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ASEAN COUNCIL ON PETROLEUM

ASEAN ENERGY SECTOR METHANE LEADERSHIP PROGRAM

An ASEAN-Led Initiative to Reduce Methane Emissions

Photo: MLP 2.0 Technical Workshop, PETRONAS, October 3, 2024

ASEAN ENERGY SECTOR METHANE LEADERSHIP PROGRAM (MLP):

An ASEAN-Led Initiative to Reduce Methane Emissions

MLP Members and Partners

- **ASEAN institutes:** ASEAN Centre for Energy (ACE) and ASEAN Council on Petroleum (ASCOPE).
- **Oil & Gas (O&G) companies:** PT Pertamina (Persero) of Indonesia, Petroliam Nasional Berhad (PETRONAS) of Malaysia, PTT Exploration and Production (PTTEP) of Thailand, PetroVietnam Exploration Production Corporation (PVEP), and Woodside Energy of Australia.
- **Energy sector associations:** Asia Natural Gas & Energy Association (ANGEA), Oil and Gas Climate Initiative (OGCI).
- **International organizations:** Environmental Defense Fund (EDF), United Nations Environment Programme (UNEP), World Bank, and Methane Guiding Principles (MGP).
- **Government agencies:** Japan Organization for Metals and Energy Security (JOGMEC), U.S. Trade and Development Agency (USTDA), U.S. Department of Energy (USDOE), U.S. Commercial Law Development Program (CLDP), and U.S. Agency for International Development (USAID), Ministry of Economy, Trade and Industry (METI) of Japan.

MLP Secretariat: USAID Southeast Asia Smart Power Program (SPP)

Photo Credit: ASEAN Energy Sector Methane Leadership Program and Deloitte Consulting LLP

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ACE
Beni Suryadi, Acting Executive Director
Suwanto, Senior Research Analyst
Shania Esmeralda Manaloe, Research Analyst

EDF
Fred Krupp, President
Mark Lunt, Asia-Pacific Methane Scientist
Emily Oi, Asia Pacific Consultant, Energy Transition

Pertamina
Suripno, VP Sustainability Strategy
Jimmy Permadi, HSSE Center of Excellence
Cahyo Andrianto, Sustainability Program and Performance
Pretty Mayang Arum, Environmental Policy & Risk Management

PTTEP
Nopasit Chaiwanakupt, Executive Vice President, Technology, Carbon Solutions, and Sustainable Growth Group
Surasak Chonchirdsin, Acting Vice President, Environment Management Department
Suthat Kanjanakanti, Senior Engineer, Environment Management Department

UNEP
Marci Baranski, Programme Management Officer, International Methane Emissions Observatory
Mitigation Branch – Climate Change Division

ASCOPE
Henricus Herwin, Secretary in-Charge
Rizka Perdhani, Policy, Research, and Capability Building Task Force
Erlangga Septama, Policy, Research and Capability Building Task Force
Sri Konsep Harum Wicaksono, ASIC Office

JOGMEC
Ichiro Takahara, Chairman & CEO
Masataka Yarita, Head, Methane Management Taskforce
Misato Miura, Facility Engineer

PETRONAS
Charlotte Wolff-Bye, Vice President & Group Chief Sustainability Officer
Hasnor Hassaruddin B Hashim, Custodian (Process Control & Optimisation), Group Technical Solutions & PETRONAS Methane Taskforce Lead
Suhana Bt Muhamad, Senior Manager (Delivery Excellence), Corporate Sustainability

The World Bank
Zubin Bamji, Program Manager, Global Flaring and Methane Reduction Partnership
Harshit Agrawal, Senior Energy Specialist

USAID
Michael Ronning, Mission Director, Regional Development Mission for Asia
David Stonehill, Sustainable Energy and Safeguard Lead
Pijarana Samukkan, Project Management Specialist

Woodside Energy
Peter Metcalfe, Vice President Climate, Sustainability and Energy Policy
Craig Duarte, Senior Climate Policy and External Engagement Advisor

Photo: MLP 2.0 Design Workshop, Bangkok July 19, 2024

Photo: MLP 2.0 Site Visit, OB Tomori and Donggi Matindok Field, Sulawesi, Indonesia , November 20, 2024

ACRONYMS

ACE	ASEAN Centre for Energy
AEC	ASEAN Economic Community
APAEC	ASEAN Plan of Action for Energy Cooperation
ASCOPE	ASEAN Council on Petroleum
ASEAN	Association of Southeast Asian Nations
CLDP	U.S. Commercial Law Development Program
CLEAN	Coalition for LNG Emission Abatement towards Net-zero
EDF	Environmental Defense Fund
GFMR	Global Flaring and Methane Reduction Partnership
GHG	Greenhouse Gas
GMP	Global Methane Pledge
IMEO	International Methane Emissions Observatory
JOGMEC	Japan Organization for Metals and Energy Security
LNG	Liquefied Natural Gas
MARS	Methane Action and Response System
METI	Ministry of Economy, Trade and Industry of Japan
METEC	Methane Emissions Technology Evaluation Centre
MLP	Methane Leadership Program
MMRV	Measurement, Monitoring, Reporting, and Verification
NDC	Nationally Determined Contribution
O&G	Oil and Gas
OGCI	Oil and Gas Climate Initiative
OGMP 2.0	Oil & Gas Methane Partnership 2.0
OGDC	Oil and Gas Decarbonization Charter
PTTEP	PTT Exploration and Production
PVEP	PetroVietnam Exploration Production Corporation
SPP	USAID Southeast Asia Smart Power Program
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development

Photo: Deloitte

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FOREWORD FROM ASCOPE

The Methane Leadership Program (MLP) represents a significant milestone in ASEAN's journey towards addressing one of the most pressing environmental challenges of our time — methane emissions. As Secretary In Charge of ASCOPE, I am honored to reflect on the immense success of MLP 1.0, which has successfully united the **regional energy sector across ASEAN and beyond,** bringing together governments, industry leaders, energy sector associations, and international organizations to foster a shared commitment to methane reduction with a focus on capability building.

