Cost recovery in production sharing contracts: a comparative review of Southeast Asian jurisdictions

Nicholas Lingard*, Philip Morgan**, Kate Apostolova*** and Jeremy Tan****

ABSTRACT

While the current macro factors (such as the COVID-19 pandemic’s impact on oil and gas demand and lower crude prices) suggest a challenging period lies ahead, the oil and gas industry remains important to a number of Southeast Asian countries, representing a focus area for foreign investment, a driver of domestic auxiliary industries and a source of government revenue. This article focuses on key oil and gas jurisdictions in the region—namely, Indonesia, Malaysia, Philippines, Thailand and Vietnam—and provides a comparative overview of the cost recovery mechanisms in each country. Despite the practical importance of understanding how the cost recovery regimes are intended to operate in each of the relevant jurisdictions, there remains a little detailed commentary on the relevant legislative and contractual frameworks. By tracking how each of the five jurisdictions has modified and adopted cost recovery provisions as it considers appropriate for its particular investment needs, and comparing the jurisdictions surveyed across a range of measures, as reflected in Table 8, this article aims to provide current and future market participants with insights on cost recovery, both to support investment decisions and provide context for disputes that may arise.

1. INTRODUCTION

In its most basic form, cost recovery refers to a mechanism through which a party to an oil and gas project can recover most, if not all, of its capital and operating costs out of a specified percentage of production called ‘cost recovery oil’ or ‘cost recovery gas’ (eg 50 per cent of total production) once (and only if) the project enters the production phase. As the contracting parties can only ‘cost recover’ their exploration costs following commercial discovery and production, contracting parties inherently take on the risk of exploration through this mechanism.

*Nicholas Lingard, partner and head of Freshfields Bruckhaus Deringer’s (‘Freshfields’) Asia International Arbitration Group, Asia
**Philip Morgan, head of Freshfields’ Oil and Gas Practice Group, Asia
***Kate Apostolova, senior associate in Freshfields’ International Arbitration Group, Asia. Email: kate.apostolova@freshfields.com
****Jeremy Tan, associate in Freshfields Freshfieldsternational Arbitration Group, Asia. The authors thank Marton Mohacsi, Peter Kim and Luiza Jeske for their excellent assistance. The authors would also like to thank Michael D Twomey, Fitriana Mahiddin and Fransiscus Rodyanto of SSEK for their contribution on Indonesian law aspects; Fariz bin Abdul Aziz and Karyn Khor of Skrine Advocates & Solicitors for their contribution on Malaysian law aspects; Chatchavej Chitvarakorn, Napassorn Liukhulwattana, Kanokon Worachanyawong and Suchaya Adulratananukul of Siam Premier for their contribution on Thai law aspects; Louie Ogsimer and Jomini Nazareno of Romulo for their contribution on Philippines law aspects; and Ngoc Nguyen and Tony Foster of Freshfields’ Vietnamese office for their contribution on Vietnamese law aspects. The article represents only the authors Rodyanto of SSEK for their contribution on Indonesian law aspects; Far

© The Author(s) 2020. Published by Oxford University Press on behalf of the AIPN. All rights reserved.
In principle, cost recovery is addressed in local legislation and the agreement between the government and the oil company (the ‘Contractor’), which in all five jurisdictions considered in this article means a production sharing contract (PSC). The local legislation and the PSC’s cost recovery provisions outline the types of costs that are eligible for recovery, which may include the costs for exploration, development, production, operating, and decommissioning and abandonment costs. They also may impose restrictions on recovering costs through cost recovery ceilings, order of recovery, requiring approvals and excluding certain costs from recovery.

Throughout the region, the cost recovery regime has evolved over its 50-year or so history. For example, in January 2017, Indonesia made headlines by changing its model PSC to replace cost recovery provisions with a gross production revenue-sharing model, ie whereby gross production is shared between the Contractor(s) and the government in an allocated proportion based on a range of factors. Though cost recovery is very much alive in Malaysia’s PSCs, it also has gone through substantial changes over time, reflecting the need to address investment realities. Relatively smaller producing nations, the Philippines and Vietnam, have more standardized versions of cost recovery, whereas Thailand just issued its first PSC with cost recovery in 2017, a move away from that country’s previous concession-based model.

The fundamental concept of cost recovery—that upstream Contractors are able to recover their costs in the event of discovery and production—is consistent throughout the PSCs in each jurisdiction. However, the political, economic and legal particularities of each jurisdiction have influenced the exact workings of cost recovery in each country, with some jurisdictions, for example, adopting a negative list principle (listing only costs that cannot be recovered) (Malaysia), while others listing both recoverable and non-recoverable costs (Indonesia, Philippines, and Vietnam).

There is a relative lack of legal commentary on cost recovery despite the significant monetary values at play and the complexities that make it of significance to foreign investors in providing predictability of profits. In addition, disputes related to cost recovery are among the most commonly encountered commercial disputes that arise from PSCs, with most resulting from uncertainty over what costs qualify for cost recovery. There have also been a number of audits of PSCs in Southeast Asia over the past several years, giving rise to potential and actual disputes for alleged excessive cost recovery claimed, which are then referred to arbitration.

In this article, we offer a comparative survey of the cost recovery regimes in key jurisdictions in Southeast Asia in order to support investment decisions and to provide context for cost recovery disputes. We organize our observations by country, first outlining the current legal framework with respect to cost recovery in each jurisdiction. We then, in Table 8, set out a comparison of the recoverability of certain general categories of costs across the jurisdictions.

2. INDONESIA

Overview

Indonesia, a country rich in natural resources, has been active in the oil and gas industry for more than 130 years, since the first oil discovery in North Sumatra in 1885. The world’s first-ever PSC was executed in Indonesia, and since then PSCs have been the most common type of joint cooperation contract used in Indonesia and the world.

