

Attachment to Coordinator Paper: (1) Overview Note on Extractive Industries Taxation Issues¹

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¹ This guidance note is issued by the UN Committee of Experts on International Cooperation in Tax Matters (hereinafter “UN Tax Committee” or “Committee”) based upon recommendations prepared by the Subcommittee on Extractives Industries Taxation Issues for Developing Countries (hereinafter “Subcommittee”) with help from the Secretariat.

Executive Summary/Purpose

The purpose of this note is to give an overview of some of the taxation issues for extractive industries in developing countries and the interactions between them, options available, and the likely effect of taking such options in particular circumstances. This is intended to help policy makers and administrators in developing countries as well as to provide information to other stakeholders. Background contained in this note will provide a broader context for viewing the overall issue of natural resource development and the more specific issues addressed in additional guidance notes, some of which accompany this note, with others to follow. These notes will deal in more detail with significant issues identified in this overview note.

The work covered by this and each of the additional more specific guidance notes stems from a mandate given by the UN Tax Committee to the Subcommittee on Extractives Industries Taxation Issues for Developing Countries to consider, report on and propose guidance on extractive industries taxation issues for developing countries, focusing on the most pressing issues where guidance from the Committee may most usefully assist developing countries. The work will seek to provide policy and administrative guidance at a very practical level.

Status of the Note

This note is for guidance only. It is intended to identify issues of taxation of the extractive industries, address several of the most significant ones in short form, help build awareness, and ultimately, along with the additional specific issue guidance notes, help those faced with these issues to make policy and administration decisions in relation to them.

Terms used

Bonuses Lump sum (or sometimes staged) payments made to a government upon award of a natural resource license or some other project event.

Concession Regimes Structures involving government grants to an entity of the rights to exploration, development, and extraction of natural resources at the grantee's sole risk. Grants generally cover a fixed area and impose certain time limits for the activities; sometimes also known as "tax and royalty" regimes; common in both petroleum and mining industries.

Consortium or Joint Venture An arrangement of several investors who may pool the capital and expertise to jointly exploit and share the risks connected with exploiting a particular extractive project.

Contract Regimes Structures involving government appointment of an entity as a contractor who agrees to bear exploration, development and other costs at its sole risk in return for a share of production in the case of a success; more common in petroleum industry and can be structured as a Production Sharing Contract/ Arrangement (PSC or PSA) or a Risk Service Contract.

License holder Persons obtaining the license to explore and extract the natural resource from its owner, usually the country.

Extractive Industries Those engaged in finding, developing, producing, and selling non-renewable resources such as crude oil, natural gas, and hard minerals and their products.

Fiscal Systems The general framework governing natural resource activities, generally falling into two broader categories: concession regimes or contract regimes.

Fiscal Terms Specific economic elements relating to extractive industry activities within a particular country including taxation, other payments such as bonuses and royalties, legal framework, and state participation.

Operator The entity in charge of performing the actual extractive industry activities with respect to a particular project. It can be the license holder or one of the license holders, if the license was granted to a consortium or joint venture.

Royalty In the extractive industries, the term ‘royalty’ refers to the obligatory payment made by the operator of the extraction project to the state as a compensation for the extraction rights. Royalties are generally calculated with reference to the type, quantity, quality and/or value of the extracted mineral resource as a percentage of the gross volume or value of the production (i.e., costs generally do not reduce the base), and are due once production commences. The term ‘royalties’ as defined under article 12 UN Model Convention has a different meaning and refers to the payment for the right to use property (in case of the UN Model both tangible and intangible).

Service Provider or Subcontractor A company or individual providing various types of services and other supplies in the framework of the extractive industries.

State Participation Direct government ownership of a portion of a project (beyond its ownership of the underlying resource reserves); also known as “Equity Participation”.

Background

Extractive industries are engaged in finding, developing, producing and selling non-renewable natural resources such as crude oil, natural gas and mining products.² The extractive industries are an important sector and thus a potentially important revenue base in many developing countries and emerging economies. Given projections that by 2040 world population will grow by 2 billion persons and per capita GDP will double, the International Energy Agency (IEA) forecasts that the world’s energy requirements will increase by over 35 percent by 2040. While the growth rate of renewables will far exceed that of conventional fuels, and energy efficiency improvements will be substantial, the IEA projects that oil and

² Crude oil and natural gas are key energy resources, as well as inputs to other worldwide products, such as chemicals, plastics, and fertilizers. Hard minerals comprise a wide variety of products, such as copper, iron, gold, bauxite and numerous rare earth minerals, which are also used as inputs for many essential products, such as steel, aluminium, electronics, and medical devices. Hard minerals also include coal, which is predominantly used in electricity generation and steelmaking.

natural gas demand will increase by over 15 percent and 50 percent, respectively. Coal demand is also expected to rise such that these three fuels, without other additional significant breakthroughs, will account for approximately 75 percent of world energy needs in 2040 (down from approximately 82 percent in 2012).³

The IEA projects that to meet the increased energy needs of the world, \$48 trillion of new investment will be required by 2035. Nearly two thirds of the energy related investment is projected to be in emerging economies. This presents major challenges, but also significant economic development opportunities.

