Energy Sector in the GMS: Outcomes of the 6th GMS Summit and Future Directions for the GMS Program

RPTCC-24
Nay Pyi Taw, Myanmar
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Pinsuda Alexander
Asian Development Bank
Presentation Outline

1. Highlights of the 6th GMS Summit
2. Ha Noi Action Plan (HAP) 2018-2022 and Future Directions of GMS Program
3. RIF 2022 Monitoring and Updates
HIGHLIGHTS OF 6TH GMS LEADERS SUMMIT
6th GMS Leaders’ Summit

Ha Noi, Viet Nam, 31 March 2018

- 30-31 March, Ha Noi, Viet Nam
- GMS Summit and related events:
  - Closed door retreat
  - Summit Plenary
  - CLV Summit
  - GMS Business Summit
- Outcomes
  - Joint Summit Declaration
  - Adopted Ha Noi Action Plan (2018-2022)
  - Adopted Regional Investment Framework 2022

Ha Noi Action Plan (HAP) 2018-2022
sets refined strategic directions and operational priorities in the remaining 5 years of the GMS Strategic Framework 2012-2022

Regional Investment Framework (RIF) 2022
A “living” pipeline of 227 projects worth $66 billion to support the HAP
GMS Leaders’ Joint Summit Declaration

“A sustainable GMS will be regionally integrated and globally connected.”

- GMS Leaders recognized the achievements of the GMS Program in its first 25 years
- GMS Leaders adopted the Ha Noi Action Plan and Regional Investment Framework to guide the medium directions and project pipeline of the GMS Program for 2018-2022.
- Leaders directed the GMS Ministers and Senior Officials to begin considering the long term vision for the GMS beyond 2022.
- Leaders affirmed commitment to the Sustainable Development Goals and Paris Agreement on Climate Change.
- Leaders encouraged greater cooperation for trade promotion activities, including acceleration of development of economic corridors and cross-border trade infrastructure, and improving trade-management capacity.
Prime Minister Hun Sen of Cambodia proposed an *Initiative on Renewable Energy*:

“Cooperation on energy is very important in supporting economic growth and maintaining the pace of development in the GMS, given the increasing demand for energy and the potentials in energy production and trade.”

- A potential option to address energy security and competitiveness issues of the subregion.
- This Initiative can help avoid the excessive use of energy sources which have negative impacts on environment and regional economy over the long run.
- It could also take advantages of the existing geographical and natural endowments of the GMS countries, enhance efficiency and promote competitive prices of energy for industrial, commercial, and residential uses.
6th GMS Leaders’ Summit

“We hereby adopt and give full support to the HAP and RIF, which will guide the GMS Program in the medium term. The RIF is a “living pipeline” of projects that will be reviewed and updated regularly to adapt to changing conditions and priorities.”
– GMS Leaders Joint Summit Declaration

**Ha Noi Action Plan (HAP) 2018-2022**
sets refined strategic directions and operational priorities in the remaining 5 years of the GMS Strategic Framework 2012-2022

**Regional Investment Framework (RIF) 2022**
A “living” pipeline of 227 projects worth $66 billion to support the HAP


HA NOI ACTION PLAN
Ha Noi Action Plan (HAP) 2018-2022

• Provides directions and operational focus to the GMS programs and guides the identification of projects

• Key elements are:
  – spatial strategy focused on economic corridors
  – refinements in sector strategies and priorities
  – improvements in planning, programming, and monitoring systems and processes
  – enhancements in institutional arrangements and partnerships

Implementation of the Ha Noi Action Plan (HAP) 2018-2022 and Future Directions of GMS Program

HAP 2018-2022: Guiding Framework

GMS Vision

Goals of GMS Strategic Framework 2012-2022

Sector Priorities

Spatial Strategy

Hanoi Action Plan 2018-2022
- Improve effectiveness
- Unfinished & expanded agenda (new areas)
- Key Actions

Planning, Programming & Monitoring Processes

Sector Refinements & Shifts

Partnerships & Institutional Enhancements

Regional Investment Framework (RIF) 2022
pipeline of projects

Synergies with ASEAN & other initiatives; Private Sector Engagement

Enablers

Knowledge linkages & use; Innovation; Technology-enabled processes

Enablers
Ha Noi Action Plan:
Energy Sector Strategies and Priorities

Figure 5: Stages in Establishing the Greater Mekong Subregion Power Market

Greater Mekong Subregion Power Market Integration

Policy and Institutional Framework

Grid Interconnection Infrastructure

Stage 1
- Bilateral cross-border connections

Stage 2
- Grid-to-grid power trading
- Use of third country transmission facilities

Stage 3
- Transmission links for cross-border trading

Stage 4
- GMS competitive power market

GMS = Greater Mekong Subregion.

