

# **Energy Sector in the GMS:**

## **Outcomes of the 6<sup>th</sup> GMS Summit and Future Directions for the GMS Program**

**RPTCC-24**

**Nay Pyi Taw, Myanmar**

**20 June 2018**

**Pinsuda Alexander**

**Asian Development Bank**



# Presentation Outline

1. Highlights of the 6<sup>th</sup> GMS Summit
2. Ha Noi Action Plan (HAP) 2018-2022 and Future Directions of GMS Program
3. RIF 2022 Monitoring and Updates

# HIGHLIGHTS OF 6<sup>TH</sup> GMS LEADERS SUMMIT



# 6<sup>th</sup> GMS Leaders' Summit



- 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.



# 6<sup>th</sup> GMS Summit Leaders' Retreat

## **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.



# 6<sup>th</sup> 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



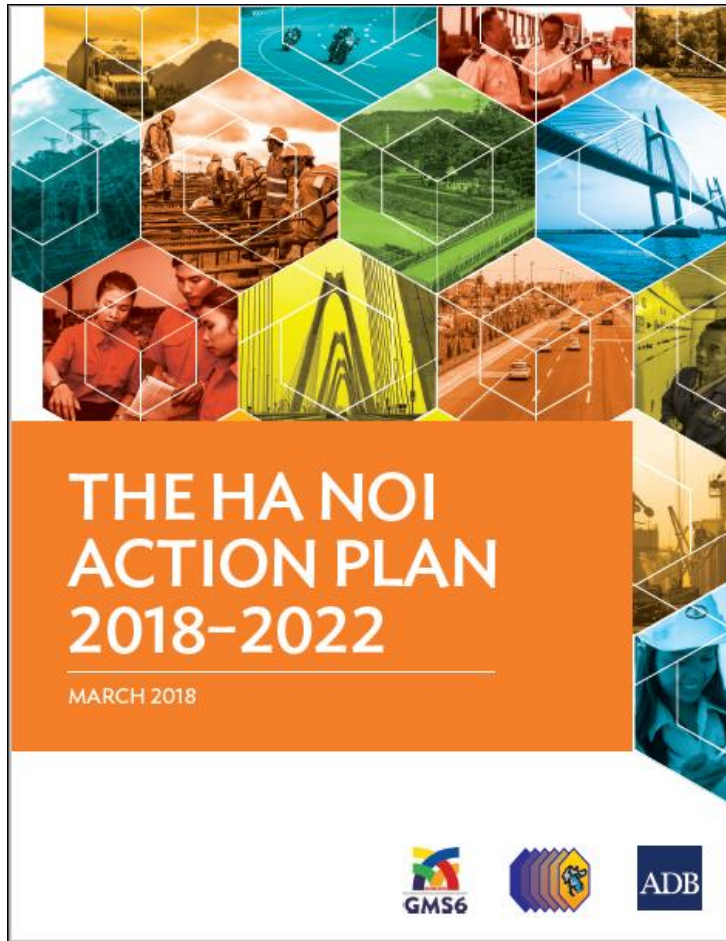
<http://greatermekong.org/ha-noi-action-plan-2018-2022>

