

CTA - CONFEDERAÇÃO DAS ASSOCIAÇÕES ECONÓMICAS DE MOÇAMBIQUE

MOZAMBIQUE -- DRAFT OIL AND GAS TAX LAW

COMMENTS

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MOZAMBIQUE DRAFT OIL AND GAS TAX LAW Comments

EXECUTIVE SUMMARY

The purpose of the consultant's study was to review the draft oil and gas tax law of Mozambique and to comment on in from a various points of view. It noted, but did not calculate the effect of, other taxes such as the surface tax and labor taxes because the study was conducted under a tight schedule. It also observed that a sophisticated conclusion, especially as to maximum cumulative taxes, would require sophisticated computer simulations.

The study found a need to correct numerous drafting flaws, particularly with respect to definitions, some of which were inconsistent or were capitalized terms in the body of the law but were not defined. These defects are easy to eliminate, as are many of the various inevitable ambiguities. The consultant considers that extensive interpretative regulations should be issued soon after enactment in order to assure transparency.

The law was found to be too complicated and to be in need of streamlining. The largest flaw is that high cost production could lead to tax rates in excess of 100% of revenues; this needs to be cured or else producers will only select cheap projects and will be induced to abandon them too early.

The law was also found difficult to administer, largely because of the need for difficult valuations of production instead of using actual sale prices.

There are many recommendations, principally:

- 1. Convert the IPP into a pure royalty that treats the government as an owner of the share of production that the royalty percentage represents, and base the royalty on actual sales, not imaginary ones. This will keep the royalties out of the income of the producer, thus simplifying and making fairer the computation of the income tax and the production-sharing. The royalty rate was considered within international norms and noted it is a good feature so as to assure revenue even if the producer loses money from production.
- 2. The income tax was generally accepted and the rate was approved as being within international norms.
- 3. The production-sharing part of the tax was generally approved, but with many observations, especially an overall, recommendation that the trigger for production-sharing be more in line with the way business people generate cash flow analysis for making business decisions, including specifically that all costs be considered, including those directly incurred prior to commercial production and taxes paid.
- 4. Thin capitalization, which results in denial of interest expense deductions, should be based on equity value, not book values. Doing this will bring the thin capitalization rules into line with the purpose of thin-capitalization rules, namely to disallow deductions for interest expenses with respect to debt that the marketplace would not provide.
- 5. Intercompany pricing rules should be clarified as to the government's authority. Under the present law the tax authorities can make any adjustments they want to, which can lead to

- capricious results. The recommendation is that in the event of a dispute over a government adjustment the adjustment will stand if it is not arbitrary and capricious.
- 6. Bonus payments were generally approved, subject to the comment that the government should consider the risk of not attracting smaller innovative producers.
- 7. Revenues should go to a separate formal government fund and be established and regulated in accordance with the Extractive Industries Transparency Initiative. The information concerning financial flows in and out of the fund should be readily accessible to the public and the press and part of the country's budget.
- 8. In order to facilitate information sharing with other governments and to facilitate intercompany pricing issues multi-laterally, the government should seriously consider entering into further bilateral tax treaties. It was also suggested that it consider entering into an existing multi-lateral tax treaty (The Convention on Mutual Administrative Assistance in Tax Matters).
- 9. The consultant considered that a top total tax take of about 80%, achieved via the production-sharing formula was within norms, and recommended that in the event the rate was exceeded, it be reduced to the top rate by reducing the production-sharing quota for the year.
- 10. The consultant recommended enactment of a branch profits tax to make the withholding tax system symmetrical as between subsidiaries of foreign corporations and branches of foreign corporations operating in Mozambique.
- 11. The consultant considered the timing of revenues to be generally appropriate, noting that the tax system encourages investments in rich fields, thereby encouraging early development of infrastructure for later less dramatic projects and provides the government with significant bonus payments.

I. Introduction

The objective of this report is to take a look at, and comment the draft tax law for oil and gas prepared by the Government of Mozambique (GOM). The GOM requested CTA – Confederation of Business Associations of Mozambique to produce comments to the draft law. CTA, due to the complexity of such draft law, requested assistance from SPEED-Support Program for Economic and Enterprise Development, a USAID-financed project. SPEED hired Professor Richard Westin to prepare the detailed comments that are the report.

The Author

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- Environmental Tax Initiatives and International Trade Treaties: Dangerous Collisions (Kluwer Law International, 1997);
- Mineral Properties Other Than Oil and Gas Exploration, Acquisition, Development and Disposition (Portfolio 601), Bureau of National Affairs (2008);
- Mineral Properties Other Than Oil and Gas Operations (Portfolio 603), Bureau of National Affairs (2008); and
- Federal Income Taxation of Business Enterprises, 4d Ed, with S. Parejo (New Mexico) R. Beck (New York) (4th Ed.VandePlas 2012).

He holds a B.A. from Columbia College, an M.B.A. from the Columbia University Graduate School of Business Administration, and a J.D. from the University of Pennsylvania Law School.

Due to time constraints, this report glances rapidly on how other taxes (not income or sector-direct taxes) can affect the sector but are. These include the surface tax, which is not a great burden, and the municipal tax, which seems to add a 1.1% profit tax load, according to the IFC. There are also government fees that companies will face. The report do not included the municipal taxes or fees, licensing fees, labor taxes or withholding taxes on payments overseas (other than in generalities), so the tax burden described below is somewhat understated. To include them would require computer simulations to model their impact on various kinds of projects and profitability levels, which due to a short deadline granted could not be prepared.

This report consists of eight parts:

- 1. Introduction
- 2. A discussion of economic principles and tax policies applicable to the oil and gas industry
- 3. A technical appraisal of the draft oil and gas law
- 4. Analysis of tax burden and proposed Maximum Government Revenues
- 5. A summary of proposals for change
- 6. Timing of revenues
- 7. Best Practices, includes some suggestions are made as to further work to be done.
- 8. The report also includes extensive Appendices at the end.

¹ http://www.doingbusiness.org/data/ exploreeconomies/mozambique/paying-taxes/

II. Economic Principles and Tax Policies Applicable to the Oil and Gas Industry

a. Basic Principles

This section attempts to explain "international norms" in the context of the basic principles behind what an oil and gas law (including the tax component) should be trying to achieve. These basic principles are behind the intent and direction of many international jurisdictions. The intent would then be to assess how well the wording and provisions of the Mozambique law can drive the oil economy on a sustainable development path.

It is often said that there is no agreed framework for sustainable development, and this has been in the context of many national and international discussions among stake-holders in the oil and gas industry. Nevertheless, the concepts of sustainable development have been introduced in the field of "welfare economics". These concepts should underlie the actions, certainly of government, but also of anyone else who is a stakeholder in oil industry development. In regard to oil production activities, through all the life-cycle from exploration to production and eventual facility closure, the intention should be to arrive at a win-win situation among all the legitimate stake-holders, in relation to each stake-holder's prior defined rights.

Before considering whether an oil project should go ahead, the rights of all stake-holders have to be defined. Then an oil project may go ahead if it produces not only private benefits through the rate of return to Concessionaires and employment opportunities for employees, but also in a social sense that it is a worthwhile project that does not go ahead at the (negative) expense of others in society.

Essentially, the project should go ahead in a private and social sense, if there are no net losers in the endeavor. It doesn't necessarily mean that there are no negative impacts of the project, but solely that the negative impacts are compensated - so that if some parties lose, they are compensated by the winners, and if the winners have more than enough left over to induce them to continue their activity, then the outcome is a win-win project, and it should be allowed to go ahead. That is the basic philosophy. If a project fails this test and the negative impacts outweigh the benefits, then the project is not socially viable.

The government role is to determine what other sorts of property rights should be upheld - for example, innocent bystanders from the point of view of "rights" to air and water quality, health, and other aspects. Governments have a role and responsibility to set safe levels. This argumentation leads to the conclusion that the project costs should include all external costs, so that 'rent' is after such costs - and taxation has to be out of this net notion of 'rent', i.e., government should not tax so high as to deny the project the ability to meet its payments to negate any damaging externalities caused by the project.

Moreover, there is a strong preference on the part of host governments to eliminate 'rent' so that the operator does not get an unjustifiable premium for its investment in money and effort.

Conversely, the operators of proposed projects want certainty that they can earn at least their cost of capital (or similar base 'hurdle rate') plus a premium for the various risks they perceive, stated as an addition to the minimum acceptable rate of return. Just what a particular operator's hurdle rate is tends to be a closely guarded secret.

b. Principles of sound tax policy

The following paragraphs describe internationally accepted standards of tax policy:

Revenues. The first issue is ordinarily the adequacy of the tax as a revenue source. Clearly, taxes are the foundation of government operations. The tax should also be stable as a revenue source, with no adverse impact on steady, noninflationary economic growth.

Fairness. The second tradition issue is the perceived fairness of the tax. This is not relevant in the oil and gas sphere, except that it is of course unfair to change the rules retroactively, which Article 127 of the Constitution of Mozambique wisely prohibits. From the business taxpayer's perspective, the important issue is not fairness, but whether the return on the investment, after taxes and other obligations are met, is sufficient to induce deploying money into the project. Whether the project is viable depends in large part on the perceived country risk, including corruption, legal instability, risk of expropriation. Mozambique is a recent participant whose risks in these regards are difficult for a Concessionaire to appraise.

Another aspect of fairness is fiscal impact, meaning the question of how much a taxpayer gets back from government compared to what it pays in. This cannot be calculated in the case of an oil and gas tax law.

Administrability. A tax ought to be certain, convenient and economical to collect. It may, for example, be that a tax can yield a substantial flow of revenues, but that its complexity is so great that the administrative burdens will largely offset the revenue, thereby making the tax inefficient in a fiscal sense. The burdens may consist of the administrative costs to the government or the compliance costs to taxpayers, or both combined. In addition, tax administration must be honest and competent, because if not, taxation cannot be fair, simple, clear, or neutral.

Because Mozambique lacks an experienced tax administration, administrability is of special importance. This is not to be unkind; the American IRS is unable to fully administer its laws, with the result that there is an enormous annual "tax gap" (the Treasury Department considers that 17% of correct revenues are lost) despite an administration that has existed almost 100 years in a relatively rich country whose Congress intends to collect its taxes and which has a revenue service considered free of corruption.

Transparency. This is a close relative of administrability. The notion is that legal rules -- including tax rules -- should be clear ("transparent") and not, for example, only apparent to taxpayers who can afford to pay for expensive tax advice. The term is of more recent origin and is common in Europe and among economists and tax policy experts generally. The more transparent the law, the safer it is from abuse.

Simplicity. A tax should be free of interpretative doubt, and have obvious meanings and purposes. In addition, it should not invite unintended behavior to defeat the tax.

Neutrality. Taxes should be compatible with a free market. A tax is "efficient" in the economic sense if, per dollar of revenue, it interferes minimally with the free-market decisions that people would make in the absence of the tax. Those decisions -- about how hard to work and how much leisure to take, how much to save and how much to consume, how much of one product to consume compared to another product, how much to spend on education, etc. -- presumably lead to an optimal allocation of resources in a perfect free market and generally should be distorted as little as possible by imposing a tax, unless the distortion or correction is desired as a matter of public policy. The concept seems obvious; in order to prevent the misallocation of resources, including the misallocation caused by tax avoidance (or compliance) practices, the tax system should not conflict with the free market system, unless the conflict is intended.

However, when speaking of taxes (or tax incentives) the subject ceases to be simple. For one thing, the *lack* of a tax may imply a conflict. For example, if harmful pollution generated in the course of manufacturing a consumer good goes untaxed, then the price of the good is too low, and excessive production and consumption will occur, compared to the level of output that would occur if the good bore its full environmental cost. This topic is of great interest to economists.

Macroeconomic Considerations. A related concern is that the tax be consistent with macroeconomic (study of the overall economy) values. That body of learning generally prefers steady growth, high levels of employment and minimal inflation. A well-formed national tax will neither stimulate inflation nor invite a recession. This consideration does not fit well with an oil and gas tax law, which is only one part of a much larger picture, and is not considered further in this report.

Tax Policy in Practice. A serious lack of publicly available empirical data haunts the study of all of these criteria. Tax legislation tends to be born in the cauldron of political debate, influenced by the economic fashions of the day. If systematic follow-up studies of tax legislation do exist, but they are seldom available to the public. On top of that, private influences often prevent governments from releasing much useful data.

A Tax Base That Corresponds to Economic Income. Every tax (meaning a forced payment to a government other than a fee for a service or a penalty) has a *base* to which a *rate of taxation* is applied. Rates are simple; designing bases is complicated. It is important to make certain that the base for a tax on income provides a realistic measure of "income," which involves a *legal* definition, that does not vary too much from "economic income" or else the tax runs the risk of being unrealistic and arbitrary. Economists have derived a definition of income, known as the Haig-Simons definition after its creators. What follows is the Haig-Simons theoretical definition of income² that is much favored by economists and is often used by income tax theorists as a possible standard for reforming an income tax and for keeping tax bases realistic:

"Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption [for the year] and (2) the change in the value of the store of property rights between the beginning and end of the [year] in question." ³

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² Their work is in turn based on the work of von Schanz and Davidson.

³ H. Simons, PERSONAL INCOME TAXATION 50 (1938).

The words "market value of right exercised in consumption" are not relevant here because business enterprises – unlike humans — do not engage in "consumption" except in minor cases such as excessive compensation to executives. Changes in net worth (the value of the entity's assets minus its liabilities) can be negative or positive. For example, if a corporation suspended its operations and lived on its capital for a year, there would be a reduction in its net worth, which would not be offset by an equal amount of personal consumption.

The economist's theoretical definition suffers from the practical problem of valuing the taxpayer's net worth every year. Income tax systems avoid this problem by measuring changes in net worth only when income or losses are *realized* by means of a sale, exchange or other palpable transaction (known as a *taxable event*). Governments' pragmatic refusal to use annual appraisals to measure income flings open the door to having taxpayers decide exactly when to stage their taxable events. That is true in Mozambique and everywhere else.

c. Recommended strategy

Every tax consists of a rate and a base. The base of income taxes is always complicated and subject to change. The changes are expensive for governments and taxpayers to implement. Rate changes are easy. Taxpayers do not honestly believe they are entitled to the same tax rate later as they have now, because they know government revenue needs change so while they will complain about rate increases, their basis for objection is weak unless the increase amounts to confiscation, such as imposing an tax that results in imposing a tax greater than income.

If a country has a highly convoluted tax base, it injures its reputation for good sense and discourages seriously considering a country as a place to invest. Conversely, once a country demonstrates it has a clear set of tax and related laws and implements them fairly and professionally, the country's attraction (and ability to attract fresh Concessionaires and raise its taxes on fresh Concessionaires) increases.

In light of this, I think, viewed from a great distance, Mozambique would be wise to strive to simplify the draft law, plan to administer it fairly and with no risk of corruption, and to raise its rates in the future. To optimize this strategy, present day Concessionaires should obtain only relatively small shares of Mozambique's national treasure of natural resources so as to control the "fiscal cost" of lower earlier year's rates in favor of maximizing overall long-term rates. (In other words, the report recommends starting with smaller projects.) Others take a different view and consider that the last penny of "rent" should be squeezed out from the very beginning, but they too would agree that revenues will be optimized, all things being equal, by straightforward laws and fine administration.

III. Technical Appraisal of the Draft Law

As a preliminary comment, the author speaks some Portuguese, but not enough to use the original Portuguese draft of the law effectively in the rare cases where he cannot understand the English translation. The author considers the translation to be very good.

The general conclusion is that the draft law is in need of substantial revision to make it functional. In addition it is complex.

The author has taken the liberty of inserting the draft of the law and making comments in **red bold** in the vicinity of each segment of the law that seems in need of improvement, sometime in the text, sometimes beneath it and sometimes both.

The author is unsure if a Concession agreement can in any way displace the tax law. This should be clarified. The author's impression is the law prevails and therefore that should be said explicitly in the tax law.