---

1 James L Loftis and others, ‘Complexity and Commercial Disputes in Production Sharing Contracts’ in James M Gaias (ed), The Leading Practitioners’ Guide to International Oil & Gas Arbitration (Juris Publishing, 2015) 595.
2 PwC, Oil and Gas in Indonesia, Investment and Taxation Guide (10th edn, PwC 2019) 14.
3 ibid.
4 See Petromindo, Indonesian Oil & Gas Book (Petromindo 2018) 3, 19, 20.
5 Daniel Johnson, ‘Upstream Concessions and Contracts’ in Peter Roberts (ed), Oil and Gas Contracts: Principles and Practice (2016) 3, 9, 10.
A volatile international market and an aging industry confronting declining reserves, rising domestic consumption, lack of downstream infrastructure and a constantly changing regulatory environment have meant that the industry overall faces substantial challenges (which are exacerbated by the impact of the COVID-19 pandemic, oversupply and decreasing demand of crude in 2020). In recent years, several international oil companies, including ConocoPhillips, Inpex, Hess and Total, have exited certain ‘non-core’ assets in Indonesia.

Cost recovery: legal framework

Relevant regulations and PSC provisions

Government Regulation No 35/2004 regarding Upstream Oil and Natural Gas Business Activities, as amended by Government Regulation No 55/2009, outlines one general principle for cost recovery: Contractors shall receive reimbursement for their costs. Specifically, Article 56 provides: ‘the investment and operating expenses incurred under the Production Sharing Contract shall be approved by the Implementing Body’ and that ‘[t]he Contractor shall recover (obtain the reimbursement for) the expenses it has incurred to carry out Exploration and Exploitation . . . according to the work plan and budget and the Authorisation of Financial Expenditure approved by the Implementing Body after [the] commercial production.’

Cost recovery is also regulated by Government Regulation No 79/2010 on Recoverable Operating Cost and Treatment of Income Tax in the Upstream Oil and Gas Business Sector as amended by Government Regulation No 27/2017.7 Government Regulation No 27/2017 amended the previous regulation by shortening an enumerated list of 24 non-cost recoverable items to 22 items. These items are listed in Table 1. Indonesia has indicated that this reduction in non-cost recoverable items was intended to encourage investment and provide additional legal certainty.

Another regulation, ESDM Regulation No 26/2017, as amended by Regulation No 46/2018, allows for the recovery of ‘investment costs’ at the termination of the PSC.8 Investment costs are costs incurred by the Contractor in maintaining equitable level of production until the end of the PSC. The aim of the regulation is to incentivize Contractors of PSCs that are about to expire to continue to invest and carry out production, confident that the costs they incur in so doing should be recoverable.

With respect to costs for abandonment and site restoration activities (ASRA), on 21 February 2018, the Ministry of Energy and Mineral Resources (ESDM), which has overall executive responsibility for the development of oil and gas in Indonesia,10 issued an important new regulation, ESDM Regulation No 15/2018. It requires all Contractors to fulfil ASRA obligations before or on the expiry of the PSC and set up and contribute to an ASRA fund.11 Contributions made to the fund by a Contractor operating under the cost recovery regime are to be treated as operating costs and therefore should be cost recoverable. Under a gross split PSC (the new fiscal regime introduced by Indonesia in 2017 and discussed in more detail below), the

---

6 The Implementing Body is Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi (‘SKK Migas’) which, currently, until the issuance of a new oil and gas law, is the cost recovery regulator. House of Representatives, ‘2018 Draft Oil and Gas Law’ <http://www.dpr.go.id/doksileg/proses2/RJ2-20170524-082813-8574.pdf> accessed 2 April 2020; Darrell R Johnson and Franciscus Rodianto, ‘Indonesia, In: The Oil and Gas Law Review’ in Christopher B Strong (ed), The Oil and Gas Law Review (Tom Barnes 2019) 185–94; House of Representatives, ‘2020 National Legislation Program’ <http://www.dpr.go.id/uu/prolegnas> accessed 27 August 2020; House of Representatives, ‘2020-2024 National Legislation Program’ <http://www.dpr.go.id/uu/prolegnas-long-list> accessed 27 August 2020; Draft Omnibus Bill.
7 Petromindo (n 4) 4.
8 PwC (n 2) 40, 53.
9 ibid 40.
10 Petromindo (n 4) 4.
11 There are debates about whether the imposition of legislative requirements on ASRA in contracts that are otherwise silent on the subject is allowable under the terms of those older contracts and/or consistent with Indonesia’s international obligations under investment treaties. That debate is beyond the scope of this article.
### Table 1. Cost recovery in Indonesia: recoverable and non-recoverable items

| Recoverable items | Non-recoverable items |
|-------------------|-----------------------|
| 1. Operating costs<sup>d</sup> from field with plan of development approval<sup>e</sup> | 1. Personal costs, including family members, management and shareholders |
| 2. Inventory costs | 2. Accumulation of a reserve fund (excluding ASRA funds) |
| 3. Head office overheads (capped at 2% of current-year costs)<sup>f</sup> | 3. Donated assets |
| 4. Investment costs<sup>g</sup> | 4. Administrative and criminal sanctions, including claims, fines and penalties related to tax law and regulation compliance |

- **Recoverable items**
  - Operating costs: Costs related to the production of oil and gas, including costs of exploration, development, and production activities.
  - Inventory costs: Costs associated with holding finished goods for sale.
  - Head office overheads: Costs of corporate and administrative activities.
  - Investment costs: Costs incurred in acquiring fixed assets or intangible assets.

- **Non-recoverable items**
  - Personal costs: Costs related to the personal and family members of employees.
  - Accumulation of a reserve fund: Costs related to the establishment of a reserve fund for future expenses.
  - Administrative and criminal sanctions: Costs related to violations of legal and regulatory requirements.
  - Depreciation of assets: Costs related to the decrease in value of assets.
  - Insurance premiums: Costs related to insurance coverage for employees and family members.
  - Depreciation of assets not owned by the government: Costs related to the use of assets owned by others.
  - Expatriate labour costs: Costs related to the employment of expatriate workers.
  - Legal consultant costs: Costs related to legal advice and services.
  - Tax consultant fees: Costs related to tax consultancy.
  - Marketing costs: Costs related to promoting oil and gas products.
  - Representation costs: Costs related to entertaining officials.
  - Training costs: Costs related to employee training.
  - M&A or Participating Interest transfer costs: Costs related to mergers and acquisitions.
  - Interest payment on loans: Costs related to interest on loans.
  - Employee income tax: Costs related to income tax paid by employees.
  - Procurement costs: Costs related to purchasing goods or services.
  - Costs incurred from surplus material: Costs related to excess materials.
  - Costs incurred from negligence: Costs related to negligence in operations.
  - Transactions that are not carried out through a tender process: Costs related to transactions not conducted through a tender process.
  - Bonuses paid to the government: Costs related to bonuses paid to the government.
  - Pre-PSC execution costs: Costs related to costs incurred before the execution of the PSC.
  - Commercial audit costs: Costs related to commercial audits.