<https://greatermekong.org/gms-regional-investment-framework-2022>

# 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



**Synergies with ASEAN & other initiatives;  
Private Sector Engagement**

**Enablers**

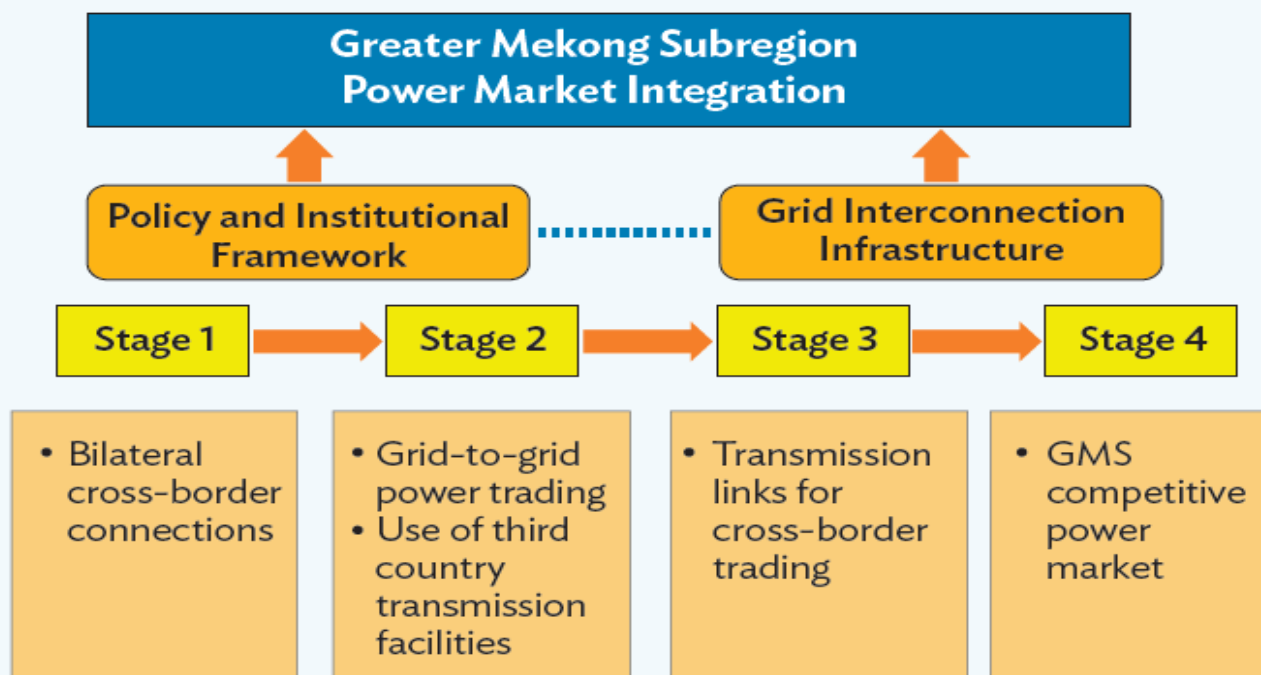
**Knowledge linkages & use; Innovation;  
Technology-enabled processes**

**Enablers**



# Ha Noi Action Plan: Energy Sector Strategies and Priorities

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



GMS = Greater Mekong Subregion.

Sources: Based on ADB. 2002. *Energy Sector Strategy, GMS Strategic Framework 2012–2022*. Manila; and ADB. 2004. *Regional Power Trade Operating Agreement Report*. Manila.

# Sector Operational Priorities: Energy Sector

Sector Operational Priorities	Key Actions <sup>1</sup>
<ul style="list-style-type: none"> <li>• Continue developing the regional power market by developing the grid interconnection infrastructure and providing the policy and institutional framework for power trading:</li> <li>• Stage 1: Bilateral cross-border Connections</li> <li>• Stage 2: Grid-to-grid power trading between any pair of GMS countries</li> <li>• Stage 3: Transmission links for cross-border trading</li> <li>• Stage 4: Fully integrated GMS regional competitive power market</li> </ul>	<ul style="list-style-type: none"> <li>• Continue power purchase agreements</li> <li>• Use transmission facilities of a third regional country; develop third party access principles</li> <li>• Develop transmission links dedicated to cross-border trading; prepare a regional transmission masterplan</li> <li>• Harmonize GMS performance standards and transmission regulations</li> <li>• Develop regional grid codes</li> <li>• Develop multiple seller-buyer regulatory frameworks</li> <li>• Develop favorable regulatory environment to support higher regional power trade</li> <li>• Conduct studies on potential cross-border interconnections</li> <li>• Increase private sector participation in cross-border regional power trade projects</li> <li>• Update regional system planning to incorporate higher share of renewable energy</li> <li>• Conduct capacity building for effective environmental management in the planning and implementation of power projects</li> <li>• Finalize the establishment of Regional Power Coordination Center</li> </ul>

<sup>1</sup>For 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.