With minerals playing crucial roles throughout economic sectors, especially in agriculture, construction, energy, transportation, electronics, and medicine, the projections for population, economic, and energy growth translate into increased demand for minerals. For example, steel demand could potentially exceed 2010 levels by 120 per cent in 2040, with the greatest increase being in emerging economies. Similar results are projected for copper.⁴ The International Council on Mining and Metals (ICMM) has underscored the significance of regions with emerging economies, noting the large investments that were recently undertaken in Latin America, Africa and parts of Asia and the outlook that these will likely increase in the next ten years.⁵

Against this macro-economic backdrop, alongside political, financial, monetary and legal stability as well as a stable labour market, fiscal stability is also crucial in developing countries' efforts to attract foreign direct investment in the extractive industries to contribute to mobilizing domestic resources for development. While resource development will be needed to meet worldwide energy demand and foster economic growth, the extractive industries are and will increasingly become an important sector in many developing countries and emerging economies. Not only will the direct investment that such industries generate be an important contributor to economic development, but it will also provide a broader, and potentially important, revenue base for additional economic development that countries may wish to pursue. The tax and broader fiscal system that applies to the extractive industries should ensure that the government obtains an adequate and appropriate share of the benefits from its resources – taking into account that extractives are assets owned by the country and once extracted, they are gone — while providing a return commensurate with the risks borne and functions carried out by the parties. Tax laws and regulations that provide legal certainty and stability reduce financial risk and therefore aid in attracting investment. In addition, transparent administration of the tax system and the avoidance of double taxation further reduce risks and influence investment decisions in the extractive industries. Governments should seek to balance creating or sustaining a supportive environment for large investment with the country's need for revenue streams that can be applied to their development efforts. Close collaboration among different governmental agencies, including Ministries of Energy and

³ See International Energy Agency, World Energy Outlook 2014, available at http://www.iea.org/publications/freepublications/publication/WEO_2014_ES_English_WEB.pdf.

⁴ See K. Keramidas, A. Kitous and B. Griffin, Future availability and demand for oil gas and key minerals, p. 45, available at http://www.polinaires.eu/docs/d2-1/polinaires_wp2_chapter18.pdf.

⁵ See International Council on Mining and Metals, The role of mining in national economies, available at <http://www.icmm.com/document/8264>.

Mining, Environment, Finance, Tax Policy and Administration, along with those entrusted to govern, manage, or reinvest revenues from natural resource development, is important in arriving at the correct balance at the outset and on an ongoing basis.

The extractives industries are unique in many ways: The sector is shaped by high sunk costs in the form of substantial investments that cannot be recouped if a project is unsuccessful; long lead times from initial investment to project start-up and very long production/project lives; fluctuating costs and commodity prices that in turn influence the profitability of exploration, development and extraction; volatile demand; and environmental impacts, including ultimately 'decommissioning' or reclamation responsibilities.⁶ The extractive industries are often located in remote areas, at great distance from their eventual markets. At the same time, companies active in the extractive industries have the potential of substantial earnings in excess of the return on investment required to induce their acceptance of the risks they assume, i.e. windfall gains.⁷

Given the large capital investment required to develop and produce natural resources, and the fact that the output is also physically present in the source country, often with world market benchmark prices available, the risk that the product sales value cannot be validated by tax authorities may be lower than for some other non-commodity based businesses. Similarly, particularly in the petroleum industry where joint ventures are present, goods or services charged into the venture by the operator are generally required under industry practice to be at cost and subject to audit by the co-venturers.⁸ Thus, base erosion and profit shifting techniques may differ as compared to other sectors. Nevertheless, given the large production values and associated development and production costs, there is growing concern about the erosion of the source country tax base via aggressive tax planning strategies, and thus fiscal regime design and administration procedures and practices should properly address these issues.

Governments will likely want to tailor their auditing plans and efforts based on the natural resource activities and parties involved, evaluating the potential risks presented and benefits to be gained from specific enforcement actions. While the challenges of dealing with these issues are the same for all natural resource countries, under-resourced and overstretched tax administrations in developing countries are often not as well equipped to deal with them. They may need augmentation, additional training, and capacity building as extractive industry activities commence, or significantly increase, in order to deal with them effectively. The information and knowledge needed to design and administer appropriate tax rules governing the extractive industries may be lacking or very thinly spread locally. Coordination between different parts of the government often proves challenging. Due to a lack of

⁶ For a more complete list of the risk factors investors face, see "Table 1.4 Categories of risk facing an energy investment project", International Energy Agency, World Energy Investment Outlook 2014, p. 32, available at <https://www.iea.org/publications/freepublications/publication/WEIO2014.pdf>.

⁷ See L. Burns, Income Taxation through the Life Cycle of an Extractive Industries Project, 20 Asia-Pac. Tax Bull. 6 (2014) p. 401.

⁸ J. Calder, Administering fiscal regimes for extractive industries: a handbook (Washington, D.C: International Monetary Fund), 2014, p. 80.

funding that often exists, access to specialists in tax design and administration is often asymmetrically held as between multinational companies and developing countries.

In designing an overall taxation regime and developing its administration, each country must carefully determine its priorities and consider a wide array of choices available to it. There are numerous issues it must deal with, and the approach on any particular issue may not be the same across countries. Ultimately, it is recommended that each country develops its own set of principles and goals, tailoring these to its specific priorities and to its unique circumstances (including location and quality of the natural resources to be developed, infrastructure, political and economic climate, development needs, and other resources available in country). Once those principles and goals are determined, the choices a country makes in its taxation system design, including the structure and administration of taxation, other fiscal terms, and legal/regulatory requirements, should be tested to determine whether they advance and are consistent with those objectives.

Some reoccurring issues that countries face are summarized below. They underscore the interests that a country will need to balance, such as:

- Attracting foreign or domestic direct investment in the extractive industries
- Ensuring the government receives an adequate share of revenues
- Weighing timing issues in relation to receipt of revenue
- Ensuring sound environmental policies and protections exist
- Fostering the development of local capacity in providing goods and services to the extractive industries
- Reconciling transparency, and confidentiality, and
- Designing appropriate governance rules for the extractive industries, including capacities to deal with potential corruption.

