

***Final report on a Midterm Review of the
IUCN Pacific SIDS Energy, Ecosystems and Sustainable Livelihood
Initiative: Managing the Ecosystem Implications
of Energy Policies in Pacific Island Countries***

Yves Renard
Green Park Consultants

and

Atul Raturi
University of the South Pacific

Working draft of 19 December 2009 – Core report without annexes

Table of contents

TABLE OF CONTENTS	1
LIST OF ACRONYMS AND ABBREVIATIONS	2
1. SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS	3
2. BACKGROUND AND INTRODUCTION	4
3. METHOD	8
4. ANALYSIS OF RELEVANCE	9
5. ANALYSIS OF IMPACT	11
6. ANALYSIS OF EFFECTIVENESS	13
7. ANALYSIS OF EFFICIENCY	15
8. ANALYSIS OF SUSTAINABILITY	17
9. A SWOT ANALYSIS	18
10. KEY ISSUES, OPPORTUNITIES AND RECOMMENDATIONS	19
11. IMPLICATIONS FOR IUCN'S GLOBAL PROGRAMME	23

List of acronyms and abbreviations

CROP	Council of Regional Organisations of the Pacific
EC	European Commission
EE	Energy efficiency
EESLI	Energy, Ecosystems and Sustainable Livelihoods Initiative
EELI	Energy, Ecosystems and Livelihoods Initiative
EIA	Environmental impact assessment
ENERGIA	International Network on Gender and Sustainable Energy
EWG	Energy Working Group
EUR	Euro
FSM	Federated States of Micronesia
GHG	Greenhouse gas
HQ	Headquarters
IUCN	International Union for Conservation of Nature
JC	Joint Committee
JWG	Joint Working Group
kW	Kilowatt
LED	Light emitting diode
LTA	Land Transport Authority
M&E	Monitoring and evaluation
MoU	Memorandum of understanding
NDBP	National Development Bank of Palau
O&M	Operations and maintenance
ORO	Oceania Regional Office
PIC	Pacific Island Country
PIGGAREP	Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project
PNG	Papua New Guinea
PV	Photovoltaic
RE	Renewable energy
RMI	Republic of the Marshall Islands
SEDREA	Sustainable Economic Development through Renewable Energy Applications
SIDS	Small island developing state
SOPAC	Pacific Islands Applied Geoscience Commission
SWOT	Strengths, weaknesses, opportunities and threats
UNDP	United Nations Development Programme
USD	United States dollar
USP	University of the South Pacific

1. Summary of main conclusions and recommendations

[This section will be added after review of the draft by IUCN]

2. Background and introduction

This report presents the findings and recommendations of a mid-term review of the project entitled “IUCN Pacific Energy, Ecosystems and Sustainable Livelihoods Initiative (EESLI): Managing the Ecosystem and Livelihood Implications of Energy Policies in the Pacific Island States”. This Initiative¹ is implemented by the Oceania Regional Office (ORO) of IUCN², in collaboration with six Pacific Island Countries (PIC)³ and with funding from the Governments of Italy and Austria.

The objective of the Initiative, as stated in the original proposal submitted by IUCN in August 2007, is “to help accelerate the transition within participating Pacific Small Island Developing States (SIDS) to energy systems that are ecologically efficient, sustainable, and socially equitable, by:

- supporting beneficiary countries in the development and implementation of environmentally sound, sustainable energy policies; and
- implementing a number of renewable energy pilot projects focusing on ecosystem conservation and livelihood enhancement.”

The Initiative is one component of a larger programme funded by the Government of Italy (Ministry of Environment, Land and Sea and Ministry of Foreign Affairs), in collaboration with the Government of Austria and the City of Milan. The main features of this programme are:

- it is governed by a memorandum of understanding (MoU) between the Government of Italy and twelve PICs;
- all activities are aimed at greenhouse gas emission reduction, with projects being implemented in a range of sectors⁴;
- a total of USD 10 million is provided by the Government of Italy;
- co-funding is made available by the Government of Austria (EUR 1 million) and the City of Milan (USD 500,000);
- six countries (Fiji, Kiribati, Federated States of Micronesia - FSM, Nauru, Papua New Guinea - PNG, and Solomon Islands) are supported through

¹ In this report, we use the term “Initiative” to refer to the overall programme that is the object of this mid-term review. The term “project” will be used to refer to the various components of the Initiative, notably the activities implemented in the six participating countries.

² We use the term “IUCN” to refer to the coordination of the Initiative, based at the Oceania Regional Office (ORO). “IUCN ORO” will refer to the Regional Office as a whole, and “IUCN HQ” will refer to staff and support systems based at IUCN Headquarters in Gland, Switzerland.

³ The six countries are Palau, the Republic of the Marshall Islands (RMI), Samoa, Tonga, Tuvalu and Vanuatu.

⁴ The MOU between Italy and the Pacific Small Island States indicates that: “The Parties will co-operate in the sectors of:

- Adaptation to climate change, and protection from the vulnerability to sea level rise and climate variability in the region;
- Development and dissemination of the use of renewable energies and biofuels to meet the energy security of the Pacific Small Island States;
- Development of sustainable tourism;
- Transfer of scientific and technical knowledge and experience;
- Transfer of technology;
- Exchange of experts, scientists and researchers;
- Training courses in the Pacific Small Island States;
- Promotion of joint ventures between the private sectors of the Parties.

In addition, the Parties will aim at strengthening the national energy infrastructure through the development of the local energy potential and ensuring increased access to energy services of the island's population and the remote communities.”

“direct financing”, i.e. funding provided by the Ministry of Environment, Land and Sea and channelled through the Permanent Missions of the PICs in New York;

- six countries (Marshall Islands, Palau, Samoa, Tonga, Tuvalu and Vanuatu) are supported through IUCN;
- a Joint Committee (JC) comprising representatives from the Government of Italy and the Heads of Missions of the Permanent Missions of the PICs to the United Nations in New York is responsible for the implementation of the MOU, including the allocation of funds and the selection of projects;
- a Joint Working Group (JWG) comprising experts designated by the signatories of the MOU was established, under the coordination of the Euromediterranean Centre on Climate Change, to conduct the initial feasibility study.

