THE LEGAL AND ECONOMIC IMPACTS OF GLOBE PILLAR TWO ON SOUTH AFRICAN OIL AND GAS TAXATION

LES INCIDENCES JURIDIQUES ET ÉCONOMIQUES DES RÈGLES GLOBE (PILIER 2) SUR LA FISCALITÉ DU SECTEUR PÉTROLIER ET GAZIER EN AFRIQUE DU SUD

AS IMPLICAÇÕES JURÍDICAS E ECONÔMICAS DAS REGRAS GLOBE (PILAR 2) PARA A TRIBUTAÇÃO DO SETOR DE PETRÓLEO E GÁS NA ÁFRICA DO SUL

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ABSTRACT

This article examines how the OECD/G20 Global Anti-Base Erosion (GloBE) Pillar Two rules affect the legal design and project economics of South Africa's upstream oil and gas tax regime. It addresses a gap in the literature by combining doctrinal analysis of the Global Minimum Tax Act 46 of 2024 with an adaptation of the IMF's Fiscal Analysis of Resource Industries model for a representative project. Under the modelled assumptions, the Qualifying Domestic Minimum Top-up Tax reduces the investor's internal rate of return from 29 per cent to 27 per cent, and its net present value (NPV) from US$4.792 billion to US$4.423 billion, while increasing the NPV of government fiscal receipts excluding state participation by 13.7 per cent. A scenario applying the 2026 Substance-based Tax Incentive Safe Harbour partly restores investor returns. The article concludes that Pillar Two partially neutralises the Tenth Schedule incentives and proposes a policy response for incentive design, legislative oversight and fiscal-stability negotiations.

Keywords: global minimum tax, oil and gas taxation, South Africa

JEL codes: H25, H21, K34, Q35, H87

RÉSUMÉ

Cet article examine l'incidence des règles du Pilier Deux relatives à l'impôt minimum mondial anti-érosion de la base d'imposition (GloBE) de l'OCDE/G20 sur la conception juridique et l'économie des projets du régime fiscal sud-africain applicable à l'amont pétrolier et gazier. Il vise à combler une lacune de la littérature en associant une analyse doctrinale du Global Minimum Tax Act 46 de 2024 à une adaptation du modèle FARI (Fiscal Analysis of Resource Industries) du FMI appliquée à un projet représentatif. Selon les hypothèses retenues dans la modélisation, l'impôt

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complémentaire minimum national qualifié (Qualifying Domestic Minimum Top-up Tax) réduit le taux de rentabilité interne de l'investisseur de 29 % à 27 % et la valeur actuelle nette de 4,792 milliards à 4,423 milliards de dollars américains, tout en augmentant de 13,7 % la valeur actuelle nette des recettes fiscales publiques, hors participation de l'État. Un scénario intégrant le mécanisme de sauvegarde fondé sur la substance (Substance-based Tax Incentive Safe Harbour) prévu pour 2026 permet de restaurer partiellement la rentabilité pour l'investisseur. L'article conclut que le Pilier Deux neutralise partiellement les incitations prévues par la Dixième Annexe (Tenth Schedule) et propose des orientations de politique publique concernant la conception des incitations fiscales, le contrôle législatif et la négociation d'accords de stabilité fiscale.

Mots-clés : impôt minimum mondial, fiscalité pétrolière et gazière, Afrique du Sud

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I. INTRODUCTION

The OECD/G20 Global Anti-Base Erosion (GloBE) Rules under Pillar Two have altered the international environment in which countries design and use corporate income tax incentives. The Rules seek to ensure that large multinational enterprise (MNE) groups are subject to an effective tax rate of at least 15 per cent in each jurisdiction in which they operate. Where a domestic incentive reduces an in-scope MNE group's jurisdictional effective tax rate below that threshold, the benefit may be partially or wholly offset by a top-up tax. This is particularly relevant to capital-intensive extractive industries, in which tax incentives have traditionally been used to compensate investors for high upfront expenditure, geological uncertainty and long development periods.

South Africa's upstream oil and gas sector remains at an early stage of development, and considerable uncertainty persists about both the extent and the commercial recoverability of its offshore and onshore resources. Nevertheless, domestic oil and gas development is frequently viewed as a potential contributor to long-term energy security and economic development. The United States Energy Information Administration has identified substantial shale-gas potential in the Karoo Basin, while offshore exploration has generated expectations of discoveries comparable to those in neighbouring jurisdictions and analogous geological basins (Davis Tax Committee, 2016, p. 7).

The fiscal treatment of domestic oil and gas production must also be considered in the context of South Africa's energy transition. Of the 236.7 terawatt-hours of electricity generated in South Africa in 2022, approximately 80.1 per cent was produced from local coal (Council for Scientific and Industrial Research, 2023, p. 2). Coal has historically supported industrial development, energy security and export earnings

(Minerals Council South Africa, n.d.). More recently, however, domestic and international climate commitments have increased pressure to reduce reliance on coal and expand lower-carbon energy sources. Gas has been presented in South African policy discussions as a possible transition fuel while renewable generation, storage and transmission capacity are developed (National Business Initiative, 2022). It is therefore important that the tax treatment of indigenous oil and gas production neither distorts investment decisions nor undermines the policy objectives that the fiscal regime is intended to support.

South Africa has sought to attract investment into upstream petroleum activities through preferential corporate income tax treatment. Section 26B and the Tenth Schedule to the Income Tax Act 58 of 1962 provide enhanced deductions for qualifying exploration and post-exploration capital expenditure and special treatment for assessed losses. The Tenth Schedule also permits the Minister of Finance to conclude fiscal stability agreements (FSAs) preserving specified aspects of the corporate income tax treatment applicable to an oil and gas company for the duration of the relevant oil and gas right. These measures were intended to recognise the high costs and risks associated with petroleum exploration and development and to improve the prospective returns of investment in a relatively undeveloped sector.