SPECIFIC TAXATION REGIME FOR PETROLEUM OPERATIONS

CHAPTER I

General Provisions

Article 1

(Definitions)

For the purposes of this Law, the following terms shall have the following meanings:

- a) **Immovable assets** mineral deposits, and Petroleum Deposits, situated in the Mozambican territory, as well as Concession Agreements comprising direct or indirect participations in entities which have title to a Concession Agreement, whether held by residents or non-residents;
- b) **Concessionaire -** one of the contracting parties to a Concession Agreement for the Exploration and Production of Petroleum, on whom are conferred rights of Petroleum Exploration and Production, in terms of applicable legislation;
- c) Concession Agreement Administrative contract in terms of which the State confers on a Mozambican person, or foreign legal person registered in Mozambique, the right to undertake Petroleum Operations; [can anyone other than a Mozambican person or registered foreign legal person undertake Petroleum Operations? If not say ", and only such a person", after "Mozambique" to eliminate ambiguity].
- d) **Demobilization Expenses** costs approved by the <u>Competent Authority</u> [if this is a defined term, then define it or leave it in lower case lettering. I do not see a definition] relating to the planning, preparation and implementation of activities involving the closure of Petroleum Operations, including dismantling, demolition or disassembling, and the removal of installations and equipment utilized in Production, and also to the restoration and rehabilitation of the area, to a condition which is ecologically similar to that existing prior to the commencement of the extraction of petroleum;

- e) **Effective date** date of the approval ("vidimus") of the Concession Agreement by the administrative court:
- f) **Petroleum Deposit -** an accumulation of petroleum [or natural gas] within a geological unit limited by characteristic, structural or stratigraphic rocks, with (in the case of petroleum) contact surfaces between the petroleum and water in the formation, or a combination of these, such that all of the petroleum is in communication, under pressure, as a liquid or gas; or part of a geological unit, such as bituminous shale or coal, containing petroleum, which has been delineated for the purposes of the Exploration and Production of Petroleum;
- g) **Petroleum Discovery** the first petroleum found in a geological structure, by drilling, which can be brought to the surface using methods employed in Petroleum Operations in the Contract Area, whether or not it has commercial potential;
- h) Exploration Expenses all direct and indirect costs allocated to the [is this intended to refer to "permanent establishment" in the tax treaty sense? What is meant by establishment?] establishment, incurred in the search for Petroleum in the Contract Area;

Comment: Contract Area is not defined but should be.

- i) Development Expenses all expenses incurred by the Concessionaire or operator in activities involving the planning, preparation, construction or installation of one or more infrastructures for the Production of Petroleum, including the opening of wells for the conducting of Petroleum Operations;
- j) Operating Expenses all expenses incurred during Petroleum Operations after the commencement of Commercial Production and which do not constitute Exploration costs, <u>Costs</u> <u>of investment in Development and Production, General and Administrative Expenses, and</u> <u>Service Costs</u>;

Comment: these terms are not defined.

- k) **Petroleum Rights** the holding of rights over petroleum establishments, or shareholdings therein;
- Affiliated Company means, as regards any Person who constitutes a Concessionaire, all
 parent companies which, directly or indirectly, control that Person, or any company which is
 directly controlled by that Person, or any company which, directly or indirectly, is controlled by
 that parent company.

For the purposes of the above definition:

 i. a company is directly controlled by another company or companies when they hold shares or other participations in the share capital of that company, which represent, together, more than 50% (fifty percent) of voting rights in the general assemblies [or value]; and Comment: use value to avoid situations where, e.g., lawyers hold stock for the benefit of a client. This is common U.S. drafting.

- ii. a specific company is indirectly controlled by a company or companies ("parent company or companies") when it is possible to identify a series of companies, starting with the parent company or companies, and terminating with that specific company, related in such a manner that each one of the companies in the series, with the exception of the parent company or companies, is directly controlled by one or more of the companies which precede it in the series; and
- iii. There is also direct or indirect control of a Person or company if that Person or company is under the practical control of another Person or Company, whether the latter is operating separately or collaboratively with another party or parties.
 Comment: lawyers excel at breaking formal control. Section 482 of the US tax law uses "practical control,} which have proven to be effective, in connection with investigating improper pricing between related parties.
- m) **Natural Gas** Petroleum which, under normal atmospheric conditions, is in a gaseous state, as well as non-conventional gas, including methane gas associated with coal, and **bituminous** shale gas, **propane and butane**

Comment: I think this is not a correct definition of natural gas. I think it is a mixture of hydrocarbon gases.

Comment: there can be other gases as well, such as helium, which is highly prized. I recommend defining it as any of various hydrocarbon gases, including shale gas, propane and butane.

- n) **Petroleum Operations** the planning, preparation and implementation of activities involving the reconnaissance, exploration, development, production, storage, transport, and the termination of such activities, or the termination of the use of infrastructure, including the implementation of a demobilization plan, sale or delivery of petroleum, up until the stipulated point of export or supply, this being the point at which Petroleum is delivered for consumption or use, or carried as merchandise, including in the form of liquefied Natural Gas;
- o) **Mozambican Person** any juristic person constituted and registered in terms of Mozambican legislation, with head office in the country, and in which more than fifty one percent of the respective share capital belong [legally, beneficially or both combined] to national citizens or companies, or to Mozambican private or public institutions, or (to those) which are controlled by them ["as control is defined above for purposes of finding Affiliated Companies"];

Comment: this is for consistency.

p) **Petroleum** – Crude Oil, Natural Gas or other natural concentrations of hydrocarbons, in the physical state in which they are found in the subsoil, produced or capable of being produced from,

or in association with, Crude Oil, Natural Gas, shales and asphalts, **including condensates and distillates:**

q) Crude Oil - Mineral crude oil [I suggest "Petroleum in its crude form, including," asphalt, ozokerite and all types of Petroleum and shales, in their natural state, whether solid or liquid, or obtained from Natural Gas by condensation or extraction, excluding coal or any substance which can be extracted from coal;

Comment: Although the term "mineral oil" is often used, I believe there is no such thing formally. In any case, Petroleum is of an organic, not a mineral, character.

- r) **Cost Petroleum** that part of Produced Petroleum at the disposal of the Concessionaire, for the recovery of costs and expenses incurred in the undertaking of Petroleum Operations, as set out in this regime;
- s) **Available Petroleum -** balance of Petroleum remaining after the removal of that part of Produced Petroleum necessary for compliance with the obligation to pay **Petroleum** Production Tax;
- t) **Profit Petroleum -** that part of Available Petroleum which exceeds the Cost Petroleum, which is allocated to the parties on the terms set out in this regime;
- u) **Produced Petroleum -** the Petroleum which has been extracted from a Petroleum Deposit, initially separated and processed as Crude Oil, condensed petroleum or Natural Gas, measured at the measuring point approved by the Government, for the purposes of the payment of Production Tax, including any Petroleum volumes lost as a result of deficiencies or negligence during Petroleum Operations. The same definition is applicable to "Produced Crude Oil", "Produced Condensate" and "Produced Natural Gas", as the case may be.

Comments: The underlined terms are not defined. How does one measure lost petroleum? The proposal is a good idea from an environmental perspective, but I think it is better addressed by environmental law because it adds complexity to the law.

v) **Point of Delivery** - in the case of Natural Gas, the entry flange of the transporting gas pipeline, and in the case of Crude Oil and of <u>Condensate</u>, the entry flange of the lifting tanker or other method of transport in the <u>Concession area</u> - or, in either of these cases, any other place which is defined by the Government, in the <u>Concession Agreement</u>;

Comments: The underlined term is not defined. Also, gas fields are tied together by gathering pipes, then typically connected to a transmission pipeline. The meaning of the term "transporting gas pipeline" should be clarified. Is it a gathering pipe? Is it the final large pipe? Or is it something else?

w) **Production** – activities involving the extraction of Petroleum from Petroleum Deposits in the subsoil, including drilling for the Production of Petroleum, injection for the purposes of improving recovery, separation and treatment, including liquefaction, storage, measuring and

- preparation for the carriage and transport of bulk Petroleum, and the operation and use of infrastructure for the Production of Petroleum:
- x) **Commercial Production** the Production of Petroleum and the delivery thereof, in terms of a <u>production and sale program</u>, as established in a <u>development plan</u>, and any amendments thereto.

Comment: it is not clear to me what the underlined words really mean and if they should be a defined term.

Article 2

(Object)

This Law sets out the rules on the taxation of, and tax benefits applicable to, Petroleum Operations.

Article 3

(Scope of application)

This Law is applicable to Mozambican persons, and to foreign juristic persons registered in Mozambique, which undertake or are involved in Petroleum Operations, or those related to the petroleum sector, in terms of a Concession Agreement subject to Mozambican jurisdiction.

Comment: Useful, but what about individuals? Do they escape this tax regime? Nothing seems to prevent "Petroleum Operations" by individuals. Perhaps a concession agreement only extends to juristic persons.

Article 4

(Specific taxes on Petroleum Operations)

Those persons and entities, including non-residents, who undertake or are involved in Petroleum Operations or in those related to the petroleum sector, **are** subject, in addition to other taxes forming part of the tax system, including municipal taxes, to Petroleum Production Tax (*Imposto sobre a Produção do Petróleo - IPP*) as well as to the specific rules on Corporate Income Tax (*Imposto sobre o Rendimento das Pessoas Colectivas - IRPC*), set out in this regime.

CHAPTER II

General comment: This section is excessively complicated and replaces royalty arrangements, which can be structured to be much simpler. This present draft invites disputes over valuations and is vague. The report recommends the following solution:

Use an explicit royalty system instead of the production tax. The royalty in effect becomes the government's share of gross production free of expenses whatever the economic fortunes of the company. The costs of producing the all oil and gas are entirely the obligation of the company.

In exchange for this simplicity, be prepared to consider reducing the proposed rates slightly, say by one percentage point each and collect the royalty from the company's sales, meaning actual amounts it is paid. This results in a small delay in payment, as compared to imposing a tax at the time of measurement.

If you reject this proposal and want to use wellhead prices, then multiply production times the average Platt's Oilgram rate or other well-respected price measure for the particular type of oil (Brent is very high quality, so depending on the quality of the oil from a particular contract area, there will very likely be a discount such as to place the oil in another pricing category). Using that measure eliminates debates about the prices of sales to affiliates and integrated producers (which creates the problem how the imaginary "sale" downstream should be priced). Require payment within 30 days of measurement. The language used elsewhere is useful.4 The oil and gas industry will find the royalty concept clear and simple. They will object that it is "too crude" because they will complain about transport costs, etc. In fact it will be a relief compared to the complexities of a production tax.

Royalties and IPP-type taxes have the well-known merit of assuring that even if the company loses money, the country makes money based on extraction of its own resources. If you want to raise the royalty or IPP with profitability, you can follow the lead of a country such as Colombia which uses rising royalties (from 5% to 25%). At 25%, the company gets 75% of revenues, bears all the expenses and pays an income tax on its share. However, because you already have production-sharing, that would add excessive complexity.

In the U.S., a royalty is simply viewed as a property right of the holder, received as a percentage of production free of associated costs of production. This model has worked very well, and is comparable to other royalties, such as for books and patents. In other words, a

Crude Oil for Production, and for the period in question. The weighted average shall be based on those days in each calendar month in which the closing price was listed in the Platts Oilgram report on listings. Those days without price listings shall be ignored, such as weekends and public holidays"

^{4&}quot; The average weighted FOB price for the calendar month, of Brent Crude Oil, or other appropriate classification of Crude Oil for Production, and for the period in question. The weighted average shall be based on those days in each

royalty is a reserved share of production. Thus, for example, the royalty share of production never becomes the income of the operator (Concessionaire) and is not subject to depletion by the operator. In contrast, you do not allow a tax deduction for the IPP in computing income taxes. This was seen it described in correspondence from Mr. Calu as a royalty. In my opinion, in essence it is an unnecessarily complicated royalty.

<u>Pricing gas:</u> This is a difficult question because gas is not fungible they way oil is, and its prices vary among regions. For U.S. royalty purposes, the norm is to sell the product and give the royalty-owner its share out of actual sales prices. The IPP (and my proposed version of it that retains the "tax when measured" rule makes the selection of any price correct only by accident. There are several solutions:

- A simplifying step is to use an assumption that the value if gas is a function of the value of oil. This value becomes the basis for the royalty.
- A variation is to allow a discount. Colombia, for example, allowed a 20% discount from the market price of light crude oil.
- Another approach is waiting for a real number, namely the sales price, making sure
 to treat sales prices to affiliates with appropriate suspicion. The comments on
 intercompany pricing go into this is more detail.
- There are also intermediate choices, such as accepting the actual sales price, subject to the government's right to use the assumed price if it can make a prima facie case that the "actual" price is unreasonably low.
- Another approach is to track supply contracts used by competitors in Mozambique.
- When possible, actual prices should be used, not imputed prices because they are artificial.

Recommendation: Drop the IPP. Use a royalty model and actual sales prices. If you conclude that the IPP must remain, then use usual of actual price of the extracted gas when measured, but in the absence of such a price, use world market price keyed off light crude oil.

Be realistic; understand that the royalty is there to offer immediate revenue and as a protection against losses incurred by the Concessionaire and that the choice of any rate will be arbitrary. It does not need to be a complex tax in order to do its job.

Field daily production (monthly average in barrels of crude per day)

Despite this recommendation, I have made comments on the proposed IPP.

Petroleum Production Tax or "IPP"

Article 5

(Objective Incidence)

Petroleum Production Tax is levied on the value of Produced Petroleum in concession areas subject to Mozambican jurisdiction.

Article 6

(Subjective Incidence)

IPP taxpayers are those Mozambican persons and foreign juristic persons, registered in Mozambique, who undertake or are involved in Petroleum Operations, in terms of an Exploration and Production Concession Agreement, subject to Mozambican jurisdiction.

Article 7

(Tax Generating Fact)

1. An obligation to pay IPP is deemed to arise at the moment at which the Produced Petroleum is measured at a measuring station defined by the Government.

Comment: is it "deemed to" arise, or does it really arise? Below, it seems the sale determines value. How can a duty to pay arise before value is determined? Why is this relevant if the tax falls on the sale price, as adjusted below?

2. In the event of payment in kind, the tax obligation is deemed to arise [the intended meaning is "does arise"] at the moment at which the Produced Petroleum is sold, at the point of delivery.

Comment: Payment in kind is rare in the real world. Details as to how payments in kind are to be made are lacking and therefore may result in corrupt dealings.

Article 8

(Tax Base)

The IPP tax base is the value of Produced Petroleum.

Article 9

(Value of Produced Petroleum)

1. The value of Produced Petroleum is the value of the sale effected by the taxpayer, determined by using, as a base, the FOB price, or in accordance with equivalent conditions [what does this mean, something tantamount to FOB price? Is normal oil pricing FOB in Mozambique, or it a terminal price?], at the point of delivery, when the Petroleum has been sold in the month to which the tax to be paid corresponds.

When exactly does a "sale" occur? When the payment is made, the contract is signed, delivery?

- 2. Petroleum Produced in one month, which is not sold in that month, is valued in accordance with the price of the last sale effected by the taxpayer. [Reasonable, but this might invite engaging a bogus low "last sale price."
- 3. If there are no [**prior**] sales, then the international market reference price must be taken as a base, in order to determine the value of Produced Petroleum.
- 4. Criteria for the determination of the international market reference price shall be defined in specific regulations.

Comment: Not necessary if you use a specific measure in the law, as can be done.

- 5. In order to determine the value of Produced Petroleum:
 - a) In the case of sale at the point of delivery, once FOB conditions have been met, or in accordance with equivalent conditions, the price to be paid by it, provided that the principle of independent entities is respected;

Comment: murky term "in accordance with equivalent conditions". It is important to understand that very large amounts of money may be involved, hence disputes can be of great value to the government and the taxpayer. This wastes the time and resources of both parties.

b) In the case of sale at the point of delivery, in accordance with conditions which are not FOB, nor the equivalent, the price to be paid by it, less the cost of transport and delivery of Petroleum downstream from the point of delivery, provided that the principle of independent entities is respected.

Comment: reasonable. This could be used to measure a sale under a simple royalty. Gross sales proceeds to the oil and gas company is the simplest method.

- 6. For the purposes of this article, the price to be paid is the value which would have been paid by the buyer if the Produced Petroleum had been delivered by the Concessionaire and received by the buyer, without any compensation for amounts relating to any credits, or claims by any creditors, and without retentions of any nature. [This invites trouble.]
- 7. The value of Produced Petroleum shall be, to the extent to which the Petroleum consists of Crude Oil, determined at the end of each calendar year, commencing in the calendar month in which

the Commercial Production of Crude Oil commenced. If such Petroleum consists of Natural Gas, its value must be determined at the end of each calendar year, commencing in the month in which commercial delivery commenced, at the Point of Delivery.

