

Extractive Industries Workshop – Audit Office Guyana

Welcome to Day 1

2023-04-23

To promote the audit of extractive industries



CANADIAN AUDIT
& ACCOUNTABILITY
FOUNDATION

Sponsors

We thank Global Affairs Canada for the necessary funding allowing us to conduct this workshop.



We also thank the INTOSAI Working Group of Extractive Industries for their in-kind support in designing and conducting this workshop.

Workshop on Auditing the Extractive Industries – Oil And Gas

Welcome and Introduction

Workshop organized jointly by the Working Group of Extractive Industries (WGEI) and the Canadian Audit and Accountability Foundation (CAAF)

Audit Office Guyana

April 2023

Key Module Objectives

- Get to know us and each other a little
- Know a bit more about WGEI and CAAF
- Understand the overall course objectives and agenda
- Understand the course “ground rules”

Working Group on Extractive Industries (WGEI)

- Established in 2013 under INTOSAI goal 3, knowledge sharing committee
- Aim is to promote the audit of extractive industries within the INTOSAI community in order to promote good governance and achievement of the Sustainable Development Goals
- OAG Uganda is the current chair and reports to the WGEI steering committee
- 45 SAI members
- Scope includes oil and gas and solid minerals
- Tasks
 - Exchange and networking (Between SAIs, SAIs & External Actors)
 - Sharing of resources and tools
 - Training, research and development

Facilitation Team



Pauline Nyaga
CPA

Principal Auditor, Office of the
Auditor General, Kenya



Juliet S. Mutesi
CPA

Principal Auditor, Office of
the Auditor General, Uganda



Scott Loder
CPA

Audit Manager, Office of
the Auditor General,
Alberta



Sherazade Shafiq
CPA

Director,
International
Programs, CAAF



**Honourable Roy
Cullen**
PC, CPA

Guest Speaker - Former
Parliamentarian Canada

Facilitator: Pauline Ngaya



- Certified Public Accountant (Kenya), B.com and MBA Finance
- 13 years' experience in Performance Auditing
- Participated in updating the AFROSAI-E Extractive Industries Guidelines; 2019 and 2022
- Facilitated Workshops on Risk Assessment in the Extractive Industry in Nigeria, Zimbabwe, Botswana, Ghana and Kenya.

Facilitator: Juliet Mutesi

- Professional Chartered Accountant (CPA Uganda, ACCA)
- Masters in Petroleum, Energy Economics and Finance.
- 9 years with SAI Uganda in financial, compliance audits and Quality assurance.
- Participated in the development of the SAI -Uganda Cost recovery audit manual and Energy sector strategic plan
- 4 years in the audit of cost recovery/expenditure statements of the International Oil Companies in Uganda.
- Facilitated workshops on extractive industries under WGEI



Facilitator: Scott Loder



- CPA , Chartered Accountant (CPA Canada)
- BCom in Accounting, BA in Economics
- 7 years with OAG Alberta in financial and performance audits
- 3 years with OAG Bermuda in financial statement audits and public interest reporting
 - In conjunction with OAG Cayman Islands, assisted OAG Bermuda with developing CSAE 3001 performance audit methodology
- Experience in Alberta focused mainly on Energy and Health sectors
- Facilitated training through OAG Alberta and OAG Bermuda

Facilitator: Sherazade Shafiq



- Professional chartered accountant (CPA Canada, U.K, Pakistan) with 18 years of international experience
- 12 years as a financial and internal auditor – PwC and E&Y
 - Audit and Advisory work for Oil Exploration and Development Companies in Pakistan
- 5 years with the Asian Development Bank working with SAIs across South Asia
 - Including energy sector projects
- Extensive training and delivery – design and delivery of many auditing, accounting and PFM workshops across all roles

Guest Speaker Day 1 & 2 : Roy Cullen



- Member of Parliament, House of Commons, Canada, 1996-2008
- Served as
 - Parliamentary Secretary to Minister of Finance
 - Chair of the Standing Committee on Finance, and
 - Opposition critic for Natural Resources
- Chartered Professional Accountant (Canada) / Master in Public Administration;
- Active member since 2002 in the Global Organization of Parliamentarians Against Corruption (GOPAC),
- Forest industry executive 1980-1993.

Welcome Note – Auditor General Guyana



Participant Introductions

Welcome!

- Name, role, and how long with AOG?
- What are your expectations after this week's course?



Overall Program Objectives

- Enhance the knowledge skills and understanding of participants to be able to conduct audits of the developing oil sector in Guyana

Agenda

Day 1 – April 17, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

- Module 1 – Course Introduction
- Module 2 – Introduction to Extractive Industries
- Module 3 – Value Chain and Key Players

Day 2 – April 18, 2023, | 1:30 a.m. – 4:30 p.m. Guyana Time (afternoon only)

- Module 3 – Value Chain and Key Players (continued)

Day 3 – April 19, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

- Module 3 – Value Chain and Key Players (continued)
- Module 4 – Risk Assessment along the EI Value Chain

Day 4 – April 20, 2023 | 9:00 a.m. – 3:30 p.m. Guyana Time

- Module 4 – Risk Assessment along the value chain

Day 5 – April 21, 2023 | 9:00 a.m. – 12:30 p.m. Guyana Time

- Module 4 – Group Presentations (continued)
- Module 5 – Illustrative Audits
- Module 6 - Closing

Ground Rules



- Confidentiality
- Timeliness
- Respectfulness
- Resist emails and other distractions
- Active Listening
- Absences – notify Sherazade and Reona

Effective Learning Principles and Tools

Adult Learning



Learning Journal

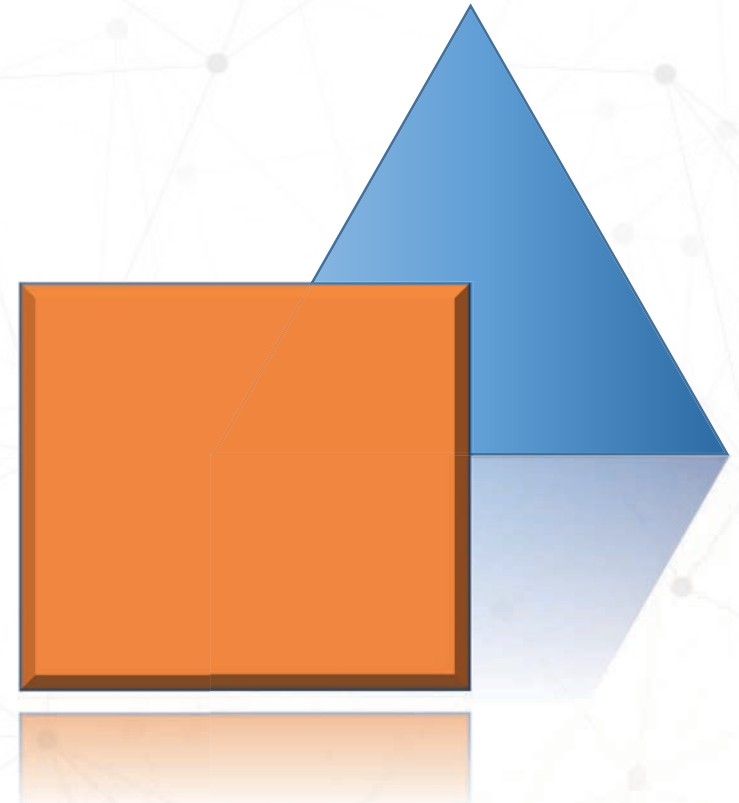


Parking Lot



Brain Break - Triangle Square Challenge!

- Draw a square in the air with index finger of both hands
- Draw a triangle in the air with index finger of both hands
- Now draw a square with one hand and a triangle with the other hand
- You can do it AS slowly as you like
- Let's try it for 30 seconds



Module 2 - Introduction to the Extractive Industries

Juliet Mutesi & Pauline Nyaga

Module 2

Learning Objectives

- Recap key learning from AFROSAI-E-learn
- Definition and Characteristics of extractive industries
- EI Value Chain and Audit Perspective
- Auditor Role
- Challenges facing SAIs

Opening Review – Recap of e-learn

1. FC are posted around the room
 - What are some relevant risk areas and audit considerations in oil and gas
 - What do you remember about the value chain for Extractive Industries
 - Who are some of the key players in the oil and gas industry and what are their roles?
2. Go stand at one
3. When instructed, write down as many ideas as you can related to the topic.
4. Switch! Move clockwise to another FC and add whatever you can to the existing content.
5. Rotation 4-3-2



Carousel

Quiz – Do you remember these acronyms from the e-learn?

Acronym	Meaning
CGT	Capital Gain Tax
DTA	Double Taxation Treaty
EIA	Environmental Impact Assessment
GHG	Green House Gases
IEA	Information Exchange Agreements
IOC	International Oil Company

Multiple Choice Question

Which of the following types of countries would be the best candidate for creating a sovereign wealth fund that invests in foreign assets

- A country with a budgetary surplus, little to no public debt, and substantial revenues expected from the extractive sector in both the short and medium terms
- A country with a budgetary deficit, a large amount of international debt, and substantial revenues expected in the short term
- A country with a budgetary surplus, little to no public debt and extractive resources nearing complete exhaustion

Source: <https://afrosai-e-learning.com/>

Time for a Break!

15 min. **BREAK**



Definition and Characteristics

- What do you understand by 'extractive industry'?
- What characterizes this industry?



Plenary

5 minutes

Definition and Scope of Extractive Industries

- Various definitions - WGEI, AFROSAI-E, WB, EITI
- World Bank Definition “Industries that extract natural resources from the earth and convert them into products that are consumed by individuals and businesses.”
- Includes extraction of all nonrenewable resources
 - Fishing and forestry
 - Mining of minerals, metals and aggregates (gold, coal, bauxite, iron etc.)
 - Extraction of hydrocarbons (Petroleum: Oil or Natural Gas)
 - Dredging and quarrying of submerged materials (off-shore oil, titanium, diamonds)
 - Both onshore and offshore
- Nonrenewable resources vary - *focus of the workshop is Oil and Gas.*

Characteristics of Extractive Industries

- Principle of sovereignty
- Long and costly exploration & development
- Geological Risk
- Substantial rents (Super profit)
- Exhaustibility of natural resources
- Volatile/Uncertain prices – Boom and Bust Cycles
- Significant economic, environmental and social impacts

What are the potential positive and negative implications for oil extraction in a developing country?



Small Group
Discussion

10 minutes

Impact of EI On Economic, Environment and Social development

POSITIVE

- Boosting revenue, Economic development and growth
- Improved infrastructure
- Employment opportunities

Negative

- Inequalities of income and social exclusion (corruption)
- Environmental degradation (pollution, poor decommissioning)
- Resource curse

Generally, EI can influence and be influenced by the Economic, Environment and Social Aspects

Impact of Extracting Oil

COMMON IMPACT OF EXTRACTIVE INDUSTRIES

SI No	Factor	Impact (+) or (-)	Impact on:
1	Air	(-)	Environment
2	Water	(-)	Environment
3	Noise	(-)	Environment
4	Bio diversity	(-)	Environment
5	Income	(+)	Socio economic
6	Employment	(+)	Social
7	Livelihood	(+) or (-)	Social
8	Poverty	(+) or (-)	Social
9	Export	(+)	Economic
10	Skill development and Trg.	(+)	Social
11	Education and literacy	(+) or (-)	Social
12	Community development	(+)	Social
13	Community access to services	(+) or (-)	Social
14	Water scarcity and quality	(-)	Environment
15	Land impact	(-)	Environment

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COMMON IMPACT OF EXTRACTIVE INDUSTRIES CONTD...

SI No	Factor	Impact (+) or (-)	Impact on:
16	Assets impacts	(-)	Environment
17	HIV/AIDS/STDs	(-)	Social
18	Security	(-)	Social
19	Gender	(+) or (-)	Social
20	Safety and accidents	(-)	Social and Environment
21	Violence/Drugs/Money laundering	(-)	Social
22	Cultural pollution	(-)	Social
23	Migration	(+) or (-)	Social
24	Impacts on tribal people	(-)	Social
25	Impact on agriculture	(-)	Environment
26	Children rights/Child labour	(-)	Social
27	Human rights	(-)	Social
28	Human trafficking	(-)	Social
29	Bribery and corruption	(-)	Socio economic

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Source: <http://www.wgei.org/international-training-programme-itp-on-audit-of-extractive-industries/>

How can developing countries balance out the positive and negative implications of oil extraction?