# Sector Operational Priorities: Energy Sector

<table>
<thead>
<tr>
<th>Sector Operational Priorities</th>
<th>Key Actions¹</th>
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</thead>
<tbody>
<tr>
<td>• Continue developing the regional power market by developing the grid interconnection infrastructure and providing the policy and institutional framework for power trading:</td>
<td>• Continue power purchase agreements</td>
</tr>
<tr>
<td>• Stage 1: Bilateral cross-border Connections</td>
<td>• Use transmission facilities of a third regional country; develop third party access principles</td>
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<td>• Stage 2: Grid-to-grid power trading between any pair of GMS countries</td>
<td>• Develop transmission links dedicated to cross-border trading; prepare a regional transmission masterplan</td>
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<td>• Stage 3: Transmission links for cross-border trading</td>
<td>• Harmonize GMS performance standards and transmission regulations</td>
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<tr>
<td>• Stage 4: Fully integrated GMS regional competitive power market</td>
<td>• Develop regional grid codes</td>
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<td>• Develop multiple seller-buyer regulatory frameworks</td>
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<td>• Develop favorable regulatory environment to support higher regional power trade</td>
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<td>• Conduct studies on potential cross-border interconnections</td>
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<td>• Increase private sector participation in cross-border regional power trade projects</td>
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<td></td>
<td>• Update regional system planning to incorporate higher share of renewable energy</td>
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<td>• Conduct capacity building for effective environmental management in the planning and implementation of power projects</td>
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<tr>
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<td>• Finalize the establishment of Regional Power Coordination Center</td>
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</tbody>
</table>

¹For energy, the key actions were based on ADB. 2012. *Energy Sector Strategy in the GMS Strategic Framework 2012–2022.* Manila; ADB. 2002. Inter-Governmental agreement on Regional Power Trade in the GMS. Phnom Penh, Cambodia; ADB. 2004. *Regional Power Trade Operation Agreement.* Manila; focus group discussion for Energy Information Note and Discussion Highlights, 11 May 2017 (videoconference); ADB. 2017. *Summary of Proceedings.* 22nd Meeting of the Regional Power Trade Coordination Committee. 20–21 June 2017. Chengdu, Sichuan Province, People’s Republic of China (PRC); and relevant documents
Refinements in Sector Strategies and Priorities

ENERGY SECTOR

Power market integration will remain the priority agenda in GMS energy cooperation.

- The GMS power market development adopts a “building block approach” to develop the essential grid interconnection infrastructure to physically facilitate the cross-border dispatch of power.

In the next 5 years, advancing regional power trade (RPT) will be pursued through:

- harmonization of GMS regional technical performance standards and the development of grid codes,
- creation of a favorable regulatory environment to support higher RPT,
- in-depth studies of potential cross-border interconnections,
- private sector participation in cross-border RPT projects, and
- targeting a higher share of renewable energy in planning for regional power systems.

➢ Power market development will mainstream environmental considerations in the design of power expansion plans.

➢ Strategic environmental assessment will be used in power sector planning and hydropower development.

➢ Capacity development for promoting effective environmental management in the implementation in power projects will continue.
REGIONAL INVESTMENT FRAMEWORK: MONITORING AND UPDATES
RIF 2022 Overview

WHAT IT IS

- Operationalizes the strategic thrusts and priorities of the GMS Program un the GMS Strategic Framework 2012-2022 and the Ha Noi Action Plan 2018-2022
- The medium-term pipeline of priority projects in the GMS
- Instrument for greater alignment between regional and national planning for GMS projects and as a tool to galvanize new financing for projects.

