

**2nd Mekong-Australia Policy Dialogue:
Energy & Electricity Futures for ACMECS Members**

Summary Note

The 2nd Mekong-Australia Policy Dialogue was held on 15 December 2020, co-hosted by Australia and Thailand. The “hybrid” event was held live at the Banyan Tree Hotel in Bangkok, the Crowne Plaza Hotel in Vientiane, and the Pan Pacific Hotel in Hanoi, with all three locations linked to one another online and to virtual participants in Cambodia and Myanmar. The largely Track 1 dialogue brought together approximately 170 individuals from member countries (Cambodia, Lao PDR, Myanmar, Thailand, Vietnam) of the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS), as well as from other regional partners, multilateral agencies, and the private sector. In the three live locations these included representatives of the European Union, France, Germany, India, International Finance Corporation, Japan, the Mekong River Commission, New Zealand, United Nations ESCAP, United States, Vietnam Business Forum Power and Energy Working Group, and The World Bank.

The policy dialogue focused on energy cooperation both among ACMECS member states and between ACMECS members and external partners, and identified some of the challenges and opportunities presented by new technologies in devising sustainable energy and electricity futures. It aimed to encourage further progress toward Sustainable Development Goal 7 - “Ensure access to affordable, reliable, sustainable and modern energy for all” - and to consider the sub-region’s energy needs in the context of COVID-19 and climate change.

Based on policy-relevant research prepared for the event, the dialogue featured a diverse set of presentations from partner countries of ACMECS, informed responses and input from the sub-region, and separate country-specific discussions to maximize local relevance. Collectively, the sessions yielded specific policy options consistent with ACMECS Master Plan 2019-2023, which lists Energy Infrastructure and Connectivity (1.3), Smart Cities (3.1), and Energy Efficiency and Promotion of Renewable Energy (3.2) as goals.

The following are the policy dialogue’s key points, most of which also serve as or contain recommendations. While there was no formal consensus or express commitment toward adopting these points as new or renewed areas of policy focus or partnership, they reflect areas of emphasis and broad agreement among presenters, respondents, and discussants.

1. **Urgency from COVID-19** – The COVID-19 pandemic has produced unprecedented challenges to inter-dependent sub-regional economies, and has made clear the need for affordable and sustainable energy as part of the recovery pathway. It has also opened an opportunity for policymakers to support an inclusive, resilient, and cost-effective energy transition within and among ACMECS member countries.
2. **Regional energy connectivity** – Considerable potential exists for increasing energy systems’ inter-connectivity within ACMECS. This presents further opportunities to reduce carbon intensity and expand the use of sustainable, renewable options. A prime example is the transport of massive solar resources across regions through new high-voltage, direct current (HVDC) lines, made possible by ambitious planning and technological innovation.
3. **Australia’s energy transition** – A transformation is underway in Australia, with renewable energy growing ten times faster than other forms. Australia is thus well-placed to not only share experiences and lessons learned, but to potentially connect its surplus solar energy with the broader ASEAN power grid by 2030. This would serve as a welcome source of Foreign Direct Investment (FDI) as companies increasingly require 100% renewable power sources. It would also reduce exposure to carbon markets and assist ASEAN countries to reach their decarbonization targets.
4. **Energy transition in the ACMECS sub-region** – Renewable energy is gaining considerable traction in the Mekong sub-region, although it continues to lag behind traditional power sources in terms of installed capacity and energy hubs. Thailand and Vietnam have been leaders in their recent deployment of solar power through the implementation of feed-in-tariff schemes. Vietnam installed an extraordinary four gigawatts of solar photovoltaics (PV) in the first half of 2019 alone.
5. **Storage and forecasting** – Sub-regional moves toward a larger portion of clean energy result in a need for improved storage, to ensure that supply is available during hours of non-generation. As the weather itself becomes the largest fuel resource for solar and wind energy, increasingly accurate weather forecasting technologies also become imperative.
6. **Digital tools** – Diversifying energy invariably means digitizing aspects of it as well. This necessitates further investment in Artificial Intelligence (AI), Research and Development (R&D), and innovation, as well as in human resources for tech-savvy and data-driven operators. Fifth generation (5G) mobile internet technology is likely to affect electricity and other energy distribution infrastructure.

7. **Market reforms** – Technical upgrades will drive market reform to some extent, but ACMECS governments must also lead with proactive, forward-thinking, and complementary regulatory frameworks. Both market and regulatory systems need to change, and to change in concert with one another, for an energy transformation to be successful.
8. **Access to electricity** – Despite the rapid expansion of connectivity within ACMECS countries, including nearly 100% electrification in Vietnam and Thailand, challenges include grid expansion in remote and mountainous areas, heavy reliance on traditional resources, and complex supply management. This makes clear a continuing need for microgrids and other distributed energy resources (DER) options.
9. **Decarbonisation** – Policy incentives and falling costs have led to a recent and rapid deployment of technology relating to non-hydro renewables within the ACMECS sub-region. There has also been a steep rise in private sector investment in renewable power generation; ten times as much as in 1996. This has had positive effects environmentally and economically, but the scale remains low compared to continued reliance on carbon-based energy.
10. **Distributed energy resources (DER)** – Western Australia’s development of distributed energy management systems, such as microgrids, has involved a combination of solar power and battery. These make sense in remote locations, which also exist in parts of the ACMECS sub-region, that are most conducive to a self-contained power supply. In response to risks from natural and climate change-driven disasters, DERs are becoming increasingly reliable as well.
11. **Potential of hydrogen** – Hydrogen has potential economy-wide uses, depending not only on technology, but on each country or sub-region’s geography, society, and economy. Hydrogen technology is multi-dimensional and provides opportunities across country contexts. National hydrogen strategies are needed to assist countries to utilize hydrogen toward achieving their energy goals, taking into account costs and emissions.
12. **Future of regional cooperation** – Energy transformation and inter-connectivity require proactive cooperation between and among sub-regional countries. There is both a need and desire for enhanced cooperation—from investment to managing connections, from sharing resources to ensuring mutual benefits, and more. Moreover, this cooperation

cannot be limited to policymakers, but must include regulators, industry, utilities, infrastructure and technology developers, and others in the public and private sectors.

The presentations provide substantially more detail for reflection and consideration.

On behalf of Australia's Department of Foreign Affairs and Trade, Thailand's Ministry of Energy and The Asia Foundation, we wish to thank you for your participation and constructive contributions.

Paul Stephens
Deputy Head of Mission
Australian Embassy
Thailand

Dr Poonpat Leesombatpiboon
Office of the Permanent Secretary
Ministry of Energy
Thailand

Thomas Parks
Country Representative
The Asia Foundation
Thailand

19 January 2021