





Background

- Since 2014: Two regional technical assistance (RETA) projects:
 - TA8830-REG: Harmonizing the Greater Mekong Subregion Power Systems to Facilitate Regional Power Trade
 - TA9003-REG: Integrated Resource Planning with Strategic Environmental
 Assessment for Sustainable Power Sector Development in the Greater Mekong
 Subregion
- Summarise main achievements and lessons learned
 - relevance of the RETA outputs to the GMS energy cooperation, including successes and shortcomings
 - directions for GMS cooperation over the next 3-5 years





Key Messages

 Achievement of objectives, in terms of its outputs and outcomes, has been mixed: very strong technical and market development work has been developed but not fully deployed, due to infrastructure constraints, a lack of progress in institutional development and regulatory harmonisation, and limited private sector engagement





Key Messages

- Feedback from participants demonstrates a strong commitment and goodwill for the ongoing cooperation from all countries
- Opportunities exist to improve the impact of the cooperation and respond to changing energy sector dynamics in the subregion, including through an increased emphasis on more holistic energy sector planning, renewable energy and energy efficiency integration, and market-based approaches to regional harmonisation





A High-Level Limited Survey





Conduct and Parameters of the Survey

- All RPTCC Members were sent questionnaires:
 - Questions covering all key elements of the cooperation: delivery of outputs, effectiveness in enhancing power sector planning, institutional development, energy security and power trading outcomes, knowledge sharing and capacity building, coordination
- Responses received from all six participating countries eight respondents in total
- While sample size was small, still provided a useful insight into future directions: Generally good agreement on cooperation effectiveness



1. The GMS Energy Sector Cooperation has delivered a workable, relevant <u>regulatory framework</u> to support increased cross-border power trade



2. GMS Energy Sector Cooperation has delivered a workable, relevant suite of <u>performance</u> <u>standards and grid codes</u> to support increased cross-border power trade







3. Power sector planning in GMS countries using <u>Integrated Resource Planning (IRP) and Strategic Environmental Assessment (SEA)</u> has been strengthened



4. Progress has been made in developing the <u>right institutions</u> to support regional energy cooperation







5. The GMS Energy Sector Cooperation has brought about increased power trade



6. The GMS Energy Sector Cooperation has brought about increased energy security







7. The GMS Energy Sector Cooperation has played a significant knowledge sharing and capacity building role for GMS Countries



8. The combination of different ADB programs is useful to each country and <u>well co-ordinated with</u> <u>other GMS energy co-operation programs</u>







Forward Looking





Recommendations

• Streamlining and alignment between different support efforts, to look at cross-border trade and security of supply outcomes and include access levels, distribution of impacts and climate change





Role of Renewable Energies in the GMS

- Renewable Energy and Energy Efficiency Integration
 - Greater focus on promotion of investment and grid interactivity of smaller-scale RE installations, given the changing economics of smaller scale generation
 - Focus on areas that would benefit from regional harmonisation of approaches to renewable energy and energy efficiency investment, including standardisation of grid access rules for decentralised generation, storage, alignment of building codes and product standards



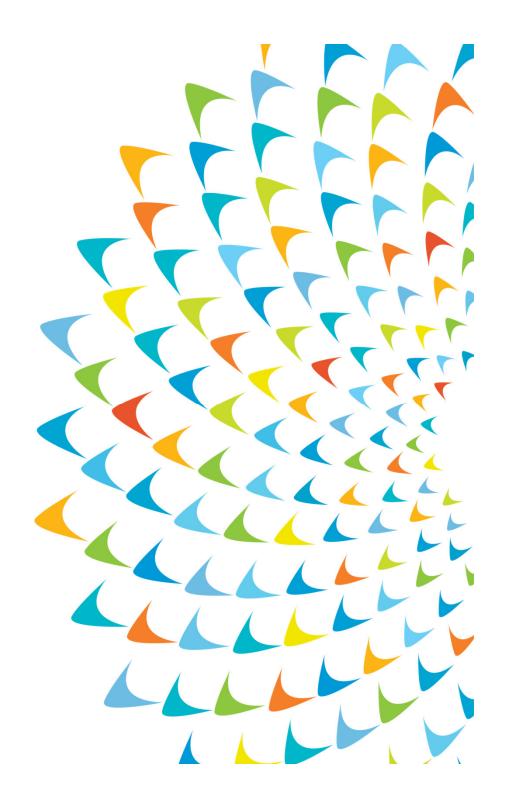


- Stronger emphasis on bridging the gap between resources for recommended harmonised frameworks, and the current national constraints of regulatory and pricing frameworks operated by domestic energy markets
- Creation of regional market institutions and trading platforms that enable commercial participation cross border power trading and infrastructure investment





Thank you!





The stated objective . . .

- Improve energy supply security through cross-power trade while optimizing use of sub regional energy resources
 - as per the GMS Economic Cooperation Program Strategic Framework 2012 – 2022
 - by 2022: GMS power trade = 70,000 GWh compared to 34,000
 GWh in 2010





New ideas / approaches. . .

Top-down approach

 Renewing the regional power transmission Master Plan = work is on-going

Bottom-up approach

- Moving on to more application = pre-feasibility study of priority interconnection projects
- Identify promising interconnections/trades and focus on making some of them work
- Country application of works done by WGRI

Evolved oversight

 WGPO proposed to take charge of Grid Code and Regional Master Plan



GMS Self-Assessment . . .

- Current approach
 - ADB provides TAs and coordinates
 - International experts lead the works
 - GMS country teams review and comment
 - WGs and RPTCC review, considers and adopts
- Regarding the approach
 - Appropriateness?
 - Productivity?
- Regarding the deliverables
 - Usefulness?
 - Relevance?





Questions for brainstorming

- What are countries' views on multiple buyer-seller models in general?
- Should the near term focus be on more enhanced Stage 2?
- What are the remaining knowledge gaps that would enable more proactive GMS cooperation?
- What are the difficulties in up-taking, implementing the recommended measures for harmonization of regulatory regimes and technical standards and grid codes?
- Can GMS power trade cooperation develop with the existing institutional arrangements?
- Relationship between RPTCC and GMS higher level fora



Looking ahead . . .

- TA 8830-REG will complete by 31 Dec 2019
- What more studies, investigation are necessary to support enhanced GMS power cooperation?
- What specific training or work deliverables are deemed most useful for future ADB support beyond 2019?
- Need to integrate works from both WG => e.g., issue of third party access, transmission system operator, various codes require cooperation/coordination from both WGs



Looking ahead . . .

- Phased focus, with near term focus on enhanced Stage 2?
- Any improvement in the GMS current working coordination?
- Is it time to bring back the need for a regional coordination center?

 What about linkage with bigger regional cooperation such as HAPUA and ASEAN?