Plenary

Audit Perspective

- Maximizing the Benefits of Oil and Gas for Developing Countries
- <https://www.youtube.com/watch?v=encCn6GbT38>



Video

2 minutes

Possible Mitigating Measures

- Increased governance and transparency
 - Membership EITI and disclosure of contracts
- Promote local content and employment
- Invest in social and economic infrastructure
- Implement environmental safeguards
- Stakeholder consultation
- Limit oil production: quotas, caps, suspension of licenses
- Possible resources:
 - [The World Bank's Oil, Gas, and Mining Unit](#)
 - [Natural Resource Governance Institute](#)
 - [International Association for Impact Assessment](#)

Life Cycle in the Oil Industry

- Series of activities that a product undergoes
- Process of getting petroleum out of the ground to the market
- 3 Stages
 - Upstream
 - Mid stream
 - Downstream

Life Cycle – Matching Activity to the Stage

Activities

1. Exploration
2. Field Development
3. Transportation
4. Refining
5. Marketing
6. Extraction
7. Distribution

Stages

A. Upstream

B. Midstream

C. Downstream

Oil and Gas Lifecycle

- Let's watch a video together
- <https://www.youtube.com/watch?v=6ozmKhahk8M&t=8s>



Video

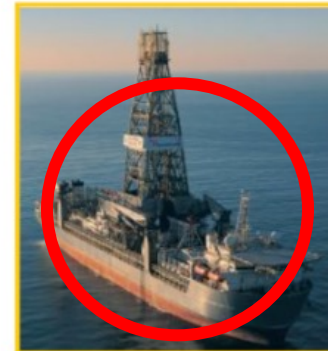
2 minutes

Offshore Drilling Guyana

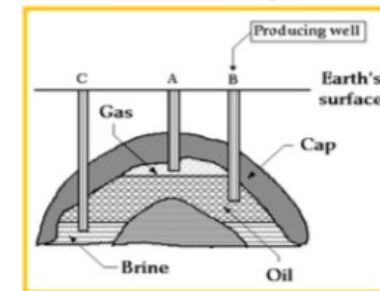
- There are many drilling techniques
- Details of Exxon's projects in Guyana can be found here:
 - <https://corporate.exxonmobil.com/locations/guyana/guyana-project-overview#LizaPhase1ProjectDescription>
- The Liza Destiny is a floating production, storage and offloading (FPSO) vessel
- Operating an oil rig offshore in poor weather conditions requires rigorous safety standards. Relevant government agencies should ensure that operators are addressing workers' health and safety properly



Onland Rig



Drill Ship



Jack Up Rig



Semi Submersible Rig

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Offshore Drilling in Guyana

- Let's watch a video showing us what might be happening in the sea and the advantages of the FPSO method
- <https://www.youtube.com/watch?v=b1VIsaMdX-Q&t=51s>

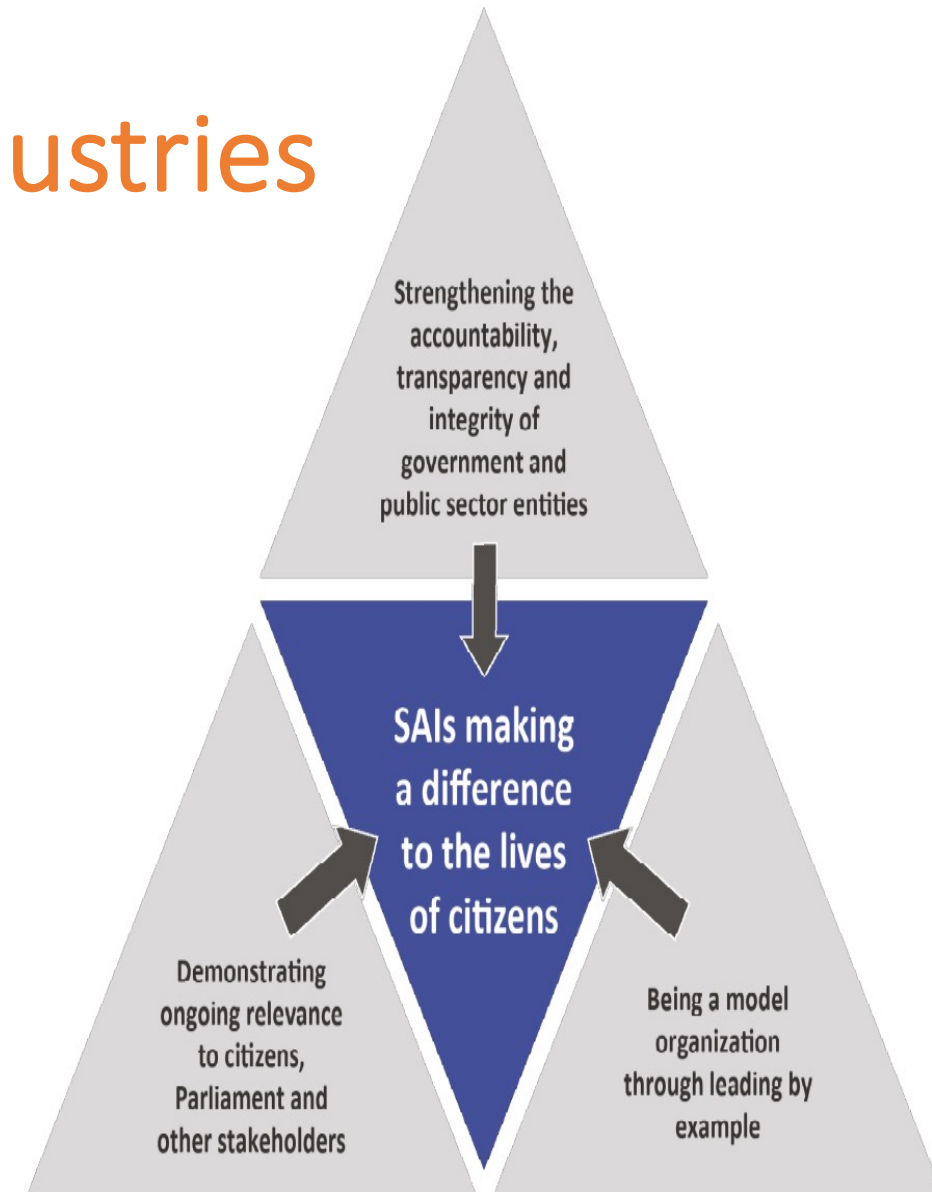


Video

5 minutes

Auditors Role in Extractive Industries

- SAs play an oversight role and promote accountability and transparency
 - Equally important in EI Sector
- Mandate of the SAI
 - Scope of the oversight and type of audit
 - Statutory obligations
 - Audit Clauses in PSA
- SAI role
 - Audit – Financial, Compliance, Performance
 - Making a difference to the lives of citizens



Auditors Role in Extractive Industries

Example of mandate:

Uganda:

Constitution Article 163:

Public Finance and management Act 2015: Petroleum Fund and Petroleum Revenue Investment reserve shall be audited in accordance the National Audit Act 2008.

Petroleum Upstream General Regulations Sec 37-Audit of the cost recovery Statement

Role of Audit Office Guyana

- What is AOG's role? Which documents govern AOG's roles in the Oil Sector?



Plenary

5 minutes

Role of Audit Office Guyana in Oil Industry

OAG Mandate in Guyana

1. FMA Act and Audit Act
2. PSA (Article 23.2 & 23.3)-The minister has the right to audit the accounting records of the contractor and nothing in the article shall be construed as limiting the right of the Government or any officer of Government pursuant to any statutory power to audit or cause to be audited the books of the contractor.
3. Natural Resource fund Act: Article 40- An external audit of the accounts, records and other documents relating to the Fun shall be undertaken annually by the Auditor General who may engage an internationally recognised auditing firm to assist in the discharge of its external audit function.

Key challenges facing SAIs in auditing EIs

- Technical Capacity
 - Technical complexity of the industry e.g organization set up
- Ambiguities in governing laws, policies, regulations or agreement
 - e.g subjective clauses (necessary, economical and appropriate)
- Contradicting regulations
- Confidentiality clauses
- Loss of skilled staff to the International Oil Companies
- Lengthy audit cycle(back & forth verification & consultations)
- Variations in systems between IOCs and Government

Enablers/solutions to the challenges

- Staff skilling, competencies and retention
- Sharing experiences and collaborating with other SAIs
- Collaboration with other government institutions
- Strategic plans for audit of the sector e.g SAI Uganda EI audit strategic sector plan.



Time for a Break!

60 min. **BREAK**



Module 3 – Seven Key Stages in the Value Chain

Juliet Mutesi & Pauline Nyaga

Module 3

Learning Objectives

Participants will understand the value chain concept as:

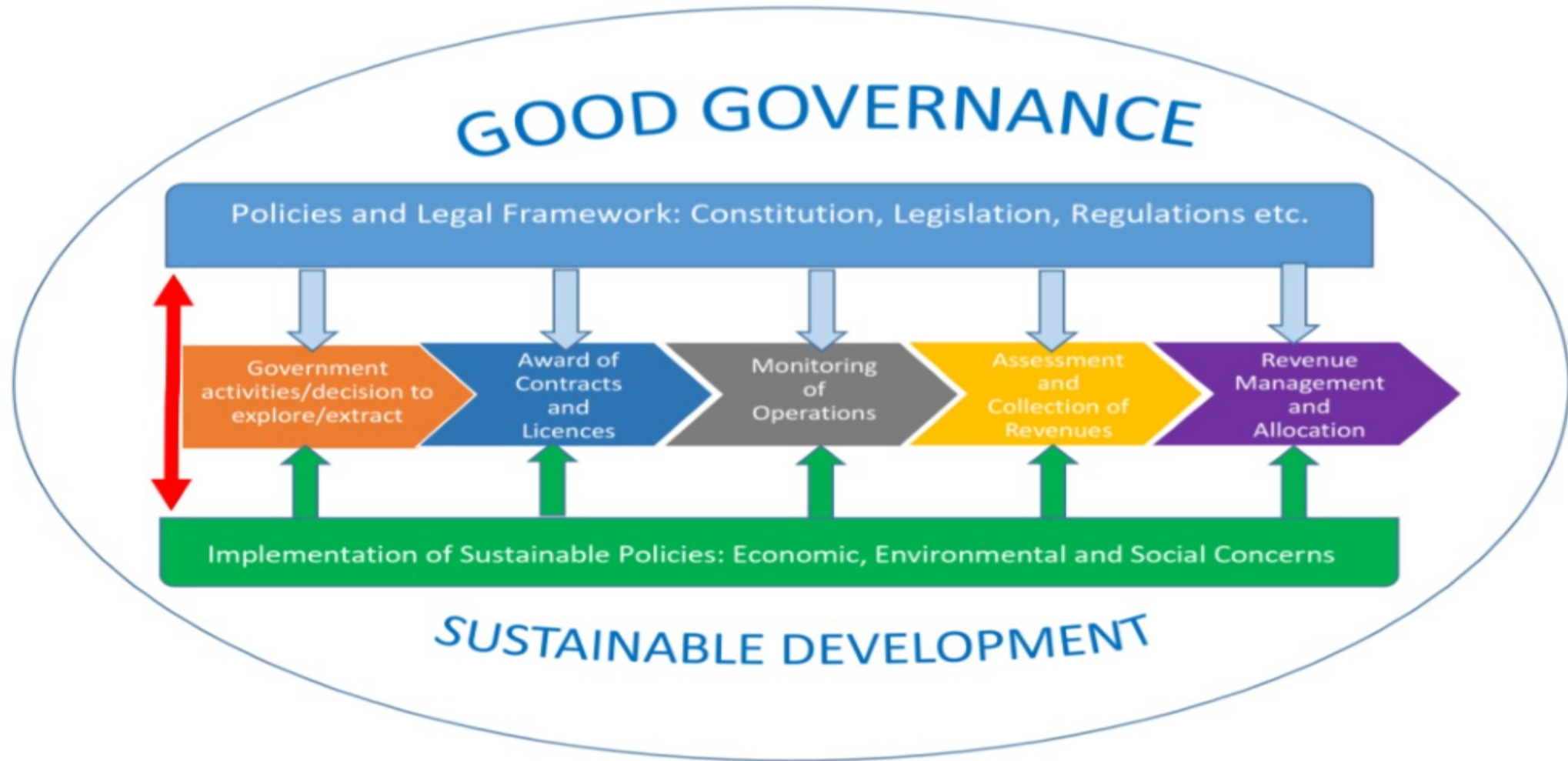
- A way of describing the stages by which the full value of a product is managed and ultimately realized
- A way to help to identify activities to focus on

Importance of EI Value Chain to Auditors

Focuses on the government's role and stakeholders involved in the EI

- Understand 7 key stages
- Be able to identify potential risks at each stage
- Develop audit considerations to address the risks
- Ultimately contribute to improving accountability and transparency in the sector

7 Key Stages in the value chain



Source: https://afrosai-e.org.za/wp-content/uploads/2019/10/Extractive-Industries-Guideline-2019_Final.pdf