Pillar Two may, however, reduce the economic value of these incentives. Where the enhanced deductions in the Tenth Schedule reduce the GloBE effective tax rate of an in-scope MNE group below 15 per cent, a top-up tax may arise, despite South Africa's ordinary corporate income tax rate of 27 per cent. The incentive may therefore continue to reduce ordinary corporate income tax without producing an equivalent improvement in the investor's overall after-tax return. This creates a potential divergence between the legal form of the incentive, its treatment under the GloBE Rules, and its actual effect on project economics.

South Africa committed to the OECD/G20 Inclusive Framework's two-pillar solution on 8 October 2021 (Organisation for Economic Co-operation and Development, 2021). The Global Minimum Tax Act 46 of 2024 (GMT Act) and the Global Minimum Tax Administration Act 47 of 2024 (GMT Admin Act) subsequently introduced an Income Inclusion Rule (IIR) and a Qualifying Domestic Minimum Top-up Tax (QDMTT), with effect from 1 January 2024. South Africa elected not to implement the Undertaxed Profits Rule (UTPR). The legislation incorporates specified elements of the GloBE Model Rules and related Administrative Guidance by reference. On 5 January 2026, the Inclusive Framework published a further package addressing, among other matters, additional safe harbours, substance-based tax incentives

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and a Side-by-Side System (Organisation for Economic Co-operation and Development, 2026).

These developments raise both legal and economic questions. Legally, the incorporation of evolving international tax rules into domestic legislation must comply with the constitutional requirements governing the imposition and amendment of national taxes. Economically, the QDMTT may alter the value of the Tenth Schedule incentives and the distribution of project returns between the investor and the state. It may also affect the operation of FSAs concluded before the introduction of the global minimum tax.

Existing literature considers the design of extractive-industry fiscal regimes, the treatment of tax incentives under Pillar Two and the domestic implementation of the GloBE Rules. These strands have, however, largely developed separately. Limited attention has been given to the combined constitutional, economic and fiscal-stability implications of Pillar Two for a sector-specific tax regime in an African source jurisdiction. This article addresses that gap by asking: How does South Africa's implementation of GloBE Pillar Two affect the legal design, project economics and policy operation of its upstream oil and gas fiscal regime?

The article has three objectives. First, it examines whether the mechanism through which the GloBE Model Rules and Administrative Guidance are incorporated into South African law is consistent with the constitutional requirements governing Money Bills and national taxation. Second, it uses an adaptation of the International Monetary Fund's Fiscal Analysis of Resource Industries (FARI) model to quantify the effect of the QDMTT and the 2026 Substance-based Tax Incentive Safe Harbour on a representative South African offshore oil and gas project. Third, it considers the implications for the design of upstream tax incentives and the interpretation and negotiation of FSAs.

By combining doctrinal legal analysis with project-level fiscal modelling, the article integrates questions that are usually examined separately. It contributes to the literature by linking constitutional control over taxation to the economic treatment of sector-specific incentives under Pillar Two and provides a basis for assessing whether the Tenth Schedule incentives continue to achieve their intended purpose in a post-Pillar Two environment.

The remainder of the article is structured as follows. Section II examines the constitutional implications of South Africa's implementation of the GloBE Rules. Section III explains the relevant features of the Tenth Schedule, the GloBE computation and the FARI methodology, and presents the modelled results. Section IV considers the implications for the design of tax incentives, while section V evaluates the potential

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application of FSAs. Section VI concludes the article and makes policy recommendations.

II. CONSTITUTIONALITY OF GLOBE PILLAR TWO

The Constitution of the Republic of South Africa, 1996 (Constitution) is South Africa's supreme law, and constitutional supremacy is a founding value of the South African state (Constitution, ss. 1(c) and 2). The Constitution therefore provides the ultimate standard against which all exercises of public power, including the power to levy taxes, must be assessed. The power to tax is a distinct fiscal power of the state and must be exercised within the substantive and procedural limits imposed by the Constitution (Brennan & Buchanan, 2000). A national tax must accordingly be authorised by constitutionally compliant legislation. A Bill that imposes, abolishes or reduces a national tax, or grants an exemption from it, is a 'Money Bill' under section 77(1) of the Constitution. The Minister of Finance must introduce such a Bill in the National Assembly, after which it is considered by the National Assembly and the National Council of Provinces in accordance with section 75, before being submitted to the President for assent (Constitution, ss. 73(2), 75 and 77). The Constitutional Court has distinguished the appropriation of tax revenue from revenue raised only incidentally through regulation (*South African Reserve Bank v Shuttleworth* 2015 (5) SA 146 (CC) para. 46).

The GMT Act expressly incorporates by reference the GloBE Model Rules and GloBE Administrative Guidance issued by the OECD, subject to the exclusions contained in the GMT Act (GMT Act, s. 23; OECD, 2021, 2023). Oil and gas companies forming part of an in-scope MNE group (generally one with consolidated revenue of at least €750 million) must therefore apply those materials when determining their South African minimum top-up tax. The constitutional concern is that subsequent changes to the implementation and application of GloBE Pillar Two may be transmitted into South African tax law through the decisions of an independent international standard-setting body, using the mechanism in section 23 of the GMT Act, rather than through a fresh Money Bill initiated and debated in Parliament.

The use of evolving external standards is not entirely without precedent in South African tax legislation. The Income Tax Act already incorporates concepts or standards developed by external bodies whose content may change over time. For example, the definition of 'permanent establishment' in section 1 draws on the concept used in South Africa's tax treaties and the OECD Model Tax Convention, while sections 24JB and 29A refer to definitions and amounts determined in accordance with International Financial Reporting Standards (IFRS). In these instances, Parliament has accepted that technical standards may

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evolve without simultaneous amendment of the primary legislation, while retaining the power to amend the Act if it considers a subsequent development inappropriate.