MLP 1.0 has been instrumental in advancing awareness, practical strategies, and technology transfer through its innovative masterclasses, workshops, and collaborative initiatives. These efforts have established a foundation for a coordinated, region-wide approach to methane mitigation, reinforcing ASEAN's role as a leader in global environmental sustainability.

The success of MLP 1.0 is a testament to the power of regional collaboration and the collective resolve of ASEAN member states to address climate change with tangible actions. It reflects our shared vision of a sustainable energy future and highlights the critical importance of uniting stakeholders under a common goal.

As we move forward to MLP 2.0 "Turning Capacity into Action", I am inspired by the potential to build upon these accomplishments, driving further progress through innovation, enhanced collaboration, and shared learning. With the unwavering commitment of all stakeholders, we will continue to achieve meaningful strides in reducing methane emissions, setting a benchmark for environmental responsibility and leadership.

Congratulations to everyone who has contributed to the remarkable success of MLP 1.0. Together, we are forging a path toward a cleaner, more sustainable energy future — not just for ASEAN, but for the world.

Henricus Herwin
Secretary In Charge
ASEAN Council on Petroleum

MESSAGE FROM USAID

On behalf of the United States Agency for International Development (USAID), I am honored to congratulate the Association of Southeast Asian Nations (ASEAN) Energy Sector Methane Leadership Program (MLP), ASEAN Council on Petroleum (ASCOPE), USAID Southeast Asia Smart Power Program (SPP) which acts as the MLP Secretariat, and all MLP members and partners on the successful completion of the 15-month MLP 1.0. This achievement marks a significant milestone in our shared commitment to reducing methane emissions across Southeast Asia, an undertaking that both improves the operational safety and economic performance of ASEAN oil and gas companies and is also good for the environment.

The success of this initiative reflects our commitment to private sector engagement and the importance we place on strategically using our resources in a way that unlocks larger amounts of private capital for development purposes. By fostering partnerships with private enterprises, development organizations, and inter-governmental agencies, we are not only addressing environmental challenges but also creating opportunities for economic growth.

By leveraging the expertise and resources of the private sector and all partners, we have enhanced the capacity of the MLP members to implement effective methane mitigation strategies. The collaboration, knowledge-sharing, and capacity-building fostered through this program have set a new standard for regional cooperation on the transboundary challenge of methane emissions. This, in turn, contributes to achieving our shared goal of a sustainable and resilient future for ASEAN.

As we celebrate this success, we also look forward to continuing our partnership through the upcoming MLP 2.0, which will focus on concrete actions to advance our mutual goals. Together, we will build on this momentum to further reduce methane emissions, drive innovation in the energy sector, and ensure a healthier planet for future generations.

Once again, congratulations to everyone involved in this landmark achievement.

Michael Ronning
Mission Director
USAID Regional Development Mission for Asia

ABOUT MLP

Photo: Deloitte

METHANE MITIGATION: THE "SPRINT" IN DECARBONIZATION

Photo: Marathon vs Sprint, SPP

Reducing methane emissions is crucial as it is the fastest way to limit warming in the near term.

Methane is a super pollutant, over 80 times more potent than carbon dioxide in trapping heat in the atmosphere over a 20-year period. As the second-largest contributor to global warming after carbon dioxide, methane accounts for approximately 30 percent of global warming since the Industrial Revolution. Reducing methane emissions is crucial as it is the fastest way to limit warming in the near term*. While cutting emissions from the energy sector is essential, even achieving zero-carbon energy today would not yield temperature benefits until later this century. However, reducing methane emissions now would result in immediate progress. Therefore, we must pursue both actions: running a decarbonization **"marathon"** and a methane abatement **"sprint"** simultaneously.

MLP: AN ASEAN-LED INITIATIVE — THE FIRST OF ITS KIND

The Association of Southeast Asian Nations (ASEAN) Energy Sector Methane Leadership Program (MLP) is a regional initiative designed to address methane emissions within the ASEAN oil and gas (O&G) sector. MLP enables the Southeast Asia O&G community, governments, and international organizations to understand, discuss, and implement best practices on methane abatement. MLP equips its members with the tools and network to better manage and reduce methane emissions.

MLP is spearheaded by ASEAN national O&G companies — namely PETRONAS (Malaysia), Pertamina (Indonesia), and PTT Exploration and Production (PTTEP) (Thailand) — and is supported by the USAID Southeast Asia Smart Power Program (SPP) (MLP Secretariat), ASEAN Council on Petroleum (ASCOPE), the ASEAN Centre for Energy (ACE), and numerous regional and international partners.

*According to Environmental Defense Fund, Methane: A crucial opportunity in the climate fight

Photo: MLP Launch at Energy Asia, Malaysia, June 26, 2024

THE MLP MODEL

MLP is a consortium of public and private sector stakeholders that aims to bridge information gaps on methane reduction measures. The primary driving force of MLP is O&G companies who are backed by their management and national governments to take steps to achieve targets under the Global Methane Pledge and other commitments. O&G companies give feedback on training topics, sponsor two- or three-day trainings and nominate participants to travel to regional events. MLP is supported by a Secretariat from SPP, who convenes regional events and connects national O&G companies with expert from international organizations. The success of MLP can be attributed to buy-in from both the private sector and international organizations.