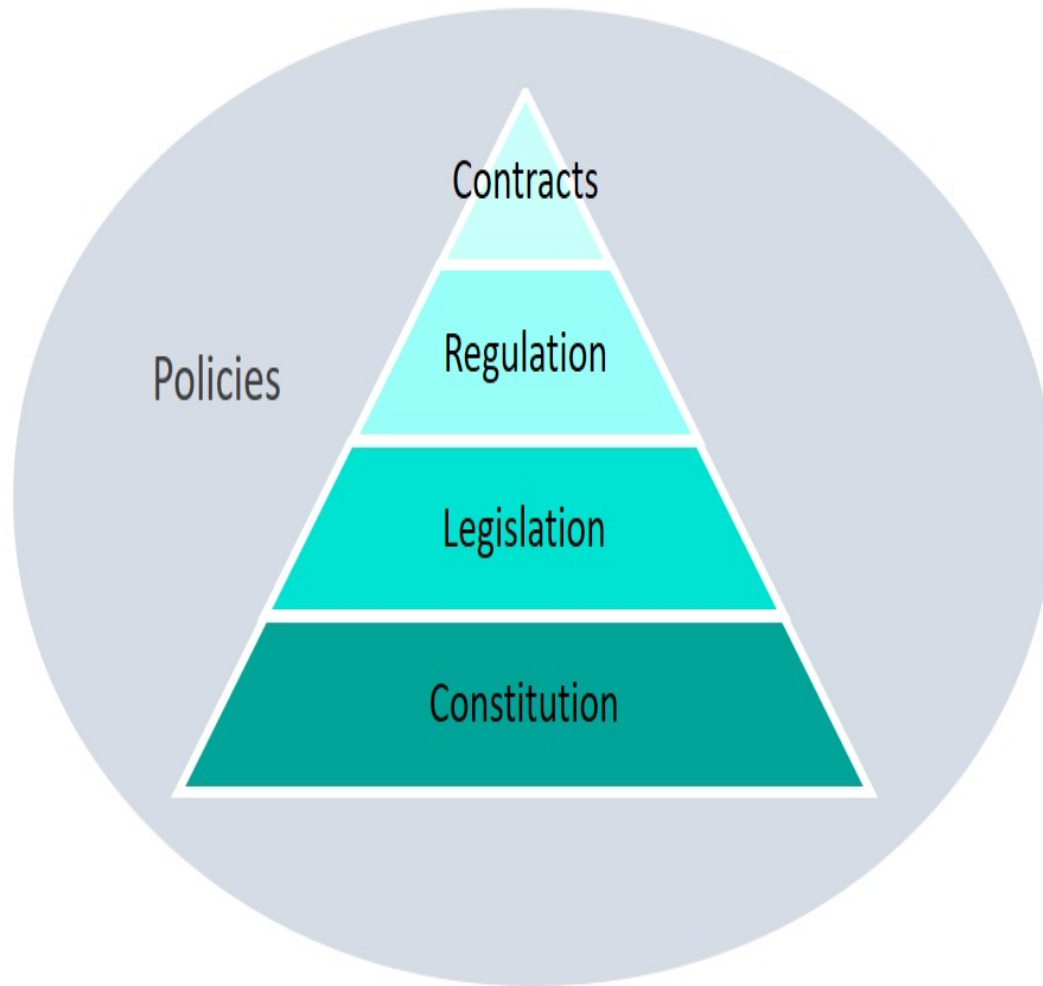
STAGE 1:

Policies and Framework

Government is responsible for establishing a proper legal framework building on international best practice

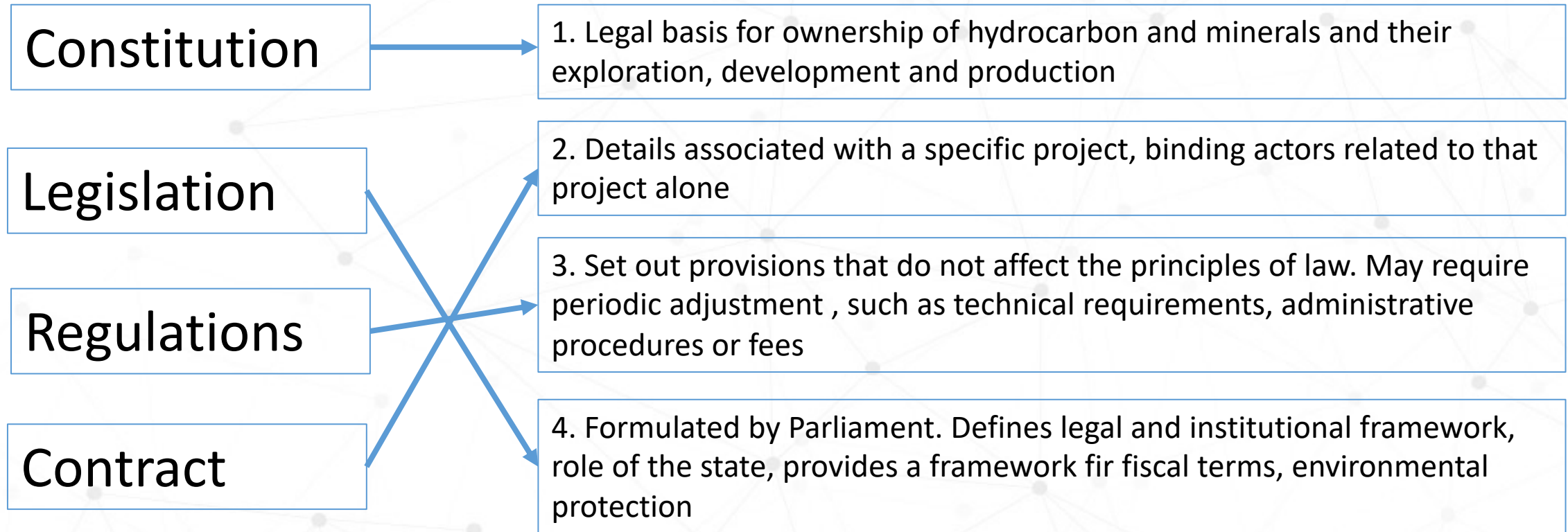


STAGE 1: POLICIES & LEGAL FRAMEWORK



Government is responsible for establishing a proper legal framework building on international best practice

Matching Exercise –E-learn Refresher



Plenary: Can a contract override other legislation?

Other Relevant Regulations

- Which are the relevant laws and regulations in Guyana governing the oil sector?



Plenary

Relevant Laws and Regulations

Key Regulations	Other Relevant Regulations
Petroleum Production Act, No 41 of 1939	Procurement Act
Petroleum Exploration and Production Act, No 3 of 1986	Finance and Administration Act
Petroleum Exploration and Production Regulations 1986	Central Bank Act
Guyana Geology and Mines Commission Act, No 7 of 1979	Audit Act
Environmental Protection Act, 1996	Financial Reporting Standards for IOCs
Natural Resource Fund Act, 2019	
Local Content Act, 2021	

[Source: Guyana 2019 EITI Report](#)

Toolkit

- Hand out # 1
- High Level Audit Considerations for policies and framework
- 5 minutes to read Stage 1



Toolkit

Hand out # 1

STAGE 2:

Exploration Activities

Government activities
and decisions to explore
and extract

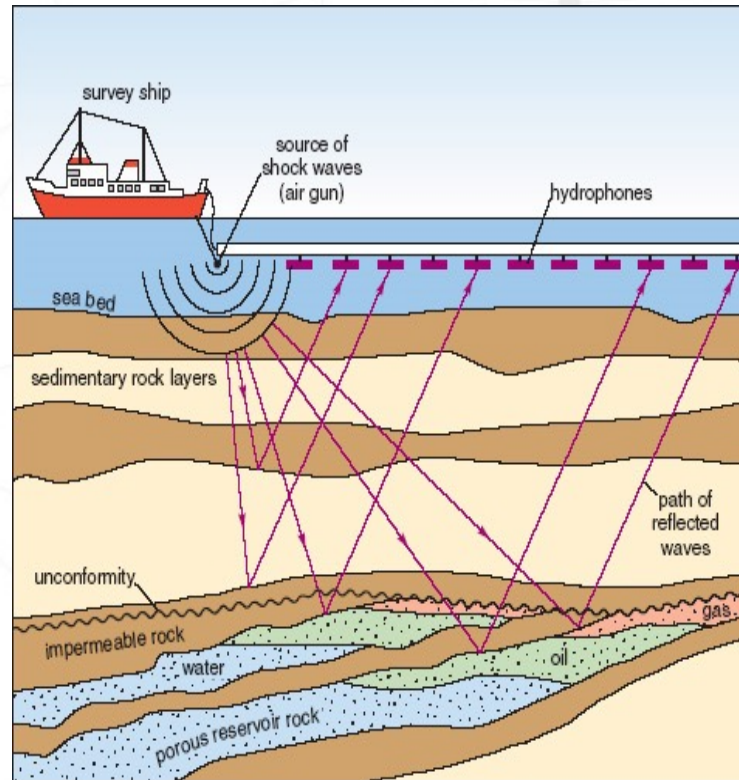
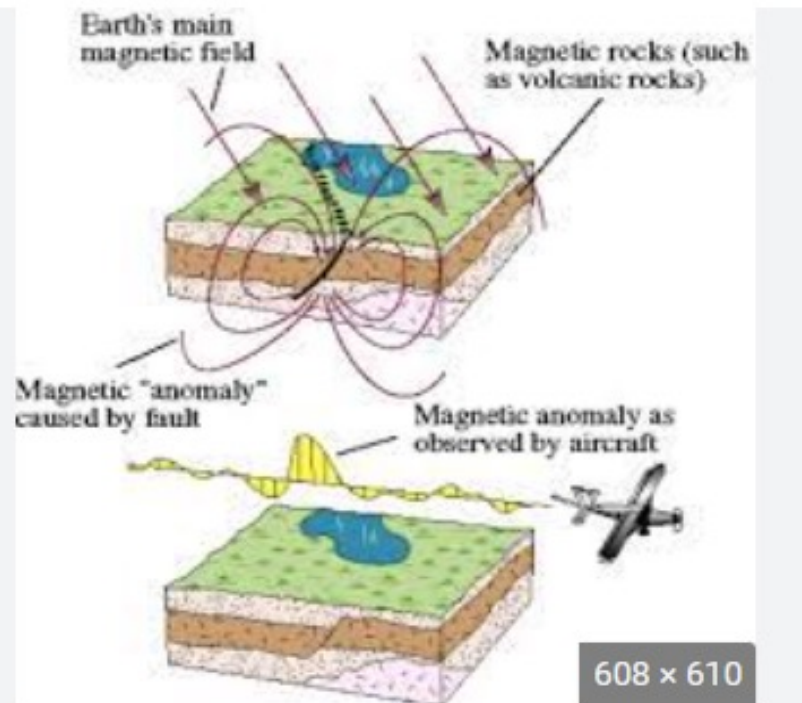


Stage 2: Government activities/decision to explore/extract

Overview/Activities involved

- Mapping an area with potential reserves (aerial surveys, seismic surveys etc) .
- Data management once information is collected
- Environmental Impact Assessment
- Decision to extract by policy makers

Seismic and Aeromagnetic Data Acquisition (Surveys)



- Data acquisition can be done by different parties.
- Airborne surveys are where sound waves are sent to the ground or water and their reflections analyzed

Access to good quality natural resource data

- Essential for a government
 - better negotiation position
 - easier to promote the industry
 - Public interest
 - Better development planning
- For example, the government should know if the reserves are offshore or onshore as this affects planning

Data Management

- Data can be physical
 - Physical - cores and oil samples and test oil
 - Electronic - reports and interpretations
- Oil agreements give governments access to all data required
- Data Management includes acquisition, processing , distribution and storage.

Data management - national depositories

National Depositories

- Such a database typically consists of: wells, well log data, well reports, core samples, seismic surveys, post-stack seismic, field data/tapes, seismic (acquisition/processing) reports, production data, geological maps and reports, license data and geological models.
- **Examples**
 - **Uganda – example of audit of national databases**
 - **Norway - <https://www.npd.no/en/about-us/open-data/>**

Audit Considerations?

- What lends itself to audit in the process of governments decisions to explore and extract ?



Small Group
Discussion

10 minutes

Audit Considerations for Stage 2

The SAI can assess

- Whether an EIA was conducted prior to the political approval or if one is planned.
 - Who did the EIA?
- Were quality assurance processes undertaken?
- Is there a reason to doubt the reliability of the seismic study?
- What is the competence of those performing the study?
- Does the government run a seismic data database?
- If yes, is it complete and is proper data security provided for?
- Are the data up to date?

https://afrosai-e.org.za/wp-content/uploads/2019/10/Extractive-Industries-Guideline-2019_Final.pdf
Section 3.2.6

Toolkit

- Hand Out # 2 - Stage 2



Toolkit

Time for a Break!

