of these islands. As such, countries such as Fiji and Papua New Guinea, are striving to increase their Renewable Energy (RE) production in order to secure more affordable, reliable and sustainable energy supplies. The institutional commitment at national and regional level has crystallised by setting RE as the priority for their sustainable development strategies.

However, little has been done to equip stakeholders (private sector, academics and civil servants) with the necessary RE skills, knowledge and capacities for this challenge. In order to underpin developments in the RE field, policymakers are currently shifting towards the promotion of capacity building, training and networking activities in this area.

In particular, Higher Education Institutions (HEIs) play a key role in educating the next generation of young RE professionals by means of offering of RE curricula within the existing education and training systems. HEIs are also able to foster research and cooperation in the RE field, driving evidence-based policymaking and programming.

METHODOLOGY

Needs analysis

Mapping of relevant stakeholders through interviews and data collection. As such, RE studies programmes and markets needs were identified.

Academic capacity building

Introducing teaching and academic staff into curriculum development, strengthening individual research capacity and updating RE knowledge. Devising context-specific teaching materials and the organisation of guest lecturers.

Institutional building activities

2 Centres of Renewable Energy (CORE) established in Fiji and Papua New Guinea to strengthen research capacity and promote sustainable development policies in the area of RE. The project assisted in the selection of the CORE staff and provided equipment for the centres, such as the installation of a Power Plant for research on solar energy, and a CORE website.

Developing and accrediting a Joint Master programme in Renewable Energy Management (REM), by elaborating RE curricula with a regional dimension and then implementing the programmes with teaching support from EU partners.

Dissemination and networking

Arranging site visits to EU partner countries to incentivise networking dynamics and knowledge transfer. Organising 2 final conferences in both Pacific countries to disseminate project achievements.



Guest lecture in University of Fiji for the pre-enrolled students and teaching staff of the Renewable Energy Management (REM) master programme (July 2016).

PROJECT IMPLEMENTATION PERIOD

October 2013 - November 2016

CONSORTIUM

- University of Alicante (UA), Spain
- University of Papua New Guinea (UPNG), Papua- New Guinea
- University of Fiji (UF), Fiji

Associated partners:

- Applied Geoscience and Technology Division of Secretariat of the Pacific Community

PROJECT CONTACT

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PROJECT WEBSITE

<http://www.epic-project.eu/>

RESULTS

→ Outputs

Capacity and institutional building

- 17 RE courses implemented
- 100+ academic staff and students trained in RE
- 2 accredited REM master programme curricula.
- 20+ students enrolled in new RE master programmes each year.
- 8 teaching and academic staff trained in study visits to EU partner.
- 55 students attended roundtables, seminars and workshops.
- 2 Centres of Renewable Energy (CORE).
- 2 power plants running in CORE.

Visibility and networking

- 1 paper presented at The University of the South Pacific International conference 'Analytical Assessment of the current situation of RE in Fiji'.
- 2 regional conferences with 100+ attendees each and the participation of senior officials from Fiji and Papua New Guinea governments, European organisations and other international organisations.
- 6 posters presented during the regional conference by project partners; 2 posters presented during one international conference in Scotland and 1 poster presented during a workshop in Colombia.

- 4 students and scholars involved in international exchanges.
- 2 international projects undertaken by UPNG-CORE.
- 5 international projects undertaken by UPNG-CORE.
- 4 collaboration agreements with international universities.

Websites

- 1 project website.
- 2 CORE websites.

↑ Outcomes

- Increased knowledge on RE applied to the Pacific Islands context.
- Awareness on RE and its role as an enabler of sustainable development in the area.
- National and regional policymakers, HEIs and private sector better coordinated to meet RE targets.

🎯 Impacts

Usage

- The enhanced RE knowledge and networks of the participants led to:
 - 4 staff participated in managerial training at UA and later secured a project funded by USAID.
 - Members of the UPNG-CORE are currently working on designing a carbon-neutral campus in their own institution.
 - UPNG-CORE has also engaged in the 'China-South Pacific Island Countries Technology Transfer Centre (CSPTTC)' initiative to advance on RE applied technology.

Policy Implications

- COREs, academic staff and students from the master programmes will provide key expertise to support sustainable development strategic planning, apply skills to RE technology implementation, inform RE policy-making and assist government officials to lobby at national, regional and international level for more cooperation in RE provision.

Sustainability

- The relationship with national and regional stakeholders, HEIs and private sector in Fiji and Papua New Guinea, will provide a strong basis for future RE actions in the Pacific.



Renewable energy experts attending the trainings at study visit to the University of Alicante (November 2013).



Official launch of the Centre of Renewable Energy at the University of Papua New Guinea (April 2017).

TESTIMONIAL



Prof. Noel Mobiha,
External consultant,
University of Papua
New Guinea, Papua
New Guinea

“This project will combine efforts from the government, academia, higher education, research and development, donors and financiers, industries, and both national and international interest communities to address the topic of clean renewable energy in the region.”

ACP-EU Co-Operation Programmes in the fields of Higher Education and Science, Technology and Research

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