Regional Investment Framework (RIF) 2022

Features

- Operationalize GMS Strategic Framework II and HAP 2018-2022
- Near to medium term pipeline
- A living document

Purpose

- Instrument to align national and regional planning and programming
- Monitor implementation
- Marketing tool
- Mobilize resources

Revisions/New Areas

- Concept, process and principles improved to enhance effectiveness as a programming document
- Intersectoral linkages more prominent
- Increase in transport subsectors (rail, ports)
- Inclusion of projects in border zone and areas

Includes 227 projects for $66 billion
143 investment projects ($65.7 billion)
84 TA projects ($295.3 million)
# Regional Investment Framework 2022 Business Process for Progress Updates and Adding/Dropping of Projects

| Q1 | The ADB GMS Secretariat initiates report preparation by advising ADB sector divisions and GMS national coordinators (NCs) to communicate with country sector agency focal points. Latest Regional Investment Framework (RIF) publication is disseminated for use and reference during budget and development programming cycle. |
| Q2 – Q3 | ADB’s sector divisions interact with country sector strategy focal points through GMS working groups and forums to • receive and compile the completed and agreed sector reports, and • submit the sector reports to ADB GMS Secretariat for collation. GMS NCs collaborate with line ministries for progress and proposed projects. |
| Q3 | ADB GMS secretariat • assembles reports for each country and sector into the consolidated Regional Investment Framework status report; • distributes the status report to the countries’ GMS NCs, sector agencies, and ADB’s sector divisions; • distributes the status report to interested development partners; • uploads the status report to ADB GMS website; and • includes the status report in the documentation for a subsequent GMS event—senior officials meeting, ministerial meeting, or summit. |
| Annual GMS Ministerial, Q3/Q4 | • RIF progress report is revised to annual report. • GMS national coordinators play a key role in collaboration with line ministries and in projected investment pipelines. • RIF 2022 report discussions are to better align with GMS working groups and forums. • Final RIF 2022 reports are to be disseminated as reference for development and budget planning cycles. |

Note: Revisions to business process are in red font.
### Progress Report Formats - Ongoing Projects

#### Table A - Projects in RIF 2022

<table>
<thead>
<tr>
<th>No.</th>
<th>Project Title</th>
<th>Country Coverage</th>
<th>Description (Please indicate if there are changes in the project description/specifications)</th>
<th>Year of Approval</th>
<th>Cost Estimate ($ million)</th>
<th>Potential Funding Source and Amount ($ million)</th>
<th>Status Updates</th>
<th>Key locations and GMS Economic Corridor Development</th>
<th>Expected/Planned Measurable Outputs</th>
<th>Project Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lao PDR–Viet Name Power Transmission Interconnection II</td>
<td>Lao People’s Democratic Republic (Lao PDR), Viet Nam</td>
<td>This project will (i) construct a 50-kilometer (km), 500-kilovolt (kV) transmission line and a 230 kV/500 kV substation in Phonsavan, Lao PDR; and (ii) will construct a 94 km, 500 kV transmission line and expand the existing 220 kV/500 kV substation in Phuoc, Viet Nam. The project will enable the transmission of 3,157 gigawatt-hours/year of electricity, to be produced by eight small hydropower plants (with a total capacity of 1,013 megawatts [MW]) in southern Lao PDR, to be developed by independent power producers.</td>
<td>2019</td>
<td>120.0</td>
<td>World Bank—40.0 (Committing TRD)—80.0</td>
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</tbody>
</table>

**New Columns:**

- ✓ (8) Key locations and GMS Economic Corridor Development
- ✓ (9) Expected/Planned Measurable Outputs
- ✓ (10) Project Contact
# Progress Report Formats - Proposed Projects

## Table B - New Projects for inclusion in RIF 2022

<table>
<thead>
<tr>
<th>No.</th>
<th>Project Title</th>
<th>Subsector</th>
<th>Description</th>
<th>Year of Approval</th>
<th>Cost Estimate ($ million)</th>
<th>Potential Funding Source and Amount ($ million)</th>
<th>Justifications</th>
<th>Key locations and GMS Corridor Alignment</th>
<th>Expected/Planned Measurable Outputs</th>
<th>Project Contact</th>
</tr>
</thead>
</table>

### New Columns:

- ✓ (7) Justifications: HAP Strategic Thrust or Operational Priorities supported
- ✓ (8) Key locations and GMS Corridor Alignment
- ✓ (9) Expected/Planned Measurable Outputs
- ✓ (10) Project Contact
RIF 2022 selection criteria

Project selection criteria:

- Has strong subregional development benefits and impacts and consistent with GMS Strategic Framework 2012-2022, HAP 2018-2022, and sector strategies
- Aligned with national priorities & sector operational priorities
- Will commence on or before 31 December 2022 but within 2013-2022 period
- Projects involving multiple countries should be discussed bilaterally
### Table A. PROJECTS IN ORIGINAL RIF 2022 LIST