15 min. **BREAK**



STAGE 3:

Contracts

Award of Contracts and Licenses



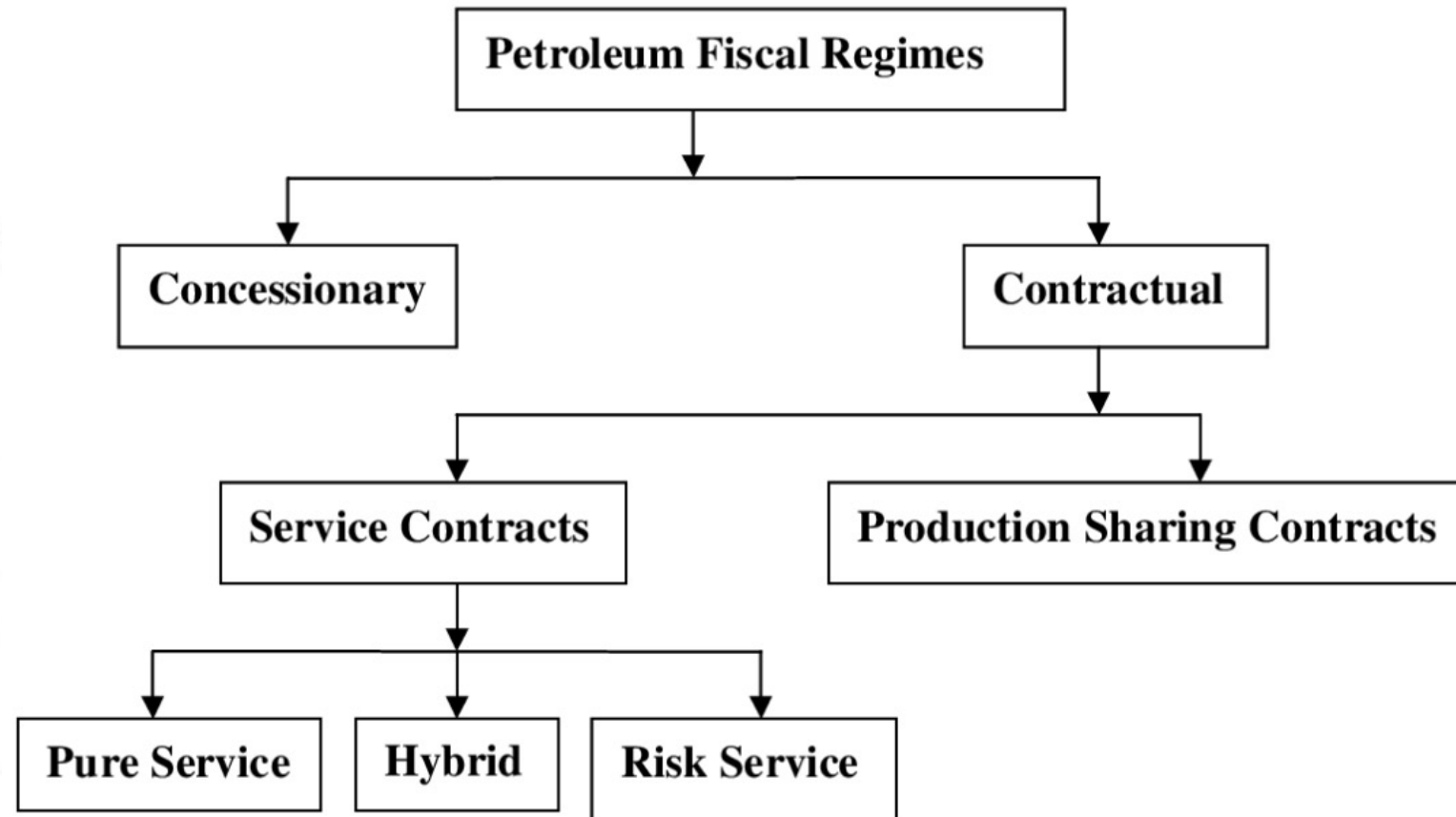
STAGE 3: Award of Contract and Licences

- Host government gives the right to explore, develop and or produce.
- The contract or licence governs the relationship between the host government and the oil and gas companies.
- Responsibilities and expectations of both parties.
- Licensing rounds
- Competitive bidding
- Direct procurement
- Under Competitive: Biddable factors can range from royalties, work programmes, bonus, etc.
- Criteria usually set out in the regulation or legislation.

Fiscal Regimes

- These are usually embedded in the laws or regulations
- There are various forms - common ones include
 - Contract-based system (PSA/PSC)
 - Concessionary system
- None is superior to the other
- Applicability or appropriateness depends on the prevailing circumstances of the host country

Fiscal Regimes



Fiscal Regimes/ Instruments

INSTRUMENT	Common features	Examples of Countries using the instrument
Concessions	<p>Host government transfers ownership of the resource to the exploiting companies.</p> <p>Economic risk is on investor</p> <p>Government take is usually through royalty and taxation of the company profits.</p>	Norway, Brazil, Egypt, Tunisia, Colombia, Ghana, Argentina, Canada
Production Sharing Agreement/ Contract (PSA/PSC)	<p>Economic risk on Contractor (Petroleum Company)</p> <p>Available petroleum is shared between the parties (profit sharing)</p> <p>Revenues (IOC petroleum profits) are taxed</p>	Guyana, Afghanistan, Azerbaijan, Libya, Ghana, Indonesia, Libya, Timor-Leste, Uganda, Canada
Technical Service Agreements	<p>Economic risk on Government</p> <p>Usually low exploration risk</p> <p>Contractor receives a fee for extracting the resource</p> <p>Fees are taxed</p> <p>Government owns the resources in the ground</p>	Iraq, Bolivia, Peru, Ecuador, Mexico, Philippines

STAGE 3: Award of Contract and Licenses

An efficient and effective award system is

- Transparent
- Competitive
- With minimal discretionary authority
- Depending on complexity of the negotiations – use transactional advisors
- *Example:*
 - *Uganda: The Ministry of Energy and Minerals Development carried out the competitive bidding.*
 - *Guyana: refer to the ministry website for the recent award*

Product Sharing Agreement/Contract (PSA/PSC)

- This was 1st used in Indonesia (“Indonesian formula”).
- The main feature is that the host government retained ownership of the resource and negotiated a profit-sharing scheme with the companies.
- Host governments give companies the right to explore and develop oil fields.

Common Features in PSA/PSCs

- Exploration period
- Royalties
- Signature/sign on bonus
- National Participation(National Oil Companies)
- Local content

- Cost recovery
- Confidentiality
- Decommissioning
- Exploration period
- Minimum exploration period
- Delivery point

PSAs continued

- Eligibility of costs to be recovered
 - usually covered in the agreement, could be in the laws
 - Uganda: In the agreement
 - Indonesia: Negative list
 - Ring Fencing
- Unrecoverable costs
 - Costs incurred before the Effective Date
 - Signature and other Bonuses
 - Royalty
 - Income tax
 - Fines and penalties
 - Interest incurred on loans to finance exploration activities

- Unrecoverable Costs (ctd.)
 - Donations
 - Any other expenses incurred without the approval of the Authority.
- Profit Oil
 - Remains after the removal of the cost oil. It is shared between the host government and contractor as per the agreement.
 - usually stated as percentages e.g 50%-50%
 - percentages can be influenced by various aspects; political stability of the host country, commerciality of the reserves, prevailing

Features of Uganda's PSA

- **Bonus**
 - Signing Bonus Between 100K-200K
 - Production Bonus 50m BOE \$5M @ additional 25m BOE \$3M
- **Royalties – dependent on production volumes – sliding scale**
- **Cost Recovery**
 - Cost oil: Retained by the contractor to reimburse the costs associated with exploration, development and production.
- **Limit on recovery - to ensure host government always has a share in any given year**
 - Common range of the limit is 55-70%.
 - Uganda : limit is 60% - 65%

- **Carryforwards**
 - A contractor incurs exploration costs in years 1, 2 & 3
 - When production starts, they recover these costs.
- **Profit Sharing**

R-Factor	Licensee's Share of Profit Petroleum (in percentage)	Government's Share of Profit Petroleum (in percentage)
$R \leq 1.000$	50	50
$1 < R \leq 3.000$	$Z = 50 - [25*(R - 1)/2]$	100-Z
$R > 3.000$	25	75

Petroleum Agreement with Esso, Nexen and Hess – June 2016

- Contract published on EITI - <https://www.gyeiti.org/reports-blog/mnr-2016-contract-with-exxon>
- EEPGL - 45 % interest in Liza block (crude oil), Hess Guyana Exploration 30 % and CNOOC Petroleum Guyana Limited 25 %.
- Guyana will take **50% of profit and 2% royalties** from oil lifted from the offshore Stabroek block.
- 18M USD signing bonus and annual license rental charge of USD 1million
- Cost recovery limit is **75 % carry forward** allowed
- Domestic Preference for goods and services and Domestic Supply Obligation
- Annual 300,000 USD to train Guyanese personnel
- Environmental Authorisation from EPA
- Administrative Overhead – Rolling rate, between 1% and 5% of contract costs

Petroleum Agreement with Esso, Nexen and Hess – June 2016

- Right to audit within 2 years
- Accounting Requirements
 - Classification of expenditure - exploration, development and production
 - Monthly Production Statement (reconciliation of opening and closing qty)
 - Quarterly value of production and pricing - quantity, prices, receipts of each quality of crude oil and natural gas – 3rd part sales separately
 - Quarterly Statement of Expenditure and Receipts – actual, cumulative, forecasts, variations with budget
 - Quarterly Cost Recovery Statement
 - End of Year Statement within 120 days
 - Annual Budget Statement – exploration, development and operating costs – one year forecast and cumulative to date – entitlement and provision of crude oil and natural gas

Toolkit

- High Level Audit Considerations in Awarding Contracts – Hand out # 1
- 5 minutes to review for Stage 3



Toolkit

Hand out # 1

Energiser – Brain Break!

- <https://www.youtube.com/watch?v=FOgcrNrtfpo>

STAGE 4:

Monitoring Operations



I.E. GUIDELINE, "AUDIT CONSIDERATIONS FOR THE AUDIT OF EXTRACTIVE INDUSTRIES" (2019)

- Effective monitoring practices involve clear definition of duties by different role-players
 - Avoid overlapping or conflicting competencies and roles in monitoring
 - Prevents gaps in regulatory responsibility
- Roles defined in the regulatory framework
- Implementation of provisions in place for monitoring operations

Key Players

- Executive bodies
- Legislative bodies
- Sector ministries
- Regulatory agencies
- National resource companies
- Finance ministry
- Taxation authority
- Central bank
- Economic planning ministry
- Environment ministry

Close coordination among these institutions is essential



Regulatory Authorities

- The sector is mainly regulated and administered by :

Institution	Description
Ministry of Natural Resources	Oversee policies for the responsible exploration, development and use of natural resources whilst ensuring the protection and conservation of the environment
Department of Energy – Established August 2018 under Ministry of Presidency, now under MNR	
Guyana Geology and Mines Commission	Grants and keeps records of licenses
Guyana Revenue Authority	Collects taxes and royalties
Petroleum Commission (to be established)	collection of fees, fines, and other charges within the oil and gas industry
Environmental Protection Agency	Environment protection
Ministry of Finance	Managing Natural Resource Fund
Other agencies	National Insurance Scheme, Financial Intelligence Unit,

Auditors Role

Ensure that the monitoring role of various government entities are clearly defined within the legislation

Key stakeholders' authority, and available resources are adequate compared with their responsibilities

Ensure sufficient technical capacity – staff with understanding of the technical complexities of the oil sector

Allocation of monitoring roles and responsibilities to agencies in the regulatory framework should take full account of environmental and social protection in the sector.



Key Monitoring Considerations

Stage 4
(continued)

- **Production**
- **Environmental and Social Impacts**

Refer to document on audits conducted.



Monitoring considerations - production

- Production Volumes
 - Critical basis for calculating revenue
- Reconcile quantity and quality at various points
 - Metering Equipment - Early and at several points to discover leaks
- Transportation
 - Determine costs

Monitoring Considerations – Social and Environmental

- Environmental and Social Impact Assessments (ESIAs)
 - IOCs analyze short- and long-term impacts of the project and identify potential mitigation measures and monitoring methods.
- Environmental and Social Management Plans (ESMPs)
 - Based on the ESIA
 - Provide more detailed procedures and practices on how the company will comply with relevant requirements and manage negative impacts
- Auditors may use these tools to monitor IOC performance

Energizer

- Everyone stand up
- Each person talks about one thing they have learnt
- After speaking, you can sit down



Energiser

What worked, what didn't?



Stop

Continue

Start

Congratulations! You have completed Day 1!

