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Oil to Gas Shifting by Regional Energy Diplomacy

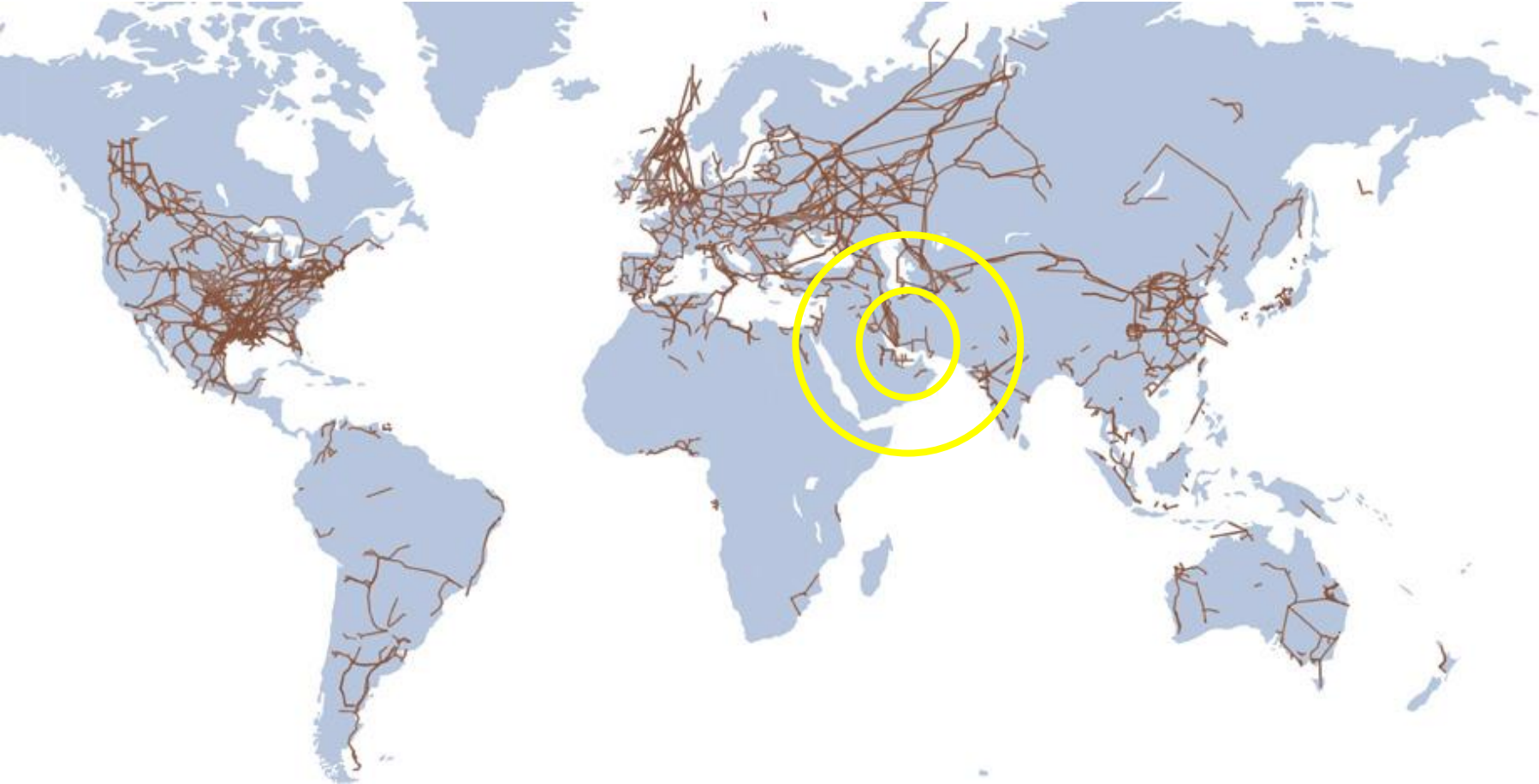
The Evolving Landscape of Natural Gas Ambitions in
the Persian Gulf: Challenges, Priorities, and Future
Prospects

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Why this topic is interesting even if you don't live in the Persian Gulf?