- 8. The value of each quality of individual Crude Oil export, shall be:
 - a) in the case of sales to non-affiliated companies, the average weighted price per barrel at the Point of Delivery of each declaration of sale or export of Crude Oil, determined with reference to FOB prices (with the meaning defined in the INCOTERMS), to which that Crude Oil has been sold by the Concessionaire, during that calendar month; or
 - b) in the case of sales to a third party, on conditions other than FOB conditions, for the purposes of this regime, an FOB price shall be applied, calculated on a netback basis, established by deducting, from the agreed price, real and direct costs incurred by the Concessionaire in compliance with the obligations flowing from the respective sale contracts, plus those obligations inherent to an FOB contract of purchase and sale;
 - c) in the case of sales to Affiliated Companies, the price which was agreed between the Ministry of Mineral Resources, the Ministry of Finance, jointly, and the Concessionaire, on the basis of the following factors:
 - i. The average weighted FOB price for the calendar month, of Brent Crude Oil, or other appropriate classification of Crude Oil for Production, and for the period in question. The weighted average shall be based on those days in each calendar month in which the closing price was listed in the Platts Oilgram report on listings. Those days without price listings shall be ignored, such as weekends and public holidays;
 - ii. A premium or discount on the price of Brent Crude Oil, or any other appropriate Crude Oil classification for the Production in question, to be determined with reference to the quality of Crude Oil produced from the Contract Area, and the cost of placing that Crude Oil on the market.
 - 9. In cases in which the Ministry overseeing the petroleum sector, and the Ministry overseeing the finance sector, jointly, and the Concessionaire do not manage to agree on a price, in terms of sub-article 8(c) of this article, the following procedures shall be adopted, so as to determine the premium or discount referred to in the cited article:
 - a) the Ministry overseeing the petroleum sector, the Ministry overseeing the finance sector, jointly, and the Concessionaire shall present, to each other, their valuations of the premium or discount, together with an explanation of the key factors taken into account in the determination of the premium or discount;
 - b) if the premium or discount presented separately by the Ministry overseeing the petroleum sector, the Ministry overseeing the finance sector, jointly, and the Concessionaire are,

- relative to each other, within a 10 US cents (ten United States cents) interval, per barrel, the average shall be calculated, for the purposes of determining the final value of the Crude Oil;
- c) if the premium or discount presented separately by the Ministry overseeing the petroleum sector, the Ministry overseeing the finance sector, jointly, and by the Concessionaire differ by more than the equivalent of 10 US cents (ten United States cents) per barrel, each of them shall present to the others, on the third working day, counting from the first exchange of information, a revised premium or discount;
- d) if the premium or discount presented separately by the Ministry overseeing the petroleum sector, the Ministry overseeing the finance sector, jointly, and by the Concessionaire in the second exchange of information falls, relative to each other, within an interval equivalent to ten US cents (ten United States cents) per barrel, the average shall be calculated, for the purposes of setting the final value of the Crude Oil;
- e) if the premium or discount presented in the second exchange of information differs by more than the equivalent of 10 US cents (ten United States cents) per barrel, the question shall be submitted for decision by an independent expert, which shall establish a price on the basis of the criteria set out in sub-article 8(c), but always within the limits established by the Parties in terms of sub-article 9(d), all of this Article.
- 10. The value calculated for Natural Gas produced from deposits in the Contract Area, shall be:
 - a) in the case of sales to non-affiliated companies, the average weighted price, per gigajoule, of Natural Gas of commercial specification, at the Point of Delivery at which such Natural Gas has been delivered by the Concessionaire during this calendar month, shall be the average weighted price per gigajoule of all of the remaining Natural Gas of commercial specification delivered during the same calendar month, coming from deposits subject to the jurisdiction of the Republic of Mozambique, and the weighted average of available prices displayed or published for combustible alternatives to Natural Gas for large industrial consumers, including generators of electricity, on the market where these have been delivered to final consumers.

Comment: will this encourage flaring gas? If so, that is unfortunate for the economy and the environment. Releasing it is worse environmentally.

- b) in the case of sales to affiliated companies, the price stipulated in sub-article a) above, for sales to non-affiliated companies, or the price agreed between the Ministry overseeing the petroleum sector, the Ministry overseeing the finance sector, jointly, and the Concessionaire.
- 11. The procedures set out in the previous sub-articles shall not have suspensive effect on any obligations of the Concessionaire to the State which must be complied with on the basis of the

determined residual price, and jointly between the Ministry overseeing the petroleum sector, and the Ministry overseeing the finance sector.

If the Government concludes, with the Concessionaire, a commercial contract for the purchase and sale of gas and/or crude oil for purchase, by the Government of Crude Oil and/or Natural Gas from the Concessionaire, the price of such sales shall not exceed the price of the Crude Oil and/or Natural Gas derived from the Contract Area, sold to Affiliated Companies, as established in sub-articles 2(c) and 10(b), both of this Article.

Article 10

(Correction of tax base)

- 1. The tax administration may make corrections, by altering the declared taxable value, when it appears that the prices utilized by the taxpayer are not in accordance with those prices used on reference markets, or that they deviate from normal market prices as between independent buyers and sellers.
- 2. The taxpayer shall be notified of the taxable value, determined in terms of sub-article 1 of this article, and may appeal to the competent Tax Court. The taxpayer will prevail if and only if it shows the government's position to be arbitrary and capricious.

Comment: this additional language tracks section 482 of the Internal Revenue Code, which has been an effective government tool. Its force depends on the heavy burden placed on the taxpayer. A US-Mozambique tax treaty would help with information gathering when dealing with US affiliates. These pricing cases can be long and drawn out. There is a lot more to be said about this. Section 482 represents 70% of dollar value of the claims in the U.S. Tax Court.

One solution is to treat affiliates as if they were members of a consolidated group filing a unitary tax return; i.e., disregard intercompany transactions and wait for a sale to an outsider and impute the gain on loss without regard to the affiliate, except to allow the affiliate enough of the sales price to offset is costs for participating.

To illustrate: A and B are affiliates. B later sells the product it bought from A to Outsiders, an unrelated party, for 100 units of currency. The 100 goes to A alone, except that B is entitled to recover its costs associated with its participation from the 100.

Article 11

(Rate)

The Petroleum Production Tax rates are the following:

- a) 10% for Crude Oil,
- b) 6% for Natural Gas.

Comment: fine.

Article 12

(Calculation)

- 1. IPP payments shall be made by those taxpayers referred to in Article 6.
- 2. IPP results from applying the rate referred to in Article 11, to the value of Produced Petroleum, determined in terms of Article 9.

Comment: fine in light of using the IPP.

Article 13

(Forms and place of tax payment)

- 1. The payment of IPP shall be effected, as a general rule, in money.
- 2. IPP may be paid in kind, at the option of the Government, in part or in whole, against notification to the taxpayer.
- 3. It shall be presumed that payment is to be in money, unless the Government, via notification at least six months prior to the fact, calculated from the first day of the month to which the tax relates, notifies the taxpayer to pay the tax in kind.
- 4. IPP shall be paid to the tax administration services.

Comment: fine.

Article 14

(Payment in Kind)

- 1. When the Government opts to charge Production Tax in kind, it shall notify the taxpayer, in writing, within the time period referred to in sub-article 3 of the previous article.
- 2. Once notification of the payment of Production Tax, in kind, as has been given, the quantities indicated in the notification shall be delivered to the entity designated by the Government, at the Point of Delivery.
- 3. Payment in kind of the quantity specified in the notice, effected in terms of the previous subarticle, shall continue until the Government issues a new notice, providing the taxpayer with revised instructions.

4. The entity referred to in sub-article 2, shall deliver, to the tax administration, the value corresponding to quantities received by way of Production Tax, in the month following that of receipt.

Comment: fine, except it is very rare in practice and might attract problems of corruption.

CHAPTER III

Specific Rules for Corporate Income Tax (Imposto sobre o Rendimento das Pessoas Colectivas)

General comment: while the following is not simple, it is standard practice and not a surprise.

Article 15

(Scope of Application)

The specific rules on income, set out in this chapter, are applicable to Mozambican persons and to foreign juristic persons registered in Mozambique, subject to IRPC, including non-residents, who undertake or are involved in Petroleum Operations or in those related to the petroleum sector, and the provisions of the Corporate Income Tax Code (*Código do Imposto sobre o Rendimento das Pessoas Colectivas - CIRPC*) may be applied subsidiary.

Comment: not clear what "related to the petroleum sector" means. Can a "nonresident" be a human being? A partnership? Why go beyond Petroleum Operations?

Article 16

(Objective Incidence)

Income tax is levied on income [**profits is a better word here**] obtained in the undertaking of Petroleum Operations, or those related to the petroleum sector.

Comment: same question as in 15.

Article 17

(Subjective Incidence)

Those subject to pay income tax are those Mozambican persons and foreign juristic persons, registered in Mozambique, including non-residents, who undertake or are involved in Petroleum Operations or in those related to the petroleum sector.

Comment: same question as in 15.

Article 18

(Determination of taxable income)

- 1. The determination of a Concessionaire's taxable income shall be limited to each Concession, and shall relate to each tax year.
- 2. A taxpayer shall obtain a tax number ("NUIT") for each Concession, and organise separate accounting for each of them, such as results from the previous article.
- 3. The costs and income derived from a Concession Agreement may only be deducted from or imputed to that same Concession Agreement as regards each tax year.

Comment: it should be made clear whether the tax base is only the Concessionaire's quota under the production-sharing provisions. This is crucial.

Article 19

(Principle of independent entities)

- 1. For income tax purposes, transactions relating to Petroleum reconnaissance, exploration, development and Production activities shall be treated as if they were conducted by independent companies, the provisions of the Corporate Income Tax Code ("CIRPC") being applicable to:
 - a) Transactions relating to different Concession Agreements concluded by the same taxpayer;
 - b) Transactions relating to a Concession Agreement and other activities of the same taxpayer;
 - c) Transactions relating to petroleum activities downstream from the Development Plan / Point of Delivery;
 - d) Services provided by activities downstream of the Point of Delivery;
 - e) Any transactions between entities with special relationships, as defined in the Corporate Income Tax Code.
- 2. For the purposes of the provisions of the previous sub-article, the transmission of an asset to a separate Concession Agreement shall be treated as an acquisition or an alienation of an asset, as the case may be.

Significance not clear. Does this mean there is a sale or exchange so that an income tax can be imposed?

3. When two or more taxpayers undertake petroleum reconnaissance, exploration, development and production activities, in the context of the same Concession Agreement, each of them shall calculate the taxable income from Petroleum Operations, in relation to that Concession Agreement, separately, as though they were associated companies, effecting transactions between them, applying the principle of independent entities.

Comment: see the earlier comment about section 482.

Article 20

(Income or Gains)

Without prejudice to the provisions of the Corporate Income Tax Code, the following are also deemed to be income or gains derived from petroleum enterprises:

- a) Income resulting from the sale or alienation of Produced Petroleum;
- b) The compensation received for any loss or destruction of Produced Petroleum and resulting from an insurance contract or other source;
- c) Amounts received for the sale of information regarding Petroleum Operations;
- d) Capital gains flowing from the direct or indirect alienation of the assets of a petroleum enterprise, situated in the Mozambican territory, in relation to which the operation is conducted:
- e) The non-utilization of a budget relating to Expenses [delete "Expenses" because it was not defined] for the Demobilization Expenses of Petroleum Operations;

Comment: I would say previous tax deduction relating to "Demobilization Expenses ..."

The issue here is whether the taxpayer can deduct expected costs, in which case the reversal of the deduction is correct, or if the future cost must be paid into a fund, in which case the deduction should only be reversed if the taxpayer gets money back.

f) Any other amounts obtained by virtue of Petroleum Operations, relating to the petroleum enterprise.

Are Municipal taxes normally eliminated in the Concession Agreement?

Article 21

(Costs or losses)

Without prejudice to the provisions of the Corporate Income Tax Code, costs or losses are deemed to be the following:

- 1. Operating Costs, such as for:
 - i. The functioning, assistance, maintenance and repair of production and injection wells, and all field installations concluded during Development and Production Operations;
 - Petroleum Planning, Production, control, measuring and flow tests, as well as the capture, collection, treatment, storage and transport of Petroleum from the Petroleum Deposit, to the Point of Delivery;
- 2. Service costs, such as for warehouses, offices, camps, quays, vessels, vehicles, motorised rolling equipment, aviation resources, fire and safety stations, workshops, basic sanitation installations

- and those for the supply of water, power plants, housing, furniture, utensils and equipment used in Petroleum Operations.
- 3. Costs of investments into social infrastructure, provided that these are foreseen in the Concession Agreement.
- 4. Costs relating to the training of Mozambican employees, up to a maximum limit of 5% of taxable income.

Comment: this limit could be a bad idea if it discourages such employment or discourages wage increases.

- 5. General and Administrative Expenses, such as those:
 - relating to the main office, and to field offices established in Mozambique, and general administrative costs, including supervisory, account and labour relations services, also incurred in Mozambique;
 - ii. Charges by way of general expenses (overheads) for the covering of services provided outside of the Republic of Mozambique, to manage Petroleum Operations, and for consultancy and staff assistance, including financial, legal, accounting and labor relations services;
 - iii. The charge referred to in the previous sub-article will constitute: 5% of contract costs, up to a limit of the equivalent of USD 5,000,000.00 (five million United States Dollars); 3% of that part of Contract Costs which are between the equivalent of USD 5,000,000.00 (five million United States Dollars) and USD 10,000,000.00 (ten million United States Dollars); and 1,5% of those contract costs which exceed the equivalent of USD 10,000,000-00 (ten million United States Dollars), these contract costs including all Exploration Costs, expenses relating to investment in Development and Production, Operating Costs and Service Costs.
- 6. The costs of constituting a fund for closure and demobilization, disbursed during the tax year.

Comment: it is important to set aside cash and not merely claim a deduction. The fund should be guarded by law from any diversion. Later, when the funds are taken out, the taxpayer would be taxed, but also claim a deduction for closing expenditures. Azerbaijan offers an example.

Article 22

(Non-deductible costs)

In addition to those provided for in the Corporate Income Tax Code, the following are non-deductible:

- a) Expenses resulting from the culpable violation of legal and regulatory obligations, on the
 part of the taxpayer, or anyone acting for its account, as regards the management of
 Petroleum reconnaissance, exploration, development and production activities; [does it have
 to violate a criminal law? "Culpable" is not clear to me]
- b) Costs incurred in contracts for the covering of risks, or losses derived from those contracts, except if the tax administration recognizes such costs or losses in advance, for tax purposes;

Comment: Insurance proceeds are taxable (above). Is the intention to deny deductions for insurance? If so, it is one-sided and unreasonable. Is the intention is to deny deductions of risk management with respect to trading in petroleum?

- c) Professional training expenses for expatriate staff, and the expense of training programs which do not comply with the terms set out in applicable legislation;
- d) Counter-payments offered to the State, for the allocation of petroleum concessions;

Why? Are they undesirable?

- e) Petroleum transport or sale expenses, beyond the point of delivery;
- f) Expenses relating to an independent expert consulted from the purposes for determining the price of Petroleum;

Comment: This is a minor issue, but I do not see why this normal business expense should not be deductible.

g) Costs and losses flowing from the depreciation of materials not used in Petroleum reconnaissance, exploration, development and production activities;

Comment: this is vague. What about furniture in a business office in Mozambique? Perhaps it would be best to say "directly" before "used"

h) Petroleum Production Tax;

Why? It clearly reduces the taxpayers' economic income. If you use a royalty approach, the company would typically treat that royalty as a share of production attributable to the government. The company would be taxed on the balance of the gross revenue from production and would deduct its expenses with respect to the remaining oil and gas.

i) Commissions paid to intermediaries;

This might be a good anti-corruption move by discouraging illegitimate expenditures, but if the commissions are appropriate as business expenses in generating income, they reduce economic income and should be taken out of the tax base. If the commissions relate to buying or selling long-term assets, they would in most systems be treated as a portion of the cost of the assets, or reduction of the proceeds for selling them.

j) Interest paid to shareholders, even if by way of shareholders' loans;

Comment: understandable, but in fairness would give the taxpayer a chance to prove there was no other source of loans.

k) Expenses incurred in arbitration proceedings, except when incurred for the defence of Petroleum reconnaissance, exploration, development and production activities;

Comment: harsh unless there is some policy reason I am not aware of.