2023-04-23

To promote the audit of extractive industries



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Welcome to Day 2

2023-04-23

To promote the audit of extractive industries



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Agenda Recap

Day 1 – April 17, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

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- Module 4 – Risk Assessment along the value chain

Day 5 – April 21, 2023 | 9:00 a.m. – 12:30 p.m. Guyana Time

- Module 4 – Group Presentations (continued)
- Module 5 – Illustrative Audits
- Module 6 - Closing

Module 3 – Seven Key Stages in the Value Chain (continued)

Juliet Mutesi & Pauline Nyaga

Recap

- What is the first stage of the value chain?
 - Environmental Assessments
 - Policies and Legal Framework
 - Seismic Data
- What are the two key areas to monitor?
 - Production Volumes and Seismic Data
 - Environmental and Contractual Issues
 - Production and Social/Environmental Issues



Poll
Use red/yellow/green
cards

Stage 5

Assessment and Collection of Revenue

The ability of a government to assess and collect taxes, royalties, duties and other revenues depends on the choice and quality of fiscal regime and fiscal instruments, and on the administrative and audit capacity and competence in the relevant institutions.



IF AU GUIDE LINE- "AUDIT CONSIDERATIONS FOR THE AUDIT OF EXTRACTIVE INDUSTRIES" (2019)

What are the different kinds of revenue the government earns?



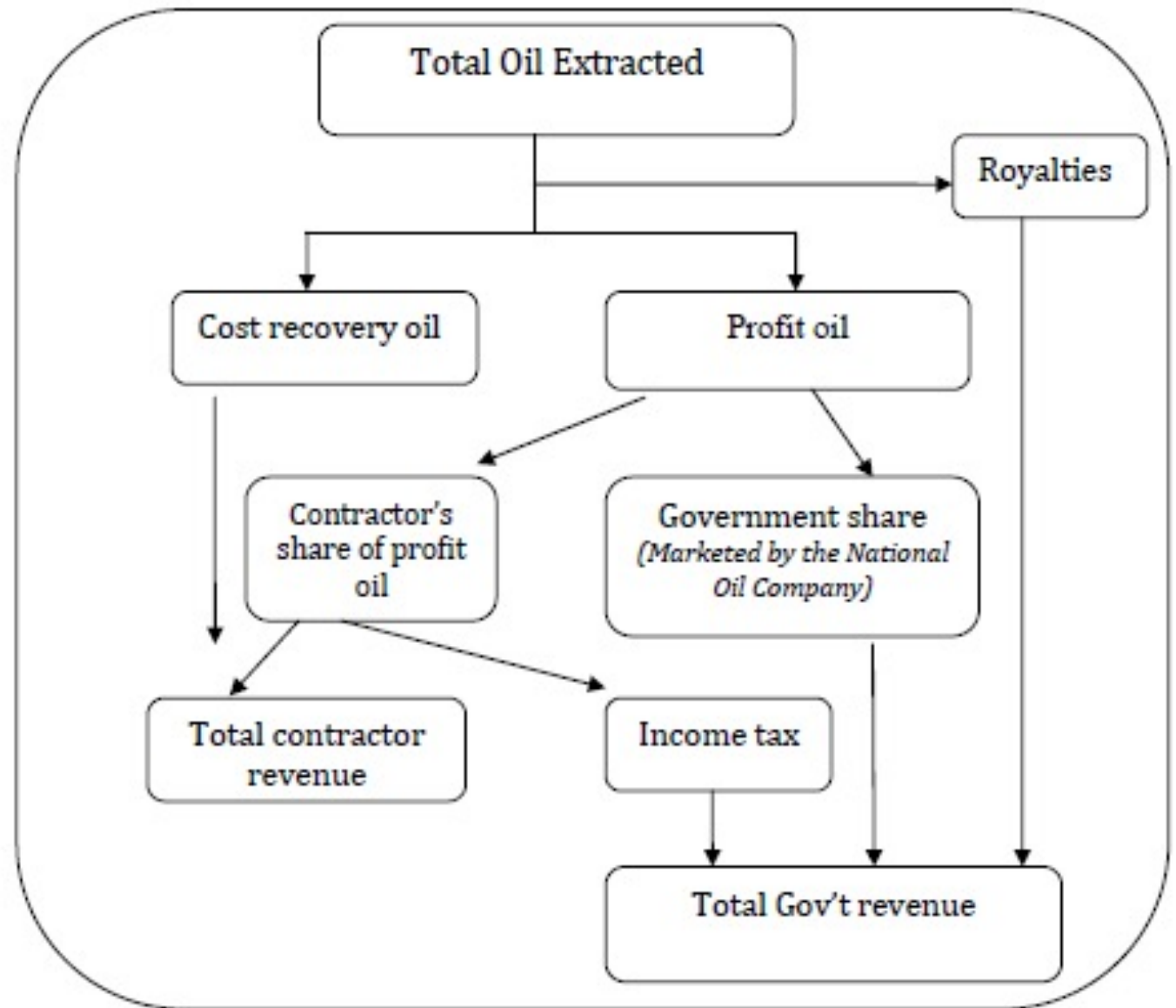
Plenary

5 minutes

Types of Revenue from Oil Sector

TYPE OF REVENUE	EXAMPLES OF REVENUE
Upfront	Auction of exploration rights, licence fees, area fees, signature bonus and transportation fees
Gross taxes	Royalties Domestic market obligations (an effective royalty) Certain types of windfall tax Ground rent tax (typically on hydro-electric and nuclear power)
Field taxation (most relevance for petroleum)	Production sharing agreements/ contracts
Corporate net income tax	Profit income tax Other taxes include: <ul style="list-style-type: none"> • Commercial tax • Corporation/Company income tax • Capital gains tax • Withholding tax • Pay-as-you-earn tax (deductible)
Government participation	Government share in projects, state-owned companies

Illustration of petroleum revenue sharing in a PSA



Revenue Sharing Example

- Scenario:
 - Total production: 1 million barrels
 - Average price per barrel: \$100
 - Royalty rate : 2%
 - Limit on Cost Recovery : 75%
 - Profit Split : 60:40%
 - Tax Rate is 30%
 - Brought forward balance of cost oil : 500M\$
- Work out the total revenue that the government will receive



Individual Exercise

Solution

	Licensee Share	Government Share
A. Crude oil production	100,000,000	
B. Less: 2% Royalty	(2,000,000)	2,000,000
C. Less: Cost Recovery (lower of 550M and 75% of production)	(75,000,000)	
A-B-C = D : Profit Oil	23,000,000	
E = Less: 60% of Government Share of Profit (100M-2M-75m)	(13,800,000)	13,800,000
D-E=F : Licensee's Share of Profit (40%)	9,200,000	
F*tax rate = G : Tax thereon @ 30%	(2,760,000)	2,760,000
B+E+G = Total government revenue		18,560,000

Transfer Pricing

- What is transfer pricing?
- Why would a company do this?



Plenary

Transfer pricing

- https://www.youtube.com/watch?v=8HUIS_WIB_o
- Let's watch this together



Video

2 minutes

Transfer Pricing

- Value of goods/services between related parties (holding, subsidiary, associates)
- Shift taxable profit
- Economic incentives for MNEs to shift profit between their companies in respectively high- and low-tax jurisdictions
- Fixing prices accordingly
 - Charge a high rate for a service to a company in a higher tax zone
- High risk for multinational entities
- Estimated 60-70% of world trade is transactions between subsidiaries within MNEs.

Transfer Pricing considerations for auditors

- Tax authorities most important to prevent illicit profit sharing
 - Applying general anti avoidance regulations (GAAR)
 - Note: No TP regulation in GY; but there is a GAAR
- A SAI's mandate is normally limited to assessing how tax authorities handle TP risks.
 - However, if the SAI is mandated to audit cost statements, then SAI will also consider TP
- Consider the country's domestic legislation regarding key TP principles, including the arm's length principle, TP methods etc.
 - Pre-approved methods for calculating arm's length

Audit Considerations

- Conduct mapping of petroleum taxation legislation
 - PSA
 - Tax law
 - Separate petroleum tax legislation, if any

Assess

- Whether tax is calculated using correct rates
- Eligibility of deductions
 - Only relate to a specific contract area and incurred in the same year as the income
 - Royalties, if applicable
 - Decommissioning fund reserve, if relevant
 - All other recoverable costs as defined in the taxation act or PSC
- The value of petroleum, of which the tax value is derived, is calculated in accordance with country regulations
- Timely submission of tax return
- All payments made in accordance with the legislation/contracts

Transfer Pricing audit finding examples

- Reluctancy or unwillingness to provide mandatory TP documents for audit;
- Revenue authority does not enforce taxpayer's compliance of providing TP documentation within deadline;
- Lack of competence and resources in revenue authority;
- Indiscriminate rate of services provided regardless of staff experience or merit;
- Duplication of costs (liable not to be discovered/detected in TP arrangements);
- Insurance/captives – overpriced by subsidiary in tax haven;
- Use of intangibles – overpriced by subsidiary in tax haven;
- Loans from related companies/affiliates with inflated interest rates;
- Restrictions to audit TP in clauses of PSA

Time for a Break!

15 min. **BREAK**



Stage 6

Revenue Management and Allocation



Oil revenues will likely be volatile

They can be used to transform a nation but can also be disruptive

Gov't manages these revenues

- Funding budgetary needs
- Establishing special funds
- Transferring to affected communities

Overview

- Oil and Gas sector is associated with significant revenue.
- A resource-rich country can get this revenue in various forms as per their fiscal policy as discussed in stage 5 assessment and collection of revenue.

Characteristics of revenues from the EI

- Significant macroeconomic distortions
 - non-oil budget deficit
 - excessive borrowing.
- Temporary and exhaustible
- Volatile(Booms/bursts)
 - Due to changes in market prices



Why an effective value chain is critical

“Despite Zambia being ranked 7th globally in copper production, communities continue to suffer from abject poverty and miserable quality of life with little access to basic services and even less hope.”

Is it a blessing or a curse?

Nigeria



Living with oil pipes in a rural area



Taking advantage of ruptured oil pipes, mostly caused by thieves leaving cracks in the pipe

Why the Need to Manage EI Revenues

- *“Countries with renewable resource wealth face both an opportunity and a challenge. When used well, these resources can create greater prosperity for the current and future generations and if used poorly, they can cause economic instability, social conflict and everlasting environmental damage”*

[NRGI](#)

- **Resource curse / Paradox of Plenty**
 - The common paradox of natural resource-rich countries not being as developed as they would be given the revenues from such resources
 - Negative consequences such as corruption, economic instability and conflict
 - e.g Nigeria
 - Exceptions/ success stories; Norway, Indonesia, Malaysia, Chile, Botswana.
- Revenue management involves allocation/ distribution of the EI revenue(expenditure, saving, investing).

Possible causes of the Resource Curse /Paradox of Plenty

- High dependence on natural resources coupled with weak institutions/ governance
- Revenue volatility due to volatile prices of natural resource commodities (hinders long-term planning).
- Increase in public debt(borrowing against resources)
- Related economic phenomena - Dutch disease
 - Tendency of economies ignoring other sectors and concentrating of the natural resources.
 - Term coined in the 1970s after discovery of natural gas in Netherlands
 - Influx of foreign currency - appreciation of domestic currency
 - Makes exports of other goods more expensive for foreign buyers – decline in the competitiveness of other sectors (manufacturing , agriculture)
 - Higher wages also make other sectors less attractive for workers
 - Example: Angola – Kwanza appreciated by 60% between 2001-2007, with (-) impact on agriculture

How to prevent resource curse

- Promoting transparency in revenue collection and distribution e.g EITI
- Resource revenue funds(Stabilization fund, Saving funds)
- Establishing sound budget and macro policies
- Building strong institutions

Transparency - Extractive Industries Transparency Initiative

- Global Initiative - Commit to disclose information along the extractive industry value chain
 - publishing comprehensive reports, including full disclosure of government revenues from the extractive sector, as well as all material payments made to the government by companies operating in the oil, gas and mining sectors
- Guyana joined in October 2017 – public commitment to implement
- GYEITI Report for Fiscal Year 2019 – May 2022 – By BDO
- Latest Validation 2022 – limited data for 2020 onwards

<https://eiti.org/countries/Guyana>

https://eiti.org/sites/default/files/2022-05/GYEITI%20Report%20FY%202019%20%20_0.pdf

Natural Resource Fund

- Purpose
 - Bringing together all the revenues from the resources, ensuring present and future benefit and promoting transparency i.e common management of the resource revenues.
- Key aspects
 - Governance (structure, process, relationship between the players, policies guiding the expenditure /investment decisions).
- Examples:
 - Alaska Permanent Fund: 25%of royalties and bonus are paid into the fund and for reinvestment in bonds.
 - Norwegian Petroleum Fund- Started in 1990 with monies initially used for investment in oversea bonds and stocks, now reorganized to a pension fund.
 - Uganda Petroleum fund
 - Ghana Petroleum Holding Fund, Ghana Stabilization Fund, Ghana Heritage Fund
 - Alberta Heritage fund

