

# The Sustainability of the Oil and Gas Business

Affin Hwang Oil and Gas Corporate Day  
16 October 2023

**EXECUTE–ENHANCE–EXCEL–EXPLORE**  
**DRIVING GROWTH**



# Agenda

**A Very Brief History of the Oil & Gas Industry**

**The Oil & Gas Business Today**

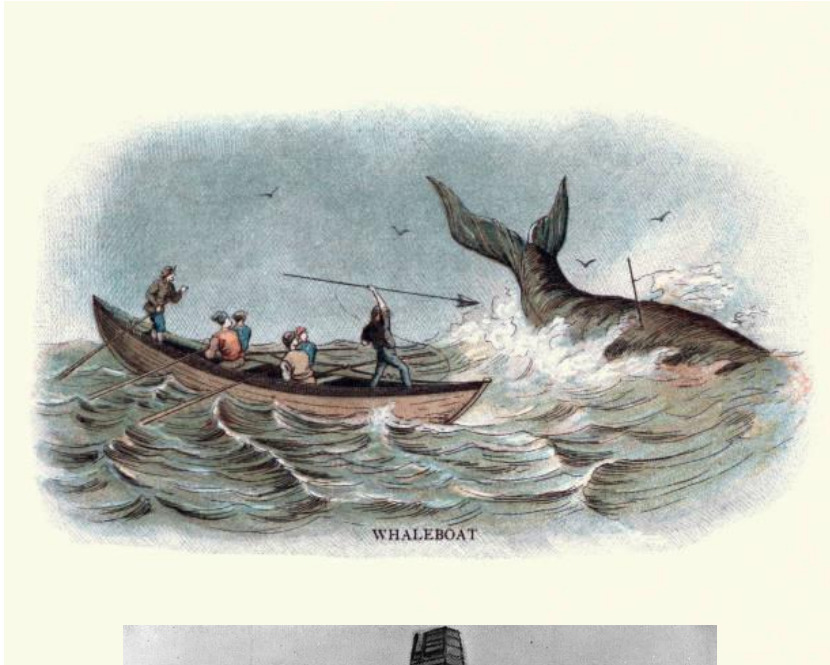
**Energy Security Considerations**

**Net Zero Considerations**

**Key Messages**

**About Hibiscus**

# A Walk Down Memory Lane ... 1



- In the early 1800s, oil was used for lighting and lubrication.
- Whales provided most of this oil.
- In the 1840s a method of manufacturing kerosene from coal was discovered by Abraham Gesner and whale oil had an alternative. But whaling continued. Even in the late 1930s, more than 50,000 whales were killed annually.
- Only in 1986, the International Whaling Commission (IWC) banned commercial whaling because of the extreme depletion of most of the whale stocks.
- In 1859, at Titusville, Pennsylvania, Col. Edwin Drake drilled the first successful well through rock and produced crude oil.
- Oil then becomes an important fuel and lubricant.

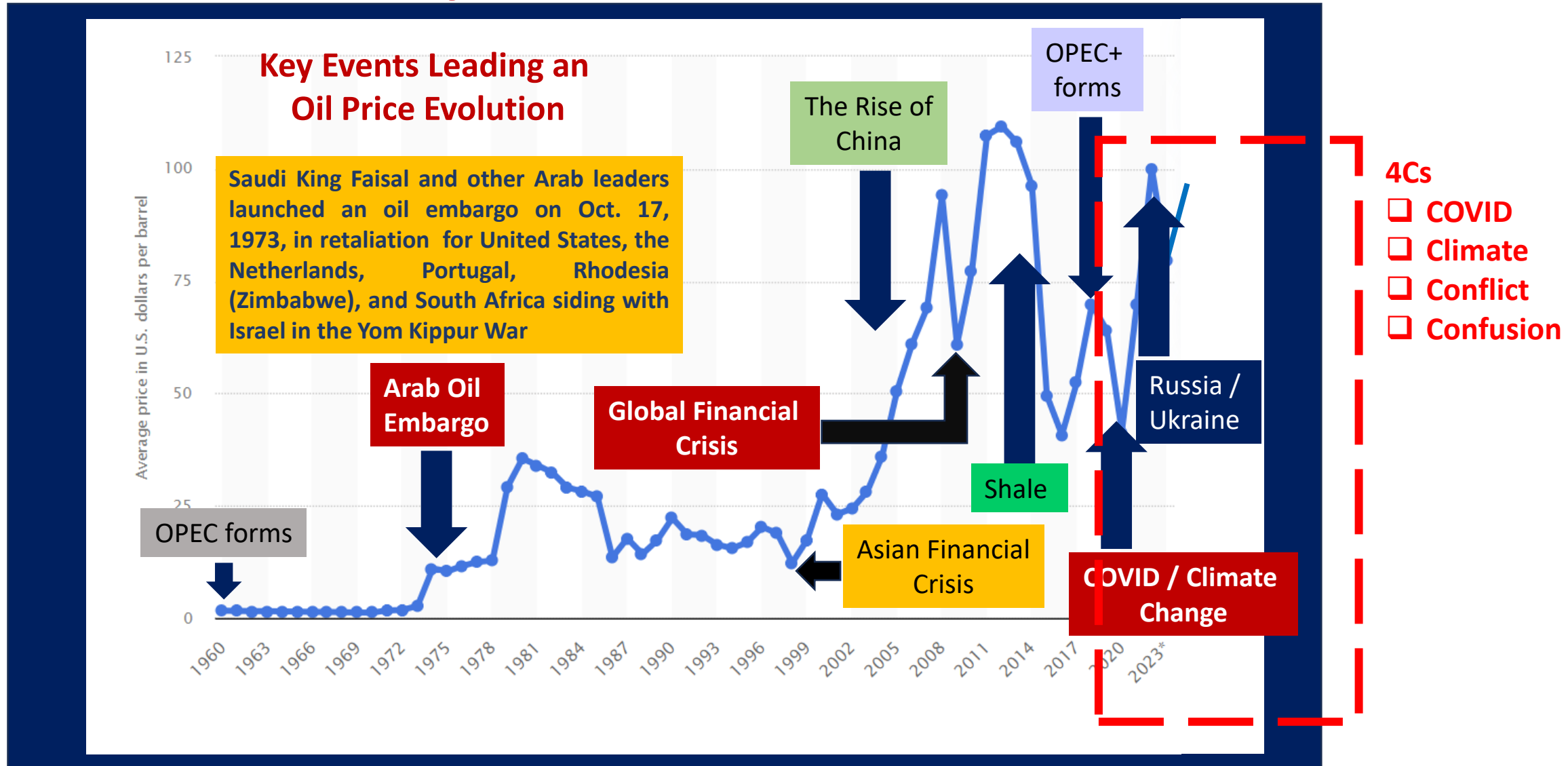


# A Walk Down Memory Lane ... 2



- Britain had abundant coal deposits, which powered its Industrial Revolution.
- The vessels of the Royal Navy, the most powerful maritime fleet the world at the time, were powered by coal.
- But in 1911, the new Navy Secretary, Winston Churchill decided to switch to oil.
- Oil had many benefits. It has double the thermal content of coal so boilers could be smaller allowing ships to travel twice as far, carry more weaponry and be more maneuverable. But Britain had no oil to support its Navy .....
- BP's origins date back to the founding of the Anglo-Persian Oil Company in 1909, established as a subsidiary of Burmah Oil Company to exploit oil discoveries in Iran. In 1935, it became the Anglo-Iranian Oil Company and in 1954, adopted *the name British Petroleum*.

