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Thailand's Growing Decommissioning Business: Opportunities and Legal Considerations



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As Thailand's energy landscape transitions toward a new energy mix, the retirement and removal of existing facilities form a critical part of this process. The decommissioning and asset retirement sector in Thailand is poised for substantial growth, bringing a host of new business opportunities. The Department of Mineral Fuels ("DMF") has projected a significant increase in decommissioning activities between 2024 and 2030, with approximately 90 production platforms and 150 petroleum transmission pipelines slated for removal from the Gulf of Thailand. This ambitious endeavor, estimated at around USD 1 billion, heralds a robust market for decommissioning services and innovative solutions.

This article aims to explore the key legal considerations and promising prospects within Thailand's decommissioning landscape.

Background

In the early 2000s, the Thai government, alongside other host governments with petroleum resources, recognized the socio-environmental need to safely decommission offshore oil and gas facilities.

Sections 80/1 and 80/2 of the Thailand Petroleum Act B.E. 2514 (1971) was amended in 2007 to impose obligations on concessionaires and PSC contractors to submit a decommissioning plan for government approval and to place a security deposit to support decommissioning work.

The value of the deposit must not be less than the estimated decommissioning costs specified in the approved decommissioning plan. Failure to make a complete security deposit will result in a surcharge of 2 percent per month on the unpaid amount. These regulations are intended to ensure responsibility for decommissioning activities, both physically and financially.

In 2016, the Ministry of Energy promulgated multiple Ministerial Regulations that support Sections 80/1 and 80/2, among them, the Ministerial Regulation Prescribing Plans and Estimated Costs and Security for Decommissioning of Installations Used in the Petroleum Industry B.E. 2559 (2016) ("MR 22"). Under these regulations, the concessionaire/PSC contractor is required to submit to the Director General of the DMF the following documents within prescribed timelines: initial and final decommissioning plans, an estimation of decommissioning costs, a decommissioning environmental assessment report, and a best practical environmental option report.

The concessionaire/ PSC Contractor is required to commence the decommissioning process under these circumstances:

- when the concessionaire does not use the relevant installation continuously for a period exceeding one year;
- when the petroleum reserves of the concession fall below 40 percent of the total accumulated petroleum production and petroleum reserves;
- when the remaining period of production, as specified in the relevant concession agreement, is five years; or
- when the concessionaire wishes to commence decommissioning activities.

While decommissioning generally provides no return on investments, key drivers for decommissioning include social responsibility, reputation, liability, and international law & regulations, such as:

- the Geneva Convention on the Continental Shelf 1958 which requires that "any installations which are abandoned or disused must be entirely removed";
- the 1982 United Nations Convention on the Law of the Sea ("UNCLOS"), which states that
 "installations or structures which are abandoned or disused to be removed to ensure
 safety or navigation, taking into account any generally accepted international standards..."
 (UNCLOS has been ratified by 167 UN member states and the European Union);
- International Maritime Organization's Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (1989) (IMO Guidelines); and
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal ("Basel Convention").

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The most efficient decommissioning practices could preserve field economics, ensure the safety of personnel and operations, set precedents for long-lasting and beneficial national legislation, and create a proper framework for company environmental policies.

The key challenges for decommissioning activities and projects are economic, legal, and technical in nature. Since decommissioning requirements, in most cases, came into force 2-3 decades after construction, the thought and cost of decommissioning were often not factored into initial economic calculations. Most installations were designed to be weather-proof, permanent, and long-lasting, especially where concession terms require that facilities must be transferred to the government free of charge and include terms that prohibit concessionaires from disposing of assets within the last 5 years of the concession term without prior government approval.

Accordingly, operators did not maintain their facilities with easy removal in mind, but instead focused on ensuring durability and continued operational efficiency for future use. Decommissioning work of a large petroleum resource field could take years and cost billions of dollars to complete, all throughout the time when the company is winding down its production (or not producing at all), with costs that cannot be applied to tax reductions. Upon its promulgation, MR 22 claimed retroactive effect, making it applicable to all concessionaires at the time.