- 1) Compensation paid by virtue of a penal clause;
- m) Costs flowing from damage caused by the negligence of fault of the taxpayer, or any person acting for its account.

Comment: In the US, the deduction for losses caused by the taxpayer is not available for gross negligence or recklessness, but is allowed for negligence on the theory that humans always make mistakes. One small negligent act might amount to a catastrophic loss to the company. I would reconsider this.

Article 23

Reintegrations and amortizations

- Without prejudice to the provisions of this article, the Concessionaire shall reintegrate and amortize all of the depreciable elements of corporeal and incorporeal assets, in terms of the Corporate Income Tax Code.
- 2. Exploration, Development and Production Expenses incurred in terms of a Concession Agreement shall be treated as depreciable elements of an incorporeal asset.
- 3. Development and Operating Expenses incurred in terms of a Concession Agreement shall be treated as depreciable elements of corporeal assets.

Comment: This is a big issue and there are many approaches to dealing with it. Order 20817 seems (via subsection III of the corporate tax code) to be the end of the authority. The author does not see exactly where it provides an answer. The author has only the Portuguese version.

Article 24

(Reintegration and amortization rates)

Reintegration and amortization rates for mining [you mean oil and gas] company assets are those set out in the legislation approving the rules on reintegrations and amortizations.

The author did not have access to the content of that law.

Article 25

Asset recording and valuation

1. The Concessionaire shall keep detailed records of goods in use in Petroleum Operations, in accordance with applicable law, and Petroleum Industry Best Practices.

Comment: there are no "best practices". It is suggest to be added the following:

The annual operating results of the Concessionaire shall be audited by an international accounting firm, which results shall be presented to the taxing authorities, made widely public, by being published and publicly available at the Mozambique official website.

- 2. The Concessionaire shall draw up inventories of goods allocated to Petroleum Operations, in terms of the Law.
- 3. The Government shall be notified in writing when inventories are drawn up, at least 30 (thirty) days in advance, and has the right to be represented during the drawing up of inventories.

The author does not understand 2 and 3. It could be a translation problem.

Article 26

(Transmission of right or participation in contract)

If a Concessionaire transmits a right or a participation in a Concession Agreement, the concessionaire who receives the right or participation shall continue to reintegrate and amortize any intangible and tangible assets, in the exploration and development phase, in accordance with the terms adopted by the original Concessionaire.

Article 27

Provision for the depreciation of stock

1. The budget intended to cover losses in the value of stock, within the limit of actually observed losses, shall correspond to the difference between the cost of acquisition or production of the stock listed on the balance sheet at the end of the tax year, and the respective market price on the same date, when this is lower than the former.

Comment: the word 'stock' is unclear; it might mean tangible assets with a useful life of over one year. Inventory is commonly valued at the lower of cost or market at year end. Perhaps the intended meaning here is inventory.

2. For the purposes of the provision of the previous sub-article, the market price shall mean the replacement cost, or the sale price, depending on whether goods were acquired for Production, or intended for sale.

Replacement cost results in disagreements. I recommend book value, meaning cost minus depreciation, for assets other than inventory.

3. The budget [loss] referred to in sub-article 1 may only be utilized in the tax year in which the loss becomes effective.

Article 28

(Thin capitalization)

1. Thin capitalization occurs when the total amount of indebtedness of a Concessionaire, towards an entity which is resident, or not, in the Mozambican territory, exceeds the ratio of 2:1 (debt: capital applied to the need for net financing), defined in sub-article 5 of this Article, and independently of the existence of special relationships with that non-resident entity.

Comment: you must decide whether, in valuing assets, to use book (balance sheet historical costs minus depreciation) or value. It is recommended value, because it is more relevant to the inquiry as to whether the borrowing is excessive; lenders too to values in determining whether to lend.

2. The thin capitalization referred to in sub-article 1 of this article relates to any date in the taxation period.

Comment: does the penalty apply only on the day or for all time? Into all future years? Can it be corrected?

- 3. In the case of thin capitalization, as defined in sub-articles 1 and 2 of this article, interest and other financial charges relating to the part deemed to be in excess shall not be deductible for the purposes of determining taxable profit.
- 4. The calculation of the indebtedness attributable to a Concessionaire, towards a resident or non-resident entity with which it has a special relationship shall be done in accordance with the principle of independent entities.
- 5. The need for net financing shall result from the occurrence of cumulative negative net cash flow at the enterprise, in any period of the development of Petroleum Operations, after taking any income into consideration.

Comment: The purpose and impact is not clear to me.

- 6. The deduction of interest, related to an increase in the debt, shall not be permitted when there is a provision for cash flow operatives to be sufficient to cover costs in the Mining Plan, without resulting in negative cash flow.
- 7. The financing plan, the terms of the debt and the principles for ensuring the prompt repayment of the debt, shall be approved as a part of the Development Plan.
- 8. The interest and other financial charges referred to in sub-article 1 relate to all forms of credit, irrespective of the form of remuneration, including the financial component of financial leases.
- 9. The calculation of own capital shall take subscribed share capital into account.

(Deduction of tax losses)

Tax losses calculated in a specific tax year shall be deducted from the taxable profits of each Concession, if they exist, in one or more or five subsequent tax years.

Comment: It is recommended no time limit. Short time limits like this just result in distortions, such as accelerating income, and refreshing losses by various means. The economic loss is real; there is no reason not to respect it, especially where there is ring fencing. The denial of the full loss is capricious.

Article 30

(Tax rate)

The income tax rate is 32%.

Article 31

(Withholding at source)

- 1. A taxpayer which is a beneficiary of services provided by a non-resident, and which pays or places at the disposal of that non-resident, amounts relating to remuneration for services provided, irrespective of the place at which these take place, provided that the beneficiary is resident in Mozambique, or which are imputable to a stable establishment, situated in the national territory, shall retain tax at source, at a rate of 20%.
- 2. The obligation to retain Corporate Income Tax (IRPC) at source occurs on the date of payment of income, of its falling due, even if presumed [what does this mean? Is the reference to original issue discount on debt instruments?], of its being made available, of its calculation or of the determination of the respective quantity, as the case may be, and amounts withheld shall be delivered to the tax administration on the terms and within the time periods established in the Personal Income Tax Code (Código do Imposto sobre o Rendimento das Pessoas Singulares).

Article 32

(Capital gains tax)

- 1. Gains obtained in the Mozambican territory, resulting from the direct or indirect alienation, for payment, of Petroleum Rights in the Mozambican territory, are taxable as capital gains.
- 2. Capital gains consist of the difference between the net realizable value of inherent charges, and the acquisition value. This is probably a translation problem. The usual statement in English is "amount realized minus the adjusted basis of the property disposed of."

3. The gains referred to in sub-article 1 of this article, including those flowing from the alienation of shares in companies which hold rights in the petroleum establishment, are, for all tax purposes, gains relative to immovable goods.

Comment: is the purpose to assure the gains will be taxed in Mozambique? The author assumes so.

4. Gains are deemed to have been obtained in the Mozambican territory if they result from the direct or indirect transmission, for remuneration, between non-resident entities, of representative parts of the share capital of entities which have title to a Concession Agreement, or other securities issued by such entities, concerning that Concession Agreement, involving assets of petroleum establishments situated in the Mozambican territory, irrespective of the place at which the alienation occurs.

Comment: this seems redundant, but not a problem.

Comment: The capital gains imposed on foreign companies is 32%, the same as the general corporate top rate, so the author wonders if this is significant, unless there is more favorable rate for domestic corporations (including subsidiaries of foreign corporations).

Article 33

(Calculation and Payment)

- 1. Tax payable, relative to Petroleum Operations during a particular tax year, is calculated by applying the rate established in Article 30, to verified taxable income, in terms of the Corporate Income Tax Code and Articles 15 to 29 of this Law.
- 2. The amount of tax due on transmissions of Petroleum Rights results from the application, at the time of realization of the gain, of the rate set out in Article 30, to the verified amount, in terms of Article 32(2).
- 3. IRPC on the transmission of rights in petroleum enterprises, shall be calculated by the taxpayer in the tax year in which the tax obligation is constituted, and payment shall be made at the tax administration, on terms to be defined in regulations.

Comment: what if regulations are slow to be issued?

4. In those cases in which a non-resident entity, without a stable establishment in Mozambique, incurs a gain, the responsibility for the payment of that tax is jointly imputed to the entity acquiring the petroleum right, this occurring in those cases in which payment cannot be obtained directly from the entity which incurred the gain.

PARA-FISCAL CHARGES [PRODUCTION-SHARING]

Article 34

Recovery of Costs and Right to Production

- 1. The Concessionaire shall bear and pay all costs it incurs in the execution of Petroleum Operations, and may recover these costs from remuneration, by way of its title to a certain quantity of Produced Petroleum and to the extent permitted by the provisions of this Regime.
- 2. From the total quantity of Produced Petroleum, the Concessionaire <u>may retain that part thereof</u> which is needed to meet its obligation to pay IPP, and the remainder, after the said part has been retained, shall be hereinafter referred to as "Available Petroleum". [This is redundant. It is already said in the definitions.]
- 3. All costs incurred by the Concessionaire, relative to the Petroleum Operations, shall be recovered from Available Petroleum at the Point of Delivery, to be defined by the Government in regulations to be issued, such particular regulations to be promulgated within one year from the date this law is enacted.

Comment: Regulations are needed in the interest of prompt transparency. Also, the term is defined as being in the Concession Agreement in the definitions. Why is it different here? Does it need to be?

4. In each calendar year, total Recoverable Costs incurred by the Concessionaire, relative to Petroleum Operations in the Contract Area, shall be limited to 60% (sixty percent) of the Available Petroleum.

Comment: The 60% is arbitrary and could be unfair if the taxpayer suffered a severe downturn or disaster. In addition it adds complexity and could lead to wasteful extraction practices by increasing production to meet the 60% test. It is recommended eliminating it.

Article 35

Sharing of Production

- 1. The provisions relating to the recovery of costs and to the right to profit contained in this article, are applicable to Petroleum, so that the Government and the Concessionaire have a right, in undivided participation quotas, to the Available Petroleum for sale by the Concessionaire in any determined period. ["A determination period means each period of time during which the calculations are made hereunder."]
- 2. Unless the Government determines another manner in the Concession Agreement, the sale of that Petroleum shall be effected on a joint basis, by the Concessionaire, who shall hold such rights in undivided proportions which are equal to the proportions of Available Petroleum to

- which each Party has had a right, during that period, and such determinations by the Government shall not affect the volumes of Petroleum subject to the contract.
- 3. Accordingly, income from the sale of Petroleum, effected in a joint manner ["on a joint basis", in order to clarify that sub-article 2 and 3 are linked], in any determined period, shall be divided between the Government and the Concessionaire in proportion to their undivided right to the sold Petroleum.
- 4. Profit Petroleum shall be shared between the Government and the Concessionaire, in accordance with a variable scale, as a function of the value of the R Factor, in which:
 - a) R Factor = (Accumulated Cash Receipts) n

 (Accumulated Investment Expenses) n
 - b) Accumulated Cash Receipts n=

Accumulated Cash Receipts (n-1)

- + Quota-part of Concessionaire's Profit Petroleum n
- + Cost Petroleum of the Concessionaire n
- Operating Costs n
- Calculated Corporate Income Tax n
- c) Accumulated Investment Expenses n =

Comment: in English "expense" implies a current expense; in English it should be said "expenditure" implying all types of disbursements. It is assumed that is the intended meaning here. Does "Operating Costs" have the same meaning here as earlier in this law? If so, say so.

Accumulated Investment Expenses (n-1)

- + Exploration Costs n
- + Expenses relating to Investment in Development and Production n

Comment: delete "investment in" because it implies only payments for long-term values. The term still remains unacceptably vague. Does it include overhead? How much? Costs of negotiation, legal fees, other professional fees, related business travel? Some more embellishment and clarification should be included here.

Where:

n is the current year; and (n-1) is the previous year;

Cost Petroleum of the Concessionaire is the amount of Recoverable Costs actually recovered;

Comment: unclear to me exactly what this means. Example: legitimate costs are 90 but recoverable costs are 54 because of the 60% limit. I assume that the intended meaning is 54 here.

Calculated Corporate Income Tax <u>is the tax obligation on the income of the Concessionaire</u>, calculated in terms of applicable tax legislation, and ["including," because applicable tax legislation includes that article] Article 18.

Comment: It is not clear to me if the corporate income tax falls on the Concessionaire's "quota". It is assumed it does. This is very important.

5. For the purposes of calculating the R Factor, the first year (n=1) shall be the year in which the Effective Date falls, and any Investment Expenses incurred prior to the Effective Date shall not be considered, for the purposes of the calculation of the R Factor, as having been incurred during the year of the Effective Date.

Comment: Why not allow allow costs incurred before the Effective Date if they are legitimate and clear? You go back seven years under the Draft Mining Law.

The R Factor shall be calculated on the last day of each calendar year, and the applicable ratio shall determine the sharing of Profit Petroleum throughout the following calendar year.

Comment: it should be made clear that if the ratio changing during the year, then the ratios shall change as of the change date and be applied on a daily basis for each such period.

The scale for Profit Petroleum is the following:

R Factor	Government's	Concessionaire's
	quota	quota
Less than 1	10 %	90 %
Equal to or more than 1 and less than 1.5	20%	80%
Equal to or more than 1.5 and less than 2	30 %	70 %
Equal to or more than 2 and less than 2.5	50 %	50 %
Equal to or more than 2.5	60 %	40 %

6. For the purposes of the R Factor calculation, Available Petroleum and Cost Petroleum shall be calculated, taking the entire Contract Area into account.

General comment: This provision is likely to be controversial. The concept of a rising tax rate after a project becomes profitable is understandable, but this formulation neither accurately measures cash-on-cash returns nor is clear. It can also result in over 100% taxation, discussed below. I have several recommendations (below).

Article 36

Production Bonus

1. The Concessionaire shall pay the following Production Bonuses to the Government, which shall not be deemed to be Recoverable Costs, for the purposes of Article 35 of this regime:

Phases of Commercial Production	Production Bonus to be paid, in United States Dollars
At the Commencement of Initial Commercial Production	5,000,000.00
When Production in the Contract Area reaches, for the first time, in the period of one month, a daily average of 25.000 BOE	10,000,000.00
Each time that Production in the Contract Area reaches, for the first time, in the period of one month, an additional average tranche of 25.000 BOE per day	20,000,000.00

2. For the purposes of this article:

- a) "Commencement of Initial Commercial Production" means the date from which Commercial Production from the Contract Area is maintained, for a period of 30 (thirty) consecutive days; and
- b) "BOE" means the equivalent number of Barrels of Crude Oil resulting from the conversion into Crude Oil of Natural Gas on the basis of 1 (one) Barrel of Crude Oil for each 6.000 (six thousand) cubic feet of Natural Gas. [Put this in the definitions. It is useful for determining gas valuation elsewhere in this law.]

Comment: This provision does not represent a large burden to the Concessionaire because 25,000 Bb/day is \$2.5 million/day at \$100/bbl., so it represents about 8 days of production at that price, or about 2% of gross pretax revenue. The bonus payments will not be large enough to encourage Concessionaries to choke production.

CHAPTER V

Tax Incentive Rules applicable to Petroleum Activities

Article 37

(Scope of Application)

The provisions of this chapter are applicable to investments made in the context of the Petroleum Law by Mozambican persons, and by foreign juristic persons registered in Mozambique, provided that they are duly registered for tax purposes.

Article 38

(Tax Benefits)

- Tax benefits are deemed, for the purposes of this Law, to be those tax measures envisaged
 herein, which imply a reduction in the amount to be paid of taxes in force, with the purpose of
 incentivizing the undertaking of Petroleum Operations, with a view to the economic and social
 development of the country.
- 2. Tax benefits are considered to be tax expenses, and, for their determination and monitoring, an appropriate declaration of benefits utilized in each tax year, is required and shall be posted and made publicly available on the Mozambican government website.