Photo: The 3rd Masterclass Training Tools for Designing and Financing Methane Mitigation Projects, Bangkok, August 19, 2024

MLP JOURNEY

2021-2022
Online and Bangkok, Thailand

MLP launched the ASEAN methane roundtable in 2021, followed by a second in 2022. The third in Bangkok included technical workshop with PETRONAS, Pertamina, and PTTEP

JUNE 2023
Kuala Lumpur, Malaysia

MLP Launch at Energy Asia, Malaysia. Started with 13 organizations led by O&G companies, ASCOPE, ACE, and partners

NOVEMBER 2023
Online

UNEP Virtual Class on methane training covered key terms, oil and gas emissions, and strategies for reducing emissions to meet NDCs.

NOVEMBER 2023
Johor Bahru, Malaysia

1st Masterclass Training Introduction to Methane Emissions Management in conjunction with Asia-Pacific Climate Week 2023.

MARCH 2024
Kuta, Indonesia

2nd Masterclass Training Policy Direction, Tools and ASEAN Experiences

JUNE 2024
Online

1st Methane Community Updates Webinar: Track Methane Emission from the O&G Sector

AUGUST 2024
Bangkok, Thailand

3rd Masterclass Training Tools for Designing and Financing Methane Mitigation Projects

OCTOBER 2024
Selangor, Malaysia

MLP 1.0 Close out and Launch of MLP 2.0 with expansion to 18 organizations, and MLP 2.0 technical workshop

MLP 1.0

CAPACITY BUILDING IN METHANE EMISSION MANAGEMENT

Photo: Deloitte

DELIVERY APPROACH

1 Track 1: Masterclassess	Interactive **MASTERCLASSES** for MLP partners on methane emissions management, featuring three progressive tracks covering topics from basic methane detection, measurement, and data management to more advanced abatement technologies, policy frameworks, and financing options. MLP organized three masterclasses in Thailand, Indonesia, and Malaysia.
2 Track 2: Workshops	Comprehensive **WORKSHOPS** for wider audiences, including ASCOPE members and national government representatives, for collaborative brainstorming sessions and group discussions, experience-sharing to identify methane abatement projects, and to explore potential financing. MLP organized workshops both online and in-person.
3 Track 3: Technical Expertise	Targeted **TECHNICAL EXPERTISE** for project development to identify and synergize partnerships between project owners and potential financiers/funders.

Photo: The 2nd Masterclass Training Policy Direction, Tools and ASEAN Experiences, Kuta, March, 2024

MLP 1.0 KEY STATISTICS

300+ participants

15 countries represented

100% of participants' technical knowledge increased after attending the masterclass series

120 certified trainees

45 organizations involved

TRAINING TOPICS COVERED

- Emissions Reporting Under International Standards (including OGMP 2.0 Reporting)
- Calculating Emission Factors
- Measurement, Monitoring, Reporting, and Verification
- Data Management Tools
- Types of Methane Abatement Technologies
- Policies and Regulations for Methane Emissions Management
- Marginal Abatement Cost Curves
- Methane Emissions Certifications
- The Funding Landscape for Methane Abatement
- Designing Methane Reduction Projects

SUCCESS STORIES

Photo: Deloitte

Photo: The 2nd Masterclass Training Policy Direction, Tools and ASEAN Experiences, Kuta, March, 2024

1. MLP: A MODEL FOR REGIONAL COLLABORATION IN METHANE REDUCTION

Launched at the Energy Asia Conference in June 2023, MLP 1.0 began as a 15-month initiative to assist the ASEAN O&G industry to better understand the methane abatement landscape and make progress on decarbonization commitments. Six ASEAN member states are signed on to the Global Methane Pledge (GMP) to reduce methane emissions by 30 percent by 2030. Countries are also working to achieve their Nationally Determined Contributions (NDCs)* and several ASEAN O&G companies are signatories to the Oil and Gas Decarbonization Charter (OGDC).** and to the United Nations Environment Programme's (UNEP) Oil & Gas Methane Partnership 2.0 (OGMP 2.0). MLP is mutually beneficial to all stakeholders to achieve these goals.

The first phase of MLP ran from June 2023 to October 2024, featuring six in-person and virtual regional events as a part of its masterclass curriculum on methane emissions management and mitigation.

The first phase of MLP was highly regarded as a successful model on regional collaboration for methane abatement, not just within the Southeast Asia region but in the global methane reduction movement. MLP proved to be an **ASEAN-led, collective, innovative** effort with buy-in not just from national O&G companies, but from company leadership, national governments, international organizations, and leading methane abatement experts.

More than 300 participants attended MLP workshops or events, 15 countries were represented, and 45 unique organizations were involved in MLP 1.0. From pre- and post-workshop assessments, all participants demonstrated an increase in knowledge from attending the masterclass series.

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*Countries' commitments to reduce emissions and address climate change under the Paris Agreement.

**Industry-led initiative focused on reducing greenhouse gas emissions and promoting sustainable practices within the O&G sector.

Photo: The 2nd Masterclass Training Policy Direction, Tools and ASEAN Experiences, Kuta, March, 2024

Photo: The 42nd ASEAN Ministers on Energy Meeting (AMEM), Laos, September 26, 2024

2. UNIFIED SUPPORT FROM ASEAN ENERGY MINISTERS AND MLP LEADERSHIP

On September 26, 2024, in Vientiane, Laos, MLP achieved a significant milestone when the 42nd ASEAN Ministers on Energy Meeting acknowledged MLP in its official joint statement:

As an ASEAN-driven initiative, MLP has united key national O&G companies like Pertamina, PETRONAS, PTTEP, and PetroVietnam Exploration Production Corporation (PVEP) (which make up 91 percent of the region's O&G emissions*), with ACE to collectively tackle methane emissions in the region. MLP's approach involves engaging company leadership to secure strategic endorsements and commitments to methane reduction efforts.