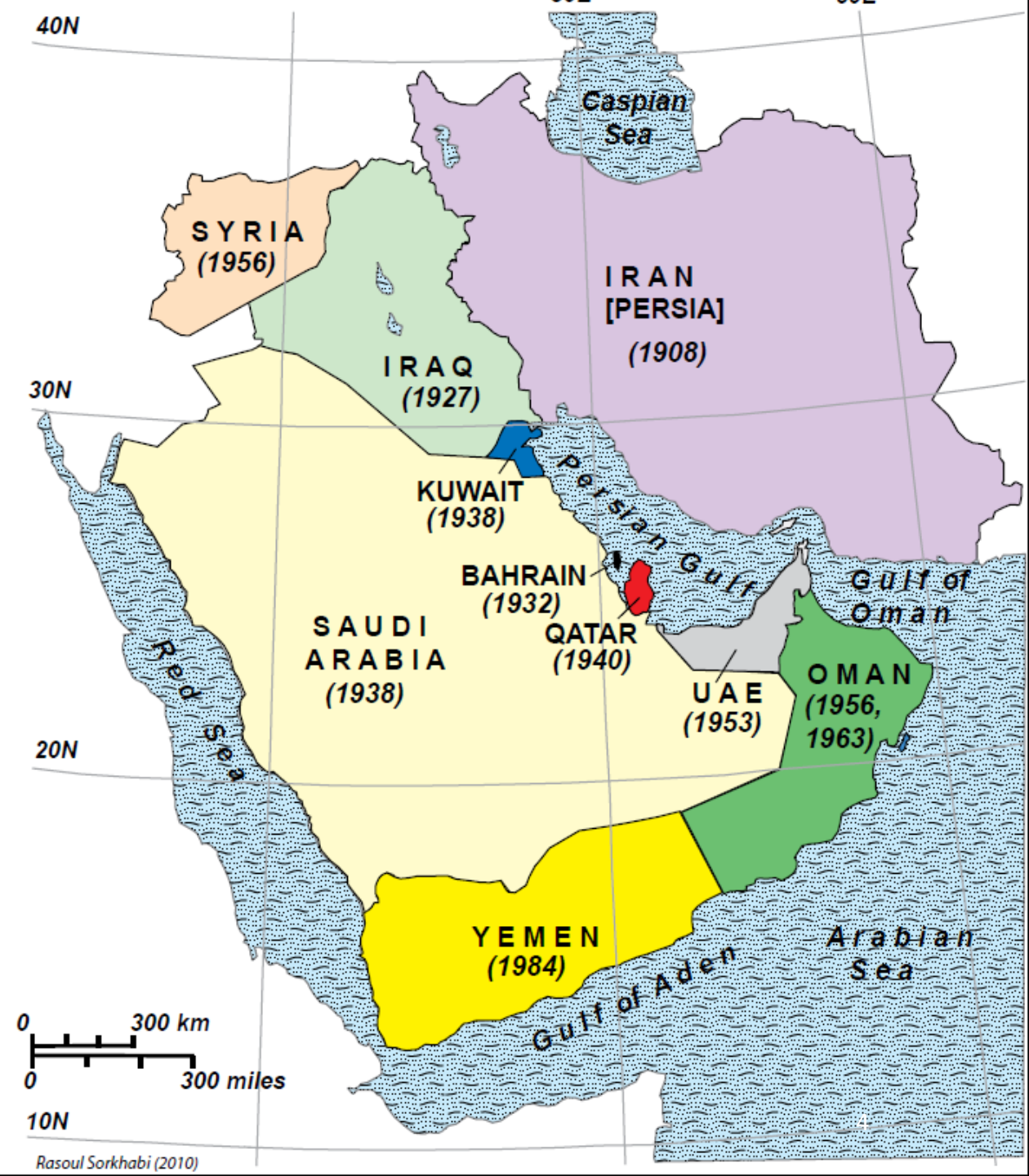
Global Map Of Natural Gas Transmission Pipelines



(IRENA, 2022, p. 73)

The Persian Gulf: Geopolitics Shaped by Oil and Gas

- **(Source: (Sorkhabi 2010))**
Rasoul Sorkhabi, "The First Oil Discoveries in the Middle East," *GEO ExPro Magazine*, 2010.



