



MEETING EDE 145-19-23

**STANDING COMMITTEE ON ECONOMIC DEVELOPMENT
AND ENVIRONMENT**

~
MONDAY, MAY 29, 2023
EAGLE ROOM / ZOOM
12:00 PM

AGENDA

1. Prayer
2. Review and Adoption of Agenda
3. Declarations of Conflict of Interest
4. Public Matters
 - a) Public Briefing Regarding Review of Royalty Regulations from GNWT
Department of Industry, Tourism and Investment
5. New Business
 - a) Mine Training Society
 - b) Freshwater Fish Harvesters Association
 - c) Tucho Board
 - d)
6. Date and Time of Next Meeting: Thursday, June 1, 2023 at 7:00PM
7. Adjournment



REVIEW OF ROYALTY REGULATIONS:

AN UPDATE ON DEVELOPMENT OF RESOURCES LEGISLATION IN THE NWT

May 29, 2023



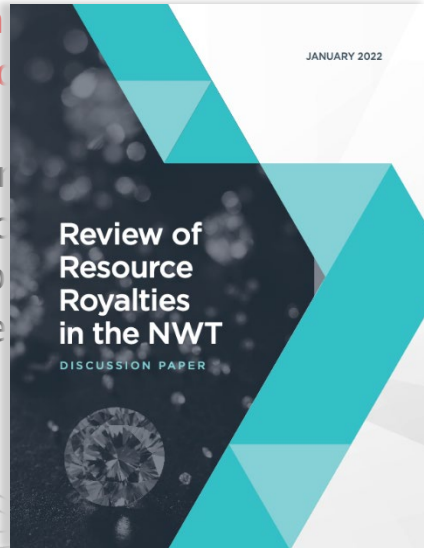
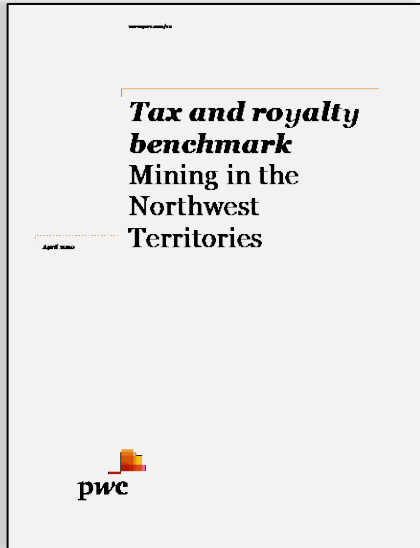
Path Forward of the Review of the NWT Royalty Regime

1. Competitive Analysis and Peer Review (PwC Report, Peer reviewed by Michael Doggett)
2. Co-development of review with Technical Working Group/Intergovernmental Council Sec.
3. Discussion Paper Development
4. Engagement on Royalty Regime
3. Policy Option Development
4. Financial Modeling of Recommendations
6. Independent 3rd Party Review
7. Finalize Recommendations
8. Drafting of Royalty Regulations
9. Aboriginal Consultation (S.35) of drafted regulations
10. Commissioner Approval of amendments to the Royalty Regulations



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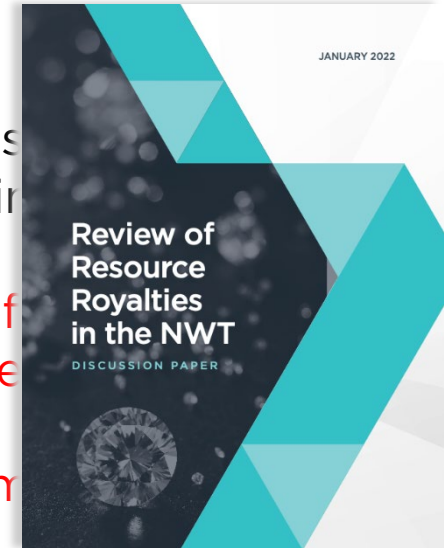