Support from the leadership of MLP member organizations is essential for impactful methane reduction. Buy-in from leadership ensures that emission reduction becomes a strategic priority, aligning with company-wide goals and sustainability commitments. Their endorsements drive the allocation of critical resources, fostering an organizational culture centered on accountability and climate action. High-level advocacy by leadership also strengthens industry partnerships and signals commitment to policymakers and stakeholders, enhancing the credibility and influence of MLP initiatives. This way, leaders help turn strategic intentions into tangible actions, advancing comprehensive methane management across the sector and contributing significantly to global climate objectives by setting a powerful industry standard.

*International Energy Agency Methane Tracker Database, March 2024.

The MLP has garnered backing from the top levels of ASEAN energy officials:

"The Meeting welcomed methane emissions abatement initiatives in the energy sector, including the completion of 'ASEAN Energy Sector Methane Leadership Program' (MLP) 1.0 and the launch of MLP 2.0 organized by the USAID Southeast Asia Smart Power Program in collaboration with ACE and ASCOPE. The Meeting encouraged DPs, IOs, and the private sector to support ASEAN in the area of natural gas."

Joint Ministerial Statement of the 42nd ASEAN Ministers on Energy Meeting
September 26, 2024, Vientiane, Lao PDR

(DPs = Development Organizations IOs = International Organizations)

PERTAMINA DRIVES METHANE REDUCTION FOR NET-ZERO GOALS

"Pertamina, Indonesia's leading energy company, is committed to reducing greenhouse gas emissions, including methane, through a comprehensive strategy aligned with global sustainability goals and Indonesia's net-zero target by 2060 or sooner. Guided by its net-zero strategic roadmap, which focuses on Decarbonization and Low Carbon Business Development, Pertamina drives methane management with innovative initiatives and international collaboration. This commitment reflects Pertamina's vision to prioritize energy resilience, availability, and sustainability."

– Suripno, Vice President of Sustainability Strategy, Pertamina.

IIn March 2024, Pertamina and SPP co-hosted a three-day masterclass training on Methane Emission Measurement: Policy Direction, Tools, and ASEAN Experiences. The training, held in Bali, Indonesia, featured technical training courses from leading methane organizations like Carbon Limits and the U.S. Commercial Law Development Program (CLDP) and included interactive peer-to-peer discussions on methane emissions reporting, corporate policies, and methane abatement regulations. Overall, the workshop session engaged 81 participants from 15 countries. The advanced curriculum improved participants "understanding of key leading practices that countries are following on methane emissions inventories, baseline setting, and abatement strategies."

PETRONAS PIONEERS ASEAN METHANE REDUCTION AND INNOVATION

"In 2023, we achieved Gold Standard from the UNEP Oil & Gas Methane Partnership 2.0 (OGMP 2.0) for our methane pathway, signifying our efforts to strengthen methane measurements, reporting accuracy, transparency and advocacy in methane emissions reduction. PETRONAS looks forward to MLP 2.0; orchestrated under ASCOPE, as we anticipate greater collaboration between ASEAN companies and governments on methane emissions management strategy, policy and action in support of the Global Methane Pledge."

- Charlotte Wolff-Bye, Vice President and Group Chief Sustainability Officer at PETRONAS.

PETRONAS, Malaysia's national O&G company, is committed to achieving net-zero carbon emissions by 2050 through four key emissions abatement levers, which are zero routing flaring and venting, energy efficiency, electrification and carbon capture and storage. As one of the founding members of MLP, PETRONAS played a key role in conceptualizing and launching MLP 1.0 in June 2023. Later in November, the company co-hosted a masterclass focused on methane management strategies and OGMP 2.0, demonstrating its commitment to leading regional efforts in methane emissions reduction. In the next phase of MLP, PETRONAS is spearheading exciting innovations in the region, the most prominent of which is the Southeast Asia Methane Emissions Technology Evaluation Centre (METEC).

PTTEP LEADS METHANE REDUCTION AND INNOVATION

"Since 2023, we have made remarkable strides in our methane reduction strategy through our participation in the MLP 1.0. By harnessing cutting-edge technologies—like satellite detection systems for efficient monitoring and big data platforms for precise reporting—we are not just setting goals; we are making them a reality."

- Nopasit Chaiwanakupt, Executive Vice President of Technology, Carbon Solutions, and Sustainable Growth Group

In Thailand, PTTEP is striving to achieve the oil and Gas Climate Initiative's (OGCI's) near-zero upstream methane emissions and World Bank's zero routine flaring by 2030, while charting the path to net-zero emissions by 2050. Early methane reduction initiatives began over a decade ago, and participation in the MLP has greatly advanced PTTEP's methane management strategies. Through MLP, PTTEP has gained valuable insights into best practices and technologies like satellite detection for methane monitoring, enhancing its mitigation efforts. This collaboration underlines PTTEP's commitment to addressing methane emissions through innovation and knowledge-sharing, as part of its broader environmental sustainability goals.

WOODSIDE JOINS MLP, ADVANCES EMISSION REDUCTION GOALS

"When we joined MLP in 2023, we were excited by the opportunities to share leading industry practices with other organizations in the ASEAN region as they work to mitigate methane emissions. MLP has presented occasions for us to learn about what other industry leaders are doing in this space."

- Peter Metcalfe, Vice President of Climate and Sustainability, Woodside Energy.

Woodside, a global energy company based in Australia, has taken decisive steps in reducing methane emissions. As the first Australian company to join the Aiming for Zero Initiative and the OGMP 2.0, Woodside is actively working towards achieving our net equity scope 1 and 2 emission reduction targets. Engagement with MLP has been integral to Woodside's methane strategy, particularly in Southeast Asia.