The GMT Act was originally enacted as a Money Bill under the section 75 procedure and its initial promulgation is therefore constitutionally compliant. The more difficult issue concerns subsequent changes to the GloBE Model Rules or GloBE Administrative Guidance that are given domestic effect through incorporation by reference and gazetting. On one view, a change that materially affects the tax base or the amount of tax payable, without a fresh parliamentary process, may sit uneasily with the constitutional scheme for Money Bills and the principle that Parliament should determine the incidence of taxation. On another view, ambulatory references to evolving international and accounting standards are constitutionally permissible in technically complex fields, particularly where Parliament has enacted the underlying statutory framework and remains able to intervene. Whether a particular change incorporated through the GMT Act would withstand constitutional scrutiny therefore depends on its nature and magnitude and on how a court characterises Parliament's decision to rely on an evolving international standard.

The January 2026 Side-by-Side Package and the Substance-based Tax Incentive Safe Harbour illustrate this issue because their inclusion may affect the amount of tax collected under the GMT Act. It remains to be seen whether the Minister of Finance will gazette their inclusion in accordance with section 23 of the GMT Act.

III. ECONOMIC IMPACT OF GLOBE PILLAR TWO

(a) Tenth Schedule

Section 26B(1) of the Income Tax Act provides that the taxable income of any oil and gas company is determined in accordance with the provisions of the Income Tax Act, subject to the specific provisions contained in the Tenth Schedule, which also provides for FSAs (Davis Tax Committee, 2016, p. 45). Paragraph 5(1) of the Tenth Schedule provides that, for the purposes of determining the taxable income of an oil and gas company during a year of assessment, there shall be allowed as deductions from its oil and gas income all expenditure and losses actually incurred in that year. Paragraph 5(2) of the Tenth Schedule allows a deduction of 100 per cent of capital expenditure actually incurred in a year of assessment in respect of exploration activities, and a deduction of 50 per cent of capital expenditure incurred after the exploration phase. In effect,

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capital expenditure in respect of exploration[1] receives a 200 per cent 'super deduction' and capital expenditure incurred post-exploration receives a 150 per cent super deduction, which has been highlighted as a key feature of the South African upstream tax regime (Futter, 2010, pp. 42–43). No deduction may, however, be claimed under paragraph 5(2) of the Tenth Schedule in respect of expenditure incurred for the acquisition of an oil and gas right.

(b) Tax assessed losses

These additional tax allowances for capital expenditure generate significant tax assessed losses for an oil and gas company. There is no ringfencing between mines, and tax assessed losses generated on one oil and gas mining right can be offset against taxable income derived from another oil and gas mining right that is held by the same oil and gas company. Furthermore, tax assessed losses can be carried forward indefinitely for offset against oil and gas income until fully utilised.

With effect from years of assessment commencing on or after 1 March 2023, the corporate tax rate in South Africa was reduced from 28 per cent to 27 per cent. As part of the corporate income tax package to broaden the tax base, tax losses carried forward (under section 20 of the Income Tax Act) may only be offset against 80 per cent of taxable income, subject to a ZAR 1 million *de minimis* provision.

Oil and gas companies benefit from the reduction in the corporate tax rate but are not subject to the tax assessed loss limitation, as the tax treatment of tax assessed losses for oil and gas companies is dealt with in the Tenth Schedule and not under section 20 of the Income Tax Act.

(c) GloBE computation

As discussed in section II, the GMT Act is a direct implementation of the GloBE Model Rules and the accompanying GloBE Administrative Guidance issued by the OECD (OECD, 2021, 2023). Under the GloBE Model Rules, the starting point for the computation of top-up taxes is the financial accounting net income or loss of each constituent entity of an MNE group, determined under the financial accounting standard used by the ultimate parent entity (UPE) in preparing the consolidated financial statements for the fiscal year (see Art. 3.1.2). For South African-headquartered MNE groups, this will generally be IFRS. The financial accounting net income or loss is then adjusted to determine the GloBE income or loss of each constituent entity. Article 3.2.1 identifies the principal permanent differences to be removed, including

[1] In the context of exploration expenditure, it is understood that the South African Revenue Service (SARS) accepts that all expenditure incurred by a company during its exploration phase will be deductible unless it is overhead expenditure of a corporate (as opposed to operational) nature.

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net tax expense, excluded dividends, excluded equity gains and losses, gains and losses from the disposition of assets and liabilities, policy-disallowed expenses, certain stock-based compensation, asymmetric foreign currency gains and losses, prior-period errors and changes in accounting principles, and accrued pension expenses. Temporary differences arising where income or loss is recognised in different periods for financial accounting and tax purposes are addressed through deferred tax adjustments, subject to safeguards that generally limit the recognition of deferred tax assets and liabilities to amounts measured at the minimum rate (Futter, 2024; OECD, 2021, Art. 4.4).

Under the GloBE Model Rules, the effective tax rate (ETR) for an MNE in each jurisdiction is calculated as the sum of the adjusted covered taxes of all constituent entities located in that jurisdiction divided by their net GloBE income for the fiscal year. Where this jurisdictional ETR is below the global minimum rate of 15 per cent, the shortfall is the top-up tax percentage (OECD, 2021, Art. 5.2.1), which is applied to the jurisdiction's excess profits to determine the amount of top-up tax. Excess profits are defined as the net GloBE income for the jurisdiction reduced by the substance-based income exclusion (SBIE) (OECD, 2021, Art. 5.3.1). The SBIE operates to exclude from the top-up tax calculation a fixed return on real economic activity by carving out, for each constituent entity (other than investment entities), 5 per cent of the sum of its eligible payroll costs and eligible tangible assets in that jurisdiction. The jurisdictional top-up tax is then calculated by multiplying the top-up tax percentage by these excess profits (OECD, 2021, Art. 5.2.2).