Around the world, host governments have found ways to procure the appropriate resources for decommissioning costs. Operators and their JV partners have had to contribute to decommissioning funds, put in place decommissioning securities, or remain liable as guarantors to their successors in title.

Recent Developments and Success Stories

Following the promulgation of decommissioning regulations in 2016, Thailand has made notable strides in this complex field. The period from 2017 to the present has seen the successful execution of the country's first decommissioning campaigns. In 2023 alone, three major projects were completed in Blocks 10-13, Block 15-17, and Block B8/32 and 9A. These projects involved the removal of 22 wellhead platforms and two sets of mooring equipment, with subsequent onshore cleaning and disassembling work. In November 2024, Chevron Thailand Exploration and Production, Ltd. (Chevron Thailand), in partnership with Mitsui Oil Exploration Co., Ltd. (MOECO), has handed over a wellhead platform topside (WHP Topside) to Carigali-PTTEPI Operating Company Sdn. Bhd. (CPOC), contributing to petroleum production in the Thailand-Malaysia Joint Development Area (JDA). To date, 12 of Chevron's WHP Topsides have been successfully reused, collectively reducing carbon emissions by up to 10,000 tons.

¹Chevron Hands Over Wellhead Platform Topside to CPOC for Reuse in JDA Operations' Bangkok Post (Bangkok, 19 December 2024). Available at: https://www.bangkokpost.com/business/general/2917241/chevron-hands-over-wellhead-platform-topside-to-cpoc-for-reuse-in-ida-operations (Accessed: 7 January 2025).

One of the standout achievements in 2023 was the innovative approach to repurposing decommissioned materials. Notably, Thailand's first "rig-to-reef" project, in which a disused offshore installation is transformed and reused as an artificial reef under a Memorandum of Agreement signed in 2020 between the Department of Marine and Coastal Resources, Chevron Thailand, and Chulalongkorn University. The topsides reuse projects not only demonstrated environmental stewardship but also helped avoid the disposal of 2,500 tons of steel waste. These initiatives underscore the importance of creativity and flexibility in overcoming the technical and regulatory complexities inherent in decommissioning work.

In 2022, Bangkok Dock (1957) Company Limited, a Thai state-owned enterprise, Namyong Terminal Public Company Limited (NYT), and Sinopec International Petroleum Service Corporation, operating under a Chinese state-owned enterprise, signed an MOU to establish a joint venture in Thailand as Thailand's first provider of one-stop petroleum decommissioning services in the field. They sought to respond to the country's growing demand, as several petroleum concessions are set to expire over the next 20 years. This collaboration of strengths and expertise of the parties, combined with the use of technologies that meet international standards, plays a crucial role in upgrading Thailand's petrochemical industry in explorations and decommissioning sector.²

Legal Considerations and Challenges of Decommissioning Work

While no two decommissioning campaigns are the same, decommissioning work can generally be divided into three main phases, each with its own legal considerations.

Phase 1- Preparation Work

Preparation work includes surveys, facility cleaning, well abandonment, pipeline removal, and lifting.

Pre-removal planning and permitting are crucial steps in the decommissioning process. It is essential to ensure compliance with national and international regulations, such as those set by the International Maritime Organization (IMO) and local environmental protection agencies. Obtaining necessary permits and approvals from relevant authorities, including environmental impact assessments (EIA) and decommissioning plans, which must be approved by the DMF, is also required. A key part of this phase is engaging with stakeholders, including local communities, environmental groups, and other governmental bodies beyond those directly reporting to the Ministry of Energy, to address concerns and obtain input.

²³ Thai, Chinese Giants Forge Public - Private Partnership for Synergy as Thailand's First Provider of One-Stop Petroleum Decommissioning Services, RYT9 (Bangkok, 11 April 2022). Available at: https://www.ryt9.com/en/prg/257612 (Accessed: 7 January 2025).

