Introduction
to
Revenue, Assessment & Collection,
Identification of Agencies,
Budgeting & Forecasting
in
Oil & Gas
under Extractive Industries.

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Key Points to Focus for Revenue

- **Market Demand Dynamics:**

  Understanding the market demand for the extracted product is paramount. It sets the foundation for revenue projections and market positioning strategies.

- **Cost of Production versus Market Price:**

  Evaluating the production cost vis-à-vis prevailing market prices is essential for determining revenue inflow. This analysis guides decision-making processes to optimize profitability.

- **Production Projections and Timelines:**

  Accurately forecasting production yields and timelines provides clarity on revenue generation potential over specific periods, aiding in strategic planning and resource allocation.

- **Operational Target Achievement:**

  Meeting production targets necessitates meticulous planning and execution. We must explore methodologies to ensure streamlined operations and attainment of set objectives.

Key Points to Focus for Revenue (contd.-)

- **Timely Revenue Collection:**

  Efficient revenue collection mechanisms are imperative for sustaining operations and facilitating growth. Must have strategies to ensure prompt and systematic revenue collection.

- **Agency Responsibilities:**

  Identifying and understanding the roles of relevant agencies involved in sales and revenue collection streamlines operational processes and fosters transparency and accountability.

- **Comprehensive Planning:**

  From exploration to production and sales, meticulous planning is pivotal. A detailed overview of the entire process, emphasizing the importance of budgeting and aligning financial targets with operational objectives is must.

- **Strategic Forecasting:**

  Leveraging strategic foresight based on physical progress enables proactive decision-making. Methodologies should be in place for dynamic forecasting to adapt to evolving market dynamics and operational realities.

Revenue collection

An understanding of company payments and government revenues can inform public debate about the governance of the extractive industries.

The Extractive Industries Transparency Initiative (EITI) requires comprehensive disclosure of company payments and government revenues from the extractive industries.

- The EITI Requirements related to revenue collection include:
- Comprehensive disclosure of taxes and revenues;
- Sale of the state's share of production or other revenues collected in kind;
- Infrastructure provisions and barter arrangements;
- Transportation revenues;
- SOE (State Owned Enterprise) transactions;
- Sub-national payments;
- Level of disaggregation;
- Data timeliness; and
- Data quality of the disclosures.

Revenue allocations

The EITI requires disclosures of information related to revenue allocations, enabling stakeholders to understand how revenues are recorded in the national and, where applicable, sub-national budgets, as well as track social expenditures by companies.

The EITI Requirements related to revenue allocations include:

- Distribution of revenues;