In the past year, Woodside has contributed to the MLP by sharing their own practices working with regional peers and advancing industry standards. In the next phase of MLP, Woodside will continue to collaborate on the MLP journey, contributing to methane leadership in the region and working together to achieve common goals.

ASEAN CENTRE FOR ENERGY: PIONEERING METHANE EMISSION SOLUTIONS AND REGIONAL COOPERATION

"The ASEAN Centre for Energy is proud to be a strategic partner for the new milestone of the MLP, working alongside the ASCOPE members, USAID SPP and other program partners. Though tackling methane emissions in the energy sector is considered a nascent purview of ASEAN, the achievements of the MLP 1.0 were acknowledged by the 42nd ASEAN Ministers on Energy Meeting (AMEM) as ASEAN's first methane emissions-related initiative that has laid the groundwork for ASEAN O&G companies, governments, knowledge partners, and other stakeholders to catalyze knowledge and technology transfer, networking, and capacity building through its 15-month masterclass and workshop initiatives,"

- Beni Suryadi, Acting Executive Director of ACE.

Serving as the ASEAN energy sector's main intergovernmental organization, ACE supports renewable energy and greenhouse gas emissions reduction, aligned to the regional ASEAN Plan of Action for Energy Cooperation (APAEC)*. ACE has played a major role in connecting the public and private sector, underpinning the regional cooperation principle of MLP. It has contributed technical expertise throughout the first phase of the program and will continue to play a sizable role in the next phase of MLP.

*APAEC is the regional blueprint for the energy sector in the framework of the ASEAN Economic Community (AEC) implementation.

JOGMEC LEADS GLOBAL EFFORT IN METHANE EMISSION REDUCTION

"We have been making advanced efforts in GHG emission reductions, including methane emissions, through Methane Emission Measurement and Quantification jointly with Pertamina in Indonesia, a technology demonstration project for GHG emission control and reduction methods with PETRONAS in Malaysia.

- Ichiro Takahara, Chairman and CEO, Japan Organization for Metals and Energy Security (JOGMEC).

The Japan Organization for Metals and Energy Security (JOGMEC) has been at the forefront of curbing methane emissions across Asia. In Southeast Asia, JOGMEC has supported projects with Pertamina and PETRONAS, including piloting methane abatement technologies and backing the start-up of Southeast Asia METEC.

Formerly the Japan Oil, Gas, and Metals National Corporation, JOGMEC has expanded its mission to address energy security and environmental sustainability — key to Japan's shift toward cleaner energy. As Southeast Asia is a primary LNG supplier, JOGMEC's work is essential for Japan's energy goals. In addition to its contributions to MLP and continued support under MLP 2.0, JOGMEC, along with other partner agencies and organizations, has rolled out the Coalition for LNG Emission Abatement towards Net-zero (CLEAN), a public-private partnership that will collect information on the status of methane emission management and reduction efforts from Liquefied Natural Gas (LNG) producers.

ADVANCING GLOBAL METHANE REDUCTION: THE ROLE OF OGMP 2.0 AND MLP

"Reducing methane emissions is the single fastest way to slow global warming as we decarbonize, but the world needs empirical data to enable climate action at scale. UNEP's IMEO exists to provide open, reliable, and actionable data to the individuals with the agency to reduce methane emissions."

- Marci Baranski, Programme Management Officer, IMEO, UNEP

The UNEP International Methane Emissions Observatory (IMEO) has been at the forefront of international methane emissions reporting. It has managed OGMP 2.0, an internationally recognized framework that provides comprehensive standards for measurement-based reporting.

As a part of UNEP's work on methane emissions reporting, IMEO runs a Methane Action and Response System (MARS), which alerts companies and governments of emissions events and compiles annual data to encourage accountability and improvement.

OGMP 2.0 has been featured largely in MLP. UNEP IMEO has provided trainings on methane management and measurement to national oil companies like PTTEP and PETRONAS. Other companies have provided tools and trainings that allow companies to make progress on OGMP 2.0 reporting standards. UNEP IMEO has provided a valuable foundation for MLP members to set goals on methane emissions reporting and increase transparency in their methane reduction efforts.

LEADERSHIP IN METHANE EMISSIONS MONITORING: EDF'S PIONEERING EFFORTS

"The EDF played a key role in the formation of the MLP 1.0, offering our international expertise and direct experience in policymaking and science. This initiative has successfully built regional capacity and shared best practices, attracting interest from Central Asia and the Middle East for similar programs. The Global Methane Hub and the U.S. Commerce Department's Commercial Law Development Program (CLDP) aim to collaborate to replicate this model with EDF's input."

- Fred Krupp, President, EDF

The Environmental Defense Fund's (EDF's) methane reduction strategy goes beyond technology, blending policy, science, and economics. Southeast Asia, a critical natural gas supplier, is a primary focus, where EDF works with major LNG-exporting nations like Malaysia and Indonesia to monitor and mitigate emissions.

In March 2023, EDF and their partners launched a first-of-its-kind methane emissions-detecting satellite, MethaneSAT. Access to EDF's MethaneSAT data will allow companies to better understand methane emission events in their O&G fields and take faster action.

Through MLP, EDF collaborates with regional stakeholders, providing expertise and incorporating UNEP training modules. The program's first phase, which built foundational knowledge, is now advancing toward actionable emissions-reduction projects. EDF's methane satellite will play an essential role in ensuring data-driven progress as it champions climate action through innovative partnerships and technology.

FINANCING FOR METHANE ABATEMENT: THE WORLD BANK'S GLOBAL FLARING AND METHANE REDUCTION PARTNERSHIP

"Our collaboration with MLP will provide much-needed support to governments and operators in the region, while also convening and working with diverse stakeholder groups to synergize and complement emissions reductions efforts for a sustained, long-term approach."

