



# ***WGRI Activities in 2020 and Suggested Topics for Future Work***





# Summary as of November 2019

- **WGRI accomplishments**

- Regulatory review
- Open access
- Transmission charges
- Short-term trading rules
- Balancing mechanism for short-term trading
- Issues around creating a Transco

- **Country Knowledge Sharing**

- National power sector/electricity market developments
- Current plans for developing cross-border trade





# WGRI actions in 2020

## • WRGI publication:

- <https://www.adb.org/publications/harmonizing-power-systems-gms-facilitate-trade>

ASIAN DEVELOPMENT BANK

[WHO WE ARE](#)
[WHAT WE DO](#)
[WHERE](#)

---

🏠
Publications > Harmonizing Power Systems in the Great...

## Harmonizing Power Systems in the Greater Mekong Subregion: Regulatory and Pricing Measures to Facilitate Trade

Publication | February 2020



**This publication identifies bottlenecks to regional power trading in the Greater Mekong Subregion (GMS) and proposes solutions to overcome them.**

Download (Free: 4.14 MB)

Price

US\$28.00 (paperback)

Citable URL

<http://dx.doi.org/10.22617/TCS200070>

The six GMS countries are striving to ensure an adequate, reliable, sustainable, and affordable energy supply for all their citizens. Toward this, the GMS countries have identified power trading as a priority for regional cooperation. However, such trading currently represents less than 2% of electricity consumed in the GMS. This publication examines the regulatory and commercial barriers that are preventing a greater uptake of power trading in the region and identifies the key measures needed to overcome them.





# Suggestion From Last Year's Meeting

Identify Methodology Gaps

## Pilot Study of Grid to Grid Trading involving 3 countries

Select appropriate example from WB business cases or other assessment, but allow for strategy variations/scenarios

Apply proposed Methodology for Wheeling Charges

Develop Regulations, Commercial & Legal Framework

Identify first 3 countries to interconnect

Analyse the Available Transfer Capacity requirements

Develop methodology

RAB  
WACC  
Depreciation  
Asset Lives

Road Map and legal framework for Grid Code roll-out

Increasing engagement with WGPO





## WGRI actions in 2020

- **WGRI virtual meeting in April:**
  - **Proposed a three country grid to grid pilot study (Lao PDR – Thailand – Cambodia)**
  - **The meeting discussed**
    - **Study objectives**
    - **Stages of study**
    - **Approach and methodology**
    - **Expected results and benefits**
    - **Study organization**
- **After the meeting a summary notes sent to members**
- **Follow up to confirm**





## Messages from November 2019

- **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



## WGRI actions in 2020

- **WGRI virtual meeting in October**
  - **Could not proceed with the proposed a three country grid to grid pilot study**
  - **Took a broader perspective by looking at**
    - **Increased roles of renewable energies in the GMS countries**
    - **Roles of public and private development/investment**



## WGRI actions in 2020

- **Findings of WGRI virtual meeting in October**
  - Active development of renewable energies particularly hydro, solar and wind power are seen in all GMS countries
  - Policies, regulations and financial incentives play key role in the recent RE developments
  - RE are in various scales: large scale (e.g. hydro, solar); small scale (e.g. solar, mini-hydro, biomass)
  - Common challenge: grid integration taking into account RE intermittency
  - Rules for various RE scale to develop





## WGRI actions in 2020

- **Findings of WGRI virtual meeting in October**
  - Active participation by the private investors, developers in development of renewable energies particularly hydro, solar and wind power are seen in many GMS countries
  - Private investors, developers are active in generation, to some extent in distribution and even transmission
  - Countries have ample experience in mobilizing private investment using their own set of standard documents such as BOT, PPA.



## **WGRI actions in 2020**

- **Conclusions of WGRI virtual meeting in October**
  - **Strengthen RE development in the context of, and to be linked with, increased GMS cooperation and interconnection**
  - **Which may open the ways to manage RE intermittency and the benefits of regional system balancing can be achieved**
  - **The WGRI should play the key roles in enabling these interconnections to be achieved**