<sup>a</sup>Reg No 27/2017; see generally PwC (note 2) 54.
<sup>b</sup>Reg No 27/2017, art 12; Reg No 26/2017, amend. No 46/2018; PwC (note 2) 53–55.
<sup>c</sup>Reg No 27/2017, art 13; Reg No 26/2017, amend. No 46/2018; PwC (note 2) 54, 55.
<sup>d</sup>Reg No 27/2017, art 11 states that operating cost 'consists of: (a) exploration cost; (b) exploitation cost; and (c) other cost'. 'Exploration cost' in turn consists of: (a) drilling cost (both exploration drilling and development drilling cost), (b) geological and geophysical cost (meaning, cost of geological studies and cost of geophysical studies); (c) general and administrative cost and (d) depreciation cost. 'Exploitation cost' consists of: (a) direct production cost for crude oil and natural gas, (b) cost related to the activity of natural gas processing, (c) utility cost consisting of cost of production devices and maintenance of equipment, (d) general and administrative cost and (e) depreciation cost. 'General administrative cost' is defined as consisting of: (a) administration and finance cost, (b) staff cost, (c) material service cost, (d) transportation cost, (e) general office cost and (f) indirect tax, regional tax and regional retribution. 'Other cost' consists of: (a) cost for the transfer of gas from the production point to the custody transfer point and (b) cost for post-operation activities in Upstream Business Activities.
<sup>e</sup>PSCs may provide for interest recovery as well. See, eg PSC between Pertamina and Apex, Ltd., for Bengara-II Block (December 1997), Annex C-3 ('Interest on loans obtained by a Party from Affiliates or parent companies or from third party non-affiliates at rates not exceeding prevailing commercial rates for capital investments in Petroleum Operations may be recoverable as Operating Cost [with prior approval of the Government Regulator]').
<sup>f</sup>PwC (note 2) 83. In order for head office overhead costs to be cost recoverable, they must be calculated consistently, disclosed in quarterly reports and approved by SKK Migas.
<sup>g</sup>Reg No 26/2017, amend. No 46/2018; PwC 2019 (note 2) 53.
contributions made to the ASRA fund are treated as a tax-deductible cost. In line with this approach, ESDM Regulation No 15/2018 establishes that upon completion of the ASRA obligations and expiry of the relevant PSC: under the cost recovery regime, any excess of the ASRA fund shall become the property of Indonesia; under the gross split system, the excess shall be returned to the relevant Contractor.

If the ASRA fund is not sufficient to cover all the costs of ASRA operations, the shortfall, once approved by SKK Migas, is to be treated as operating costs and is to be considered cost recoverable. From the Contractor’s point of view, this is a positive development as it has not been clear so far whether or not the costs over and above those reserves in the ASRA fund are cost recoverable, especially as some PSCs explicitly provide that the additional costs will be borne by the Contractors.

Cost recovery limitations

In contrast to the other jurisdictions discussed here, there is no monetary cap on cost recovery in Indonesia. There are certain other limitations, however. Government Regulation 27/2017 provides that operating costs are recoverable if they meet certain conditions, including that the Petroleum Operations are conducted in accordance with the Work Program and Budget (‘WP&B’) ‘approved by the Head of SKK Migas’. To be
recoverable, operating costs also need to ‘use fair value’ and reflect ‘the execution of Petroleum Operations in accordance with the principles of good business and engineering practices’.  

Moreover, in addition to bearing all risks of exploration, Contractors typically must agree to certain provisions that increase the burden of investment. First, pre-PSC expenditure cannot be transferred to the PSC and is not cost recoverable. Secondly, Contractors must generally pay a range of signing and production bonuses and local education costs that are not cost recoverable. Thirdly, production assets, including all equipment, machinery, materials and supplies purchased by the Contractor, as well as exploration and geophysical data, become the property of the state. Despite the absence of an overall cap, some recoverable categories may also have a cap imposed. For example, head office overheads are capped for cost recovery purposes at 2 per cent of annual spending on PSC operations.  

In Table 1, we list items that are generally cost recoverable and non-recoverable under Indonesian PSCs.

**The gross split PSC**

In January 2017, likely due to budgetary strains, Indonesia issued ESDM Regulation No 8/2017 (the ‘Gross Split Regulation’), which originally replaced the traditional cost recovery PSC model with a new, progressive and sliding gross split mechanism. Following a mixed response from the industry, however, in July 2020, Indonesia adopted a new regulation, Regulation No 12 of 2020, which permits entering into new PSCs on either a cost recovery or a gross split basis. Under it, the government can determine whether to adopt the gross split PSC, the cost recovery PSC or other cooperation contracts for new PSCs, existing PSCs and expiring PSCs (whether they are extended or not), after considering the level of risk, the investment climate and the maximum benefit for the state. The new regulation does not provide for existing gross split PSCs (ones already signed) to shift to cost recovery.  

Under gross split PSCs, Contractors will no longer recover their costs with cost oil revenue. Rather, ‘all costs and risks are borne by the Contractors’. The oil split is divided between the Contractor and the government from the gross production without any cost recovery mechanism. In return, the Contractors receive a higher share of the production split than before, and the operating costs may be tax-deductible.

Specifically, Article 5 of the Gross Split Regulation requires a base split for oil production of 57 per cent for the government and 43 per cent for the Contractor and 52 per cent and 48 per cent for the government and the Contractor, respectively, for gas production. These base split percentages are then adjusted according
to a number of ‘variable’ and ‘progressive’ components specified in the Gross Split Regulation and in the actual contractual terms Table 2.23

Audit and dispute resolution mechanism
Generally, Indonesian PSCs give Indonesia and Pertamina a right to audit the Contractor’s books and accounts for any calendar year covered by the PSC. This right would include an audit of the costs claimed by the Contractor.