The January 2026 Side-by-Side Package introduces a Substance-based Tax Incentive Safe Harbour. For purposes of the analysis in this article, the Safe Harbour is applied as a separate modelling scenario relevant to the South African oil and gas industry, while its precise domestic application and timing depend on the operation of the GMT Act, as discussed in section II. The Safe Harbour allows MNEs to add qualified tax incentives (QTIs) to adjusted covered taxes for entities in a jurisdiction, potentially reducing or eliminating the top-up tax. The addition is subject to a substance cap equal to 5.5 per cent of the higher of (1) eligible payroll costs; or (2) the depreciation and depletion recorded in respect of eligible tangible assets located in the jurisdiction.

(d) FARI model

Proper evaluation of fiscal regimes for extractive industries requires economic and financial analysis at the project level, and Fiscal Analysis of Resource Industries (FARI) is an analytical tool that allows such fiscal regime design and evaluation (IMF, n.d.). The FARI framework has been primarily used in the IMF's Fiscal Affairs Department's

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advisory work on fiscal regime design: it supports calibration of fiscal parameters, sensitivity analysis and international comparisons (Luca & Mesa Puyo, 2016). An adaptation of the 2023 FARI methodology[2] was used to demonstrate the economic impact of GloBE Pillar Two on a South African oil and gas mining right.

Table 1: *Key assumptions used in FARI modelling of a representative South African offshore oil and gas project*

Description	Value	Measure
Model first calendar year	2024	Calendar year
Selected project	800MMbl _B	Option
Oil price	81.23	US$2024/bbl
Economic limit test applies	Yes	Option
Inflation rate	2	%
Discount rate	10	% real
Scope 1: Upstream carbon intensity	10	g CO2 eq/MJ
Scope 3: Emissions per barrel of oil consumed	0.4300	t CO2/barrel
BoE energy content	6 120	MJ/BoE
Fiscal regime selected	Royalty + CIT	Option
Royalty rate	5	%
Royalty base (net/gross)	gross	Switch
Royalty, CIT and RRT deductible	yes	Option
Tax per ton of CO2 eq emitted in start year	8	US$ / t CO2 eq
Carbon tax imposed on scope 3 emissions levied on investor	no	Option
Carbon tax cost recoverable and CIT and RRT deductible	yes	Option
CIT rate	27	%
Exploration costs depreciated or deducted immediately	expensed	Option

[2] The 2023 Petroleum FARI model is found here: https://www.imf.org/en/topics/fiscal-policies/fiscal-analysis-of-resource-industries.

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Description	Value	Measure
Depreciation starts from	spend	Option
Development costs and replacement capital depreciation	1	Year
Dividend withholding tax	0	%
Interest withholding tax	0	%
State participation	20	%
SOC meets exploration costs	no	Option
SOC meets development costs	yes	Option
Carried interest: Proportion of SOC negative cash flows financed by IOC	100	%
Carried interest: financing by IOC till prod. year	1	Year
Carried interest: Proportion SOC cash flows used to repay	100	%
Proportion development costs borrowed	70	%
Repayment period (yrs after financing period)	10	Year
Loan real interest rate	3	%

Source: *Authors' assumptions and calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

Table 1 summarises the assumptions used to calibrate the 2023 FARI petroleum model. The underlying project profile was drawn from the IMF model and updated for a 2024 start date and oil price, while the fiscal assumptions were adapted to the South African regime as set out in Table 1. The project is used as an illustrative representative scenario rather than as a forecast of a particular South African field. The pre- and post-GloBE scenarios hold the non-tax project assumptions constant so that the effect of the relevant tax measures can be isolated.

The GloBE income used in the analysis to derive the post-GloBE Pillar Two results in Figure 3 and Table 3 limits the recognition of the additional tax uplifts under the Tenth Schedule to the extent permitted under the GloBE deferred-tax rules. Accordingly, the deferred-tax amount included in Adjusted Covered Taxes was calculated at the 15 per cent minimum rate in respect of the actual capital expenditure incurred in the exploration and development of the field. Net GloBE

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Income was reduced by the SBIE, calculated as 5 per cent of payroll costs and tangible assets, to derive excess profit. As the jurisdictional ETR was zero during the first three years of production, the top-up tax percentage was 15 per cent and was applied to excess profit while the project remained in an assessed-loss position due to the additional tax uplifts.

For the Substance-based Tax Incentive Safe Harbour, adjusted covered taxes were increased by an amount calculated as 5.5 per cent of the greater of eligible payroll costs or the depreciation and depletion expense relating to eligible tangible assets. The jurisdictional ETR was then recalculated, and the top-up tax percentage (being the difference between the 15 per cent minimum rate and the revised ETR) was applied to excess profit as determined in the post-GloBE Pillar Two calculations. As the tax value of the additional Tenth Schedule uplifts exceeded the substance cap, the addition to adjusted covered taxes was limited to the amount of the substance cap and the excess was disregarded.

Scenario	Oil price	Real NPV for IOC
Base 2024	US$81.23	US$4,792.37 million
Oil price -40	US$41.23	US$171.91 million
Oil price +40	US$121.23	US$9,261.95 million

The model outcomes will change in terms of net present value (NPV) and IRR for the investor (IOC) and in terms of government take with fluctuations in oil price and corporate tax rate. Where all assumptions remain constant with the exception of the commodity price, the breakeven for projects is at an oil price of US$39.80/bbl. At an oil price below US$39.80/bbl the project will not receive FID as it does not achieve its investment hurdle rate (namely a WACC discount rate of 10 per cent) and the hydrocarbons become stranded. Any oil price above US$39.80/bbl generates a positive NPV and, assuming that there are no other competing projects in the IOC's capital allocation portfolio with a higher return, the project would likely receive FID and proceed with the field development. Where all assumptions remain constant with the exception of the corporate tax rate, any reduction in the corporate tax rate by 1 per cent equates to an increase in IRR of 0.1 percentage points and NPV of US$67 million.

