



# Regulatory in oil and gas industry



## 2. Regulatory in oil and gas industry





## Definition of **regulator** and **operator** in oil and gas industry

- It is an entity that **set policies and monitor** an industry's **prices, products, and practices** to ensure proper functioning of the market and ensure consumers' satisfaction.
- In oil and gas industry holding companies are considered as **operators**. They play significant operational roles in upstream and downstream sectors. **Operators must obey the regulator's policies.**



## Regulator(s) have three distinct roles which can be shared among several entities:



**Policy creation** (e.g. develop HSE policies)



**Policy oversight** (e.g. monitor HSE compliance based on HSE policies)



**Policy implementation** (e.g. award concessions / licenses)

✦ Regulator has mainly policy creation and oversight roles. Policy implementation depends on the country. In this report regulator is used for dedicated O&G regulator





Here is a comparison between regulators & operators roles in the industry

<b>Roles</b>	<b>Bodies</b>	<b>Regulator</b>	<b>Operator (Holding Oil &amp; Gas Companies)</b>	<b>conditions</b>
<b>Policy creation</b>		✓	✗	<b>This role only can be assign to regulator bodies</b>
<b>Policy oversight</b>		✓	✗	<b>This role only can be assign to regulator bodies</b>
<b>Policy implementation</b>		✓	✓	<b>Policy implementation in some countries is assigned to the holding companies</b>




## There are six major categories which cover many of the oil and gas policies set, overseen and implemented by regulators

### Categories of policies



#### General oil and gas policies



#### Exploration, development and production



#### Infrastructure



#### Decommissioning of petroleum activities



#### Environmental, health and safety



#### Sanctioning

### Example of policies

- Oil and gas fiscal / royalty policies
  - Oil and gas price setting
  - Tariffs and subsidies
  - Import / export policies
  - Foreign investment policies
- 
- Depletion policy (whether and at what pace to explore for oil and gas)
  - Award concessions / licenses
  - Exploration and production location determination
  - Exploration and production contracting mechanism
- 
- Permits for transportation, storage, distribution, compression, liquefaction, decompression, regasification, marketing, and sale of crude oil, oil products, and natural gas
- 
- Decommissioning program / policies (including entities liable for decommissioning costs)
- 
- Environmental policies
  - Health and safety policies
- 
- Legal sanctions for violations in the oil and gas sector



We have performed a global benchmarking assessment and have collated lessons learned

## KEY QUESTIONS

- Who will regulate the oil and gas sector?
- How many regulators are required?
- What is the authority of the regulator(s)?
- How many oil and gas Holding Companies are required to manage the entire value chain?
- Level of ownership of Holdings?

1

### Regulatory characteristics

- Number of regulatory bodies to execute the three roles of policy maker, regulator and implementer
- The authoritative positions of the bodies
- Authority level of the regulator(s)

2

### Holding Company (operator) characteristics

- Number of Holdco's across the value chain
- Level of government ownership of the Holdco(s)
- Business unites and legal entities within the Holding Companies



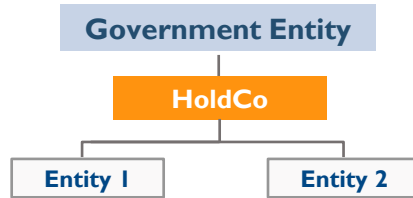
### **3. Regulatory Benchmarks in oil and gas industry**





# Investigating the number of operators (holdco's)

## Option 1: One Holdco



### Description

- One Holdco focusing on the entire oil and gas value chain

### Advantages

- Integrated decision making, providing clear alignment on sector vision and strategy
- More negotiation power with oil majors
- Single point of contact improves communication channels to the government

### Disadvantages

- Lack of independent decision making leading to increased bureaucracy

### Examples



Malaysia



Norway



Mexico

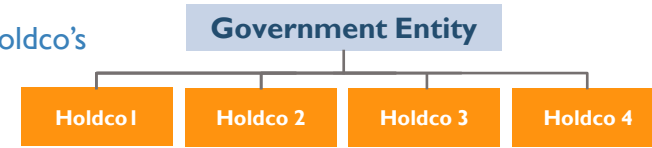


Saudi Arabia



UAE

## Option 2: Multiple Holdco's



- Each section of the oil and gas value chain has a separate Holdco, each reporting to their own Board of Directors

- Direct line of sight to the government on oil and gas matters
- Increased focus on a particular part of the oil and gas value chain

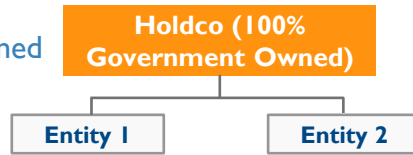
- Lack of integrated strategic approach across the oil and gas value chain
- Duplication of functions