– Zubin Bamji, Program Manager, Global Flaring and Methane Reduction Partnership (GFMR), the World Bank.

The World Bank has been a major champion of and contributor to MLP, delivering training sessions about the World Bank's resources and ensuring access and availability for all MLP members.

The World Bank continues to build on technical and financial assistance for methane emissions abatement, in particular through its new Global Flaring and Methane Reduction Partnership (GFMR). Introduced at COP 28, GFMR is a multi-donor trust fund dedicated to helping national O&G companies access funding to implement projects that reduce methane emissions.

The World Bank plays a key role within the MLP model of regional collaboration. It provides international expertise combined with financing resources that ensure that companies understand the financing landscape for methane abatement and have the international backing to financially support methane abatement projects.

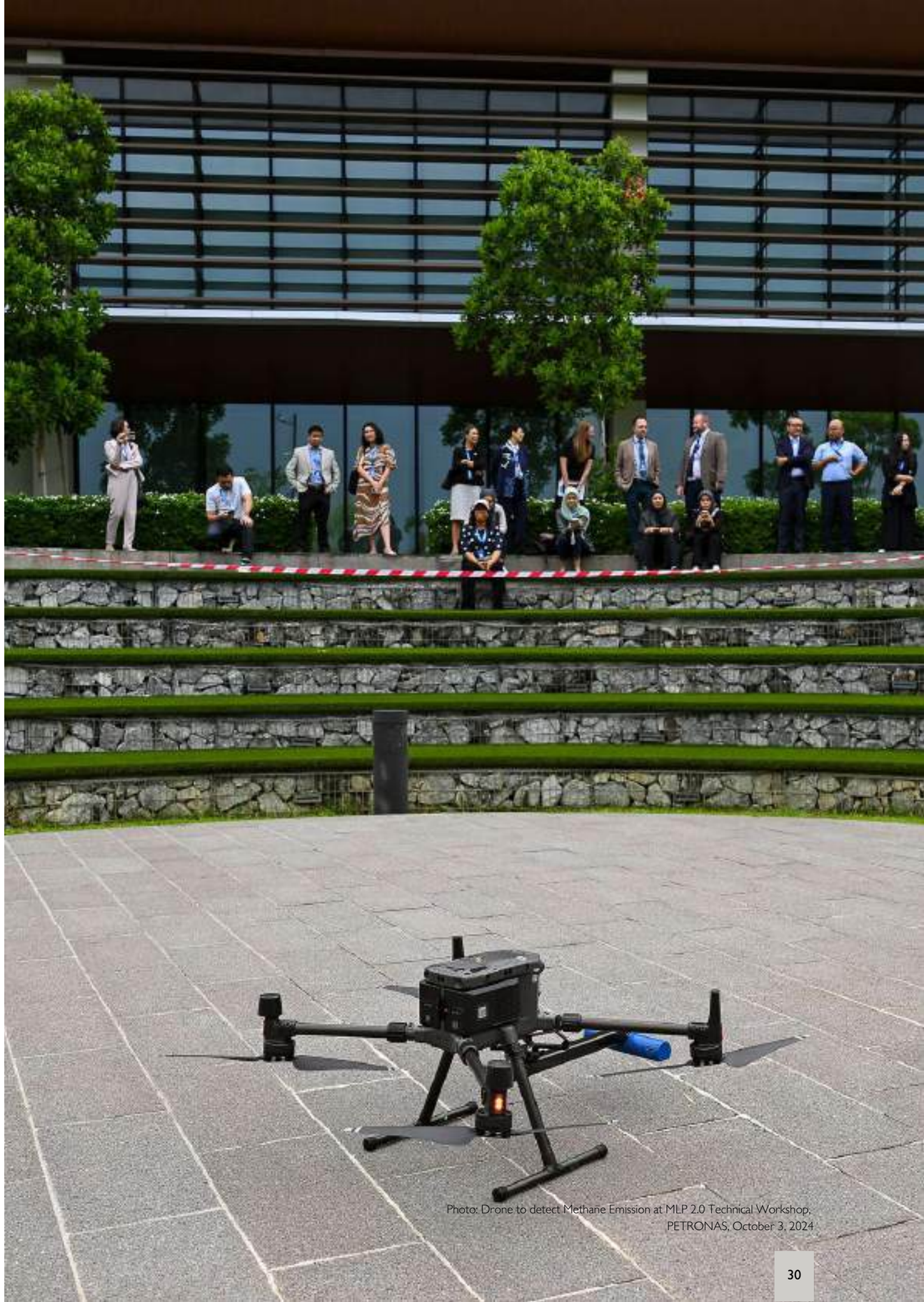


Photo: Drone to detect Methane Emission at MLP 2.0 Technical Workshop, PETRONAS, October 3, 2024

Photo: The 3rd Masterclass Training Tools for Designing and Financing Methane Mitigation Projects, Bangkok, August 19, 2024

3. EMPOWERING ASEAN TO TACKLE METHANE EMISSIONS

MLP 1.0 has been a crucial catalyst for advancing methane emissions management within the energy sector. By focusing on capacity building, the program has equipped MLP members and partners across the ASEAN region with the tools, knowledge, and partnerships needed to tackle one of the most potent greenhouse gases contributing to climate change. MLP 1.0's success lies in its ability to foster collaboration, elevate technical expertise, and drive meaningful policy and operational change across its diverse network of partners.

At the core of MLP 1.0's approach is capacity building through trainings and knowledge sharing. The program has brought together O&G companies, intergovernmental institutions and associations, and international organizations to exchange insights on methane measurement, abatement technologies, and regulatory frameworks. PTTEP, for example, has greatly benefited from the program's ability to connect with global experts.