Top-ten oil and natural gas producers, 2018

Crude oil and NGL			Natural gas	
Rank	Producer	% of world supply	Producer	% of world supply
1	United States	15.6	United States	21.9
2	Saudi Arabia	12.4	Russia	18.2
3	Russia	12.0	Iran	5.9
4	Canada	5.7	Canada	4.8
5	Iraq	5.0	Qatar	4.3
6	Iran	4.8	China	4.1
7	China	4.2	Norway	3.2
8	United Arab Emirates	3.9	Australia	3.0
9	Brazil	3.6	Saudi Arabia	2.5
10	Kuwait	3.2	Algeria	2.4
Source of data: International Energy Agency, (IEA, 2019)				

Key Points:

1. Dual Energy Production

2. Global Standing

3. Persian Gulf Focal Point

4. Key Nations

5. Geopolitical Significance

Jale Tosun, "Energy Policy," in *Oxford Research Encyclopaedias*, vol. Politics (Oxford University Press, 2017),

Agenda

- Part One: Reserves, Supply and Demand
 - Gas Deficit and Surplus
 - Import Dependence
 - Diversification
- Part Two: Regional Security Complex: Targets and Policies
 - Political Crisis
 - Geopolitics, Pipelines, and Security
- Summary, Conclusion, Uncertainties

Part One: Reserves, Supply and Demand

Gas Deficit and Surplus
Import Dependence
Diversification

Gulf countries basic data of natural gas in 2020

	Total Proved Reserves (% of the world)	Total Proved Reserves (Tcm)	R/P ratio (year)
Bahrain	0.03	0.1	3.9
Iran	17.1	32.1	128
Iraq	1.9	3.5	336.3
Kuwait	0.9	1.7	113.2
Oman	0.4	0.7	18
Qatar	13.1	24.7	144
Saudi Arabia	3.2	6	53.7
United Arab Emirates	3.2	5.9	107.1
Total	39.8	74.7	110

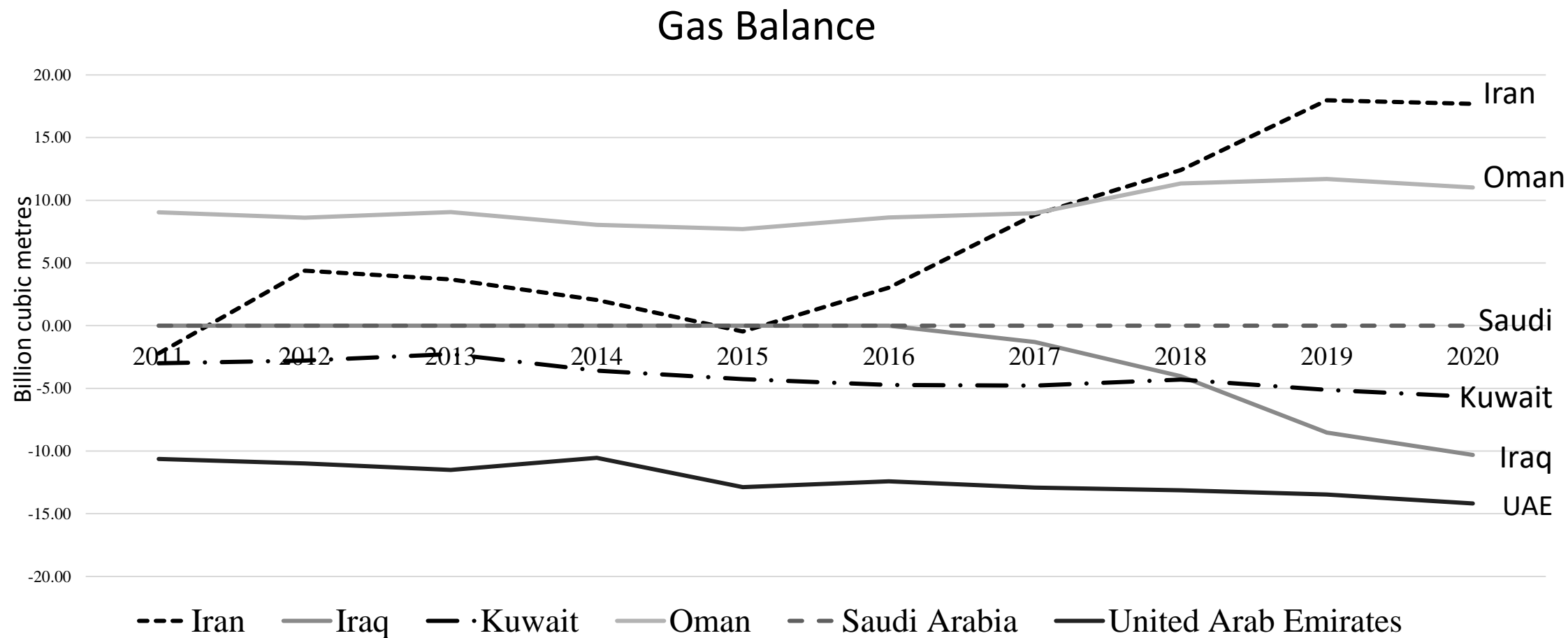
Source of Data: BP Statistical Review of World Energy 2021