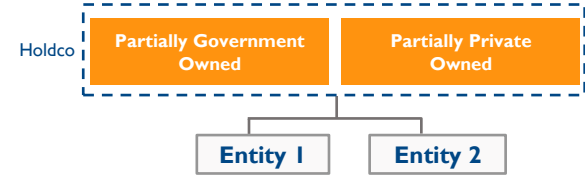
# Investigating ownership of operators (holdco's)

A country can decide to fully own the Holdco or share ownership with private organizations

Option 1: Fully government owned



Option 2: Partially government owned



## Description

- The government fully owns the Holdco. The legal entities beneath the Holdco may be owned by private organizations

- The government partially owns the Holdco. The remaining is owned by private organizations

## Advantages

- Full control of the oil and gas value chain by the government
- Enables country objectives are met easier and faster

- Improved access to financial resources and external capabilities
- Share risks with other private organizations

## Disadvantages

- Lack of business focus, due to risk of government priorities absorbing profits rather than investing in capex and R&D

- Misaligned interests between the government and private organizations
- Reduced level of control and influence to drive non business-related governmental agenda

## Examples



Statoil is owned 67% by the government and 33% by private investors



# Investigating the number of regulators in the industry

## Option 1: One regulatory body

### Regulator Upstream & Downstream

#### Description

- Independent oversight: one dedicated regulatory body across the upstream, midstream and downstream activities
- Most applicable when there is a large focus on either upstream or downstream

#### Advantages

- Ensures the interests of the entities across the value chain are aligned
- Increased efficiency through functional synergies
- Greater negotiation strength

#### Disadvantages

- Lack of specialized capabilities to regulate the entire value chain

#### Examples



## Option 2: Multiple regulatory bodies

### Regulator(s) Upstream

### Regulator(s) Downstream

- Independent oversight; multiple dedicated regulatory bodies for upstream and / or downstream activities
- Most applicable when upstream and downstream are well established

- Provides strategic focus on a particular part of the value chain ensuring;
  - Sector specific expertise
  - Reduced conflicts of interests
  - Increased agility

- Risk of disconnect between the regulators





## Investigating the number of regulators in the industry

### Option 1: One regulatory body

Regulator Upstream & Downstream

#### Explanation

 **Upstream:** Ministry of Energy, Industry and Mineral Resources (MEIM)  
**Downstream:** MEIM


 **Upstream:** Supreme Petroleum Council (SPC)  
**Downstream:** SPC


 **Upstream:** Malaysia Petroleum Resources Corporation (MPRC)  
**Downstream:** No dedicated regulatory body for downstream. Regulation is conducted by different ministries such as the Ministry of International Trade / Industry and Ministry of Domestic Trade, Cooperatives / Consumerism Ministry

### Option 2: Multiple regulatory bodies

Regulator(s) Upstream

Regulator(s) Downstream\*

 **Upstream:** Ministry of Energy (SENER) / Comisión Nacional de Hidrocarburos (CNH)  
**Downstream:** Energy Regulatory Commission (CRE)

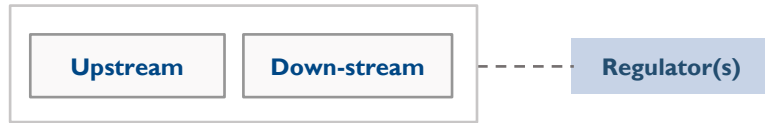
 **Upstream:** Ministry of Petroleum and Energy (MPE), Norwegian Petroleum Directorate (NPD) and Petroleum Safety Authority (PSA)  
**Downstream:** The downstream sector is market-based and is not heavily regulated



# Authority levels of a regulator

The position of the regulatory body dictates the level of authority

## Option 1: Fully authoritative



### Description

- Policy making regulator is Fully Authoritative and is responsible for setting, overseeing and implementing policies
- The regulator does not delegate policy oversight nor implementation to a dedicated NOC

### Advantages

- Ensures a direct line of sight to the government on oil and gas matters

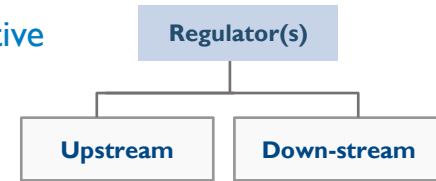
### Disadvantages

- Possible lack of specialized capabilities to set, regulate and implement policies as one entity
- Possible overload of one single entity overseeing the entire sector

### Examples



## Option 2: Partially authoritative



- The regulator will mainly focus on policy setting and oversight
- The regulator delegates implementation and / or oversight to a dedicated NOC

- Distribution of regulatory roles and responsibilities and reducing workload
- Empowering the NOC with more authorities

- Potential lack of operational visibility to the regulator
- Greater risk of non-compliance





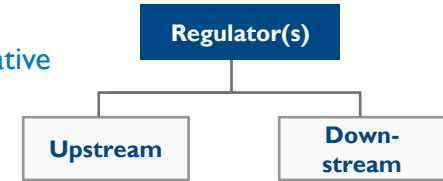
# Authority levels of a regulator

The policy creator can either be fully authoritative or share policy implementation with a national oil company.