# A Walk Down Memory Lane ... 3

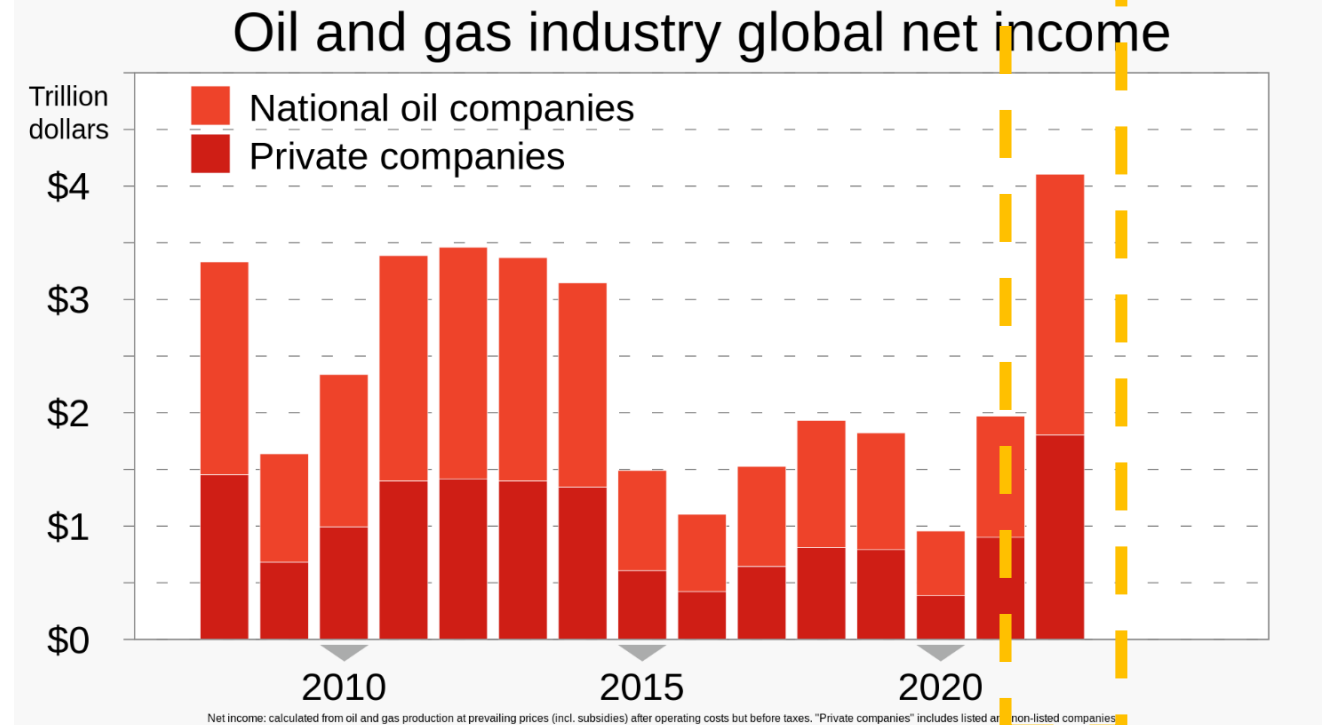
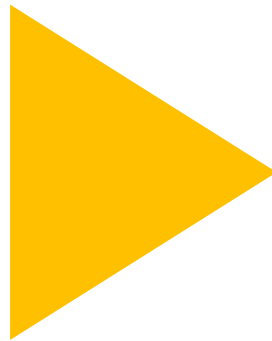
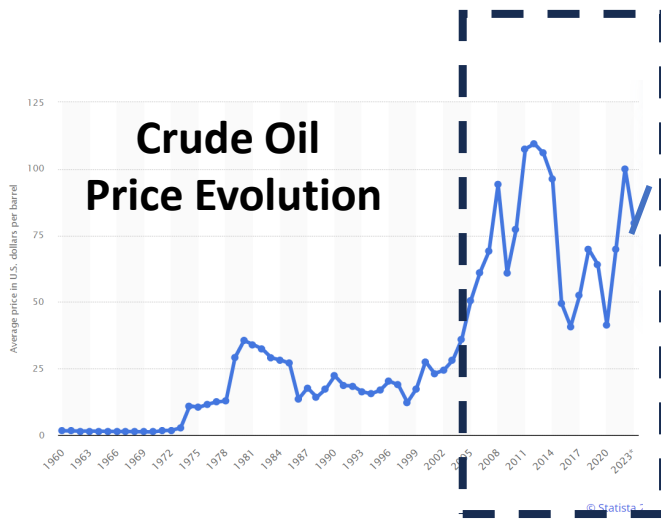


Crude oil price movement and geopolitics are closely related

# The Oil and Gas Business Today

- Economic and political uncertainty prevails globally
- OPEC+ back as swing producer
- China demand uncertain
- Volatile oil prices – short cycles of stability
- Industry investment is low, no financial support from lending institutions
- No young talent interested as industry being projected as being in its sunset years

**But oil prices are high .... not at their highest but net income is ....**





# Practically ....

**The oil and gas industry is integrated into nearly every aspect of our daily lives**

# Energy Security is Crucial – Oil and Gas Guarantees It

**Life Expectancy vs. GDP per capita in 1800, 1950, 1980 and 2012**



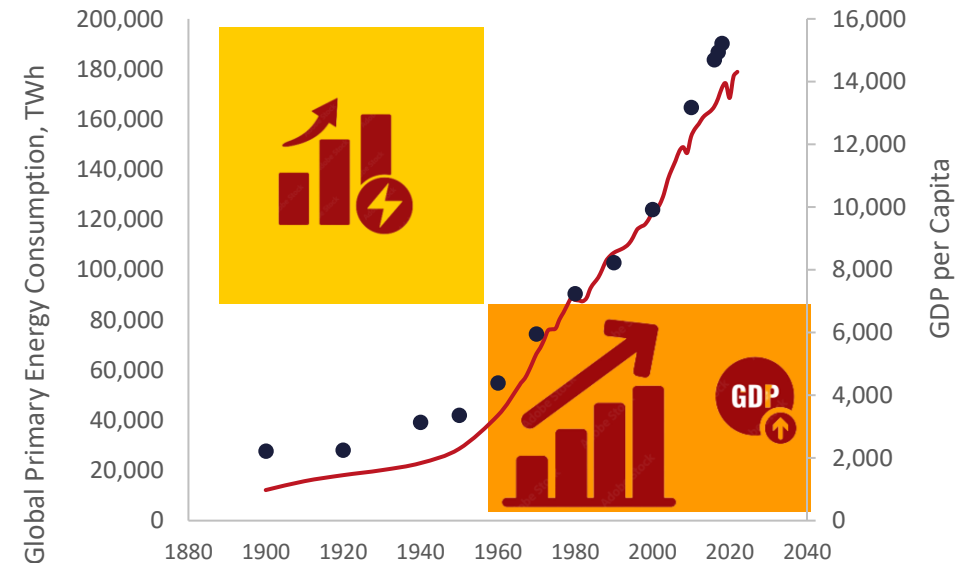
Data sources: Data on life expectancy are from Gapminder.org; data on GDP per capita are from the 'New Maddison Project Database'.  
OurWorldInData.org – Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Max Roser

[Source from World Data](#)