Path Forward of the Review of the NWT Royalty Regime

Discussion Paper Metrics

To shape the public discussion and development of the NWT's resource royalty regime, the Technical Working Group/Intergovernmental Council Sec. has set out three broad measures by which it proposes consider royalty regulations for mineral development in

1. Are NWT royalty regulations providing a fair share of
2. Are NWT royalty regulations contributing to a stable competitive investment environment in the NWT?
3. Is the utility of NWT royalty regulations being maxim



All elements of the royalty system (except for the resource revenue distribution formula) are open for discussion and a combination of concepts and elements may ultimately be employed to establish the NWT's royalty system moving forward.

Potential Royalty Review Items

The review of the MR should be guided by the goals to increase in transparency and update the policy language from the perspective of the NWT.

| | |
|-----------------------------------|--|
| Minimum Tax / Hybrid Regime | Infrastructure Contributions Deduction |
| Interest Rate Refinement | Processing Allowance Restructuring |
| Progressive Reclamation Deduction | Enhanced Mine Property Exploration Incentive |
| Reclamation Trust Revision | Off-Property Exploration Incentive |
| Northern Head Office Incentive | Northern Procurement Deduction |



Potential Royalty Review Items

The review of the MR should
policy language from the pe

transparency and update the

| | |
|-----------------------------------|-------------------------|
| Minimum Tax / Hybrid Regime | ons Deduction |
| Interest Rate Refinement | structuring |
| Progressive Reclamation Deduction | y Exploration Incentive |
| Reclamation Trust Revision | Incentive |
| Northern Head Office Incentive | Deduction |



Refined Royalty Review Items



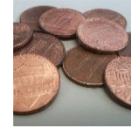
Royalty Structure Options

- Royalty Structure
- Hybrid
 - Value Based
 - Gross Value
 - Net Smelter
 - Profit Based
 - Net Proceeds
 - Net Profits
- Progressive Tiers
- Royalty Rate



Deductions and Allowances

- Additions
 - Property Tax
 - Benefit Agreements
 - Socio-Economic Agreements
 - Offsite Infrastructure Investments
 - Mining Reclamation Trust (Functionality)
 - Greenhouse Gas Compliance
 - Insurance
- Removals
 - Enhanced Offsite Exploration
 - Processing Allowance
 - Streaming Costs (Make not deductible)



Administrative

- Transparency
- Ring Fence
- Commencement of Production
- Interest Rate
- Compliance

Royalty Structure Options

What We Heard Report

"1. that in the profit-based royalty system the progressive range of royalties is stepped up more steeply, the highest rate be in the range of 50%, and the cap should be in the range of \$200M. Furthermore, ITI should not promote the highest rate of royalties to the public as if it were the only amount; the progressive range should be shown, with the amount received at the various levels to provide a more accurate picture of government take. "

"...to set up our project in northern Ontario we would only have to pay a 5% royalty in comparison to your 13%. And it is just as remote there as the NWT."

Royalty Structure Options

- 1 Physical Ore Processed
- 2 **Gross Value of Saleable Commodities**
 - Downstream Deductions
- 3 **Net Smelter Revenue**
 - Minesite Costs
- 4 **Net Operating Income or Net Proceeds**
 - Allowances for Capital Expenditures
- 5 **Net Profit**



Royalty Structure Options

Mineral royalties and total tax payments over life of mine showing different calculation points in our base case results are:

| | | Rate | Royalty |
|---|---|--------|---------|
| 1 | Physical Ore Processed | \$15/t | \$604 |
| 2 | Gross Value of Saleable Commodities | 4% | \$604 |
| - | Downstream Deductions | | |
| 3 | Net Smelter Revenue | 6% | \$604 |
| - | Minesite Costs | | |
| 4 | Net Operating Income or Net Proceeds | 10% | \$604 |
| - | Allowances for Capital Expenditures | | |
| 5 | Net Profit | 13% | \$604 |

Result in same
Total Royalty

Different Rates
Depending on
Calculation Point

Our Current System

Royalty Structure Options

Identified which royalty system is best suited for the NWT

Hybrid Regime

➤ Advantages

- Ensures Minimum Royalty Collected (Value-Based)
- Royalty can be collected Monthly or Quarterly (Value-Based) and Annually (Profit-Based)
 - Increase frequency of royalty payments to Indigenous governments
- Advantages of both Value-Based and Profit-Based Regimes maintained.

