

Signature of Committee Chair/WG Lead Shepherd:

(Separate written confirmation acceptable for email submission)

Date:

ECOTECH Weightings Matrix (Revised - November 2000)

[APEC 21st Century Renewable Energy Development Initiative (Collaborative VIII): Infrastructure development for support of renewables-related energy-service company (RESCO) projects in the hydro-electric field.]

Criteria	Supporting Information (indicate paragraph number if details are in the project proposal)	Linkage (1 point for each)
Responds to a <u>specific</u> instruction from Leaders/Ministers ¹	4	1
Meets a core ECOTECH theme under the <i>Manila Declaration</i> ¹	4	1
Responds to the Common Policy Concepts, Activities and Dialogues identified in Part II of the <i>Osaka Action Agenda</i> ¹	4	1
Responds to a <u>specific</u> ECOTECH Initiative ²	The project supports the Third APEC Ministers' Conference on Regional Science and Technology Cooperation (Mexico City) and the Action Agenda for the New Economy	1
Improves skills, including in new technologies	6	1
Builds capacity and strengthens institutions	6,7	1
<u>Measurably</u> improves economic efficiency/performance ³	9	1
Is of <u>practical</u> benefit to the private/business sector; has private/business sector <u>participation</u> ; and/or <u>funding</u> ⁴	7,8	1
Assists economies attain sustainable growth and equitable development, while reducing economic disparities among APEC economies and improving economic and social well-being	8,9	1
Supports a TILF objective, as laid down in Part I of the <i>Osaka Action Agenda</i> ¹	N/A	0
Disseminates information including through seminars/websites/databases ⁵	18	0
Outline the <u>outcome</u> and how members will benefit ⁵	This project will transfer both technologies and technical know-how necessary to increase the use of existing hydro-facilities and thus improve the environment and increase the energy security in APEC member economies.	0
	Net Score	9

Footnote

- 1 Identify which instruction/ECOTECH theme/OAA element.
- 2 See <http://www.apecsec.org.sg/ecotech/index.html>
- 3 Policy outcomes that include development of energy efficiency guidelines, food safety standards etc
- 4 One point for each element up to a maximum of 3 points.
- 5 Not scored

Remarks (Please indicate if not applicable e.g., for TILF projects. Additional information in support of projects which do not score highly may also be provided here by the Lead Shepherd/Chair).

Format for Projects Seeking APEC Funding

This format should be completed with reference to the Guidebook on APEC Projects. It is recommended that the “Guide to Strengthening Project Management and Performance” would be a useful reference. Both Guides are available on the APEC Secretariat website at www.apecsec.org.sg

Please note that items followed by an asterisk () fall within the category of criteria which relate to “APEC values” in the **Criteria of Assessment of APEC projects** set out in Annex B.*

Please provide your answers in point form or as succinctly as possible below each paragraph heading.

A. Project Design

Project

01. Name of project.

APEC 21st Century Renewable Energy Development Initiative (Collaborative VIII): Infrastructure development for support of hydro-electric renewables-related energy-service company (RESCO) projects in the hydro-electric field.

02. Name of the working group or committee taking responsibility for the project and the dissemination of its results.

EWG Expert Group on New and Renewable Energy Technologies

Objectives

03. Describe briefly how you will measure your results (in the short and longer term) to know if your project has been successful. (You must provide detailed assessment measures in paragraph 19)

This project is being proposed as the second of a series of 3 hydro-electric-related projects under Collaborative VIII (Financing) of the APEC 21st Century Renewable Energy Development Initiative. These three projects are intended to demonstrate the feasibility of operating a renewables-related energy-services company (RESCO) in the hydro-electric field. The purpose of this project is to facilitate the development of (1) power purchase contracts (PPAs) for hydro-electric optimization projects, and (2) the institutional infrastructure needed to implement

these projects in at least two APEC-member economies. Two other self-funded projects will focus on identifying and prioritizing hydro-power generation facilities possessing optimization project opportunities in APEC-member economies and on actually implementing hydro-power optimization projects. Power generation optimization projects are defined as the modification of, or addition to, power generating equipment in existing facilities. Through the implementation of these power generation facility optimization projects, latent capacity is released from the existing power infrastructure without the need for new or greenfield power generation development. This release of latent capacity provides for additional power in a given locale with a lower cost and environmental impact per megawatt of capacity.

The short-term results will be based on the production of standardized forms and processes for applying for hydro-related PPAs. The long-term results will be based upon the creation of public-private sector partnerships for facilitating the overall process for obtaining PPAs for hydro-electric optimization projects.

04. How, briefly, this project responds to the priorities set by APEC Leaders and Ministers, as evidenced by parts of the APEC Action Agenda including Action Program, work plan, vision statement, and policy statement that relate to this project.