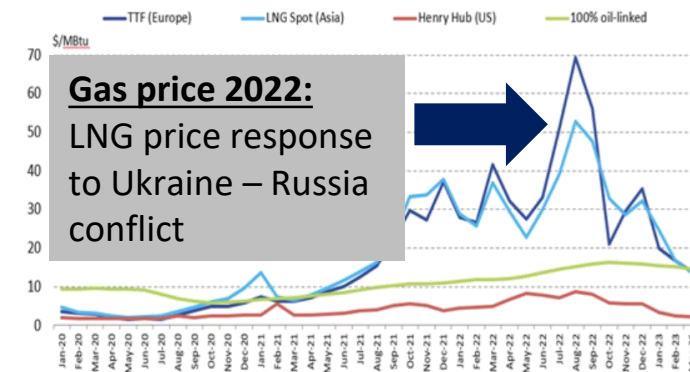
- ❑ Access to energy enables an increase in GDP/capita and extends life expectancy – some decoupling now seen
- ❑ Uncertainty of energy supply results in lack of investment and economic progress, public disorder and health and security issues
- ❑ The outcome of a sustained scarcity of energy is poverty

**Global Primary Energy Consumption vs GDP per Capita**



— Global Primary Energy Consumption    ● GDP per capita

**An Energy Security Lesson from the European Union**



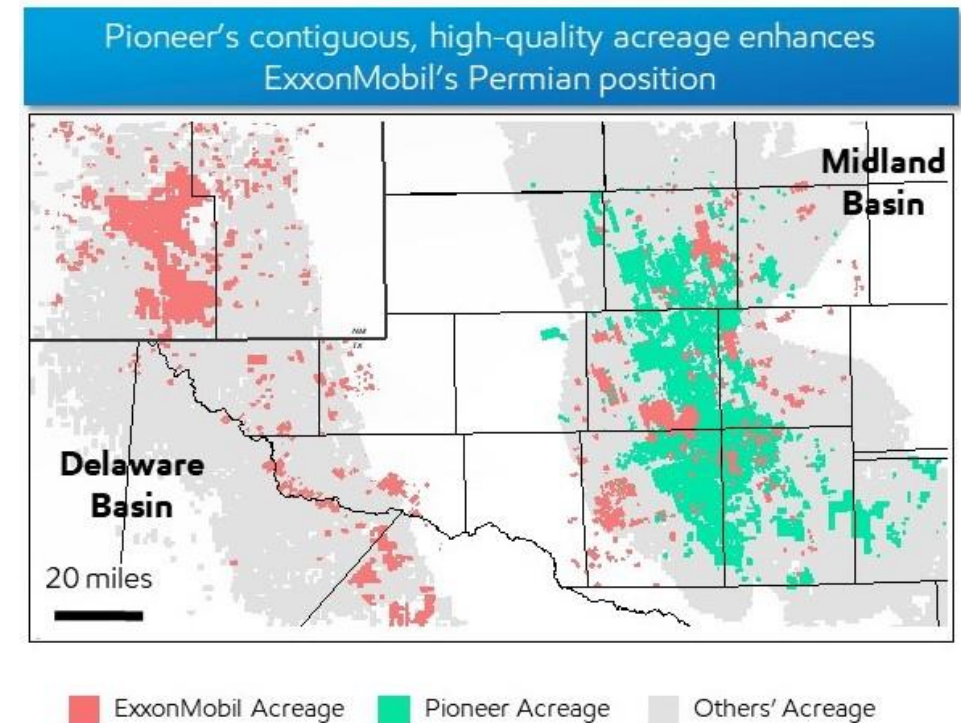
Source: Reuters, IEPEN, CEDIGAZ



# The Importance of Energy Security

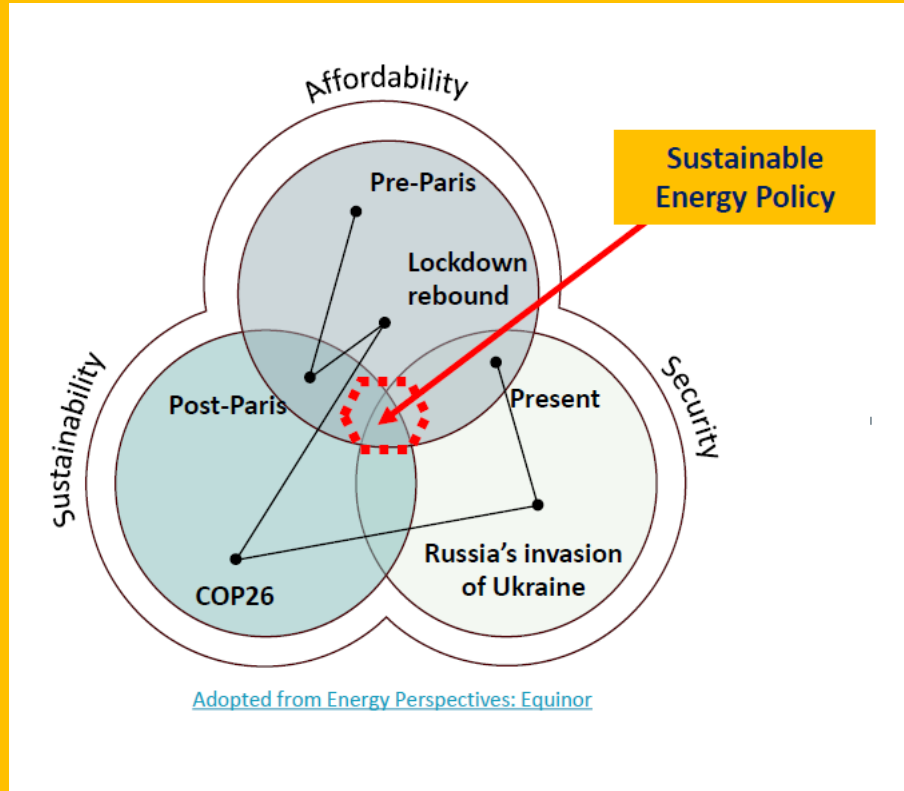
## ExxonMobil's Recent Acquisition of Pioneer Natural Resources

- On 11 October 2023, ExxonMobil announced that it is acquiring Pioneer Natural Resources, one of the US' largest shale oil producers in the Permian basin.
- In an all-stock deal, the merger is valued at **USD59.5 billion (USD253 per share based on Exxonmobil's closing price on 5 October 2023)**, where Pioneer shareholders will receive 2.3234 shares of ExxonMobil for each Pioneer share at closing.
- This is ExxonMobil's largest acquisition since buying Mobil in 1999.
- As at 13 October 2023, ExxonMobil's market capitalisation stands at USD420 billion while Pioneer's is USD56 billion.
- Why would ExxonMobil commit to such a deal? From the press release:
  - "ExxonMobil believes the transaction represents an opportunity for even greater U.S. **energy security**..."
  - The company expects a cost of supply of **less than \$35 per barrel** from Pioneer's assets.