Guyana Natural Resources Fund Act 2019

- Oil and gas revenues, profits, taxes etc. to be deposited in Natural Resource Fund
 - Managed by MoF
- Purpose is to manage the wealth for current and future generations:
 - Revenue volatility should not lead to spending volatility
 - Revenues should not lead to loss of economic competitiveness
- 22-member oversight committee
 - representatives from CSOs, women groups, youth, the Bar, Consumers, EITI, trade unions, accountants, 10 councils, PSC etc.
 - Members of Parliament and Ministry not eligible
- 6-member investment committee - 500 M USD in 'safe' investments
- Withdrawals – request in annual budget
 - National development and green economy priorities
 - Natural disasters or emergencies
 - 'Economically and Fiscally Sustainable' amounts determined by Macroeconomic Committee

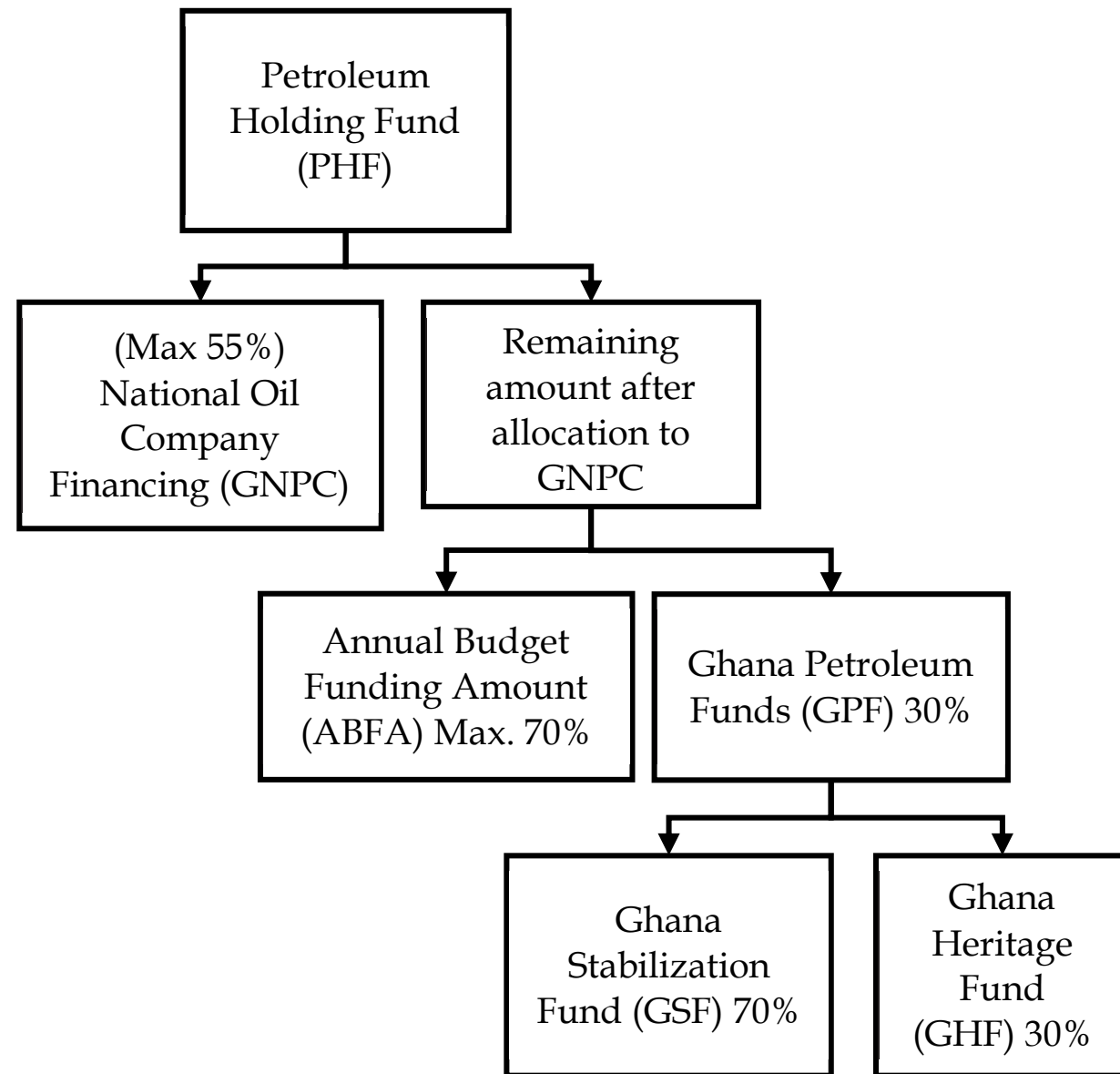
Guyana Natural Resources Fund Act 2019

Other matters covered

- Governance : Board and Oversight committee
- Banking
- Private managers
- Custodians
- Investments & withdraws
- Accounts and Audit
- Confidentiality

Illustration: Ghana Revenue Management Model

Source: AFROSAI- E Guideline 'Audit Consideration for the Audit of Extractive Industries' (2019)



Calculation of Fiscally Sustainable Amount

- Benchmark Petroleum Revenues – a conservative 7-year average of crude oil prices
- Production Constrained Benchmark
 - 67% of BPR – if < 200K barrels a day
 - 50% of BPR – if 200K-400K barrels a day
 - 33% of BPR if > 400K barrels a day
- Fiscally Sustainable Amount Ceiling is greater of
 - 3% of the NRF balance
 - 25% of nonpetroleum revenues for 5 years

Auditors Role in the Fund

- Guyana: Para 40 of the NRF Act

External audit.

40. (1) An external audit of the accounts, records and other documents relating to the Fund shall be undertaken annually by the Auditor General who may engage an internationally recognised auditing firm to assist in the discharge of this external audit function.

(2) The Bank shall submit the audited financial statements of the Fund and the external auditor's report to the Minister no later than the 30th of April of the fiscal year following the fiscal year that is being audited.

(3) The Auditor General may charge a cost recovery fee for the external audit which shall be paid by the Fund.

Auditors Role in the Fund

Questions SAIs can ask

- Are decisions on revenue allocation transparent?
- Are expenditure decisions nested within a sound macro-fiscal framework and in line with the country's development strategy?
- Are there policy measures to address the Dutch disease?
- Is there a credible mechanism to deal with excess revenue in a sustainable manner, such as setting it aside in a transparent savings and stabilisation fund?
- Is Revenue being paid on time into the designated central bank account
- Does the management agreement between MOF and the central bank also covers investment policies.
- Is the cap on the amount of revenue to be transferred to the annual budget adhered to.
- Are withdrawals only made for the intended purpose.

Reflection – Review

Module 3

- Take a few minutes to reflect on what you learned today
 - What concepts did I learn?
 - What questions do I have?
 - What can I implement or share with my team?
 - What improvements could be made by the office to prepare to audit the oil sector?



Learning Review

5 minutes

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- Module 6 - Closing

Opening Review

1. FC are posted around the room
 - What do you understand by transfer pricing?
 - What is the resource curse and related Dutch disease?
 - What is the benefit of being part of the EITI?
2. Go stand at one
3. When instructed, write down as many ideas as you can related to the topic.
4. Switch! Move clockwise to another FC and add whatever you can to the existing content.
5. Rotation 4-3-2



Carousel

Stage 7

Implementation of Sustainable Policies

Economic, Environmental and Social Concerns



I-E GUIDELINE: "AUDIT CONSIDERATIONS FOR THE AUDIT OF EXTRACTIVE INDUSTRIES" (2019)

EI Value Chain and Sustainable Policies

EI Value Chain Step	Relevant to Sustainable Policies
Policies and legal framework	Environmental, health and safety (EHS) regulations, social impact regulations/agreements, revenue management regulations, local content policies and legislations, contracts, licensing agreements and conditions for tender qualifications etc.
Government activities/decisions to explore/extract	Baseline assessments, verification of license compliance, environmental and social considerations when exploring etc.
Award of contracts and licences	EIA/ESHIA license and requirements etc.
Monitoring of operations	Environmental health and safety (EHS) monitoring, (EIA/Environmental Management) monitoring, monitoring of closure/decommissioning etc.
Assessment and collection of revenues	EIA license fees, rehabilitation fees, monitoring fees, community development funds, decommissioning funds/financial assurance etc.
Revenue management and allocation	Managing and allocating revenue to and from community development funds, decommissioning funds or sovereign wealth funds etc.

Environmental and

Environmental Impact Issues

Biodiversity

Disaster management and emergency preparedness

Decommissioning, rehabilitation and mine closure.

Water usage and water pollution

Pollution and waste management

Air emissions

Social Issues

Social Impact Issues

Human rights

Fatalities, Safety and Occupational Health of miners and communities

Local content, local employment and investment

Displacement and resettlement of communities

Gender equality

Health, Safety and Environmental Concerns in Guyana

What issues are you aware of?



Plenary

Health, safety and environmental concerns raised in Guyana

- Sensitive marine ecosystems
- Rising Sea Levels
 - Georgetown is one of nine major world cities forecast to be underwater by 2030 if greenhouse gas emissions continue at their current rate - research group Climate Central.
- Citizens and activists lodge concerns
- Guyana is historically a 'Green Champion'
- Guyana striving to balance growth from oil and the climate – vast rainforests suck carbon dioxide from the atmosphere and may result in net-zero (or low) carbon emissions

Gas Flaring

- “The World Bank-led Global Gas Flaring Reduction (GGFR) partnership called on oil producers, both countries and companies, to reduce flaring of natural gas associated with oil production by 30% by 2017. This, the Bank said, would reduce flaring from 140 bcm of gas flared in 2011 to 100 bcm by end of 2017, for a reduction in CO2 emissions equivalent to taking 60 million cars off the road.”

Local content

- **Purpose:** Ensure that host country citizens benefit from the resource extraction in their country
- **Criteria frequently used:**
 - Ownership – enter JV with local partners
 - Procurement - Preference to locally sources goods and services
 - Local employment
 - Capacity building of local employees and suppliers – training, transfer of know-how and technology
 - Research and Development - local companies benefit from technology transfer

SAIs Role



EI and SDGs

- EI's will impact almost every SDG in Guyana
- In four Groups
 - Group 1 – SDG 1-4
 - Group 2 – SDG 5-8
 - Group 3 – SDG 9-12
 - Group 4 – SDG 13-17
- Consider implication of the newly discovered oil on these SDGs



Small Group
Discussion

30 minutes

El's and SDGs

- Refer to Hand Out # 3
- Compare your answers with the AFROSAI-E List
- 5 minutes individual reading



Toolkit

Time for a Break!

15 min. **BREAK**



Module 4 - Risk Assessment Along the EI Value Chain

Juliet Mutesi & Pauline Nyaga

Module 4

Learning Objective

Use of the EI Value Chain to identify audit risks along the value chain

Identification of possible audit areas

Risk and Risk Assessment

Risk is the probability that incidents may occur and affect the achievement of objectives negatively

Risk assessment involves a systematic process of evaluating country-specific potential risks for each step in the EI value chain

What are some of the key risks in this sector?



Plenary

5 minutes

Security and IT Risks

- What areas do you think are prone to cyber security risk in the oil extraction industry?
- (Hint: Recall eLearn)



Plenary

5 minutes

Some cyber security risks

UP STREAM	MIDDLE STREAM	DOWN STREAM
<ul style="list-style-type: none">• Manipulating field device parameter settings• Interfering with key safety controls and measures• Theft of intellectual property such as geological data, production information and bidding documents	<ul style="list-style-type: none">• Unauthorised access to and manipulation of relieve valves, compressors and manually overriding automatic shutdowns in pipelines• Altering automated storage gauge controls and alarms (level, temperature, pressure)	<ul style="list-style-type: none">• Controlling automated gauges at retail stations• Theft of customer credit card and sales data• Tampering with market data and transaction systems
KEY BUSINESS RISKS POSED BY CYBER ATTACKS		
<ul style="list-style-type: none">• Damage to critical infrastructure • Environmental damage • Operational shutdown • Plant sabotage• Utilities interruption • Production disruption • Product quality (inferior oil or gas quality)• Undetected spills • Illegal pipeline tapping • Safety incidents (death or injury)• Financial loss • Reputational damage • Market disruption • National security		

Corruption Risk

- What areas do you think are prone to corruption in the oil extraction industry?



