An Economic Analysis of the GNWT's Approach to the Mining Regime Fiscal Review

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RESOURCES for DEVELOPMENT CONSULTING

About Resources for Development Consulting

Resources for Development Consulting (R4D – www.res4dev.com) is an economic and policy research firm founded in 2011 with the mandate to assist governments and communities in securing a fair share of mineral and petroleum wealth. We assist in the design of fiscal regimes; the negotiation and renegotiation of contracts; the forecasting of future government revenues; and the monitoring and auditing of production, sales, and project costs to secure government revenues in practice. In order to provide our clients with exceptional value, R4D engages world-class industry experts. However, to avoid any risk of a conflict of interest, we never work for oil, gas, or mining companies. We provide capacity building services designed to enable non-specialists to play an active and effective role in defending their revenue interests.

Mining Economic Team

Don Hubert is the founder and president of R4D. He is a specialist in the economic analysis of mining and oil and gas projects with an emphasis on maximizing the revenues that flow to governments and to communities. He has conducted economic analyses of petroleum and mining projects in Canada and in more than twenty other countries. He has acted as a financial advisor to First Nations communities in Canada in negotiating revenue sharing agreements for infrastructure and extractive sector projects. Hubert is the author of *Many Ways to Lose a Billion: How Governments Fail to Secure a Fair Share of Natural Resource Wealth*. Previously, he was a member of the executive group in the Canadian Department of Foreign Affairs and an Associate Professor of Public and International Affairs at the University of Ottawa. He holds a PhD from the University of Cambridge, UK.

Paul Olmsted has been providing services to R4D since 2015. He has been an executive in the mining industry for 20 years and active in the sector for more than 30 years. He is current Chief Financial Officer for Superior Gold Inc, a Canadian gold mining company with multiple assets in Western Australia. Olmsted has been instrumental in the technical evaluation, financial analysis, and structuring for corporate transactions totalling nearly $10 billion. He has developed R4D's economic models for the Pueblo Viejo gold mine (Dominican Republic), the Blanket gold mine (Zimbabwe), the Tenke Fungurume copper/cobalt mine (Democratic Republic of Congo), and for the Songwe rare earth prospect (Malawi). Olmsted holds a BSc in mining engineering and a master's in business administration.

Daniel Dumas has been a senior associate at R4D since 2015. With almost 25 years of experience in the energy and natural resources sectors, he has assisted over 20 countries addressing natural resources governance, fiscal, and tax administration issues. He also worked for the IMF's Managing Natural Resource Wealth Topical Trust Fund, dealing with fiscal matters, tax policy, and tax administration. He was a panellist and reviewer of *A Question of Future Prosperity: Developing a Heritage Fund in the Northwest Territories*. He is the author of *Transforming Society through the Extractive Industries* and co-author of *Minerals Taxation Regimes: A Review of Issues and Challenges in Their Design and Application*. Dumas has a bachelor's degree in business administration (financial economics) and a master's degree specializing in applied economics.

EXECUTIVE SUMMARY

The Government of Northwest Territories (GNWT) is proposing to "adopt a benefit retention approach to economic development." This includes "maximizing benefits from development while maintaining competitiveness." The Minister of Industry, Tourism and Investment (ITI) has stated that the "re-imagining of our government's fiscal framework around royalties is one that deserves a comprehensive, collaborative, multi-phased approach." In support of these objectives, the ITI commissioned PricewaterhouseCoopers (PwC) to prepare a "Tax and Royalty Benchmark" study including developing "recommendations addressing mineral royalties, taxes, and direct and indirect economic returns."

The mining sector plays an outsized role in the NWT economy, with diamond mining alone accounting for more than one-fifth of the territorial GDP. Given the importance of the sector, the Standing Committee on Economic Development and Environment sought an economic analysis on the NWT's proposed fiscal and regulatory mining regime review, with an emphasis on assessing the PwC report. The terms of reference (ToR) for this study asked for a gap analysis on the PwC report's contribution to assessing whether the GNWT was maximizing benefits from the mining sector, and on whether the mining regime fiscal review as proposed will identify risks to the GNWT mining revenues.

Several caveats are warranted. Our insights into the approach that the ITI is taking to the mining fiscal regime review are limited as we have not had access to the ToR for the PwC study nor the presentation to the Standing Committee in October 2020 by the ITI on their wider plans for the mining fiscal review. Our emphasis on direct taxes is both deliberate and appropriate as these are compensation to the NWT for the depletion of non-renewable resources and should be the source of the overwhelming share of revenues that the GNWT receives from the mining sector. As with the PwC study, we do not assess the wider economic benefits from mining including contributions to GDP, employment, and small- and medium-sized enterprise. While these benefits should of course be maximized, large-scale mining should generate large-scale government revenues to the benefit of current and future generations. More generally, while this review can highlight important issues and provide illustrations of additional types of analysis that could be undertaken, it is obviously not a substitute for a more comprehensive assessment of potential government revenues from the NWT mining sector.

PwC has conducted a standard fiscal regime benchmarking to compare the theoretical costs to mining companies of the royalties and taxes applicable in the NWT and in 21 comparison-jurisdictions in Canada and internationally. The methodology replicates a previous 2008 study on mining royalties commissioned by the Mining Association of Canada and the Department of Indian Affairs and Northern Development. Input data on revenues and costs was developed for two hypothetical mines. This data was then incorporated into a cashflow model that calculated the annual distribution of mine revenues between project costs, payments to government, and company profits based on the fiscal (tax) terms applicable in each jurisdiction.

The core finding of the PwC study is that "lowering taxes is unlikely to be effective for the Northwest Territories" because the government take (the share of after-cost revenues flowing to the government as compared to the company) is already very low. In terms of the "fair return assessment," PwC concludes that "the Northwest Territories' tax regime is in line with other jurisdictions in Canada, and thus receiving a fair return." An independent review appended to the PwC report broadly endorses the study's main findings.

PwC Report Gap Analysis

Gap 1 – Investment Attractiveness versus Maximizing Revenues: The ToR for the PwC study were specifically designed to assess the comparative attractiveness of the fiscal terms from the perspective of

attracting inward mining investment. While it is obvious that there is no government revenue if a mine never opens, it is equally obvious that the opening of a mine cannot be equated with the maximization of economic benefits. The PwC report includes an assessment of whether the NWT was securing a fair return, but there is no mention of possible strategies for maximizing government revenues. It may be that the ITI has commissioned other studies to assess these issues.

Gap 2 – The Sample of Comparator Jurisdictions: Analyses of the competitiveness of the NWT fiscal regime is based on comparisons with most Canadian provinces and territories, several US states, and a few international mining jurisdictions. The comparators selected generate the impression that the NWT tax regime is only slightly more generous than most other jurisdictions. This impression is misleading. While the NWT tax regime is similar to other Canadian provinces and territories, the government take for mining in Canada falls far below the international average. As a previous report for the ITI concluded, the NWT fiscal regime results "in some of the lowest 'government take' in the world for minerals."

Gap 3 – No Systematic Analysis of Payments to Government from Mining: Although the ToR for the PwC study did not ask for a wider analysis of revenues from mining, this is necessary to assess whether the GNWT is maximizing its benefits. The PwC report does not assess the relative contribution, the strengths and weaknesses, and the appropriateness for the NWT of the existing royalty and corporate income taxes. Assessments of the government share are compared only indirectly as "cost" to the mining company. Results are shown only for the life of the mine, obscuring potentially important differences in the timing of government revenues. Most importantly, there is no assessment of the historical performance of the NWT fiscal regime, and particularly the share of revenues accruing to the government from the world class diamond mines operating in the territory since devolution.

Gap 4 – Assessing the Net Benefits of Mining Revenue for the GNWT: The objective of "maximizing benefits" from the fiscal regime applicable in the NWT cannot be assessed based solely on the theoretical taxes that mining companies would pay. The PwC study conflates revenues to be paid to the federal government with revenues to be paid to the GNWT. Analysis of potential revenues from mining must also include an analysis of the net revenues that could be expected to remain in the NWT after considering the Territorial Formula Financing (TFF) clawback.

Government Revenue Analysis

Government Revenues from Mining: Mining companies make three main sets of payments to government: the NWT profit-based royalty, the federal tax on corporation net income, and the territorial tax on corporation net income. To provide a very preliminary revenue analysis, we developed a mine model using the input data for the large diamond mine in the PwC study. We show government revenue results for the higher profitability scenario where the company secures a 20% return on their investment (IRR). We find that the after-cost share of revenues to the government (the government take) is around 36%, with 22% for the NWT and 14% for the federal government. While there is no consensus on the appropriate government take, based on extensive cross-national studies, the International Monetary Fund (IMF) suggests that a government could expect 40–60% from a mining project.

Risks to GNWT Revenues: Economic models developed to benchmark fiscal regimes make a series of assumptions that lead to overstating the government share. As a result, these models do not present an accurate picture of the scale and timing of revenues that a government might expect to receive. In many cases, reductions in actual revenues as compared to an original forecast are the result of real-world circumstances such as a decline in commodity prices or an increase in the cost of materials used at the mine. In some cases, however, reductions in government revenue may be the result of company efforts to minimize their payment of royalties and taxes. To illustrate the potential impact, we construct six plausible scenarios associated with project cost and commodity price assumptions and model the

potential impacts and assess their impact on government revenues. We find that one-quarter of potential government revenues could fail to materialize due to factors that are commonly found in the mining sector in Canada.

Conclusions

Question 1: Is the GNWT maximizing benefits from resource extraction? The share of after-cost mining revenues that flows to the government (and to the GNWT) falls well below what could reasonably be expected. Only by selecting multiple American and Canadian jurisdictions – known to have among the lowest government take in the world – does the NWT appear well situated.

Question 2: Does the GNWT fiscal and regulatory structure maximize value for NWT residents and future generations? The NWT mining fiscal regime does not appear to be well designed to maximize government revenues: the government take is low and there is a strong likelihood that government revenues will come late in the project lifecycle, and there are significant base erosion and profit shifting (BEPS) risks.

Question 3: Is the proposed approach by the GNWT to review this fiscal and regulatory regime comprehensive? While the ITI may commission other studies, the PwC study was designed to answer only one of the many questions that should be part of a mining fiscal regime review. It should be complemented by a comprehensive review of historic payments to government from the diamond mines, a full revenue analysis from the perspective of the GNWT, and an assessment of the net benefits that would be retained by the NWT under the TFF clawback.

Question 4: Will the proposed approach accurately assess whether the benefits of resource wealth are being maximized for the GNWT, NWT residents, and future generations? Three sets of additional analyses, as set out above, would be needed to accurately assess whether the benefits of resource wealth are being maximized for the GNWT, for current NWT residents, and for future generations.

Recommendations

Analyse the Performance of the NWT Mining Fiscal Regime since Devolution: The GNWT should analyse the revenue data for the diamond mines since devolution and publish the details on the actual implementation and performance of the existing mining fiscal regime.

Implement Government-led Revenue Transparency: In contrast to the global movement towards transparency of natural resource revenues, there is insufficient information published by the GNWT on mining revenues in the NWT to allow residents to assess whether they are securing a fair share.

Conduct a Fiscal Regime Review Focused on Maximizing Government Revenue: Redesign the mining fiscal regime, considering take, timing, progressivity, and BEPS risks, to increase the share of mining revenues that remain in the NWT.