Actual implementation of the IUCN Initiative began in mid-2008, following a period of design and negotiations that included the following steps:

- May 2007: the Government of Italy and the Governments of twelve Pacific Small Island States sign an MOU and issue a Joint Communiqué.
- 30 June – 1 July 2007: a Regional Meeting for the Implementation of the Cooperation programme between the Italian Government and the Governments of the Pacific Small Island States is held in Vanuatu.
- 13 December 2007: the first meeting of the Joint Committee is convened.
- February 2008: IUCN and Italy sign an MOU, and a meeting is held in Rome between the Ministry of Foreign Affairs, the Ministry of Environment, Land and Sea and IUCN.
- 6 March 2008: the second meeting of the Joint Committee is held and the decision is made, upon recommendations of the Italian Ministry of Environment, that the country projects in Samoa, Tonga and Vanuatu will be supported through IUCN.
- April 2008: IUCN ORO recruits a Coordinator for the Initiative.
- 6 – 8 May 2008: the inception meeting for the Initiative is held in Samoa. It is attended by representatives from Samoa, Tonga, Vanuatu, Italy and IUCN.
- 13 May 2008: at its third meeting, the JC decides to add three countries (Palau, RMI and Tuvalu) to the Initiative, with funding approved for Palau and Tuvalu, and budget for the RMI project to be considered at its next meeting.
- July 2008: IUCN finalises the project document, with five country projects (Palau, Samoa, Tonga, Tuvalu and Vanuatu), multi-country and regional support activities, as well as a country project in the RMI, subject to the availability of funding.
- August 2008: the first contract is signed between IUCN and one of the participating countries (Kingdom of Tonga).
- 16 January 2009: at its fourth meeting, the JC approves a budget of EUR 360,000 for the project in the RMI.

At present, the Initiative includes six country projects as well as a number of other activities, usually described by IUCN under the label of Special initiatives. The current status of the country projects has been summarised in Table 1 (detailed descriptions and analyses of these projects are available in annexes 1 and 4 to 9). The Special initiatives, as described in a recent call for proposals issued by IUCN⁵, may include:

⁵ A total of USD 250,000 has been allocated for this component of the Initiative.

- *“Demonstration Projects:* This category includes the comprehensive initiatives focused on the practical implementation of various renewable energy technologies, approaches and methods that demonstrate improvement in livelihoods and the preservation of biodiversity.
- *Information Projects:* The initiatives should focus on raising awareness of the general public to the environmental problems and impacts of unsustainable energy systems within the Pacific region.
- *Energy Forum:* This category focuses on the development of a roadmap for a clear pathway for a national energy sector development plan. This will include national dialogue forums where all key stakeholders, from implementers to users, policy makers, politicians and donors discuss and develop a national energy strategy for the country.
- *Evaluation and Impact Assessment:* This category will include the proposals to evaluate existing projects/programs and collect the lessons learned and the best practices. It will also include projects that focus on assessments of the environmental impacts of energy systems.”

At present, the activities that fall under this category of Special initiatives include:

- participation in and provision of support to a policy process in Tonga, known as the Tongan Energy Roadmap;
- a partnership between the Pacific Islands Applied Geoscience Commission (SOPAC), the International Network on Gender and Sustainable Energy (ENERGIA) and IUCN for the implementation of the “Gender Mainstreaming into SIDS IUCN’s Pacific Energy Ecosystems and Sustainable Livelihoods Initiative”, a project developed as part of the ENERGIA financial and technical assistance to enhance gender mainstreaming into energy projects in the Pacific Island Countries;
- the conduct of a regional training workshop on environmental impact assessment (EIA), as a first step towards the development of guidelines and the provision of support to EIAs within selected energy projects;
- the promotion of cycling, in collaboration with the Velocity Cycling Club of Fiji and the Tonga Community Development Trust.

In addition, IUCN collaborates with and contributes to a number of regional policy and institutional development processes, particularly as a member of the Energy Working Group of the Council of Regional Organisations of the Pacific (CROP-EWG) and as a member of the Steering Committee of the Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP).

While the focus of this mid-term review is on the IUCN Energy Initiative in the Pacific region, it must be placed in the context of the global IUCN Energy, Ecosystems and Livelihoods Initiative (EELI). The goal of that Initiative is “to support and accelerate the transition to energy systems that are ecologically sustainable, socially equitable, and economically efficient while making full use of the best available technologies and governance arrangements”. “Naturally energising the future” is one of the five areas of the global Programme adopted at the World Conservation Congress in October 2008, and this Oceania Initiative is a component of this new and expanding programme area.

Table 1: Summary presentation of country projects

Country	Title of project and agency responsible	Date of contract	Contract ending	Amount (USD) ⁶	Current status (Summary, see annexes for details)
Palau	Palau Energy Efficiency Subsidy Program (PEESP) National Development Bank of Palau (NDBP)	December 2008	May 2011	500,000	On-going with no major difficulty 2 model homes completed, 1 under construction, 1 planned 10 loans approved, 26 in pipe line Awareness activities conducted
RMI	Efficient and Renewable Public Lighting for Urban Centres Ministry of Resources and Development, with Ministry of Works and Public Transport and Marshall Islands Energy Company	April 2009	April 2011	426,375 (EUR 360,000)	Almost completed
Samoa	GHG Abatement through Energy Efficiency in the Land Transport Sector Ministry of Natural Resources and the Environment, with Land Transport Authority and Scientific Research Organisation of Samoa	February 2009	May 2011	700,000	Awareness activities conducted Research on biofuel (coconut oil) initiated Other activities delayed
Tonga	Rehabilitation of Solar Home Systems in Mango Island and Mo'unga'one Island, Ha'apai Group Energy Planning Unit in the Ministry of Lands and Natural Resources	August 2008	December 2009	206,550	Almost completed
Tuvalu	Grid-connected PV system Tuvalu Electricity Corporation	February 2009	May 2011	800,000	System installed, to be commissioned in early 2010
Vanuatu	Renewable Energy Projects, with Wind, Hydro and Solar components Vanuatu Energy Unit	February 2009	May 2011	1,000,000	Wind monitoring and solar rehabilitation: scoping work completed, tenders to be issued early 2010 Hydro project: feasibility study done

⁶ The fourth meeting of the Joint Committee has agreed that the proposals submitted by the Governments of the Marshall Islands and Samoa had budgets that were significantly higher than the amounts approved. At that meeting, one of the representatives from the Government of Italy indicated that it would be seeking other avenues of financing from within the Italian system and that he was "hopeful that positive results could be achieved shortly". The expectations from the two countries are that an additional EUR 600,000 would be available for the project in the Marshall Islands and an additional USD 600,000 for the project in Samoa.

3. Method

This mid-term review has been carried out simultaneously at three levels:

- an assessment of the country projects in the six participating PICs;
- an examination of the regional components (support to the country projects, Special initiatives, and policy and institutional linkages);
- an assessment of the contribution of this Programme to the IUCN Global Programme (and especially the Energy, Ecosystems and Livelihoods Initiative – EESLI).

In accordance with accepted evaluation methodologies, this review has used and applied five main criteria:

- relevance: the extent to which the Initiative and its activities are consistent with the needs, expectations and capacities of the various stakeholders and respond adequately to identified needs, goals and objectives;
- impacts: the outcomes produced as a direct or indirect result of activities carried out as part of the Initiative;
- effectiveness: the extent to which activities have been implemented as planned and have produced the desired outputs (status of Initiative and project implementation);
- efficiency: the extent to which the activities have been implemented with the optimal use of financial, human and technical resources and in a timely fashion;
- sustainability: the extent to which outcomes and outputs could be sustained beyond the time frame of the Initiative and its various activities.