## Option 1: Fully authoritative



## Option 2: Partially authoritative



## Explanation



The policy creators in Mexico (e.g., SENER / CNH) set, oversee and implement policies for the entire value chain. Pemex has to comply at the same level as private operators



The regulators (e.g. MPE and NPD) set, oversee and implement policies across the entire value chain. Statoil has to comply at the same level as private operators



The policy creator in Saudi Arabia (MEIM) delegates policy implementation to Saudi Aramco



The policy creator in UAE (SPC) delegates policy implementation to ADNOC



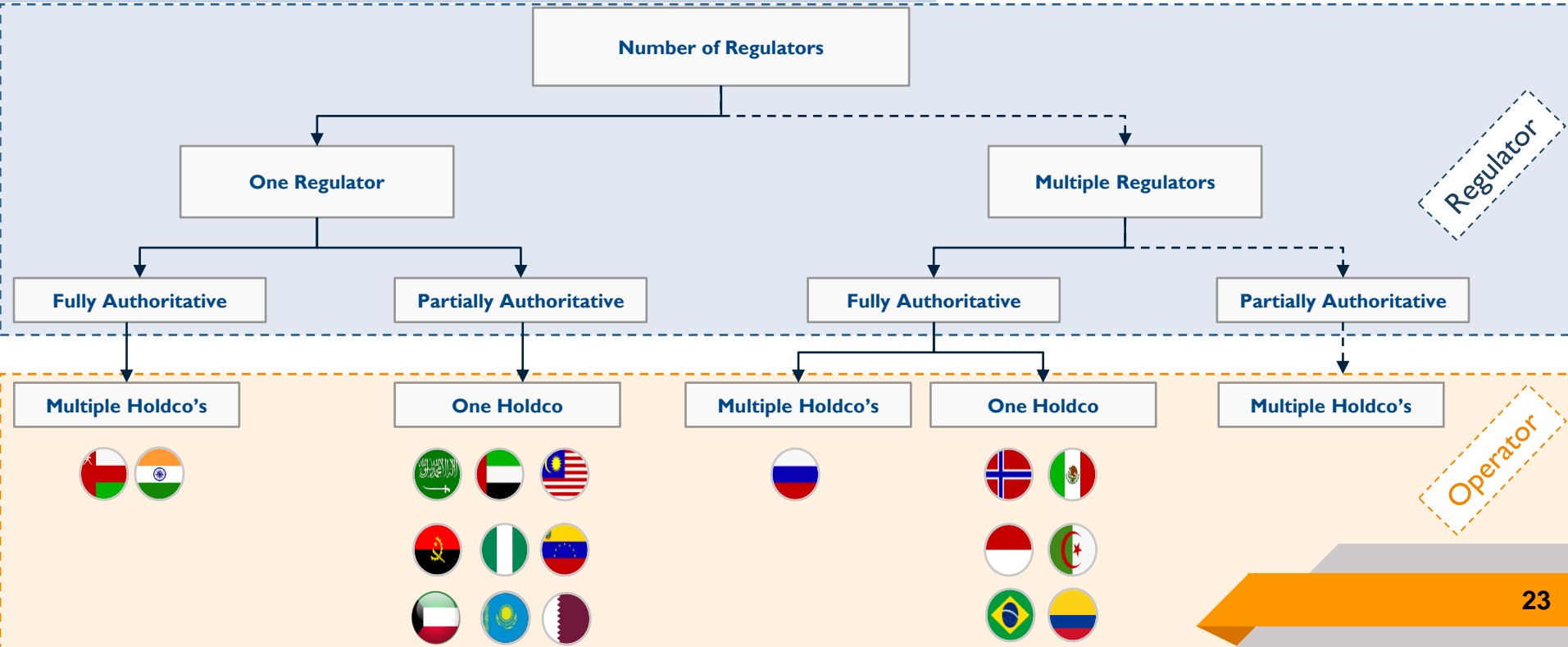
The upstream policy creator in Malaysia (MPRC) delegates policy implementation to Petronas

## 4. Conclusion of benchmarking





# Summary of regulatory and holding companies benchmark







## Relationship between the number of holding companies and the number of regulators

If there are **multiple regulators** in the industry, they **should be fully authoritative**.

If there is only **one regulator** that is **partially authoritative**, there should be only **one Holding company** in the industry.

If there is only **one regulator** in the industry that is **fully authoritative**, industry could have **multiple holding companies**.

Holding Companies have **integrated Value Chain**.

Most of the Holding companies are **state-owned** (100% government owned).