This project supports the APEC Ministers and Leaders in their call for the development of new clean energy technologies and sustainable development. The project also specifically addresses key themes of the Manila Framework of 1996. Specifically, the overall economic infrastructure will be strengthened by development of domestic renewable energy resources; small and medium enterprises will be strengthened since they are the principle beneficiaries of the associated technology transfer; and environmentally sound growth will be promoted with the development of clean renewable energy based systems.

This project responds to Part II of the Osaka Action Agenda (Implementation of the Bogor Declaration), especially:

- Section B1a, Economic and Technical Cooperation in Specific Area: “APEC economies will address the human resource development needs by providing a quality basic education;
- Section B5c, Energy, Common Policy Concepts: “APEC economies will set policy priority on...reducing the environmental impact of the energy sector.”

05. For applications under the TILF Special Account: How briefly this project contributes to APEC Trade and Investment Liberalisation and Facilitation (e.g. relevance to specific parts of the Osaka Action Agenda).

Not applicable

Linkages

06. The kinds of institutions in member economies intended to benefit from the results of the project. Highlight the direct benefits to the institutions, the types of business in member economies which will benefit from the results of the project and what the direct benefits are.

This project will benefit the private sector, NGOs, and governments of APEC member economies who are considering, or actively involved, in implementing renewable energy technologies to reduce energy use and environmental problems. The project will have direct benefits in increasing the understanding of how to identify and finance efficient hydro-electric and other renewable energy projects.

07. How the participation of the business/private sector and non-governmental institutions has been sought or will be sought. Illustrate how the business/private sector has been involved in the planning and delivery of the project and whether any other APEC fora have been consulted. (*)

Participants in the project will include NGOs, the private sector, and government officials. All APEC member economies with significant hydro-electric development will be invited to participate in the project.

08. How this project will add “APEC value” (as to the potential benefits of implementing projects) in the context of other work that might have been done elsewhere in the same field. (*)

The value to APEC will be to transfer successful project development methodologies which can be applied across all APEC economies.

09. An indication of how the project might contribute to related projects or activities in APEC or elsewhere.

By demonstrating the feasibility of the renewables-related energy-service company concept, all APEC member economies will benefit from the experience which can be applied to the development of both hydro and non-hydro renewable energy resources in their economies. This project will also build directly on a self-funded project conducted under the APEC 21st Century Renewable Energy Development Initiative which had as its goal the identification of candidate hydro projects.

10. Describe the deliverables of the project and demonstrate how they will meet the needs of the targeted beneficiaries.

The deliverables are listed in #13 below. All deliverables are intended to facilitate the rapid implementation of hydro-electric optimization projects in the Asia-Pacific region by a renewables energy services company. These optimization projects will provide additional hydro-electric power to APEC-member economies with a lower cost and environmental impact per megawatt of added capacity.

Methodology

11. A concise description of the project’s methodology by components, with its associated outputs clearly specified.

The methodology for the project is as follows:

In at least two APEC-member economies,

- a. Create public-private sector partnerships to facilitate and streamline the overall process for obtaining PPAs for specific hydro-electric optimization projects.
 - b. Develop standardized application forms and processes for these PPAs.
 - c. Make recommendations to streamline optimization project implementation.
 - d. Assist project developers in demonstrating the economic and environmental benefits of hydro-electric optimization projects.
 - e. Help identify potential power purchasers for the resale of PPAs, generated by the optimization projects, in the power purchase markets.
12. A timeline for circulation and submission of this project proposal with drafts circulated well in advance to fora to allow careful consideration.
- (1) February 2002: Submission of project proposal to the Expert Group on New and Renewable Energy Technologies
 - (2) March 2002: Submission of project proposal to the Energy Working Group
 - (3) May 2002: Concurrence by EWG 23.
13. A timetable for the accomplishment of each component in (11).

This project is scheduled to be completed by July 2004. The dates for completion of the activities are:

- a. 7/2003: Create public-private sector partnerships in at least two APEC-member economies;
 - b. 9/2003: Develop standardized PPA application forms and processes;
 - c. 12/2003: Report containing recommendations for streamlining optimization project implementation.
 - d. 3/2004 : Report on how to demonstrate the economic and environmental benefits of hydro-electric optimization projects.
 - e. 7/2004: Listing of potential power purchasers for resale of PPAs and reasons for individual listings.
14. The number of APEC member economies that will participate in this project. Please indicate the names of member economies participating in each component of the project as set out in (11). (*)

The US will lead this project and all APEC economies can participate.

Budget

15. An itemized budget for the project, including provision for any publication and dissemination of project results, in the prescribed format. Applications under the Operational Account should use the format at *Annex A1*. Applications under the TILF Special Account should use the format at *Annex A2*. The budget should illustrate the assumptions adopted (e.g. unit costs) for the computations.

