

### 3<sup>rd</sup> GMS Energy Transition Task Force Meeting

4–7 June 2024

Mandaluyong City, Philippines



(Program as of 31 May 2024)

#### WEEK AT A GLANCE

	4 June, Tuesday	5 June, Wednesday	6 June, Thursday	7 June, Friday
Morning Session (09:00–12:30)	<a href="#">ACEF</a> Opening Plenary	ACEF Deep Dive Workshop Enabling Frameworks for Renewable Energy Multi-Lateral Power Trade	3 <sup>rd</sup> GMS ETTF Meeting at Discovery Suites Hotel	GMS/ASEAN Training on Electricity Market Principles at Discovery Suites Hotel
Afternoon Session (14:00–5:30)	ACEF Plenary Thematic sessions (including regional power grids)	3 <sup>rd</sup> GMS ETTF Meeting at Discovery Suites Hotel	ACEF Southeast Asia Regional Session including ASEAN Power Grid (APG)	
Evening Session (18:00–20:00)	ACEF Welcome Reception (open to registered participants)	ACEF Networking Reception (open to registered participants)		

#### 3<sup>rd</sup> ETTF MEETING AGENDA

DAY 1, 5 June 2024 (ETTF Committee Meeting)	
Time (Manila)	Item
9:00 – 12:30	<i>ACEF Deep Dive Workshop at ADB HQ Enabling Frameworks for Renewable Energy Multi-Lateral Power Trade</i>
12:45–13:45 (60 mins)	<b>Welcome Lunch at Discovery Suites Hotel, 42<sup>nd</sup> Floor, Columbus</b> * Note: participants will need to leave the ADB premises around 12:30 pm.
<b>Zoom Link</b> <a href="https://adb-org.zoom.us/j/95598565166?pwd=QnQ4ZzIiYUxwcGJYN3ljUXpJdHEwZz09">https://adb-org.zoom.us/j/95598565166?pwd=QnQ4ZzIiYUxwcGJYN3ljUXpJdHEwZz09</a>  Meeting ID: 955 9856 5166 Passcode: B9xC701w	
13:45–14:30 (45 mins)	<b>Opening Remarks by GMS Energy Transition Task Force (ETTF) Chairperson (5 mins)</b> <i>His Excellency Victor Jona, Under Secretary of State and the Chairperson of the Third ETTF Committee Meeting, Ministry of Mines and Energy, Kingdom of Cambodia</i>  <b>Welcome Remarks by ADB (5 mins)</b> <i>Mr. Keiju Mitsuhashi, Director, Pacific and Southeast Asia Team, Energy Sector Office, Sectors Group, ADB</i>  <b>Introduction of Country Delegates and Participants (5 mins)</b>  <b>Presentation and Adoption of the 3<sup>rd</sup> ETTF Agenda</b> <i>ETTF Chairperson (5 min)</i>

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Time (Manila)	Item
	<p><b>ADB’s Experiences in Regional Interconnection Projects in Central and South Asia Regions and Reflections for Southeast Asia</b>  <i>Mr. Len George, Principal Energy Specialist, Emerging Areas, Energy Sector Office, Sectors Group, ADB (15 min)</i></p>
14:30–14:45 (15 mins)	<p><b>ADB’s New Technical Assistance on GMS/ASEAN Power Grid and Power Market Development</b>  <i>Ms. Hyunjung Lee, Senior Energy Economist, Pacific and Southeast Asia Team, Energy Sector Office, Sectors Group, ADB</i></p>
14:45–15:30 (45 mins)	<p><b>Country and Regional Updates</b>  <i>By 20 May 2024, participants will provide quick updates from their respective countries or organizations about new strategy/policy/plan, new project/MOU/agreement, cross-border interconnection and power trade data, energy efficiency, green financing, issues, and challenges, etc. <u>with regional significance</u> to GMS Secretariat: Mr. Jeffrey Almera (<a href="mailto:jalmera@adb.org">jalmera@adb.org</a>) with a copy to Ms. Hyunjung Lee (<a href="mailto:hilee@adb.org">hilee@adb.org</a>). The GMS Secretariat will compile country updates prior to the event, which will be presented by the Cambodia representative, as ETTF Chair country.</i></p> <ol style="list-style-type: none"> <li><b>Summary of GMS Sector Update</b> by Cambodia representative (15 min)</li> <li><b>Laos–Thailand– Malaysia–Singapore (LTMS) Interconnection and its Prospect to be connected to the rest GMS countries</b>  <i>Ms. Titiporn Sangpetch, Chief, Power System Connection and Cooperation Planning Department, EGAT (15 min)</i></li> <li><b>ASEAN Power Grid Roadmap and Framework Agreement</b>  <i>Ms. Shani Nadhilah, Senior Officer, ASEAN Power Grid, ASEAN Centre for Energy (ACE) (15 min) (TBC)</i></li> </ol>
15:30–15:45 (15 mins)	<p><b>Coffee / Tea Break</b></p>
15:45–16:45 (60 mins)	<p><b>Development Partner Support for GMS and ASEAN</b>  <i>Representatives of development partners will share highlights of their ongoing, planned, or potential support for GMS/ASEAN countries related to power trade, renewable energy and energy storage, energy efficiency, or green finance.</i></p> <ol style="list-style-type: none"> <li><b>DFAT:</b> Mekong-Australia Partnership and study tour on green energy transition in Australia  <i>Mr. Dwight Ronan, Senior Program Manager, DFAT</i></li> <li><b>ESCAP:</b> ASEAN Power Grid Advancement Program and Potential Cooperation with GMS ETTF  <i>Ms. Yejin Ha, Economics Affairs Officer, Energy Division, ESCAP</i></li> <li><b>Global Energy Alliance for People and Planet (GEAPP):</b> Global BESS program and other energy transition support for GMS  <i>Ms. Sunita Dubey, Country Representative in Viet Nam and Lead of BESS program in Southeast Asia</i></li> <li><b>USAID:</b> Southeast Asia Smart Power Program: Renewable energy certificate, wheeling charges, VRE grid integration and subsea interconnectors</li> </ol>