Gas Production, Demand, and Exportable Surplus 2018-2040, in billion cubic metres

Scenarios	Production			Demand			Net exports		
	2018	2030	2040	2018	2030	2040	2018	2030	2040
Current policies	645	806	1045	535	674	857	110	132	188
Stated policies	645	787	1016	535	646	807	110	141	209
Sustainable development	645	681	651	535	550	507	110	131	144
Source: data from (WEO, IEA 2019), Inspired by (Stern, 2019)									

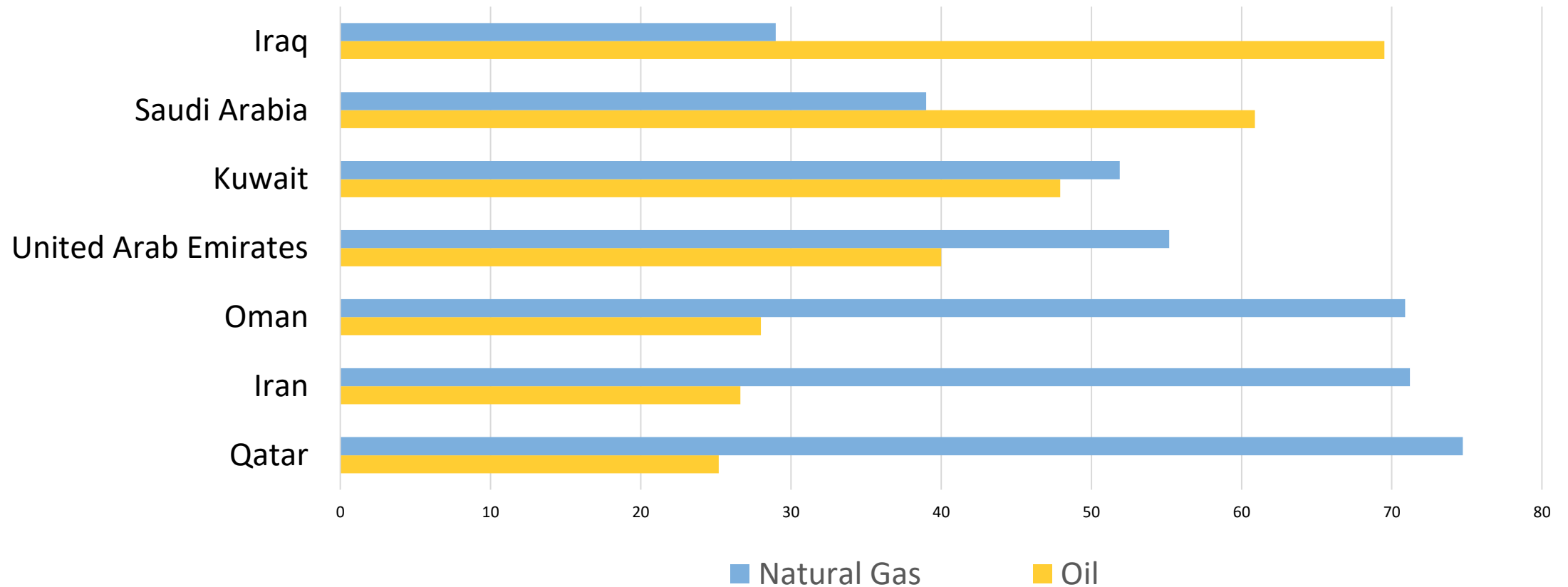
¹ IEA, “World Energy Outlook 2019” (Paris: IEA, 2019); Stern, *The Future of Gas in the Gulf: Continuity and Change*, p.2.

Gas Surplus/ Deficit in the Gulf



Share of Gas in Energy Mix (%)

Oil & Gas shares in Energy Mix 2021



Gas allocation comprises four primary categories

- Upstream oil production (mostly in-field power generation, and re-injection for improved recovery)
- Power generation
- Industry (feedstock for petrochemicals, including fertilizers and methanol, and fuel for industries such as aluminium and cement)
- Exports (Qatar LNG and Iranian pipelines)

Part Two: Regional Security Complex: Targets and Policies

Political Crisis
Geopolitics, Pipelines, and Security

Energy Security and the Regional Security Complex Theory (RSCT)

What is a Regional security complex?

By definition, 'set of units whose major processes of securitisation, de-securitisation, or both, are so interlinked that their security problems cannot reasonably be analysed or resolved apart from one another.'