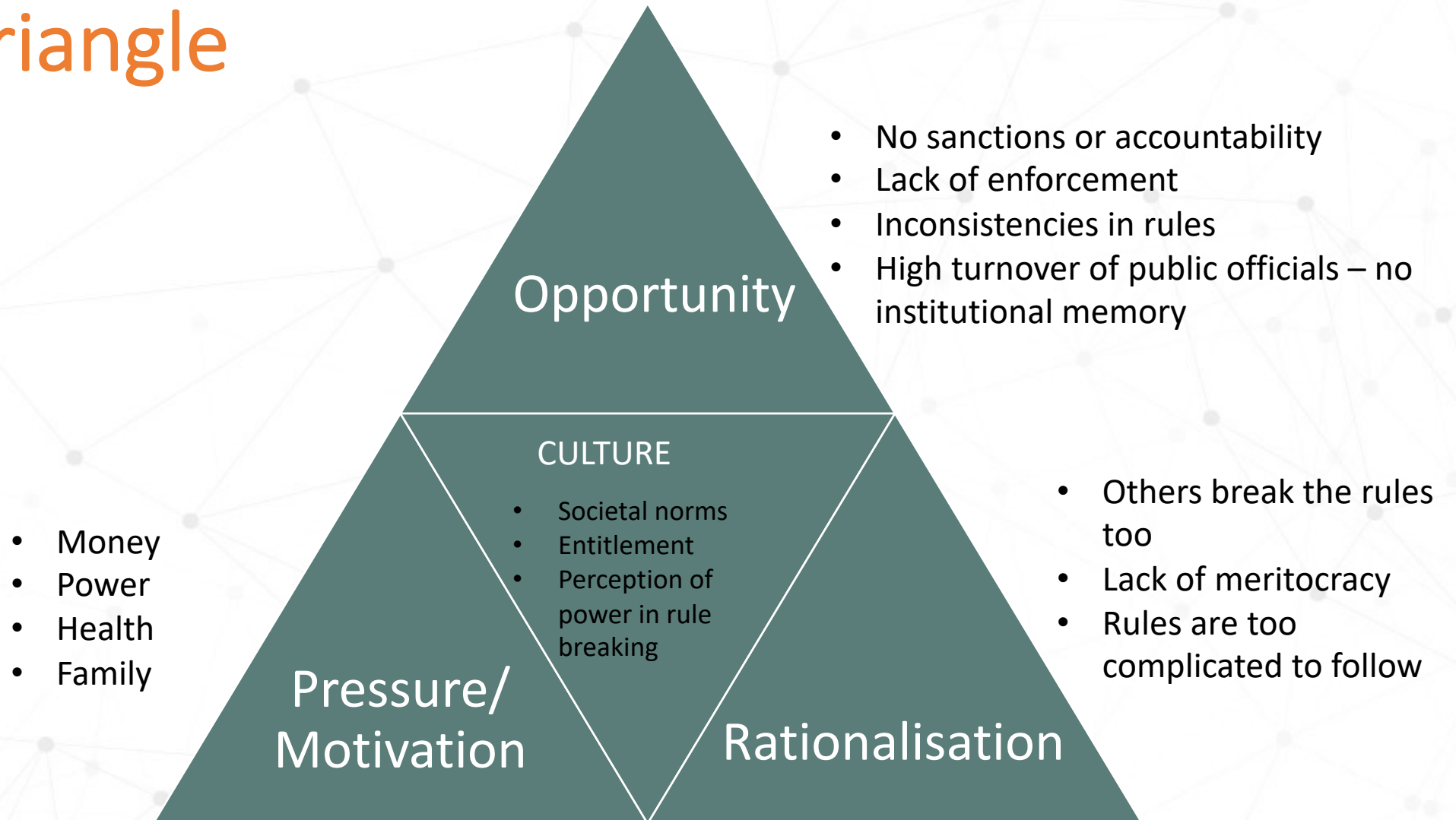
Plenary

5 minutes

Areas prone to corruption

- License award and allocation
 - much room for judgment and discretion when applying existing regulatory processes
- Contract Management
- Revenue
 - Strong reliance on self-reported data
 - Very large revenues
 - Limited information
 - Money laundering
- Environmental and Social Impacts
 - Depriving people of livelihood
 - Unsustainable extraction patterns

Fraud Triangle



Corruption – 12 Red Flags

Government allows a seemingly unqualified company to compete for, or win an award

A competing or winning company shows signs of having a PEP as a hidden beneficial owner

An official intervenes in the award process, resulting in benefit to a particular company

Competition is deliberately constrained in the award process.

A company uses a third-party intermediary to gain an advantage in the award.

The winning company or its owners sell out for a large profit without having done substantial work.

The agreed terms of the award deviate significantly from industry or market norms

A company or individual with a history of controversy or criminal behaviour competes for, or wins, an award

A competing or winning company has a shareholder or other business relationship with a politically exposed person (PEP), or a company in which a PEP has an interest.

A company provides payments, gifts or favors to a PEP with influence over the selection process.

An official with influence over the selection process has a conflict of interest.

A payment made by the winning company is diverted away from the appropriate government account.

- Do you spot a common theme?
- Which of these 12 do you think is the most frequent?

Who can use this list

- Government officials who design award processes
- Government officials who oversee and approve awards
- Parliamentarians and government oversight bodies (including auditors!)
- Law enforcement officers
- Extractive company officials
- Financial institution staff
- Civil society actors and journalists

Fraud Red Flags

- Refer to Hand Out # 4
- Individual Reading – 5 minutes
- Any questions?



Toolkit

Hand Out # x

Time for a Break!

60 min. **BREAK**



Risk Assessment Template

- Walk through of the template together
- Refer Hand Out # 3



Toolkit



Identification of Key Players

- Identification of key players is an essential part of the risk assessment process
- It ignites the process of identifying potential auditees

Identification of Key Players

Who are
the key
players in
the
sector?

How are
they
involved in
the
sector?

When are
their roles
required?

Risk Assessment Activity

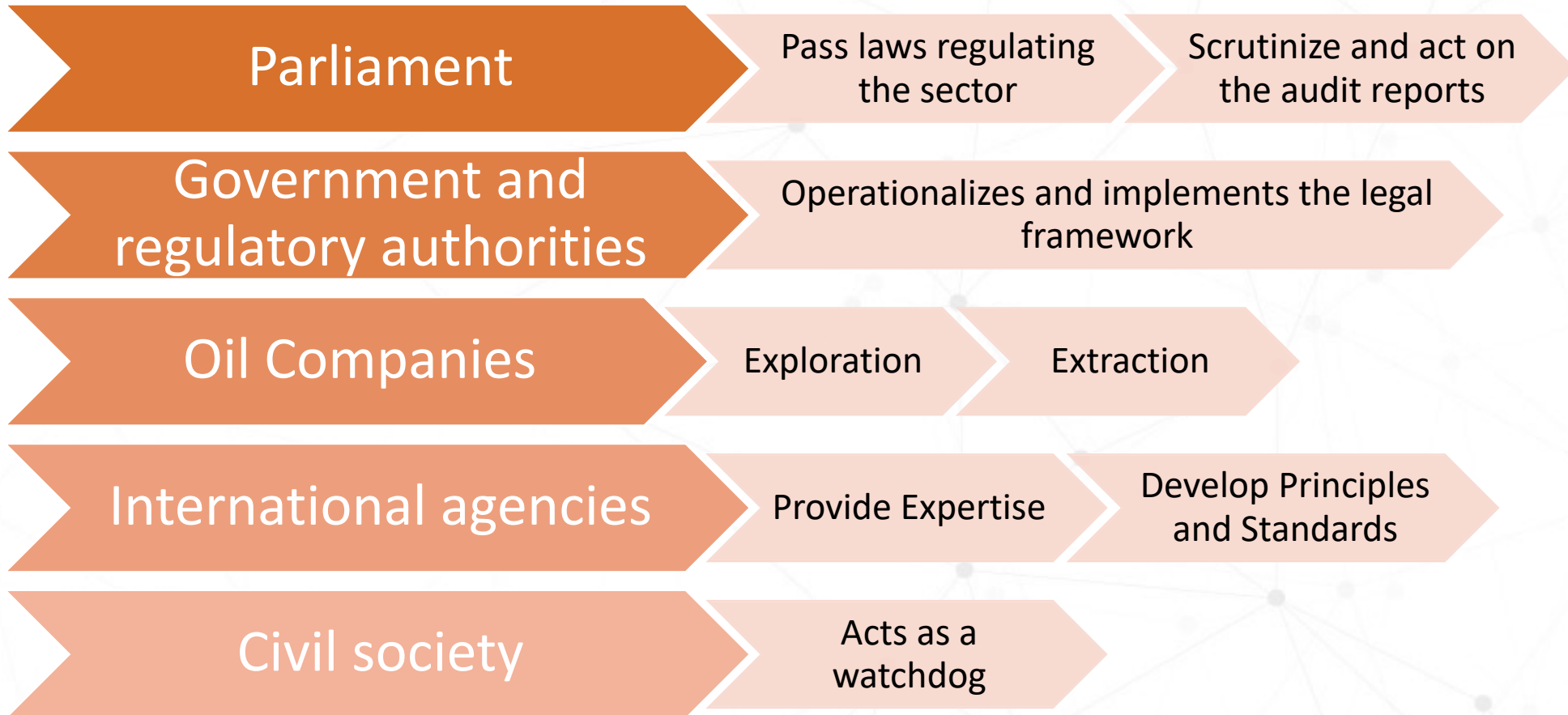
- Identify relevant **Guyana specific** role players along the EI Value Chain
- Identify the 5 most important ones



Small Group
Discussion

15 minutes

Stage 1- Key Players





RISK

Identification

- What are their risks in the sector?
- Use the EI Value Chain to identify risks across the seven steps
 - Template on Risk Identification

Risk Assessment Activity

Using the Risk Assessment Template, identify

- For the 5 selected key players
- Each group will be assigned one player
- Identify risks for each player along the EI Value chain
- Nominated spokesperson to present



Small Group
Discussion

Hand Out # 5

5 Groups

120 minutes

Any questions?



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Day 2 – April 18, 2023, | 1:30 a.m. – 4:30 p.m. Guyana Time (afternoon only)

- Module 3 – Value Chain and Key Players (continued)

Day 3 – April 19, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

- Module 3 – Value Chain and Key Players (continued)
- Module 4 – Risk Assessment along the EI Value Chain

Day 4 – April 20, 2023 | 9:00 a.m. – 3:30 p.m. Guyana Time

- Module 4 – Risk Assessment along the value chain

Day 5 – April 21, 2023 | 9:00 a.m. – 12:30 p.m. Guyana Time

- Module 4 – Group Presentations (continued)
- Module 5 – Illustrative Audits
- Module 6 - Closing

Risk Assessment Activity

Using the Risk Assessment Template, identify

- For the 5 selected key players
- Each group will be assigned one player
- Identify risks for each player along the EI Value chain
- Nominated spokesperson to present



Participant Presentation

5 Groups

120 minutes

Module 4 - Risk Assessment Along the EI Value Chain (ctd.)

Juliet Mutesi & Pauline Nyaga

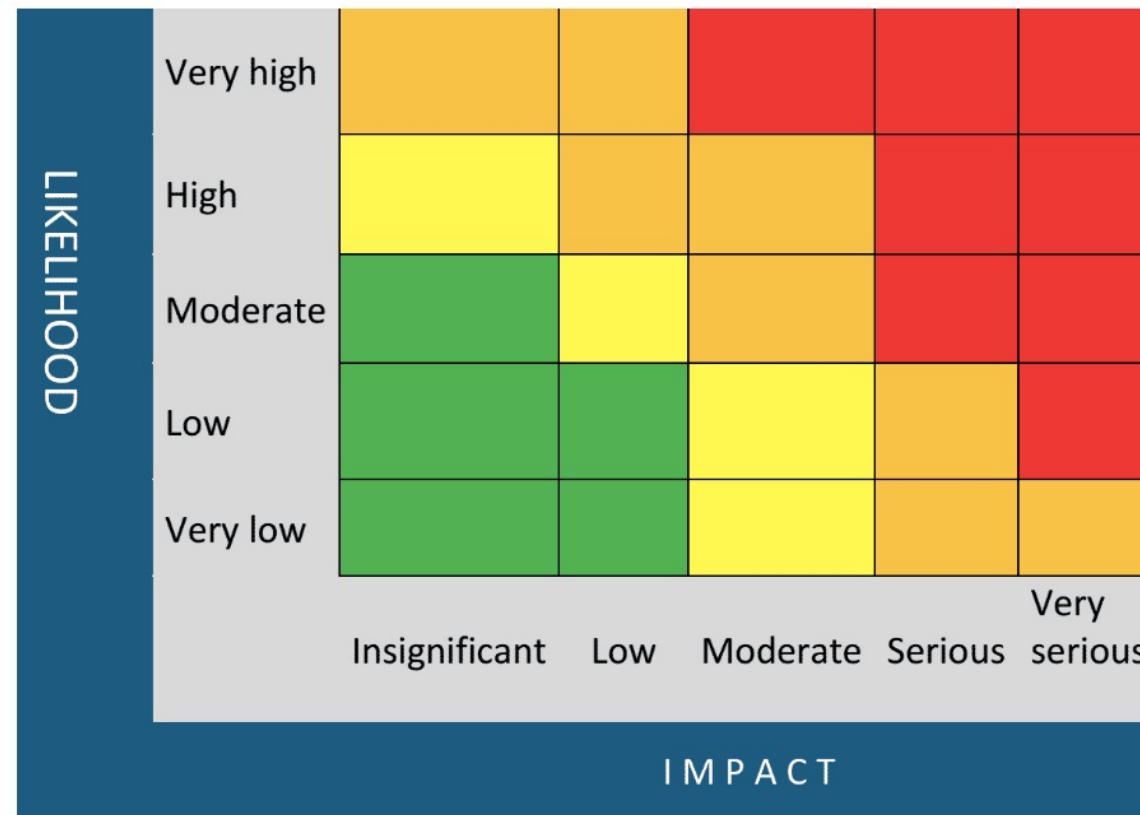


RISK

Mapping

- Prioritise the identified risks to focus on areas that have high risks
- Assess the likelihood and impact of identified risks and prioritise the risks that are significant

Risk Mapping Tool



Time for a Break!

