

**The GMS Road Map and Work Plan
for Expanded Energy Cooperation**

**Second Meeting of the
Subregional Energy Forum (SEF-2)
Ho Chi Minh City, Viet Nam
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Energy Challenges Facing GMS Countries

- Widespread energy poverty
- High and rising energy vulnerability
- Social/ environmental costs of energy development
- Low energy productivity
- Institutions and policies not conducive to sustainable energy service delivery



Main Recommendations of GMS Energy Strategy Study

1. High level investments and policy/ institutional actions toward:

(i) reducing vulnerability, (ii) correct fuel diversification, (iii) integrating social/ environment considerations, and (iv) more productive use of energy with lower carbon footprint

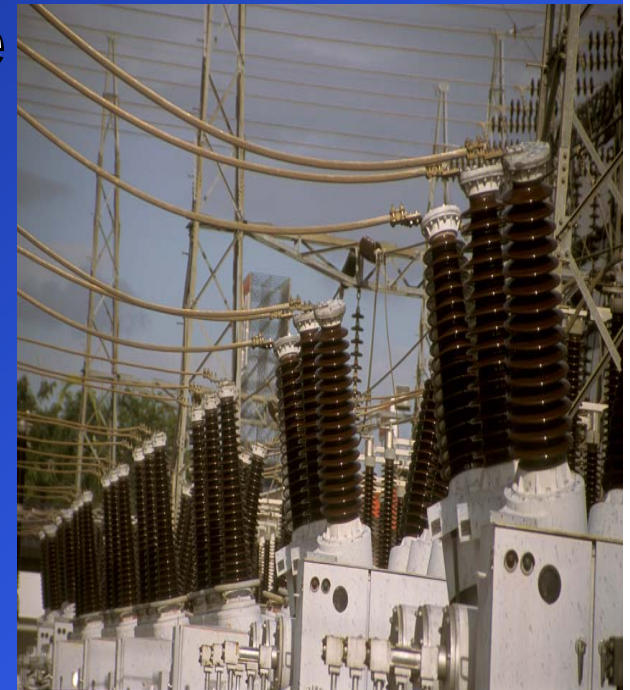
2. Balanced infrastructure program and policy/ institutional agenda for energy integration, through a 7-point action plan: (i) political/ technical leadership, (ii) investment in energy productivity, (iii) regional level reforms, (iv) reduced oil dependence, (v) improved transport modal-mix, (vi) enabling environment for private investment, and (vii) institutional/ human capacity building

The GMS Road Map for Expanded Energy Cooperation

Goal: An integrated approach to **deliver sustainable, secure and competitive energy** in the GMS

Major Strategic Objectives:

- Enhance **access to modern energy** to all sectors/ communities
- Utilize domestic resources in a more optimal, **environmentally-sound** manner/ reduce oil dependence
- Improve **regional energy security**
- Promote **private participation** in GMS energy development



Work Plan for Expanded Energy Cooperation: Key Thrusts, Priority Projects, Timeline

Medium Term Thrusts	Priority Projects/ Activities/ Timeline
Power	
Policy/ regulatory framework for power trade	Items in Vientiane Plan of Action (VPOA), 2008-2012
Grid interconnection infrastructure and power generation for export	<ul style="list-style-type: none"> a. Items in VPOA, 2008-2012 b. Study for Regional Power Transmission Development Program, 2009-
Power coverage to all (rural electrification [RE])	<ul style="list-style-type: none"> a. RE linked to backbone lines, 2008-2015 b. Off-grid systems incentives, 2009-2015 c. Piloting smart subsidies for new and renewable energy (NRE), 2010-2012

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Medium Term Thrusts	Priority Projects/ Activities/ Timeline
Power (continued)	
Promoting environmentally-sustainable power infrastructure	Coordination of RPTCC and Environment Operations Center (EOC) on Strategic Environmental Assessments (SEAs), 2008-2015
Oil and Gas	
GMS Segments of Trans-ASEAN Gas Pipeline (TAGP)	a. TAGP logistics, contractual arrangements, 2011-2012
Oil and Natural Gas Logistics and network	a. Use of natural gas in transport, 2009-2011
Mitigation of environmental risks	a. Studies on safety, environment-risk mitigation of pipelines, 2012-2014