- In the case of oil or gas pipelines, since threats come more from short distances than long ones, states' heavy dependence on a neighbouring supplier determines their **threat perceptions** towards the supplier, because they might not have any other options to diversify their resources.

What is the central idea in RSCT?

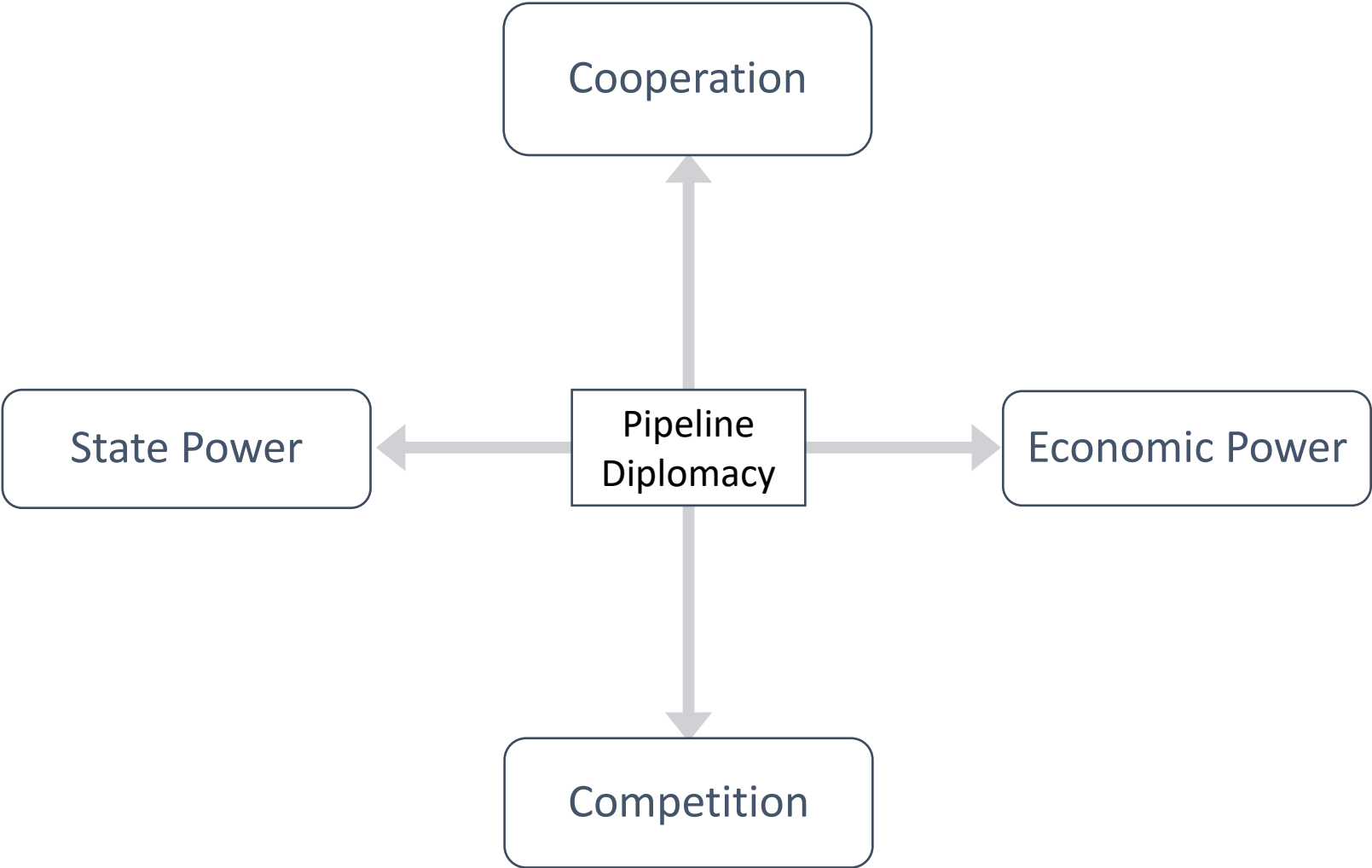
(Sharples, 2012)

“Most threats travel more easily over short distances than long ones, **security interdependence** is normally into regionally based clusters: security complexes.