Figure 1, Figure 2 and Table 2 present the pre-GloBE Pillar Two outcomes, including the project's IRR, NPV and the distribution of economic rent between government and the investor. Figure 1 shows that the maximum cash flow is reached in year 7, with the project commencing production in year 5. Only in year 9 does the cash flow

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for the project become positive. There is a cash flow plateau in years 12 to 19, corresponding to the production profile for the field, which begins to taper from year 20 as production from the field declines while operating costs remain high in comparison. In year 31, decommissioning and abandonment of the field commences up to year 36. At this time the mine closure certificate would be sought, subject to statutory monitoring for latent oil seepage post-decommissioning. Table 2 reflects that the IRR for the IOC is 29 per cent with a NPV of US$4 792 million.

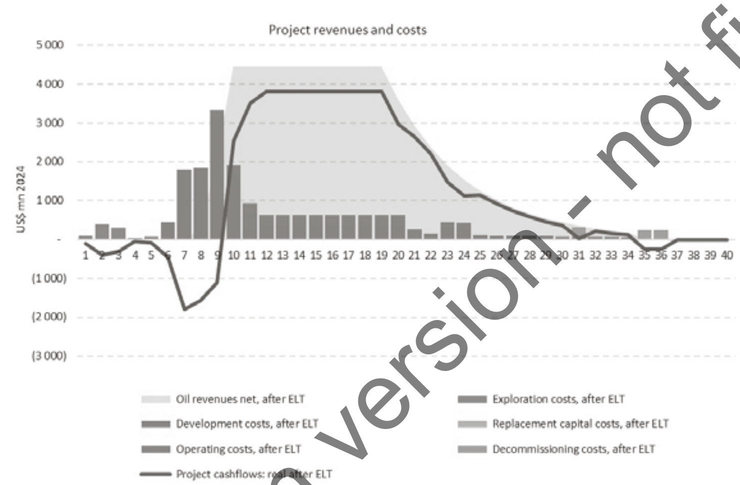

Figure 1: *Pre-GloBE Pillar Two FARI project revenues, costs and real cash flow*

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

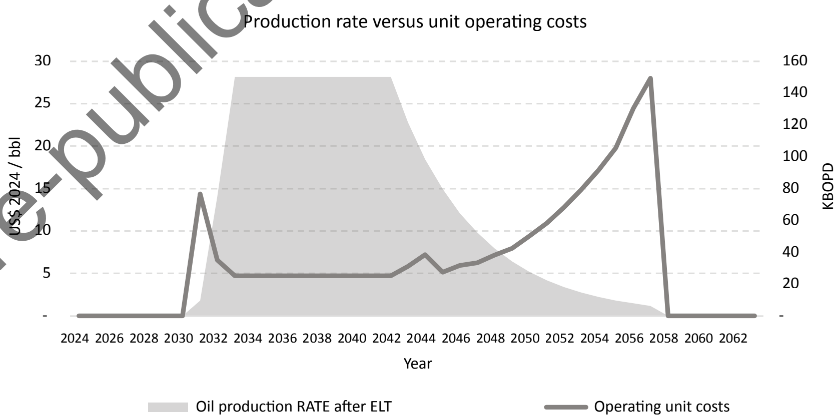

Figure 2: *Production rate versus unit operating costs to explain cash flow*

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

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Table 2: *Participant cash flows in the pre-GloBE Pillar Two scenario (US$ millions)*

Participant cashflows	**IRR real**		**US$ mn 2024**		**US$ mn NPV 1.0 real**	
	full-cycle	FID forward	full-cycle	FID forward	full-cycle	FID forward
Project	28%	40%	45 370	46 210	8 718	13 849
IOC	29%	72%	23 667	24 507	4 792	8 102
Lender	3%	3%	896	896	(604)	(885)
IOC + Lender	22%	32%	24 563	25 403	4 188	7 218
Government excl. participation			12 266	12 266	2 688	3 935
State participation	40%	40%	8 526	8 526	1 707	2 500
Government including participation			20 793	20 793	4 395	6 435
Government share (AETR)			46%	45%	50%	46%
Government share of project benefits			35%	35%	29%	29%

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

Figure 3 and Table 3 show the corresponding results once the QDMTT is applied in accordance with the GloBE Model Rules. Figure 3 shows a similar cash flow profile to Figure 1, with the same rationale for the movement in the cash flow. Table 3 reflects that there is a reduction in the IRR for the IOC to 27 per cent, and a decline in the NPV to US$4 423 million. These outputs are drawn on in section V when assessing whether the adverse economic impact of GloBE Pillar Two meets the 'materiality' threshold in paragraph 8(6) of the Tenth Schedule.