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Coal	
Promoting clean coal technologies	a. Abated Clean Coal Generation in Viet Nam, 2011-2013
Strengthening framework for trade, investment in coal	a. Coal Liquefaction and Carbon Neutrality TA, 2011-2014 b. Piloting Integrated Gasification Combined Cycle (IGCC) and Carbon Capture and Storage (CCS), 2012-15
Energy Efficiency (EE) and Conservation	
Information sharing/ networking on best practices in GMS context	a. Study on development of GMS EE Network, 2010-2012

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Medium Term Thrusts	Priority Projects/ Activities/ Timeline
Energy Efficiency (cont.)	
Enhanced energy management in industrial and commercial sectors	a. Study of prospects for public-private partnerships for EE (e.g. hotels with TWG), 2009-2012
Energy efficiency in the transport sector	a. Study on carbon-neutral GMS corridors (with EOC), 2008-2010 b. Energy efficient transport modal mix (with STF), 2008-2012
Financing for EE initiatives	a. Regional Energy Efficiency Program, 2009-2015
New and Renewable Energy (NRE) Sources	
Policy/ institutional framework for NRE development, financing, private investment	a. Regional framework for NRE development, 2009-2011

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NRE (cont.)	
Policy/ institutional framework for NRE development, financing, private investment	<ul style="list-style-type: none"> b. Small Scale Clean Generation Fund, 2009- 2015 c. Renewable Energy Resource Assessment Studies, 2009-2012
Promoting biofuels and biomass	<ul style="list-style-type: none"> a. Biomass Generation Project, 2009-2012 b. Coordination between SEF and WGA on Rural Renewable Energy (RRE), 2008-2012
Information networking in GMS-appropriate NRE technology	<ul style="list-style-type: none"> a. Study on propagating NRE technology, 2010-2012 b. Renewable Energy Advocacy Program for GMS, 2009-2011

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Regional Energy Planning, Policy, Program (REPPP)	
Energy policy, planning, program management, coordination and networking	<ul style="list-style-type: none"> a. Energy database development, 2009-2015 b. Training needs analysis (TNA) and capacity building (with APAEC), 2009-2011 c. Study on Accreditation Schemes for energy managers/ technical staff, 2010-2012
Sustainable financing and support for road map	<ul style="list-style-type: none"> a. Regional Project Preparation TA Facility, 2009-2012

Outstanding Issues and Next Steps

- Road map consistent with GMS Program's Strategic Framework (SF)
- Road map will fulfill SF Mid-Term Review proposals for broader global perspective (i.e. addressing climate change) and fine tuning program for enhanced competitiveness (i.e., energy productivity and efficiency)

Remaining challenges need to be addressed:

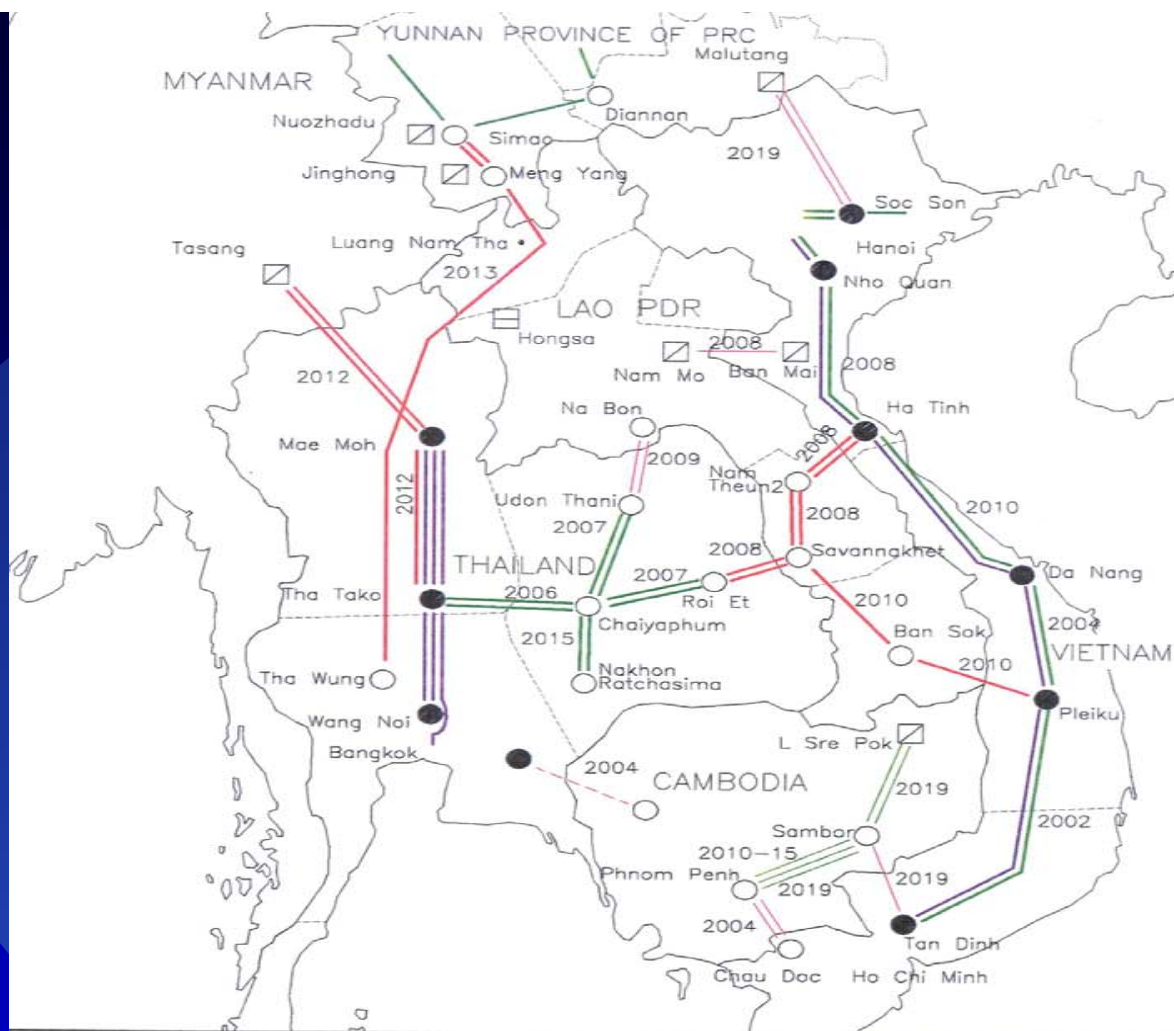
policy/ institutional constraints, divergent capacities and levels of development

Next Steps: Who will prioritize projects (SEF)? How will projects be further developed? How to mobilize resources and sustain financing for the road map? Process of monitoring, evaluating results?

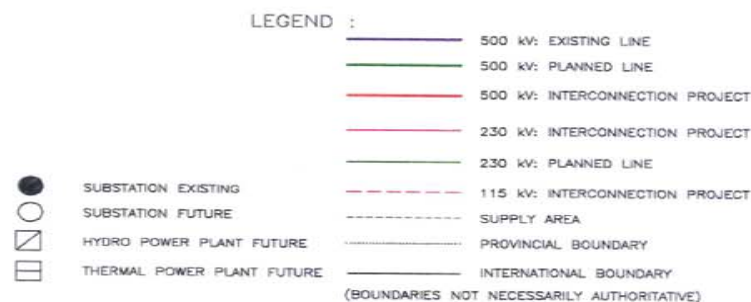
Possible Regional Master Plan on Power Interconnection

“Blocks” of power interconnection lines that can stand on their own merits

Phased cross-border connections to meet power demand forecasts and generation system planning scenarios



Scenario 2B : Extended Power Cooperation



Thank You!