Article 39

(Right to tax benefits)

- 1. Enterprises which are commenced in the context of the legislation referred to in Article 38, shall enjoy those tax benefits defined in this Law, provided that they meet the conditions set out herein.
- 2. The effective enjoyment of tax benefits may not be revoked, nor may acquired rights be diminished, except in cases envisaged in this Law, and if there is non-compliance with the obligations established for the beneficiary, or if the benefit had been unduly granted.

Comment: "unduly granted" presumably means erroneously granted.

Article 40

(Transmission of tax benefits)

Tax benefits are, in terms of the legislation referred to in Article 37, transmissible during the time for which they are in force, against the authorization of the Ministry which superintends the area of finances, provided that they remain unaltered, and that the transferee meets the requirements for the enjoyment of these benefits.

Comment: this Article is difficult to follow in English.

Article 41

(Investments in terms of the Petroleum Law)

- 1. Enterprises set up in terms of the Petroleum Law shall benefit, for five tax years, calculated from the Effective Date of the Concession Agreement, from an exemption from customs duties on the import of equipment intended to be used in activities involving prospecting and exploration for petroleum, classified in class "K" of the Customs Tariff Schedules, contained in Annexure II;
- 2. The importation referred to in the previous sub-article shall also benefit from an exemption from Value Added Tax.
- 3. The incentives referred to in sub-articles 1 and 2 of this article shall only be granted when the goods to be imported are not produced in the national territory, or, if they are so produced, do not have the specific characteristics of purpose and functionality required, or inherent to the nature of the activity to be undertaken.

Comment: this "local content" restriction may be trouble under WTO rules. This provision offers only a fairly minor benefit.

Article 42

(Requirements for the obtaining of tax benefits)

In order to obtain tax benefits, a person must:

- a) Have been authorized, by the competent entity, to undertake Petroleum Operations, in the context of the Petroleum Law;
- b) Have registered for tax purposes, by obtaining the respective tax number (*Número Único de Identificação Tributaria* NUIT);
- c) Have organized accounting, in accordance with the Accounting System for the Business Sector; and
- d) Not have committed any [significant Mozambican] offence of a tax nature, in terms of applicable legislation. [The underlined words are confusing, at least in English.]

Comment: the term Accounting System for the Business Sector should be in the definitions.

Article 43

(Extinction and suspension of tax benefits)

- 1. Tax benefits cease once the time period for which they were granted, has expired, or when an extinguishing sanction has been applied.
- 2. The extinction or suspension of tax benefits implies the automatic application of general taxation, as enshrined in the Law.

- 3. In the case of the application of a suspensive sanction, such sanction shall remain in force until the complete restoration of the situation which gave rise to it, including payment, within a period of 30 days, calculated from the date of notification by the competent tax services, of revenue not collected.
- 4. In the case of the termination of a factual or legal situation on which a tax benefit was based, or the suspension of tax benefits, the holder of a right to tax benefits shall be obliged to declare such occurrence, within a period of 30 days.

Comment: It might be useful to say that procedural rules regarding examinations, appeals and penalties embodied in some specific location in the general tax law apply here to clarify who exactly has authority and how it is to be applied.

Article 44

(Procedures and rules for the obtaining, suspension and extinction of tax benefits)

The procedures for the obtaining of tax benefits referred to in this Law, as well as the definition of the rules for their suspension or extinction in the case of offences of a tax nature, and any non-compliance with established conditions at the time of their granting and recognition, shall be the object of regulations.

Comment: the entire law should be subject to interpretative and procedural regulations.

Article 45

(Alienation of goods with tax incentives)

When a tax benefit relates to the acquisition of goods intended for the direct achievement of the purposes of the acquirers, it shall become without effect if those goods are alienated or used for another purpose without the authorization of the competent authorities, without prejudice to other sanctions.

Comment: Does this simply mean VAT applies to the resale?

The tax benefit should be recovered if the property was soon disposed of.

CHAPTER V

Transitional and Final Provisions

Article 46

(Transitional Regime)

Tax incentives for the petroleum sector, the rights to which were acquired prior to the entry into force of this Law, shall be retained, on the terms on which they were granted.

Comment: this is good tax law stability, but I do not know what incentives were granted. The ones above are relatively minor.

Article 47

(Inspection)

- 1. All persons holding a right to enjoy the tax benefits referred to in this Law, shall be subject to inspection by the tax administration, for the purpose of controlling the verification of the bases for the respective tax benefits, and compliance with established obligations.
- 2. Compliance with the obligations set out in this Law shall be inspected by the tax administration, and payers of those taxes set out herein, and of other tax obligations, shall, within reasonable limits, collaborate, as may be requested of them, with the responsible services, with a view to the exercise, by these services, of their respective powers.

Article 48

(Taxpayers' Guarantees)

Taxpayers' Guarantees are those set out in the Law which establishes the general principles and norms of the Mozambican tax law system, applicable to all national and municipal taxes.

Article 48 [New]

(Application of Revenues)

Revenues paid under this law shall be handled as follows:

- 1. The taxpayer shall identify the character of each payment in accordance by Contract Area and the tax obligation being paid.
- 2. The government shall record the annual amount of accumulate such payments and shall deposit the funds in sub-accounts within the revenue accounts by taxpayer, Contract Area, amount and type of tax, provided the descriptions are in all cases consistent with the Extractive Industries Transparency Initiate.
- 3. Collectively, the accounts shall constitute the National Oil Fund.

- 4. The government shall permit accounting firms selected by taxpayers under this law to validate the amounts paid in to each account pertinent to each taxpayer that has paid taxes under this law. The government shall cooperate with the accounting firm.
- 5. Each taxpayer shall report to the government all cumulative payments to any one payee exceeding \$600 during the year, with such report including the name, identifying number (if any) and address of each payee, domestic or foreign.
- 6. Disbursements from any and all sub-accounts shall be promptly described with specificity (at least the payee, date, form of payment and amount paid) on the books of the pertinent subaccount.
- 7. The above information shall be posted on the government website and shall conform to standards no less than those called for called for by the Extractive Industries

 Transparency Initiate.
- 8. The government website shall be easily and constantly available to anyone who wishes to see this information.

Comment: if this basic concept is acceptable, then this section can be expanded.

Article 49

(Transgressions)

Transgressions of the provisions of **[this law or Regulations promulgated pursuant to it]** constitute tax offences, punishable in terms of the Law which establishes the general principles and norms of the Mozambican tax law system, applicable to all national and municipal taxes, of the general tax offence regime, and other applicable legislation.

Comment: There should be heavy penalties for fraud and I recommend a reward system for "whistleblowers." Anonymity should be protected.

Article 50

(Language)

All official documents and all contracts with the Government of Mozambique shall be in the Portuguese language. If there is both a foreign translation of a document or communication with the Government, the Portuguese form shall control all interpretations.

IV. ANALYSIS OF TAX BURDEN AND MAXIMUM TAX BURDEN

a. Foreign tax credits as a consideration

Foreign corporations can often claim a tax credit in their home countries for income taxes paid on their overseas business operations. This has led many oil exporting countries to assure that their income tax systems can produce a credit overseas. The US has a long experience with this and it induces oil companies from the US to encourage foreign policy-makers to make sure their income taxes "fit" the requirements for a credit in the US. (The credit appears in section 901 of the US Internal Revenue Code.)

My research shows this is true in Germany, France and England, for example. However, those countries operate on a territorial system, so their home countries in various instances do no tax foreign earnings and therefore the credit is of no use. Thus, it is the US companies that generally have the greatest stake in making sure the foreign tax law fits the US rules. Without going into details, Mozambique's corporate income tax fits and at a 32% rate that is generally compatible with a full use of the Mozambique tax as an offset to the US corporate income tax.

In the United States at least withholding taxes are generally creditable, but the sum of income taxes and withholding taxes are only currently creditable to the extent they do not exceed the American corporate tax rate (35%) I do not know about the limits in other countries.

b. Concern about high cost and older fields

In my opinion, the draft law is rational with respect to rich fields which imply low cost production. In the case of high cost older or poorer fields, the outcomes are perverse and will discourage full extraction from rich fields as well as early abandonment of equipment, representing inefficient practice. Caveat: without knowing the amortization rate for exploration and development expenditures, it is impossible to be more precise.

c. External standards

The unsolved mystery is how high a rate of return, after taxes, will a Concessionaire tolerate and still be attracted. There is no known external answer because oil companies require different minimum rates, assign different values to factors used to price in things like country risk and may even on occasion take an unreasonably low return in the hope of being drawn into more attractive deals later. In author's opinion, the best external measure is Norway's because Norway has no country risk, an excellent administration and a high level of transparency. It is the country that most successfully turns oil and gas companies into engineers, offering little opportunity for a sudden huge return.

To take just a few examples, Norway's extraction from oil and gas companies is a 78% rate imposed on taxable income, with certain fairly simple adjustments. Norway has had abundant time and unlimited funds to produce what it considers the most reasonable revenue model. Some might argue it is too simple, perhaps because it lacks a windfalls profit tax on sudden increases in world oil prices. Others might say if it can get 78%, why not 79%? etc. Qatar's marginal Government take ranges from 30% to 80% and some contracts in Azerbaijan will take the marginal tax rate towards

90% once the top tranche of Profit Oil is triggered, so 78% is not necessarily a limit. Note that Qatar only taxes profit oil and operates on a very simple model that consists of an income tax (commonly 25%) but rates never exceed 100%. Putting all those considerations aside, the author considers it is unrealistic to think that Mozambique should plan do better than Norway in terms of obtaining a share of production from oil and gas operating companies.

In addition and more importantly, the following graph shows country-by-country total government take for oil and gas activities in a large number of countries. The source is a recently OECD study of the tax system in Indonesia. Incidentally, the OED reportedly offers support to governments in dealing with transfer pricing issues. Mozambique could, I think, seek a combined tax rate of around 80% once production-sharing begins.

It begins at around 40% and rises to over 90%.

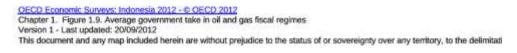
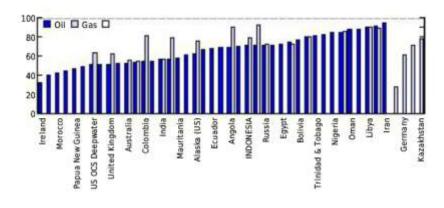


fig 19 Figure 1.9. Average government take in oil and gas fiscal regimes Share of profils captured by the state



Source: Agalliu, I. (2011), "Comparative Assessment of the Federal Oil and Gas Fiscal Systems", U.S. Department of t

The author thinks the graph suggests that for gas a total take of around 80% is not unreasonable.

Another useful table (Appendix A) compares remaining reserves on the vertical axis (higher is more) and average government take, Rising from left to right. The implication is that the greater the reserves, the higher the top rate the country is able to extract. It shows Venezuela as the most expensive, but it should be ruled out because it obtained production by expropriation and has captive refiners that are overly dependent on heavy oil.

⁵ The Source is a CERA Report, 2011, Comparative Assessment of the Federal Oil and Gás Fiscal System. Available at http://www.keepeek.com/Digital-Asset-Management/oecd/economics/oecd-economic-surveys-indonesia-012/average-government-take-in-oil-and-gas-fiscal-regimes_eco_surveys-idn-2012-graph25-en 6 Idem.

As you will see from reviewing the above graph and Appendix C, there is reason to believe that a total take of around 80% is not an unreasonable proposal, especially if the foreign corporation has recovered its investment with a reasonable return on its investment.

I do not know Mozambique's geological prospects, so I cannot comment on the graph but it certainly isolates potential production as a vital factor.

d. Implicit tax rates in draft law

The purpose of this short section is to show how a high cost producer and a low cost producer would fare under the triple tax system in the draft law.

The author does not have enough details to be confident about exactly how various issues, such as amortization and depreciation, would influence the results, and he therefore ignore them here in order to generate a simple statement of the tax system proposed in the draft law.

The author uses an earlier year in which the company has 100% of the initial production revenue and a later year when it declines to 40% as a result of historical profitability. The table is in units of currency and the product is gas; the results are more extreme if the product is petroleum. It ignores the production bonus payments. It assumes the Concessionaire (or "Company") is taxed only on its share of production and it treats production-sharing as a form of taxation. It assumes constant annual production and that gross production is 200 and, alternatively, legitimate deductible business expenses of 100 and 10. It treats economic operating expenses and legally deductible operating expenses as the same. This is not true, because we know some deductions for economic expense are disallowed.

NB: all amount received by the government are treated as "taxes" because all of them take production from the Concessionaire. The bonus charges are ignored, but increase the burden.

CASE I - HIGH COST PRODUCER

	Pre-tax economic net field revenue	IPP	Corp. Tax	Company Production Share (%)	Cash Left from field revenue after taxes	Tax paid as % of pre-tax legal income	Tax paid as % of net field revenue (100)
	100	12	32	100	56	44	44
Late year	75.20	0	0	40	(24.80)7	>100%	>100%
Comment		because already accounted for defining Available Petroleum	[75.20 post IPP share - 100 otherwise allowable deductions]x .32 tax rate, i.e., .32 x 0 NB: may produce tax loss for future extraction will reduce gov't quota		Subtract 100 op. expenses from 75.20 pre-tax cash. Ignore 12 because prepaid in determining company share	Tax= 4.80 IPP share Legal income = 80 -100 costs	[4.80 +112.80]/100

Available Petroleum after IPP (200 - 6 IPP) = 194.

⁷ Continuing on this path should result in declining government share in later years.

Gross government share is $.6 \times 188 = 112.80$ Gross company share is $.4 \times 188 = 75.2$

CASE II - LOW COST PRODUCER Same assumptions except the Concessionaire can produce 200 units of value of production for 10 units of expense

Early year	Pre-tax economic net field revenue	IPP	Corp. tax	Company productio n share (%)	Cash left from field revenue after taxes	Tax paid as % of pre-tax legal income	Tax paid as % of net field revenue (190)
	200- 10=190	12	60.80	100	117.20 ⁸	38.319	38.81
Late year	66.6	0	22.40	40	45.20	38.86	75.58
Comme	76.6- 10=66.6	Already accounted for in determining company's share. Company's de facto tax is 4.80	[80 pre-IPP share - 10 of allowable deductions]* *x .32 tax rate i.e., .32 x 70		Subtract 22.40 +10 op. expenses from 77.60 pre-tax cash. Ignore 4.80 because prepaid"	Tax= 4.80 IPP share + 22.40 = 27.20 Income = .4 x 200] - 10 expenses Net = 70.00 Result= 27.2/70.0 = 35.15	116.4 gov. share + 4.80 IPP share+ 22.40 corp. tax/190 = 143.60/190 This equals implicit field revenue after business costs, treating government share as a tax.

^{*}Available Petroleum after IPP (200 - 6 IPP) = 194. Gross government share is $.6 \times 194 = 116.4$ Gross company share is $.4 \times 194 = 77.6$ 60% limit inapplicable

Implication for production. This can easily encourage wasteful early abandonment of wells because of rising taxes.

Also, please note that this does not include the 20% withholding tax on distributions or various other smaller taxes.

Appendixes A and B shows that over time total government take has increased, implying that increasing rates in the future is not out of step with world-wide changes in government take. ¹⁰ Appendix C s a list of expenditures that might be helpful in deciding, say in regulations, which should be deducted and which should be treated as long-life assets. Appendix D is a large grid of numerous countries' taxes presented in some detail.

10 Idem.

⁸ Here: 190 - 12 - 60.80 = 117.20

⁹ Here: 72.8/190 = 38.31

V. PROPOSALS FOR CHANGE

a. Background

Looking at the draft law from a high altitude in terms of basic attributes from the point of view of tax policy, the picture is mixed:

- It produces admirable revenues, and is on the high side, although it arguably lacks a windfalls profit tax if oil and gas prices were to greatly increase.
- It will be difficult to administer, especially in connection with valuation under the IPP, determining the R factor, and dealing with the three separate forms of revenue it calls for.
- It is reasonably transparent now, but in large measure because there is so much to interpret that has not been interpreted.
- It is not simple at all. It is complex and uncertain.
- It is not neutral. It only works for large companies because of the large million early payment, along with the complexity and uncertainty of negotiating a concession. It may discourage small innovative participants. It encourages early abandonment of profitable wells. It discourages investments in high cost wells.

b. Proposals

Taken as a whole the draft law is complicated and in some instances crushing. The gradual application of production-sharing is a sensible way to limit extraction of large profits, but as applied it can result in tax rates over 100%. That is simply unacceptable and has to be fixed.