# Oil & Gas versus Alternatives

## What Governments Wish to Achieve



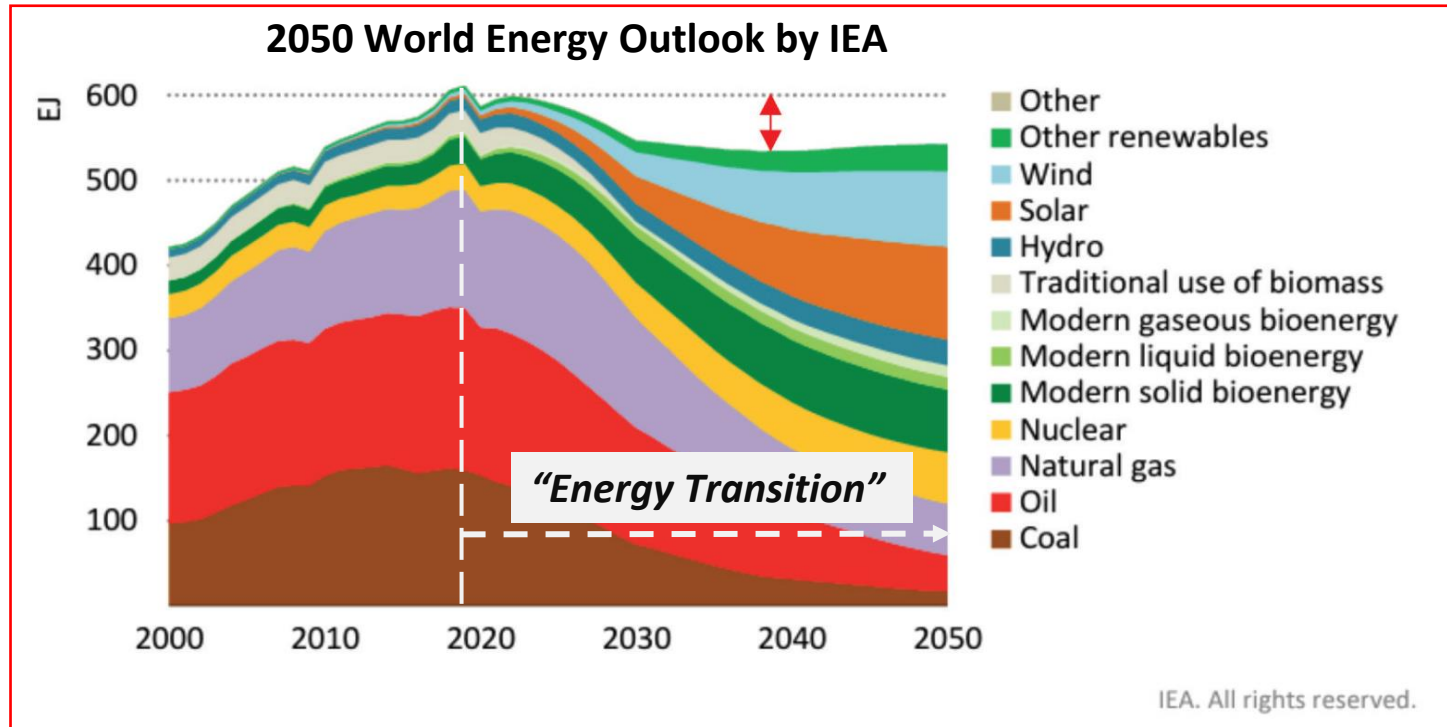
**The Energy Trilemma – different priorities at different times**

Energy Source	Watts / m2
Fossil Fuels	500 – 10,000
Nuclear	500 – 1,000
Solar	5 - 20
Hydropower	5 - 50
Wind	1 - 2
Wood / Biomass	Less than 1

**Energy Return on Investment (EROI)**, sometimes called **Energy Returned on Energy Invested (ERoEI)** is the ratio of the amount of usable energy delivered from a particular energy resource compared to the amount of **exergy** used to obtain that energy resource.

Energy Source	ERoEI
Fossil Fuels	20 - 40:1
Nuclear	Very High
Solar	4 – 18:1
Wind	4 – 6:1
Hydrogen	1:4

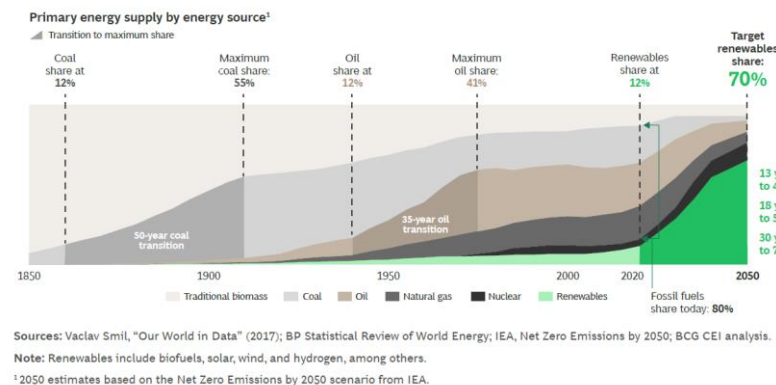
# What About Net Zero? Is It Likely By 2050?



## IPCC Publication: Net Zero by 2050 – A Roadmap for the Global Energy Sector

- **Pathway to Net Zero exists.**
- No new oil and gas exploration required
- Influenced the establishment of the Glasgow Financial Alliance for Net Zero

## The Transition to Net Zero Needs to Happen Roughly 3x Faster Than Previous Transitions



## Practically .....

- Renewables to increase from 12 % supply generation in 2021 to 70 % in 2050
- Solar and wind generation must increase 10 X
- Electric grids must expand by a factor of 2.5 X
- The Energy Transition to Net Zero needs to happen 3X faster than previous Transitions
- **Net Zero .. possible for some nations by 2050 but not for the majority, particularly in Asia, Africa and elsewhere.**

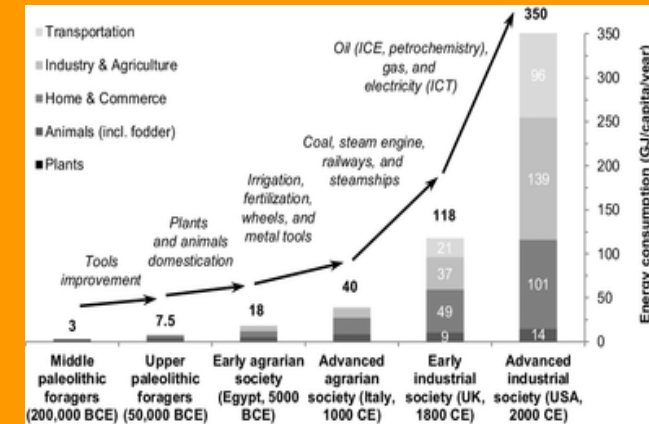


# Reality: Is Future Energy Security at Risk?

## “Jevons Paradox”

*Technological progress or government policy increases the efficiency with which a resource is used, but the falling cost of use increases its demand—increasing, rather than reducing, resource use*

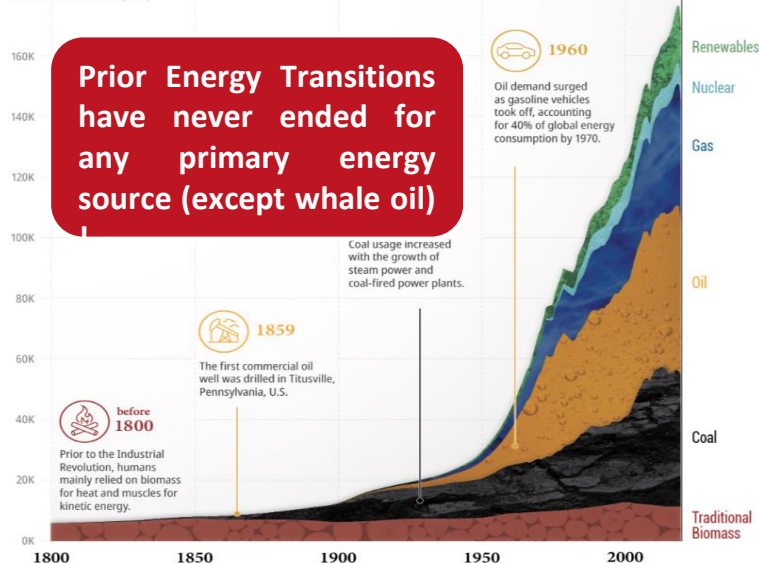
**Both human population and innovation drive energy demand**



The economic and technological advances over the last 200 years have transformed how we produce and consume energy.