➤ Disadvantages

- Value-Based royalty impacts the producer's cash flow during early phases in mine life when the mine is less profitable
- Value-Based royalty increases royalty burden on producers
 - burden reduced if minimum royalty payments are deductible in calculating Profit-Based royalty
- Increased administrative burden
- Can include all the disadvantages of Value-Based and Profit-Based Regimes.

Royalty Structure Options

Jurisdictional Scan PROVINCES AND TERRITORIES

| | BC | AB | SK | MB | ON | QC |
|-----------------------------|----------|-----------|------------|----------|----------|-----------------|
| Profit-based | Yes | Yes | Yes | Yes | Yes | Yes |
| (Hybrid System) Minimum Tax | Yes | Yes | No/Yes* | Yes | No | Yes |
| Net Proceeds | Yes 2% | ↓ | ↓ | Yes .5% | - | Yes 1% 4% |
| NSR | - | Yes 1% | Yes 1/5% | - | - | No |
| Sales | - | - | Yes 1% | - | - | No |
| Carry Forward | Yes | No | No | No | - | Yes |
| Payment Frequency | monthly | quarterly | quarterly* | annual | monthly | >\$3000 monthly |
| | NL | NB | NS | YT | NU | |
| Profit-based | Yes | Yes | Yes | Yes | Yes | |
| (Hybrid System) Minimum Tax | No | Yes | Yes | No | No | |
| Net Proceeds | - | ↓ | ↓ | - | - | |
| NSR | - | Yes 2% | Yes 2% | - | - | |
| Sales | - | - | - | - | - | |
| Carry Forward | | Yes | No | | | |
| Payment Frequency | annually | quarterly | quarterly | annually | annually | |

*Potash GV 1%
Metals+Diamonds NSR 1%
Uranium NSR 5%

Royalty Structure Options

- In order to ensure the NWT is receiving some royalties for minerals produced, a hybrid royalty regime with a profit-based regime and a minimum royalty is recommended.
- Different points can be tested in the value chain.

- | | |
|----------------|----------|
| • Gross Value | 1% or 2% |
| • Net Smelter | 1% or 2% |
| • Net Proceeds | 3% or 4% |

Minimum Royalty

As a minimum that is paid if profit-based royalties do not exceed it.



Royalty Structure Options

Mineral royalties and total tax payments over life of mine showing different calculation points in our base case results are:

| | | | | | | | | Rate | Royalty |
|---|--------------------------------------|--|--|--|--|--|--|--------|---------|
| 1 | Physical Ore Processed | | | | | | | \$15/t | \$604 |
| 2 | Gross Value of Saleable Commodities | | | | | | | 4% | \$604 |
| - | Downstream Deductions | | | | | | | | |
| 3 | Net Smelter Revenue | | | | | | | 6% | \$604 |
| - | Minesite Costs | | | | | | | | |
| 4 | Net Operating Income or Net Proceeds | | | | | | | 10% | \$604 |
| - | Allowances for Capital Expenditures | | | | | | | | |
| 5 | Net Profit | | | | | | | 13% | \$604 |

Result in same
Total Royalty



Royalty Structure Options

What We Heard Report

“...that in the profit-based royalty system the progressive range of royalties is stepped up more steeply, ...”

Royalty Structure Options

Progressivity Concept

- Progressivity, in the usual sense of the literature, refers to a rising government share of the net cash flows of a project—the so-called government take—as the value of the resource increases.
- Regressive taxes (the opposite of progressive), such as *Ad Valorem* royalties, signature bonuses, and land rental fees, exist to satisfy various government objectives other than revenue maximization.