Indonesian PSCs also provide that any disputes arising between the Contractor and Pertamina, which are not settled amicably, should be submitted to arbitration before a three-member tribunal in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC).

3. MALAYSIA

Overview
Malaysia is the second-largest producer of oil and gas in Southeast Asia, after Indonesia,24 and similar to Indonesia, has a long history in the industry. PETRONAS, the upstream regulator,25 signed its first PSC with Shell in 1976 over an offshore block in the state of Sarawak. By 2013, PETRONAS had signed over 150 PSCs.26 Today, PETRONAS is one of the driving forces behind the Malaysian economy, and its importance as a source of government revenue has grown enormously.27

Cost recovery: legal framework
Generally, cost recovery is addressed in the Malaysian PSCs between PETRONAS and the Contractors. The relevant provisions strongly resemble those found in their Indonesian counterparts (before Indonesia’s shift to the gross production revenue-sharing model), but with notable differences by way of royalty fees, caps and the so-called revenue-over-cost concept.

Similar to the other selected jurisdictions, Contractors bear all risks and only recover their investment if a discovery is made and the relevant upstream asset proceeds to production.28 After payment of royalties to the government and the recovery of certain costs out of production, the Contractors share in the produced oil and gas in the manner agreed in the PSC.

Certain categories of expenses are non-recoverable. The way Malaysia’s PSCs differentiate between recoverable and non-recoverable cost is through a ‘negative list’, listing expenditures that cannot be cost recovered.29 Those not listed in the negative list are recoverable in so far as they relate to ‘Petroleum Operations’.30 The negative list is supplemented by PETRONAS’ cost recovery policies issued from time to time which, among other things, limit the costs recoverable by limiting the number of expatriates employed and their employment benefits.

With respect to abandonment costs, generally PSCs stipulate that such costs incurred during the term of the PS shall be cost recoverable. Usually, Contractors are obliged to calculate and submit for PETRONAS’ approval, a comprehensive Annual Abandonment Work Programme and Budget. Unlike certain other jurisdictions where monies for abandonment operations are set aside or a provision is made by the Contractors for these amounts, under Malaysian PSCs, generally, Contractors are required to make cash payments

23 ibid, arts 4, 5 and 6(1).
24 Malaysian Investment Development Authority, ‘Investment Opportunities in Asia’s Oil and Gas Hub’ (2018) 5, 6.
25 Christopher Lee and Loy Ee Lin, ‘Malaysia’ in Bob Palmer (ed) Getting the Deal Through: Oil Regulation 13 (2016) 104.
26 See, eg Intan Farhana Zainul, ‘Malaysia Has 100 Active Production Sharing Contracts, Highest Ever’ The Star (12 December 2013).
27 Bank Pembangunan, ‘Report on Malaysia Oil and Gas Exploration and Production’ (2011) 60.
28 Petroleum Reg 1974 (1974) (amended 1991) s 3.
29 Tengku Machmud, The Indonesian Production Sharing Contract: An Investor’s Perspective (Kluwer Law International 2000) 98, 122.
30 ibid 98.
towards future abandonment of ‘Petroleum Facilities’ (referred to as ‘abandonment cess’) to PETRONAS on an annual basis with such funds then being made available to Contractors when abandonment work is actually undertaken.

There are certain limitations to cost recovery as well. In contrast to Indonesia’s cost recovery PSC, Malaysian PSCs cap the cost recovery to a certain percentage of total production. Today, this cap is based on a revenue-over-cost concept (the ‘R/C PSC’), under which PETRONAS measures the Contractor’s revenue against its costs (the ‘R/C Index’) and allows for a higher cost recovery ceiling should costs be equal to or greater than the revenue. The basic principle is to allow Contractors a higher share of production when their profitability is low and to increase PETRONAS’ share of production when Contractor’s profitability improves Table 3. With greater levels of profitability, the cost recovery ceiling lowers, leading to decreased recovery.

Table 4 below lists the recoverable and non-recoverable costs under Malaysian PSCs generally.

**Audit and dispute resolution mechanism**

Similar to Indonesian PSCs, generally, Malaysian PSCs give Malaysia and PETRONAS a right to audit the Contractor’s books and accounts for any calendar year covered by the PSC. Malaysian PSCs also provide that any dispute arising between the Contractor and PETRONAS that cannot be settled amicably is to be submitted to arbitration in accordance with the Rules of Arbitration of the now Asian International Arbitration Centre in Kuala Lumpur.

4. **THAILAND**

**Overview**

Home to roughly 4 per cent of confirmed oil and gas reserves in Southeast Asia, Thailand is by no means the largest player in the region. It has limited geological options and imports more than 20 per cent of its natural gas and about 70 per cent of its crude oil requirements. The growing demand for gas makes maintaining domestic gas supplies and securing new imports particularly important for Thailand. In that connection, Thailand has made recent changes.

Under its key legislation, the Petroleum Act, BE 2514 (1971) (‘PA’), Thailand opted for petroleum concessions, and not cost recovery PSCs. In 2017, however, with the goal of attracting domestic and foreign investment, Thailand amended the PA authorizing the Thai Ministry of Energy, which regulates the oil and gas