Here's how the global energy mix has evolved since 1800.

Global Primary Energy Consumption by Source 1800-2020  
180K Terrawatt-hours (TWh)



## Global E&P investment vs Brent oil price

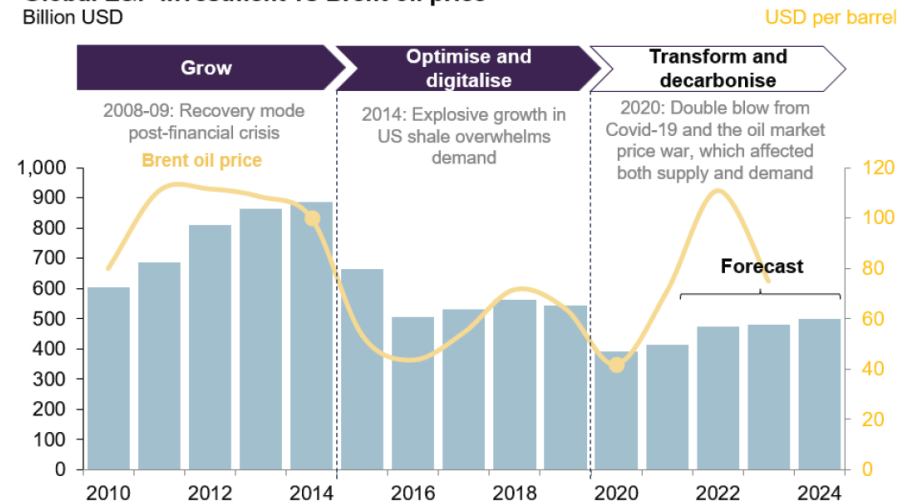
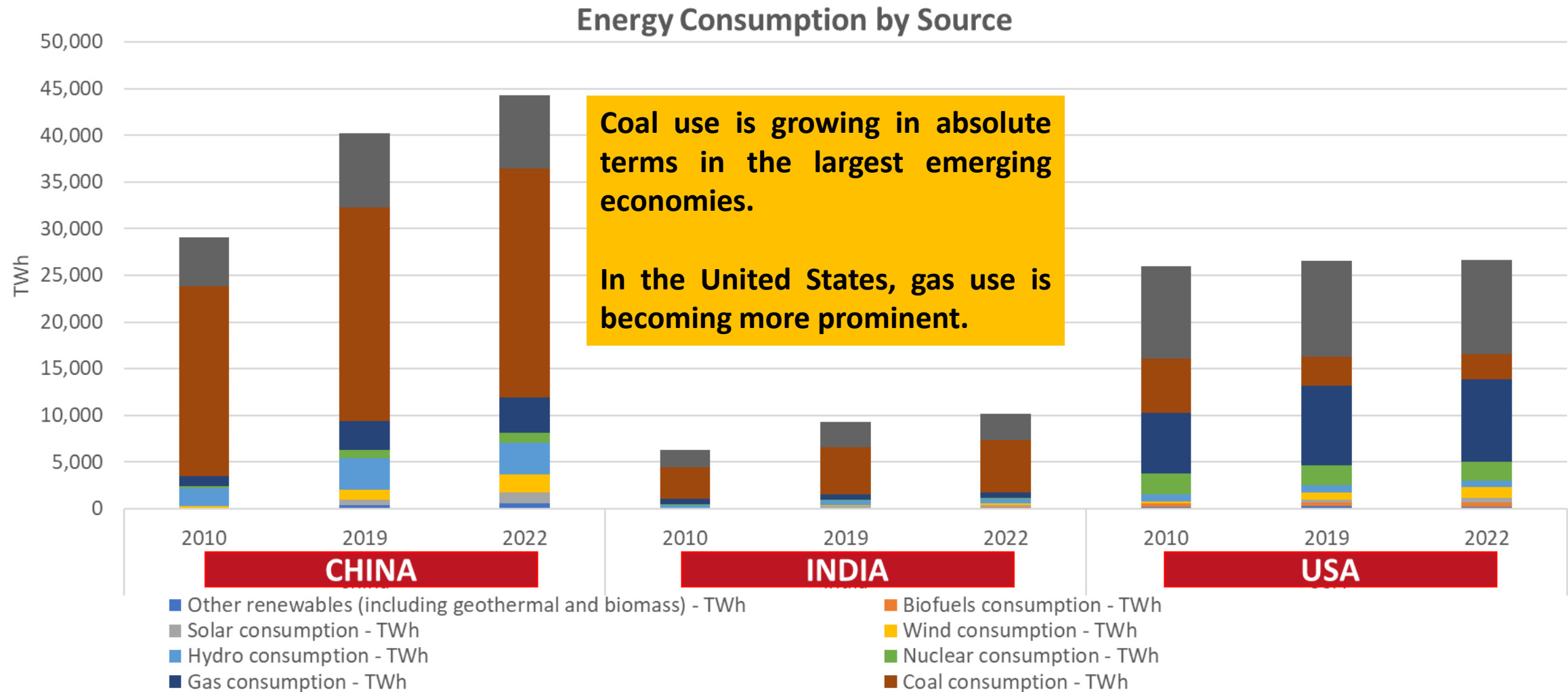


Figure 2: Oil and Gas Industry Capital Expenditure Chart (Source: Rystad / Author)

# How About Energy Consumption in the USA, China and India?



Three countries account for the lion's share of global carbon dioxide emissions. In 2022, China was highest, at 32%, though that has begun to fall slightly. The United States was next with 14%, an increase of 1.5% over 2021. India's emissions continue to rise and now make up 8% of the global total.

