Global Energy Law: Perspectives from North America and Africa

• Oil and gas are natural resources that constitute a common ground in Texas and some African countries like Nigeria. This presentation provides an introduction to the role of natural resources in both jurisdictions. Participants will identify the key stakeholders (i.e., multinational corporations and governments), as well as challenges and developments facing the energy sector. The presentation will focus on compliance with local laws and international treaties, especially in the areas of human rights and corporate accountability.
Outline

- Introduction to the Petroleum Industry
  - Petroleum Geology
  - Key Players
  - Sources of Oil and Gas Law

- Challenges in the Oil and Gas Industry
  - Human Rights
  - Environment
  - United States
  - Nigeria
Energy Use Evolves Over Time

Global Percent Mix of Fuels

Source: Smil, Energy Transitions (1800-1960)
ENERGY USE MIX

- **Energy Use Mix**
  - 1800: wood (about 98%)
  - Wood and dung used today by about 2.5 billion people
  - 1900: coal (over 50%)
  - 1950: oil (just over 20%)
    - Hydropower becomes significant
    - Natural gas use greatly expands

- **Globally:**
  - 2040: oil, gas, and coal will still meet 80% of world energy demand. Gas will grow the most.
  - Nuclear and renewables will grow.
  - Wood, dung, and other biomass will decline slightly.
Petroleum Geology: Crude oil and natural gas are naturally occurring substances present in rock amidst the earth's crust.
Organic Theory: The origin of oil and gas is organic material compressed in sedimentary rock such as sandstone, limestone and shale.
Why Sedimentary Rock?

A. Water
B. Sedimentary rock
C. Impermeable Rock

- Dead and decaying organic matter
- Trapped fossils
- Oil
- Natural Gas
Classification of Rocks

- There are 3 basic classes of rock
  - Igneous (e.g., volcanic, granite)
  - Metamorphic (e.g., slate and marble)
  - Sedimentary (e.g., sandstone, limestone, shale)
- Nearly all commercial oil and gas production is from some form of sedimentary rock. Why?
  - Because, unlike igneous and metamorphic rock, sedimentary rock has 2 physical properties necessary for accumulation of petroleum in commercial quantities, i.e.: Porosity & Permeability.
POROSITY & PERMEABILITY
Oil and Gas Industry: Upstream, Downstream, Midstream

- Exploration and Production Companies
- Drilling and Service Companies
- Transport and Shipping Companies
- Refining Companies
- Equipment Manufacturing and Procurement Companies
Summary of Oil and Gas Sectors
E & P companies are those that find hydrocarbon reservoirs, drill oil and gas wells, and produce and sell these substances to be later refined into products such as gasoline and diesel. This activity is usually classified as upstream oil and gas activity.
Drilling and Service Companies are hired by E&P companies to drill wells for them and maintain or service them afterwards.
Types of Drilling: Vertical and Horizontal
MAJOR PLAYERS IN THE OIL AND GAS INDUSTRY

• National Oil Companies (notable ones: Saudi Arabia; Brazil, Mexico, Malaysia, Indonesia, Venezuela and Nigeria)
• Major Multinational Corporations (Exxon, Shell, Chevron, etc)
• Newer Independent Oil Companies (Marathon, Noble, VAALCO, etc)
• Oil Service Companies (Halliburton, Baker Hughes, Schlumberger, Tenaris, Weatherford, etc)
Industry Players
Legal Issues and Sources
Sources of Oil and Gas Law

- Federal Statutes
- State Statutes
- Agency Regulations
- Common Law
- International Law
- Soft Law
Human Rights are More than Civil Rights

• Civil and Political Rights
  – Free speech, right to life and right to protest without being harassed by government or thrown in jail or shot
  – Right to participate in political decisions that affects your livelihood
  – Right to hold property without government interference or if expropriation, fair compensation

• Economic, Social and Cultural Rights
  – Right to health, including air, land and safe drinking water
  – Right to food
  – Right to livelihood and work

1. Human rights in the workplace
   - Forced Labor and Child Labor
   - Discrimination
   - Just and favorable conditions of work and safety

2. Human rights and local communities
   - Access to land
   - Right to Health and Adequate Standard of Living

3. Human rights and security
   - Risk of Misuse of Force
Common Environmental Problems in the Oil and Gas Industry

- Air Pollution due to emissions from drilling and fracking equipment, the fracking process, hydrocarbon storage tanks, natural gas flaring, and emissions from vehicles that travel to and from sites as well as engines that run on oil and gas sites;
- Water pollution through wastewater produced during drilling and fracking process, improper disposal of wastes to surface and groundwater, and spills and leaks from facilities and equipment such as pipelines, gathering lines, wellheads, storage tanks, pits, and transport trucks;
- Effect on aquatic life, wildlife and plant life through surface water and groundwater withdrawals, site development and accompanying habitat fragmentation and disruption, and bird deaths resulting from open wastewater pits.