- Sub-national transfers;
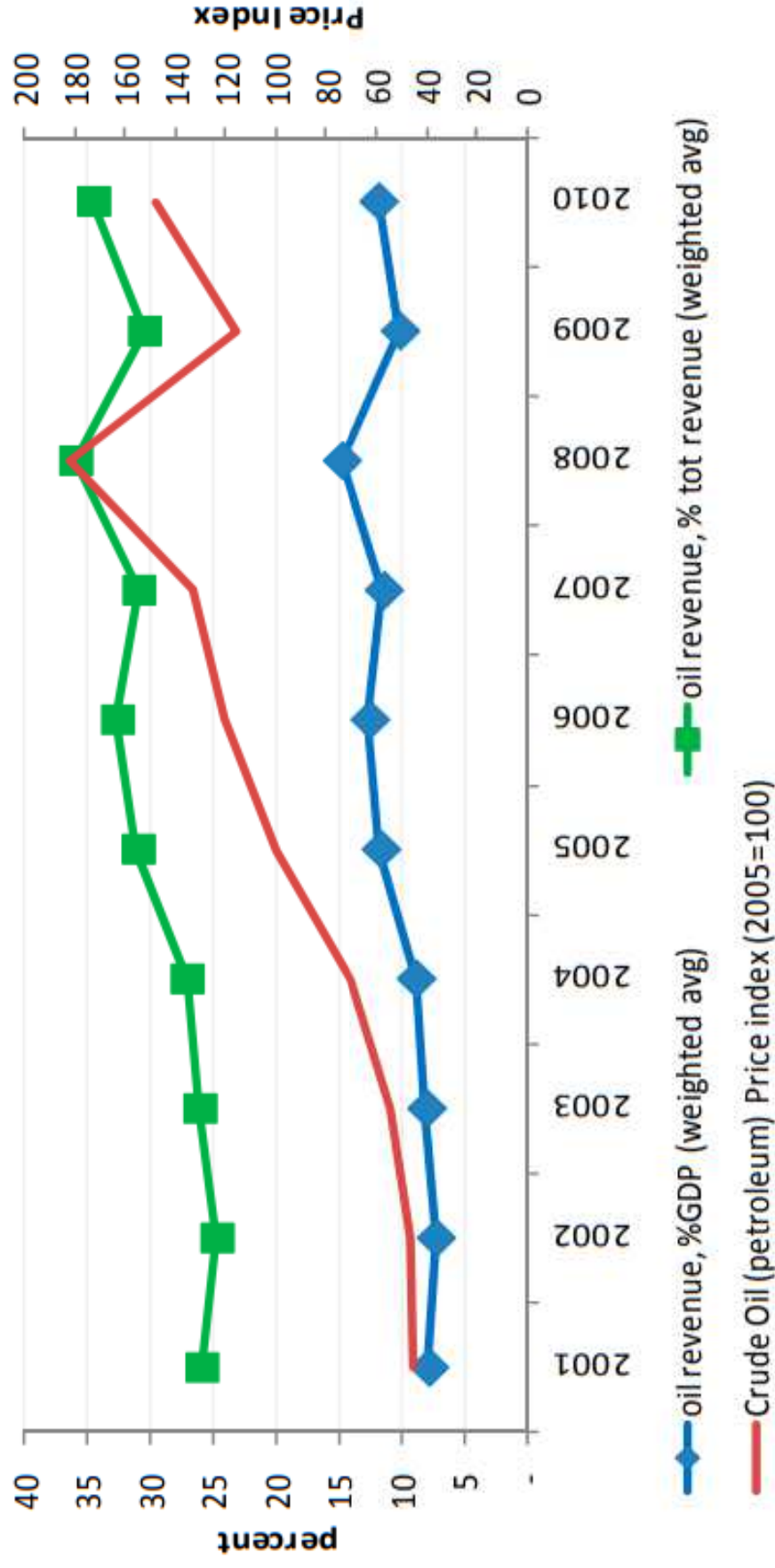
- Revenue management and expenditures.

Revenue allocations (Contd.-)

- Revenues from the EI have major macroeconomic implications.

- Revenue objectives contribute large in designing fiscal regimes for the EIs, but involve complex trade-offs.

- Fiscal regimes for the EIs vary greatly, a wide range of instruments being used.

- Country circumstances require tailored advice, but a regime combining a royalty and a tax targeted explicitly on rents (along with the standard corporate income tax) has appeal for many developing countries.