Analyse the Net Revenue Benefits for the NWT: Government revenue analyses should focus on revenues that would be paid to the GNWT and be retained in the NWT after the TFF clawback.

Generate Greater Mining Revenues to Benefit Future Generations: Sharing meaningful benefits with future generations may require adjustments to the Heritage Fund but definitely requires the NWT to secure a greater share of mining revenues.

Expand Indigenous Governments' Economic Benefit Sharing: The comparatively low government take generated from the current NWT mining fiscal regime creates opportunities for Indigenous Governments to secure increased economic benefits directly from the mining companies.

ACRONYMS

ACCA	Accelerated capital cost allowances
AETR	Average effective tax rate
BEPS	Base erosion and profit shifting
CCA	Capital cost allowances
CCPC	Canadian-controlled private corporation
CDE	Canadian development expense claim
CEE	Canadian exploration expense
CRA	Canada Revenue Agency
CRCE	Canadian renewable and conservation expense
EBITDA	Earnings before interest, taxes, depreciation, and amortization
EITI	Extractive Industries Transparency Initiative
ESTMA	Extractive Sector Transparency Measures Act
FTS	Flow-through shares
GNWT	Government of Northwest Territories
GDP	Gross domestic product
IBA	Impact Benefit Agreement
IRR	Internal rate of return
ITI	Department of Industry, Tourism and Investment
LOM	Life of mine
MDS	Mineral development strategy
METC	Mineral exploration tax credit
MIP	Mining incentive program
NWT	Northwest Territories
OECD	Organisation for Economic Co-operation and Development
PwC	PricewaterhouseCoopers
R4D	Resources for Development Consulting
RFP	Request for proposals
SCEDE	Standing Committee on Economic Development and Environment
TFF	Territorial formula financing
ToR	Terms of reference

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1.0 INTRODUCTION

The Government of Northwest Territories (GNWT) is proposing to "adopt a benefit retention approach to economic development." This includes "maximizing benefits from development while maintaining competitiveness."[1] The Minister of Industry, Tourism and Investment (ITI) has stated that the "re-imagining of our government's fiscal framework around royalties is one that deserves a comprehensive, collaborative, multi-phased approach."[2]

In support of these objectives, the ITI decided to "conduct an independent review on the competitiveness of the NWT's mining regime and develop recommendations addressing mineral royalties, taxes, and direct and indirect economic returns."[3] The overall review is to be completed by Spring 2022 with recommendations to be finalized by Fall 2022.

The consultancy selected to conduct the independent review was PricewaterhouseCoopers (PwC). Their report entitled "Tax and Royalty Benchmark: Mining in the Northwest Territories" was published in April 2020. The report was published alongside an independent review of the PwC study commissioned by the ITI, prepared by Michael Doggett, and submitted on 31 March 2020.

The extractive sector combining the mining and oil and gas plays an outsized role in the NWT economy. According to government data[4], the contribution of this sector to territorial GDP was 30.5% in 2019 and 23.7% in 2020. The diamond mines account for most of this economic activity: 26.7% of GDP in 2019 and 20.8% in 2020. The figures indicate that the sector is currently in decline with contributions falling by 30% between 2019 and 2020.

In this context, the Standing Committee on Economic Development and Environment sought an economic analysis on the NWT's proposed fiscal and regulatory mining regime review, with an emphasis on assessing the recently released GNWT's Report of the Northwest Territories Mining Fiscal Regime. Following a public tender, Resources for Development Consulting (R4D) was selected to undertake the study.

Terms of Reference

According to the public tender,[5] the committee is seeking an independent expert to assess the following areas of concern.

- Is the GNWT maximizing benefits from resource extraction?
- Does the GNWT fiscal and regulatory structure maximize value for NWT residents and future generations?

[1] Priorities of the 19th Legislative Assembly.
[2] Tax and royalty benchmark - Mining in the Northwest Territories, 20 October 2020.
[3] Mandate of the Government of the Northwest Territories – 2019-2023, p. 23.
[4] Gross Domestic Product Northwest Territories, 2020 Preliminary, 3 May 2021, p. 2.
[5] RFP Consulting Services: Economic Analysis on the GNWT's Approach to the Mining Regime Fiscal Review, March 2021.

- Is the proposed approach by the GNWT to review this fiscal and regulatory regime comprehensive?
- Will the proposed approach accurately assess whether the benefits of resource wealth are being maximized for the GNWT, NWT residents, and future generations?

Specifically, the consultant was asked to prepare a report that responded to the following two points:

- "Report to provide a gap analysis on the GNWT's Report of the Northwest Territories Mining Fiscal Regime (as well as the accompanying independent review) with respect to assessing whether the GNWT is maximizing benefits of resource wealth from the extractive sector."
- "Committee would specifically like to have an assessment on the Reports listed above, with an analysis on whether the mining regime fiscal review as proposed will identify risks to the GNWT in areas such as:
  - Revenue loss due to tax rates, tax incentives or other breaks;
  - Revenue loss due to limited tax base;
  - Revenue loss due to tax avoidance or potential profit shifting; and
  - Revenue loss due to high construction and operating costs in the NWT."

Methodology and Structure

PwC is clearly a well-established consultancy firm with the necessary expertise to carry out a standard fiscal regime benchmarking study. This review will therefore focus on the limitations of the study inherent in the original request for proposals (RFP), including the decision to replicate the Two Ducks methodology, the way the study's findings are presented including possible alternative interpretations, and the lack of any significant analysis on potential payments to the GNWT that could be expected from future mining projects.

This report begins with a gap analysis of the PwC report focusing both on the underlying methodology and the representation of the findings. The overriding point is that while a benchmarking study may be an important component of a fiscal regime review, it is not designed to answer many important questions related to potential government revenues from the mining sector.

The next main section of the report seeks to provide a preliminary government revenue analysis. It begins with a description of the fiscal terms currently applicable to mining projects in the NWT. This includes the royalty provisions in the Mining Regulations R-015-2014 in force from 1 April 2014 (as amended), and the mining-specific provisions of the Income Tax Act including applicable deductions, allowances, and credits. It also includes an initial analysis of government revenues from the existing NWT mining fiscal regime. Three main metrics for assessing the performance of a fiscal regime are introduced: government take, the timing of government revenues, and the share of after-cost revenues flowing to the government under high and low profitability scenarios.

This is followed by an initial revenue risk assessment. It begins with a broad framework drawn from *Many Ways to Lose a Billion*. It then discusses a range of risks to government revenue

including tax incentives, base erosion and profit shifting, and higher project costs that can be expected in challenging environments such as the NWT. To make these points more concrete, we have prepared an economic model that mirrors the large diamond mine in the Two Ducks and PwC study. Annual government revenues are shown for the base case and for an alternative scenario where a series of additional costs are included. The objective is to illustrate how theoretical benchmarking exercises tend to systematically over-estimate the actual revenues that a government can expect to receive.

The report concludes with high level responses to the four main questions set out in the Terms of Reference. It also sets out six main recommendations in the context of the NWT mining fiscal regime review:

(1) Analyse the Performance of the NWT Mining Fiscal Regime since Devolution
(2) Implement Government-Led Revenue Transparency
(3) Conduct a Fiscal Regime Review focused on Potential Government Revenue
(4) Analyse the Net Revenue Benefits for the NWT
(5) Generate Greater Revenues to Benefit Future Generations
(6) Expand Indigenous Governments' Economic Benefit Sharing

Several caveats about this analysis should be noted.

Our insights into the approach that the ITI is taking to the mining fiscal regime review are limited. We have not had access to the terms of reference (ToR) for the PwC study as these were deemed to be confidential. We are therefore unable to assess whether all aspects of the original ToR were delivered. We have also not had access to the presentation by the ITI of 19 October 2020 that sets out the broader plan for the NWT Minerals Royalty Regime. We are therefore unclear on the wider plans of the ITI and whether other studies are envisaged. Our mandate was to conduct a gap analysis on the PwC study as a stand-alone product and to assess the degree to which this approach addresses risk to GNWT revenues.

The emphasis in this analysis on direct taxes is both deliberate and appropriate. Direct taxes including royalties and corporate income tax should be the source of the overwhelming share of revenues that the GNWT receives from the mining sector. These payments are the compensation that NWT residents receive for the depletion of their non-renewable resources. The PwC study also analyses indirect taxes including property tax, fuel tax, payroll tax, and carbon tax. We have not devoted attention to these as they have marginal impacts on the economics of all but the least profitable of mines.

As with the PwC study, we also do not assess the wider economic benefits from the mining sector including the contribution to gross domestic product (GDP), employment or the increase in economic activity of small- and medium-sized enterprise. While these benefits should of course be maximized, large-scale mining should generate large-scale government revenues to the benefit of current and future generations.

Within this small consultancy, we have sought to raise important issues and to provide illustrations of additional types of analysis that could be beneficial as part of the wider review of the NWT mining fiscal regime. While we believe that the analysis contained in this report serves

this purpose, it is obviously not a substitute for a more comprehensive assessment of potential government revenues from the NWT mining sector.

2.0 GAP ANALYSIS ON PWC STUDY METHODOLOGY AND FINDINGS

To understand the methodology on which the PwC study is based, it is necessary to revisit a previous analysis commissioned by the Mining Association of Canada and the Department of Indian and Northern Development. This original report, referenced as the "Two Ducks" study, was designed to determine whether the mining royalty in Canada was too onerous on companies and therefore represented a barrier to new investment (Comparative Review of the Rate of Royalty in the Canada Mining Regulation, as Relates to National and International Competitiveness, Two Ducks Resources, 2008). The methodology of the Two Ducks report involved the development of two hypothetical mines (a gold mine and a diamond mine) to assess the theoretical tax burden imposed by the fiscal regimes of Canadian provinces and territories, US states, and several other countries. That study concluded that the Canadian royalty "has maintained its international competitiveness."[6]

The PwC study was designed to replicate and expand on the Two Ducks report to allow for comparisons over time. The principal focus of the study is on whether the combined royalty and tax rates in the NWT have a negative impact on competitiveness and therefore inhibit new investment in the mining sector.

The PwC report seeks to recreate the hypothetical mines used in the Two Ducks report and assess them against updated fiscal regimes from 21 jurisdictions. The analysis is conducted in three phases: a first phase that considers direct taxes (analogous to the Two Ducks report), a second phase that adds indirect taxes such as property, payroll, fuel, and carbon taxes, and a third phase that seeks to incorporate a "total cost" analysis to consider higher operating costs in the north based mostly on electricity and transportation.

The core finding of the study, as was the case with the Two Ducks report, is that "lowering taxes is unlikely to be effective for the Northwest Territories." The PwC study also includes a "fair return assessment" and concludes that "the Northwest Territories' tax regime is in line with other jurisdictions in Canada, and thus receiving a fair return."[7]

The PwC report is accompanied by a short independent review conducted by Michael Doggett. According to his biography, Doggett is a mineral economist with a strong background in the private sector and affiliations with mining departments at Canadian universities. His review broadly endorses the PwC study's findings.

Gap 1: Investment Attractiveness versus Maximizing Revenues

The broader context of the GNWT fiscal regime review was to "maximize benefits from development while maintaining competitiveness." The methodology was designed to assess the comparative attractiveness of the fiscal terms from the perspective of attracting inward

[6] Comparative Review of the Rate of Royalty in the Canada Mining Regulation, as Relates to National and International Competitiveness, Two Ducks Resources – Analysis, 2008, p. xii.