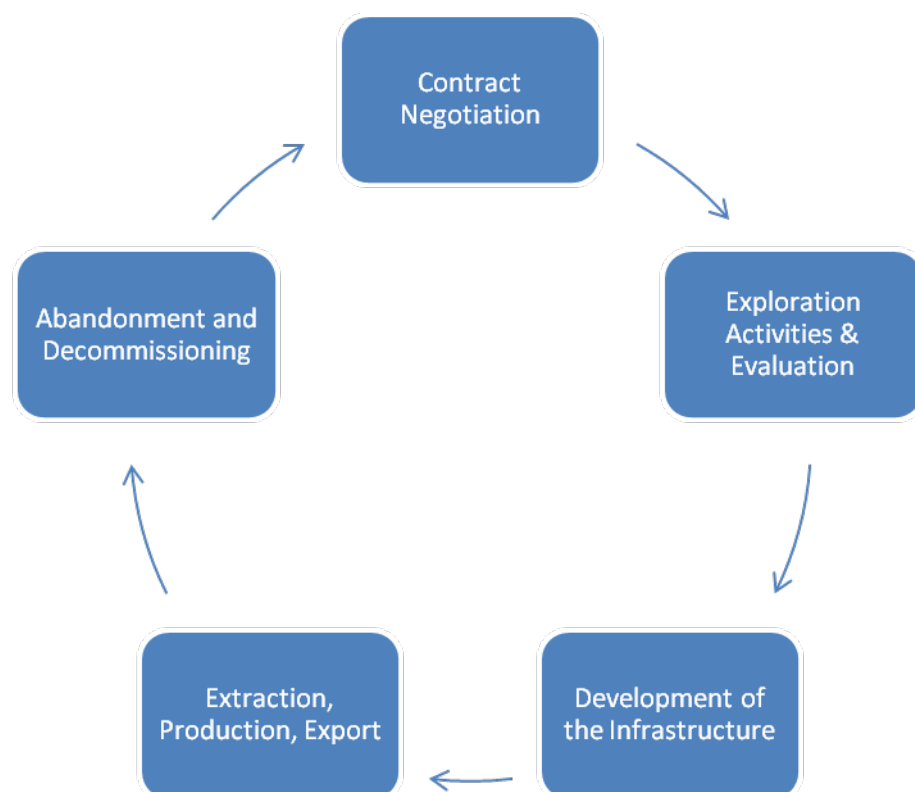
Additionally, as revenues are generated under the fiscal plans, management of such funds over the short and long term requires planning, diligence, and governance structures.

Industry Overview

As noted, there are similarities but also many differences between the extractive industries and other industries which should be taken into account when designing and administering a tax regime. In order to better understand the specific problems that may arise in the extractive industries, a diagram of the generalized life cycle of a natural resource project is shown below, followed by an overview of the oil and gas and hard minerals industry structures.

Extractive Industry Structures: Life Cycle

Figure 1: Lifecycle of an Extractive Industry Project



Extractive Industry Structures: Oil and Natural Gas

The Oil and Gas (O&G) industry involves exploration and production, transportation and the refining of crude oil and natural gas, and manufacturing, distribution and marketing of crude oil and petrochemical products and liquefied petroleum gases.

In the oil and gas industry, reserve ownership and production is dominated by governments and government owned or sponsored national companies, the latter increasingly investing outside of their residence countries and becoming major competitors of publicly traded multinational companies. Government owned national oil companies (NOCs) control 78 per cent of global oil reserves and 58 per cent of global oil production.⁹ In addition to NOCs, international oil companies (IOCs)¹⁰ also supply oil to the market, such that 84 per cent of the world's oil is produced by about 100 companies (NOCs or IOCs).

NOCs can encompass various degrees of government involvement, and often operate as government agencies or corporate entities. NOCs operating as an extension of the government mainly aim for macroeconomic goals such as employing citizens, furthering a government's domestic or foreign policies,

⁹ NOCs are for example Saudi Aramco (Saudi Arabia), Pemex (Mexico), the China National Petroleum Corporation (CNPC) and PdVSA (Venezuela).

¹⁰ IOCs are for example integrated companies like ExxonMobil, BP, Royal Dutch Shell or Repsol and many companies focused purely on exploration and production like ConocoPhillips, Apache, Tullow and Ophir Energy.

generating long-term revenue to pay for government programs, and supplying inexpensive domestic energy. In contrast, NOCs with strategic and operational autonomy¹¹ balance profit-oriented concerns with the well-being of the country as a whole.¹²

IOCs are investor-owned, market-oriented, and mainly aim to increase shareholder value. Various degrees of size, specialization, and integration exist in IOCs. Often companies specialize in one or more individual industry segments, such as the exploration and production, refining, transportation/distribution or marketing segments.¹³ Many of the largest multinational oil and gas companies integrate all businesses, and are referred to as ‘vertically integrated’ oil companies.

The O&G industry is often considered to have two major parts, the Upstream activities i.e., those related to the exploration and production of crude oil and natural gas, and the Downstream activities, i.e., those related to the transportation, refining and marketing of oil and natural gas and their products.

Upstream

The exploration and production activities are the beginning stages of the life cycle and involve large upfront capital investment with significant risks that commercially successful results will be achieved. Lead times from exploration through development to first production are long, often ten years or more, further increasing project risks.

Investors often seek to reduce risks via project diversification, often in cooperation with other partners. The oil and gas industry is characterized by joint ventures (JVs) involving an operator along with several other investing partners that own undivided interests in the project and participate in decisions pursuant to an operating agreement. This approach is (and has traditionally been) the most common way of sharing economic risks. JV partners can also include government bodies or NOCs.