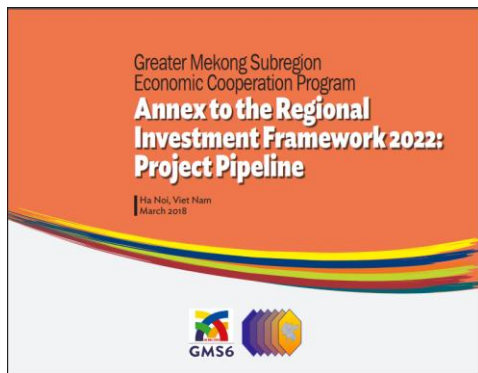
# **REGIONAL INVESTMENT FRAMEWORK: MONITORING AND UPDATES**



# RIF 2022 Overview

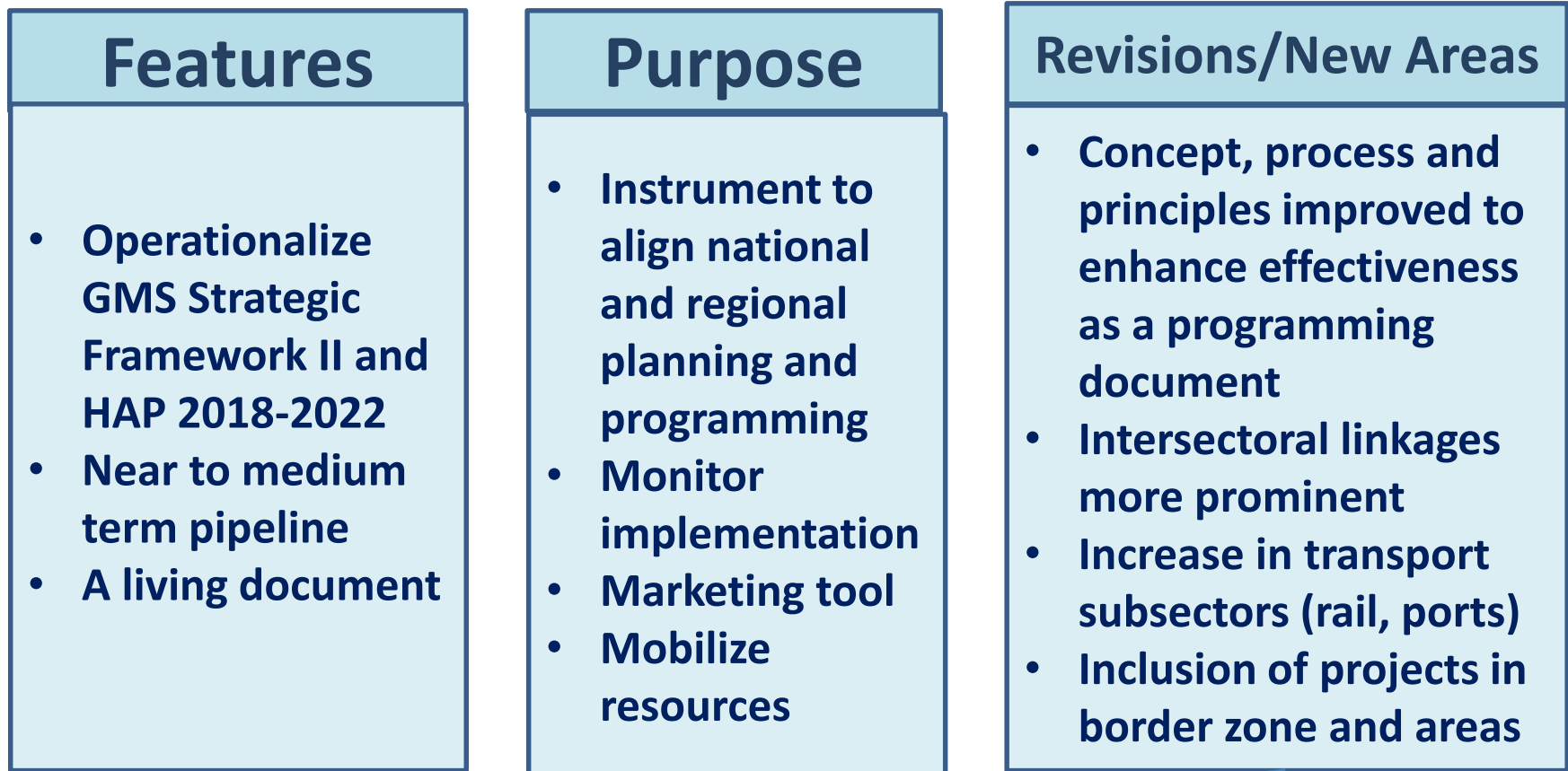
## WHAT IT IS

- 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.



<https://greatermekong.org/gms-regional-investment-framework-2022>

# Regional Investment Framework (RIF) 2022



***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.

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.

Q2 –Q3

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

(1) No.	(2) Project Title	(3) Country Coverage	(4) Description <i>(Please indicate if there are changes in the project description/specifications)</i>	(5) Year of Approval	(6) Cost Estimate (\$ million)		(7) Potential Funding Source and Amount (\$ million)		(8) Status Updates  <i>Please indicate progress/changes in project development status or implementation. (Refer to Guide for Accomplishing the Progress Report table.)</i>	(9) Key locations and GMS Economic Corridor Alignment	(10) Expected/Planned Measurable Outputs	(11) Project Contact
					Original	Updated (if any)	Original	Updates (if any)				
1	Lao PDR–Viet Nam Power Transmission Interconnection II	Lao People’s Democratic Republic (Lao PDR), Viet Nam	This project will (i) construct a 59-kilometer (km), 500-kilovolt (kV) transmission line and a 230 kV/500 kV substation in <u>Hatxay</u> , Lao PDR; and (ii) will construct a 94 km, 500 kV transmission line and expand the existing 220 kV/500 kV substation in <u>Pleiky</u> , 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.	2019	120.0		World Bank—40.0 <u>Cofinancing</u> (TBD)—80.0					

### 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

(1) No.	(2) Project Title	(3) Subsector	(4) Description	(5) Year of Approval	(6) Cost Estimate (\$ million)	(7) Potential Funding Source and Amount (\$ million)	(8) justifications Please indicate the basic rationale and justifications for the project, based on: (a) Strategic thrust/ operational priority in HAP and/or relevant sector strategy supported (Refer to Annex I) (b) Other Justifications	(9) Key locations and GMS Economic Corridor Alignment	(10) Expected/ Planned Measurable Outputs	(11) Project Contact