U.S. Energy Consumption

- About 18% of world total energy consumption
- For less than 4.5% of the population
- For 25% of world GDP
- And about 18% of world CO₂ emissions (China accounts for 23+%)
U.S. Primary Energy Consumption By Source And Sector, 2011 (quadrillion Btu)

Source: U.S. Energy Information administration, Monthly Energy Review (April 2012), Table 1.3, 2.1-2.5 (http://www.eia.gov/energyexplained/)
FRACKING: Shale Gas Production Techniques And Possible Environmental Hazards

Source: IEA, World Energy Outlook 2012
http://www.worldenergyoutlook.org/goldenrules/

Diagram: Source: Adapted from Aldous (2012).

1. High pressure fracturing fluid first cracks the shale
2. Fine particles (proppant) keep the fractures open
3. Shale gas flows into the pipe and up the well
Conventional and Non-Conventional
The Magic Of Directional Drilling

Dakota Access Pipeline – concern by Native Americans that it would threaten sacred burial grounds and impact on water quality.
CLIMATE CHANGE
Paris Accord

• “Under the accord, the United States had pledged to cut its greenhouse gas emissions 26 to 28 percent below 2005 levels by 2025 and commit up to $3 billion in aid for poorer countries by 2020.”

TEXAS ENVIRONMENTAL REGULATION OF OIL & GAS

- Railroad Commission (RRC) now regulates oil and gas pollution and oilfield wastes.
- RRC may act even when no pollution has occurred – i.e., may order corrective action before harm occurs - order improperly cemented wells to be plugged.
- Texas has an Oilfield Cleanup Fund that receives money from Drilling permit fees, Civil penalties, Bond proceeds, Fees imposed on each barrel of crude and each MCF of natural gas produced in Texas.
- RRC can draw from the Oilfield Cleanup Fund –
  - to control or cleanup oil and gas wastes
  - plug abandoned wells
  - administer and enforce other pollution prevention measures
Texas has thousands of abandoned or improperly plugged wells that create pollution hazards.

Operator has primary duty to plug well.
- Usually within 1 year of cessation of drilling and production.

Operator is person “responsible for physical operation and control of a well at the time the well is about to be abandoned or ceases operation.”

If operator cannot be found or fails to plug, Nonoperator has duty to plug the well.

No liability for plugging wells attaches to: a) Royalty interest owners b) Lessors.

RRC, using money from the Cleanup Fund, plugs abandoned wells where neither operator or nonoperator can be found.
The Foreign Corrupt Practices Act (FCPA) prohibits individuals and companies from bribing foreign officials, either directly or indirectly through intermediaries. The FCPA is extremely broad in scope and applies to US businesses and nationals in furtherance of unlawful payments anywhere in the world, even payments that take place outside the U.S. Many energy and other companies have received huge penalties.
FCPA Anti-Bribery Provision

• It is unlawful for any persons or entities covered by the FCPA to corruptly make any offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value to any foreign official, foreign political party or party official, or any candidate for foreign political office.
FCPA Accounting Provisions

Often called “books and records” provision

Issuers must make and keep accurate books and records
• Record who, where, when, what, and why entertained or paid

Issuers must devise and maintain a system of internal accounting controls that ensure that all transactions and dispositions of assets occur only with management’s authorizations, and that all such transactions are recorded accurately and in reasonable detail in the companies’ books, records and accounts
• Knowingly falsifying any book, record, or account of an issuer may result in a criminal prosecution

Jurisdiction - Applies only to publicly traded U.S. companies (“issuers”)
Disasters in Nigeria's oil operations are common. 200 villagers died in this pipeline explosion 2000. (2001 CorpWatch Report (photo) AP/Clement Ntaye)

Human Rights
Property Takings
Hostage Taking

#AALL17
Gas flares are common in the Niger River Delta. Oil companies use them to burn off unwanted natural gas. This massive flare is erupting from the ground at a Shell flow station near the town of Odidi. (NPR Photos)
A Nigerian Face of Energy Poverty in the midst of Plenty
On 4 February 2005, soldiers fired on protesters at Chevron’s Escravos oil terminal on the coast of the western Niger Delta. One man was killed and at least 30 others were injured. The protest was over the company's failure to fulfil an agreement to provide jobs and development projects to the local Ugborodo community.