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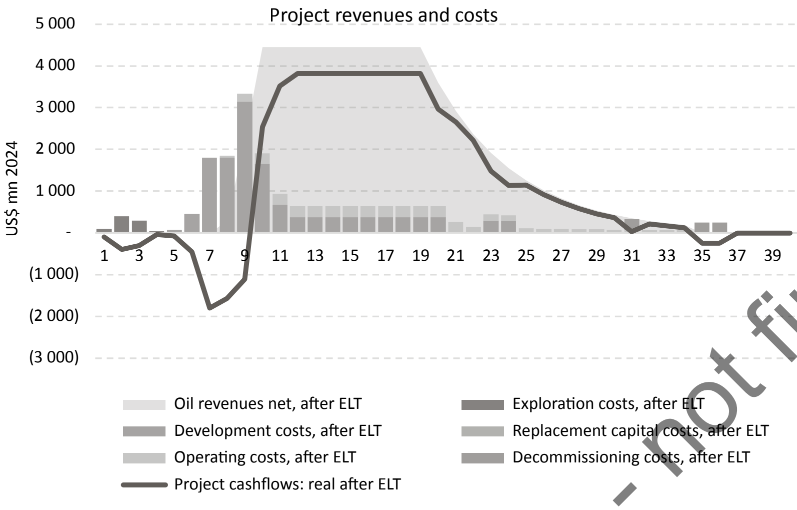

Figure 3: *Post-GloBE Pillar Two project revenues, costs and real cash flow after application of the QDMTT*

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

Table 3: *Participant cash flows in the post-GloBE Pillar Two scenario (US$ millions)*

Participant cashflows	**IRR real**		**US$ mn 2024**		**US$ mn NPV 1.0 real**	
	full-cycle	FID forward	full-cycle	FID forward	full-cycle	FID forward
Project	28%	40%	45 370	46 210	8 718	13 849
IOC	27%	64%	23 432	24 272	4 423	7 562
Lender	3%	3%	896	896	(604)	(885)
IOC + Lender	21%	30%	24 328	25 168	3 819	6 677
Government excl. participation			12 501	12 501	3 057	4 476
State participation	40%	40%	8 526	8 526	1 707	2 500
Government including participation			21 027	21 027	4 765	6 976
Government share (AETR)			46%	46%	55%	50%

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Participant cashflows	**IRR real**		**US$ mn 2024**		**US$ mn NPV 1.0 real**	
Government share of project benefits			35%	35%	32%	32%

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

Figure 4 and Table 4 reflect the outcome of the Substance-based Tax Incentive Safe Harbour on the post implementation in the GloBE Model Rules. Here Figure 4 reflects a comparable cash flow to the cash flow profile to Figure 2 with the same rationale for the movement in the cash flow. Table 4 reflects that there remains a reduction in the IRR for the IOC to 28 per cent and a decline in the NPV to US$4 560 million compared to the pre-GloBE Pillar Two FARI model outputs.

The FARI modelling results in Figures 3 and 4 and Tables 3 and 4 are illustrative of the selected representative project and should not be generalised to marginal or higher-cost projects, for which a comparable tax effect may have a more significant influence on the investment decision.

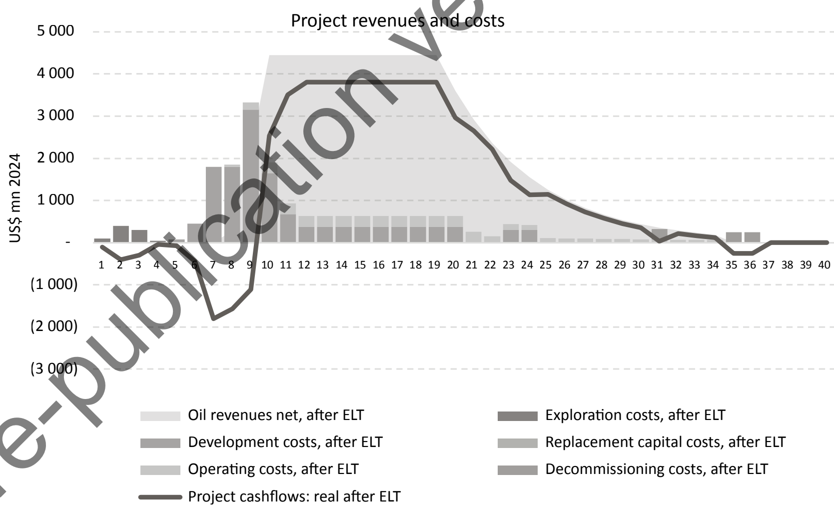

Figure 4: *Post-GloBE Pillar Two project revenues, costs and real cash flow after application of the 2026 Substance-based Tax Incentive Safe Harbour*

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

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Table 4: *Participant cash flows in the post-GloBE Pillar Two scenario with Substance-based Tax Incentive Safe Harbour (US$ millions)*

Participant cashflows	**IRR real**		**US$ mn 2024**		**US$ mn NPV 1.0 real**	
	full-cycle	FID forward	full-cycle	FID forward	full-cycle	FID forward
Project	28%	40%	45 370	46 210	8 718	13 849
IOC	28%	67%	23 765	24 605	4 560	7 762
Lender	3%	3%	896	896	(604)	(885)
IOC +Lender	21%	31%	24 660	25 500	3 956	6 878
Government excl. participation			12 169	12 169	2 920	4 275
State participation	40%	40%	8 526	8 526	1 707	2 500
Government including participation			20 695	20 695	4 627	6 775
Government share (AETR)			46%	45%	53%	49%
Government share of project benefits			35%	35%	31%	31%

Source: *Authors' calculations using the IMF Petroleum FARI model (International Monetary Fund, n.d.)*

IV. OECD POSITION ON TAX INCENTIVES

According to the OECD, the introduction of GloBE Pillar Two presents an important opportunity for jurisdictions to reconsider the design and use of CIT incentives (OECD, 2022). Where such incentives reduce the jurisdictional ETR of in-scope MNE groups below the global minimum of 15 per cent, the benefit of the incentive is at least partially clawed back through top-up taxes under the GloBE rules. In these circumstances, the incentive may no longer improve the after-tax return to the investor but may still erode the host country's tax base. The OECD therefore cautions that broad, profit-based CIT incentives (such as tax holidays or very low statutory rates) are likely to become ineffective or 'wasted' in a post-Pillar Two environment and should be priority candidates for reform (OECD, 2021, 2022). By contrast, expenditure-based incentives that reduce the cost of real investment, such as accelerated depreciation

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or immediate expensing, are generally less affected by the GloBE rules because timing differences are accommodated through deferred tax adjustments, and the SBIE provides a carve-out for a fixed return on tangible assets and payroll (OECD, 2021). However, the uplift component of the Tenth Schedule super-deductions is not merely a timing benefit: because it permits deductions exceeding the underlying expenditure, it produces a permanent reduction in taxable income and is therefore more exposed to top-up tax, subject to any relief under the 2026 Substance-based Tax Incentive Safe Harbour.