The first phase of Upstream activities, i.e. the acquisition of exploration rights, can occur via several methods, including participation in companies, entering into a joint venture with other investors to find or to develop resources, international bids (unilaterally or with partners), direct negotiations with governments and/or nationally owned oil companies, and outright purchases of assets or companies.

An exploration contract or license can last for several years, divided into sub-periods during which the company commits to a series of investments in geological, geophysical, and seismic work and to drill a certain number of exploratory wells.

The operation, management, and policy-making procedures of a JV are regulated in a ‘joint venture’ or partnership agreement called a ‘Joint Operating Agreement’ (JOA). In the JOA, one of the participating companies is designated as the ‘operator’; responsible for the day to day management of the activities to

¹¹ NOCs with strategic and operational autonomy are for example Petrobras (Brazil) and Statoil (Norway).

¹² See U.S. Energy Information Administration, Who are the major players supplying the world oil market?, available at http://www.eia.gov/energy_in_brief/article/world_oil_market.cfm.

¹³ There are independent refining, marketing, pipeline, shipping, and exploration and production companies, as well as major service companies (also referred to as subcontractors) providing seismic, drilling, construction, health, safety and environmental and other services and technologies for all phases of the international oil and gas industry.

be performed, and the implementation of the decisions taken by the partners, including representation vis-a-vis local governments and third party providers of services and materials.

The operator assigns its own resources to the project, i.e. a team of technical and administrative support, which are charged at cost to the joint venture and allocated to each party based on its ownership percentage.

Non-operator companies are responsible for controlling and overseeing that the activities performed by the operator are carried out according to quality standards and that the costs are in conformity with the agreement and budget of the consortium.

In the case of a commercial discovery, following government approval, the development phase commences, consisting of investments in engineering, development drilling, construction of processing facilities, civil works, platforms, well production and control facilities, and oil and gas transportation/offloading systems.

The operator forms a development team to conduct the development project, which involves coordinating with the partners as well as with the numerous subcontractors and service companies involved, and to ensure compliance with and sound administration of the contracts involved.

The development phase can last from a few months to three to four years (or more) depending on the size, location and complexity of the site to be developed.

Once the facilities and offloading systems are commissioned and development surveys are completed, the production phase starts. Contractually, this phase usually lasts between fifteen and twenty-five years, provided that the economic limit of the field has not been reached earlier. Throughout time, new and/or improved assisted recovery techniques are applied to maximize production levels and reserve recovery.

Throughout the project the environmental impacts need to be assessed and managed to minimize adverse impacts and, at the end of the project's life, contracts generally provide for the decommissioning of the structures, and restoration of the site.

Downstream

Downstream is the term generally given to the transportation of crude oil and natural gas and to the refining, storage, distribution, and marketing of crude oil and its derived products. Refining involves conversion of crude oil into industrial and consumer products such as petrol, diesel, LPG, aviation fuel, bunker for marine transport and chemical feedstock. Marketing can involve retail petrol station activities, and other marketing to wholesale or retail customers, including petrochemical manufacturing activities.

Activities connecting the pure Upstream and Downstream functions are sometimes referred to as "Midstream," and consist of trading and transportation (by pipeline, rail, barge, tanker or truck), storage, and wholesale marketing of crude oil, natural gas, or refined petroleum products. These functions can be performed within integrated companies (where they are also called the Supply and Transportation (S&T) function), or by independent businesses specializing in one or more of these activities.

An integrated company's S&T function is important since companies often lack sufficient production of their own, in total or in the right locations or specifications, to meet their refining or marketing needs. These constraints are addressed by businesses actively involved in purchasing, exchanging, and/or selling of crude oil, intermediate or end products. Additionally, the fact that many producing and refining countries export their production to other markets requires a robust supply and transportation industry.

Liquified Natural Gas—An Expanding Business¹⁴

The Liquified Natural Gas (LNG) business involves upstream, midstream, and downstream elements in the commercialisation of natural gas resources through extracting and processing, liquefying, transporting such liquefied gas in special ships, re-gasifying it in processing facilities, and delivering it to customers. LNG projects involve very large upfront capital investments, with a development phase typically between five to six years. Given the significant upfront capital investment, LNG suppliers typically require revenue certainty by having offtake contracts for a significant portion of the expected LNG production to be in place prior to a final investment decision. Once LNG projects are in the production phase, they can continue producing for 30-50 years (or longer) depending on the size of the gas resource and the investment of additional capital expenditure during the project life.

Extractive Industry Structures: Mining

The mining industry worldwide is often described as having a formal and an informal sector. The formal sector has been estimated to include approximately 6,000 public and state-owned companies. Within this group, the 20 largest companies accounted for some 30 per cent of global output in 2010, and the largest 150, sometimes referred to as the 'majors', accounted for approximately 85 per cent of global output.¹⁵

The 'majors' are often broken into two categories, global (the largest 50 companies, with asset bases in excess of \$10 billion) and senior companies (the next largest 100 companies with asset bases generally in the \$3-10 billion range), followed by approximately 350 'intermediates' with lower access to capital but with goals of growing into the major category. Below the intermediates are three categories of so-called 'junior' companies - those large enough to be involved in exploration and production, those only involved in the exploration phase, and finally, the smallest involving companies that are at the threshold of the formal industry sector and are seeking venture capital to grow within the industry.