Just two weeks later, at least 17 people were reported to have been killed and two women raped when soldiers raided the town of Odioma. The attack was ostensibly to arrest members of an armed vigilante group suspected of killing 12 people, including four local councillors. Members of this group were reported to have been recruited by a sub-contractor of Shell's subsidiary in Nigeria and to be responsible for security in an area where oil exploration was being conducted, despite their alleged criminal record. The suspects were not captured but 80 per cent of homes in Odioma were razed.
ODIOMA, NIGERIA: A villager walks through the ruins of the southern Nigerian community of Odioma, a fishing and trading centre, and a historic centre for the Ijaw people in the oil-rich Niger Delta. It was burned to the ground on 19 February 2005 by government troops hunting a local militia leader accused of ordering the murder of 12 people from a neighboring village during a dispute over the ownership of the proposed site for a new oil well.

DAVE CLARK/AFP/Getty Images

It is like paradise and hell. They have everything. We have nothing… If we protest, they send soldiers. They sign agreements with us and then ignore us. We have graduates going hungry, without jobs. And they bring people from Lagos to work here. Eghare W.O. Ojhoger, chief of the Ugborodo community in Delta State
How does this affect us and why should we care?
Our Laws and Courts

US and Canadian Corporations have faced lawsuits for their role in human rights violations

Alien Torts Claims Act

- Chevron-Texaco
  *Ecuador and Nigeria*
- Royal Dutch Shell
  *Nigeria*
- Exxon-Mobil—Aceh, *Indonesia*
- Unocal—*Burma*
- Talisman—*Sudan*
Our Gas Prices

Violence in the Niger Delta—where upwards of 100,000 barrels of oil per day is stolen—cost the country about $1 billion last year (2005) in lost oil revenue.

**Bloomberg.com on oil prices, March 13, 2006:** “Nigerian forces clashed last week with militants holding two US citizens and a Briton working for an oil company in the Niger River delta... Kidnappings and attacks last month on a pipeline... forced Royal Dutch Shell to halt output of 455,000 barrels a day, about a fifth of Nigeria’s daily production... Shell... hasn’t resumed operations.”

**Reuter’s March 14, 2006:** “Oil rose to $62 on Tuesday as deeper outage in Nigerian supply and concern that U.S. gasoline may grow tight ahead of the upcoming driving season outweighed a lower global oil demand growth forecast...”
Contrast: Gas Prices on July 4, 2017 – the lowest price in 12 Years (since 2005):

CONCLUDING THOUGHTS

• Ownership of Oil and Gas Matters
• Capacity Building for Effective Institutions Can Change Things
• Need to Embrace a Legality Culture – Obedience and Consequences
• Attention to Alternative Energy Policy – Sustainable Development Model
• International Cooperation is Essential for All Countries
“[T]he entire property in and control of all minerals, mineral oils and natural gas in under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in the Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly.”
1. The law of capture
   a. *Ad Coelum* doctrine
RULE OF CAPTURE
Interest Holders
Renewable Energy Future

• “The United States consumes approximately 100 quads of energy per year of which renewable energy accounts for about 10 quads. While 10% appears to be a respectable portion of our energy picture, about one half of that figure is comprised of hydroelectricity although the contribution of wind and solar continues to increase as the cost of those resources declines. . . . If the United States is to move away from the traditional path of heavy reliance on fossil fuels and nuclear power to an alternative path of renewable resources and conservation, then government support will be necessary. Support can come from legislation specifically addressing particular resources, or from tax and other financial incentives or, more generally, from increased federal R & D investments.”

• JOSEPH P. TOMAIN & RICHARD D. CUDAHY, ENERGY LAW IN A NUTSHELL 531, 533 (3d ed. 2017)
Questions & Answers

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Crude Impact Movie Link
https://www.youtube.com/watch?v=7Gd7vqyxI68

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