---

31 Putrohari & Kaszanto & Suryanto & Abdul Rashid, Proceedings, Indonesian Petroleum Association, 'PSC Term and Condition and Its Implementation in South East Asia Region' (Thirty-First Annual Convention and Exhibition, May 2007) 3, 11 (hereinafter, PSC Term and Condition).
32 ibid.
33 ibid 3.
34 For completeness, in addition to the R/C PSC model, there are other PSC models: (i) the deepwater PSC (which incorporates the R/C concept) and (ii) progressive volume based PSCs (similar to the pre-R/C model PSCs, where the profit oil split is determined on a sliding scale based on the level of production achieved but instead of the profit split becoming increasingly in PETRONAS' favour as production increases, it shifts in the Contractor's favour).
35 See Malaysian Investment Development Authority (n 24) 5; David Beckstead and others, 'Oil Regulation: Thailand, Getting the Deal Through Joins Lexology' (Chandler MHM Limited, 17 April 2020) <https://gettingthedehalthrough.com/area/24/jurisdiction/60/oil-regulation-thailand/> accessed 27 August 2020.
36 Ministry of Energy, 'Information Memorandum, Thailand Petroleum Bidding Round 2018 for Offshore Block G1/61 & G2/61' (2018) 4; International Financial Law Review, 'Thailand: Petroleum Law Update' (26 January 2018) <https://www.iflr.com/Article/3783371/Thailand-Petroleum-law-update.html> accessed 13 December 2019.
37 Beckstead & Kishi & Wechsuwanarux, Chandler MHM Limited, 'Oil Regulation, Thailand' (June 2019) <https://gettingthedehalthrough.com/area/24/jurisdiction/60/oil-regulation-thailand/> accessed 13 December 2019; EY, Global Oil and Gas Tax Guide (2018) 657–40. For completeness, the exception was contractors operating in the Malaysia-Thailand Joint Development Area, which have had available conventional cost recovery PSCs.
Table 4. Cost recovery in Malaysia: non-recoverable and recoverable items

| Non-recoverable items                                                                 | Recoverable items                                                                                                                                 |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Costs incurred as a result of proven negligent act or omission or wilful misconduct of Contractors | 1. Costs not listed as non-recoverable that relate to the exploration, development and production of petroleum and subject to the cap in the PSC |
| 2. The replacement and/or costs in respect of assets or other property that are uninsured or under-insured and liability incurred to third parties on the basis of strict liability |                                                                                                                                                   |
| 3. All amounts of Contractors are liable to pay to PETRONAS as indemnity payments      |                                                                                                                                                   |
| 4. All expenditure in connection with the negotiation, signature or ratification of the PSC or any other costs incurred by the Contractors prior to the effective date of the PSC |                                                                                                                                                   |
| 5. Cash payments for every kilolitre of Contractors’ Portion of Profit Oil for a month, and research cost and other payments (including bank charges and commissions) |                                                                                                                                                   |
| 6. Any expenditure in connection with the raising of money to finance Petroleum Operations and other incidental costs and charges (including interest, bank charges, commissions, fees and brokerage) |                                                                                                                                                   |
| 7. Audit and accounting fees (except fees and expenses incurred for audit and accounting services required by the PSC) |                                                                                                                                                   |
| 8. Any expenditure in respect of the hiring or leasing of equipment, plant, machinery or other property or facilities (except as approved by PETRONAS or is reasonably warranted in emergency or extraordinary circumstances) |                                                                                                                                                   |
| 9. Any costs and charges relating to formation of any related company or any partnership or joint venture |                                                                                                                                                   |
| 10. Payment of compensation or damages under the PSC and other payments not arising out of Petroleum Operations |                                                                                                                                                   |
| 11. Central administration or head office costs which are not substantiated to the reasonable satisfaction of PETRONAS as being incurred in connection with the Petroleum Operations under the PSC or which are excessive |                                                                                                                                                   |
| 12. All taxes on Contractors’ income or profits under any applicable law and export duties |                                                                                                                                                   |
| 13. All costs, expenses and charges relating to the settlement of disputes              |                                                                                                                                                   |
| 14. Any costs, charges or expenses, including donations relating to public relations or enhancement of Contractors’ image and interests |                                                                                                                                                   |
| 15. Local offices and local administration costs, including excessive staff benefits unless approved by PETRONAS |                                                                                                                                                   |
| 16. Any expenditure which is not related to Petroleum Operations                      |                                                                                                                                                   |
| 17. Claims for expenditure which are not adequately supported and documented           |                                                                                                                                                   |
| 18. All costs and expenses related to training of expatriate personnel                 |                                                                                                                                                   |
industry, to allow PSCs, in addition to concessions. The first-ever PSC bidding round was opened in 2018, which was awarded to the state-owned oil and gas company PTT Exploration and Production and Mubadala Petroleum.

**Cost recovery: legal framework**

The 2017 amendment to the PA defines the basic provisions of PSCs: all actual expenses in upstream operations are to be borne by the Contractor and are recoverable from production, as detailed in the actual terms of the contract (and the underlying WP&B as approved by the Director-General and the Petroleum Commission).

These provisions also limit cost recovery, which cannot exceed 50 per cent of the total production, though provisions allow for the carry forward of unrecovered costs to the following year, so long as such recoverable expenses for that year also do not exceed 50 per cent of production and the terms as set out in the PSC.

Similar to Malaysian PSCs, the 2017 amendment provisions also require the payment of a 10 per cent royalty on total production by the Contractor to the government. After royalty and cost recovery, the remaining share of equity oil is to be divided between the government and the Contractor as specified in the agreement, though no more than 50 per cent can be distributed to the Contractor.

It remains uncertain how exactly the new regime will be administered in practice. However, certain 2018 ministerial regulations have provided some guidance as to the recoverability of certain costs such as decommissioning liabilities. In general, decommissioning costs may be recoverable if they were incurred in accordance with a work plan approved by the Director-General.

### 5. VIETNAM

**Overview**

Vietnam has the second-largest proven oil and gas reserves in Southeast Asia, after Indonesia. It is still, however, only the fourth-largest producer of oil and gas in the region, after Indonesia, Malaysia and Myanmar. Oil and gas is one of the top priorities of the government and thus, there are potential opportunities in the sector for both domestic and foreign investors.

**Cost recovery: legal framework**

The 1993 Petroleum Law, as amended in 2000 and 2008 (the ‘Petroleum Law’), is the principal legislation that regulates the oil and gas industry in Vietnam. With respect to cost recovery, it provides that the Contractor ‘shall have’ the right ‘to recover their capital investment under the terms of the Petroleum Contract’.