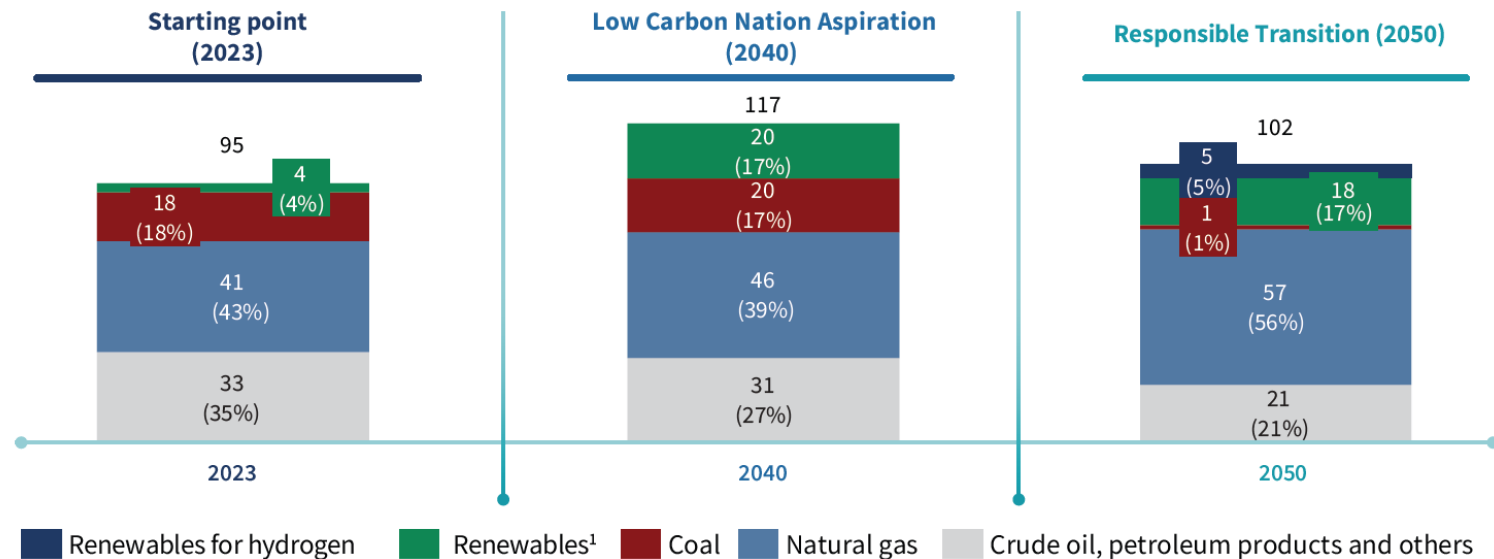
Source: USA Today

# What About Malaysia? ... 1

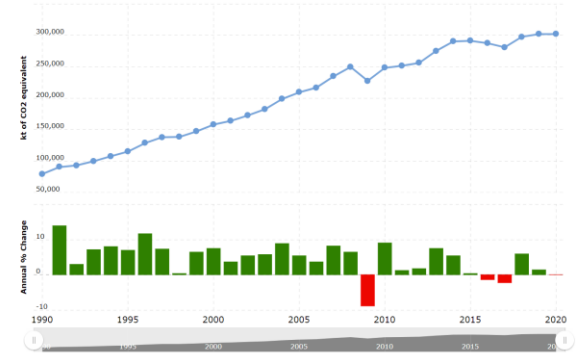
Malaysia intends to transition from its current heavy reliance on coal, natural gas and other petroleum products (96%) as its primary energy supply, to a contribution of 20% from renewable energy sources by 2040 whilst the demand for energy grows by 23%.

**Exhibit 4.3: Malaysia's projected TPES by 2050**

Total Primary Energy Supply (Mtoe), by energy source



1. Includes bioenergy, solar, hydropower and hydrogen



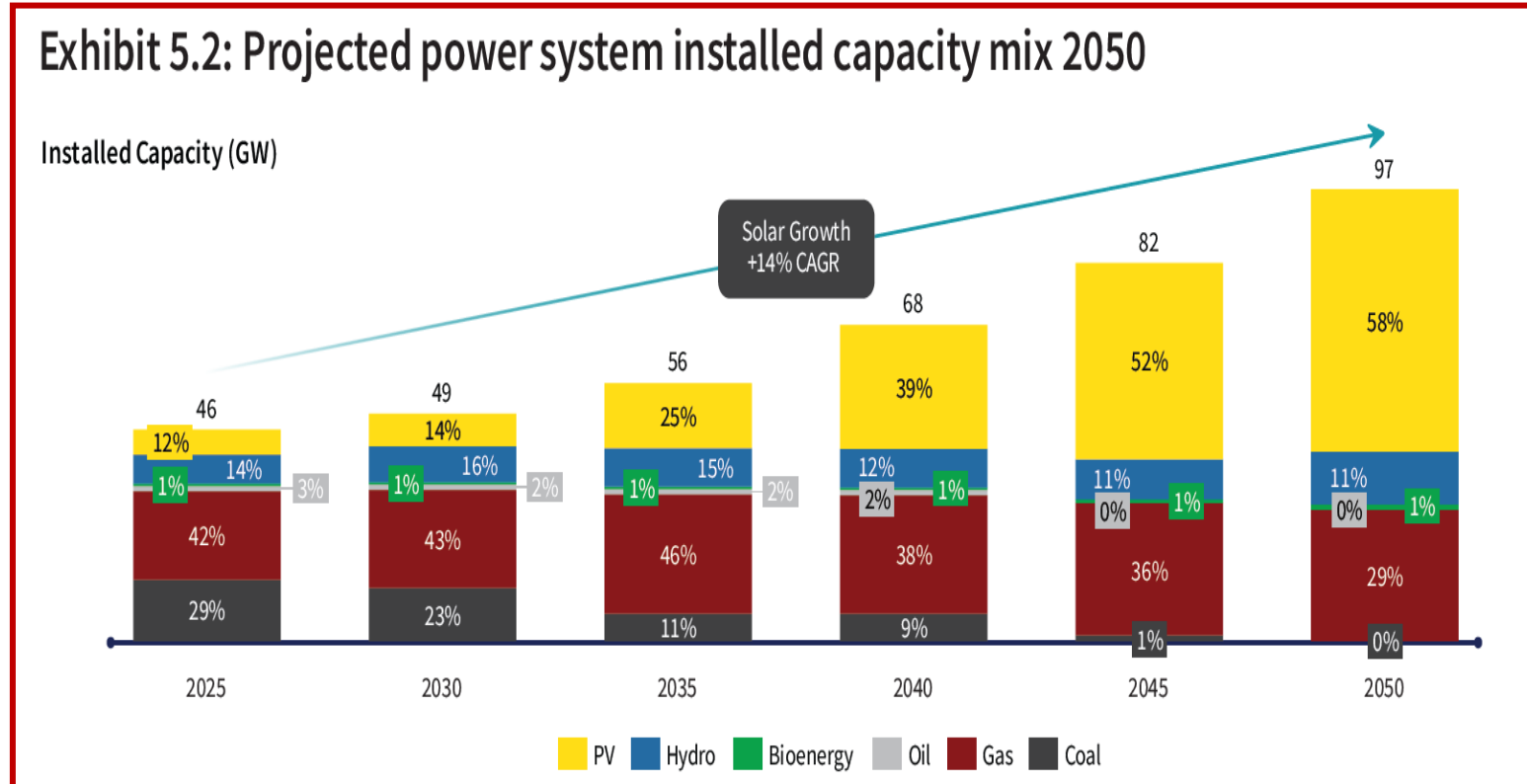
- **Malaysia** – emissions circa 300,000,000 tonnes of CO2 equivalent annually.
- Circa – 0.7 – 0.8 % of global emissions.
- # 22 in global rankings for total emissions.
- 2021 Total Global Emissions – circa 40,000,000,000 tonnes of CO2 equivalent annually.

- Total contribution from gas continuous to grow.
- Use of crude oil remains relatively stable over this period.
- The target is a responsible transition by 2050 in which 23% of the energy supply comes from renewable energy sources.
- The contribution from gas continues to grow during this transition period to 56% of the energy mix.



# What About Malaysia? ... 2

A worrying trend, which is similar to that observed in other parts of the world.



**REUTERS** World Business Markets Sustainability Legal More

Energy | Sustainable Markets | Renewable Fuels | Grid & Infrastructure | Hydrogen

## Malaysia needs to invest \$375 bln in renewables to reach 2050 climate goals - report

By Mei Mei Chu  
March 9, 2023 7:41 PM GMT+8 · Updated 7 months ago

KUALA LUMPUR, March 9 (Reuters) - Malaysia will need to double its investments in renewable energy transition to at least \$375 billion in order to achieve its ambitious goal of carbon neutrality by 2050, the International Renewable Energy Agency (IRENA) said on Thursday.

The Southeast Asian nation has pledged to cut its greenhouse gas emissions dramatically by 2030 and reach net-zero emissions by 2050.

IRENA director general Francesco La Camera told Reuters in an interview Malaysia's planned energy policies could be insufficient to meet its energy transition goals.