Artisanal and small scale mining make up the informal sector of the industry, which includes 15 to 20 million firms, operating in 30 countries, and employing 80 to 100 million people. This compares to the approximately 2.5 million people employed by the formal sector, half of whom are employed by the majors. The formal mining sector operates under legal and fiscal frameworks, but application of such

¹⁴ See Liquified Natural Gas: Understanding the Basic Facts, United States Department of Energy, http://energy.gov/sites/prod/files/2013/04/f0/LNG_primerupd.pdf (August 2005); see also "B.C. and Petronas reach LNG agreement paving way for energy giant's proposed \$36-billion investment," Financial Post <http://business.financialpost.com/news/energy/malaysias-petronas-and-b-c-reach-lng-deal-paving-way-for-companys-proposed-35b-investment> (May 2015).

¹⁵ See M. Ericsson, Mining industry corporate actors analysis, POLINARES working paper n. 16, available at <http://www.eisourcebook.org/cms/Mining%20industry%20corporate%20actors%20analysis.pdf>.

standards in some parts of the informal sector of the industry can be challenging.¹⁶ For some minerals, artisanal and small scale miners can account for a substantial amount of the value of minerals extracted (e.g., less than 5 per cent of worldwide iron, lead, zinc and copper but 25 per cent or more of gold, tin and tantalum).

The mining industry life cycle is delineated into stages: Prospecting/Exploration, Development, Production (including processing) and Closure. In between production and permanent closure may be a period when production is suspended and the mine placed under “care and maintenance.” This may become necessary for a number of reasons, including prevailing economic conditions or unfavorable resource prices, and may continue until fundamentals improve or the operations are otherwise turned around.

The mining industry typically does not have the level of unincorporated joint ventures that oil and gas does, it being more common for one investor to be involved in any particular project. There is less direct government participation in mining projects as compared with the oil and gas sector, and the mining sector does not have national mining companies comparable to NOCs. But like the oil and gas industry, the use of subcontractors is prevalent through many phases of the life cycle of a mine.

Prospecting/Exploration

The exploration phase, often consisting of reconnaissance and prospecting activities, generally involves the greatest uncertainty. The inherent risks of the exploration stage are similar to those described for the oil and gas industry. Exploration and prospecting activities are undertaken to identify whether mineral deposits exist. Subsequently further work is undertaken to define the mineral deposits (the ore body); i.e. its extent and location as well as its peculiarities. Following this a feasibility study is undertaken to determine the commercial and financial viability of the project. Risks and potential upsides are also taken into account at this stage. Significant risks of commercial viability are inherent to exploration as the feasibility and other studies could conclude that a project is not commercially viable based on external market variables as well the mining company’s own internal trigger points. The time frames from exploration through development to first production can range from three to up to ten years.

Development

Once exploration activities have demonstrated that there is a viable mining opportunity, the development phase commences. During the development, detailed geological and geothermal studies are undertaken to map the ore body and to substantiate the economics of the mine. This enables detailed mine planning. The required infrastructure and mine processes are developed at this stage. During the development stage, significant capital investments are made in expectation of eventual income when the mineral is extracted.

¹⁶ See International Council on Mining and Metals, Trends in the mining and metals industry (2012), available at <https://www.icmm.com/document/4441>.

In addition to the above and in recognition of the socio-economic and environmental implications of mining, regular studies should be undertaken to determine the impact of mining on the environment as well as surrounding communities and to properly plan for mitigation efforts.

Production

Physical production of the ore, which can be called the 'mine/mill' phase of mineral development, makes up the bulk of the mining life cycle. At this stage, due to the detailed development work that has been done, the overall life of the mine, based on current economic and market fundamentals can be determined. The ore that is mined is generally physically prepared (via crushing, grading, and grinding) and concentrated for further processing so as to extract the raw mineral.

Waste and tailings resulting from the processing activities need to be carefully managed at this stage so as to prevent adverse environmental effects.

The ore or unrefined mineral product may then be further processed near the mine/mill facility, but is more often transported to an offsite processing facility. Processing can take the form of smelting, leaching or refining, being value adding processes which result in the final products being available for sale in the open market.

Prospecting/Exploration, development, and production are similar to oil and gas upstream activities, and the further processing and transportation are similar to the oil and gas downstream. The terms upstream and downstream are, however, not as commonly used to describe mining activities as they are for oil and gas.

Similar to the oil and gas industry, sale and transportation of ore, unrefined metals, and ultimately the upgraded and refined metals and metal products globally is an increasingly important aspect of the industry. Many countries where minerals are produced export ore or upgraded products to markets around the world. Further, mechanisms to reduce or manage risks - including commodity price risks - are necessary realities of a business with the inherent risks of worldwide mining. Thus, as within the oil and gas business, these logistics and risk management issues need to be addressed by active businesses or functions designed to meet business objectives and optimize processes and costs.

Overview of Fiscal Instruments and their Characteristics

Minerals and Oil and Gas agreements or contracts often have some unique features and at times are subject to specific legal, tax, and commercial requirements. They often are limited to certain geographical areas and may involve a completely different legal, tax and economic regime from general business activities, and even from natural resource contracts covering a different area. Requirements often include separate and independent accounting for each mine or contract area.

Fiscal systems governing natural resources generally fit into two broad categories, concession or contract regimes.¹⁷ Though not without exceptions, concession regimes are more commonly found in Europe, Australia and North and South America and contract systems in Africa, the Middle East and Asia.

Concession regimes

Concession regimes are often also described as ‘tax and royalty’ regimes. These are common both to the mining and petroleum industries and are usually prescribed by law.¹⁸ Minerals or oil and gas extracted pursuant to these arrangements belong to the investors, who in exchange for such rights generally pay a royalty on the volumes extracted as well as other payments such as bonuses and delay rentals. In addition, some sort of profit based taxation is usually due on the profits related to the venture or the exploiting company. Concession regimes may also involve equity participation.