[7] Tax and Royalty Benchmark: Mining in the Northwest Territories, PricewaterhouseCoopers, 2020, p. 10.

investment. While it is obvious that there is no government revenue if a mine never opens, it is equally obvious that the opening of a mine cannot be equated with the maximization of benefits.

The ToR for the PwC study is, to "assess the tax and royalty competitiveness of its mineral sector." Analysis on "maximizing benefits from development" was reduced to a classic benchmarking study designed to assess competitiveness between selected jurisdictions. While there is an analysis of whether the NWT was securing a fair return, there is no mention of maximizing government revenues or any discussion of the many issues that would be involved in doing so. It may be that the ITI has commissioned other studies to assess options for the maximization of revenues.

The methodological limitations built into the studies are not surprising given the institutions that commissioned the work and the consultants engaged to undertake the analysis. The PwC study was commissioned by the ITI, the arm of government responsible for the promotion of investment in the mining sector. While it is understood that the Department of Finance was consulted during the process, neither the methodology nor the analysis is oriented towards the generation of government revenues. This is somewhat surprising given that one of the main findings of a previous study of the NWT mining fiscal regime, commissioned by the ITI, concluded that it resulted in "some of the lowest 'government take' in the world for minerals."[8]

Similarly, the Two Ducks study on which the PwC analysis was based was commissioned by the Mining Association of Canada and the Department of Indian Affairs and Northern Development. A non-exhaustive review of the experts involved in the various studies and reviews has not identified any individuals with specific expertise on *maximizing* government revenue from mining, or with experience in monitoring and auditing mining companies on behalf of governments. It does not appear, for example, that any of the consultants have worked for a ministry of finance or revenue authority.

A pattern that we see routinely in our work in dozens of countries is that decisions around fiscal terms are taken by arms of the government responsible for investment promotion (ministries of resources and industry) with little if any engagement by arms of government responsible for revenue generation (ministries of finance and revenue authorities). All too often, those concerned about revenue generation become engaged only when government revenues fall far short of original projections. Assessing whether these common patterns also exist in the NWT is, however, outside of the scope of this analysis.

Gap 2: The Sample of Comparator Jurisdictions

Analyses of the competitiveness of the NWT fiscal regime are commonly based on comparisons with the following jurisdictions: all Canadian provinces with substantial mining projects (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Ontario, and Quebec) and all three territories; three US states are often added – Alaska, Wyoming, and Nevada; and several major international mining jurisdictions. This is the methodology used in the PwC study, in the prior Two Ducks study, and in a comparable analysis of mining fiscal regimes undertaken by

[8] See Mineral Resources Act: Mineral Review and Benchmarking Research Released and Andrew Bauer, Northwest Territories Mineral Sector Review and Benchmarking, 2017, p. 4.

NRCan in 2011. These analyses commonly conclude that NWT is appropriately situated among the more tax competitive jurisdictions.

It is of course relevant to analyse the mining fiscal regime in the NWT against other Canadian jurisdictions. However, there should be no surprise that there is only minor variation across provinces and territories, as the main fiscal instrument – federal corporate income tax, along with its associated tax incentives – applies to all. Furthermore, all provinces and territories impose a supplementary corporate income tax with rates varying from a low of 11.5% in NWT and Ontario to a high of 16% in Nova Scotia. Similarly, all Canadian jurisdictions also impose a profit-sensitive royalty on mining operations.

The inclusion of US states in the benchmarking process is also appropriate. Once again, however, it is important to contextualize these jurisdictions as comparators. US states are widely recognized as having among the lowest government take in the world. This is particularly true for Nevada which is ranked at the bottom of virtually all benchmarking exercises. While it is unlikely to change relative rankings, it is worth noting that Nevada has recently increased mining taxes.[9]

The selection of comparators, and particularly the inclusion of nine Canadian provinces and territories, generates the impression that the Northwest Territories is slightly on the lower side of the middle of other jurisdictions. This impression is misleading. International benchmarking exercises, which would normally include only a single Canadian province or territory given the overwhelming similarities, routinely show that Canadian fiscal regimes are among the most generous in the world. Figure 1 is a re-representation of the PwC data removing Nevada, which truly is a global outlier, and most of the Canadian provinces and territories. The result is perhaps a more accurate representation of where the NWT fiscal regime stands in a global comparison. It is also worth noting that two of the international comparators selected for inclusion in the PwC study, Peru and Chile, are both considering increasing mining sector taxation, which could be expected to change their position in the rankings.[10]

This alternative assessment should not come as a surprise in the NWT or to the ITI. In 2017, Andrew Bauer, an expert on fiscal regimes for mining, oil, and gas prepared a report for the ITI entitled "Northwest Territories Mineral Sector Review and Benchmarking."[11] One of seven points highlighted in his Executive Summary focused on the comparatively low share of revenues secured through the NWT fiscal regime.

> "**Fiscal Regime and Revenue Collection:** The GNWT's generous deductions on royalties and corporate income taxes—along with the complexity in overseeing tax avoidance measures such as transfer pricing—result in some of the lowest 'government take' in the world for minerals. Low government take represents an implicit shift of economic rents from NWT residents to mostly foreign company shareholders."

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[9] See After decades-long fight, Nevada lawmakers raise mining tax, Associated Press, 1 June 2021.

[10] See The World's Top Copper Nation Moves Closer to Giant Tax Hike, Bloomberg, 6 May 2021. Peru's newly elected president made an increase in mining taxes a central part of his platform. See Peru presidential candidate outlines new taxes, royalties for miners, Reuters, 17 May 2021.

[11] See Mineral Resources Act: Mineral Review and Benchmarking Research Released. Andrew Bauer, Northwest Territories Mineral Sector Review and Benchmarking, 2017, p. 4.

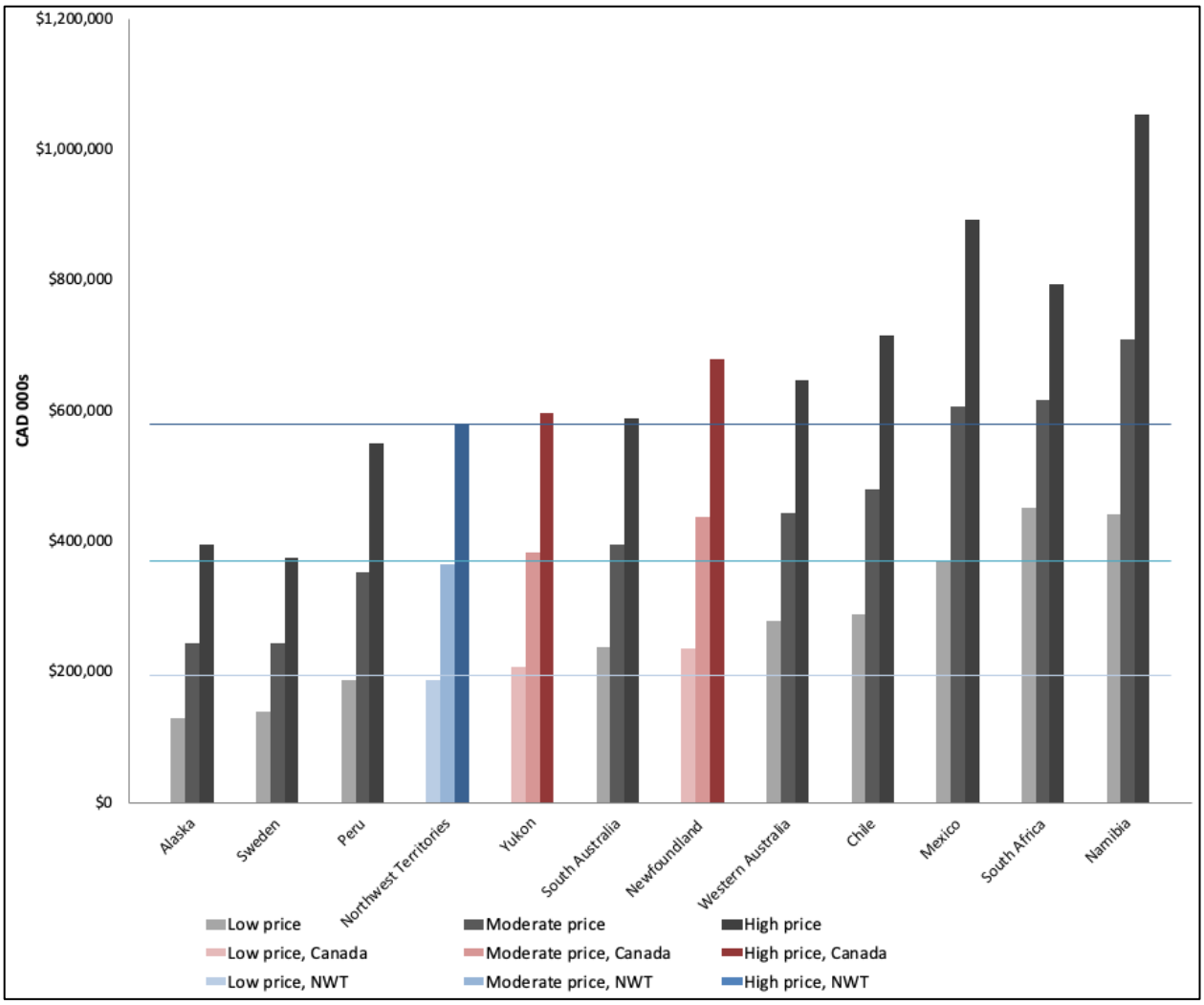


Figure 1: Re-representation of PwC Direct Taxes Large Diamond Mine (Figure 1, p. 2)

Gap 3: No Systematic Analysis of Payments to Government from Mining

By design, the PwC study provides a relative ranking of the attractiveness of fiscal regimes in multiple jurisdictions. The ToR did not ask for a wider analysis of potential revenues for the GNWT from mining. Yet this question is directly relevant for assessing whether the GNWT is maximizing benefits from development.

The report devotes little attention to describing the specific fiscal instruments through which the NWT receives revenues from mining. Royalties, corporate income tax, and indirect taxes are described at a high level in Appendix A (page 86). There is no analysis of the specific role of these fiscal instruments, their relative contribution to potential government revenues, their strengths and weaknesses, or their appropriateness for the NWT context.

The report provides only limited insights into the revenues that the government of the NWT might expect from a mining project. Three standard metrics are commonly used to assess

government revenues from mining: the government take, the timing of government revenues and the notion of progressivity.

First, the standard metric for assessing the government share of mining revenues is commonly known as the *government take* (technically known as the *average effective tax rate* or AETR). The PwC report does provide results on the AETR in the section on Fair Return Assessment (p. 68). The results as portrayed are difficult to interpret as they are presented only in charts (rather than tables) and focus first on the company share, making comparisons between the government share difficult to interpret. Figure 2 provides a re-representation of the PwC data provided in Figure 33 (p. 70) of the report showing the AETR (direct taxes) for a large diamond mine under high prices.