- Effective administration is vital, but complex EI fiscal regimes and fragmented responsibilities are often major hindrances.
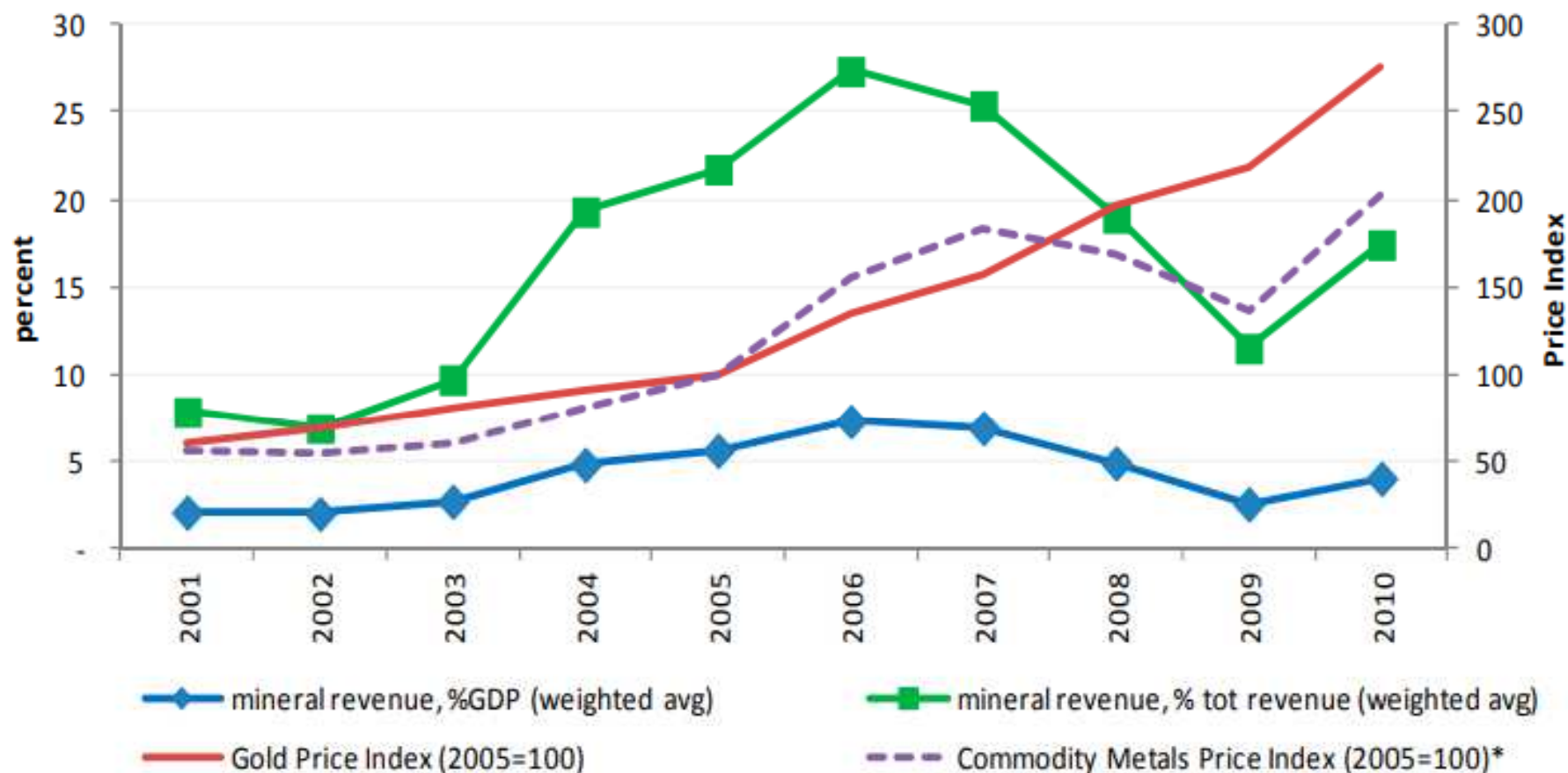
Key Points on Revenue Realisation

- Important to consider how best to realize the revenue potential of the extractive industries (EI—oil, gas, and mining), particularly in developing countries.

- Designing and implementing upstream fiscal regimes for the EIs—mining and petroleum (oil and gas)—is now a major focus of IMF policy support and technical assistance.

- Amplifying the already considerable macroeconomic significance of EI, recent and prospective discoveries make designing and implementing EI fiscal regimes a key challenge—and opportunity—for many developing countries.

- Large new developments, notably in oil, gas, and iron ore, are underway in several countries.

- Revenue potential from oil is especially substantial. Country-level simulations confirm this potential.

- The central fiscal issue is ensuring a 'reasonable' government share in the rents often arising in the EIs. ('Rents'—the excess of revenues over all costs of production, including those of discovery and development, as well as the normal return to capital.)