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DAY 1, 5 June 2024 (ETTF Committee Meeting)	
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	<i>Mr. Grayson Heffner, Director, Utility Modernization and Power Trade, USAID SPP</i>
16:45–17:00 (15 mins)	<b>Conclusion of Day 1</b>
18:00–20:00 (2 hours)	<b>ACEF Networking Reception at ADB</b> <i>Open to all ACEF registered participants</i>

DAY 2, 6 June 2024 (ETTF Committee Meeting)	
Time (Manila)	Item
	<b>Zoom Link</b> <a href="https://adb-org.zoom.us/j/99825758348?pwd=US9GZVhNenp6aDFDVURuSFhsbC9vZz09">https://adb-org.zoom.us/j/99825758348?pwd=US9GZVhNenp6aDFDVURuSFhsbC9vZz09</a>  Meeting ID: 998 2575 8348 Passcode: VBbwS869
08:30–08:45 (15 mins)	<b>Overview of Day 2</b>
08:45–09:45 (60 mins)	<b>Regional Power Trade Work Stream</b> <i>Speakers will give a brief presentation on assigned topic and participants will discuss and agree on next steps.</i> <ol style="list-style-type: none"><li>1. Priority interconnection projects</li><li>2. Financing models for interconnection projects</li><li>3. Plan for shadow trading</li></ol>
09:45–10:00 (15 mins)	<b>Coffee / Tea Break</b>
10:00–10:40 (40 mins)	<b>Energy Efficiency Work Stream: Draft Work Plan and Next Steps</b> <i>Ms. Architrandi Priambodo, Senior Energy Specialist, Pacific and Southeast Asia Team, Energy Sector Office, Sectors Group, ADB</i>
10:40–11:10 (30 mins)	<b>Technology Capacity Building Work Stream: Key Technology and Regulatory Issues on Regional Power Market Development and Draft Capacity Building Program for 2024 and 2025.</b> <i>Mr. Joao Aleluia, Energy Specialist, Pacific and Southeast Asia Team, Energy Sector Office, Sectors Group, ADB</i>
11:10–11:40 (30 mins)	<b>1. GMS Regional Investment Framework (RIF) 2025-2027 GMS Program Update</b> <i>Ms. Pinsuda Alexander, Economist (Regional Cooperation), Regional Cooperation and Integration Unit, Southeast Asia Department, ADB</i>  <b>2. Draft GMS Energy Strategy</b> <i>Ms. Hyunjung Lee, Senior Energy Economist, Pacific and Southeast Asia Team, Energy Sector Office, Sectors Group, ADB</i>
11:40–12:00 (20 mins)	<b>Closing of the 3<sup>rd</sup> ETTF Meeting</b> <ol style="list-style-type: none"><li>1. ETTF Chair Meeting Recap and Next Steps</li><li>2. Closing remarks from each country</li></ol>
12:00–13:00 (60 mins)	<b>Lunch Break at Discovery Suites Hotel, 42<sup>nd</sup> Floor, Columbus</b>

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<b>DAY 2, 6 June 2024 (ACEF Southeast Asia Regional Sessions)</b> <b>Asian Development Bank Headquarters</b>	
<b>Time (Manila)</b>	<b>Item</b>
14:00–17:30	ACEF Southeast Asia Regional Sessions <ul style="list-style-type: none"><li>• 2:00–3:30: ASEAN Power Grid (APG): Powering ASEAN's Green Future</li><li>• 4:00–5:30: Driving Energy Transition and Decarbonization in Southeast Asia</li></ul>

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**DAY 3, 7 June 2024 (ETTF Training Workshop)  
Discovery Suites Hotel, 42<sup>nd</sup> Floor, Columbus**