It is necessary to conduct thorough environmental assessments to understand the potential impact of removal on marine life and ecosystems. As offshore installations have been in place for more than 30 years in the tropical and relatively shallow waters of Southeast Asia (less than 100m), structures—particularly those that followed environmental guidelines—could contain thriving marine ecosystems. The removal of such structures would disrupt the environment and risk breaching environmental laws. Moreover, local communities, such as fishermen communities, could have relied on the abundant ecosystem for their livelihoods, meaning the removal of these structures from their constructed locations could have environmental and social impacts.

Another requirement for Phase 1 is the development of a plan for managing and disposing of hazardous materials and waste in compliance with environmental laws. The DMF has approved the application of rig-to-reef programs, where wellhead platform jackets are cut and moved to a reefing location to be left as artificial reefs.

Lastly, contractual agreements must be meticulously drafted and negotiated. Contracts with contractors responsible for the removal should incorporate clauses ensuring compliance with legal and environmental standards, along with strong provisions to manage the risks associated with delays and potential abandonment of work. The parties to the agreement should clearly define liability and indemnity provisions to address any potential legal disputes or accidents that may arise during the removal process, particularly when multiple third parties may be operating within the same area. Further, it is important to secure sufficient insurance coverage to mitigate potential risks, including environmental damage and worker injuries.

Phase 2- Platform Removal

Once preparations are complete, the platform removal phase involves the removal of the riser and conductor, topsides, and jackets.

During the actual removal operations, it is essential to ensure that all operational permits are obtained before commencing any activities. In addition, implementing monitoring and reporting mechanisms to ensure compliance with legal and environmental standards throughout the removal process is required. Specific types of dive support vessels and platform removal vessels are required for the operation, and all work done needs to meet the performance and safety standards set by the operator. There is a clear local capability gap in terms of available skilled resources. Moreover, the operator must ensure the development and maintenance of an emergency response plan to address any incidents or accidents that may occur, with regular training for relevant stakeholders on these plans.

In 2023, the DMF approved extensions for 2 decommissioning plans: one for offshore Block 12 (Chevron Thailand Exploration and Production, Ltd.), and another for offshore Blocks 15, 16 and 17 (PTT Exploration and Production Public Company Limited). These extensions were granted due to delays encountered during the process. In a tropical climate like the Gulf of Thailand, extreme weather events are highly probable occurrences that could significantly delay asset retirement work.

Phase 3 - Transportation & Onshore Handling

Depending on the location of the onshore work, transportation could involve navigating international and maritime laws and conventions. Phase 3 of the decommissioning process includes a range of activities such as offshore lifting operations, transportation using cargo barge to onshore, onshore handling at scrapyards or onward delivery to be re-used.

Once the removal process is completed, site clearance and post-removal activities involve complying with legal requirements for site restoration and rehabilitation, ensuring the area is returned to a safe and environmentally stable condition. The operator is responsible for addressing any residual liability issues, including long-term monitoring and potential future claims related to the decommissioned site. A thorough legal review would help ensure that any final reports submitted to regulatory authorities, which document the removal process and compliance with legal requirements, would protect the operator against future claims.

Financial considerations include ensuring sufficient financial provisions are in place to cover the costs of decommissioning, as required by law. These considerations include taking into account the tax implications of the decommissioning process, including potential deductions and liabilities.

Where a platform or other facilities, such as a floating storage vessel, are to be transported through international waters or near the borders of other jurisdictions, the parties must comply with relevant international laws and treaties. For example, the Basel Convention must be adhered to when importing or exporting hazardous materials for decontamination in another country. In addition, there is a requirement to assess and mitigate any transboundary environmental impacts, in cooperation with neighboring countries. Governmental approvals and supporting documentation may also be required from multiple countries. Moreover, where vessels are involved, vessel flag states may become relevant to asset transport considerations.