15 min. **BREAK**



Risk Mapping

- Using the Risk Mapping Template
- Identify high risks along the EI Value Chain
- Potential audit approach to mitigate the risks



Small Group
Discussion

Hand Out # 6
5 Groups

Time for a Break!

60 min. **BREAK**



Risk Mapping

- Using the Risk Mapping Template
- Identify high risks along the EI Value Chain
- Potential audit approach to mitigate the risks



Small Group
Discussion

5 Groups

Time for a Break!

Coffee BREAK



Congratulations! You have completed Day 4!

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Welcome to Day 5

2023-04-23

To promote the audit of extractive industries



CANADIAN AUDIT
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Agenda

Day 1 – April 21, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

- Module 1 – Course Introduction
- Module 2 – Introduction to Extractive Industries
- Module 3 – Value Chain and Key Players

Day 2 – April 22, 2023, | 1:30 a.m. – 4:30 p.m. Guyana Time (afternoon only)

- Module 3 – Value Chain and Key Players (continued)

Day 3 – April 23, 2023 | 9:00 a.m. – 4:30 p.m. Guyana Time

- Module 3 – Value Chain and Key Players (continued)
- Module 4 – Risk Assessment along the EI Value Chain

Day 4 – April 24, 2023 | 9:00 a.m. – 3:30 p.m. Guyana Time

- Module 4 – Risk Assessment along the value chain

Day 5 – April 25, 2023 | 9:00 a.m. – 12:30 p.m. Guyana Time

- Module 4 – Group Presentations (continued)
- Module 5 – Illustrative Audits
- Module 6 - Closing

Risk Assessment Activity

- Each group will present the value chain for their assigned/selected player



Participant Presentation

Time for a Break!

Coffee BREAK



Module 5 –



Some Recent Audit Work at OAG Alberta in the Energy Sector



Alberta - Site Rehabilitation Program (March 2022)

Objective and Scope

- Determine if the Department of Energy (the "department") designed and implemented the Site Rehabilitation Program ("SRP") to achieve the program's objectives
- Covered the period from April 24, 2020, when the SRP was set up to end of June, 2021
- Examined the annual reporting on the SRP results to the federal government submitted September 30, 2021
- Scope was limited to the department's systems and processes and excluded the Alberta Energy Regulator's responsibilities under the federal-provincial agreement.

Alberta - Site Rehabilitation Program – (March 2022)

Criteria that focused on the department's processes and activities to ensure that:

- Grant recipients are eligible and comply with grant agreements
- Grant payments are made in accordance with the SRP guidelines
- Grant allocation is efficient and effective
- Risks to the SRP are adequately managed
- Evaluation of the SRP results and internal and external reporting is accurate
- Responsibilities under federal-provincial agreement are met

Alberta - Site Rehabilitation Program – (March 2022)



Examination and evidence gathering methods

- Interviews with the department's management and staff
- Examination of records of grant applications and payments
- Testing of automated and manual controls for grant eligibility and payments
- Examination of internal and external reporting and public information
- Assessment of risk management processes
- Discussions with external stakeholder groups who play an active role in the management of activities related to well closure in Alberta

Alberta - Site Rehabilitation Program – (March 2022)



Conclusion

We concluded that based on our audit criteria, the Department of Energy has designed and implemented the SRP to meet the program's objectives.

The department:

- Has efficient and effective processes to ensure grants are awarded and paid only to eligible applicants
- Reports on the SRP using accurate, complete, and timely information
- Uses two key metrics, estimated number of jobs created and total approved grants, to evaluate the SRP results
- Is meeting its responsibilities under the federal provincial SRP agreement
- However, the department did not have an adequate process to identify, analyze, and respond to key risks to the SRP.
- We recommend that the Department of Energy formalize its process to identify, analyze, and respond to key risks to the SRP.

Alberta - Site Rehabilitation Program – (March 2022)



Why this conclusion matters to Albertans

- SRP was initiated during a time of significant and systemic economic and financial distress for Alberta's oil and gas sector.
- SRP is a \$1 billion (CAD) grant program, effective controls for ensuring proper eligibility, payments, monitoring, and reporting are critically important to ensure program objectives are being met.
- The department has designed and operated the SRP to ensure the grants were issued promptly, which helped create employment in Alberta's oil and gas sector during economically challenging times. This was the primary objective of the program.
- Robust risk management processes are expected for properly controlling \$1 billion (CAD) in program spending.
- A formalized system to manage risk is not just a documentation exercise, but a way to facilitate strategic decision making and demonstrate senior management awareness of key risks and mitigating actions, particularly if certain risks are being accepted.

<https://www.oag.ab.ca/wp-content/uploads/2022/03/oag-energy-site-rehab-pa-mar-2022.pdf>

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)



Background

- Pipelines essential component of the energy industry in Alberta
- The primary responsibility for maintaining safe and reliable pipelines rests with their operators
- The Alberta Energy Regulator's (AER) role is to ensure pipeline operators comply with regulatory requirements, with public safety and the environment as their priority
- Pipelines are used to transport a variety of liquids and gases. They are often categorized as one of the safest, most efficient and reliable ways to move energy related products over long distances
- In Alberta, the AER regulates about 417,000 kms of pipeline used to transport crude oil, bitumen, natural gas, sour gas, oil emulsion, and salt and fresh water. Ten per cent of the operators own 89 per cent of the pipelines

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)

Objective - Assess whether the Alberta Energy Regulation ("AER") has adequate regulatory systems to ensure the safe and reliable operation of the pipeline systems it oversees.

Scope - AER's core pipeline activities: surveillance, inspection, compliance, incident response and regulatory enforcement, foundational components of risk management and performance measurement.

Exclusions

- the AER's systems for pipeline applications and abandonment.
- Merits of the regulation that gives the AER the authority to regulate pipelines within Alberta.

Methodology

- Met with and interviewed staff at various field offices
- accompanied AER inspectors to observe their inspections at selected operator sites.
- Interviewed a variety of external parties and stakeholders about their interaction with the AER and the overall regulatory systems for pipelines.
- Engaged an expert to assist us during the course of the audit.

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)

Criteria

- The AER should use a risk management system to identify, assess and manage risks in fulfilling its regulatory duties over pipelines. Management's decisions for allocating resources should reflect the AER's priorities for managing risk at the operational level, including the allocation of appropriate staff resources. The regulator should also have sufficient, well-trained and experienced staff to carry out pipeline regulatory functions.
- The AER should have performance measures and targets for pipeline operations, assess results against those measures and targets, and incorporate the outcomes to enhance future pipeline performance.
- The AER should promptly and thoroughly respond to, investigate and report pipeline critical incidents.
- The AER should collect appropriate, sufficient and timely information from pipeline operators, to enable it to carry out its regulatory functions.
- The AER should have systems to manage, fulfill and enhance its pipeline monitoring activities.
- The AER should have systems to discharge and enhance its pipeline enforcement activities.

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)

What we examined

To determine whether the AER has adequate systems to regulate the operation of pipelines in Alberta, we focused on activities that are essential for regulatory oversight:

- the risk management system to identify, assess and manage pipeline risks
- measuring performance, assessing results, and identifying learnings for improvement
- systems for collecting information from pipeline operators
- monitoring and enforcing of pipeline operator regulatory obligations
- responding to, investigating and reporting on pipeline critical incidents

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)

What we found - The AER has well-functioning systems to regulate pipeline operations in Alberta

Improvement areas

- The enterprise risk management system is still under development; no clear link between the risk information and resource allocation activities that will help AER reach its targets
- A skills gap analysis of pipeline staff has not been completed and a formal training program is not in place.
- A primary target of reducing incidents 4% by 2016 is in place, but this target does not encapsulate the severity of incidents. Overall, measures and targets could be enhanced and better aligned with individual staff performance goals
- The AER collects a lot of data from pipeline operators, but it has not completed an evaluation of its present and future data needs to confirm it has all the information it requires to better regulate pipelines in an evolving industry
- While the response and investigation of critical incidents are performed well, the AER did not go as far as it could have in highlighting contributing factors and sharing these lessons learned with industry.
- Pipeline operator integrity management programs are a key component of keeping product safely in the pipeline. The AER does not have a defined process to evaluate the effectiveness of these programs.

Alberta - Systems to Regulate Pipeline Safety and Reliability (March 2015)

Positive and noteworthy practices

- The emergency response process was strong and well-documented.
- The AER has a process to promptly post details of incidents that meet certain criteria.
- Based on past operator performance, the AER identified those that may pose a greater risk and met with their senior management to promote pipeline safety practices.
- The AER carried out its enforcement activities as stipulated by the rules and regulations. With the new enforcement framework that came into effect in 2014, the AER has more tools and powers; as such, continued operational effectiveness of this system will be critical.

Perhaps most importantly, through our interactions with AER staff, we observed a strong commitment to what the AER is trying to achieve. We also observed that the AER began the process of responding to our recommendations and findings while the audit was still underway – this willingness to improve will serve the AER well in reaching its goals.

https://www.oag.ab.ca/wp-content/uploads/2020/05/EN_PA_Mar2015_Systems_Regulate_Pipeline_Safety.pdf

1minute stretch – Chair Yoga

- Do as much or as little as you like!
- <https://www.youtube.com/watch?v=HMwg5qunhF0>



Website Demo – Audit Reports

- **Audit reports in oil and gas can be accessed via www.wgei.org/audit-reports-oil-gas**

Module 7

Closing

- Next steps
- List of Resources
- Kahoot Quiz
- Evaluation
- Round Table

Way Forward

- What can AOG do next?



Small Group
Discussion

15 minutes

Uganda Example

- OAG dedicated unit for EI's (geologists, lawyers, financial auditors, performance auditors)
- Use of IOC Training Fund for Capacity Building
- Collaboration with other government institutions in petroleum sector
- Strategic Plan for EI Audits
- EI Risk Assessment updated regularly

Kenya Action Plan

- Develop EI Strategic Audit Plan
- Enhance collaboration between FA, CA and PAs
- Capacity Building in EI
- Incorporate PA Recommendations in FA Reports
 - To speed up follow up and implementation
- Benchmark with more advanced SAIs
- Pilot stand-alone compliance audits
- SMART monitoring of this action plan

Resources

More detailed guidance can be found here:

- [AFROSAI-E Extractive Industries Guidelines 2019](#)
- [CAAF – Practice Guide to Auditing Oil and Gas Revenues](#)
- [World Bank Guidance on Extractive Industries](#)
- [Society of Petroleum Engineers Guidance on financial reporting in oil sector](#)
- Online Course - <https://www.oecd.org/ctp/tax-global/work-on-extractive-industries.htm>

Final Review - Kahoot

- Using your Smartphones , or a second screen on your computers, please browse to:
 - [Kahoot.it](https://kahoot.it)
 - Enter Game Pin
 - Add your Name
 - Questions will show on the screen
 - Answers will be on your phones/second screen
 - Timer of 20 seconds per question

Post Course Evaluation

- Pre-course survey link
 - <https://www.surveymonkey.com/r/Guyana2023>
- Post course evaluation link
https://www.surveymonkey.com/r/IGAPinperson2023_24
- Instructor # 1 – Pauline Ngaya
- Instructor # 2 – Juliet Mutesi
- Instructor # 3 – Scott Loder
- Instructor # 4 - Sherazade Shafiq



Closing

Round Table

Final Round Table and Remarks

Group Photo

Lunch Break

Team available for questions
after lunch

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<https://www.intosaicommunity.net/wgei/>



Congratulations! You have completed the 5-day workshop!

2023-04-23

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