On this basis, the review has been able to analyse the Initiative's main strengths, weaknesses, opportunities and threats (SWOT), it has identified the main issues and challenges faced, and it has formulated a number of recommendations.

In each of the six participating countries, this review has been based on a description and analysis of:

- work plan, activities implemented, current status and impacts to date;
- institutional arrangements for implementation of the country project: national implementing agency, steering committees, other national stakeholders, donors, etc.;
- the larger context of the relationship between ecosystem, livelihoods and energy in the country (including the status of policy);
- other activities of the Initiative that are relevant to the country (e.g. Special initiatives, policy linkages, capacity-building).

The review of the regional components and support systems has been based on a description and analysis of:

- the support provided by IUCN to the country projects;
- the Special initiatives;
- the involvement of the Initiative and its personnel in policy and capacity-building processes in the region;
- the institutional arrangements (roles and responsibilities) for implementation (including planning, coordination, management, monitoring and evaluation);
- other donor activity in the energy sector in the region, including donor coordination and cooperation mechanisms.

Sources of information have included:

- a review of project documents;

- a review of management structure, implementation arrangements and management systems, including systems and procedures for procurement, human resource management and financial management;
- a review of the main national and regional policy documents in the fields of energy, biodiversity, environment and development;
- interviews with project focal points and other project participants, including visits to three of the participating countries (Palau, Samoa and Tonga)⁷;
- interviews with other actors in country (e.g. organisations involved in energy and in environment, donors and policy-makers), at the regional level and within IUCN ORO and HQ.

The review team considers that it is important to ensure transparency in the conduct of the review and in the dissemination and use of its results. The following steps have therefore been taken, or are being proposed at this time:

- sharing an evaluation framework (see Annex 12) with the IUCN Oceania Energy Programme Coordinator in advance of review;
- the presentation and discussion of preliminary findings at the regional workshop held in Nadi, Fiji on 25 November;
- the circulation of a final draft version of this report to stakeholders for review and comments (January 2010), and the use of these comments in the preparation of a final version;
- the posting of the final report on the IUCN website (Oceania Energy Programme page and Monitoring and Evaluation Reports page) and distribution of the final report to stakeholders.

4. Analysis of relevance

The Initiative is highly relevant to the energy agenda of PICs, because energy issues in small islands states are primarily linked to two challenges:

- a high dependency on imported petroleum products, and the impacts of that dependency on local economies and fiscal budgets;
- the need and demand for universal access to energy, with the high cost implications in the case of outer islands and isolated settlements, and with renewable sources often providing the only viable options.

In this context, energy policies and strategies must simultaneously aim at increasing energy efficiency (EE) and providing alternative, renewable energy (RE) sources. It is not a question of choosing between these two approaches (EE and RE), but a question of promoting both, as complementary elements of any strategy aimed at providing universal access, reducing costs and dependency, and mitigating negative social and environmental impacts. As illustrated by Annex 1 (technical components), the country projects implemented under this Initiative are directly relevant to this agenda, as they focus on both aspects (energy efficiency and renewable energy) and provide a good mix of experiments and technologies.

The Initiative and its country projects contribute directly to the implementation of public policy in the six countries involved. Thanks to the commitment of national

⁷ The review team was also able to participate in a Mid-Term Review Meeting of the Initiative that was held in Nadi, Fiji on 25 November 2009. This was one of the events held during a week of activities that also included a two-day workshop on impact assessment and a workshop of participants in PIGGAREP. These events provided the review team with a unique opportunity to interview project participants and other actors (regional institutions and representatives of PICs not involved in the IUCN Initiative), and to make a formal presentation to the Review Meeting.

organisations and to the support of regional and international partners such as SOPAC and the European Commission (EC), all countries in the region now have a formal policy framework to guide developments in the energy sector, and several have also adopted ambitious targets for renewable energy production (e.g. 50% of electricity to be produced from renewable sources by 2012 in Tonga, and 100% by 2020 in Tuvalu) and have developed specific action plans (e.g. rural electrification in Vanuatu). All work done under this IUCN energy Initiative is consistent with public policy at regional and national levels, and it will help governments meet their policy objectives and targets⁸.

One of the linkages between energy, conservation and sustainable development that is implicit in this Initiative, and that could easily be made more explicit in activities and communications, is the contribution that new and more sustainable energy policies and systems can make to the broader sustainable development agenda of PICs, for at least two reasons:

- in the current global context and in light of the obstacles to global agreements on measures to tackle climate change, PICs are among the countries of the world that have the most to lose, but they also occupy a high moral ground, a position that is undoubtedly strengthened by their own efforts at reducing carbon emissions and moving towards no-oil, low carbon energy systems. Compared to the impacts of the world's largest economies in Asia, Europe or North America, the contribution of PICs to climate change is negligible (about 0.03% of global GHG emissions), and their efforts at reducing carbon emissions can be seen as symbolic, but that symbol is powerful, and it sends the right message to all actors;
- tourism is a main driver of local economies, and low-impact energy systems are fully consistent with the image and the brand that PICs want to project on the tourism market. Energy efficiency and renewable sources of energy thus help these countries to move towards a type of development that is more integrated and more sustainable⁹.

The Initiative brings positive benefits to some people and communities, but it does not contribute very directly to sustainable livelihoods, and it is only marginally relevant to the ecosystem management and biodiversity conservation agenda. This is clearly one of the distinct features of this Initiative: most of the activities that it implements are not directly – and in several cases not at all – relevant to the overall objective of the programme of work. This feature will be discussed later in this report, but four points need to be made now: (a) while most of the country projects do not have explicit ecosystems and livelihoods dimensions, they contribute to the establishment of more efficient and sustainable energy systems, (b) IUCN's involvement in the energy sector in the region will, in the medium and long term, become a major positive force towards the transition to ecologically efficient and

⁸ It must however be noted that some of the targets set by governments may be unrealistic, and may be justified more by political considerations than by scientific evidence. Indeed, there is a danger that unmet targets could have negative impacts on public perceptions and on commitments from partners and donors. The setting of targets should still be encouraged and supported, but only on the basis of rigorous assessment of feasibility and options.

⁹ For example, a recent policy document in one of the countries participating in this Initiative states that the country “will become an international leader in creating a green and renewable energy society”, and there are projects in the region that look specifically at the linkages between energy and tourism, including the promotion of EE in hotels.

socially equitable energy systems, and this involvement would not have been possible without this Initiative, (c) the Initiative is only half-way through its implementation, and there are opportunities to strengthen the biodiversity, ecosystems and livelihoods dimension during the next phase, and (d) the small-scale dimensions of the energy systems, including traditional uses such as biomass use and new community-based solutions, are not sufficiently addressed by regional programmes, and many agree that this is a clear niche for IUCN.

Activities conducted and results obtained in this Initiative are relevant to the region as a whole, and the Initiative therefore provides lessons and experiences that are available for dissemination. In its project document, IUCN states the intention to use this Initiative as an instrument of networking among Pacific SIDS, and as a channel to share lessons learned, skills and technology. This review confirms that all activities undertaken as part of the country projects are relevant to the region as a whole, and therefore provide materials for the sharing and the networking.