Decommissioning disputes

One of the primary legal challenges in decommissioning activities involves disputes with governments and national oil companies. The allocation of liability between current and former owners and operators is a complex issue that requires careful legal navigation. These disputes often arise over the scope and implementation of decommissioning requirements. Arbitration was initiated by operators and JV partners in the Gulf of Thailand concerning Erawan and Bongkot fields, specifically regarding future decommissioning costs, following the introduction of new decommissioning regulations in 2019.

Joint ventures are common in the offshore oil and gas industry, and decommissioning activities often lead to disputes among business partners. These disputes may revolve around the development of decommissioning proposals, cost estimations, and the timing of contributions to decommissioning trust funds. The Association of International Energy Negotiators (AIEN) model Joint Operating Agreement (JOA) provides a framework for addressing these issues; however, disagreements can still arise, particularly regarding the decision to commence decommissioning. In a research paper conducted by the AIEN, formerly known as the Association of International Petroleum Negotiators, an industry-vetted checklist of key elements for the design of an abandonment provision includes, at a minimum, the following: the possibility of abandonment agreements; provisions for security against default and the form of such security; residual liabilities; trust funds and their fiscal treatment; and measures of public accountability.

Decommissioning projects often involve multiple contractors, and disputes may arise over issues such as contractual obligations, site conditions, and project delays. These disputes are similar to those encountered in large-scale construction projects and require careful management to avoid costly delays and increased expenses. Offshore decommissioning requires specific types of vessels, which may be in short supply, outpaced by growing demand from successive expiring concessions. A termination for convenience halfway through a decommissioning campaign to join another project a performance risk.

Global Context and Future Outlook

The decommissioning sector is not unique to Thailand; it is a global phenomenon with significant activity in regions such as the North Sea, which is home to more than 1,500 platforms and installations, with an average age of 25 years, and the Gulf of Mexico, which has another 1,500 platforms, many of which are over 30 years old.³ Southeast Asia comprises 11 nations, 10 of which are coastal states, with Indonesia, Malaysia, Thailand, and Vietnam being major oil producing countries. Lessons learned from international projects can provide valuable insights for Thailand as it navigates its own decommissioning journey. There are more than 200 offshore oil fields in Southeast Asia with 1,500 platforms and 7,000 wells that are projected to cease production by 2030.⁴

Though many countries have yet to develop comprehensive legislative and regulatory frameworks for decommissioning, the successful decommissioning of the Brent Field in the North Sea, which managed to reuse or recycle more than 97% of the platforms,⁵ offers valuable lessons for future decommissioning projects. Similarly, Malaysia was able to turn a decommissioned oil rig into a dive resort and the innovative approaches used in the Gulf of Mexico serves as benchmarks for best practices and regulatory compliance.

Conclusion

In conclusion, the decommissioning and asset retirement sector in Thailand presents a wealth of opportunities for industry players. By effectively addressing challenges related to offshore removal, hazardous substance handling, and safety in dismantling work, alongside key legal considerations and embracing innovative solutions, we can ensure a sustainable and prosperous future for this growing market.

This article aims to provide a comprehensive overview of the current state and prospects of the decommissioning sector in Thailand, highlighting both the opportunities and challenges it presents. We hope you find this information valuable and look forward to your continued engagement in this dynamic industry. We look forward to collaborating with all stakeholders to drive progress and achieve our shared goals.

³Decommissioning Oil and Gas Platforms, World Economic Forum (World Economic Forum, 4 April 2024). Available at: https://www.weforum.org/stories/2024/04/decommissioning-oil-and-gas-platforms (Accessed: 7 January 2025)

⁴Meeting the Decommissioning Challenge in Southeast Asia, CMS Law-Now (CMS Law-Now, 12 December 2023). Available at: https://cms-lawnow.com/en/ealerts/2023/12/meeting-the-decommissioning-challenge-in-southeast-asia (Accessed: 7 January 2025)

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