The 2013 Vietnamese Model PSC also provides that the Contractor ‘has the obligation to carry out Petroleum Operations at its own expense in a safe and efficient manner and at its own risk’ and that the

---

38 See Ratana Poonsombudlert and others, ‘Thailand: Petroleum Law Update’ (Int’l Fin L Rev, 26 January 2018) <https://www.iflr.com/Article/3783371/Thailand-Petroleum-law-update.html?ArticleId=3783371> accessed 27 August 2020.
39 ‘Thailand Offers Two Offshore Blocks under First Ever PSC Regime’ (Offshore Energy Today, 26 April 2018) <https://www.offshoreenergytoday.com/thailand-offers-two-offshore-blocks-under-first-ever-psc-regime> accessed 28 August 2020; Ministry of Energy, ‘Thailand, 2018 Annual Report’ <http://dmf.go.th/resources/annualReport/ebook/annual2018/index.html> accessed 9 April 2020; Satawasin Staporncharnchai & Jessica Jaganathan, ‘UPDATE 3-PTTEP Wins Erawan, Bongkot Petroleum Blocks in Gulf of Thailand’ (Reuters, 13 December 2018) <https://www.reuters.com/article/thailand-energy-auction/update-3-pttep-wins-erawan-bongkot-petroleum-blocks-in-gulf-of-thailand-idUSL3N1YI2BB> accessed 27 August 2020.
40 Tomkiewicz & Boonsanong & Pantumkomon, ‘Petroleum Decommissioning Regulations in Cambodia, Myanmar, Thailand, and Vietnam’ (Tilleke & Gibbins, 4 December 2019) <https://www.tilleke.com/resources/petroleum-decommissioning-regulations-cambodia-myanmar-thailand-and-vietnam> accessed 13 December 2019.
41 See Malaysian Investment Development Authority (n 24) 6.
42 Petroleum Law, 1993, art 28(8) (amended 2000, 2008).
‘Petroleum Operation Costs shall be borne and recovered by the Contractor in accordance with the Contract’.43

Articles 6.1.1 and 6.2.1 of the Vietnamese Model PSC provide for a quarterly allocation of ‘Cost Recovery Oil’ out of the net oil production for cost recovery of Petroleum Operation Costs by the Contractor.44 ‘Petroleum Operation Costs’ is defined as ‘all expenditure made and incurred by the CONTRACTOR to carry out Petroleum Operations, determined in accordance with the accounting procedures in Exhibit B and recovered in accordance with Articles 6.1.2, 6.2.2 and Article 11.2.2’.45 ‘Petroleum Operations’ in turn is defined as ‘all Exploration Operations, Development Operations, Production Operations and Abandonment Operations, including all activities directly servicing such operations’.46 The mechanism is similar to natural gas allocation and cost recovery.47

Cost recovery is allocated ‘during each Quarter provided that in no Quarter shall the amount allocated to Cost Recovery Oil exceed [a contractually determined cost recovery ceiling]’.48 Operation costs ‘which are not recovered in a Quarter may be carried forward to the next succeeding Quarters without interest until fully recovered or the termination of the contract, whichever occurs earlier’.49

With respect to abandonment obligations, the Vietnamese model PSC requires the Contractor to ‘carry out the abandonment’ and to prepare an Abandonment Plan to be approved by the Ministry of Industry and Trade.50 The PSC further provides that ‘[a]ll expenses incurred and borne by the Contractor for Abandonment Operations in accordance with the approved Abandonment Plan shall be Petroleum Operation Costs for the purposes of cost recovery’,51 which are recoverable under Articles 6.1.2 and 6.2.2.52

Table 5 below lists the recoverable and non-recoverable costs under Vietnamese PSCs generally.

Whether other costs which do not generally constitute ‘Petroleum Operation Costs’ are recoverable depends on the particular PSC. Under the Petroleum Law, ‘the parties to the contract may agree upon other provisions which are not inconsistent with the provisions of this Law and Vietnamese Laws’.53

Before costs can be recovered, Vietnamese PSCs require the payment of a royalty that is calculated on an incremental sliding scale based on the rate of production for the particular contract area.54 Following royalty payment and cost recovery, the PSCs allow for profit-sharing, which also occurs on an incremental sliding scale based on production levels.55

Audit and dispute resolution mechanism

Generally, Vietnamese PSCs give Petrovietnam, the state-owned oil and gas company, a right to audit the Contractor’s books and accounts for any calendar year covered by the PSC, with at least 30 days’ advance written notice. Similar to the Philippines, the model PSC requires that the audit be completed within 12 months of the audit request.

Vietnamese PSCs also provide that, failing an amicable settlement, disputes should be submitted to arbitration before a three-member tribunal. The Vietnamese Model PSC does not select a specific arbitral institution or rules, leaving that for the parties to negotiate.

43 Decree No 33/2013/ND-CP, 2013, arts 1.2.3 and 1.2.4 (Vietnam Model PSC).
44 ibid, art 6.1.2.
45 ibid, art 1.1.57.
46 ibid, art 1.1.58.
47 ibid, art 6.2.
48 ibid, art 6.1.2(a).
49 ibid, art 6.1.2(c).
50 ibid, art 14.3.
51 ibid, art 14.3.3.
52 ibid, art 1.1.57.
53 Petroleum Law (n 42) art 15.
54 Vietnam Model PSC (n 43) art 6.1.1.
55 ibid, arts 6.1.3 and 6.2.
Overview

Of the jurisdictions reviewed here, the Philippines has the smallest proven reserves and the lowest levels of actual oil and gas production. However, with rising domestic demand, the government (in particular, the Department of Energy as the upstream regulator) has in recent years invested substantial political capital to attract greater levels of interest from upstream Contractors. Though the real impact to upstream regulations is yet to be seen, such policy is a welcome change, as Philippines upstream oil and gas sector regulation has historically been known for ‘saddling energy companies with red tape’.