5. Analysis of impact

While it is certainly too early to quantify the impact of the Initiative on carbon emissions, it is already clear that these impacts will be significant. For some of the projects, the GHG reduction calculations are straightforward, under certain assumptions. In Tonga, before the rehabilitation of the PV systems, the average kerosene consumption per household for lighting was 15 L per month, and it can therefore be estimated that the project will reduce 2.52 tonnes CO_{2e} annually in the two islands where it is being implemented. In Tuvalu, the grid-connected 46 kW PV system is expected to reduce GHG emission by 109 tonnes annually. The country project in Vanuatu envisages a GHG reduction of 118 tonnes, provided all components are completed. Similar figures can be calculated for light emitting diodes (LED) and solar lighting in the RMI. All these projects involve replacement of fossil fuel based electricity generation by RE based electricity production and/or the use of energy efficient lamps. Emission reduction calculations for projects in Palau and Samoa will be more challenging, as they depend on a number of factors and will have to be monitored and validated. In spite of these challenges, it should be possible, at the end of the current phase of the Initiative (mid-2011), to quantify these impacts (as well as the impacts on energy efficiency and access to energy, see Annex 1), because all country projects will have the relevant data at their disposal¹⁰, and PIGGAREP has offered to assist with the measurements and analysis.

In addition to these measurable impacts, the Initiative is undoubtedly contributing to public awareness of energy issues and solutions. As far as the country projects are concerned, this is particularly the case in Palau and Samoa, where the projects have activities specifically aimed at raising awareness. At the regional level, the Initiative has not yet focused much on communications, but this is an area that will be strengthened through the Special initiatives and other activities, and where there is a real potential for IUCN to impact on perceptions, attitudes and behaviour in the region.

The Initiative is having a limited impact on livelihoods, but there are discrete activities that are directly beneficial and that have a potential for replication and growth. In Palau, for example, the recent signing of an MOU between the NDBP and the Palau Housing Authority will allow for an extension of the subsidy programme to the low-

¹⁰ The country projects where measurement of impact will be challenging are those in Palau and Samoa, and recommendations in this respect are made later in the report.

cost housing sector, with benefits to low-income households in terms of access to financing and savings in energy consumption. In Tonga, the rehabilitation of the solar systems has brought direct benefits to households and communities, both in terms of comfort and in terms of economic activity, and similar results are expected from the project in Vanuatu. Results of research in coconut biodiesel production in Samoa also have the potential to bring benefits to many communities.

The Initiative has not had any significant impact on conservation and ecosystem management. While this is the proclaimed focus of the Initiative, it was noted earlier that the country projects have very little relevance to this agenda, and it is therefore not surprising that no impact has been realised in this domain. One important exception could be the hydro project Vanuatu: if properly designed (it is still at the feasibility study stage) and implemented, this component could contribute positively to watershed and ecosystem management, and could help to demonstrate how renewable energy production can be properly integrated into that management, with due consideration to conservation requirements.

In its country projects, the Initiative has not been very innovative, and most of the activities and technologies that have been and are being supported are not different from those supported by other organisations (donors and regional institutions) over the past two or three decades in the region. The only innovative approach is that of the project spearheaded by the NDBP in Palau, because it is using an instrument (energy efficiency in private homes through subsidised loans) and an institutional arrangement (implementation by a development bank) that have not been used previously in energy programmes in the region, and that have the potential for replication.

The Initiative has not yet impacted significantly on energy policy and governance in the region. Because the country projects are very concrete investments in renewable energy production and energy efficiency, they do not aim at informing or reforming public policy, except in the case of the project in Samoa, where there is an explicit policy development component. This does not however mean that the country projects do not contribute indirectly to creating a favourable policy context, because they increase the volume of effort in and attention to energy issues, reinforce the message that these issues are important, and amplify the voice of policy actors. This influence is particularly noticeable in Palau, where the entry of the NDBP as an actor in the energy sector has undoubtedly helped to promote the sustainability agenda. In addition, IUCN is presently involved in two sets of policy processes:

- IUCN participates in the formulation of the Tongan energy roadmap. While this is an important process, which could bring substantial benefits to Tonga, there are a number of issues and weaknesses that IUCN should take into account in deciding its future involvement, and these are mentioned later in this report;
- IUCN is also a participant in all the main regional processes that relate to energy efficiency and renewable energy in the region. While it is impossible to measure the impact of that participation, there is no doubt that it is significant, both in terms of process (encouraging collaboration and synergies) and of content (promoting the environmental and conservation agenda).

The Initiative has been very beneficial to IUCN as a new actor in conservation and sustainable development in the Pacific Islands and in Oceania as a whole. The IUCN Oceania Regional Office is very new (it was formally established in Fiji in 2008, following three years of strategic planning and programme development) and it is in the process of building a presence and a programme in the region. Tremendous progress has been achieved over a short period of time, and this energy Initiative has

played a key role in making that progress possible: it has substantially increased ORO's volume of activity, it has strengthened working partnerships with national agencies, regional institutions and development partners, and it has positioned IUCN as a regional actor with good management capacity and the ability to deliver results. This is, without any doubt, one of the most significant achievements of this Initiative, because it has allowed for a process of institutional development that will have lasting beneficial impacts on the region¹¹.

The impacts of the Initiative and its country projects remain difficult to measure, in part because some of the monitoring and evaluation systems are weak. In some of the country projects, such as Tuvalu, measurement will be easy, but it would still be useful to formalise the monitoring procedure to ensure that IUCN is able to assess impact, within and beyond the time frame of the Initiative. More robust M&E systems would also be needed if the country projects are to serve as true pilot projects, with a mechanism for the extraction and documentation of lessons learned. In some of the country projects, such as the one in Palau, impact assessment will be more challenging, because of the inherent difficulty in measuring energy savings, and creative methods will have to be designed and applied.

6. Analysis of effectiveness

The effectiveness of the Initiative is mixed, and can be summarised as follows:

- most country projects are implemented according to plans and schedules, and deliver the anticipated results (such as the installation and rehabilitation of renewable energy equipment and systems or the provision of subsidy for energy efficiency in housing);
- the country project in Samoa has suffered substantial delays, due in part to the disruptions caused by the recent tsunami, and in part by the recent switch to a left hand drive system, which mobilised the resources of the agency where the project officer is based. There have also been delays in the recruitment of a consultant to work on a strategic plan for the Land Transport Authority (LTA);
- the country project in Vanuatu has also suffered delays, mainly because of issues surrounding the institutional home of the project (between the Vanuatu National Advisory Committee on Climate Change and the Ministry of Lands, Environment, Energy and Natural Resources) and project coordination. A new coordinator has recently been recruited, who is attached to the Ministry of Lands, and this recruitment should allow for a more effective implementation of the project.