- In order for Malaysia to achieve the target of a 23% contribution from renewable sources to the primary energy supply, it has to achieve an installed capacity of 70%.
- This reflects the relatively low capacity factor associated with renewable energy technologies. Thus, despite natural gas having only 29% of the installed capacity by 2050, it will constitute 56% of the primary energy supply.

# Key Messages

- The world does not end in 2050 if Net Zero is not reached. **Is Malaysia impacted? Yes and No! We must adapt.**
- **The oil and gas business is not evil.** Instead, it has delivered health and wealth. It is integrated in everything that we do.
- **The oil and gas business is required for** there to be **energy security** which is essential for:
  - global peace and harmony
  - global prosperity
- There is **a U – turn** being seen in the developed world on the climate change agenda.
  - EU
  - UKPeople are beginning to consider it **an elitist agenda**, with little consideration for the poorer nations.

## FORTUNE

**BlackRock and Vanguard were once ESG's biggest proponents—now they seem to be reversing course**

BY [BOB RUBIN](#)

September 13, 2023 at 5:52 PM GMT+8

- Basic economics will continue to apply and be even more relevant in the future. Our role as an industry is to be as productive and efficient as possible. **Decades of future subsidies will not work for emerging economies.**
- **No Global Net Zero without Asia going Net Zero** – Gas / LNG - Decarbonization – CCUS – Electricity Combination is the solution where there is no mass hydro.

**For the first time in history, we are trying to move from a high EROEI primary fuel source to a lower EROEI primary fuel source.**

**In a country where they have done this (Germany), there are the highest energy costs in the world. In Malaysia, to remain competitive, can we afford pathway on an accelerated basis?**

# About Hibiscus



# Hibiscus Today

## Revenue generating and profitable production operations

### Company Snapshot

- Listed in 2011 on the Main Market of Bursa Malaysia.
- Our goal is to grow our business by enhancing production from mature assets safely and profitably in regions of our geographic focus.
- Track record in offshore exploration drilling in Oman (discovery) and in the Bass Strait, Australia and drilling of infill production wells in the UK and Malaysia.
- Operator of PSCs in Malaysia and Vietnam: 2011 North Sabah EOR PSC, PM3 CAA PSC, 2012 Kinabalu Oil PSC, Block 46 Cai Nuoc PSC, PM305 PSC, PM314 PSC. Joint operator and owner of the Anasuria Cluster of producing fields in the UK North Sea. Significant cash and profit generating business. We hold development licences in the UK and Australia as operator.
- Shariah Compliant. Constituent of the MSCI Global Small Cap Index, FTSE Bursa Malaysia Mid 70 Index, FTSE4Good Bursa Malaysia Index and FTSE4Good Bursa Malaysia Shariah Index.
- Numerous prestigious awards for safe operations in Malaysia and the UK.



<sup>1</sup>As of 4 October 2023 | <sup>2</sup>As of 30 June 2023

### Highlights

Shares Issued <sup>1</sup>	2,012,418,743
Shareholders <sup>1</sup>	> 16,000
Market Capitalisation <sup>1</sup>	RM 2,153,288,055
Net Assets <sup>2</sup>	RM 2,689.8m
Cash <sup>2</sup>	RM 925.7m
Total Debt <sup>2</sup>	RM 456.8m



Dato' Sri Roushan Arumugam, our Non-Independent Non-Executive Director, receiving on behalf of Hibiscus the 'Most Outstanding Company in Malaysia – Energy Sector' at the Asiamoney Asia's Outstanding Companies Poll 2023.

# Disciplined Growth Strategy with a Clear Plan Forward

## COMPANY OBJECTIVES

01

Our aim is to build a **responsible energy company**, using our resources, founded on upstream oil and gas assets and expertise, to optimally build a sustainable business

02

Our focus is to **enhance shareholder value** whilst always being **conscious of the environment and caring for our people**

03

Reduce Emissions – our aspiration is to become a **net zero emissions** producer by 2050

## OUR GOALS

### Near-Term Goals

- **Consolidation and integration of Malaysian business units** – complementing our existing portfolio
- Develop projects with a focus on **increasing production in the UK** and in **Malaysia**
- Continue to **build on banking relationships**

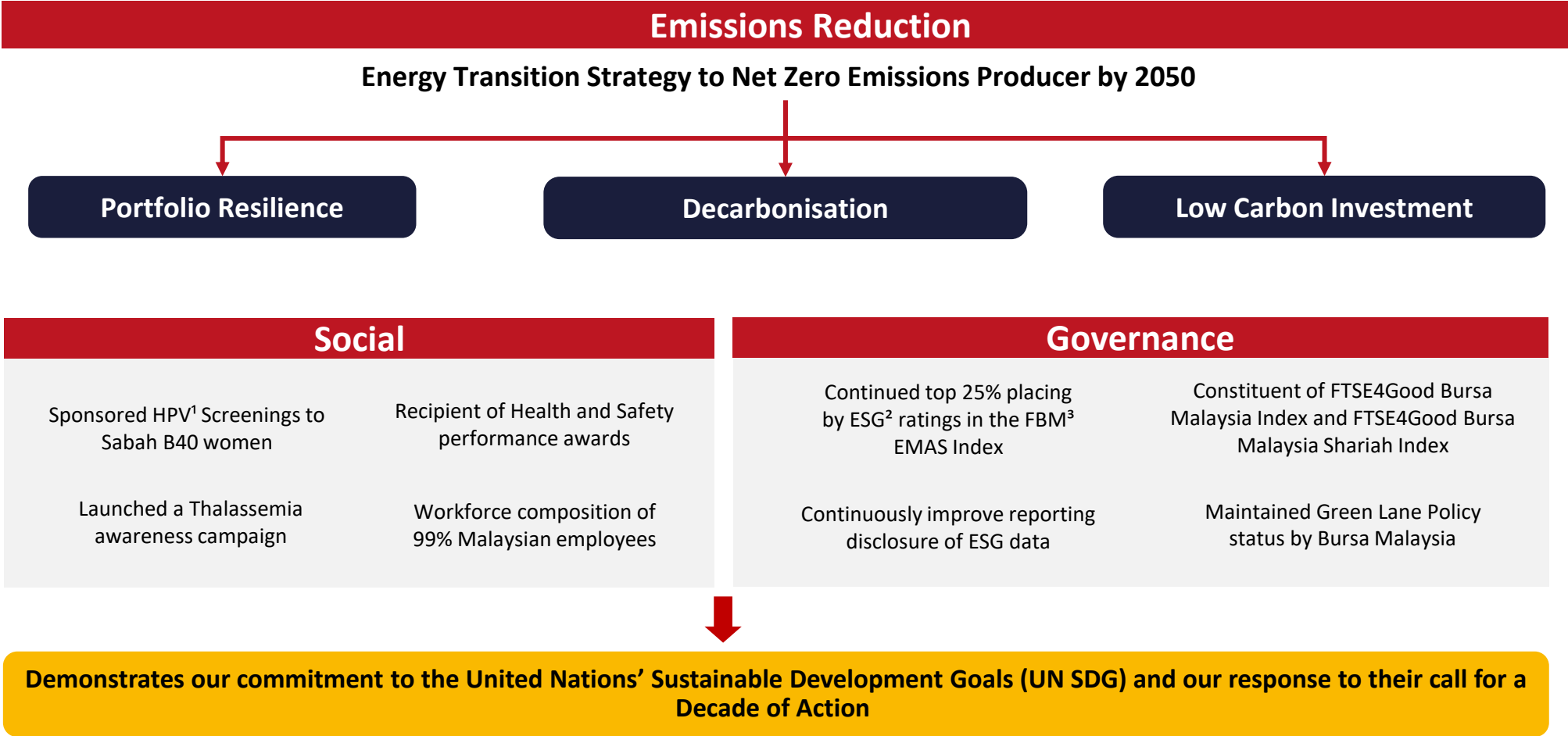
### Medium-Term Goals

- Achieve production of **35k-50k boe/d** and 2P Reserves of **100mm boe** by **2026**
- Transition toward a more **gas-weighted company**
- Implement **decarbonisation initiatives** within existing portfolio
- Secure **additional 2P/2C gas resources** in Southeast Asia