Figure 8. Petroleum: Government Revenue, 2001–10

Figure 9. Mining: Government Revenue, 2001–10

- mineral revenue, %GDP (weighted avg)
- mineral revenue, % tot revenue (weighted avg)
- Gold Price Index (2005=100)
- Commodity Metals Price Index (2005=100)*

*includes Copper, Aluminum, Iron Ore, Tin, Nickel, Zinc, Lead, and Uranium Price Indices

Source: IMF staff Calculation & Estimation
INTERNATIONAL MONETARY FUND Fiscal Regimes for Extractive Industries: Design and Implementation Prepared by the Fiscal Affairs Department August 15, 2012

Extractives Revenue & Budgeting Process

✓Once resources are discovered, should expected future revenue be brought forward by borrowing?

    If money is to be invested productively, then it is better invested sooner rather than later. However, governments are faced with the dilemma of what to spend the borrowed money on.

✓When revenue begins to accrue, how much should be spent and how much saved for the future?

    Two considerations are pertinent here – utilising revenue in ways that benefit future generations as well as the current generation, and the capacity of the economy to absorb additional spending without leading to the Dutch disease.

✓Should borrowing be used to smooth volatility in revenue?

    In theory, borrowing could also be used as a tool to smooth volatility – borrowing when prices are low, and repaying when prices are high, if governments have reliable revenue forecasting to underpin sustainable debt servicing in the long term.

Extractives Revenue & Budgeting Process

✓How much should be spent on current needs and how much should be invested in economic diversification?

Over and above immediate development demands, some portion of revenue should be devoted to investing in diversification of the economy to create sustainable long term growth.

✓Should resource revenue be managed through normal budgets or special funds?

Some argue that in countries where existing Public Financial Management (PFM) systems lack integrity, special mechanisms for spending resource revenue should be created. However, creating new mechanisms reduces the impetus for making the necessary reforms to wider systems.

✓Should resource revenue be earmarked for specific purposes?

Earmarking resource revenue is as source of contention amongst PFM practitioners. It can guarantee a minimum level of funding for specific high-priority areas (while reducing flexibility and undermining accountability) but can be offset simply by shifting resources to other areas.

Extractives Revenue & Budgeting Process

✓Should a country create an SWF? (Sovereign wealth funds)

Many countries channel some resource revenue into overseas investments through SWFs, to create long-term returns and mitigate the risks of the Dutch disease. However, SWFs can have high administrative costs and, where resource revenue is relatively small, it may be better instead to accumulate revenue in the foreign exchange reserve account of the central bank.

So the general guideline will be

Extractives Revenue & Budgeting Process

Some recommendations that apply to all developing countries with resource revenue.

✓Design long-term extractives and fiscal strategies, for the production of resources and the subsequent use of the revenue respectively, which address the problems of volatility and exhaustibility of revenue.

✓Implement the strategy for use of revenue through medium-term budget frameworks that align annual spending plans by ministries with overall fiscal discipline, including adherence to strict fiscal rules.

✓Set out formal fiscal rules imposing multi-year constraints on overall government expenditure. To guard against the political pressures that create temptations to break these rules, implement meaningful enforcement mechanisms, publicise the rules widely and apply them transparently.

✓Create rigorous and depoliticised procedures to appraise proposals for new spending. Ensure that infrastructure projects (such as new hospitals) make allowance for the long-term operations and maintenance costs (such as drugs and nurses' salaries) to which they will give rise.

Extractives Revenue & Budgeting Process

<u>Some recommendations that apply to all developing countries with resource revenue.</u>
(Continued)

✓Ensure that fiscal planners and sectorial planners work closely but do not displace each other, as technical expertise for operational planning in a sector may well not be a core strength of the finance ministry.

✓Invite independent external auditors to promote transparency and accountability. This is especially necessary given that the complexity of transactions associated with natural resource revenue flows requires specialist skills that are often not possessed by tax officials in developing countries.

Strategies to ensure prompt and systematic Revenue collection

Ensuring prompt and systematic revenue collection is crucial for any organization, especially in the petroleum sector where substantial revenues are involved.