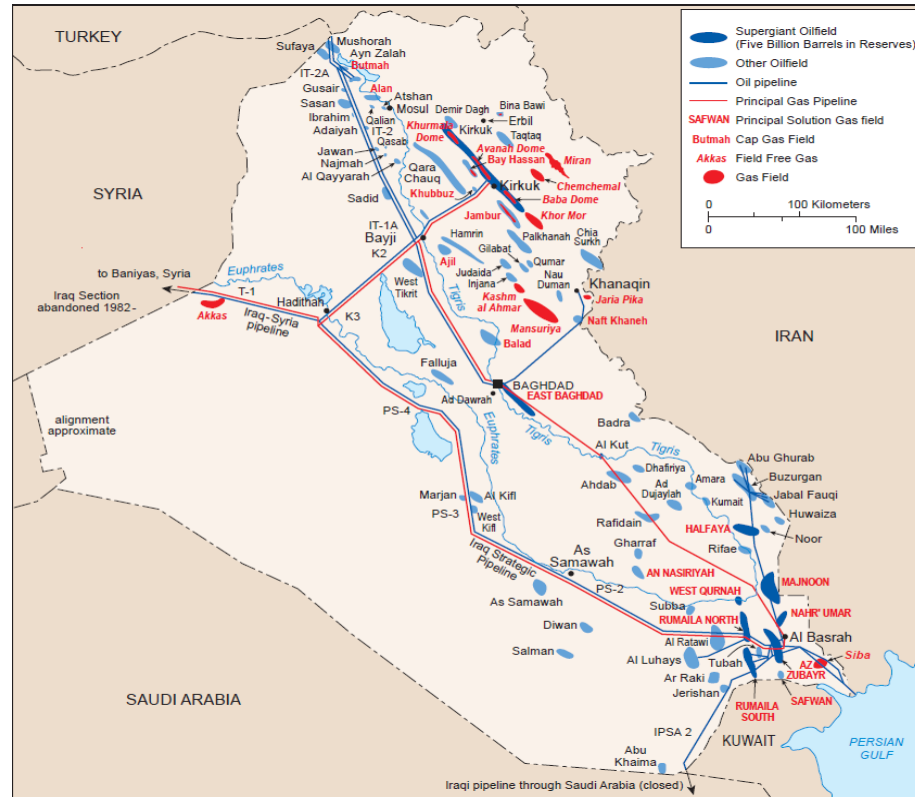
Process of securitization and thus the degree of security interdependence are more intense between actors inside such complexes than they are between actors inside the complex and outside of it”

A pipeline Security Framework

Security of Energy Supply and Demand



Gas and Oil Pipelines in the Upper Gulf



Two pipelines export gas from Iran to Iraq

Intra GCC Gas pipelines that failed

Project	Year launched	Gas source	Importing countries	Reason for failure	Source
GCC gas grid	1988	Qatar	KSA, Kuwait, Bahrain, UAE	Political/territorial disputes	Dargin 2011
Crescent Petroleum pipeline	2001	Iran	UAE (Sharjah)	Price disputes, GCC countries prevention of Iranian Emirati gas trade, Hard line factions of the Iranian Parliament	Adibi & Fesharaki 2011
Dolphin Pipeline extension to Kuwait	2005	Qatar	Kuwait	Saudi refusal to grant access to territorial waters	Dargin 2011
Iraq-Kuwait	2017	Iraq	Kuwait	Dispute in gas pricing or the location of petrochemical industries	Zidane 2018

^[1] Dargin, "Qatar's Gas Revolution," 317.

^[2] Siamak Adibi and Fereidun Fesharaki, "The Iranian Gas Industry," in *Natural Gas Market in The Middle East and North Africa*, ed. Bassam Fattouh and Jonathan Stern (OIES, 2011), 272–305.

^[3] Dargin, "Qatar's Gas Revolution."

^[4] Zidane, "Iraq Has Much to Gain from Gas-Supply Pact with Kuwait."

Intra-Gulf and International Politics

Impact of External Controversies and Conflicts

- International sanctions on Iran
- Rising Iran-Saudi rivalries and conflicts
- Political rift/economic embargo on Qatar by UAE, Saudi Arabia, Bahrain (and Egypt)
- Instability in Iraq and between the Kurdistan region and Baghdad government

• (Stern, 2019)

The geostrategic role of gas in the Middle East will grow

- 1. Iraq's Gas Initiatives:** Iraq, a major gas flaring country and a gas importer, is exploring options to address its gas needs. This includes the possibility of importing surplus gas from Kurdistan and developing non-associated gas fields in different regions. The country's energy resilience is becoming more critical due to a competitive oil market, rising power demand, and the energy transition.
- 2. Qatar's Growing Geostategic Power:** Qatar is poised to become a significant player in the global energy landscape due to its abundant natural gas resources. The country's strategic advantage lies not only in its gas reserves but also in its commitment to decarbonizing the gas value chain. Qatar Petroleum is involved in carbon capture and storage projects and is also investing in solar power, making it a leader in cleaner energy production
- 3. Saudi Arabia's Unconventional Gas Development** Saudi Arabia is actively pursuing unconventional gas development projects in South Ghawar and Jafurah. This move aims to reduce the reliance on liquid fuels in the power sector, which is a significant step in diversifying the country's energy mix.