"I was impressed by the program, particularly because it wasn't commercialized. MLP involved experts who educated us on methane. We learned new things from international speakers. MLP also offered opportunities for collaboration and networking," said Surasak Chonchirdsin, acting Vice President of the Environment Management Department, Safety, Security, Health and Environment Division of PTTEP.

Similarly, Pertamina has leveraged MLP to enhance its technical capacity, drawing on international best practices to refine its methane reduction strategies.

"Through our involvement in MLP, we have benefited from various capacity-building initiatives. These initiatives have equipped our staff with the necessary skills and knowledge to effectively manage methane emissions," said Cahyo Andrianto, Pertamina representative. The company plans to integrate these advanced technologies into its operations as part of its broader commitment to achieving net-zero emissions.

MLP 1.0 has also provided an invaluable platform for hands-on learning through workshops and masterclasses. These events, which attracted participants from across the region, have covered topics such as methane measurement technologies, abatement strategies, and policy development. PETRONAS, PTTEP, Pertamina have been key resources in these sessions, including hosting regional technical workshops. These efforts have not only enhanced participants' technical expertise but also facilitated policy exchanges that are essential for scaling methane reduction efforts across the region.

Photos (Left and Right): Masterclass Training Introduction to Methane Emissions Management in conjunction with Asia-Pacific Climate Week 2023.

Beyond technology and policy, MLP 1.0 has created an environment of collaboration and networking that has helped align efforts and prevent duplication. Through regular engagement, members and partners have been able to share their successes, challenges, and lessons learned. For example, the World Bank has emphasized the importance of this collective capacity building, noting that MLP 1.0 has made methane reduction a strategic priority for energy leaders in the region.

"What we have achieved so far as part of MLP is definitely an accelerated energy bringing all the stakeholders together," said Dr. Harshit Agrawal, Senior Energy Specialist at the World Bank.

The program has also facilitated the adoption of advanced methane detection technologies. EDF has provided cutting-edge methane measurement technologies and advocated for transparent data practices.

"I think the first phase (of MLP) has been pretty good. We focus more on capacity building in these 15 months. I think that's where EDF has quite a fair bit to offer, because we have a UNEP module that we have developed together," Mark Lunt, Asia-Pacific Methane Scientist and Emily Oi, Asia-Pacific Consultant at EDF, added.

The contribution from EDF has helped MLP members improve emissions tracking, setting a solid foundation for future action.

Through the development of educational modules and training programs, UNEP has supported MLP's capacity-building efforts by providing the tools needed for methane management integration into operational frameworks. For example, PTTEP has integrated satellite methane detection systems into its monitoring protocols, which has significantly improved its emissions reporting capabilities. This is a vital development as companies are increasingly required to meet stringent global standards for transparency and emissions reduction.

As MLP transitions to its second phase with the focus shifts to **"Turning Capacity Into Action,"** members are increasingly enthusiastic about its expanded attention to actionable solutions. With a stronger emphasis on concrete methane reduction projects that address regulatory, financial, and technological challenges, participants are eager to leverage the collaborative platform to accelerate progress, share best practices, and implement measurable strategies.

JOGMEC has highlighted the importance of moving from theoretical discussions to practical, implementable solutions.

"The MLP is a very good practice. It's a programmatic and down-to-earth project that tackles real issues," said Masataka Yarita, Head of Methane Management at JOGMEC.

Similarly, Marci Baranski, Programme Management Officer at IMEO, UNEP, also added, *"For the next phase of the MLP, we would like to continue to be a partner and we can help to provide more technical training materials."*

MLP 1.0 has been pivotal in building capacity for methane emissions reduction, equipping partners with essential tools, knowledge, and networks. As the program advances, this ASEAN-led initiative exemplifies regional leadership in tackling methane — a crucial step toward sustainable progress.

Photo: Masterclass Training Introduction to Methane Emissions Management in conjunction with Asia-Pacific Climate Week 2023.

Photo: The 3rd Masterclass Training Tools for Designing and Financing Methane Mitigation Projects, Bangkok, August 19, 2024

MLP 2.0

TURNING CAPACITY INTO ACTION

Photo: MLP 2.0 Launch, PETRONAS, October 2, 2024

TURNING CAPACITY INTO ACTION

Based on the success of MLP 1.0, MLP members unanimously agreed to extend MLP into a second phase, running from October 2024 to March 2026. The theme of MLP 2.0 is **"Turning Capacity Into Action"** and will feature activities to drive tangible methane emissions reduction in the region. Whereas the first phase of MLP was to build a foundation and knowledge base for the ASEAN O&G sector to understand the methane abatement landscape, MLP 2.0 will enable its public and private sector partners to plan and implement methane mitigation actions, policies, and projects in support of the Global Methane Pledge. Key objectives of MLP 2.0 include accelerating financing for innovative solutions, strengthening corporate methane mitigation plans and targets, and connecting MLP members with leading companies to adopt methane reduction technologies.

Photo: Canva

DELIVERY APPROACH

1 Track 1: Methane Action	Track 1 highlights methane mitigation action as the theme of MLP 2.0. Track 1 will build on the knowledge and workshops of MLP 1.0 to implement practices and operations that lead to direct methane emissions reduction. Activities include helping O&G companies to refine project proposals, adopt technologies, and access finance through finance clinics.
2 Track 2: Cross-Cutting Track	Track 2: Cros-cutting activities will feature innovative tools, events, and activities that will support the O&G sector to better manage methane emissions. The track may include collaboration of the proposed Southeast Asia Methane Emissions Technology Evaluation Center (METEC), site visits, technology displays, etc.
3 Track 3: Capacity Building	A continuation of masterclass trainings under MLP 1.0, this track will be focused on sharing with MLP partners about leading practices in methane abatement, providing members with interactive exercises, and featuring experts and organizations leading in methane emissions management.