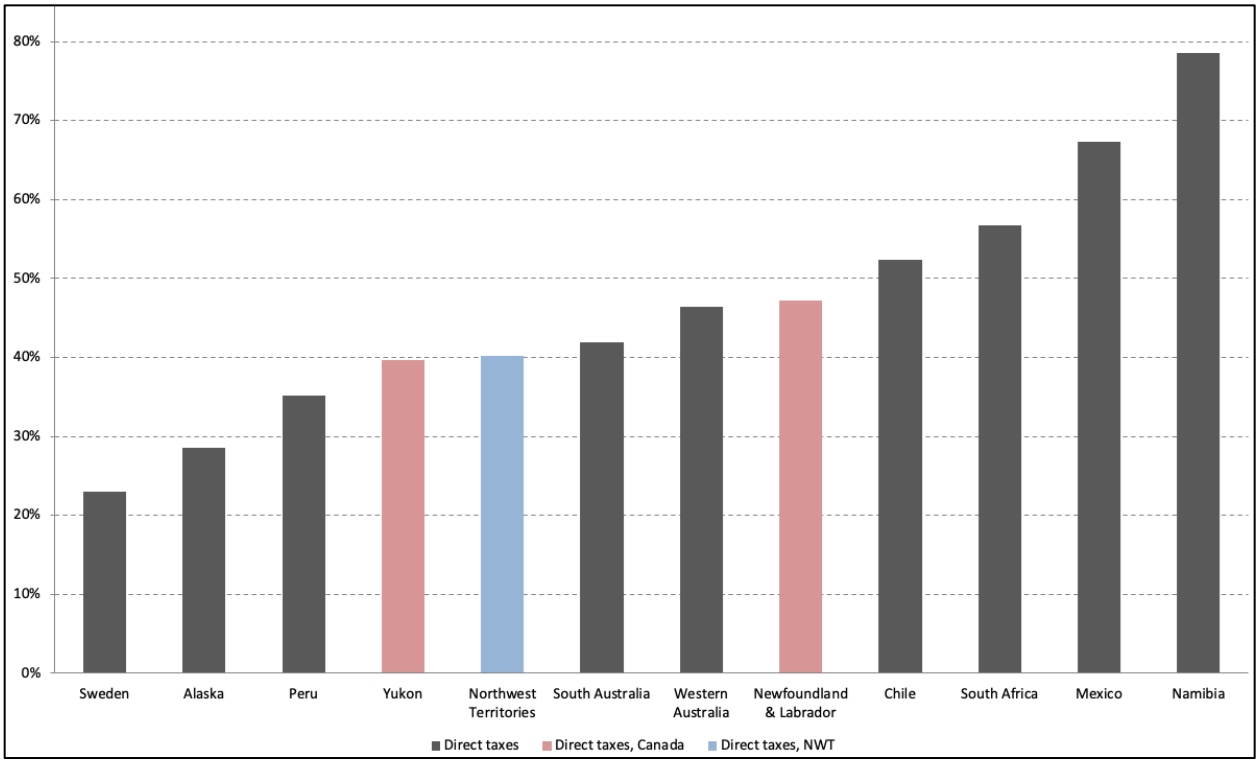


Figure 2: Re-representation of PwC Direct Taxes Large Diamond Mine High Prices (Figure 33, p. 70)

Second, because the PwC report focuses only on the life of mine (LOM) it provides no insights into the timing of expected government revenues. Nor does it provide any information on whether comparator jurisdictions generate substantial government revenue in the early stages of a mining project. The report does acknowledge that "despite the clear advantage of profit-based taxes and royalties in the long run, they also *tend to result in governments initially receiving lower or no revenues*" (p. 14). Fiscal regimes based exclusively on profit sensitive fiscal instruments, as is the case with the NWT, commonly receive no direct taxes in the early years of a project, and in the face of cost overruns and potential downturns in commodity prices, sometimes receive little or no direct taxes at all.

Third, in a well-designed fiscal regime the government take (AETR) increases for highly profitable projects. The concept is simple. If companies are receiving windfall profits, they should certainly benefit, but at the same time the government share should increase. Unfortunately, by conflating direct and indirect costs in the analysis of the AETR (p. 68–69), the PwC report makes it impossible to assess the progressivity of the core fiscal regime.

Finally, there is no reference to the historical performance of the mining fiscal regime, particularly in the context of the world-class diamond mines that have been operating in the NWT since devolution. The importance of this kind of analysis cannot be overstated given the strong likelihood that the fiscal regime has significantly underperformed during this time-period.

Gap 4: Assessing the Net Benefits of Mining Revenue for the GNWT

The objective of "maximizing benefits" from the fiscal regime applicable in the NWT cannot be assessed based solely on the taxes that mining companies would pay. As a result of the emphasis on company investment decision-making, the PwC study conflates revenues to be paid to the federal government with revenues to be paid to the GNWT.

Analysis of potential revenues from mining should include an analysis of the net revenues that could accrue to the GNWT considering the Territorial Formula Financing (TFF). The first part of this analysis is relatively straightforward, as financial models of hypothetical mines generate results for each fiscal instrument independently. This allows for an analysis of the revenues that would be paid to the NWT (the royalty and the NWT corporate income tax) under varying scenarios of mineral production, commodity prices, and project costs. Additional analyses, and the development of wider macro-economic inputs, would be required to assess the net revenues that could be expected to remain in the NWT after considering the TFF clawback.

3.0 GOVERNMENT REVENUES FROM MINING

Mining companies make three main sets of payments to government: the NWT royalty, the federal corporate income tax, and the territorial corporate income tax. This section first provides descriptions for these three fiscal instruments. It then provides a preliminary revenue assessment based on a model that we have prepared that broadly mirrors the large diamond mine used as the first example throughout the PwC report.

Sources of Government Revenue

The fiscal regime for mining in the NWT is based around two fiscal instruments: a profit-based royalty and a corporate income tax that is assessed at both the federal and territorial level.

NWT Royalty

A royalty is a payment to the government based on mineral production. It is commonly a percentage of the sale value of a mineral.[12] The technical name for a royalty based on the sale value of a mineral is an *ad valorem* royalty. Royalties are often seen as a "payment" in the sale of a non-renewable resource. They are seen as a guaranteed source of government revenue for mines that are producing but not yet reporting profits.

The NWT royalty, while based on mineral production, is not based on the value of the mineral produced but rather on the profit generated by the mine (See Annex I for a more detailed description). It would be equally valid to label the NWT royalty a mine profit tax.

The royalty provisions are set out in the Mining Regulations R-015-2014 in force from 1 April 2014 (as amended). Although the NWT royalty rate is often referred to as being 13%, it is in fact a progressive range of royalty rates. It starts at 5% for output value less than $10 million and increases on each tranche of output. It reaches 13% only for output between $40 million and $45 million. The highest rate of 14% is triggered when output is higher than $45 million. Moreover, the royalties are calculated on a "lesser of" basis between a) the base rate of 13% or b) the progressive rates. It is therefore a misconception to say that the NWT royalty rate is 13%, as lower royalty rates are applied for all output below $40 million. The 13% rate is in fact a maximum royalty rate when we look at the entire output.

With a profit-based royalty, most expenses associated with mining operations are allowed as deductions before the royalty is assessed. The NWT royalty provides for three specific allowances: a depreciation allowance, a development allowance, and a processing allowance. In practice, there are only a few differences in eligible deductions that distinguish the tax base for the NWT royalty from the tax base used for corporate income tax (discussed below). Prominent examples would include mining exploration costs and mining losses incurred outside of the NWT, and interest expenses incurred on the financing of the mining operation.

[12] See James Otto, Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society, World Bank, 2006.

Corporate Income Tax

Corporate income tax is a tax assessed as a percentage of the net profits of a project after deducting allowable expenses.

All mining operations in Canada pay corporate income tax at the national level at the common rate of 15%. Provinces and territories impose a secondary corporate income tax of between 11.5% and 16% on normal mining operations (lower rates area offered in some jurisdictions for manufacturing and processing). The combined income tax rate therefore ranges from a low of 26.5% (NWT and Ontario) to a high of 31% (Nova Scotia).

Except for Alberta and Quebec, provincial and territorial income taxes are assessed based on the taxable income as established for the payment of federal tax.

Mining-specific provisions of the Income Tax Act include a series of applicable deductions, allowances, and credits. These are discussed in detail in the following paragraphs.

Mining Sector Incentives

A non-exhaustive list of tax incentives and provisions to be examined includes Capital Cost Allowances (CCA) and Accelerated Capital Cost Allowances (ACCA), Canadian Exploration Expenses (CEE), Canadian Development Expense Claims (CDE), the Mineral Exploration Tax Credit (METC), and flow-through shares (FTS) investments. We will then provide an assessment of the reduction in government revenues associated with the most significant of these incentives.

Federal Tax Incentives

CEE provides a deduction of 100% of eligible exploration expenses against taxable income.

The deduction for pre-production development expenses no longer receives CEE treatment but instead receives CDE treatment, which is a deduction of 30% of expenses on a declining balance basis.

CEE eligibility extension. On 24 January 2017, the Canada Revenue Agency released administrative guidelines confirming that community consultation and environmental expenses undertaken to obtain an exploration permit are eligible for the 100% CEE deduction.

The FTS provision allows an investor to claim a CEE or CDE or a CRCE (Canadian renewable energy and conservation expense) deduction earned by a publicly listed company against their taxable income. The expenses must be reduced by any provincial or federal assistance received and, in that FTS have a zero adjusted cost base, when the share is sold the entire income from the sale is subject to capital gains tax.

NWT Tax Incentives

Mining Incentive Program (MIP). This program provides funding to prospectors and exploration companies who propose new exploration projects or are already carrying out NWT mineral exploration work. The MIP is intended to stimulate and sustain mineral exploration activities throughout the NWT and reduce the risk associated with grassroots mineral exploration – exploration that is vital to a healthy, sustained, and productive mining industry. The MIP is an initiative of the NWT Mineral Development Strategy (MDS) and was developed in response to

the findings of the Stakeholders Engagement Panel. The MIP is modelled after successful incentive programs offered by other Canadian jurisdictions. For 2020–2021, mineral exploration companies licensed to operate in the NWT can apply for up to $240,000 in funding representing up to 60% of eligible project expenses.

Prospector Mining Incentive Program. Prospectors licensed to operate in the NWT can apply for up to $25,000 in funding. The funding limit was increased from $15,000.

Base Case Revenue Analysis

To provide a very rudimentary revenue analysis, we have developed a mine model that mirrors the large diamond mine used in the PwC report.

Our model is based on input data as set out in Table 1 of the PwC Report (p. 17) and in the associated text.[13] As PwC sought to replicate the "model mines" as originally developed for the Two Ducks study, we also consulted their Summary Table (p. 20). The results as shown below are for the higher profitability scenario (IRR [internal rate of return] of 20%).

All revenue analysis starts from the gross revenue generated by the mining project. In this hypothetical scenario, the mine operates for 15 years and over that lifespan generates between $450 million and $600 million in gross revenue each year. As would be expected, over the life cycle of the mine, mine costs account for more than half of the gross revenue (57%). The remainder (43%) is divided between the company, the federal government and the GNWT. See Figure 3.