These concerns are accentuated in the extractive industries. The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development and the United Nations Economic Commission for Africa note that mining tax incentives in Africa have often led to substantial revenue losses while playing a limited role in driving investment decisions, particularly where investment is tied to immobile resources such as minerals and hydrocarbons (Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development & United Nations Economic Commission for Africa, 2025). In many instances, investments would likely have proceeded even in the absence of generous tax holidays or rate reductions, meaning that incentives primarily transfer value from citizens to investors. The hydrocarbon potential of a country, together with the accessibility and commercial viability of extraction, are typically stronger determinants of investment than the detailed tax treatment of production. However, the taxation of oil and gas production may become a deciding factor where projects with broadly similar reserve potential compete for capital. In this regard, South Africa competes regionally with Namibia and Mozambique for foreign direct investment (FDI) from large multinationals such as Shell, TotalEnergies, QatarEnergy and Chevron, and its comparatively favourable CIT treatment of upstream activities has been used as a tool to attract and retain investment in South African oil and gas rights.

The Petroleum Agency of South Africa (PASA) estimates that South Africa has around 27 billion barrels and 60 trillion cubic feet of prospective oil and gas resources (Central Energy Fund, 2021). A case study conducted by PASA of the exploration and development of discoveries in Block 11B/12B (located in the Bredasdorp Basin off the southern coast of South Africa) suggests that development of this field could make a significant positive contribution to GDP, employment, poverty alleviation, tax collection and the balance of payments (Tukwayo, 2022). The use of CIT incentives in the oil and gas sector has therefore been justified not only by reference to revenue generation, but also by reference to the broader socio-economic potential of domestic oil and gas production in South Africa. The generous super-deductions in the Tenth Schedule were designed to offset high upfront capital costs

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and geological risk, thereby improving project NPVs and encouraging investment in a nascent upstream sector.

The global minimum tax changes this calculus. For in-scope MNEs, the Tenth Schedule incentives may reduce ordinary corporate income tax without producing an equivalent improvement in the investor's after-tax return, because part of the benefit may be recaptured through South Africa's QDMTT. The modelled results in section III illustrate this effect: the QDMTT increases government fiscal receipts while reducing the IOC's NPV and IRR. If South Africa did not impose a QDMTT, the corresponding top-up tax could instead be collected by another jurisdiction under an IIR or the UTPR (Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development & United Nations Economic Commission for Africa, 2025; OECD, 2022). The policy question is therefore whether the incentives continue to influence investment decisions once their benefit is partly neutralised under Pillar Two.

Against this background, South Africa will need to reconsider the balance of tax and non-tax instruments used to support upstream oil and gas projects. One option is to reorient the incentive mix away from broad profit-based CIT concessions and towards more targeted, time-bound and transparent measures that are aligned with real economic substance, such as accelerated deductions for qualifying tangible assets that are consistent with the SBIE, or carefully designed qualified refundable tax credits. Another option, which has been mooted in policy discussions, would be to adjust other elements of the fiscal package, such as royalties, state carried participation or regulatory obligations, rather than further reducing CIT. However, the African experience suggests that any new incentives, whether tax or non-tax, should be subject to rigorous cost–benefit analysis, limited in duration, and closely monitored to ensure that they achieve specific policy objectives without unnecessarily eroding the tax base (Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development & United Nations Economic Commission for Africa, 2025). In the context of GloBE Pillar Two, these considerations are no longer merely questions of tax policy design, but are central to preserving South Africa's primary taxing rights over rents from its oil and gas resources.

The modelled results broadly support the concerns identified in the OECD and African extractive-industry literature, but also qualify them. Consistent with the OECD's analysis, the QDMTT reduces the value of a corporate income tax incentive where that incentive lowers the jurisdictional effective tax rate below 15 per cent. The results also demonstrate that the intended investor benefit may be partly neutralised: in the South African QDMTT scenario, part of the ordinary corporate income tax benefit is recaptured domestically as top-up tax, while the

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investor receives less than the nominal value of the incentive. However, the modelled Substance-based Tax Incentive Safe Harbour partially restores the investor benefit, indicating that the effect of Pillar Two depends on the design of the incentive and the extent of the available substance-based relief. The appropriate policy response is therefore not necessarily the wholesale withdrawal of upstream incentives, but a project-level assessment of which measures continue to influence investment while preserving South Africa's taxing rights.

V. FISCAL STABILITY AGREEMENTS

Paragraph 8 of the Tenth Schedule to the Income Tax Act authorises the South African Minister of Finance, after consultation with the Minister of Mineral Resources and Energy, to conclude FSAs with oil and gas companies. In essence, an FSA secures the application of the Tenth Schedule as it stands on the date of the agreement for the full term of the relevant oil and gas right, thereby insulating the company from subsequent adverse changes to those provisions (Davis Tax Committee, 2016, p. 49).

Paragraph 8(6) of the Tenth Schedule provides:

> If the State fails to comply with the terms of the fiscal stability agreement and that failure has a material adverse economic impact on the taxation of income or profits of the oil and gas company that is party to the fiscal stability agreement, the oil and gas company is entitled to compensation for the loss of market value caused by that failure (and interest at the prescribed rate) or to an alternative remedy that otherwise eliminates the full impact of that failure.