An itemized budget for this project is included.

16. A timetable for the drawdown of APEC funding requested for the project, including details of any advance payment or instalment payment requested and justifications for such requests.

9/2003 20% on submission of report which develops standardized PPA application forms and processes;
 12/2003 40% on submission of report containing recommendations for streamlining optimization project implementation.
 3/2004 60% on submission of report on how to demonstrate the economic and environmental benefits of hydro-electric optimization projects.
 7/2004 100% on submission of final report

17. Details of any request for waiver or exception from the normal APEC financial rules with justifications.

Not applicable

Dissemination of Project Output

18. A plan for the publication and dissemination of the results of the project, including:
- a. the nature of the target audience, and, based on that audience;
 - b. the form and content;
 - c. format (e.g. hard copies, floppy discs, internet uploading);
 - d. number of copies for the publication;
 - e. accessibility of results for the targeted audience;
 - f. a publicity plan for:
 - i) briefing the general or specialist media about key components of the project;
 - ii) the promotion of sales or other dissemination of the final product; and
 - iii) budget for publication and dissemination, to form part of the itemized budget

The final product will be a written document that will include the findings from the monitoring and assessment of the project. The format will be an electronic document which distributed to each of the APEC member economies and made available electronically on the APEC website, with links to it from other energy-related organizations (e.g., U.S. Department of Energy, United Nations Development Programme, World Bank, and others).

Assessment of Project

19. With reference to your objectives stated in paragraph 3, provide detailed criteria (quantitative and qualitative) for how you will measure your results in the short and long term to know if your project has been successful. State your current benchmarks for measurement, your

target results from the project for each measurement criterion and the range of acceptable results both in numerical and percentage terms, where possible.

The criteria for APEC projects will have been met if the project is structured so that the results are applicable and useful to all the APEC member economies. If it is possible to replicate the hydro-elect RESCO concept in other APEC economies, then the project will have proven positive results.

Gender Criteria for Formulation and Evaluation of Projects

Objectives

1. Show how the objectives of the project provide benefits for women, where appropriate. APEC Ministers have indicated (*Framework for the Integration of Women in APEC*) that benefits might include: increased involvement of women; taking account of the differences in women's and men's lives (gender analysis); and collection/use of sex-disaggregated data.

Women will directly benefit from this study, since the increase of clean affordable energy will increase the overall quality of life in APEC member economies.

Linkages

2. Show how the participation of women has been/will be sought. Show how women are involved in the planning, management, allocation of resources, and implementation of the project.

The participation of women will be sought in the development and implementation of the project.

Methodology

3. Provide a brief description of the way women will be able to participate equitably in the development and implementation of the project.

Women's participation will actively be sought in the course of this project through interviews, meetings and access to published material.

4. Provide a brief description to show that the project will collect and use sex-disaggregated data (if available) to measure the project's effects on women.

Not applicable.

Dissemination of project output

5. Does the plan for the publication and dissemination of the project's results include communication methods that are appropriate for women?
 - Questions that may be relevant include: Are women one of the target audiences? Does the plan take account of women with low literacy and women with low access to electronic media? Will the results be disseminated to women's organizations?

Although women are not a specific target audience of this project, it will be possible for women's organizations with Internet access from around the world to have access to the report and to seek guidance from APEC in renewable energy related RESCO development.

Budget

6. Are women involved in making decisions on the allocation of resources?

Not applicable

7. Where appropriate, provide details of the project's budget that are allocated to activities that address the specific needs of women.

Not applicable

Assessment of project

8. Provide details of how the project proponent will assess whether he/she has met the gender criteria for APEC projects and how he/she will measure the impact of the project on women.

Evaluation of the project with regard to its impact on women, will be done at the conclusion of the study.

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APEC Operational Account
Itemized Budget for Financial Year _____ 2003_¹

Items		APEC Funding (USD)		Self Financing (USD)
<i>Direct Labour</i>	No. of Hours	Rate		
- Speaker's Honorarium				
- Consultant (including Researcher) Fees	450	\$100/hour	\$45000	
- Consultant's Secretary Cost				
<i>Travel</i>				
- Per Diem (including accommodation and "additional payment")	2 trips, 5 days per trip	\$200/day x 10 total days	\$2000	
- Airfare	2 persons trips	\$1500/trip	\$3000	
	No. of Copies	Unit cost		
<i>Publication of report (including distribution)</i>				
<i>Photocopying</i>				
<i>Communications (Phone/ Fax/ Mail/ Courier)</i>				
<i>Total</i>			\$50,000	

¹ If project straddles more than one year, please indicate only the amount of funds required for the financial year in question.