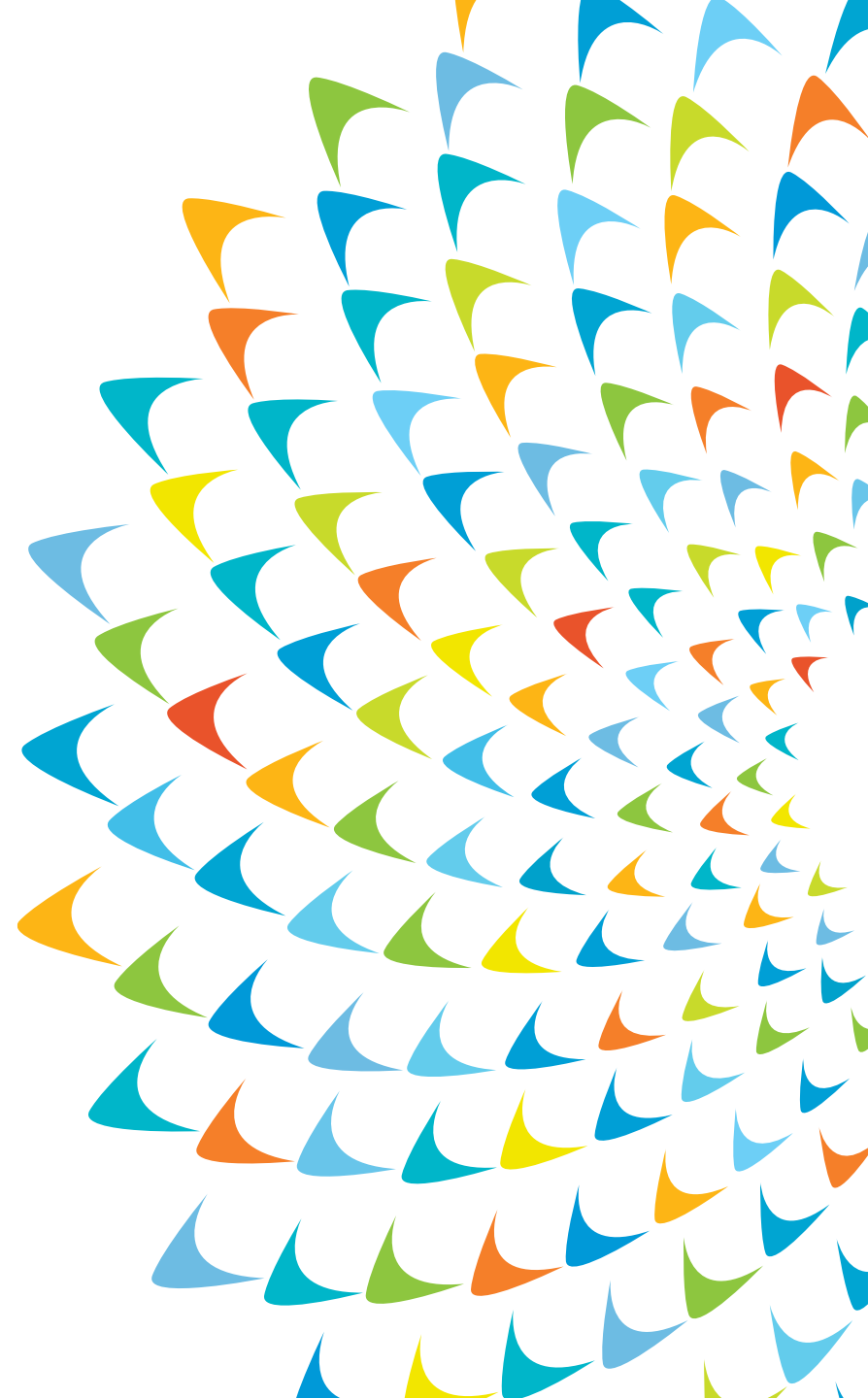




## WGRI actions in 2020

- **Conclusions of WGRI virtual meeting in October**
  - **Sharing experience in managing the RE intermittency in the power grid**
  - **Future topics could include BOT/IPP/PPA models and templates for developing RE regionally**
  - **Learning from the experiences of all the countries to date and international experience**
  - **Identifying best practice in renewable IPP planning and procurement procedures**
- **The two working groups WGRI and WGPO need to integrate their works**





*Thank you !*



## Messages from November 2019

- 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
- 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



# Suggestion From Last Year's Meeting

## Market Platform developments

- Short Term Trading
- Balancing Mechanism

## Business Case investigation

- Short-term trade examples
- With/without wheeling

## Institutional changes

- "Champion" organisation
- Power Pool formation?
- Regulatory Authority?

## Infrastructure development

- Integrated regional plan
- Transmission investment models

## Regulatory harmonisation

- Template licences
- Template agreements

## Wheeling charge calculations

- Development of models
- Publication of schedule

## Organisational reforms

- Transco creation
- Functional separation/  
ring-fencing

Others?

**Above are the possible areas for further study and investigation**



## Messages from November 2019

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