The Tenth Schedule FSA is a freezing agreement. The FSA guarantees the CIT treatment of oil and gas companies under the Tenth Schedule. But the FSA offers limited protection, as the FSA (1) does not encompass all taxes levied on an oil and gas company; (2) does not prevent the introduction of new taxes; and (3) does not prevent amendments in the body of the Income Tax Act (Davis Tax Committee, 2016, p. 66).

The adverse economic impact of GloBE Pillar Two may not necessarily satisfy the requirement of materiality. Under the modelled assumptions, the application of the QDMTT reduces the IOC's NPV by US$369 million (US$4 792 million minus US$4 423 million), or approximately 7.7 per cent, and its full-cycle IRR by two percentage points. These results establish a measurable adverse economic effect but do not, on their own, determine whether the materiality requirement in paragraph 8(6) is satisfied. The representative project nevertheless remains substantially above the assumed investment hurdle rate, which weighs against, without conclusively excluding, a finding of materiality.

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Whether an oil and gas company could invoke an FSA would ultimately depend on the effect on market value and the project-specific and contractual circumstances.

Furthermore, the Global Minimum Tax is a new tax type; it is not exclusively levied on the oil and gas industry and does not form part of the Tenth Schedule. It is also questionable whether GloBE Pillar Two constitutes 'taxation of income or profits', as it is a top-up tax on the differential between the GloBE ETR of constituent entities in a country and the global minimum tax rate of 15 per cent. The top-up tax is levied on GloBE excess profits (excluding SBIE carveouts). If South Africa failed to collect the top-up tax under the QDMTT, it would be collected in a country outside of South Africa (either the home country under an IIR or some third-party country in the MNE group under the UTPR). It can accordingly be argued that the adverse economic impact is not due to South Africa's non-compliance with the FSA, but is an extra-territorial impact of GloBE Pillar Two implementation over which South Africa has no control; arguably, there is no obligation on South Africa to compensate the oil and gas company under the FSA.

VI. CONCLUSIONS AND RECOMMENDATIONS

South Africa, as a signatory to the Inclusive Framework, enacted the GMT Act to incorporate the GloBE Model Rules and GloBE Administrative Guidance directly into its domestic legislation. The initial implementation of GloBE Pillar Two as a 'Money Bill' is constitutionally sound, but future changes to the GloBE Model Rules and GloBE Administrative Guidance by the OECD may be challenged as invalid where these are automatic (extra-territorial) amendments to the domestic legislation.

On 30 September 2023, the African Tax Administration Forum (ATAF, 2023) released its revised *Suggested Approaches to Drafting Domestic Minimum Top-up Tax (DMTT) Legislation*. The publication presents three alternative drafting models: brief primary legislation supported by detailed regulations; incorporation of the GloBE Rules by reference, subject to the modifications required for a DMTT; and a long-form model containing the substantive rules in primary legislation. In light of the constitutional concerns identified in this article, South Africa could consider whether the long-form approach, or another mechanism providing equivalent parliamentary scrutiny, would provide stronger domestic oversight of material changes to the tax than predominant reliance on incorporation by reference. Where such changes require amendment of the primary legislation, they would be considered through the parliamentary procedure applicable to Money Bills.

The modelled findings indicate that, for the representative project, South Africa's statutory corporate income tax rate of 27 per cent does

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not prevent a QDMTT from arising where the enhanced deductions available under the Tenth Schedule reduce the GloBE effective tax rate below 15 per cent. In the representative project, application of the QDMTT reduces the IOC's internal rate of return from 29 per cent to 27 per cent and its NPV from US$4 792 million to US$4 423 million. In the modelled Substance-based Tax Incentive Safe Harbour scenario, the internal rate of return increases to 28 per cent and the NPV to US$4 560 million. The Safe Harbour therefore partially, but not fully, restores the economic benefit lost through the QDMTT.

Conceptually, this article links constitutional control over the incorporation of international tax standards with the effectiveness of domestic tax incentives and fiscal stability arrangements. Methodologically, it combines doctrinal legal analysis with project-level FARI modelling. Its policy and practical contribution lies in demonstrating how National Treasury, SARS, investors and parties negotiating FSAs may evaluate the actual, rather than nominal, value of upstream tax incentives in a post-Pillar Two environment.

The resulting policy response should be sequenced. In the short term, National Treasury and SARS should assess the treatment of the Tenth Schedule deductions under the QDMTT and the Substance-based Tax Incentive Safe Harbour and provide sufficient guidance to permit consistent application by taxpayers. In the medium term, National Treasury and the department responsible for mineral and petroleum resources should review whether the existing corporate income tax incentives continue materially to influence investment decisions by in-scope MNE groups. This review should use project-level cost–benefit analysis and consider whether more targeted, transparent and time-bound tax or non-tax measures would preserve investment value more effectively. Future FSAs should also address Pillar Two expressly, including the taxes covered, the meaning and measurement of material adverse economic impact, and the allocation of risks arising from an IIR or the UTPR imposed outside South Africa. In the longer term, South Africa could, through ATAF and the Inclusive Framework, advocate for adjustment of the existing substance-based relief if evidence across a wider range of capital-intensive projects demonstrates that the present caps systematically fail to recognise genuine economic substance. A sector-specific carve-out should be considered only if broader evidence establishes that less distortive alternatives are inadequate.

The Tenth Schedule offers fiscal stability to oil and gas companies, but it is questionable whether oil and gas companies would have recourse to government under the FSAs. It is, nonetheless, proposed that consideration be given to whether the top-up tax will be recognised as a 'tax on income or profits' as would qualify for relief from double taxation under the tax treaties or a foreign tax credit under the domestic

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tax legislation when collected under an IIR or the UTPR in a foreign jurisdiction. This examination is beyond the scope of this article.

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