HIGHLIGHTS

	One-on-one Technical Assistance and Financial Clinics to help oil and gas companies to develop and identify funding for methane abatement projects.
	Public-Private Sector Roundtable – working to create a better enabling environment for oil and gas companies to invest and make progress on methane emissions reduction.
	Southeast Asia Methane Emissions Technology Evaluation Center (METEC) will test technologies and prove their suitability for the ASEAN region prior to deployment at actual oil and gas sites.
	Methane Emissions Mapping and Dashboard developed by ACE.

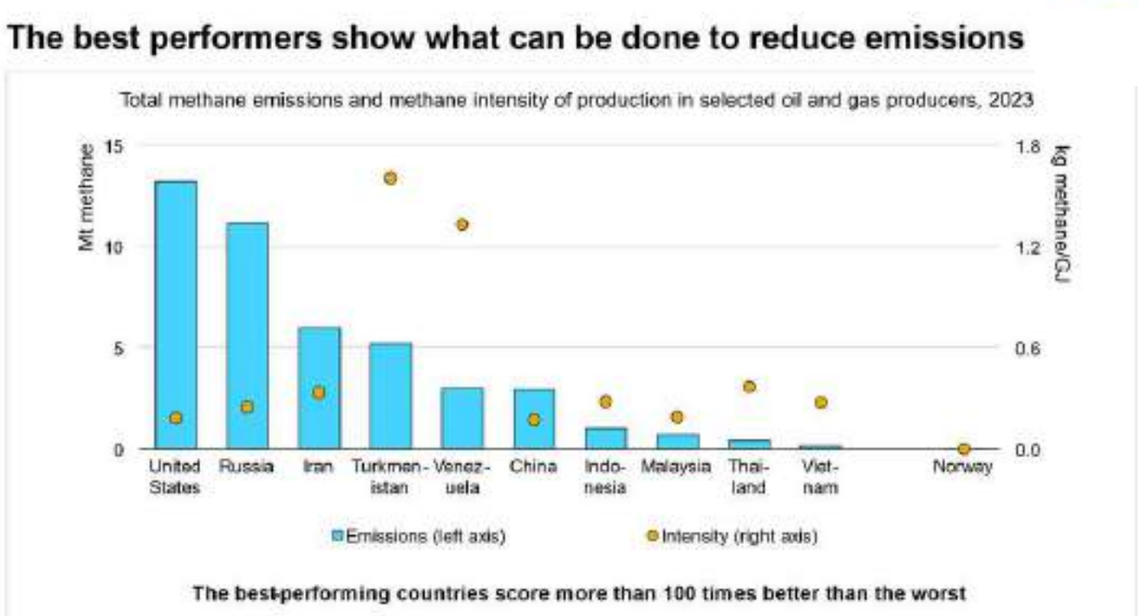
HIGHLIGHTS AND ACCOMPLISHMENTS FROM MLP & ITS PARTNERS

The MLP's partners have made important advancements in the global methane community over the last year.

On March 4, 2024, the **EDF** launched a groundbreaking satellite, **MethaneSAT,** to monitor global methane emissions and provide high-resolution emissions data to the public. The MLP is working with EDF to get updates on MethaneSAT for the Southeast Asia region, which can aid MLP members in better understanding their emissions baselines for oil and gas fields.

The **CLEAN Initiative** was launched by **JOGMEC** in partnership with KOGAS (Korea) and JERA (Japan) and aims to increase transparency of methane emissions from LNG sellers. The inaugural CLEAN Annual Report 2024, published in October 2024, highlights notable developments from MLP and its members, including PETRONAS achieving the Gold Standard Pathway for OGMP 2.0 reporting and the growth of MLP membership.

Each year, the **International Energy Agency (IEA)** releases an annual energy outlook for geographic regions. **IEA's 2024 Southeast Asia Energy Outlook** included a section on the region's efforts to reduce methane emissions, highlighting the MLP as a key initiative to drive action on methane emissions. The USAID Southeast Asia Smart Power Program, the secretariat of the MLP, provided feedback on the IEA report and continues to seek avenues to work with the IEA under the MLP 2.0.



Source: IEA

Photo: MethaneSAT Media Asset

JOIN US

Photo: Deloitte

MLP is open for new memberships, inviting organizations, governments, and private sector partners dedicated to reducing methane emissions to join our growing network. By becoming a member, you will connect with a community of leaders committed to innovative solutions and collaborative approaches for tackling methane emissions. Membership offers access to exclusive resources, capacity-building programs, and the opportunity to contribute to impactful climate initiatives aligned with global climate goals. Join us in advancing meaningful progress toward a cleaner, more sustainable future.

For more information, please contact MLP Secretariat:

Dr. Amornwan (Mai) Resanond
Director of Clean and Sustainable Energy
USAID Southeast Asia Smart Power Program
Email: aresanond@deloitte.com

MLP Members

ASEAN Centre for Energy
One Community for Sustainable Energy

ASCOPE
ASEAN COUNCIL ON PETROLEUM

USAID
FROM THE AMERICAN PEOPLE

PETRONAS

PERTAMINA

PTTEP

PETROVIETNAM
PVEP

Woodside Energy

Asia Natural Gas & Energy Association

Environmental Defense Fund

JOGMEC

METHANE GUIDING PRINCIPLES

GFMR

UN environment programme | International Methane Emissions Observatory

CLDP

USTDA
U.S. TRADE AND DEVELOPMENT AGENCY

METI
Ministry of Economy, Trade and Industry

OGCI