**As of June 2018**

<table>
<thead>
<tr>
<th>No.</th>
<th>Project Title</th>
<th>Country Coverage</th>
<th>Description (Please indicate if there are changes in the project description/specifications)</th>
<th>Year of Approval</th>
<th>Cost Estimate ($ million)</th>
<th>Potential Funding Source and Amount ($ million)</th>
<th>Status Updates Please indicate progress/changes in project development status or implementation. (Refer to Guide for Accomplishing the Progress Report table.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Laos PDR–Viet Nam Power Transmission Interconnection II</td>
<td>Laos People’s Democratic Republic (Laos PDR), Viet Nam</td>
<td>This project will (i) construct a 59-kilometer (km), 500-kilovolt (kV) transmission line and a 230 kV/500 kV substation in eastern Laos PDR; and (ii) construct a 94 km, 500 kV transmission line and expand the existing 230 kV/500 kV substation in Dak Lak, Viet Nam. The project will enable the transmission of 1,157 gigawatt-hours/year of electricity, to be produced by eight small hydropower plants (with a total capacity of 1,013 megawatts (MW)) in southern Laos PDR, to be developed by independent power producers.</td>
<td>2019</td>
<td>120.0</td>
<td>World Bank—40.0</td>
<td>Proposed</td>
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<td>2</td>
<td>Laos PDR–Thailand 500 kV Substation Transmission Facility</td>
<td>Laos PDR, Thailand</td>
<td>The project aims to construct a 500 kV line from Vientiane (Laos PDR) to Nakhon Phanom (Laos PDR) to transfer power from three hydropower projects in the Central-1 area of the Laos PDR to Thailand. The hydropower projects are Nam Xeua 2, Nam Tha Hau 1, and Nam Tha Hau 4, which have a total capacity of over 1,500 MW, largely for export to Thailand.</td>
<td>2014</td>
<td>106.0</td>
<td>Nam Xeua 2 Power Company—106.0</td>
<td>Ongoing</td>
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<td>No.</td>
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<td>(4) Year of Approval</td>
<td>(5) Cost Estimate ($ million)</td>
<td>(6) Potential Funding Source and Amount ($ million)</td>
<td>(7) Justifications</td>
<td>(8) Key Locations and GMS Economic Corridor Alignment</td>
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<td>(a) Strategic thrust/operational priority in HAP (Refer to Annex 1)</td>
<td>(b) Other Justifications</td>
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</tbody>
</table>
# Table A. Projects in Original RIF 2022 List

## II. Technical Assistance Projects

<table>
<thead>
<tr>
<th>No.</th>
<th>Project Title</th>
<th>Subsector</th>
<th>Description (Please indicate if there are changes in the project description/specifications)</th>
<th>Year of Approval</th>
<th>Cost Estimate ($ million)</th>
<th>Potential Funding Source and Amount ($ million)</th>
<th>Status Updates Please indicate progress/changes in project development status or implementation. (Refer to Guide for Accomplishing the Progress Report table.)</th>
<th>Key locations and GMS Economic Corridor Alignment</th>
<th>Expected/Planned Measurable Outputs</th>
<th>Project Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Harmonizing GMS Power Systems to Facilitate Regional Power Trade (formerly Support to RPTCC in the Completion of Performance Standards, Grid Codes, Market Rules, and Subregional Transmission Expansion Plan)</td>
<td>All GMS countries</td>
<td>The technical assistance (TA) supports the development of a clear basis for regional market rules that would comprise agreed rules and indicative planning of interconnections. It will result in a more functional regional market with genuine exchanges of electricity, leading to an improved reliability and quality of power supply, and lower costs. A supplementary TA project was approved in 2017, the outcome of which will be a set of GMS performance standards and grid codes, and an enhanced regulatory framework. Additional output, among others, include feasibility studies for four new interconnection projects.</td>
<td>2014</td>
<td>3.5</td>
<td>ADB—2.3 PRC trust Fund—0.5 ADB—2017 Fonds de Développement (AFD)—0.3</td>
<td>Ongoing</td>
<td></td>
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<td>Ongoing</td>
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<tr>
<td>No.</td>
<td>(1) Project Title</td>
<td>(2) Subsector</td>
<td>(3) Description</td>
<td>(4) Year of Approval</td>
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Next Steps

• RIF project updates submitted by RPTCC by (31 July 2018)

• Consider other future directions of energy sector (beyond 2022)
  o Renewable energy
  o Development of a new energy sector strategy
  o RPCC
Questions & Discussion

GMS Secretariat

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GMS website:

www.adb.org/gms or
www.greatermekong.org

https://www.facebook.com/GMSProgram/