Country projects are managed in a way that ensures good delivery of project results, but more could be done to link the projects with the larger policy context and use them to bring forward the ecosystems and livelihoods agenda and to involve other actors. In many ways, project implementation arrangements are very "classical", with a public sector Steering Committee that oversees implementation, procurement procedures that follow the rules of the implementing agency, and strict adherence to the terms of the project agreement. While this is entirely appropriate, and while the

¹¹ While it is beyond the scope of this review to look at the broader institutional landscape in the region and the place that IUCN does and could occupy within it, it must be noted that the strengthening of IUCN's presence and capacity in the region meets a real and critical need, because there is no other regional institution in the field of sustainable development in Oceania that has the capacity to bring together governments and non-state actors, and because civil society networks are currently weak and somewhat unable to perform essential communication and networking functions in this vast region.

strategies of technical assistance employed by the Initiative appear fully effective, a number of significant opportunities are missed, for example:

- the involvement of civil society actors (including an IUCN member in the case of Tonga) in the Steering Committee and/or planning and monitoring processes associated with the country project;
- the use of the Steering Committee to provoke and facilitate debate around issues associated with the linkages between energy, ecosystems and livelihoods;
- the use of country projects as platforms or points of entry for policy influencing (IUCN is involved in the Tongan energy roadmap process, although that involvement is not directly linked to the country project there, but IUCN missed the opportunity to contribute to the recent energy policy process in Palau, and this is regrettable, especially when one considers that the final draft of the policy and the accompanying Energy Sector Strategic Action Plan pay too little attention to the environmental dimensions of energy policy).

The Initiative has begun work on capacity-building, and there is much potential for growth in this respect. In November 2009, IUCN organised and facilitated a regional training workshop on impact assessment, which was well received by participants. The issues and approaches in which IUCN has unique expertise – the linkages between energy, ecosystems and livelihoods – are new to many of the actors in the region, whether they are from the energy sector or from the environmental community. The IUCN Initiative would therefore benefit from an assessment of training and capacity-building needs in these areas, and from a comprehensive strategy to help meet these needs.

The country projects and the initiative as a whole are faced with issues and challenges that are typical of most projects in the fields of energy efficiency and renewable energy, but IUCN is aware of these issues and challenges and has factored them into design and implementation. One of the issues is the lack of data, and the need for interventions to be based on proper plans, assessments and feasibility studies; in this regard, the Initiative is benefiting greatly from its partnership with PIGGAREP, which provides technical assistance in the conduct of such studies. Another issue relates to the skills and capacity of national actors, because of the small size of institutions and of the special skills required; this is a challenge that cannot be easily resolved, but it is a reality that must be taken into account when designing and reviewing interventions. These capacity issues are often exacerbated by the multiplicity of external actors, the lack of coordination among the many initiatives and programmes, and the confusion and demands that insufficient coordination cause on the countries. Lastly, a frequent obstacle to the effective implementation of energy projects is the legacy of past interventions, with some failed projects (because of inappropriate technology, or because of insufficient attention paid to operations and maintenance) having at times given RE “a bad name”¹².

¹² Developing countries, including PICs, are littered with failed RE projects. Projects are started with good intentions, most often with donor funding, but two or three years later, a majority of them stop functioning mostly because of lack of maintenance and operational problems. For example, a solar panel is under warranty for 20 years, but most of the PV systems do not last that long as the batteries are not properly looked after. In the case of the country project in Tonga, the old panels were still usable but islanders had reverted to kerosene lamps because the batteries were not maintained or replaced. In some cases the panels were completely shaded by trees rendering them useless! It is hoped that the availability of technicians in the islands will make sure that the rehabilitated systems will now be maintained.

Communication is an integral part of the Initiative, but this is one of the areas where a more strategic approach would enhance effectiveness and increase impact. At present, the main instruments of communication are the Oceania pages on the IUCN website (www.iucn.org), which include all the main documents related to and produced by the Initiative, as well as the public awareness activities that are part of two of the country projects (Palau and Samoa). The Initiative's advocacy, policy reform and public awareness agendas could however be well served by a number of other activities, such as:

- the publication and dissemination of policy papers and policy briefs (this is already planned as part of the Special initiatives);
- a more systematic use of regional meetings and events to disseminate policy messages related to the relationship between energy, ecosystems and livelihoods;
- a more complete and more analytical presentation of activities undertaken and results obtained by the Initiative in its quarterly reports.

7. Analysis of efficiency

In spite of some delays and obstacles, the country projects have been managed and implemented efficiently. This is especially encouraging and significant when one considers the conditions under which the Initiative began, and the difficulties inevitably associated with the conduct of projects in several countries, with the many issues (administrative arrangements, recruitment of personnel, procurement of services and equipment, transportation, etc.) that need to be addressed. In three instances (RMI, Tonga and Tuvalu), the projects have been implemented according to their original schedules – or even faster than these schedules in two cases – and are now practically completed. The country project in Palau suffered minor delays at the start – because it needed time to market a new concept and to put in place the required management systems – but it is now well underway and it is being implemented in a timely and adequate fashion. In Samoa and Vanuatu, delays have been encountered and some issues have been faced, which are discussed elsewhere in this report.

The budget of the Initiative appears generally adequate to support the activities and achieve the expected results. Two-thirds of the funding is allocated to the country projects, leaving a suitable amount for coordination, regional activities (including training) and the Special initiatives. The only issue relates to the overhead fees, which are small, possibly too small, especially when one considers that both IUCN ORO and HQ have a role to play in coordination and facilitation. Another issue, which is beyond the responsibility of any of the main actors in the Initiative, is the impact that currency fluctuation has had on budgets.

The Initiative benefits from the management structures and procedures provided by IUCN and by the governments of the participating countries, and adequate systems and controls are in place. Because the six country projects are part of an integrated Initiative coordinated by IUCN's regional office, they are managed in accordance with IUCN's policies, procedures and operational guidelines. The Initiative is also served by IUCN's structures and human capacities, both at ORO (especially through the Regional Accountant) and at HQ. These systems are fully adequate to support an Initiative such as this one (financial management systems, procurement guidelines, templates for contracts with countries and service providers, etc.), and they ensure efficiency, transparency and accountability. In the countries, financial management is handled through the Ministries of Finance (except in RMI, where it is the utility company, and in Palau, where it is the development bank). With respect to the

coordination of the Initiative, current arrangements appear adequate, with a Coordinator who has extensive knowledge of and experience in the energy sector in the region, with an efficient and dedicated Programme Assistant, and with the recent recruitment of a Project Officer with suitable experience and skills. Project partners in the various countries describe IUCN's support as timely, efficient and beneficial to their work.

Procurement procedures are adequate, but some issues related to the property of equipment purchased as part of the country projects need to be clarified and some decisions need to be formalised. As stipulated by the terms of the MOU between the Government of Italy, the "ownership of equipment, supplies and other properties shall vest in IUCN"... and "matters relating to the transfer of ownership by IUCN shall be determined in accordance with the relevant policies and procedures of IUCN". In two instances (RMI and Samoa), the projects have required the purchase of vehicles, and IUCN took the precaution of confirming with the donor agency that such purchases were acceptable.