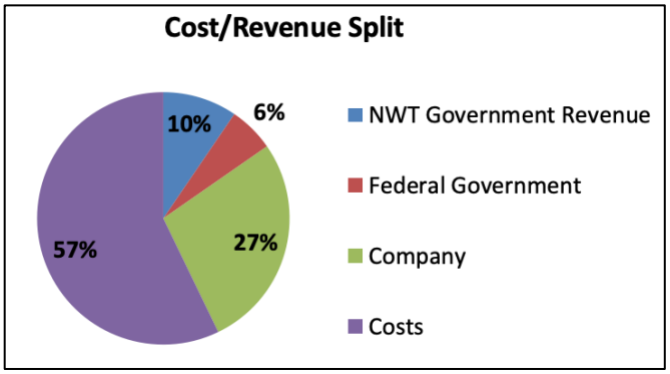


Figure 3: Cost/Revenue Split for Large Diamond Mine @ 20% IRR

The nominal value (the sum of each year's revenues) over the life of the mine is around $750 million for the GNWT and around $460 million for the federal government.

The Government Take

The government take (AETR) is the most common measure of comparing the government share across jurisdictions. Figure 4 shows the undiscounted government take for the large diamond mine, with the NWT share at 22% and the federal government share at 14%, resulting in a total government take of around 36%.

[13] PwC Study, p. 17.

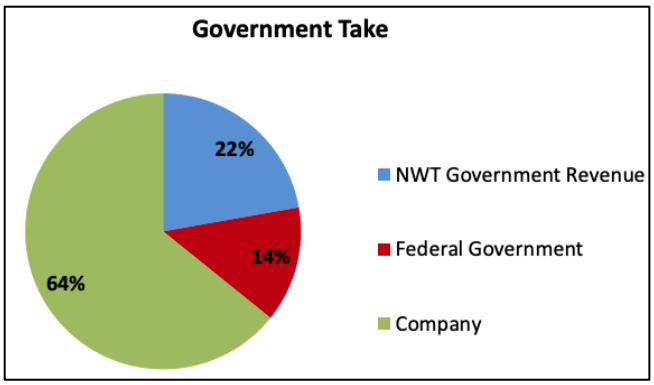
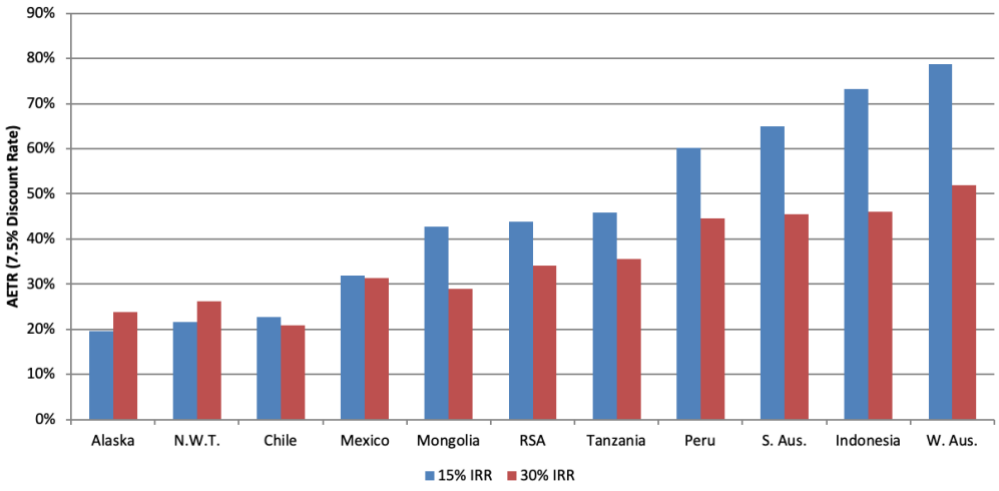


Figure 4: Government Take (Undiscounted) for Large Diamond Mine @ 20% IRR

The government take statistic can also be reported in discounted terms, since the company must make major investments in the mine long before any revenue is generated. The government take rises to 39.6% at a discount rate of 10% (as used in the PwC report).

The specific percentage government take is a product of the fiscal terms and the assumptions built into the mine model. Different assumptions will generate equally valid yet different results.

In 2011, NRCan published a benchmarking study based on a different hypothetical mine and at a different discount rate (7.5%). The results, shown in Figure 5, indicate a government take for the NWT of less than 30%.



(NRCan 2011)

Figure 5: International Comparison of Mining Fiscal Regimes

There is no simple answer as to how large a share a government should expect. Based on extensive cross-national analysis, the International Monetary Fund suggests that in the mining sector, countries could expect a government take of between 40 and 60%.[14]

[14] See Philip Daniel, Generating Extractive Industry Revenues, IMF, 2013, p. 7.

The findings of the PwC report on the share of revenues flowing to the government do not come as a surprise, as they are consistent with many other studies. The results can, however, be read in different ways. Institutions responsible for investment promotion (e.g., ITI or NRCan) will report that the NWT is one of the most competitive mining tax jurisdictions in the world. At the same time, it is also true that the NWT sells its non-renewable resources more cheaply than most other jurisdictions in the world.

Timing of Government Revenues

A second core metric when analysing government revenues is the timing when those revenues arrive. For companies, early payback of their initial investment is a priority. Profit-sensitive fiscal instruments, such as corporate income tax and a profit-based royalty like the one in the NWT, provide for early payback, though at the expense of the payments to government.

As would be expected, the delay in government revenue is particularly pronounced under lower-profitability scenarios. As can be seen in Figure 6, government revenues are very modest in the early years, particularly under the 10% IRR scenario.

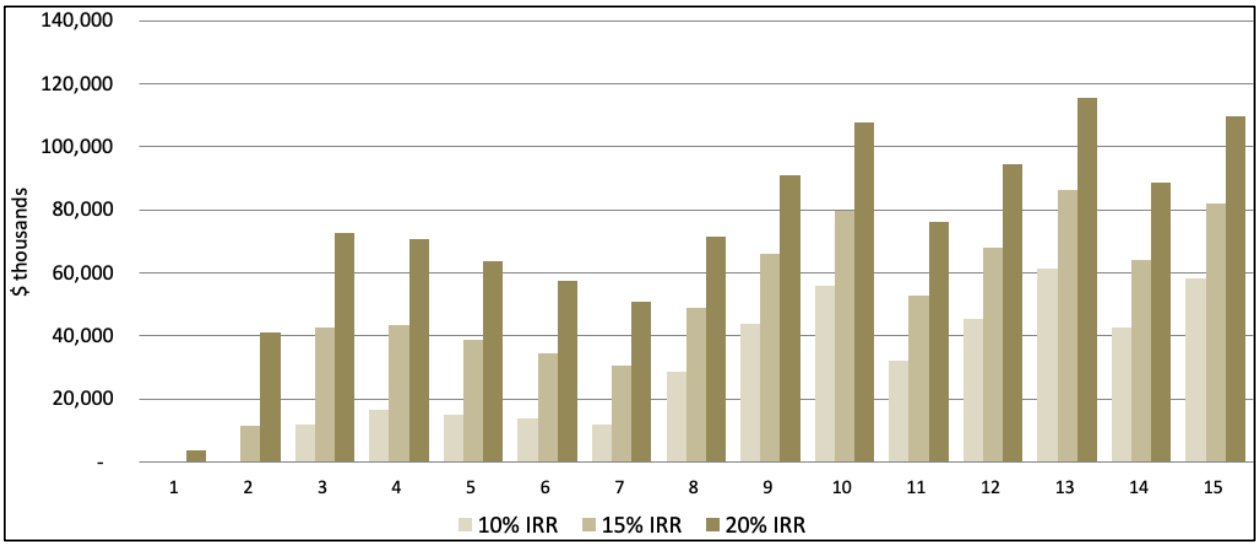


Figure 6: Annual Government Revenues under PwC Cases at Different IRR

Progressivity – Allocation of Windfall Profits

The third main metric for analysing government revenues is assessing the impact of profitability on the government share. Well-designed fiscal regimes are progressive, in the sense that the government's share of net benefits should increase for more profitable projects. This is based on the logic that the government share should be higher in the case of windfall profits.

Progressivity depends on the kinds of fiscal instruments chosen. Corporate income tax is generally considered to be neutral. Some fiscal regimes include some kind of windfall tax, often a resource rent tax or a commodity price-based royalty. *Ad valorem* royalties, assessed on the value of production, are regressive as they do not change whether profits are high or low.

As many fiscal regimes do not have a progressive tax, the government does not capture a higher share when commodity prices skyrocket, when the grade is particularly high, or when production costs are particularly low.

As would be expected with profit sensitive fiscal instruments (royalty and corporate income tax), the NWT mining fiscal regime is essentially neutral. As shown in Table 1, the undiscounted government take for a large diamond mine ranges from 35.4% at an IRR of 10% to 36% at an IRR of 25%.

Table 1: Government Take for Large Diamond Mine at Different IRR

	IRR 10%	IRR 15%	IRR 20%	IRR 25%
GNWT	21.4%	22.2%	22.5%	22.7%
Federal	14.0%	13.6%	13.4%	13.3%
Combined	35.4%	35.8%	35.9%	36.0%

4.0 NWT Mining Fiscal Regime Revenue Risk Analysis

Economic models developed to benchmark fiscal regimes necessarily make a series of simplisitic assumptions. For example, the models assume that the mine is a solitary economic entity (ring fenced) meaning that no costs are deducted from other mines or from failed exploration activities. Modelling also assumes that tax administration is perfect and that companies do not employ strategies to minimize their tax payments. As a result, these models represent the high-water mark for government revenues. They do not present an accurate picture of the scale and timing of revenues that a government might expect to receive.

In many cases, reductions in revenues as compared to original forecasts are the result of real-world circumstances such as a decline in commodity prices or an increase in the costs of materials required for the development of the mine. In some cases, however, reductions in government revenue may be the result of company efforts to minimize their payment of royalties and taxes. Illustrative examples of base erosion and profit shifting (BEPS) in the mining sector include affiliated party mineral sales; excessive cost for marketing, transport, processing, and insurance; high management fees; thin capitalization; and excessive interest charges. These concerns extend well beyond the mining sector and have garnered global attention in recent years.[15] In comparison to other international jurisdictions, the NWT is particularly vulnerable to revenue loss through base erosion and profit shifting as both the royalty and corporate income tax are sensitive to project costs.

To assist governments in analysing risks to government revenue, R4D has prepared a revenue risk framework illustrating the ways in which companies can benefit from tax incentives, from treaty shopping, and from understating their actual

Figure 7: R4D's Revenue Risk Framework

(R4D, *Many Ways to Lose a Billion*, 2017)

[15] See for example, Tax and Development Programme: Assisting Developing Countries on Extractive Industries, OECD, with specific reports on pricing minerals, tax incentives and excessive interest deductions.

revenues and overstating their actual costs (See *Many Ways to Lose a Billion,* 2017). For a more elaborate discussion of the risks associated with BEPS, see Annex II: Tax Erosion Risks for the NWT.

From the perspective of government revenues, the preliminary revenue analysis of the PwC case at an IRR of 20% (as shown in Section 3) can be considered a "best case" analysis. Except for an increase in commodity prices, nearly all plausible scenarios will result in a *decrease* in government revenue as compared to this base case.