Application of a regular corporate profit tax ensures income is taxed at the corporate level just as in other sectors. However, many countries apply a higher tax rate on mining and petroleum activities, while others have separate income tax regimes addressing sector-specific issues. In contrast to royalties and bonuses, profit taxes are only levied on a profitable investment.

Some of the most important profit based taxes used are company income taxes, excess profits (or variable income) taxes, and resource rent taxes. Since such taxes are profits based, in early years of projects, or in low price environments, they will yield less revenue than some non-profit based taxes. In high priced environments, the opposite is generally true.

Royalties are generally calculated as a percentage of the gross volume or value of the production (i.e., costs do not reduce the base), and are due once production commences (versus profit based taxes which are often delayed as production ramps up and cost recovery reduces net profits). They are relatively predictable and ensure some payments in times of low prices and revenues. As the payment of royalties does not require the project to be profitable and are not reduced by production costs, governments seeking revenues early in the project life might choose to impose royalties as one part of their overall fiscal structure.

Bonuses are one-off (or sometimes staged) payments which may be fixed, the result of a bid or negotiated, and are generally linked to particular early project events such as license award or signature. They can be attractive to governments since they provide early revenue and are easy to administer. Since bonus payments are usually made upfront before knowledge of commerciality, and are unrelated to production, they are generally less attractive to investors. Bonus costs can be recovered, if at all, only from profits.

¹⁷ For further information about fiscal instruments in the extractives sector, see IMF, *Fiscal Regimes for Extractive Industries: Design and Implementation* (2012), available at <https://www.imf.org/external/np/pp/eng/2012/081512.pdf>; IMF, *Guide on Resource Revenue Transparency* (2007), available at <http://www.imf.org/external/np/pp/2007/eng/051507g.pdf>; C. Nakhle, C., ‘Petroleum fiscal regimes’, in P. Daniel, M. Keen and C. McPherson (eds.), *The Taxation of Petroleum and Minerals: Principles, Problems and Practice*, (Routledge, New York 2010) p. 89.

¹⁸ For example, in South Africa, permits are issued and rights are granted under national legislation.

Contract regimes

Contract regimes generally embody two categories, production sharing contracts and risk service contracts.

Production sharing contracts

Production sharing contracts are common within the oil and gas industry, but less so in the area of hard minerals. Under such contracts, states share the results of the exploitation with the investors.

Production sharing arrangements generally provide a formula for sharing the production between the investor and the government (or government owned company). As with the concession arrangements, ownership of the investors' share of such production generally vests with the investors upon production.

Normally, but not always, a royalty on gross production is payable, with a certain percentage of the remaining production (usually called 'cost oil') allocated to the investor to cover its actual investment and production costs. Recoverable costs exceeding the cost oil allocation for a particular year are generally carried forward. After deducting any royalty amounts and cost oil entitlement, the remaining amount (called 'profit oil') is allocated per percentages or formulas in the agreement between the investors (as a return on investment) and the government. Profit oil is generally also subject to the profit based taxes imposed, which can be variable. Thus, the government obtains its share of profit oil outright, and a payment, or a larger in-kind allocation, of the investors' profit oil to cover the investors' income taxes. The profit oil allocation percentage between the investors and the government can also change over time based on overall profitability of the project. Costs recoverable under the cost oil definitions may be different in amount and in timing from those deductible under income or profit based tax rules.

Risk service contracts

Risk services contracts are found primarily in the oil and gas sector. Under a services contract, the State owns the oil and gas that can be exploited and pays a fee to the investors for the exploration and production services. All production is effectively owned by the state, in contrast to concession regimes and production sharing contracts.

Risk service contracts can take several forms, but they generally place full investment risk on the contractor/investor, in return for a fee (which may be paid in the form the oil or gas produced). The fee can be subject to profits based taxes.

Other fiscal terms

Equity participation

Governments may also desire an equity stake in a project, as a means on increasing government revenues over time or for non-fiscal motivations such as a desire for direct government ownership, the possibility to participate in decision-making, or a means to promote knowledge transfer. State equity can take different forms. Fully paid-up equity on commercial terms puts the government on the same footing as the private investor. Where governments do not have, or do not wish to risk, the funds needed to bear the costs on an ongoing basis as a full equity partner, they may request their cost shares to be advanced by the other investors. Under a carried interest arrangement, the government's equity share of exploration and/or development costs are advanced by the other investors, with a recovery of such

‘carried costs’ to come from production. Where a government owns an equity share of the project, its interests with respect to that share are well aligned with the other investors which can promote ongoing cooperation and collaboration.

Other taxes and fees

A number of other taxes and fees can also be imposed on the natural resources industries. Some of the more common ones are briefly noted below:

Broad-based consumption taxes in the form of value-added, sales, or goods and services taxes are often levied by countries and are designed as taxes on domestic consumption. They are generally refundable on exports. Since much of the natural resource production in developing countries is exported, consumption taxes usually do not provide lasting revenues to governments. In the exploration and development stages for the extractives industry, consumption based taxes can, contrary to their design, represent a cost to the industry. This is because during the exploration and development phases, significant capital expenditure is incurred but no exports or revenues exist. Thus, companies are often faced with negative cash flow impacts from consumption taxes unless refunds are processed in a timely manner. Consumption taxes can put additional strain on tax administrations as they require significant administrative efforts.

In general, sales or other disposition of business assets are frequently subject to income taxation on the net gain from such transfers under a country’s tax on ordinary income or in the form of a capital gains tax. The scope of transactions covered by such taxes varies widely.