Table 5. Cost recovery in Vietnam: recoverable and non-recoverable items

| Recoverable items                                                                 | Non-recoverable items                                                                 |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1. All expenses actually incurred for exploration and exploitation of crude oil and gas, capped at specified annual rates, until full recovery. The parties to a PSC can agree on the annual rates of up to 70 per cent for ‘encouraged projects’, 50 per cent for other projects or (if there is no specific provision agreeing on the relevant rate in the PSCs), 35 per cent of the total production revenues. | 1. Tax payments, such as royalties tax, corporate income tax and export duties. |
| 2. Contractor’s proportionate share of operations costs.                          | 2. Expenses in relation to the sale of crude oil.                                    |
| 3. Expenses incurred for PETROVIETNAM’s representatives to supervise the Petroleum Operations. | 3. Bonus and data fees, including signature bonus, commercial discovery bonus, first production date bonus, bonus for various levels of increased production and access to data fees. |
| 4. Expenses incurred in providing copies of data to PETROVIETNAM.                 | 4. Training fees, and payments to the Petroleum Scientific Research and Technology Development Fund. |
| 5. Expenses incurred with regards to arbitration costs relating to settlement of dispute between Parties to the Contract and a third party. | 5. Expenses incurred in the independent auditing of Contractor, until settlement of relevant disputes. |

*See EY (note 37) 744; see also Vietnam Model PSC (n 43) art 6.1.2 (providing a contractual template for cost recovery provisions). Encouraged projects refers to projects that involve petroleum operations in a deep-sea and remote offshore area or in a region with especially difficult geographical or complex geological conditions and in other areas in accordance with the list of blocks decided by the Prime Minister; and a project carrying out coal bed methane exploration and production (Petroleum Law (n 42) art 3.12).

6. PHILIPPINES

Overview

Of the jurisdictions reviewed here, the Philippines has the smallest proven reserves and the lowest levels of actual oil and gas production. However, with rising domestic demand, the government (in particular, the Department of Energy as the upstream regulator) has in recent years invested substantial political capital to attract greater levels of interest from upstream Contractors. Though the real impact to upstream regulations is yet to be seen, such policy is a welcome change, as Philippines upstream oil and gas sector regulation has historically been known for ‘saddling energy companies with red tape’.

---

56 See Malaysian Investment Development Authority (n 24) 5.
57 See generally about PNOC EC <https://pnoc-ec.com.ph/about-pnoc-ec> accessed 5 July 2019; Presidential Decree No 87, 4; EY (n 37) 521.
58 See, eg Department of Energy, ‘DOE to Launch New Petroleum Contracting Program’ <https://pia.gov.ph/news/articles/1012526> accessed 8 July 2019; Kris Crismundo, ‘More Oil Exploration Activities in PH Pushed’ (Philippine News Agency, 5 October 2018) <https://www.pna.gov.ph/articles/1052149> accessed 27 August 2020.
59 John Reed and Grace Ramos, ‘Philippines Set to Develop 14 Petroleum Blocks’ Financial Times (26 March 2018) <https://www.ft.com/content/7759221a-2cc3-11e8-9b4b-bc4b9f08f381> accessed 27 August 2020.
Cost recovery: legal framework

Presidential Decree No 87 (known as the ‘Oil Exploration and Development Act of 1972’) (‘PD 87’) provides that the Contractor ‘shall ... assume all exploration risks such that if no petroleum in commercial quantity is discovered and produced, it will not be entitled to reimbursement’.60 PD 87 also provides that the government shall:

reimburse the CONTRACTOR for all operating expenses not exceeding seventy percent of the gross proceeds from production in any year. Provided, that in any year the operating expenses exceed

| Recoverable items: operating expenses | Recoverable items: capital expenses |
|--------------------------------------|-----------------------------------|
| 1. Costs attributed to the acquisition, renewal or relinquishment of surface rights for the operations | 1. Tangible investments, including initial cost of physical assets classified as depreciable, to be allocated to Operating Expenses over a five-year period |
| 2. Wages of employees of the Contractor who are directly engaged in exploration, development, maintenance and operation of the contract area, as reflected on payrolls | 2. Intangible exploration costs, to be reimbursed in full |
| 3. Certain pre-specified employee benefits such as health insurance and pension benefits | 3. Leasehold improvements, to be allocated to Operating Expenses over a five-year period |
| 4. Material, equipment and supplies purchased or furnished by the Contractor for use in the operations | |
| 5. Transportation expenses of employees, equipment, material and supplies necessary for the operations | |
| 6. Cost of services and utilities procured from outside sources in relation to geological, geophysical and drilling services | |
| 7. Costs necessary to replace or repair damages or losses not recovered from insurance incurred by fire, flood, storm, theft, accident or any other cause not controllable by the Contractor through reasonable diligence | |
| 8. Costs of litigation or legal service for the protection of joint interests | |
| 9. Premiums paid for insurance required for the operations | |
| 10. Administrative costs for principal and district offices located within the Philippines | |
| 11. Administrative costs for expenses outside of the Philippines limited to 3 per cent or less of the expense | |
| 12. Any other expenditure necessarily incurred by the Contractor for the operations | |
| 13. Any interest or other consideration paid in respect of the financing as approved by the government for the development and production operations, limited to two-thirds of the amount, except interest on loans incurred to finance exploration operations | |

Table 6. Cost recovery in Philippines PSCs

---

60 PD 87, s 8(e).
seventy percent of gross proceeds from production then the unrecovered expenses shall be recovered from the operations of succeeding years.\footnote{ibid, s 8(1) (emphasis added); Department of Energy, Model Petroleum Service Contract (2014) s 1, art 1.03 (Philippine Model PSC). For clarity, this article uses the term ‘Philippine Model PSC’ to refer to what the Philippine legislation refers to as the ‘Petroleum Service Contract’.}

In contrast to Indonesia and similar to Malaysia, the Philippine Model PSC caps cost recovery at 70 per cent of annual gross revenue.

In each Calendar Year, the CONTRACTOR shall recover from the Gross Income resulting from the sale, exchange, or other disposition of all Petroleum produced under this Contract an amount equal to \textbf{all unrecovered Operating Expenses}\footnote{Operating Expenses are defined as ‘total expenditures incurred by CONTRACTOR both within and outside of the Philippines in all Petroleum Operations performed pursuant to [the] Contract’ as defined by the Accounting Procedures inserted as an annex to every Contract. Expenses may include, for instance, costs pertaining to Geophysical Survey and Exploration Contracts (eg processing of seismic data, geological studies, operation and maintenance of facilities, including general and administrative costs and expense, overhead costs); and costs pertaining to the lifting, transportation, storage, handling and sale of petroleum. Previous expenditures for petroleum operations in the contract area that relate to the Geophysical Survey and Exploration Contract before the effective date of the Petroleum Service Contract.} in accordance with Accounting Procedure; Provided, that the