Revenue Reduction Scenarios

Although it is impossible to predict the specific circumstances that might be associated with a particular mine, it is possible to articulate a series of different scenarios that have in other contexts resulted in a reduction in revenues to governments in different jurisdictions. These scenarios can then be modelled to provide a sense of the potential reductions in government revenue that might be at stake. Below we set out six alternative scenarios that could result in a significant reduction in government mining revenues:

- High Project Cost and Cost Overruns
- Diamond Marketing Charges
- Ongoing Exploration Costs after Commercial Production
- Mining Expenses Outside of the NWT
- High Financing Costs
- Commodity Price Escalation

Each of these scenarios is described in a following sub-section. We first describe the issues at stake and then articulate a specific scenario to be modelled. The quantification of the reductions in government revenue, then, are provided in Table 2 below.

High Project Cost and Cost Overruns

As government revenues from both royalties and corporate income tax are assessed after costs have been deducted, higher construction and operating costs will result in lower government revenues. The PwC report addresses this point in Phase 3: Total cost analysis (p. 60). While a comparative assessment of mining costs in different jurisdictions is beyond the scope of this report, undoubtedly mining capital and operating costs are higher in the far north.

Revenue Loss Scenarios:

- Government revenue implications of an increase in mining capital costs of 30%
- Government revenue implications of an increase in mining operating of 20%.

Diamond Marketing Charges

One set of costs often ignored in fiscal regime benchmarking is the costs that companies charge for the marketing of the minerals produced (See for example, the case of Australia and marketing hubs in Singapore, *Many Ways to Lose a Billion*, p. 32). Marketing costs vary depending on the

mineral in question and specifics are normally confidential. A technical report for the Stornoway diamond mine in Quebec indicates marketing charges of 3%.[16]

Revenue Loss Scenarios:

- Government revenue implications of including a diamond marketing charge of 3%.

Ongoing Exploration Costs after Commercial Production

The mine models used in the Two Ducks and PwC reports are based on a set of cost assumptions associated with the development of the mine as originally conceived in feasibility studies. Once operational, the objective in any mine is to discover further mineral resources to keep the mine operating profitably for as long as feasible. To discover additional resources, companies normally conduct further exploration activities in the areas surrounding the mine site.

Revenue Loss Scenarios:

- Government revenue implications of including additional exploration following the start of commercial production of $10 million per year for ten years.

Mining Expenses Outside of the NWT

Mining expenses incurred outside of the NWT have no impact on the calculation of the NWT royalty. These expenses do, however, have an impact on federal corporate income tax and therefore also in NWT corporate income tax. Examples of costs allowed as deductions could include unsuccessful exploration efforts or losses incurred in other operating mines.

Revenue Loss Scenarios:

- Government revenue implications of unsuccessful exploration expenditures outside of the NWT amounting to $50 million.
- Government revenue implications of the carry-forward of historic mining losses from projects outside of the NWT amounting to $50 million.

High Financing Costs

High financing costs, particularly when made to affiliated companies, are a major source of company profit shifting and therefore government revenue loss. The OECD has published dedicated guidance for countries on the risks of high financing costs.[17] For a real-world example of revenue loss from abusive debt financing, see the case of a Chilean copper mine in *Many Ways to Lose a Billion* (p. 42). The PwC mine model assumes that 50% of the initial capital investment would be financed with debt with an annual interest rate of 4.25%. In practice, the share of debt and the interest rates are often both much higher.

Revenue Loss Scenarios:

- Government revenue implications of an increase in the share of debt to 65% of the initial capital borrowed at an interest rate of 8%.

[16] Stornoway Diamond Corporation – Renard Diamond Project NI 43 101 Technical Report – March 30, 2016, p. 143.

[17] Limiting the Impact of Excessive Interest Deductions on Mining Revenue, OECD, 2018.

Commodity Price Escalation

The results generated by economic models of mining projects are only as good as the assumptions on which they are based. The least reliable of all assumptions are commodity prices. As future commodity prices cannot be predicted, models are based on a series of assumed commodity prices, normally representing low, medium, and high cases. In the case of the PwC models, these cases are based on mine revenues and are designed to correspond to different rates of return for the mining company (low = IRR of 10%, medium = 15%, and high = 20%).

As inflation of costs is commonly built into models, so too is the inflation of commodity prices (or in the case of the PwC models, mine revenues). As stated in the methodology section of the PwC report, "cost and revenue escalation were built into the model at 2% per year" (p. 16).

This approach to the escalation of costs and prices/revenues is so commonplace that it rarely receives attention. However, while inflation can be assumed to affect project costs, as it does across the economy, there is no reason to assume that commodity prices / mine revenues will escalate in a similar way. This methodological approach has a direct impact on the results, particularly over longer time horizons. As revenues are larger than costs, escalation increases the margin building in a degree of profitability, and therefore government revenues, that are purely an artifact of modelling assumptions.

Revenue Loss Scenarios:

- Government revenue implications of removing escalation of mine revenues by 2%.

Quantifying Potential Risks to Government Revenue

Table 2 shows the impact on government revenue of the revenue risk scenarios set out above. Results are shown in total dollar values (cumulative total revenues in nominal terms) and as a percentage reduction for both total government revenues (federal government and GNWT) and separately for the GNWT.

The results in Table 2 illustrate how a series of changes to the assumptions running the model, including a reduction in revenues (marketing fees), higher mine costs (capital cost and operating cost overruns, and higher debt financing costs), and deductions from outside the territory can lead to a fall in government revenues of more than 25%. It also illustrates how the seemingly simple assumption that revenues will increase by a consistent 2% alongside costs can be responsible for an additional 35% of projected government revenues.

Table 2: Revenue Risk Analysis – Implications for Government Revenue

	Combined Government Revenues	Combined Percentage Reduction	GNWT Revenues	Combined Percentage Reduction
Base Case – Large Diamond Mine @ 20% IRR	1,779,340	-	1,115,779	-
+ Capital costs exceed original estimates by 30%	1,768,825	0.6%	1,110,452	0.5%
+ Operating costs exceed original estimates by 20%	1,579,192	11.2%	989,202	11.3%
+ Diamond marketing charges at 3%	1,476,405	17.0%	923,324	17.2%
+ Exploration costs at NWT mine site at $10mil/year for 10 years	1,425,384	19.9%	884,453	20.7%
+ Exploration costs outside of the NWT at $50 million	1,412,224	20.6%	878,742	21.2%
+ Historic tax loss carry-forward from outside NWT at $50 million	1,398,974	21.4%	872,992	21.8%
+ Debt finance costs at 65% debt and at 8% interest	1,326,439	25.5%	834,832	25.2%
+ Removal of assumption of revenue inflation at 2% per annum	722,212	59.4%	445,663	60.1%

Figure 8 shows government revenues for the large diamond mine from the PwC study (IRR at 20%) comparing the results at 20% IRR with the results for the combined revenue risk scenarios.

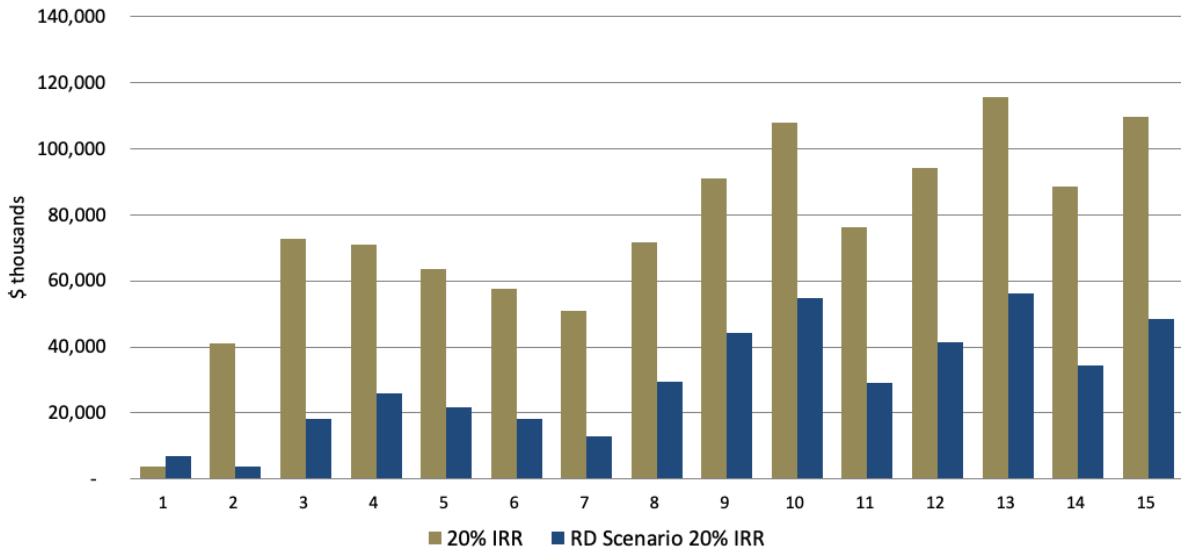


Figure 8: Forecast GNWT Revenues for Large Diamond Mine under Revenue Risk Scenarios

5.0 CONCLUSIONS AND RECOMMENDATIONS

The stated purpose of the mining fiscal regime review is "maximizing benefits from development while maintaining competitiveness." However, the ToR for the PwC report imply that maximizing benefits is synonymous with attracting inward investment. A benchmarking study may be an important element of a wider fiscal regime review, but it is certainly not a sufficient basis on which to conclude that the NWT is maximizing benefits in terms of revenues from the mining sector.

The ToRs for this study set out four high-level questions. These are reproduced in Table 3 below. ITI has stated that "re-imagining of our government's fiscal framework around royalties is one that deserves a comprehensive, collaborative, multi-phased approach." Perhaps other studies are already in process, or are soon to be commissioned, to deliver on this comprehensive, collaborative, multi-phased approach. The responses below are based on materials on the NWT mining fiscal regime review currently in the public domain, with emphasis on the PwC study.

Table 3: Terms of Reference Questions and High-Level Responses

No.	Question	High-Level Response
1	Is the GNWT maximizing benefits from resource extraction?	The share of after-costs mining revenues that flow to the government (and to the GNWT) fall well below what could reasonably be expected. Only by selecting multiple American and Canadian jurisdictions – all known to have among the lowest government take in the world – does the NWT appear well situated.
2	Does the GNWT fiscal and regulatory structure maximize value for NWT residents and future generations?	The NWT mining fiscal regime does not appear mining to be well designed to maximize government revenues. An effective fiscal regime secures a fair share or revenues and is based on a combination of fiscal instruments that perform well on take, timing and progressivity and are resilient to BEPS. For the NWT mining fiscal regime, the take is low, there is a significant risk that revenues will be delayed and there is virtually no progressivity. With profit sensitive fiscal instruments, including the royalty, there are considerable base erosion and profit shifting (BEPS) risks.
3	Is the proposed approach by the GNWT to review this fiscal and regulatory regime comprehensive?	The PwC study was designed to answer only one of the many questions that should be part of a mining fiscal regime review. This benchmarking study should be supplemented with: - a comprehensive analysis of historic payments to government (how has the fiscal regime performed in practice); - a full revenue analysis from the perspective of the government as opposed to only the companies;

		- an analysis of plausible mining revenues for the GNWT and the net benefits that would be retained by the NWT under the TFF.
4	Will the proposed approach accurately assess whether the benefits of resource wealth are being maximized for the GNWT, NWT residents, and future generations?	Three sets of additional analyses, as set out above, would be needed to accurately assess whether the benefits of resource wealth are being maximized for the GNWT, NWT residents, and future generations.