1. The IPP

Recommendation: The author strongly encourages converting it into a direct royalty that is treated as a retained government share, free of costs, rather than treating it as a separate tax and then disallowing an income tax deductions and base it on actual sales minus transportation whenever possible. The royalty is valuable because it assures some revenue even if the operator is falling apart. Make the royalty simple to calculate. Operators will understand the system and it will be clean and simple. The author thinks the draft's proposal begs for disputes that will not be helpful to Mozambique.

The author realizes that some countries treat the operator as receiving all the income then deducting the royalty, but the author thinks it is an unnecessary complication.

2. The corporate income tax component

Put the amortization and depreciation schedules in the law so that they are visible and independent of some change to the old Proclamation they are currently embodied in. The Proclamation is hard to find.

Recommendation: Keep the tax and the rate. It is in line with international norms.

Inter-company sales:

Recommendation: consider disregarding inter-company sales and make the sole measure of income final sales to the first consumer where it is practicable.

Recommendation: make the standards clearer as to the exact burden of proof. Saying the government can adjust prices is dangerous from the taxpayer's perspective. Limit adjustments to cases where the government is not being arbitrary and capricious.

Recommendation: if you insist on keeping the IPT as a separate tax, make it deductible from the corporate tax because it is a real cost of doing business.

3. Bonus payments when milestones are achieved

This provision adds some revenue and it not surprising. It is a fairly minor consideration, except perhaps for small companies. The bonus payments could discourage bothering with older fields.

Recommendation: eliminate this requirement in the case of projects not destined to require over \$20 million on total over the life of the project.

4. Production-sharing

This regime is offensive because it may lead to unrealistically high taxes on income, and will likely lead to bad real-world practices, including premature abandonment of fields. The total revenue take of about 78% in the model is higher than the world-wide rates and, while perhaps not troubling where the Concessionaire operates a low-cost field and has earned a healthy profit, it is riddled with features a reasonable person could quickly object to, including:

• Disallowance of expenses over 60% of Available Petroleum. This is unfair, arbitrary and capricious.

Recommendation: eliminate this feature.

• Lack of allowance of any pre-Effective Date costs, which could be considerable.

Recommendation: include direct costs paid in Mozambique prior to obtaining the Concession agreement in cash disbursements, with no overheard costs allowed.

Recommendation: keep all normative (moralistic) considerations out of the cash flow analysis.

5. Solutions to taxes in excess of 100% of income

Preferred recommendation: Drop production sharing in favor of higher corporate tax rates as milestones of profits are reached. Keeps the cash flow analysis honest, allowing a recovery of all disbursements, including for taxes and financing charges.

Alternative recommendation: same, but limit the production share so that collective taxes above do not exceed some ceiling, such as 76-80% of the taxpayer's net cash

revenues for the year. Take the reduction out of the government's production share to minimize necessary calculations.

6. Denial of interest expense deductions - thin capitalization

According to my research, interest paid from a Mozambique corporation to a resident or nonresident is subject to a 20% withholding unless (in the latter case) the rate is reduced under a tax treaty. This will increase Mozambique's revenues by 20% of each payment, but each payment stands to reduce its corporate income taxes by 32%. The thin capitalization proposal in the law is sensible in this regard, but it should specify whether 'equity' is based on fair market value or financial numbers and I would give the taxpayer a chance to prove why the affiliate was the only source of financing.

Recommendation: use value of equity because it ties to the reality of banking practices. Recommendation: because "base erosion" (erosion of taxable income by devious means such as excessive payments to affiliates) is a serious problem (now under serious review by the OECD), it is recommended you watch OECD developments very closely in this area and prepare to adopt OECD standards, because they are likely to be thoughtful.

c. Withholding taxes

There is no branch profits tax. This facilitates branches of foreign corporations moving money to the home office or elsewhere with no withholding, Branch profits taxes treat such repatriations as dividends or interest. They are complicated taxes to administer, but prevent drainage of funds. The withholding tax rates are comparatively high and can lead to trapping funds in Mozambique because the withholding taxes. It was not computed their impact because they create the alternative of not distributing dividends but instead moving profits to other countries where the funds are invested in fresh projects. This is a chronic practice of US companies.

Branch profits taxes. The concept is fairly recent and is as follows. It is the American version of what Mozambique could impose. In 1986, Congress enacted branch profits and branch-level interest taxes, which apply only to foreign corporations carrying on business through unincorporated branches in the United States. If a foreign corporation does business in the United States through a U.S. subsidiary, profits of the subsidiary distributed to the shareholder as dividends are subject to two U.S. taxes—the corporate income tax and a withholding tax on the dividends. The branch profits tax—a tax on profits earned in the United States through an unincorporated branch and deemed repatriated by the foreign corporation owning the branch—is intended to be comparable to the withholding tax on dividends that would apply if the branch was incorporated as a U.S. subsidiary. If a U.S. subsidiary borrows from abroad, interest on the debt is generally deductible by the corporation, but it is U.S. source income to the creditor, which may be subject to the withholding tax. The branch-level interest tax, which parallels the branch tax on transferred profits, is intended to be a comparable withholding tax on interest deducted by an unincorporated U.S. branch of a foreign corporation.

Recommendation: add a branch profits tax to the withholding tax system to protect your revenues.

Recommendation: Enter into bilateral tax treaties. Accept withholding tax rate reductions in favor of the improved enforcement that comes with such treaties.

d. Application of Revenues

It is included an extensive addition to the draft law to conform to EITI standards and to minimize diversion of revenues.

Recommendation: Adopt proposed Article 48 above.

VI. Timing of Revenues

Clearly, if the same amount of revenue is involved, then receiving the revenue early is preferable to receiving it late. Of course the operating company has exactly the opposite preference. Because of risk of failure for some reasons (blow-out, bad geological information, civil unrest, etc.) oil companies going in to new areas with institutional weaknesses will particularly resist because of heightened risk of loss, as compared to Norway, for example. In the US, where oil and gas has been in private hands during a century of activity, it is common practice for the operating company (usually a lessee) to pay the lessor a bonus, usually recoverable out of share later production; the Treasury Department treats the prepayment as a true bonus which is subject to depletion.

Obviously, in some cases the host country simply needs money, in which case it can, among other things, borrow against future revenues (Russia's case for some time) or simply "front load" its revenue share within limits tolerable to operating companies. In theory, in the absence of risk increasing with time, as long as the discounted net cash flow from the project is not reduced by early payment, early payment is acceptable. On the government side, it must recognize that the operator engages in extensive financial modeling before its commits to a project, and in doing so will normally employ discounted net cash flow spread-sheets to evaluate the project.

In my view, the timing of the revenues in the draft law is roughly normal, namely an initial commitment (which may be too heavy for small projects) and a rising share of field revenues over time, with bonus payments along the way.

The law drives taxpayers to larger low-production-cost projects, which has the benefit of enabling the government to pay for infrastructure projects such as road-building that will facilitate rapid economic growth and make lower-yield projects more feasible in the future because more infrastructure will be in place.

VII. Best Practices

The author was asked for comments on the draft law in relation to the International Extractive Industries Transparency Initiative (EITI) and Publish What You Pay.

The Initiative is supposed to increase transparency over payments by companies from the oil, gas and mineral industries to governments and to government-linked entities, as well as transparency over revenues by those host country governments. The core idea is for companies to publish what they pay and for governments to report what they receive embodied in an EITI report. Procedurally, EITI demands that EITI Reports be comprehensible, actively promoted, publicly accessible, and contribute to public debate.

The author saw nothing in the draft petroleum law that suggests further transparency. It is considered that absence as a failing. A few proposals were inserted in pursuit of EITI compliance as proposed amendments.

Below are the Draft Standards. They are likely to be accepted. The comments are inserted in bold.

1. **Each country's EITI sets its own objectives.** All EITI implementing countries already develop an 'EITI work plan'. In the revised EITI Standard, a country's work plan will have a much more significant role. EITI multi-stakeholder groups (MSGs) in each country are required to set their own implementation objectives. These should articulate what they want to achieve with their EITI, and how they plan to realize these objectives. This ensures that the EITI is well-grounded in the national dialogue about how their natural resources are governed.

The author knows nothing about this process in Mozambique.

- 2. **Presenting the context.** In order to make the EITI Reports easier to understand and use, the revised EITI Standard introduces a new requirement that EITI Reports must contain basic contextual information about the extractive sector. This includes
 - ensuring disclosure of production figures,
 - ensuring disclosure of ownership of the license holders, with disclosure of ultimate beneficial ownership being encouraged,
 - a description of how revenue allocations into state, local or other accounts,
 - a description of the fiscal regime, with disclosure of production contracts being encouraged.

This is seen as an internal matter.

- 3. **New disclosure requirements.** Several of the EITI reporting requirements found in the previous EITI Rules have been strengthened and the EITI Standard introduces new reporting requirements in a number of areas:
 - i. Comprehensive and accurate disclosures. It is required that the EITI Report contains full government disclosure of all revenues received from the extractive industries. The reporting procedures have also been strengthened, requiring the Independent Administrator and the MSG to assess prevailing auditing practices and agree procedures for assuring the data to be disclosed in the EITI Report. These changes seek to ensure that the EITI Report provides

- a complete picture of the revenues received, and that the EITI Report more clearly addresses the reliability of the data.
- ii. Disaggregated reporting. The data in the EITI report must now be presented by individual payment type, company and government agency and by project. Project level reporting is to be consistent with requirements in the US and EU.
- iii. State-owned companies. The revised EITI standard requires more transparency in of state-owned companies (SOEs) activities. SOEs will now report on financial transfers between SOEs and other government entities, revenues collected on behalf of the government, including revenues from the sale of the state's share of production, and any expenditure on social services, public infrastructure or fuel subsidies executed by the SOE. SOEs are also required to disclose their level of ownership in any extractive companies operating in the country.
- iv. Sub-national transfers. In many countries, most of the revenues from natural resources accruing at sub-national levels are not derived from company payments to local government entities, but from transfers from the central government. Depending on the revenue-distribution frameworks in place, these transfers can be a considerably larger source of revenue for sub-national entities than taxes and fees collected at local levels. The revised EITI standard requires that such transfers are reported where mandated by law and where material.
- v. Social expenditures by companies. Where companies are legally or contractually required to make social contributions, these must be disclosed.

This is not a tax law matter.

vi. Payments from transit. Where countries collect significant revenues from the transportation of oil, gas and minerals, such as pipelines, the government is required to disclose the revenues received.

This is not a tax law matter.

- 4. Annual activity reports. The requirement to publish annual activity reports is no longer limited to Compliant countries, but is now a requirement for all implementing countries. It is foreseen that countries will report on progress with meeting the EITI requirements as well as efforts to achieve the objectives set out in their work plans.
- 5. Improved EITI Validation procedures. Changes to the EITI quality assurance process aim to improve the quality, efficiency and consistency of Validation assessments. Validation will now be procured and managed by the International Secretariat rather than by implementing countries. Countries will undertake Validation more frequently, with Compliant countries being revalidated every three years as opposed to every five years.
- 6. Simplified and restructured. Part one 'Implementation of the EITI Standard' includes: the EITI Principles, which have not been modified. Part two now includes the seven EITI Requirements, which set out the expectations of implementing countries in a clearer and more logical way. The requirements incorporate the majority of the provisions found in the EITI Criteria, Requirements and Policy Notes in the 2011 EITI Rules. The Validation Guide has been revised to reflect the agreement that Validation will be administered by the International Secretariat. The Civil Society Protocol identical to Policy Note 6 in the 2011 Rules has been retained. Part three on Governance and Management sets out how the EITI is governed and includes: slightly amended

Articles of Association; the EITI logo policy; the EITI openness policy; and slightly amended draft EITI constituency guidelines.

"c" through "e" are not tax law matters.

7. **Making the data machine-readable**. With the wealth of new data in future EITI Reports as well as through the new disclosure rules in the EU and the US, this vast amount of data will be of little use unless it is made available in open and accessible formats. In the revised EITI Standard, countries are encouraged to make their data available in machine-readable formats so that citizens, journalists and analysts can use the information to analyze, visualize and compare it with other data sources.

Recommendation: make these principles concrete by adding them to the law.

A reference to this was inserted in the new material relating to use of revenues.

Incidentally, the EU a contemplating new Directive concerning financial reporting that would require that certain large natural resource extractive industry undertakings and NGOs to report payments to governments. This development should help to force disclosure of improper payments and thus reduce the practice.

VIII. Proposals for further work

There is a lot more to be done in particular was is included below.

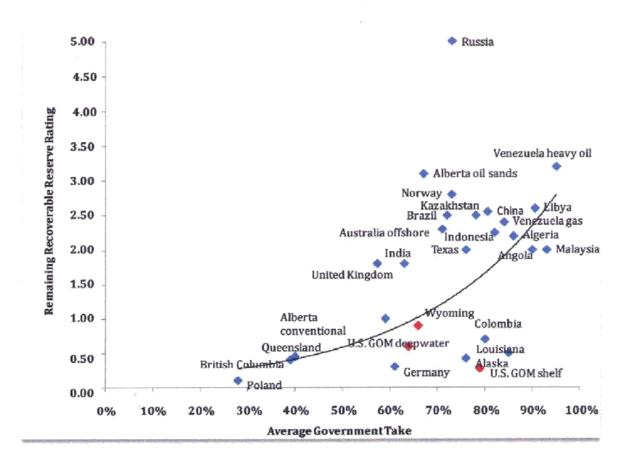
The draft law will require interpretative and procedural regulations in order to implement it smoothly. Often just have *any* interpretation, almost no matter what it is, is better than having none.

- The movement of funds needs to be embellished and hardened to assure there is no graft or "milking" of revenues.
- Anti-bribery laws need to be consulted to see if they are realistic in light of the enormous amount of money that is at play in the oil and gas sector. If they are found to be weak, they should be improved, either by regulation or legislation, as the circumstances dictate.
- EITI compliance needs to be implemented scrupulously.
- The tax administration process should be reviewed to make sure it is as impregnable as possible from corruption.
- Whistle-blower legislation should be enacted.
- Civil and criminal penalties should be reviewed to see if they are sufficient to deter impropriety.
- Investigate of entering into more tax treaties. The larger the network of treaties the better from the Concessionaire's point of view. The problem of contrived transfer prices can be reduced be entering into bilateral tax treaties because they offer mutual administrative cooperation with respect to transfer pricing for the purpose of forcing ruthful pricing on multinational corporations. There is also a recent multilateral tax enforcement treaty that

- goes a long way toward allowing governments to collect unpaid taxes of foreign persons in foreign courts (OECD Convention on Mutual Administrative Assistance in Tax Matters).
- Mozambique -- and every other country -- should look into this opportunity. NB: transfer pricing investigations are now apparently the most common tax examination issue that natural resources companies face.

APPENDIX A. REMAINING RESERVES (VERTICAL AXIS) AND AVERAGE GOVERNMENT TAKE (HORIZONTAL AXIS)

Government Take Relative to Remaining Recoverable Reserve Ranking

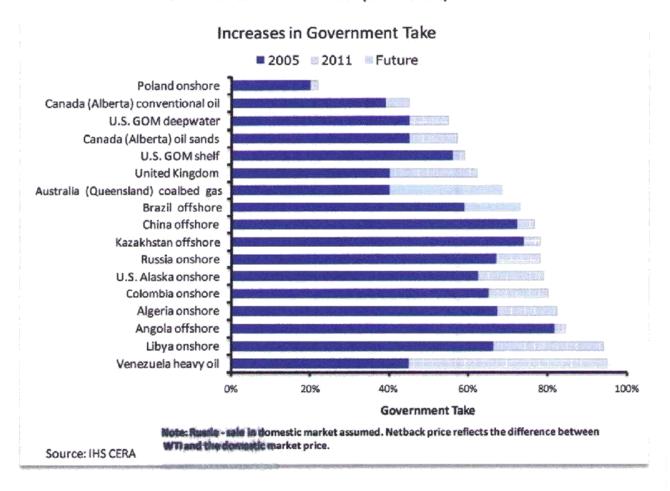


This table compare remaining reserves on the vertical axis (higher is more) and average government take, Rising from left to right. The implication is that the greater the reserves, the higher the top rate the country is able to extract.