Dividend or other profit distributions, interest, royalties and subcontractor payments to non-residents are common and can be significant. Withholding taxes on these payments, which allow source states to effectively tax this income, are often borne by investors and are another component of the overall fiscal take. Withholding tax rates on payments to subcontractors are typically set at relatively low levels, reflecting the fact that they are levied on a gross basis. In many circumstances, bilateral income tax treaties reduce withholding tax rates.

Numerous other fees and taxes can become part of an overall fiscal package, including items such as customs duties, excise taxes, pipeline fees, export fees, property taxes, and personal income taxes. Source countries should be conscious of the overall fiscal package applicable to investors. The optimal design of any tax system governing the extractive industries will often be a blend of the fiscal instruments described above. As mentioned, fiscal policy will need to be designed to further a country’s development plan balancing different needs.

Tax provisions applicable to the natural resource sector may be the same as for all other industries and encompassed in a more general tax law. In other cases, there may be a desire for special tax legislation applicable just to the natural resource sector. A third option is to tax extractive industries according to the corporate income tax laws, but with additional provisions applicable specifically to their industry. The optimal design should provide a country with adequate resources and ensure administrative ease while being responsive to the needs of investors.

Transparency in the Extractive Industries

The extractive industries are the subject of several transparency initiatives, and the extractives sector is often in the forefront of a growing movement for greater transparency for all businesses.¹⁹ The Extractive Industries Transparency Initiative (EITI) contributes to this and requires (1) all investors doing business in the country to report all payments made to governments or agencies (and specifying to which agency), (2) governments to publically report on the payments it records as having been received and (3) an independent audit and reconciliation to be done.

A properly designed and cost effective reporting mechanism can help to create a climate of trust between investors and governments, and with the public, with respect to natural resource development.

Investments in natural resources in developing countries can play an important role in providing governments with the resources needed to reduce poverty while meeting the world's energy and economic needs. But natural resource development must be done safely, efficiently, and in an environmentally sound way. Investors, working together with developing countries governments and local communities, must earn trust and support. Likewise, governments must gain the trust and support of investors. And both governments and investors, given the high impact (both physically and financially) of natural resource development, must also gain the trust and support of the public at large. Transparency in reporting is a key element contributing to the development of trust.

Extractive Industries Taxation Issues for Developing Countries; the Role of the UN Committee of Experts

As evident from this Overview Note, designing appropriate tax regimes in resource-rich countries is far from easy. Developing countries are faced with additional difficulties given the often prevalent lack of resources in tax administrations. As abovementioned, the need for revenue should be balanced with the need to attract foreign investment. At the same time, governments have to ensure that investments adequately contribute to economic growth and adhere to social and environmental standards.²⁰

During the tenth annual session, the UN Committee of Experts on International Cooperation in Tax Matters decided to focus its work in the area of taxation of extractives on areas considered the most pressing for developing countries. In addition to an Overview note, specific guidance notes will be issued on such key issues. Guidance notes on (1) Capital Gains Taxation and Indirect Transfers, (2) Selected Double Tax Treaty Issues, and (3) Tax Treatment of Decommissioning Costs are presented in 2015 along with this Overview note. Guidance notes on (4) Value Added Taxation, (5) Permanent Establishment Issues in Double Tax Treaties, (6) Negotiation and Renegotiation of Contracts, and (7) Government Take are expected to be issued in 2016. An approach for addressing work on Invoicing and Costs (focusing on "trade mis-pricing") is also expected to be finalized in 2016. The Committee will identify additional issues

¹⁹ Other initiatives such as the Dodd-Frank requirements of US law, and EU and other country initiatives are also important.

²⁰ See Africa Progress Panel, Equity in Extractives, Africa Progress Report 2013, p. 63, http://www.africaprogresspanel.org/wp-content/uploads/2013/08/2013_APR_Equity_in_Extractives_25062013_ENG_HR.pdf.

for which guidance notes might be issued beyond 2016 based upon recommendations of the Subcommittee.

Capital gains taxation and Indirect Transfers

This guidance note will deal with the question of whether and how a capital gains tax could be implemented. Domestic legislation could tax gains on sales of capital assets as general ordinary income, as capital gains taxable under the corporate income tax law, or by a stand-alone capital gains tax law. In cases where there is a capital gains tax on sales occurring within a country, the question of how indirect sales should be treated has to be taken into account. Instead of transferring an asset, e.g. a mine itself (direct transfer), the owner of an entity holding the asset may transfer its interest in that entity (thus “indirectly” transferring the underlying asset).

In the case of a direct transfer of a mining or petroleum right, even by a non-resident, the source country can levy a tax under its domestic law on the gain from the sale of such property. The guidance note reviews issues and considerations a country may face in taxing or, in some circumstances, not taxing such direct transfers. Next, the note considers indirect sales of mining or petroleum assets. For example, in order to protect the tax base of the source country in those cases, an indirect transfer tax rule could be implemented to tax indirect sales. The guidance note will extensively review issues involved in making, implementing, and administering such a decision. An indirect transfer tax rule may involve both domestic law and applicable tax treaty issues, and the interrelationship of these is outlined in depth.

Value added taxation

The guidance note on value added taxes (VATs) will cover the key issues raised in applying a VAT on the extractive industries, including policy and administration issues over the life cycle of natural resource projects. In particular, since many developing countries will export most of their natural resource production, a VAT intended to tax domestic consumption should not provide a large source of lasting revenue, but timing and refund issues can be significant. The note will cover these issues and address the effect a VAT may have as a barrier to or a facilitator of direct investments. Implications on local content sourcing and other local economy spillover effects will be described.