At the country level, efficiency has been largely determined by the capacity of local partners. Most country projects are being implemented in collaboration with national agencies responsible for energy, and these institutions are typically small, with limited human and technical capacity. These constraints have however been successfully managed, thanks primarily to the constitution and operation of small Steering Committees that have brought together key institutions such as energy units of relevant ministries and utility companies. It is only in the case of Vanuatu that there have been issues surrounding country-level coordination, but these issues are now resolved. In the case of Palau, the country project is managed by the National Development Bank, a competent and efficient institution that is providing excellent service to the project.

IUCN's collaboration with other regional actors contributes to efficiency in the implementation of this Initiative and in other regional processes. IUCN is described as a good partner by other institutions in the region, and there is much evidence of its commitment, from the initial design stages of this Initiative, to transparency and collaboration. IUCN's cooperation with PIGGAREP is particularly significant, because of the complementary nature of the inputs, with the IUCN Initiative supporting "hardware projects" while PIGGAREP's contribution focuses on studies and capacity-building; in effect, IUCN's contribution has resulted in leveraging these additional resources. Also, while cooperation among regional actors is not as complete as it could be, IUCN appears able to communicate and collaborate with all, and is therefore playing a useful bridging role in a sector where there are very few institutions and where much could be achieved through genuine cooperation. Recent activities held in Nadi, Fiji in November 2009 illustrate the benefits of this collaborative approach, with IUCN and PIGGAREP holding back-to-back meetings during the same week (thus saving costs and provoking synergies), and with most of the key actors in the region (SOPAC and UNDP in particular) being in attendance (and thus taking the opportunity to hold an informal meeting of the CROP-EWG members present).

The Joint Committee (JC) plays a very important role in making decisions concerning the selection of country projects and the allocation of funding, but it does not provide guidance to the actual technical implementation of the Initiative. The minutes of meetings of the JC illustrate its role in making – or at least confirming – decisions related to the selection of projects and the allocation of funding, but the Committee apparently does not review technical reports and does not discuss the substantial impacts and outputs of the projects.

8. Analysis of sustainability

Sustainability is not a major concern for the six country projects, but there are issues that will need to be taken into account and addressed:

- in the case of the subsidy programme in Palau, the ability of the National Development Bank to continue to provide such funding beyond the life of this project will depend on its ability to raise additional funding. But regardless of what happens in this regard, the homes that would have benefited from the subsidy will not need on-going project support, and the NDBP will have acquired an experience and competencies that it will be able to utilise in the design and management of similar schemes¹³;
- in the case of solar systems, the challenge will be to ensure that there are effective operations and maintenance strategies, and all projects are giving due consideration to this need. For the home systems installed on two outer islands in Tonga, there is an already functioning management system that has proven effective and that will hopefully prevent the reoccurrence of past problems, where maintenance was inadequate and the systems stopped functioning. In the case of the grid-connected system in Tuvalu, the fact that it is installed in a school is somewhat of a guarantee that maintenance will be provided;
- maintenance will be one of the issues that the hydro project in Vanuatu will have to consider very carefully, and the assumption is that a community-based arrangement, with adequate support from government agencies, should ensure that the system is properly operated and maintained;
- in the RMI and in Samoa, the sustainability and maintenance of the equipment that has been put in place will be the responsibility of the government agency that has installed them, and hopefully, this should not pose any major problem.

One of the main challenges at this time is to ensure that IUCN remains able to play its role in the energy sector in the region, beyond the life of a specific project. Looking at the Initiative as a whole, it has been noted that one of its most tangible results to date is that it has allowed IUCN to establish itself as a credible regional actor in the field of energy in the region, thus giving it a unique opportunity to strengthen and promote linkages between energy systems, biodiversity, ecosystems, and livelihoods in its future activities, whether within this Initiative or otherwise. This places a responsibility on IUCN, but also on its current partners, and especially the Governments of Italy and Austria, as there is a clear expectation in the region, especially among the governmental agencies, that IUCN will continue its work beyond the current phase. There is also a growing interest in and demand for work in the areas of more direct relevance to IUCN's programme and competencies (the linkages between energy, ecosystems and livelihoods, at both policy and technology levels), and it is therefore clear that IUCN has a role to play beyond the scope and time frame of the current Initiative.

¹³ Indeed, the NDBP is currently negotiating the establishment of a Renewable Energy Window, with support from the Sustainable Economic Development through Renewable Energy Applications (SEDREA) project.

9. A SWOT analysis

On the basis of the observations and conclusions presented in the preceding sections, it is possible to identify the main strengths, weaknesses, opportunities and threats.

<p><u>Strengths:</u></p> <ul style="list-style-type: none"> ○ clearly defined country projects with deliverables ○ good management structure and support systems within IUCN ORO and in project countries ○ a competent and dedicated team managing the Initiative ○ most country projects effectively and efficiently managed ○ new and promising focus on gender dimension and issues ○ an innovative country project in Palau ○ solar lighting improving livelihood prospects in remote islands (Tonga) ○ cutting down fossil fuel usage by using biodiesel (Samoa) 	<p><u>Weaknesses:</u></p> <ul style="list-style-type: none"> ○ delays in project implementation in two instances (Samoa, Vanuatu) ○ insufficient focus and limited relevance of the Initiative to the linkages between energy, biodiversity and ecosystems, and no clearly defined niche for IUCN and the Initiative ○ in some cases, lack of communication among various agencies involved in country projects and at the regional level ○ M&E systems within projects too weak to allow for lessons learning and measured assessment of impact ○ with one exception, country projects not innovative and promoting solutions and technologies similar to those promote by other organisations ○ very little work done on communications and awareness at regional level
<p><u>Opportunities:</u></p> <ul style="list-style-type: none"> ○ take advantage of the imminent completion of three out of six country projects and of the resources available through staff time and the Special initiatives to shift the project closer to its core agenda of energy, biodiversity, ecosystems and livelihoods ○ for this purpose, develop a strategic work plan for the remaining 18 months, with greater focus on policy ○ encourage the Steering Committees responsible for the country projects to become more involved in awareness and policy matters ○ involve civil society and private sector when appropriate and feasible ○ transform the hydro project in Vanuatu into a genuine pilot project that fully integrates the ecosystems, biodiversity, livelihoods and community management dimensions ○ work on issues associated with small-scale, natural resource based energy ○ increase capacity-building components of the Initiative ○ use country projects and lessons learned from other projects to facilitate mutual learning ○ use this Initiative to encourage islanders to adopt healthy habits 	<p><u>Threats:</u></p> <ul style="list-style-type: none"> ○ discontinuation of funding at the end of the current agreement between IUCN and the Government of Italy ○ difficulty or obstacles to defining a clear niche for IUCN in the field of energy in the region ○ duplication of efforts with those of other organisations ○ dispersion of efforts in response to funding opportunities and stakeholder expectations ○ further delays and complications in country projects in Samoa and Vanuatu, placing excessive demands on the time of the Coordinator, with danger of projects not being completed by the time the current phase of the Initiative ends ○ PV systems falling into disrepair due to lack of maintenance (Tonga, RMI, Tuvalu) ○ non-payment of user fee by the beneficiaries (Tonga) ○ coconut oil price fluctuations (Samoa)