Energy integration between Iran and Iraq

1. Energy Integration in Iraq and Iran:

- Both Iran and Iraq have taken steps towards energy integration to ensure a continuous flow of gas through pipelines.
- Iran has implemented monopoly rules to establish an Iran-Iraq energy relationship.

2. Importance of Energy Security:

- Long-term energy security requires a structure based on the doctrine of mutual interdependency, considering all necessary elements of gas supply and demand.
- "Asymmetric interdependence" and high dependency can lead to vulnerability and de-politicization, affecting a state's ability to securitize energy.

3. Challenges and Paradoxes:

- Globalization of energy markets and related externalities have led to a "paradox of sovereignty" where states have less control over energy policy but are reluctant to transfer authority to multilateral organizations.
- The external aspect of energy policy, including competition rules and securing ties with energy-supplying and transit countries, has been incoherent and inefficient.

4. Issues and Gaps in Energy Policy:

- Decision-making patterns regarding energy in foreign policy are diffused and decentralized at high authority levels.
- There is a lack of an efficient external energy policy to ensure an uninterrupted flow of natural gas at stable or sustainable prices.
- The focus on achieving an internal energy system often overlooks the increasing dependence on energy flows across borders.

5. Policy Implementation and Historical Context:

- Policy emphasis historically has been on governments adjusting decision patterns to manage demand efficiently, ensure internal security, and create a common pattern for energy use.

Qatar and the Dolphin Pipeline

1. The Dolphin Pipeline:

- The Dolphin pipeline's development involved complex political negotiations and concessions.
- Pricing terms for transported gas, like those in the Dolphin pipeline agreement, can be challenging to replicate due to changing market dynamics.

2. Geopolitical Dynamics and Regional Complexities:

- The Iran-Qatar relationship, along with interactions with neighbouring states, shapes the complexities of the ongoing Gulf crisis and broader regional dynamics

3. Energy as a Political Tool:

- Energy is viewed as a strategic tool in international politics, not just an economic asset.
- States leverage energy resources and interests for strategic and geopolitical gains.

Saudi Arabia: No Import-No Export Gas Strategy

1.Regional Security Complex Theory and Saudi Arabia:

Saudi Arabia's behaviour aligns with this theory, emphasizing power dynamics and historical relations.

2.Iran and Iraq as Regional Powers:

Absence of a regional security framework could lead to extended conflicts, influencing foreign policy in the region.

3.Saudi-Iran Rivalry and Regional Instability:

Ongoing rivalry shapes regional attitudes, occasionally triggering crises.

4.Pipeline Projects as Exceptional Measures:

States address security concerns through pipeline projects, a notable example being the East-West pipeline in the Arabian Peninsula.

5.Re-evaluating Existential Threats:

Rethinking characterization of issues as existential threats, considering alternative security approaches like pipeline projects.

6.'Culture of Rivalry':

Adib-Moghaddam introduced this concept in the Persian Gulf, highlighting confrontational interactions among political actors.

Summaries and Conclusion

Can Cooperation Enhance Natural Gas Utilization and vice-versa?

