



Report on "First Consultative Workshop", (Colombo, January 12-13, 2005) under Development of Policy Framework for Renewable Energy Resources Based Electricity Generation Project

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*Prepared for*

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# Report on “First Consultative Workshop”, (Colombo, January 12-13, 2005)

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## Background

Under the project titled, “Development of Sri Lanka’s Policy Framework for Renewable Resource Based Electricity Generation”; one of the initial tasks pertained to preparation of a *Discussion paper* on enabling environment for Renewable Resource Based Electricity Generation in Sri Lanka. Discussion paper focused on following aspects:

- Analysis of the existing renewable energy scenario in Sri Lanka
- Review of legal framework encompassing the sector and related policy documents
- Assessment of issues and barriers that are impeding the RRBEG
- Assessment of the international policy and regulatory regimes

The draft discussion paper so prepared was finalized by incorporating comments received from the stakeholders. Thereafter, this consultative workshop was organized in Colombo. In this workshop (i) the issues that were identified on the basis of the preceding analysis and (ii) the suggested approach were presented before the representative stakeholders. The idea was to get their view-points and refine the approach accordingly.

In the overall context of renewable energy based electricity generation in Sri Lanka, presentations on (i) issues and barriers and (ii) suggested approach were made by Mr Amit Kumar whereas presentations on international policy and regulatory regimes were made by Ms Namrata Mukherjee and Mr Mahesh Vipradas. The discussions, that followed, were moderated by Mr J L Bajaj and Mr K Ramanathan. The concluding session was moderated by Dr Tilak Siyambalapitiya

The following sections outline the summary of discussions and the key points of discussions that emerged out of these discussions. These key points were further discussed to come out with a distilled approach.

## Summary of discussions

1. It was pointed out that the rationale for RERBEG in Sri Lanka should also include the following additional points:
  - (a) Overall impact of RERBEG in the national context
  - (b) Creation of renewable energy based industry, leading to better socio-economic development
2. There is a need for a single 'Apex' agency or body that can coordinate all the various activities related to RERBEG.
3. There was a view that RERBEG, on account of expensive electricity, should not result in more burden on the consumer.
4. A decision needs to be taken regarding the targets. Whether the targets should be fixed on the basis of installed capacity or on generation basis.
5. There is a need to study the impact of RERBEG against the backdrop of grid and network limitations.
6. Prioritization of RET for suitable policy support could be done as per the following criteria:
  - As per resources availability
  - Indigenous capacity for exploiting the same
  - Whether 'firm' or 'non-firm'
7. There is need to (a) quantify the exploitable potential and (b) decide a reasonable time frame within which electrification through RERBEG could be done, considering the fact that population cannot wait indefinitely for technologies to mature.
8. There is a need to have better coordination among all the stakeholders, especially the institutions engaged in RERBEG.
9. Interest rates as well as duties for RERBEG projects are high compared to those for the conventional power plants.
10. It was felt that if RERBEG has to be promoted; policy directive should come from the Government. It is certainly not Regulator's or CEB's job.

11. Apart from a central, coordination agency; it was pertinent to have `decentralized institutional set up` as the application of RERBEG is going to be decentralized in nature.
12. There is a need to treat grid connected and off-grid applications of RERBEG separately since the issues are totally different for both.
13. While developing the policy, the national interest should be uppermost in mind so that policies do not end up serving interests of a single (or a group of) stakeholder(s).
14. While estimating tariff, following issues need to be examined:
  - Two-tier tariff – higher for initial period till the loan is repaid then reduction in tariff.
  - Royalty on natural resources like wind and water.
15. While considering RERBEG, a holistic approach is required considering benefits in terms of (a) environment and (b) rural employment opportunities.
16. In the context of grid connected RERBEG, there should be provision for wheeling and open access to grid.
17. In case `cost plus` method has to be adopted for tariff setting, some way of benchmarking the investment costs has to be established.
18. There is a need for (a) support for R&D, (b) greater coordination among R&D taking place at various organizations, and (c) skill development.
19. Regulatory practices for off-grid plants need to be established, including clearly defined criteria for licensing.
20. The issue of `first-cum-first-served` basis of allotment (as is done presently) vs. allotment through bidding needs to be revisited. This has to be examined from the perspective of optimal exploitation of existing potential at a given site.
21. Role of different agencies (viz. PUCSL, Transmission company, Distribution company, and Generation company) also needs to be clearly defined in the context of RERBEG.