Mozambique's large reserves suggest it can extract a high rate,

APPENDIX B: INCREASE IN GOVERNMENT TAKE OVER TIME

Increase of Government Take (2005-2011)



APPENDIX C: TYPICAL U.S. TREATMENT OF OIL AND GAS RELATED EXPENDITURES

Policy-makers may find this breakdown of these common oil and gas related expenditures helpful in sorting capitalized expenditures from current deductions, or at least listing many common expenditures you wish to characterize as expenses or capital expenditures. Many may not agree with whether any particular item should be deducted or capitalized. The general rule under US law is that payments for items that endure for more than a year must be capitalized and then be written off over time as their useful lives expire.

Leasehold Cost (Capital Α. **Expenditure**) Research of Concession location by engineer, geologist, etc., for purposes other than locating a well site. Geological and geophysical expenditures where or not leading to acquisition or retention 2. of an oil and gas property. Expenses in connection with leasing the property from government. 3. Legal costs of securing Concession 4. Legal fees incurred to obtain access to the property and to obtain easements, etc. 5. Lease bonus paid to the government or other owner. 6. Purchase price of an existing oil or gas. Core-hole wells drilled to obtain geological data. 8. Seismic work to determine the size of the reservoir or reserves. 9. Legal fees incurred in drafting contracts. 10. Travel expenses incurred in acquiring leases. 11. Salaries of land department personnel in acquiring Concession. 12. Cost of acquiring oil and gas equipment and pipe 13. Intangible drilling and development costs (see below for details) 14. Delay rentals. 15.

B. Intangible Drilling Costs – US grants election to deduct these

Administrative costs in connection with drilling contracts.
 Survey and seismic costs to locate a well site on Concession.

3. Costs of drilling. Grading, digging mud pits, and other dirt work to prepare drill site. 4. Cost of constructing roads or canals to drill site. 5. Surface damage payments to landowner. 6. Crop damage payments. 7. Costs of setting rig on drill site. 8. Transportation costs of moving rig. 9. Technical services of geologist, engineer, and others engaged in drilling the well. 10. Drilling mud, fluids, and other supplies consumed in drilling the well. 11. Transportation of drill pipe and casing. 12. Cementing of casing (but not the casing itself). 13. 14. Rent of special equipment and tanks to be used in drilling a well. 15. Perforating the well casing. Logging costs, but not velocity surveys. 16. Costs of removing the rig from the location. 17. 18. Dirt work in cleaning up the drill site. Cost of acidizing, fracturing the formation, and other completion costs. 19. 20. Swabbing costs to complete the well. 21. Cost of obtaining an operating agreement for drilling operations. Cost of plugging the well if it is dry. 22. 23. Cost of drill stem tests.

C. Lease and Well Equipment (Capital Expenditures)

1.	Surface casing.
2.	Sales tax on acquired equipment and delivery costs
3.	Cost of well casing.
4.	Salt water disposal equipment and well.
5.	Transportation of tubing to supply yard but not from supply yard to well site.
6.	Cost of production tubing.
7.	Cost of well head and "Christmas Tree."
8.	Cost of pumps and motors including transportation.
9.	Cost of tanks, flow lines, treaters, separators, etc., including transportation.
10.	Dirt work for tanks and production equipment.

11. Roads constructed for operation of the production phase. 12. Laying pipelines, including dirt work and easements. Installation costs of tanks and production equipment. 13. Construction costs of trucks turnaround pad and overflow pits at new tank battery. 14. D. **Operating Expense – Typically Deducted** Cost of switcher or pumper to operate the wells. Cost of minor repair of pumps, tanks, etc. Grading existing roads. Treat-o-lite and other materials and supplies consumed in operating the well. 4. Pulling sucker rods, pump, and cleaning the well. 5. Utilities. 6. Taxes other than income taxes. 8. Depreciation of equipment used on the lease. 9. Rental of lease equipment. 10. Salaries for painting and cleaning the lease. 11. Lease signs. Salaries of other operating personnel—farm boss, superintendent, engineer, etc. 12. Salt water disposal costs (other than those under C.4. above). 13. 14. Allocable portion of overhead costs. 15. Injectant expenses.

APPENDIX D - MATRIX OF TAXES IMPOSED ON OIL AND GAS ACTIVITIES IN SELECTED COUNTRIES -AUTHOR'S PRODUCT

Country	Fiscal Regime	Corporate Income Tax Rate	Production Sharing Contracts with Government	Royalties Tax Rate
Algeria	Generally controlled by production sharing contract (PSC) or other similar contracts concluded between the Algerian authorities and the contractor.	38%		20% but can be reduced to 16.25% and 12.5% dependent upon territory. Ministry of finance can reduce to 10% upon discretion
Angola	There are three types of contracts, each with different tax regimes: 1. Production sharing agreement (PSA) — the most common form of arrangement 2. Partnership — applicable only to certain partnerships set up in the 1960s and 1970s, such as Block 0 and FS/FST 3. Risk service contract (RSC)	50% if operate under production sharing agreement, 65.75% if no PSA		
Argentina	Argentina is organized into federal, provincial and municipal Governments. The fiscal regime that applies to the petroleum industry principally consists of federal and provincial taxes.	35%		
Australia	The fiscal regime that applies in Australia to the petroleum industry consists of a combination of corporate income tax (CIT) and either a petroleum resource rent tax (PRRT) or royalty-based taxation.	30%		0-12.5%

Brazil	The Brazilian fiscal regime that applies	15% plus surtax of	Yes	10% of total production volume each
	to the oil and gas industry consists of	10% for profits over		month x relevant reference prices
	corporate income tax (CIT) and	BRL 240,000 and		(ANP). May reduce production
	government and third-party takes.	social contribution		volume by 5% in some circumstances
	Government and third-party takes vary	tax of 9%. Taxation		
	depending on the type of contract.	is the same for		
		entities bearing CC		
	Two types of contracts are Concession	or PSC contracts, or		
	contract and production sharing contract	both.		
	_			

Country	Dividends Tax Rate	Capital Gains Separate Tax Rate	Branch Remittance tax Rate	Profit Sharing
Algeria				
Angola				
Argentina				
Australia		30%		
Brazil	34%	15%. Losses limited to 30% of future capital gains. 25% rate if beneficiary lives in low tax jurisdiction (jurisdiction with income tax lower than 20%)		

Country	AMT/MPIT (Minimum Presumed Inc. Tax)	Rent Tax	Windfall and/or Excess Profits Tax	Special Capital Allowances
Algeria			5-50% when Barrel cost is \$30+,	
			30% on excess	
			profit (15% if	
			reinvested)	
Angola		25% annual amortization of capital		
		expenditures		
Argentina	1%			25% annual amortization of capital expenditures
Australia				Diminishing value (= base value x days held/365 days x 200%/asset's effective life), Prime cost = asset's cost x days held/365 days x 100%/ asset's effective life
Brazil				Buildings 25 years, Machinery 10 years, vehicles and computers 5 years

Country	Transaction	VAT	Stamp Tax	Turnover Tax
Algeria	1%			
Angola				
Argentina		21%	1%	2.5%
Australia				
Brazil				

Country	Import/Export	Losses	Petroleum Production Tax	Petroleum Transaction Tax
Algeria			20%, may be reduced to 10% upon petition	70%, deductible from income tax
Angola				
Argentina	0/35% import, 5-25% export			
Australia				
Brazil		Loss carry forward for up to 30% of yearly taxable income		

Country	Petroleum Income Tax	Investment Incentives	Extraction Tax	Other Policy
Algeria	35%. Tax credit for 144			
	months from production date.			
Angola		R&D and land investment		Oil is limited to a maximum percentage of the total amount of oil produced in each development area, in accordance with the respective PSA (generally 50%, but may be increased up to 65% if development expenditures are not recovered within four or five years from the beginning of commercial production or from the year costs are incurred, whichever occurs later)
Argentina				
Australia				
Brazil		R&D investment credit 75% reduction of 25% CIT due calculated on profits from activities covered by the incentive tax treatment for projects for projects to be considered vital for modernization. 12.5% reduction for new ventures considered a priority on calculated profits 60-100% total expenditure deduction for R&D periods Signature bonus for winning bidder for exploration of crude oil and natural gas 10-40% rates= for high volumes of production or high earnings		

Country	Withholding Tax General	WHY Royalties	WHY Interest	WHT Dividends
Algeria				
Angola		10%	10%	0%
Argentina		21%/28%/31.5%	15.15%/35%	0%
Australia		30%	30%	10%
Brazil		15-25%	15-25% (Higher for low tax jurisdiction)	15-25% (Higher for low tax jurisdiction)

Country	WHT Administrative	WHT Service Payments	WHY Rental	WHY Brach Remittance
Algeria				
Angola		5-25%		
Argentina				
Australia				
Brazil	15-25%		15-25%	

Country	Fiscal Regime	Corporate Income Tax Rate	Production Sharing Contracts with Government	Royalties Tax Rate
Canada	The fiscal regime that applies to the oil and gas industry in Canada consists of a combination of royalties and income taxation	15% + 10-16% provincial rate		20% but can be reduced to 16.25% and 12.5% dependent upon territory. Ministry of finance can reduce to 10% upon discretion
Chad	Production sharing contract (PSC) ii) the standard production contract (hereafter referred to as the Model PSC); iii) the PSC and concession agreements (CA) concluded between the state of Chad and the contractors (the oil companies), and iii) the Chadian Tax Code.	40% under a product sharing contract	Yes	14.25-16.5 for crude, 5-10% gas
Colombia	The fiscal regime that applies in Colombia to the petroleum industry consists of a combination of corporate income tax (CIT) and royalty-based taxation.	33%		8% (up to 5000 barrels/day), 8+ [production – 5,000] * 0.10 (5001 to 125,000 barrels/day), 20% (125001 to 400,000 barrels/day), 20+ [production – 400,000]* 0.025 (400,001 to 600,000 barrels/day), 25% (more than 600,000 barrels/day)
Côte d'Ivoire	The fiscal regime applicable to the petroleum industry in Côte d'Ivoire consists of Ivorian tax law, the Ivorian petroleum code and the production sharing	25%. In terms of the PSC, an E&P company finances all exploration and development costs and bears all costs and risks of this operation in the event that no oil	Yes	Depends on terms of Product sharing contract

	contracts (PSC), or the contract of service concluded between the Ivorian Government and the contractor (hereafter	and gas is found.		
	referred to as the Holder).			
Congo	The fiscal regime applicable to the petroleum industry in the Democratic Republic of Congo (DRC) consists of the Congolese Tax Law, the General Tax Code dated March 2003, the Reform of Tax procedures book dated 13 March 2003, the Hydrocarbon Ordinance-Law n°81-013 dated 2 April 1981, customs code and customs tariff, the relevant production sharing contract (PSC) or other similar contract concluded between the Government and the oil company, and the provincial legislation	40%	Yes	Rate depends on the terms of the PSC

Country	Dividends Tax Rate	Capital Gains Separate Tax Rate	Branch Remittance tax	Profit Sharing
			Rate	
Canada			25% additional,	
			reduced to	
			5/15% with	
			treaty	
Chad	Exempt	25% from asset assignment		
Colombia				
Côte d'Ivoire		25%, same as CIT		
Congo				

Country	AMT/MPIT (Minimum Presumed Inc. Tax)	Rent Tax	Windfall and/or Excess Profits Tax	Special Capital Allowances
Canada				
Chad		annual contribution as agreed to in PSC		Ring-fence according to the Model PSC (negotiable) and LIFO (last in, first out). No greater reimbursement of costs than 70%
Colombia				Computer sand vehicles 5 years, machinery 10 years, real estate 20 years
Côte d'Ivoire		No specific legislated rate and depends on the terms of the production sharing contracts		Immediate deduction of exploration costs, certain assets qualify for accelerated depreciation (TBD by officials).

Congo	US\$2/km² and US\$500/km² per	
	permit	

Country	Transaction	VAT	Stamp Tax	Turnover Tax
Canada				
Chad		Mostly exempt		
Colombia		16% for Payments for technical assistance services and consulting, technical services, and services rendered in Colombia and abroad		
Côte d'Ivoire				
Congo				

Country	Import/Export	Losses	Petroleum	Petroleum Transaction Tax
			Production Tax	
Canada				
Chad				
Colombia		8yr carry forward with max of 25% offset/ year		
Côte d'Ivoire	Yes, depends on certain factors			
Congo				

Country	Petroleum Income Tax	Investment Incentives	Extraction Tax	Other Policy
Canada		20% for R&D (possibly up to		
		35% for up to CAD\$3M of annual		
		SR&ED		
Chad		R&D and land investment		Oil is limited to a maximum
				percentage of the total amount of
				oil produced in each development
				area, in accordance with the
				respective PSA (generally 50%, but
				may be increased up to 65% if
				development expenditures are not
				recovered within four or five years
				from the beginning of commercial
				production or from the year costs
				are incurred, whichever occurs
				later)
Colombia		Exploration – no requirement to		
		calculate income tax, carried		
		forward		
		Environmental deduction of up to		
		20% of yearly income		
		20% of yearly meome		
		ANH sum of 10% of production		
		for light hydrocarbon and 5% in		
		case of heavy hydrocarbon		
Côte d'Ivoire		Holders of PSCs are exempt from		Bonuses exist, but amount is
		any taxes, duties and fees as soon		dependent upon PSC. Exist at 50M,
		as they sign the PSC contract for		75M, 100M and 200M barrels
		the period in which they are		
		conducting R&D during the E&P		Gov't share of oil profits: 0-
		period up to the end of their		100k(barrels) 45%, 100k-200k -
		activities in Cote d'Ivoire or at the		47%, 200k-300k - 55%, 300k+ -

	end of the PSC. The main taxes exempted are: Tax on banking operations Tax on sales or similar tax (VAT) Taxes and duties applicable to petroleum products supplied to permanent facilities and drilling facilities. carryforward and back of losses acceptable and indefinitely	60%
Congo		Mineral fee - Rate depends on the terms of the PSC

Country	Withholding Tax General	WHY Royalties	WHY Interest	WHT Dividends
Canada		25%	25% Nonresident, 15% Nonresident with Treaty, 5/10% Nonresident Corporation with treaty	
Chad				
Colombia		33% (royalties in acquisition and exploitation of intangibles	15.15%/35%	0%
Côte d'Ivoire		Exempt	Exempt	
Congo				

Country	WHT Administrative	WHT Service Payments	WHY Rental	WHY Brach Remittance
Canada				
Chad				
Colombia		10% (technical ass. Services and consulting), 10% Technical services, 33% pmt for services rendered in Colombia		
Côte d'Ivoire		25-30% of the wage amount, resulting in effective rate of 7.5%		Generally applies, but not under PSC
Congo				

Country	Fiscal Regime	Corporate Income Tax Rate	Production Sharing Contracts with Government	Royalties Tax Rate
Ecuador		23%, 22% in 2013	Yes (81.5-87.5%)	12.5% to 18.5%
Equatorial Guinea	The fiscal regime that applies to the oil and gas industry is provided by the EG Tax Code (EGTC) dated 28 October 2004, the EG Hydrocarbon Law No. 8/2006 dated 3 November 2006, the production sharing contract (PSC) or other similar contract concluded between the Equatorial Guinea (EG) Government and the contractor	35%	Yes	>13%

Indonesia	The fiscal regime applicable to oil and gas companies consists of product sharing contracts (PSCs) that are entered into between contractors and BPMIGAS, the Indonesian executive body for oil and gas upstream activities (previously Pertamina on behalf of the Government).	25%	
Iraq		15%, 35% if related to upstream oil and gas activities	
Kazakhstan	This article describes the fiscal regime in force for almost all existing and all new contracts from 1 January 2009. This regime is applicable to all contracts except production sharing agreements that became effective prior to 1 January 2009 and contracts specifically approved by the president of Kazakhstan. The generally applicable fiscal regime that applies in Kazakhstan to exploration and production (E&P) contracts in the petroleum industry consists of a combination of corporate income tax (CIT), rent tax on export, bonuses and royalty-type taxation. Oil and gas production activities are ring-	20% as of 2010	

fenced from downstream		
activities and from each other		
(i.e., contract by contract) for		
tax purposes		

