

## Workshop on

**"Renewable Energy Integration and Procurement"** Organized by - South Asia Regional Energy Partnership (SAREP) and USAID Sri Lanka Energy Program

### Date: March 18 to 19, 2024 (Monday and Tuesday)

Venue: Kingsbury, Colombo

# Agenda

	DAY-I (Start Time 08.30 a.m.)				
	Time	Session details	Speaker/Presenter		
08.30 a.m. -09.00 a.m.	30 min	Registration			
	Inaugural Session (30 min)				
9.00 a.m. - 9.10 a.m.	10 mins	Welcome remarks and Context Setting	Apurva Chaturvedi, Indo- Pacific Office, USAID/India		
9.10 a.m. - 9.20 a.m.	10 min	Special Remarks	Rozanne Croos Moraes, Project Development Specialist, USAID/Sri Lanka		
9.20 a.m. - 9.30 a.m.	10 min	Address by Chief Guest	Sulakshana Jayawardena, Secretary, Ministry of Power and Energy, Sri Lanka		
9.30 a.m. -9.40 a.m.	10 min	Pre-Workshop Questionnaire			
	Session I: Introduction and Outlook (60 min)				
9.40 a.m. -10.00 a.m.	20 min	Sharing India Experience on Power Sector Reforms and scaling Renewable Energy (Multiple state experiences, successes, and failures and what drove them)	S.K. Soonee, SAREP Adviser (Former CEO Grid INDIA)		
10.00 a.m. -10.20 a.m.	20 min	Proposed sector reforms in Sri Lanka	Pradeep Perera, Head - Power Sector Reforms Secretariat, Sri Lanka		
10.20 a.m. -10.40 a.m.	20 min	Q&A/ Panel discussion			
10.40 a.m. -10.55 a.m.	15 min	Tea Break			
10.55 a.m. -11.10 a.m.	15 min	Group Photograph			

	Session 2: Large Scale Power Procurement – Part I (90 min)			
11.15 a.m. -12.00 p.m.	45 min	<ul> <li>Competitive Procurement – Standalone and Round the Clock RE Power – India Case Study</li> <li>Reverse Auctions and e-tendering (How it was implemented in India, Pros, and cons) and how it has brought down cost of power.</li> </ul>	Veena Sinha, CEO, REMCL	
12.00 p.m. -12.45 p.m.	45 min	<ul> <li>Global Practices and Methodologies for RE</li> <li>Procurement, included but not limited to, <ul> <li>Large RE parks (How these parks are structured, land acquired including transmission, roles and responsibilities of policy holders and private sector)</li> <li>Tendering the Grid (Limiting solar based on grid absorption capacity)/ RE curtailment methodology</li> </ul> </li> </ul>	Rakesh Kumar Goyal, Chief of Party, SAREP	
12.45 p.m. -01.45 p.m.	60 min	in Lunch Break		
	Session	3: Large Scale Power Procurement – Part 2 (90 mi	n)	
01.45 p.m. -03.15 p.m.	<b>90</b> min	<ul> <li>Critical aspects of the Power Purchase Agreement – Generation (Solar (Floating and Ground Mounted), Wind, BESS) and Transmission addressing the following, but not limited to: <ul> <li>Key aspects of the PPA that directly affect its bankability with international lending practices.</li> <li>Risk allocation Matrix in PPA</li> <li>How Network unavailability, Force Majeure and Change in law conditions are expected by financial institutes</li> <li>Technical and pricing clauses/back stop mechanisms.</li> <li>BOT structures (including for transmission)</li> </ul> </li> <li>Negotiating Technical Parameters of Power Purchase Agreements <ul> <li>Benchmarking generation costs across solar, wind and BESS</li> <li>Curtailment clauses and compensation models</li> </ul> </li> </ul>	Anand Kumar, IIT Gandhinagar	
03.15 p.m. -03.30 p.m.	15 min	Closing of Day-1 and Plan for Day-2	USAID SAREP	
03.30 p.m. -03.45p.m.	15 min	Теа		



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	DAY-2 (Start Time – 8.30 a.m.)					
	Time	Session details	Speaker/Presenter			
08.30 a.m. -09.00 a.m.	30 min	Registration				
	Session	Session 4: Financing Renewable Energy Projects (90 min)				
09.00 a.m. -10.30 a.m.	90 min	<ul> <li>Challenges and Mitigation Strategies in Financing Power Sector in Developing Countries</li> <li>Off taker risk mitigation products (such as PRGs, MIGA guarantees, etc.) in each type of tender.</li> <li>Options and Solutions for Financing Power Sector in Sri Lanka</li> <li>Possible refinancing strategies</li> <li>Benchmarking capital costs (debt and equity risk premiums)</li> <li>Asset Monetization <ul> <li>Tariff Based Competitive Bidding</li> <li>Financing products - Green Bonds, blended finance, PPP structures (Financial and legal charges applicable in these products including project finance loans)</li> </ul> </li> </ul>	Namrata Mukherjee, USAID SAREP			
10.30 a.m. -10.45 a.m.	15 min	Tea Break				
	Session	5: Global Distributed Renewable Energy O	utlook (30 min)			
10.45 a.m. -11.15 a.m.	30 min	Distributed Renewable Energy Outlook- Programs, Schemes and Targets (Solar, Wind Technologies etc.)	Atul Dhir, Lead-RE and EE, SAREP			
		Session 6: Challenges in the face of high renewable penetration in the country (120 min)				
11.15 a.m. - 12.15p.m.	60 min	<ul> <li>Challenges of renewables penetration in the country</li> <li>Grid Stability</li> <li>New and innovative solutions for grid stability</li> </ul>	S.K. Soonee, SAREP Adviser (Former CEO Grid INDIA)			

		<ul> <li>Forecasting - Renewable energy and forecasting</li> <li>Predictive analytics for grid management</li> <li>Case studies of grid disturbance and actions</li> </ul>			
12.15 p.m. -01.15 p.m.		Lunch Break			
01.15 p.m. -02.15 p.m.	60 min	<ul> <li>Challenges in the face of high RTS penetration in the country</li> <li>Policy architecture (How pricing and business models would evolve)</li> <li>Performance monitoring of RTS plants</li> <li>Generation data monitoring and performance management framework</li> <li>Rating program to ensure quality, safety, and performance of rooftop solar installations.</li> </ul>	Atul Dhir, Lead-RE and EE, SAREP		
	Session 7: Power Wheeling/ Open Access Market (60 min)				
02.15 p.m. -03.15 p.m.	60 min	<ul> <li>Power wheeling and how open access works with renewable energy projects.</li> <li>Business models</li> <li>Tariff schemes.</li> <li>Tolling fee schemes</li> <li>Open access and wheeling regulations</li> </ul>	Anand Kumar, IIT Gandhinagar		
	Closing	losing session (15 min)			
03.15 p.m. -03.25 p.m. 03.25 p.m.	10 min 05 min	Way Forward and Vote of ThanksMonali Zeya Hazra, Clean Energy Specialist USAID/IndiaSubmission of post-workshop questionnaire			
-03.30 p.m. 3.30 p.m. - 3.45 pm	15 min	Tea			