### 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

PROGRESS REPORT ON ENERGY SECTOR INVESTMENT PROJECTS IN THE GMS REGIONAL INVESTMENT FRAMEWORK (RIF) 2022

As of June 2018

Table A. PROJECTS IN ORIGINAL RIF 2022 LIST

I. INVESTMENT PROJECTS

(1) No.	(2) Project Title	(3) Country Coverage	(4) Description <i>(Please indicate if there are changes in the project description/specifications)</i>	(5) Year of Approval	(6) Cost Estimate (\$ million)		(7) Potential Funding Source and Amount (\$ million)		(8) Status Updates <i>Please indicate progress/changes in project development status or implementation. (Refer to Guide for Accomplishing the Progress Report table.)</i>	(9) Key locations and GMS Economic Corridor Alignment	(10) Expected/Planned Measurable Outputs	(11) Project Contact
					Original	Updated (if any)	Original	Updates (if any)				
1	Leo PDR-Viet Nam Power Transmission Interconnection II	Leo People's Democratic Republic (Leo PDR), Viet Nam	This project will (i) construct a 59-kilometer (km), 500-kilovolt (kV) transmission line and a 230 kV/500 kV substation in <del>Vietnam</del> <del>Laos</del> Leo PDR; and (ii) will construct a 94 km, 500 kV transmission line and expand the existing 220 kV/500 kV substation in <del>Laos</del> <del>Vietnam</del> 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 Leo PDR, to be developed by independent power producers.	2019	120.0		World Bank—40.0 <del>Co-financing</del> <del>(TBD)</del> —80.0		Proposed			
2	Leo PDR-Thailand <del>Nabang</del> 500 kV Substation Transmission Facility	Leo PDR, Thailand	The project aims to construct a 500 kV line from <del>Udon Thani</del> (Thailand) to <del>Nabang</del> (Leo PDR) to transfer power from three hydropower projects in the Central-1 area of the Leo PDR to Thailand. The hydropower projects are Nam <del>Noum</del> 2, Nam <del>Toum</del> 1, and Nam <del>Noum</del> 1, which have a total capacity of over 1,500 MW, largely for export to Thailand.	2014	106.0		Nam <del>Noum</del> 2 Power Company—106.0		Ongoing			

TABLE B. PROPOSED NEW ENERGY PROJECTS FOR INCLUSION IN RIF 2022

No.				(4) Year of Approval	(5) Cost Estimate (\$ million)	(6) Potential Funding Source and Amount (\$ million)	(7) justifications		(8) Key locations and GMS Economic Corridor Alignment	(9) Expected/Planned Measurable Outputs	(10) Project Contact
							(a) Strategic thrust/operational priority in HAP (Refer to Annex 1)	(b) Other Justifications			
1											
2											
3											
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5											
6											

PROGRESS REPORT ON ENERGY SECTOR TECHNICAL ASSISTANCE PROJECTS IN THE GMS REGIONAL INVESTMENT FRAMEWORK (RIF) 2022

As of June 2018

Table A. PROJECTS IN ORIGINAL RIF 2022 LIST

II. TECHNICAL ASSISTANCE PROJECTS

(1) No.	(2) Project Title	(3) Subsector	(4) Description <i>(Please indicate if there are changes in the project description/specifications)</i>	(5) Year of Approval	(6) Cost Estimate (\$ million)		(7) Potential Funding Source and Amount (\$ million)		(8) Status Updates <i>Please indicate progress/changes in project development status or implementation. (Refer to Guide for Accomplishing the Progress Report table.)</i>	(9) Key locations and GMS Economic Corridor Alignment	(10) Expected/Planned Measurable Outputs	(11) Project Contact
					Original	Updated (if any)	Original	Updates (if any)				
1	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)	All GMS countries	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. <del>By</del> <del>supplementing</del> 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.	2014	3.5		ADB—2.5 PRC trust Fund—0.5 <del>Seneca</del> <del>Cooperation</del> <del>de</del> <del>Development</del> <del>ent (AFD)—</del> 0.5		Ongoing			

TABLE B. PROPOSED NEW AGRICULTURE TECHNICAL ASSISTANCE PROJECTS FOR INCLUSION IN RIF 2022

(1) No.	(2) Project Title	(3) Subsector	(4) Description	(5) Year of Approval	(6) Cost Estimate (\$ million)	(7) Potential Funding Source and Amount (\$ million)	(8) Justifications		(9) Key locations and GMS Economic Corridor Alignment	(10) Expected/Planned Measurable Outputs	(11) Project Contact
							(a) Strategic thrust/operational priority in HAP <i>(Refer to Annex 1)</i>	(b) Other Justifications			



# Next Steps

- RIF project updates submitted by RPTCC by (31 July 2018)
- Consider other future directions of energy sector (beyond 2022)
  - Renewable energy
  - Development of a new energy sector strategy
  - RPCC

# Questions & Discussion

GMS Secretariat  
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GMS website:  
[www.adb.org/gms](http://www.adb.org/gms) or  
[www.greatermekong.org](http://www.greatermekong.org)

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