## Key issues for discussion

The aforementioned points were further distilled/combined to bring out those key issues that needed further deliberations for finalization. These key issues are summarized below:

1. Whether there is a need to have an 'Apex' coordination body for RERBEG in Sri Lanka
2. Whether a legislation is required to be brought out that has clear targets and time frame for their implementation
3. In the national context, whether there is a need to prioritise different renewable energy options for devising appropriate supportive actions
4. In case of grid connected RERBEG, what sort of interventions could be there:
  - There may be certain minimum quota of electricity generation/procurement that has to be met through RERBEG. One way of fulfilling this quota could be through competitive bidding
  - Whether the support should be through preferential tariff
  - Whether the support should be through tax incentives
  - Whether there should be direct investment subsidy
  - Whether the support should be in the form of subsidized interest
  - Combination of above, probably based on technological maturity
5. In case of off- grid RERBEG, what sort of interventions could be there:
  - Whether direct subsidy needs to be provided
  - Whether the reach of micro-credit needs to be broadened and made easier
  - Whether local/community participation in O&M needs to be encouraged, and how
6. What should be the policy insofar as licensing of off-grid power plants is concerned
7. R&D and technology transfer being very important aspects of successful RERBEG, what steps are needed to encourage indigenous development as well as adaptation of technologies developed elsewhere

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8. How to meet financing requirements of RERBEG, considering the fact that such projects are perceived to be risky; and whether innovative financing mechanisms are required
9. How to take care of capacity building needs for each and every stage of RERBEG

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## Concluding discussions on key issues

After summarizing the discussions that took on the first day, key issues for further discussions were flagged. Given below is a gist of the conclusive round of discussions on the second day.

### 1. Apex coordination body

- The stakeholders were informed that the Chairman, Energy Conservation Fund (ECF) had already been entrusted with the task of overall restructuring of renewable energy sector. He, therefore, is already looking into this issue. One of the possibilities could be to locate such a body within ECF.
- While some of the stakeholders opined that the present arrangement - but with a better representation of all the stakeholders (both at national and provincial levels) in the decision-making process – may continue; others felt that a government body may have certain limitations.
- There were concerns that, in the name of creating a new body, another bureaucratic road-block should not be created.
- To the suggestion that all the stakeholders be part of decision making or `apex' body; Chairman, ECF explained that while this might not be possible legally, the stakeholders can be accommodated into an `advisory body'.
- Another suggestion pertained to strengthening of the existing body *along with* establishment of an advisory council composed of the stakeholders.
- Insofar as R&D is concerned, it was opined, that it may continue to be coordinated by Ministry of S&T whereas another body could take up commercialisation activities.
- Finally, everybody felt that:
  - Only revamp of the existing setup would not suffice but there has to be a separate organization
  - This body should have clout and authority to bargain

### 2. Legislation / policy with clear targets and time framework

- The discussion centred on merits and demerits of policy vs. legislation. It was opined that if there is legislation and targets are defined therein, government would be mandated to fulfil

the same. Moreover, legislation is taken more seriously as compared to policy only.

- The developers had more confidence in the legislation, which they felt, would safeguard them from frequent policy changes. Only having policy, on the other hand, may not achieve this.
- One suggestion was to have the targets, albeit with an upper limit enshrined in the legislation. The annual targets could then be introduced through policy measure.
- It was felt that the empowerment of the apex body could be in the legislation whereas targets etc. could be brought out in the policy.
- There could be an action plan consisting of targets and time frame. This action plan could be a coordinated affair carried out by the apex body, including identification of technologies. Targets need to be:
  - National
  - Regional
- The point in favour of the legislation is that the legislation cannot be as easily rejected or reversed as a policy by the new regime/political dispensation.
- Furthermore, it was felt that only prescribing targets would not suffice unless a robust monitoring mechanism is also in place.
- Intervening in the discussions, the Director General, PUCSL informed that draft of National Energy Policy is ready for public feedback and as such:
  - RE policy should fit into overall energy policy
  - Since there is going to be a National Energy Policy; renewable energy (which is a sub-set of this policy) can not have a legislation.
- It was also pointed out that most countries in the world have *laws* that detail out the targets.