10. Key issues, opportunities and recommendations

Although the Initiative is made primarily of discrete projects that have only marginal relevance to IUCN's core mission and that were designed with very little and late technical input from IUCN, IUCN has been able to: (a) provide suitable guidance and management services to the six country projects, (b) transform this set of disconnected projects into a coherent regional programme, and (c) optimise the benefits of this work to its own mission and institutional development agenda. This is, indeed, a remarkable achievement, considering the various issues associated with the design and initiation of this work:

- the initial documents (especially the MOU between the Government of Italy and the Pacific Small Islands States as well as the Programme Outline annexed to that MOU) did not provide fully adequate guidance to the Initiative because they had a very broad scope, covering a wide range of sectors and issues. IUCN was however able to narrow down and focus its contribution, first with its concept note of June 2007, and then with the actual project document that was finalised in July 2008;
- while the original understanding between Italy and IUCN covered only three countries, this was later increased to five, and then six countries;
- the main expectation from the countries was that they would receive direct funding for discrete projects, and some have questioned the justification for IUCN's involvement.

In spite of the issues resulting from the process used in its design, the Initiative has been beneficial to its main stakeholders:

- it has contributed, and will continue to contribute, to the energy efficiency and renewable energy production agendas of six countries of the region;
- it has allowed the Government of Italy to contribute to this agenda and to enhance its role as a development partner in the region;
- it has allowed IUCN to become a significant actor and partner in the energy sector and, through this, to enhance its presence in and services to the region.

The three country projects that will remain operational until mid 2011 (Palau, Samoa and Vanuatu) will require some adjustments in order to optimise their impacts and to avoid difficulties, and it would be desirable to make these adjustments soon, taking advantage of the results of this mid-term review.

- in the case of Palau, the main requirement is the design and implementation of a system to monitor (with accurate measurements) the impact of the project (loan subsidies) on energy efficiency. This is a bit challenging, because measurement will be difficult, but a monitoring system could still be put in place, perhaps with the use of a small sample of houses and with the collection of both quantitative (energy consumption) and qualitative (surveys of homeowners) data. It is recommended that IUCN recruit a local consultant in Palau who will work with the NDBP and the Energy Office to help with the design this monitoring system;
- in the case of Samoa, there are two issues linked to the contractual agreement between IUCN and the Government of Samoa that must be addressed: (a) the total funding available, and (b) the time frame for implementation. Considering that IUCN is not in a position to increase the amount provided or to extend project duration, because it is itself constrained by the terms of its agreement with the Governments of Italy and Austria, and in light of some of the delays encountered in project implementation up to this

time, it is recommended that: (a) the Government of Samoa prepare a revised work plan and budget for the period January 2010 – May 2011, based on the total funding available under its existing contract with IUCN, and (b) the Government of Samoa approach to Joint Committee to seek confirmation of the additional support as per its understanding of the commitments made by the Joint Committee¹⁴;

- the country project in Samoa would also benefit from the design of an M&E protocol that would allow for an assessment of its impacts at the end of the current phase of the Initiative;
- in the case of Vanuatu, the challenges are important, because the country project is broad and ambitious, and because it has suffered substantial delays. At the same time, these delays and recent changes in the management of the project have created some opportunities. In this context, and taking into account the fact that the Talise Hydropower Project is by far the largest and most challenging component of the country project, it is recommended that: (a) efforts be made to ensure that ecosystems and livelihoods issues are fully integrated into project design, assessment and implementation, (b) the National Task Force/Steering Committee be reconstituted to include relevant government agencies as well as civil society and community groups, and (c) the possibility of utilising expertise available within IUCN Members and Commissions in support of the project be explored.

There are significant weaknesses in the Initiative's reporting systems and products, which have impacts on its management and on the ways it is perceived by some of its main stakeholders. The main weaknesses and deficiencies are found at two levels:

- while countries are committed under the terms of the contracts to produce quarterly reports, most countries have failed to submit regular reports;
- the quarterly reports prepared and submitted by IUCN are primarily factual and do not convey all the results obtained and impacts generated. In this respect, IUCN is doing itself a bit of a disservice by not providing a more analytical overview of the Initiative, including not only the activities undertaken in the six country projects or the activities being planned or initiated under the Special initiatives, but also the institutional and policy linkages that the Initiative provokes and supports, and the policy processes in which it participates.

It is therefore recommended that: (a) the requirement for submission of quarterly reports by countries be applied rigorously, (b) these quarterly financial and technical reports be shared with the IUCN ORO Regional Accountant on a timely basis, and (c) a modified format be used by IUCN for its quarterly reports on the Initiative, and a format is proposed in Annex 10.

Although appropriate systems and controls are in place, it would be useful, for the purpose of transparency, if the accounts of the Initiative could be audited. If ORO is one of the Regional Offices of IUCN to be audited by IUCN's external auditors next

¹⁴ In the case of the RMI, a similar approach should be made by the country to the Joint Committee to seek the additional funding which is being considered.

year as part of the established rotation plan, this could be done easily, perhaps including a sample of two country projects in the field audit.

The issue of the property of the equipment purchased for the country project should be addressed. It is therefore recommended that the Regional Director, in accordance with the provisions of the IUCN Operational Guidelines (Projects and Donor Contracts), formally transfer the ownership of equipment, as follows: (a) immediate transfer of vehicle purchased for the Samoa country project, (b) immediate transfer of all equipment purchased for the RMI and Tonga country projects, and (c) transfer of equipment purchased in the other projects, including Samoa, at the time of commissioning.

On the basis of its achievements, the Initiative is now presented with the opportunity to transform itself while continuing to meet the expectations of the Government of Italy and the specific objectives of the six country projects. This opportunity comes from three main factors: (a) the capital and legitimacy that IUCN has generated on the basis of the work done to date, (b) the fact that within the next few weeks, three of the six country projects (Marshall Islands, Tonga and Tuvalu) will be completed, leaving the IUCN team with more time available for activities other than the design, oversight and monitoring of country projects, and (c) the funding allocated to the Special initiatives, offering the opportunity to support a wide range of activities. At the same time, there are threats that must be taken into account, the main danger coming from the risk of dispersion that could come from a non-strategic use of the funding available under the Special initiatives and from a pull by donors and partners in directions that would be inconsistent with IUCN's core mission and mandate¹⁵.