Streamlined Billing and Invoicing Processes: Implement efficient billing and invoicing systems to ensure accurate and timely generation of invoices for products or services rendered. Automate processes wherever possible to minimize errors and delays.

Clear Payment Terms and Policies: Establish clear payment terms and policies that are communicated to customers upfront. This includes specifying payment due dates, accepted payment methods, and consequences for late payments or non-payment.

Customer Education and Engagement: Educate customers about the importance of timely payments and the consequences of non-compliance. Maintain open communication channels to address any payment-related queries or issues promptly.

Use of Technology: Utilize technology solutions such as electronic payment platforms, online portals, and mobile applications to facilitate convenient and secure payment transactions. Implement digital payment options to encourage faster payments and reduce administrative overheads.

Strategies to ensure prompt and systematic Revenue collection

Regular Monitoring and Reporting: Monitor revenue collection activities regularly to track payment status, identify overdue accounts, and take timely actions to follow up with customers. Generate comprehensive reports to analyze revenue performance and identify areas for improvement.

Efficient Debt Recovery Mechanisms: Implement effective debt recovery mechanisms to recover outstanding payments from delinquent customers. This may include sending reminders, issuing notices, initiating legal proceedings, or engaging third-party collection agencies when necessary.

Incentives and Penalties: Consider offering incentives such as early payment discounts to encourage prompt payments from customers. Conversely, impose penalties or interest charges for late payments to incentivize compliance with payment terms.

Training and Capacity Building: Provide training to staff involved in revenue collection processes to enhance their skills in customer relationship management, negotiation, and conflict resolution. Invest in building the capacity of the revenue collection team to handle diverse customer situations effectively.

Strategies to ensure prompt and systematic Revenue collection

Regular Reviews and Audits: Conduct regular reviews and audits of revenue collection processes to identify potential bottlenecks, inefficiencies, or areas of non-compliance. Implement corrective measures based on audit findings to optimize revenue collection performance.

Compliance with Regulatory Requirements: Ensure compliance with relevant regulatory requirements governing revenue collection practices, including tax laws, accounting standards, and industry regulations. Stay updated on regulatory changes and adapt revenue collection processes accordingly.

Methodologies for Dynamic forecasting for adapting to evolving Market Dynamics & Operational realities.

Dynamic forecasting methodologies are essential for organizations in the petroleum sector to adapt to evolving market dynamics and operational realities. Here are several methodologies that can be employed:

Time-Series Analysis: Time-series analysis involves analyzing historical data to identify patterns and trends over time. By examining historical sales, production, pricing, and other relevant data, organizations can develop models to forecast future demand, prices, and operational requirements. These models can be continuously updated with new data to reflect changing market dynamics.

Machine Learning and AI: Machine learning algorithms and artificial intelligence techniques can be used to analyze large datasets and identify complex relationships between various factors affecting the petroleum market. By training predictive models on historical data, organizations can forecast future market trends, optimize production schedules, and make data-driven decisions in real-time.

Scenario Planning: Scenario planning involves developing multiple scenarios based on different assumptions about future market conditions, such as changes in oil prices, geopolitical events, or regulatory policies. By simulating various scenarios and their potential impacts on operations, organizations can better prepare for uncertainty and adapt their strategies accordingly.

Methodologies for Dynamic forecasting for adapting to evolving Market Dynamics & Operational realities.

Predictive Analytics: Predictive analytics involves using statistical techniques to predict future outcomes based on historical data and current market conditions. By analyzing key performance indicators (KPIs) and external factors influencing the petroleum market, organizations can forecast demand, optimize inventory levels, and improve decision-making processes.

Simulation Modeling: Simulation modeling involves creating mathematical models of complex systems to simulate different scenarios and assess their potential outcomes. By simulating production processes, supply chains, and market dynamics, organizations can identify bottlenecks, evaluate alternative strategies, and optimize resource allocation to adapt to changing market conditions.