Are Government Revenues from Mining a Priority for the GNWT?

Before turning to the recommendations, it is important to consider a prior question:

> **Does the GNWT believe that maximizing government revenues from the mining sector is an important policy objective?**

Internationally, it is widely recognized that mining is a capital-intensive industry and that capital-intensive industries generate relatively few jobs and spin-off benefits, particularly in comparison to other sectors such as manufacturing. The follow-on conclusion is that maximizing benefits from the mining sector must include securing a substantial share of the revenues from the sale of non-renewable resources.

Interestingly, this is not a view that is necessarily widely shared within Canada or the United States, where emphasis is often given to indirect economic benefits.[18] The sentiment that mining revenues are not a priority is implicit in the mining fiscal regimes that predominate in the two countries. Sometimes the sentiment is explicit, as was the case when the Ontario Mines Minister Michael Gravelle was pressed on the marginal revenues that Ontario was generating from the mining sector. His response:

> "Mining taxes are obviously one part of it, but the value for us are the jobs, are the indirect economic benefits that come from the jobs."[19]

It will be important to clarify the GNWT's position on the value of generating substantial revenues from the mining sector. **The remainder of this section assumes that the GNWT believe that the residents of the NWT should share significantly in the wealth generated from the sales of the territory's non-renewable resources.**

(1) Analyse the Performance of the NWT Mining Fiscal Regime since Devolution

The PwC study concludes that no changes are required to the NWT mining fiscal regime as the government take is already so low that reducing it further would not generate additional inward

[18] For an analysis of economic benefits that focuses on contributions to GDP, but which does not analyse royalty or corporate income tax payments, see Warwick D. Bullen and Malcolm E. Robb, Socio-economic Contribution of Gold Mining in the Yellowknife Mining District, 2004.

[19] Rita Celli, Mining for more: How much is mining really worth to Ontario? CBC, 11 May 2015.

investment. The analysis is based on the modelling of a series of hypothetical mines under a set of highly optimistic assumptions.

In the seven years since devolution, world class diamond mines have been operating in the NWT. There is, therefore, a wealth of data that could be examined on how the NWT mining fiscal regime performs in practice rather than in theory. Retrospective analyses can shed important light on the ability of a fiscal regime to generate the government revenues that are easy to forecast but hard to collect. In many cases, there is little enthusiasm for retrospective revenue analyses as the results often simply highlight missed opportunities. Nevertheless, fixing the shortcomings in a mining fiscal regime requires careful diagnosis of the existing weaknesses.

(2) Implement Government-led Revenue Transparency

For nearly two decades, a global movement towards transparency on extractive sector revenue payments has gathered momentum based on the belief that securing a fair share of natural resource wealth seldom benefits from secrecy. Dozens of countries around the world now regularly publish revenue payment data at the level of the individual project under the auspices of the Extractive Industries Transparency Initiative (EITI).[20] In a growing number of countries, data is also published on mineral production volumes, realized sale prices, and in some cases even project costs.

While Canada is a supporter of EITI being implemented in other countries, revenue transparency in Canada lags far behind. According to a journalist seeking to understand mining revenues in Ontario: "It took me months to untangle the mechanics of how the provincial government collects mining-related taxes or royalties. No one offered up a clear answer."[21]

There has been some important progress in requiring companies to disclose payments to government. In Canada, this is now done through the Extractive Sector Transparency Measures Act (ESTMA). Mining companies publicly listed in Canada are also subjected to the most stringent disclosure requirements resulting in the routine publication of full feasibility studies (known in the industry as National Instrument 43-101). Furthermore, some Canadian mining companies disclose detailed operational data at the individual mine level to give confident to their investors.

Expanding disclosure requirements for companies, however, is no substitute for disclosure by governments at both the federal and provincial/territorial levels. Residents of the NWT have the right to know at least as much as investors about the terms on which their non-renewable natural resources are sold.

[20] A list of countries implementing the Extractive Industries Transparency Initiative can be found here: https://eiti.org/countries.

[21] See Rita Celli, Mining for More: Is Ontario getting a good deal? 2015. The various reports are summarized here: http://www.michenerawards.ca/mining-for-more-report-by-rita-celli-winner-of-the-2014-michener-deacon-fellowship-for-investigative-reporting/.

(3) Conduct a Fiscal Regime Review Focused on Maximizing Government Revenue

The analysis in Section 3 of this report provides a very preliminary assessment of the NWT mining fiscal regime. That section is designed to be illustrative of the kinds of analyses that should be done as part of a forward-looking mining fiscal regime review.

In contrast to a benchmarking study that assesses royalties and taxes as a cost to be incurred from the perspective of a mining company, a government revenue analysis is designed to determine whether the fiscal regime is well-designed to maximize the government share of revenue under a wide range of circumstances.

A government revenue analysis should include a detailed assessment of the different fiscal instruments, and an analysis of whether these instruments in combination perform well in both encouraging inward investment and generating a fair share of government revenue. Particular attention would be given to the interplay between the different fiscal instruments and whether other combinations, revenue-based royalties, and resource rent taxes, might not be more appropriate. A government revenue analysis would assess the performance of the mining fiscal regime against the core metrics of take, timing, and progressivity. A comprehensive mining fiscal review should also consider revenue risks including BEPS, as fiscal regime design can both generate and mitigate risks to future government revenues.

The economic modelling required for this kind of analysis is very similar to what PwC has already done. However, the questions that are asked, and the ways in which the results are presented, are fundamentally different.

(4) Analyse the Net Revenue Benefits for the NWT

Any mining sector revenue analysis conducted for the NWT should draw the distinction between revenues that will be paid to the federal government and revenues that will be paid to the NWT.

The provisions of the TFF complicate government revenue analysis for the NWT. The implementation of the TFF appears to create a significant disincentive for the GNWT and Indigenous Governments to maximize government revenues through increases in taxes and royalties.

The TFF provisions are complex and the implications for government revenue cannot be understood in the context of a two hypothetical mines. It requires an analysis of the overall mining sector in the NWT, including data on revenue payments from all operating mines. While this analysis is not easily done, any decision to leave or change the NWT fiscal terms that apply to the mining sector should be analysed through the lens of the net revenue benefits that would accrue to the NWT.

(5) Generate Greater Mining Revenues to Benefit Future Generations

In resource-rich economies, it is appropriate to consider how future generations might also benefit from the one-time sale of non-renewable resources. A common response is to invest a proportion of natural resource revenues in a long-term savings fund.

The NWT has adopted this approach with the creation of the Heritage Fund in 2012 designed to "save a portion of resource revenues for the benefit of future generations of NWT residents." The rationale behind the Heritage Fund is admirable. Criticisms have been levelled at fund governance, oversight and transparency, deposit rules, and investment strategy.[22] More fundamental, however, is the challenge that even with several world-class diamond mines, government revenues have not been substantial enough to build up meaningful funds for future generations.

The Heritage Fund can be seen as a "premature fund" – an example of "governments creating funds when resource revenues are small, distant or uncertain."[23] A case can be made both for saving wealth for future generations or for building a strong future by investing in the current generation. Both approaches, however, depend on the NWT retaining a strong share of their natural resource wealth in the form of royalty and corporate income tax payments.

(6) Expand Indigenous Governments' Economic Benefit Sharing

The comparatively low government take generated from the current NWT mining fiscal regime creates opportunities for Indigenous Governments to secure increased economic benefits directly from the mining companies. As Impact Benefit Agreements payments to Indigenous Governments appear to fall outside of the clawback provisions of the TFF, this could be the easiest way for more revenues from the mining sector to be retained within the NWT. As with wider government revenues, securing significant economic benefits from mining projects for Indigenous Governments is best pursued through a combination of a payment based on project revenues (likely a value-based royalty) and variable payments based on project profitability (likely a sliding-scale commodity price-based royalty). As with government revenues, careful monitoring over the project lifespan is essential to ensure that the appropriate share of revenues.

[22] Bauer, Northwest Territories Mineral Sector Review, 2017, p. 33.
[23] Andrew Bauer and David Mihalyi, Premature Funds: How Overenthusiasm and Bad Advice Can Leave Countries Poorer, NRGI, 2018, p. 1.

ANNEX I: NWT MINING ROYALTY

In contrast to most other jurisdictions, the NWT royalty is entirely profit-based. In Canada many provinces have a combination of both *ad valorem* and profit-based royalties. In the rest of the world *ad valorem* royalty systems are by far the most common. An *ad valorem* royalty is calculated by applying the royalty rate on the sale value of the minerals – either with the actual sale price or based on a market value estimation. In the case of an *ad valorem* royalty, some deductions may be allowed but these are commonly limited to transportation cost (up to the border) and some marketing and insurance fees. In the case of NWT, as the royalty is profit-based, most costs incurred to produce the mineral are deductibles – not dissimilar to the calculation of corporate income tax.

Royalty Rate

Although the NWT royalty rate is often referred to as being 13%, it is in fact a progressive range of royalty rates. It starts at 5% for output value less than $10 million and increases on each tranche of output. It reaches 13% only for output between $40 million and $45 million. The highest rate of 14% is triggered when output is higher than $45 million. Moreover, the royalties are calculated on a "lesser of" basis between a) the base rate of 13% or b) the progressive rates. It is therefore a misconception to say that the NWT royalty rate is 13%, as lower royalty rates are applied for all output below $40 million. The 13% rate is in fact a maximum royalty rate when we look at the entire output.

Revenue

The revenue can be determined in three different ways: a) from the proceeds from sales if sold to an unrelated party, b) the market value of the mineral if sold to an affiliate party,[24] and c) for precious stones, their value before they were cut and polished.

Deductions

The allowed deductions could be regrouped in four main categories:[25] a) sales-related costs, b) direct costs at the mine, c) general and administration costs (including depreciation), and d) others.

a. **Sales-related costs:**
   - the costs of sorting, valuing, marketing, and selling the minerals or processed minerals
   - the costs of insurance, storage, handling, and transportation to the processing plant or market.
b. **Direct costs at the mine:**
   - the costs of mining and processing minerals or processed minerals from the mine
   - the costs, of repair, maintenance, or reclamation at the mine
   - if minerals are processed by the operator of the mine before their sale or transfer, an annual processing allowance can be deducted based on set rules.

[24] Although for diamonds "market value" is quite well-defined, we could not find the basis of estimation for other minerals such as a specific reference price at the London Metal Exchange for instance.
[25] The following provide only a general overview as the regulations provide for dozens of deductions.

c. General and administration:

- general and administrative costs for property, employees, or operations at the mine that are not otherwise allocated to operating costs
- depreciation for:
  - the depreciable assets of the mine
  - depreciable assets of any facilities located outside the NWT that are used for the processing of minerals produced from the mine
  - development allowance
  - exploration costs incurred before the date of commencement of production on the mining property
  - all costs incurred before the date of the commencement of production for the purposes of bringing the mine into production
  - the purchase price of the claim or lease
- a mining reclamation trust contribution allowance for environmental rehabilitation.

d. Other costs:

- exploration costs incurred during the year (capped at 10% of output minus sales-related and direct costs).

Limitations on Deductions and Allowances

The regulations are also quite explicit on what cannot be deducted in the calculation of the royalty. Following are the main limitations on deductions and allowances.