It is therefore recommended that IUCN design a short-term strategic work plan for the next phase of the Initiative (2010 to mid-2011). This work plan should¹⁶:

- pursue implementation of the country projects as planned under the terms of the project document and the agreement between IUCN and the participating countries;
- take into account not only the resources available under the budget for the Special initiatives, but also the time that the Coordinator and other members of the team will be able to devote to activities other than the country projects. Seen in this way, the Initiative has significant means at its disposal and, if it uses them well, could have a major impact;
- be based on a clearly articulated vision of the place of biodiversity, ecosystems and livelihoods in new, sustainable and equitable energy systems in the PICs. Such a vision statement is now needed for a number of reasons: to guide future programming and fundraising by IUCN in the field of energy, to define and communicate IUCN's niche and added value in the sector, and to provide an instrument of advocacy. This could be done through

¹⁵ IUCN's current involvement in the design of the Global Environment Facility-funded project for renewable energy in Nauru, Niue and Tuvalu could be a case in point. While it is good that IUCN is doing this work, it should be done with the understanding that it is not IUCN's primary role to develop and implement "hardware" projects in renewable energy and that these projects should therefore not come at the expense of more strategic and targeted efforts. This particular project however offers the opportunity to build a strong policy component, and this opportunity should be actively exploited.

¹⁶ What is proposed here is not to modify the 2010 work plan that ORO has already developed, but to place it in a strategic context and to amplify it with activities that could enhance its impact.

a visioning exercise, that could be funded under the Special initiatives and that would involve the preparation of short case studies and discussion papers, leading to a seminar bringing together a small group of people with varied perspectives and to the publication and dissemination of the results of that seminar¹⁷;

- aim at building coherence and synergies among the missions and activities of regional and international institutions involved in the field of energy in the Pacific region, with IUCN focusing on a clearly defined niche and mission (themselves defined by the vision mentioned above);
- give priority to policy work, at both regional and national levels, by identifying in advance the “targets” of advocacy and the processes¹⁸ that will be used to influence and inform policy development. This advocacy work should be guided by a simple communications framework that identifies: (a) the main regional and national stakeholders in the energy/environment sectors in the region, (b) the current perceptions and roles of each stakeholder or stakeholder category, and (c) the policy messages and advocacy goals that IUCN wishes to disseminate and pursue;
- ensure that a major, perhaps the major, part of its work over the next 18 months is focused on this policy work, with activities including: the participation of IUCN, at the appropriate level, in policy events and processes; the publication of policy papers, briefs and guidelines; the provision of training in policy development; the facilitation of dialogue and collaboration among various stakeholders in government, civil society and the private sector; and the provision of credible advice¹⁹ and information to actors in the region;
- sustain and expand current work on the gender dimensions of energy issues and solutions, which is a very important area, especially if seen and approached in the larger context of equity issues (and thus possibly leading to other relationships between energy and social justice, including access to energy by poor and marginal groups, implications of various energy options for children and older persons, or civil society and private sector participation in the governance of institutions in the energy sector);
- avoid dispersion in the funding and implementation of demonstration projects in the Special initiatives, focusing perhaps on EIA methodology and on

¹⁷ One of the useful by-products of such a visioning exercise could be the formulation of a research agenda on the issues related to energy, biodiversity and livelihoods, with the possibility of discussing future research with other actors such as the University of the South Pacific (USP), civil society organisations or research institutions. USP already has an MoU with IUCN for collaboration in conservation and sustainable development, which should be extended to cover the energy sector.

¹⁸ In its documents, IUCN currently uses the word “roadmap” to refer to national policy processes, apparently because this is the word used in the current exercise in Tonga. The use of this word is not recommended, except when referring specifically to the Tongan process, because it does not really reflect the complexity of a national policy process (a roadmap is an instrument to go from one place to the next), and because its use suggests that the Tongan process can be taken as a model (when there are reasons to fear that it will not deliver the expected results, because it focuses on electricity and not on the energy sector as a whole, key sectors of society are not involved in the process, and the target that it seeks to achieve may not be realistic and feasible).

¹⁹ One of the areas where the need for such advice is frequently mentioned is the assessment of the varied “energy solutions” that countries are presented with, some of which have the potential to bring negative environmental and social impacts.

community-based energy solutions. Another promising area would be for IUCN to work with its Members and other conservation organisations in the region and encourage them to develop and implement plans to reduce their own energy footprint. This would have a significant potential for demonstration and advocacy, and would have a localised yet significant impact, especially with the organisations that manage visitor and other facilities and equipment in protected areas and sensitive ecosystems;

- ensure that sufficient time and resources are allocated to extracting, documenting and disseminating lessons learned and best practices, and not only from the country projects and the Special initiatives, but also from the past and current experience of other actors. Over time, IUCN should become the privileged source of information and knowledge hub on matters related to the environmental and livelihood dimensions of energy policy and technology.

At this time, eighteen months before the end of its current phase, the future of the Initiative should be discussed among all parties. Countries and other actors clearly expect that IUCN will be able to sustain its role in the energy sector in the region, and there is a need and a demand for more work in the areas of particular interest to IUCN. It would be highly detrimental to the region, and to IUCN, if the Initiative were to terminate at the end of the current funding phase. The Governments of Italy and Austria should therefore consider the continuation of their support beyond 2011, and should work with IUCN and the participating countries to ensure that the gains of the Initiative are secured and built upon.

11. Implications for IUCN's global programme

With the implementation of this energy Initiative in Oceania, IUCN as a whole has begun to gain valuable experience in its newest programme area, called "Naturally energising the future", with the goal of "Implementing ecologically sustainable, equitable and efficient energy systems". This Initiative is at the moment among the largest projects in the programme area, and the results and lessons it produces should therefore be examined very closely to see if there are implications for the global programme.

In many respects, the relationship between energy, ecosystems, biodiversity and livelihoods, which is the rationale for IUCN's involvement in this domain, is less obvious in small islands than in larger countries and regions, because the energy options are fewer (especially in very small islands), and because big environmental issues such as those associated with major dams or large-scale biofuel production are not directly applicable to small islands.

At the same time, there are a number of reasons why focused work on linking energy, environment and livelihoods in island systems is useful, and why such a focus is highly relevant to IUCN's agenda and capacities:

- because SIDS are by definition small societies and small economies, they offer a good opportunity to design, test and implement comprehensive energy systems, thus being able to provide lessons and experience that could then be extrapolated to other contexts;
- helping island states and territories to move quickly toward low-carbon energy systems and green economies would have high symbolic and demonstration value on a much larger scale;

- renewable energy and energy efficiency are an integral part of the image and development strategies that islands – especially tropical islands – wish to promote, notably in support of sustainable tourism;
- the current drive towards renewable energy could bring negative impacts on biodiversity and ecosystems, impacts that are far less reparable in small islands than in large ecosystems. The transition to energy efficiency and renewable energy should therefore be accompanied with due consideration given to environmental and social impacts, and there is a need for policies, capacities, decision-making tools and technologies to make the management of these impacts possible.

IUCN's global programme on energy can and should therefore see this Oceania Initiative as an excellent starting point for the design and implementation of a global strategy aimed at "implementing ecologically sustainable, equitable and efficient energy systems" in small islands.