Tax Treatment of Decommissioning Costs

At the end of its life cycle, the decommissioning of an extractive facility in a way that avoids environmental damage and adverse effects on local populations must be addressed. A key element in achieving comprehensive closure/dismantling of extractive facilities is ensuring adequate financial resources are available on closure. Properly taking into account decommissioning when designing fiscal rules governing the extractive industries is particularly important in developing countries where, quite often, there may be a lack of general legal framework addressing these issues.

The note will describe these issues, and examine the tax treatment and considerations involved, since decommissioning costs are normally expended when revenues are no longer generated. Examples from countries that have specific rules on decommissioning will be reviewed and options for decommissioning will be presented for consideration by countries in formulating their national policies and legislation.

Tax treaty issues

Bilateral tax treaties play an important role in coordinating rules for cross-border tax treatment and eliminating obstacles to cross-border trade and investment. Extractive activities usually include numerous cross-border elements. They are undertaken by investors, license holders, service providers and suppliers who are often not resident in the source country. Natural resources produced are typically exported. These elements raise several tax treaty issues for the extractive industry which are discussed in this guidance note.

In particular, the note will include commentary on which taxes are covered by a treaty, when activities of investors, contractors and subcontractors are taxable, how tax jurisdiction may vary throughout the life cycle of a natural resource project, how the term “royalties” as used in tax treaties differs from mineral/oil and gas royalties, whether a tax or other levy is creditable in the resident state of the investor, aspects of non-discrimination, and the territorial scope of the treaties.

The note will also introduce the concept of a permanent establishment (PE) and issues that arise in its application, considering the perspectives embodied in the UN Model Convention and its Commentary, as well as references to the OECD Model and other specific bilateral treaties.

Permanent establishment issues for the extractive industries

This note will put a special focus on Article 5 of the UN Model Convention and how this article can influence the taxation of the extractive industries. Whereas the permanent establishment issue is addressed more generally in the guidance note on tax treaty issues, this note will elaborate in-depth on the significance and existence of PEs of the investor and its subcontractors as a result of different activities performed by the extractive industry in the source country.

In the extractive industries, costs often arise before a permanent establishment is set up or after a permanent establishment has ceased to exist. Preparatory costs can include planning or exploration costs. Subsequent costs can arise due to decommissioning or activities associated with other liabilities. In addition, issues with respect to companies that rent drilling rigs, perform their activities on-board such rigs, and activities that take place at different wells or contract areas are also covered.

Kinds of government ‘take’

The different forms of government taxation and participation and their likely impact in various scenarios will be described in this guidance note.

Negotiation and re-negotiation of contracts in terms of their fiscal aspects

How countries attract outside investment while balancing their economic, environmental, and social needs is a major challenge, requiring careful upfront planning and priority setting. In some countries, laws are independently enacted governing the framework for investments in resources, and investors must determine whether they will invest based upon those prescribed rules. In many developing countries, however, where resource development is beginning, no overall framework exists, and often a negotiated framework for development between an investor or investors and the government governs natural resource development. This note will review various issues that arise in connection with the

negotiation of such contracts, and the options regarding their renegotiation as circumstances or parties involved change.

Additional issues

Consideration of additional issues, not otherwise covered in these guidance notes, will be undertaken. Possible areas for additional guidance are:

- Ring fencing issues: When should taxation rules apply separately to contract, project, or geographical areas or to specific activities (such as Upstream versus Downstream activities)?
- Setting prices for tax purposes/tax issues related to price fluctuations: Valuation of costs and outputs in general and administrative issues in auditing prices
- Tax incentive issues and management: When may incentives such as tax holidays, special credits or exemptions be appropriate? Distinguish incentives that permanently reduce taxes from provisions affecting timing impacts, such as deduction of expenses and accelerated cost recovery.
- Taxation of service providers to the extractive industries (contract mining) and non-resident subcontractors
- Additional specific double taxation treaty issues
- International tax issues in absence of tax treaties
- Tax treatment of financial transactions, such as hedging, finance leases, debt financing and thin capitalization
- Specific Contract Issues not otherwise covered under prior guidance notes, such as stability clauses,
- Tax Administration Issues:
 - Organization and procedures—including general approach to mining tax legislation, tax assessments, organizational models for extractive industries capabilities in revenue authorities, access to and effective use of information
 - Dispute resolution (including possible mutual agreement procedures)
 - General capacity building

For more information...

Africa Progress Panel, Equity in Extractives, Africa Progress Report 2013, http://www.africaprogresspanel.org/wp-content/uploads/2013/08/2013_APR_Equity_in_Extractives_25062013_ENG_HR.pdf

L. Burns, Income Taxation through the Life Cycle of an Extractive Industries Project, 20 Asia-Pac. Tax Bull. 6 (2014) p. 401.

Economic Commission for Africa, Minerals and Africa's Development: The International Study Group Report on Africa's Mineral Regimes, available at http://www.africaminingvision.org/amv_resources/AMV/ISG%20Report_eng.pdf.

EI SourceBook, available at <http://www.eisourcebook.org/>.

IMF, Fiscal Regimes for Extractive Industries: Design and Implementation (2012), available at <https://www.imf.org/external/np/pp/eng/2012/081512.pdf>.

IMF, Guide on Resource Revenue Transparency (2007), available at <http://www.imf.org/external/np/pp/2007/eng/051507g.pdf>.

C. Nakhle, 'Petroleum fiscal regimes', in P. Daniel, M. Keen and C. McPherson (eds.), The Taxation of Petroleum and Minerals: Principles, Problems and Practice, (Routledge, New York 2010) p. 89.