The depletion in the value of the mine or mining property by reason of exhaustion of the minerals; remuneration and travel costs of directors; stock transfer agents' fees; shareholders' meetings or the preparation of shareholders' reports; legal, accounting and other costs incurred in connection with incorporations; reorganizations, financing or security or stock issues; interest on any debt; remuneration of executive officers; administrative and consulting costs; and costs in respect of offices not located at the mine site.[26]

The limitations also include taxes on profits, property, or capital; royalties paid for the use of mining property; the royalties calculated on revenue, production or profits of the mine; payments made to an organization, community or corporation that are not attributable to the provision of goods and services directly related to the development and operation of the mine; payments made for the use or lease of, or access to, the surface of the land on which the mine is located; discounts on bonds, debentures, shares or sales of receivables; insurance premiums other than those paid for minerals or processed minerals produced from the mine; the purchase price of any financial instrument; charitable donations; and advertising costs not directly identified with the output of a particular mine.

[26] Unless it is demonstrated that remuneration or those costs are directly related to operations of the mine or to the marketing and selling of minerals or processed minerals produced from the mine.

ANNEX II: TAX EROSION RISKS FOR THE NWT

For a number of years, there has been an international and Canadian effort in establishing mechanisms and regulations to prevent tax erosion practices. The OECD, in particular, has been active on this issue especially with regards to the mining sector.

One of the challenges is that activities of tax "leakages" take various shapes and forms and are sometime misinterpreted. We often hear the terms tax optimization, aggressive tax planning, tax erosion, tax avoidance, tax evasion, and tax fraud. But while the first two are normally legal and tax evasion and tax fraud are clearly illegal, tax erosion is somehow in a grey area. Hence, the challenge with these practices is that in most cases they are not illegal. Largely they just take advantage of current rules that are still grounded in the legislation, tax codes, and treaties. The challenge is even greater when jurisdiction deals with the presence of multinational firms, often the case in the mining sector.

These tax erosion practices often come under the acronym BEPS (base erosion and profit shifting). They include transfer pricing (or mis-pricing), excessive interest deductions, undervalue of mining sales, stabilization provisions, tax incentives, international tax treaties, excessive management or marketing fees, abusive hedging arrangements and inadequate ring-fencing. All these tools are commonly used by mining companies to reduce their fiscal payments.

Since, in general, companies tend to navigate within the tax erosion zone as this allows them to remain within the legal limits, it is the duty of tax authorities to put in place mechanisms to prevent or at least reduce the possibility of companies benefitting from tax erosion practices and to enforce penalties when they are abusing the fiscal rules. The Canada Revenue Agency (CRA) has built its capacity to prevent these practices, in particular in abusive interest deductions and on transfer mispricing and marketing fees.

Why is this an issue for NWT? One of the reasons is that NWT royalty is profit-based and so is exposed to the same erosion practices on the costs side as corporate income tax. As a matter of fact, contrarily to most jurisdictions in the world, Canadian provinces rely heavily on profit-based royalties instead of purely *ad valorem* royalties based on revenues.[27] But in most provinces, part of the royalty payments also includes a revenue-based royalty. This is not the case in the NWT.

Transfer Pricing

Transfer pricing involves setting a price for the purchase of a good or service between two related parties (i.e., part of the same corporate group). These transactions can be used to shift profits away from the NWT when the related parties set the price of a transaction in a manner inconsistent with what unrelated (*arm's length*) parties would have done. Transfer pricing is one of the most complex issues in tax administration. Needless to say, it cannot be fully addressed here.

A transfer price is employed in a transaction between associated enterprises. When independent enterprises transact with one another, market forces determine the pricing of those transactions. This may not always be the case in transactions between associated enterprises. Transfer pricing

[27] An *ad valorem* royalty is based on the mineral value (revenue) rather than profits.

is a legitimate and necessary feature of the commercial activities of multinational enterprises. However, where the transfer prices between the associated enterprises do not accord with internationally applicable norms, they can distort the allocation of profit among the countries in which a multinational enterprise operates.

When transfer pricing artificially shifts profits out of a country it denies the country essential tax revenues. Canada, as most countries, has addressed the tax risks created by transfer pricing by introducing domestic tax rules based on the "arm's length principle."

Transfer pricing rules also typically provide a tax administration with the authority to make adjustments to taxable profit where taxpayers do not adopt arm's length conditions in their transactions with associated enterprises.

In order to establish such prices (and other conditions), it is necessary to compare the conditions of transactions that exist between the associated enterprises with those that do or would exist between independent parties in comparable circumstances. It is necessary to carry out this comparability analysis whenever the arm's length principle is implemented.

This is an issue that does exist in Canada as we are aware of two major cases under CRA review against two major Canadian mining companies. It is therefore a risk for NWT projects as well.

Long-term Supply Agreements

You would expect Canada to be immune to these types of BEPS practices. It is not the case. For instance, long-term supply agreements are under scrutiny from tax authorities, as indicated by the CRA's audit of Cameco.

For instance, it is in the public domain that Cameco entered into an intercompany agreement with its Swiss marketing hub for the purchase of uranium; this locked in the price of future transactions at 1999 market rates for the next 17 years. During that time, the price of uranium increased substantially, leading to significant profits for the Swiss subsidiary.

With the introduction of the BEPS principle, which deals with profit shifting through intercompany transactions that would not typically occur between third parties, tax authorities are likely to focus more closely on the long-term supply agreements of mining companies. Many contractual commodity pricing structures, such as the one used in the Cameco agreement, could be significantly affected by these changes.

Hybrid mismatch arrangements

The federal budget of 2021 proposes addressing "hybrid mismatch arrangements" in connection with the OECD's report on neutralising the effects of this type of arrangement. Generally, hybrid mismatch arrangements are cross-border structures in which the participants rely on discrepancies in different jurisdictions' tax treatment of certain instruments, entities, or transfers to obtain overall tax benefits to one or more of the participants.

The Canadian government is concerned that these arrangements significantly erode the tax-base, and the 2021 budget draws attention to four types of hybrid mismatch arrangements:

1. Deduction/non-inclusion (D/NI) mismatches – where one country allows a cross-border payment to be deducted from income, but the payment is not included in the recipient's income (within a reasonable period of time);

2. Double deduction mismatches – where a deduction in respect of a single expense is available in two or more countries;
3. Imported mismatches – where a payment is deductible by an entity in one country and included in the income of a second entity in a second country, but that inclusion is set off against a deduction under a hybrid mismatch arrangement between the second entity and a third entity in a third country; and
4. Reverse hybrids – these involve using an entity which is treated as fiscally transparent under the laws of the country in which it is formed, but as a separate entity under the laws of its investors (i.e., its shareholders, members, etc.).

The budget also addresses "branch mismatch arrangements." Generally, branch mismatch arrangements occur where a taxpayer, taxed in one country, has a branch which is taxed in a different country, but the ordinary rules for allocating income and expenditure between the countries result in income escaping tax in both countries.

The government is concerned that branch mismatch arrangements can generate similar mismatches to hybrid mismatch arrangements.

Thin Capitalization / Excessive Interest Deductions

Mines require significant capital outlays over their life cycle. Expenditure starts relatively modestly with exploration and development, before increasing substantially to build the mine and related facilities. There are a variety of financing instruments available to companies to finance exploration and development activities, but here we will focus on debt.

Mining companies routinely lend money to their operating subsidiaries where the interest on the debt is deductible. In many cases, the interest paid by operating subsidiaries exceeds the deductibility limit set by the country in which they operate.

Debt is of particular concern since the interest on debt can be deducted from corporate income tax and also for the calculation of royalty in NWT. Companies can use these deductions to lower their taxable income in several ways. First, they can allocate a disproportionately large amount of debt to the host company, significantly reducing its taxable income locally. This is called "thin capitalization" because the equity capital portion of the financing is small relative to the amount of debt.

Second, they can charge artificially high interest rates to themselves, rates that are inconsistent with those that would be charged between unrelated parties. For this measure to be effective, the debt is purchased by one or a number or related parties located outside of Canada in a jurisdiction with low tax rate on interest. This can be viewed as a form of transfer pricing.

Third, companies can use hybrid financing instruments. There exist a multitude of financial products difficult to classify as either debt or equity. Companies will often use these instruments for legitimate purposes. However, their complex nature presents an opportunity to reduce taxable income in the host country by declaring the payments made as interest.

In response to this issue of excessive interest deduction, the OECD developed a new approach. The recommended approach ensures that an entity's net interest deductions (i.e., interest expense that exceeds any interest income) are directly linked to the taxable income generated

by its economic activities, as measured by taxable earnings before deducting net interest expense, depreciation and amortization (EBITDA). Among the variations, the OECD recommends a fixed ratio rule based on a benchmark net interest / EBITDA ratio of between 10 and 30 percent.

Consistent with recommendations of the OECD, Canada in its 2021 budget proposes to limit the amount of interest expense that a corporation, trust, partnership, or Canadian branch of a non-resident taxpayer can deduct in computing its taxable income to no more than a fixed ratio of its "tax EBITDA." Tax EBITDA will be comprised of taxable income (thereby excluding, amongst other things, certain dividends eligible for deductions) before taking into account interest expense, interest income, income tax, and deductions for depreciation and amortization, all as determined for tax purposes.

Exemptions will be available for Canadian-controlled private corporations (CCPCs) with taxable capital in Canada of less than $15 million and groups of entities with aggregate interest expense under $250,000.

The rule would be phased in with a fixed ratio (subject to the "group ratio rule") of 40% for taxation years beginning after 2022 but before 2024, and 30% for taxation years beginning after 2023. Interest denied under the new rule can be carried forward for up to twenty years or back for up to three years.

It is worth noting that Canadian members of a "group," as that term will be defined in the legislation, will generally be able to transfer any unused capacity to deduct interest to other Canadian members of the group who would otherwise be limited by the rule.

As the royalty calculation in NWT is solely profit-based, there might be an incentive for companies to over-leverage debt – and interest payments in NWT – and transfer the ineligible interest deduction in a project located in another province.

Inflated Management and Marketing Fees

Mining companies use a wide range of administrative and technical services from their parent company such as engineering, legal, and information technology services. In some cases, these services are not provided directly by the parent company but through a related party subsidiary – often legally set up outside of Canada in a low tax jurisdiction. As these services may be highly specialized, it is difficult to accurately price them.

In most instances, the services company covers the cost of delivering these services, then charges it as a service fee to their affiliate in the NWT. Although this can be justified from an economic point of view, mining companies may use these fees to transfer profits out of the NWT and Canada by overcharging the local NWT subsidiary.

Canada has tax provisions to apply withholding taxes to services which safeguard, to some extent, against this type of profit shifting.[28] Unfortunately, double taxation treaties (DTA) that reduce or

[28] In Canada, a withholding tax (WHT) at a rate of 25% is imposed on interest (other than most interest paid to arm's-length non-residents), dividends, rents, royalties, certain management and technical service fees, and similar payments made by a Canadian resident to a non-resident of Canada. However, Canada has a network of treaties where some have retroactive effects.

exempt withholding taxes are impediments to proper implementation. As Canada has almost one hundred of these treaties signed, the risk of a practice called “treaty shopping” is high.

The arm’s length principle should be used to price technical services. On the other hand, the government could set a limit on the maximum amount of management fees that can be charged to the NWT mining company, perhaps as a percentage of operating costs or revenues.