Real-Time Data Analytics: Real-time data analytics involves analyzing streaming data from sensors, IoT devices, and other sources to monitor market trends and operational performance in real-time. By leveraging advanced analytics techniques such as data streaming, complex event processing, and predictive modeling, organizations can quickly respond to market fluctuations and make timely decisions to optimize operations.

Methodologies for Dynamic forecasting for adapting to evolving Market Dynamics & Operational realities.

Collaborative Forecasting: Collaborative forecasting involves engaging key stakeholders, including suppliers, distributors, and customers, in the forecasting process to gather insights and improve forecast accuracy. By sharing information and collaborating closely with partners, organizations can better understand market demand, mitigate risks, and respond effectively to changing market dynamics.

Continuous Improvement: Continuous improvement involves regularly reviewing and refining forecasting processes based on feedback, performance metrics, and lessons learned from past experiences. By adopting a culture of continuous learning and improvement, organizations can enhance their forecasting capabilities and adapt more effectively to evolving market realities.

By employing these dynamic forecasting methodologies, organizations in the petroleum sector can better anticipate market changes, mitigate risks, and optimize their operations to remain competitive in an increasingly volatile and uncertain environment.

Selection Criteria for Petroleum Agencies

The **selection criteria for petroleum agencies in India** can vary depending on the specific context, such as whether it's related to exploration, production, refining, distribution, or marketing. However, some common criteria that are often considered include:

Experience and Expertise: The agency should have a proven track record and expertise in the petroleum sector, including relevant experience in exploration, production, refining, or marketing.

Financial Capability: The agency should demonstrate financial stability and capability to undertake petroleum-related projects or operations effectively.

Technical Competence: The agency should possess the technical skills and resources required to execute petroleum-related activities efficiently and safely.

Compliance and Regulatory Requirements: Compliance with regulatory requirements, including environmental regulations, safety standards, and licensing requirements, is essential.

Selection Criteria for Petroleum Agencies

Infrastructure and Facilities: The agency should have access to necessary infrastructure and facilities, such as refineries, pipelines, storage tanks, and distribution networks, to carry out petroleum operations effectively.

Market Presence and Network: A strong market presence and network, including distribution channels and customer base, are often important factors in the selection process.

Ethical and Legal Standards: Adherence to ethical standards and compliance with legal regulations, including anti-corruption laws and contractual obligations, are crucial.

Risk Management: Ability to identify, assess, and manage risks associated with petroleum operations, including market risks, operational risks, and health, safety, and environmental risks.

Selection Criteria for Petroleum Agencies

Innovation and Sustainability: Commitment to innovation, sustainability, and responsible business practices in the petroleum sector is increasingly becoming a significant consideration.

Performance Track Record: Past performance and reputation in delivering projects on time, within budget, and meeting quality standards are often evaluated.

Collaboration and Partnerships: Ability to collaborate with other stakeholders, such as government agencies, industry partners, and local communities, is important for successful petroleum operations.

These criteria may vary depending on the specific requirements and objectives of the selection process, and they may be subject to change based on evolving industry standards and government policies.

Additionally, the selection process may involve a combination of <u>technical evaluation</u>, <u>financial assessment</u>, and <u>regulatory compliance</u> checks to ensure that the chosen agencies are capable of meeting the objectives and requirements of the petroleum sector in India.

Selection Criteria for Petroleum Agencies

Who hires them?

Exploration and Production:
Oil and Natural Gas Corporation (ONGC)
Oil India Limited (OIL)
Refining:
Indian Oil Corporation Limited (IOCL)
Reliance Industries Limited (RIL)
Distribution and Marketing:
Indian Oil Corporation Limited (IOCL)
Bharat Petroleum Corporation Limited (BPCL)
Pipelines and Infrastructure:
Indian Oil Corporation Limited (IOCL)
GAIL (India) Limited
Petroleum Services and Support:
Schlumberger Limited
Halliburton

These are just a few examples of prominent companies operating in various aspects of the petroleum sector in India.
There are other players as well, including smaller companies, joint ventures, and international firms involved in different segments of the industry.

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