### Long-Term Goals

- Establish **Hibiscus** as **SEA's main E&P IOC**
- **Leverage expertise** to expand into adjacent green business lines

# Focus on Emissions Reduction



1. HPV - Human papillomavirus

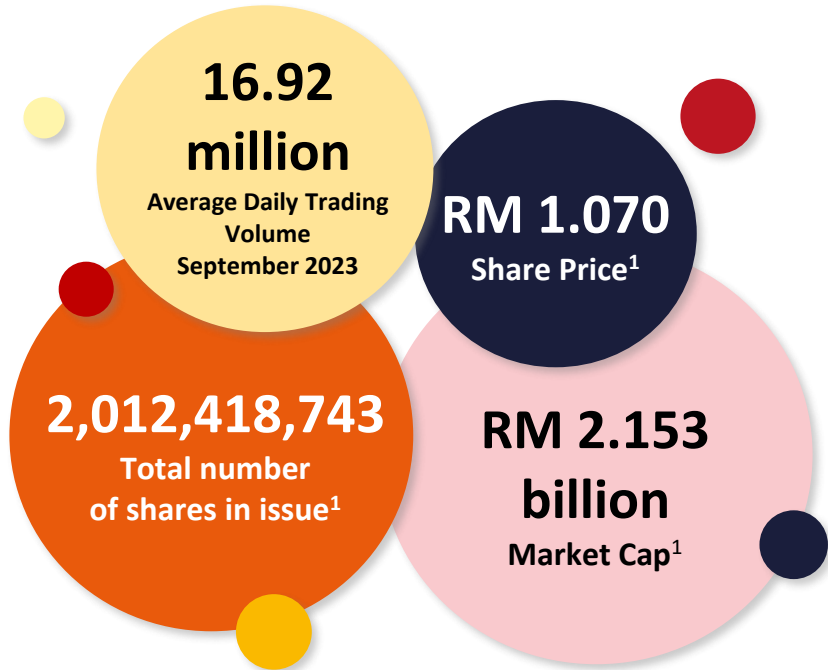
2. ESG - Environment, Social and Governance

3. FBM - FTSE Bursa Malaysia



# Shareholder Base

A public company with strong liquidity and a diversified shareholder base



Number of Shares <sup>2</sup> (million)	% of Shares	Shareholder Profile
183.06	9.1	Management Team
138.90	6.9	Polo Investments Limited
75.46	3.8	Mettiz Capital
1,125.44	55.9	Other Institutional & Corporate Shareholders
489.56	24.3	Retail Shareholders



- Diversified shareholder base, with no controlling shareholder
- Most large shareholders are involved in or familiar with the O&G industry

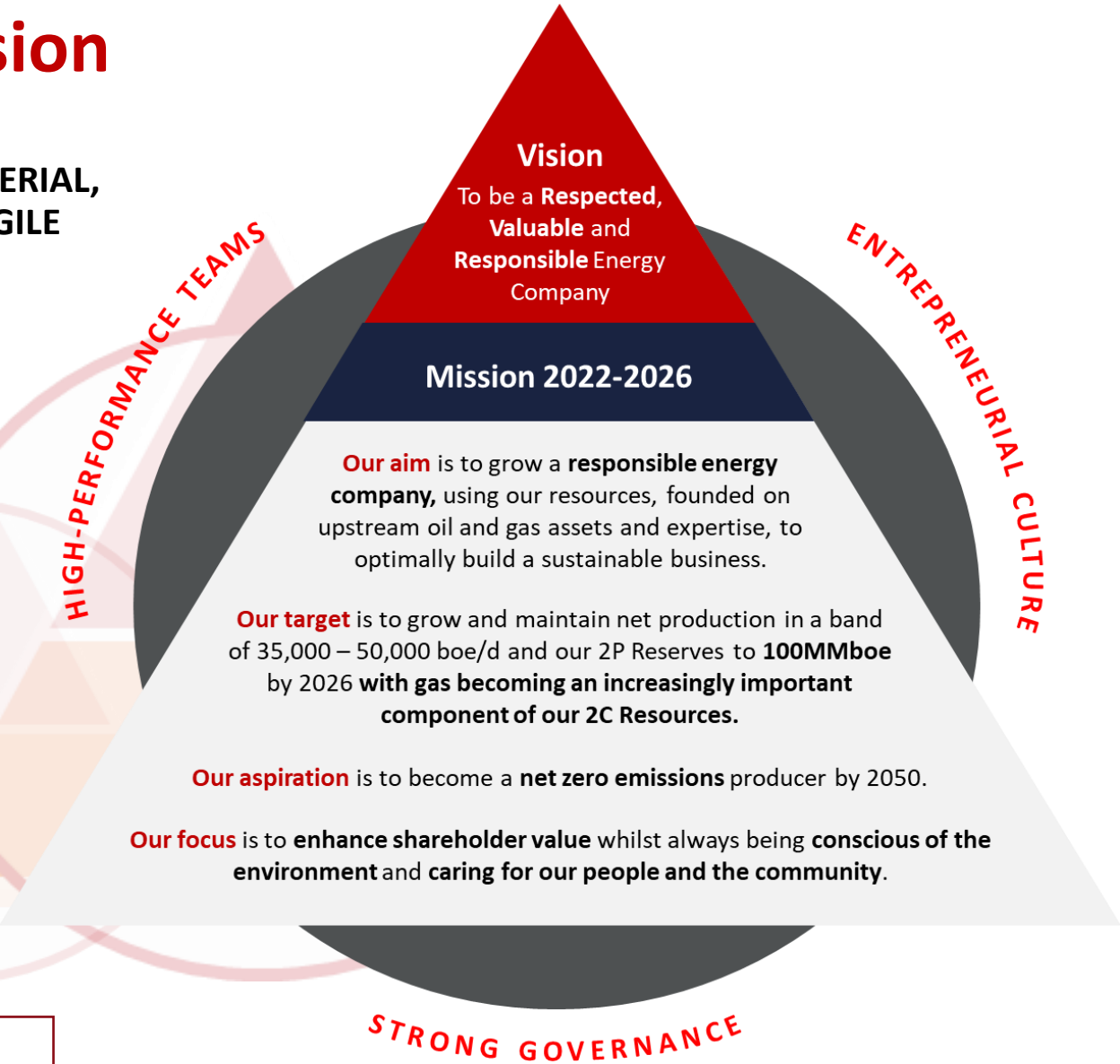
<sup>1</sup>As of 4 October 2023  
<sup>2</sup>As of 30 September 2023

# Refreshed Vision & Mission

LARGE ENOUGH TO BE MATERIAL,  
SMALL ENOUGH TO BE AGILE



<b>Vision</b> To be a Respected and Valuable Independent Oil and Gas Exploration and Production Company	<b>Mission (2017 – 2021)</b> <ul style="list-style-type: none"> <li>• 100 MMbbls net 2P (proven and probable) oil reserves/entitlement in existing core asset areas.</li> <li>• 20,000 bbls/day net oil production</li> </ul>
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# Thank You

For more information please contact:

**Investor Relations Team**

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