### 3. Prioritisation

- One view was that some sort of technological prioritisation is necessary.
- Prioritisation could be carried out on the basis of
  - Economics
  - Social impact
  - Environmental impact
- It is important to give adequate weightage to different aspects of RETs for power generation, such as:
  - Despatchability
  - Non-energy benefits
  - Aspects related to government commitments like poverty alleviation and private sector development

- While talking about the prioritisation, it needs to be examined whether utility can absorb RERBEG, given the limitation of grid absorptive capacity
- Another view pertained to the fact that since small/mini hydro programme is already well advanced, the remaining technologies are biomass and wind. In that case there may not be any prioritisation required.

#### 4. Intervention in grid connected projects

- Presently, the projects are awarded on the basis of 'first come first served (F-C-F-S)'
- It was opined that while F-C-F-S should be retained for mini hydro plants up to 10 MW capacities; for plants of capacity above 10 MW, there could be bidding (perhaps on the royalty to be paid on the use of natural resources like water and wind).
- In order to encourage developers to enter in to biomass based electricity generation, first 50 MW of biomass could be awarded on F-C-F-S basis. Thereafter there may be a competitive process.
- One view was to have bidding process for a specific technology rather than as a general rule.
- If mandatory quota for RERBEG is introduced, to make it really meaningful, it could be on 'production (i.e. generation) basis' rather than as a percentage of the installed capacity.
- As per PUCSL, for the tariff, there could be two tier system -
  - During initially period of the project, on avoided cost basis
  - Later on, on competitive basis
- However, there were some concerns that if fixed tariff is announced, it may lead to investors taking up only most profitable sites, leaving out the rest. But it was suggested that in order to promote the RERBEG, for first 50 MW; developers must be given the freedom to choose best sites so that confidence could be built.
- It was felt that the support to RERBEG should be
  - Tariff based
  - Subsidy should be linked to performance rather than the investment.

#### 5. Intervention in off grid projects

- It was pointed out that while ESD and RERED models (with bridging financing from provincial councils and donors) may be adequate, growth of rural electrification projects is constrained on account of tedious approval process and that need to be accelerated.

- Furthermore, these models cannot meet target of electrification of 1 million households. Therefore, there could be a separate body to oversee that.
- Implementation mechanism should be expanded for accelerating the pace of rural electrification.
- It was also pointed out that solar home systems (SHS) can be, at best, only a stop-gap arrangement.
- Treating off-grid consumer at par with the grid-connected ones; off-grid consumer must also be subsidized (as grid connected consumers already enjoy a number of hidden subsidies. Also, it is estimated that for rural electrification through grid extension \$ 400–500 per household are spent).
- Some other points that were brought out in the context of off-grid RERBEG, include:
  - There is very crucial role for provincial councils in this whole programme.
  - There is a need to improve off-grid energy delivery services. Some sort of standards need to be developed for the services provided.
  - Apart from PCIs, regional banks should play more active role.
  - Private sector participation in rural electrification has to be encouraged.
  - For rural electrification to be sustainable, there is an urgent need to form a maintenance fund.

## 6. R&D and capacity building

- Since RERBEG related R&D is already going on in many universities and organizations, all these efforts need to be coordinated so as to have a focused approach.
- The R&D activities should be adequately and consistently supported in order to bring them to logical conclusion.
- Rather than having capacity building activities of generic nature; specific programmes need to be developed addressing specific requirements.
- Capacity building for grid-connected and off-grid RERBEG should be tackled separately.

## Agenda of "First Consultative Workshop", (Colombo, January 12-13, 2005)

Day 1, January 12, 2005		
0930 - 1000	Registration	
1000 - 1015	Welcome	RERED Project Management Unit and TERI
1015 - 1045	Project Overview & Introduction of Participants	Working Group
1045 - 1115	Coffee Break	
1115 - 1200	Issues and barriers for promotion of RERBEG in Sri Lanka	TERI
1200 - 1245	Lunch	
1245 - 1415	Discussions	
1415 - 1500	International regulatory and policy regimes	TERI
1500 - 1530	Coffee Break	
1530 - 1600	Suggested approach for Sri Lanka	TERI
Day 2, January 13, 2005		
0930 - 1100	Discussions	
1100 - 1130	Coffee Break	
1130 - 1200	Summing up	TERI
1200 - 1205	Vote of Thanks	TERI
1205 - 1245	Lunch	