Country	Dividends Tax Rate	Capital Gains Separate Tax	Branch Remittance	Profit Sharing
		Rate	tax Rate	
Ecuador	12%			Employee - 15% of annual profit to employees. In hydrocarbon industry employee receives 3% and gov't 12%
Equatorial Guinea				
Indonesia				
Iraq		15%, 35% if related to upstream oil and gas activities		
Kazakhstan	15% if paid abroad. Usually reduced to 5% by treaty			

Country	AMT/MPIT (Minimum Presumed Inc. Tax)	Rent Tax	Windfall and/or Excess Profits Tax	Special Capital Allowances
Ecuador				Immediate write-off for exploration costs is not a common practice. However,
Equatorial Guinea		Determined under PSC		Developed land 5% Housing 5% Temporary buildings 20% Light vehicles 25% Heavy vehicles 33.33% Office furniture 20% Naval and air material 20%
Indonesia		None (Resource or surface rent)		these costs can be subject to write-off when the operation is finished
Iraq				
Kazakhstan		0-32% on export based on the value of the exported crude oil and gas based on the same tax valuation as for Mineral Extraction Tax	10%, 20%, 30%, 40%, 50%, 60% dependent upon net income allocation in accordance with % of deductions.	Buildings and structures 10% (max depreciation rate), Machinery 25%, Office machinery and computers 40%, Fixed assets 15%

Country	Transaction	VAT	Stamp Tax	Turnover Tax
Ecuador				
Equatorial Guinea				
Indonesia	0.4% to be 0% by 2018			
Iraq				
Kazakhstan		12% on import and export		

Country	Import/Export	Losses	Petroleum Production Tax	Petroleum Transaction Tax
Ecuador				
Equatorial Guinea				
Indonesia	generally exempt, but subject to conditions			
Iraq		No carryback, 5 yr carryforward of losses		
Kazakhstan	Export 0- 32% (progressive with cost/bbl)			
	Crude oil export duty of \$40/ton			
Country	Petroleum Income Tax	Investment Incentives	Extraction Tax	Other Policy
Ecuador		Loss carryforward: net operating losses may be carried forward and offset against profits in the following five years, provided that the amount offset	1% of the services fee amount after determination of profit sharing and income tax	Sovereignty Margin - 25% of gross income of the field production
		Reinvestment of profits result in a 10% reduction on the corporate income tax rate.		
Equatorial Guinea				State entitled to % of all hydrocarbons
Indonesia				
Iraq		Does not exceed 25% of the year's profits. Loss carrybacks are not permitted		

Kazakhstan	Discovery Bonus of 0.1% of	0.5% - 18% (reduced	
	value of proven extractable	by 50% if	
	resources	completely domestic	
		production and	
		purchaser)	

Country	Withholding Tax General	WHY Royalties	WHY Interest	WHT Dividends
Ecuador	23%, 22% in 2013		5%	1010%
Equatorial Guinea	6.25 and 10%		25%, bank interest rate at 4%	25%
Indonesia		15-20%	15-20%	Depends on K
Iraq		15%	15%	0%
Kazakhstan	20%		15%	15%
Country	WHT Administrative	WHT Service Payments	WHY Rental	WHY Brach Remittance
Ecuador				
Equatorial Guinea				None
Indonesia				Depends on K
Iraq				
Kazakhstan				

Country	Fiscal Regime	Corporate Income Tax Rate	Production Sharing Contracts with Government	Royalties Tax Rate
Kenya		30%		
Libya	In Libya, the fiscal regime that applies to the petroleum industry consists of a combination of corporate income tax (CIT) and a surtax. Under the production sharing contract (PSC) regime, taxes are deemed to be paid by the This is National Oil Company (NOC), and the tax computation is notional.	20% plus an adjustment for 4% royalty		16.67%
Mexico	There are no special tax rules applicable to the petroleum industry. It should be noted that oil activities are reserved for the Mexican Government, and Petróleos Mexicanos (PEMEX) is the responsible agency. PEMEX, as a government agency, has a particular taxation regime, which is not covered by this guide. The intention of this guide is to provide an overview of the tax rules applicable to companies that provide services to PEMEX or are engaged in the oil industry in Mexico. However, PEMEX subcontracts an extensive	30% (29% in 2013 and 28% in 2014		

	variety of services to domestic and international providers, among them: drilling, supply, engineering and construction.		
Namibia	The fiscal regime that applies to the petroleum industry in Namibia consists of a combination of petroleum income tax (PIT) under the Petroleum (Taxation) Act 3 of 1991 (the PTA), the administrative provisions as contained in the Income Tax Act 24 of 1981 (the Income Tax Act) and royalties levied on sales under the Petroleum (Exploration and Production) Act 2 of 1991 (the Petroleum Act).	35%	5% of gross revenues
Nigeria	Companies carrying on petroleum operations are deemed to be in the upstream regime and taxed under the Petroleum Profits Tax Act. Nigeria operates on both a licensing and contractual regime. Under licensing regime there are two arrangements. These are joint ventures between the fed gov't and the international oil company and the sole risk operator. The contractual regime	65.75% (first 5 years), 85% (first 5 years existing companies),85% (Subsequent years for all companies) and gov't share based on production	0-20%

servi	ngements are the risk ice contracts and the		
prod	luction sharing contracts.		

Country	Dividends Tax Rate	Capital Gains Separate Tax Rate	Branch Remittance tax Rate	Profit Sharing
Kenya			37.5%	
Libya				
Mexico	42.858%		None	Employees - 10% of adjusted taxable income of the business
Namibia				
Nigeria				

Country	AMT/MPIT (Minimum Presumed Inc. Tax)	Rent Tax	Windfall and/or Excess Profits Tax	Special Capital Allowances
Kenya				Carryback n/a (applied to petroleum company that has permanently ceased production, losses no carryback greater than 3 years otherwise). Carryforward of 5 years
Libya				

Mexico	17.5%		Depreciation rates: Buildings 85%, Vessels 78%, Computers 94%, Telecoms 74-85%, 95% Tooling, 74- 95% Machinery,
Namibia			
Nigeria		NGN 200.00 kilometer ^2 for oil prospecting license, NGN 300.00 kilometer ^2 for nonproducing oil mining license, NGN 500.00 kilometer ^2 producing oil mining license	Onshore operations 5% years 1-4 20%, year 5 19% Operations in areas up to 100 meters water depth 10% Operations in areas between 101 meters and 200 meters water depth 15% Operations in areas beyond 200 meters water depth 20%

Country	Transaction	VAT	Stamp Tax	Turnover Tax
Kenya		16%	Yes	
Libya				
Mexico				
Namibia				
Nigeria	10%	5%, but exceptions exist in regards to certain industry products		

Country	Import/Export	Losses	Petroleum Production Tax	Petroleum Transaction Tax
Kenya				
Libya	6% Import			
Mexico		No carryback, 10 yr carryforward		
Namibia				
Nigeria			Depends on production quantities and asses on current year basis	

Country	Petroleum Income Tax	Investment Incentives	Extraction Tax	Other Policy
Kenya		deduction of straight line basis of 20% per annum		Petroleum taxes related to signature bonus, surface fees, training fee, windfall profits, and profit oil (to be shared, taken and disposed of separately by the government and contractor according to increments of profit oil) negotiable.
				Taxation of petroleum service sub- contactors - profit = 15% of all money paid by a petroleum company. Profit taxed at 37.5%
Libya		Bonuses – paid at milestones of production of 100M barrels and subsequently every 30M produced		

Mexico	
Namibia	expenditures deductible in first year of production
	Development expenditures amortized over 3 years
Nigeria	Lenient capital allowances given

Country	Withholding Tax General	WHY Royalties	WHY Interest	WHT Dividends
Kenya		Resident - 5%	15%	Resident - 5%
		Nonresident - 20%		Nonresident 10%
Libya				
Mexico		25%, 10% under treaties	4.9% Registered bank in treaty country, 10% reg bank not in treaty country, 21% qualified acquisitions of machinery, 30% general, 10-15% general w/ treaty, 30% Nonresident	
Namibia				
Nigeria		10%	10%	

Country	WHT Administrative	WHT Service Payments	WHY Rental	WHY Brach Remittance
Kenya			Nonresident 30%	
Libya				
Mexico				
Namibia				
Nigeria		10%		

Country	Fiscal Regime	Corporate Income Tax Rate	Production Sharing Contracts with Government	Royalties Tax Rate
Peru	Oil and gas exploration and production (E&P) activities are conducted under license or service contracts granted by the Government. The Government guarantees that the tax law in effect on the agreement date will remain unchanged during the contract term.	30%. Prepay of final income tax @ 2% per month		5% (<5 barrels per day), 5-20% (5-100 bpd), 20% (>100 bpd)
Tanzania		25% or 30%		
Venezuela	The fiscal regime that applies to the petroleum industry in Venezuela consists of a combination of corporate income tax (CIT), royalty tax, indirect taxes and special contributions.	50% of net profits		33.33% on the value of the crude oil extracted

Country	Dividends Tax Rate	Capital Gains Separate Tax Rate	Branch Remittance tax Rate	Profit Sharing
Peru	4.1%	30%, treated as ordinary income		Employees - obliged to distribute 8% in regards to oil, mines, etc. Calculated pretax income and is deductible expense for determining income tax.
Tanzania		30%		
Venezuela		50%		50%

Country	AMT/MPIT (Minimum Presumed Inc. Tax)	Rent Tax	Windfall and/or Excess Profits Tax	Special Capital Allowances
Peru				vehicles 20%, machinery 20%, other machinery 10%, 25% hardware, 10% fixed assets, buildings 5%
Tanzania				
Venezuela	50%			

Country	Transaction	VAT	Stamp Tax	Turnover Tax	
Peru	0.005%	18%, recovery for goods related to hydrocarbon production			
Tanzania					
Venezuela					

Country	Import/Export	Losses	Petroleum Production Tax	Petroleum Transaction Tax
Peru				
Tanzania		No carryback, carryforward unlimited		
Venezuela				

Country	Petroleum Income Tax	Investment Incentives	Extraction Tax	Other Policy
Peru	Tetroteum meome Tax	exploration expenditures amortized on basis of production unit or through lineal amortization over 5 years Once commercial extraction starts no recovery of exploration costs. Such expenses include: investment for drilling, exploration investments.	Extraction Tax	Corporate Tax incentives - According to Peruvian income tax law, tax losses can be carried forward and offset against the net income obtained in future fiscal years. The provisions currently in force require the taxpayer to elect one of the following procedures to offset the tax losses: Offset the total net tax losses from Peruvian sources obtained in the tax year against the net income obtained in the four fiscal years following. No loss offset after such term. Offset the total net tax losses from Peruvian sources obtained in the tax year against 50% of the net income obtained in the following years, without limitation
Tanzania				
Venezuela				

Country	Withholding Tax General	WHY Royalties	WHY Interest	WHT Dividends
Peru		30%	30%, can be reduced to 4.99%	4.1%
Tanzania		15%	10%	5-1-%
Venezuela		3% Resident, 24% Nonresident	3% Resident, 5% Resident Corp, 34% Nonresident, 34% Nonresident Corp	
Country	WHT Administrative	WHT Service Payments	WHY Rental	WHY Brach Remittance
Peru		15%		
Tanzania				10%
Venezuela		2% Domiciled Corp/ 1% Resident/ 34% NR/ 34% Non-domiciled Corp Technical Assistance, 2% Domiciled Corp/ 1% Resident/ 34% NR/ 34\$ Non-domiciled Corp Technological Services		

APPENDIX E: TABLE SHOWING INTERNAL RATES OF RETURN TENDS TO SHOW 18% INTERNAL RATE OF RETURN USED FOR CASH FLOW TESTING IS GENEROUS RATE IF NOT ALL TAXES ARE CONSIDERED

Fiscal Terms Index (Un-weighted Score)

Fiscal System	Gov Take	Index Score	PI	Index Score	IRR	Index Score	Progressivity/ Regressivity	Index Score	
Algeria onshore	86%	4.32	1.83	0.00	25%	0.43	-9%	1.50	
Angola offshore	78%	3.70	1.32	1.93	16%	2.27	2%	0.17	
Australia (Queensland) coalbed gas	40%	0.89	1.41	1.60	15%	2.56	-10%	1.67	
Australia offshore	71%	3.18	1.57	0.99	20%	1.50	-8%	1.33	
Brazil offshore	72%	3.28	1.62	0.80	14%	2.78	-22%	3.67	
Canada (Alberta) conventional oil	61%	2.49	1.32	1.93	16%	2.45	-30%	5.00	
Canada (Alberta) oil sands	67%	2.91	1.10	2.78	9%	3.85	-19%	3.17	
Canada (British Columbia)	40%	0.87	1.17	2.52	13%	2.97	1%	0.16	
China offshore	80%	3.88	1.46	1.41	12%	3.20	8%	1.21	
Colombia onshore	82%	4.03	1.20	2.40	16%	2.35	-4%	0.67	
Germany onshore	61%	2.46	0.80	3.92	6%	4.49	-11%	1.83	
India offshore	57%	2.16	1.23	2.28	15%	2.56	-16%	2.67	
Indonesia coalbed gas	79%	3.78	1.35	1.81	23%	0.76	-12%	2.00	
Indonesia conventional gas offshore	82%	4.00	1.07	2.91	11%	3.38	-13%	2.17	
Kazakhstan offshore	78%	3.73	1.17	2.51	13%	2.99	9%	1.33	
Libya onshore	91%	4.66	1.43	1.51	17%	2.09	4%	0.52	
Malaysia offshore	93%	4.85	0.93	3.42	7%	4.27	-12%	2.00	
Norway offshore	79%	3.79	1.04	3.02	12%	3.28	27%	4.50	
Poland onshore	28%	0.00	1.50	1.26	16%	2.35	-8%	1.33	
Russia onshore	73%	3.36	1.26	2.17	14%	2.78	-22%	3.67	
United Kingdom offshore	62%	2.53	1.13	2.66	12%	3.20	0%	0.00	
U.S. Alaska onshore	76%	3.59	1.09	2.81	11%	3.36	-18%	3.00	
U.S. GOM deepwater	64%	2.65	1.04	3.01	10%	3.64	-18%	3.00	
U.S. GOM shelf	79%	3.77	0.72	4.23	4%	4.83	-16%	2.67	
U.S. Louisiana onshore gas	85%	4.27	1.03	3.05	27%	0.00	-9%	1.50	
U.S. Texas onshore	76%	3.55	0.95	3.35	11%	3.42	-17%	2.83	
U.S. Wyoming gas	66%	2.85	1.22	2.33	14%	2.81	-17%	2.67	
Venezuela conventional gas	84%	4.18	0.98	3.22	9%	3.78	-13%	2.17	
Venezuela heavy oil	95%	5.00	0.52	5.00	4%	5.00	-5%	0.83	
Alternative Federal Fiscal Systems									
U.S. GOM deepwater 12.5% royalty	55%	2.01	1.11	2.74	11%	3.32	-14%	2.33	
U.S. GOM deepwater 20% royalty	65%	2.76	1.02	3.08	10%	3.68	-17%	2.83	
U.S. GOM deepwater 25% royalty	72%	3.28	0.96	3.31	8%	3.93	-18%	3.00	
U.S. GOM deepwater sliding scale royalty	65%	2.79	1.02	3.08	10%	3.71	-7%	1.17	
U.S. GOM shelf 12.5% royalty	70%	3.13	0.77	4.03	5%	4.58	-13%	2.17	

Fiscal System	Gov Take	Inde x Score	PI	Index Score	IRR	Index Score	Progresivity/ Regressivity	Index Score
U.S. GOM shelf 20% royalty	80%	3.88	0.71	4.27	4%	4.84	-17%	2.83
U.S. GOM shelf 25.5% royalty	85%	4.25	0.66	4.44	3%	5.00	-18%	3.00
U.S. GOM shelf sliding scale royalty	81%	3.92	0.69	4.33	4%	4.87	-6%	1.00
U.S. Wyoming gas 18.75% royalty	71%	3.24	1.14	2.63	13%	3.00	-17%	2.67
U.S. Wyoming gas 20% royalty	72%	3.31	1.12	2.71	13%	3.06	-17%	2.50
U.S. Wyoming gas 25% royalty	77%	3.62	1.05	2.96	11%	3.30	-16%	2.67
U.S. Wyoming gas sliding scale royalty	68%	2.96	1.19	2.45	13%	2.88	-13%	1.83

Source: IHS CERA