- 1. Energy Security Complex Model:** The energy security complex model involves analysing energy security based on regional dynamics, considering both economic and political aspects. This model aids in understanding the interplay between states, energy markets, and energy policy.
- 2. Energy Security Community:** Positive energy interdependency can lead to the formation of an energy security community, where nations work together to ensure secure energy supply and stable prices based on market principles.
- 3. Scenarios and Global Geopolitical Developments:** Scenarios based on global geopolitical developments provide insights into potential future trajectories of the energy sector. These scenarios highlight the dominance of either state-centric systems or global energy market mechanisms.
- 4. Interdependence vs. Negative Interdependency:** Interdependence isn't always positive, especially when considering issues like climate change, where negative consequences affect certain regions more than others. Similarly, energy dependency can have negative impacts, especially in regions where it is used as a tool for political influence.
- 5. Dependency Perception Alternatives:** Energy dependency can be viewed on a spectrum, ranging from positive interdependency (mutually beneficial) to negative dependency (unequal and threatening). This perception is influenced by the existing relations and interactions between states.
- 6. Historical Amity and Enmity Patterns:** Historical relationships and patterns of friendship or hostility between nations significantly influence how energy dependency is perceived. A positive history may lead to perceiving energy dependency as mutually beneficial interdependence, while a negative history can make the same dependency seem threatening.
- 7. Impact of External Controversies and Conflicts:** Energy dependency becomes more politicized or securitized when linked to other controversies or conflicts between states. Enmity perceptions can turn a dependency into a negative energy dependency, emphasizing the role of existing conflicts.
- 8. Economic-Political-Security Continuum:** The nature of energy dependency can be placed on a continuum that incorporates economic, political, and security aspects. This continuum helps in understanding how nations view and respond to their energy dependencies.

Uncertainties And Complexities

1. The international strategic importance of the Persian Gulf means that no relationship between the states can be a purely bilateral matter. Considerations relating to regional stability and third-party interests and influences are unavoidable.
2. Each country in the Persian Gulf has its own political and economic characteristics and priorities that will determine the nature and direction of their relations.

- **Notes:**
- GCC states are driven by strong domestic gas consumption growth and geopolitical motivations.
- Gas projects are crucial for the NOCs despite some potential project delays.
- Historically, gas has been sold at low, regulated prices in GCC countries.
- High demand growth in the region raises concerns about future supply.
- Gas fortunes differ, with Qatar being a major LNG exporter and other GCC countries facing shortages.
- GCC states have raised gas prices to address supply concerns.
- Oman, UAE, and Saudi Arabia are actively pursuing gas development to achieve self-sufficiency.
- Economic challenges may delay or alter the course of gas projects in the region.
- Competition comes from renewables, nuclear energy, and even coal.
- GCC countries are likely to continue with domestic gas projects, despite the challenges they pose.

GECF Members and Observers

- **Algeria**
- **Bolivia**
- **Egypt**
- **Equatorial Guinea**
- **Iran**
- **Libya**
- **Nigeria**
- **Qatar**
- **Russia**
- **Trinidad and Tobago**
- **UAE**
- **Venezuela**
- Angola
- Azerbaijan
- Iraq
- Malaysia
- Mozambique
- Norway
- Peru

Dolphin pipeline: connecting Qatar, the UAE, and Oman

- 1. Purpose and Significance:** The Dolphin pipeline was constructed to transport natural gas from Qatar's vast North Field to the United Arab Emirates (UAE) and Oman. This pipeline is a key component of the region's energy infrastructure, allowing the Gulf countries to access Qatar's abundant natural gas reserves.
- 2. Capacity:** In 2007, the Dolphin pipeline had a capacity to supply between 18.4 and 20.1 billion cubic meters per annum (bcma) of natural gas. This was a substantial amount and helped meet a significant portion of the UAE's gas demand.
- 3. Expiration of Contracts:** As you mentioned, the Dolphin contracts were set to expire after 2030. This is an important consideration, as it impacts the long-term energy strategy of the UAE and the region as a whole.
- 4. Gas Self-Sufficiency Goal:** The UAE's goal of achieving gas self-sufficiency by 2030 is a strategic objective aimed at reducing its reliance on gas imports, particularly from Qatar via the Dolphin pipeline. This is driven by a desire to enhance energy security and reduce vulnerability to potential supply disruptions.
- 5. Political Tensions and Economic Blockade:** The reference to political tensions and the economic blockade in 2017 alludes to the diplomatic crisis in the Gulf Cooperation Council (GCC) region. Saudi Arabia, the UAE, Bahrain, and Egypt imposed a blockade on Qatar, which had political and economic implications. The Dolphin pipeline remained unaffected, but such political tensions can influence the regional energy landscape.
- 6. Future of Dolphin Contracts:** The future of the Dolphin pipeline contracts is uncertain and depends on various factors, including political relations and economic considerations. If the UAE is successful in its gas exploration and development efforts and becomes more self-sufficient in gas production, it may choose to reduce its reliance on imports via the Dolphin pipeline.
- 7. Gas Pricing:** The mention of "new gas fees" suggests that any future contracts for gas supply through the Dolphin pipeline may involve negotiations on pricing. Given the strategic importance of the pipeline and the desire for gas self-sufficiency, the UAE may be willing to pay higher prices for gas, but this would depend on various factors, including market conditions and geopolitical dynamics.