## List of participants of the "First Consultative Workshop", (Colombo, January 12-13, 2005)

Name	Designation	Name of Organisation
L P Jayasinghe	President	Bio Energy Association of Sri Lanka
Dr Nalin Walpita	Representative	-- do --
Dr Nishantha Nanayakkara	President	Grid Connected Small Power Developers Association
R Karunaratne	Representative	-- do --
M P T Cooray	Consultant	-- do --
Y P Dassanayake	Coordinator	Federation of Electricity Consumer Societies
S M G Samarakoon	Director	Consultancy & Professional Services (Pvt) Ltd
Bandula Chandrasekara	Field Coordinator	Energy Forum
Lalith Gunaratne	Director	LGA Consultants (Pvt) Ltd
Upali Daranagama	Project Management Specialist	USAID
T Thavasilingam	Deputy Secretary	North East Provincial Council
Rohana Dissanayake	Secretary, Ministry of Power	Uva Provincial Council
J A Ranjith	Secretary, Ministry of Power	Sabaragamuwa Provincial Council
Anura Vidanagamage	Assistant Director	Industrial Services Bureau
Sumith Peiris	Deputy Manager	National Development Bank
G B Wimalaratne	Head, Department of Electrical Engineering	NERD Centre
P G Joseph	Director, Alternate Energy Division	Ministry of Science & Technology
M A Warnakulasooriya	Chairman	Energy Conservation Fund
M I M Rafeek	Director (Power)	Ministry of Power and Energy
P Liyanarachchi	Project Manager	-- do --
Ananda Gunasekara	Chairman	Ceylon Electricity Board
Badra Jayaweera	Additional General Manager (Region 1)	-- do --
B A N Fernando	Deputy General Manager (Energy Purchase)	-- do --
Amali Rajapaksa	Infrastructure Specialist	World Bank
Kaushal C Obadage	Project Implementation Officer	ADB

Name	Designation	Name of Organisation
<i>Representing Renewable Energy Working Group</i>		
W B Dissanayake	Additional Secretary	Ministry of Power and Energy (Chairman, RE Working Group)
Prof. Priyantha Wijetunga	Director General	Public Utilities Commission of Sri Lanka
P L G Kariyawasam	Project Manager, Kerawalapitiya	Ceylon Electricity Board (Convener, RE Working Group)
Dr. Tilak Siyambalapitiya	Director	Resource Management Associates (Pvt) Ltd.
K A N Priyantha	Engineer	Ceylon Electricity Board
Harsha Wickramasinghe	Director Projects	Energy Conservation Fund
<i>Representing Administrative Unit, RERED Project</i>		
Jayantha Nagendran	Senior Vice President (Project Management)	DFCC Bank (Project Director – RERED Project)
Kapila Subasinghe	Assistant Vice President (Project Management)	DFCC Bank
<i>TERI, India</i>		
J L Bajaj	Team Leader	TERI
K Ramanathan	Regulatory and Legal Specialist	TERI
Amit Kumar	Policy Development Specialist	TERI
Mahesh Vipradas	Renewable Technology Expert	TERI
Namrata Mukherjee	Economic and Financial Expert	TERI
<i>Invitees that did not participate</i>		
	President	Solar Industries Association
	President	Village Hydro Developers Association
	Team Leader	ITDG – South Asia
Mr K S Fernando	Director	Resource Management Associates (Pvt) Ltd.
	Chief Secretary	Southern Provincial Council
	Managing Director	SEEDS (Gte) Ltd
	Director General, National Planning	Ministry of Finance
	Director (Environmental Economics & Global Affairs)	Ministry of Environment & Natural Resources
	Chairman	Public Utilities Commission of Sri Lanka
	General Manager	Ceylon Electricity Board
	Additional General Manager (Transmission)	-- do --

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Name	Designation	Name of Organisation
	Representative	JBIC
	Representative	UNDP
	Deputy General Manager (Transmission & Planning)	Ceylon Electricity Board (Representing RE Working Group)
	Deputy Director, National Planning	Ministry of Finance (Representing RE Working Group)

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## Presentations made during the conference

**Please find enclosed four power points files for the presentations:**

- **Renewable Resource Based Electricity Generation in Sri Lanka: Issues & Barriers**
- **International Policy and Regulatory Regimes**
- **Renewable Resource Based Electricity Generation in Sri Lanka: Approach**
- **Summary of Discussions on January 12, 2005**