*This **Electricity Market Executive Course** will be delivered by [Dr. Mark Thurber](#) from the [Program on Energy and Sustainable Development \(PESD\) at Stanford University](#). Over the period from 20-30 May, participants will be given access to four e-learning modules developed at PESD, on “Fixed and Variable Costs”, “Basics of Offering into Wholesale Electricity Markets”, “Pay-As-Bid versus Uniform-Price Auctions”, and “Unilateral Market Power”. Participants are required to complete each of these modules on their own. **This is mandatory for all delegates from GMS ETTF members and ASEAN partners.***

Time (Manila)	Item
<p style="text-align: center;"><b>Zoom Link</b></p> <p style="text-align: center;"><a href="https://adb-org.zoom.us/j/99422094572?pwd=bklUWGhPQ0lnVWFyMU1pQ1ExckhBZz09">https://adb-org.zoom.us/j/99422094572?pwd=bklUWGhPQ0lnVWFyMU1pQ1ExckhBZz09</a></p> <p style="text-align: center;">Meeting ID: 994 2209 4572 Passcode: 1ecg22Bs</p>	
Time (Manila)	Item
8:15 – 8:45 (30 mins)	<b>Introduction of the Capacity Building Program on Electricity Market – Asian Development Bank and ADB Institute (ADBI)</b>
8:45 – 10:00 (75 mins)	<p><b>Training Session 1:</b> Uniform-Price Auctions and Unilateral Market Power</p> <p><i>In this first session, we cover the basics of how generating companies offer into wholesale electricity markets with uniform-price auctions, where the market-clearing price is paid to all units that run. Workshop participants, playing gencos, explore how and when they can exercise unilateral market power through their offers.</i></p>
10:00 – 10:15 (15 mins)	<b>Coffee / Tea Break</b>
10:15 – 11:00 (45 mins)	<p><b>Training Session 2:</b> Pay-As-Bid Auctions</p> <p><i>Why are uniform-price auctions near universal in wholesale electricity markets, when they require paying the market-clearing price even to units whose marginal costs are significantly lower than this price? Wouldn't ratepayers seem to benefit from using a “pay-as-bid” approach instead? We run a market with a pay-as-bid auction to investigate this question.</i></p>
11:00 – 12:00 (60 mins)	<p><b>Training Session 3:</b> Understanding Transmission Constraints</p> <p><i>Transmission constraints can cause congestion on the grid, limiting how many gencos can compete to supply electricity at a particular location. Transmission becomes even more important with the introduction of significant quantities of variable energy resources. In this session we explore how congestion causes locational marginal prices (LMPs) to vary across the network and influences the ability of suppliers to exercise unilateral market power.</i></p>

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Time (Manila)	Item
12:00 – 13:00 (60 mins)	<b>Lunch break</b>
13:00 – 14:00 (60 mins)	<b>Training Session 4: Forward Contracts in Electricity Markets</b>  <i>Fixed-price, fixed-quantity forward contracts play a crucially important, but not widely understood, role in electricity markets. Many electricity market problems (and notably the California Electricity Crisis of the early 2000s) can be traced in part to a failure to ensure that generating companies hold fixed-price forward commitments for most of their energy supply. Once gencos have sold forward contracts, they no longer have the incentives to exercise unilateral market power that were demonstrated in the previous sessions. We show how this works in a game where gencos are pre-assigned forward contract positions.</i>
14:00 – 15:00 (60 mins)	<b>Training Session 5: Impact of Variable Energy Resources on Electricity Markets</b>  <i>Intermittent renewable resources like wind and solar can increase wholesale electricity price volatility and alter the economics of dispatchable units in the market. We run a market with high shares of wind and solar to explore these effects and illustrate the “resource adequacy” problem.</i>
15:00 – 15:15 (15 mins)	<b>Coffee / Tea Break</b>
15:15 – 16:30 (75 mins)	<b>Training Session 6: Ensuring Resource Adequacy with High Shares of Wind and Solar through Interconnection</b>  <i>When renewable energy incentives push large quantities of new zero-marginal-cost capacity into the energy mix, there is a risk that dispatchable units may be retired for economic reasons, even as their energy becomes crucial in times of low wind and solar output. We play a market game in which forward contracts for all of the expected demand are auctioned off as part of a “long-term resource adequacy mechanism” that can help avoid the resource adequacy issues seen in previous sessions.</i>

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Time (Manila)	Item
16:30 – 16:45 (15 mins)	<b>Closing of the Training</b> <i>We host a discussion and Q&amp;A session about how the principles demonstrated in the workshop simulations apply to real-world electricity markets.</i>
16:45 – 17:00 (15 mins)	<b>Certificate Ceremony</b> <i>We organize a certificate ceremony to award certificates to participants who successfully complete the e-learning modules and the training workshop.</i>