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{cost_recovery_diagram.png}
\caption{Graphic illustration of cost recovery}
\end{figure}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|}
\hline
\textbf{Indonesia (PSC)} & \textbf{Indonesia (Gross split)} & \textbf{Malaysia (R/C PSC)} & \textbf{Philippines (PSC)} & \textbf{Thailand (PSC)} & \textbf{Vietnam (PSC)} \\
\hline
\textbf{First Tranche} & \textbf{(No cost recovery)} & \textbf{Royalty} & \textbf{Cost recovery} & \textbf{Royalty} & \textbf{Royalty/bonus} \\
\textbf{Cost recovery} & \textbf{(no cap)} & \textbf{Cost recovery} & \textbf{(capped at 70 per cent of annual gross revenue)} & \textbf{Cost recovery} & \textbf{Cost recovery} \\
\textbf{Profit-sharing} & \textbf{(no cap)} & \textbf{Profit-sharing} & \textbf{(capped at 50 per cent of total production)} & \textbf{Profit-sharing} & \textbf{Profit-sharing} \\
\hline
\end{tabular}
\caption{Overview of cost recovery in selected Southeast Asian jurisdictions}
\end{table}
Table 8. Comparison of recoverability of various categories of costs across the selected Southeast Asian jurisdictions

| Category of costs | Indonesia | Malaysia | Philippines | Vietnam | Thailand |
|-------------------|-----------|----------|-------------|---------|----------|
| Operating costs   | Y         | Y        | Y           | Y       | Y        |
| Inventory costs (ie cost relating to equipment, supplies) | Y         | Y        | Y           | Y       | N        |
| General administrative/legal costs incurred in connection with Petroleum Operations | Y         | Y        | Y           | Y       | Y        |
| Investment/capital costs | Y         | Y        | Y           | Y       | N        |
| Decommissioning costs (including contributions to reserve fund) | Y         | Y        | **          | Y       | Y        |
| Administrative and criminal sanctions, including claims, fines and penalties related to breach of upstream (or other) regulations | N         | N        | **          | N       | N        |
| Depreciation of assets | N         | N        | **          | N       | Y        |
| Expatriate labour costs | N         | Y        | **          | N       | Y        |
| Tax consultant fees | N         | N        | **          | Y       | N        |
| Marketing costs | Y         | N        | **          | N       | Y        |
| Public relations costs | N         | N        | **          | N       | Y        |
| Costs relating to sale/farm-in of interests in upstream asset | N         | N        | **          | N       | N        |
| Tax payments | N         | N        | **          | N       | N        |
| Procurement costs | Y         | Y        | **          | Y       | Y        |
| All expenditure incurred in connection with the negotiation, signature or ratification of the PSC or any other costs incurred prior to the execution of the PSC | N         | N        | **          | N       | N        |
| Audit and accounting fees | N         | N        | **          | N       | N        |
| Financing costs, including interest, bank charges, commissions, fees and brokerage | N         | N        | **          | Y       | N        |
| All costs, expenses and charges relating to the settlement of disputes relating to Petroleum Operations | Y         | N        | Y           | N       | Y        |
| Transportation expenses of employees, equipment, material and supplies necessary for petroleum operations | Y         | Y        | Y           | Y       | Y        |
| Local employees’ costs | Y         | Y        | Y           | Y       | Y        |

The amount so recovered shall not exceed seventy percent (70%) of the Gross Income from Petroleum production in any Calendar Year; Provided further, that if, in any Calendar Year, the unrecovered Operating Expenses exceed seventy percent (70%) of the Gross Income from Petroleum production, contract can be transferred and included in gross Operating Expenses, subject to the Department’s approval. See Philippine Model PSC (n 61) art 2.52.
or if there is no Gross Income, then the unrecovered Operating Expenses shall be recovered from the
Gross Income in the succeeding Calendar Year(s). If in any year the operating costs exceed the upper limit of 70 per cent of the gross proceeds from production or there are no gross proceeds, those unrecovered expenses may be recoverable from gross proceeds earned through production in the succeeding years. There is no time limit for the recovery of the uncovered expenses on the carryforward to succeeding years.

With respect to abandonment costs, under the Philippines Model PSC, the Contractor has the obligation to include in its Overall Development Program, submitted to the Department of Energy for approval, a provision for abandonment and payment of abandonment costs. Abandonment cost estimates are to be included in the annual Work Programme and Budget and recovered annually as Operating Expenses over the productive life of the Oil Fields and/or Gas Fields. For this purpose, within one year after the date of commencement of production, the Contractor is required to establish and maintain a sinking fund, in the form of a trust account with a reputable commercial bank in the Philippines in favour of the Department of Energy, the amount of which shall be equivalent to the estimated abandonment costs.

Similar to Indonesia and Malaysia, the Philippine PSCs generally include a list of costs that are recoverable and a negative list for the costs that are not recoverable Table 6.

Audit and dispute resolution mechanism
The Philippine Model PSC gives the government the right to audit the Contractor’s books, to be completed within 12 months after it is commenced. If the government raises any issues in relation to the Contractor’s books, the parties are to attempt to reach a mutually acceptable resolution, barring which, they are to settle the dispute through arbitration before a three-member tribunal in accordance with the ICC arbitration rules.

7. CONCLUSION
To sum up, generally, the cost recovery mechanism may be illustrated as in Figure 1.

The relevant cost recovery frameworks in Indonesia, Malaysia, Thailand, Vietnam and the Philippines are very similar in certain areas but also defer in others. At a high level, for example, as illustrated in Table 7, some jurisdictions require royalty to the government before cost recovery (Indonesia, Malaysia, Thailand, Vietnam, but not the Philippines), and some cap cost recovery (Malaysia, Philippines, Thailand, Vietnam, but not Indonesia).

With respect to specific recoverable and non-recoverable costs, there are also differences and similarities. Table 8, while not exhaustive and adopting general descriptions for the purposes of this comparison only, provides a summary of cost items that may be cost recoverable across the various jurisdictions.

---

63 Philippine Model PSC (n 61) s X, art 10.02, s I, art 1.03; PD 87, s 8(e).
64 EY (n 37) 522.
65 ibid.
66 Philippine Model PSC (n 61) s VII, art 7.01.h.
67 ibid.
68 ibid.