Royalty Structure Options

Current Regulations:

69. (1) Each fiscal year, the owner or operator of a mine shall pay to the Government of the Northwest Territories royalties on the value of the mine's output during that fiscal year in an amount equal to *the lesser of*

(a) **13%** of the dollar value of the output of the mine, and

(b) the sum of the royalties payable set out in Column 2 of the table set out in Schedule 3 for the corresponding dollar value of the output set out in Column 1 of that table.

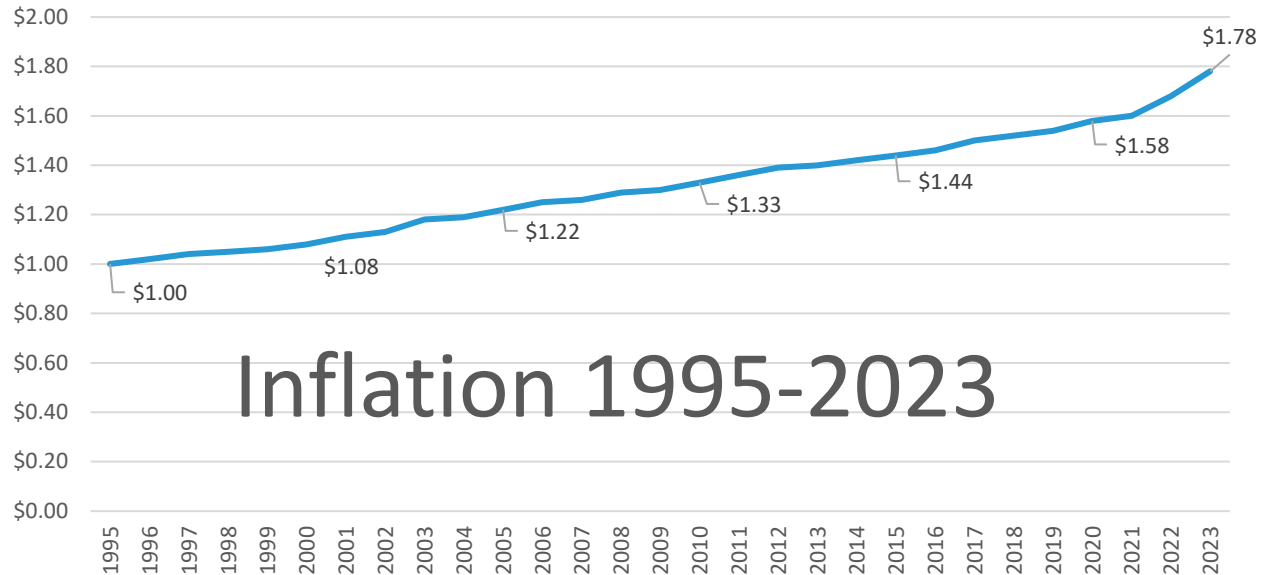
SCHEDULE 3

(Subsection 69(1))

TABLE

| Item | Column 1 Dollar Value of the Output of the Mine | Column 2 Royalty Payable on that Portion of the Value |
|------|---|--|
| 1. | 10,000 or less | 0% |
| 2. | greater than 10,000 but not greater than 5 million | 5% |
| 3. | greater than 5 million but not greater than 10 million | 6% |
| 4. | greater than 10 million but not greater than 15 million | 7% |
| 5. | greater than 15 million but not greater than 20 million | 8% |
| 6. | greater than 20 million but not greater than 25 million | 9% |
| 7. | greater than 25 million but not greater than 30 million | 10% |
| 8. | greater than 30 million but not greater than 35 million | 11% |
| 9. | greater than 35 million but not greater than 40 million | 12% |
| 10. | greater than 40 million but not greater than 45 million | 13% |
| 11. | greater than 45 million | 14% |

Royalty Structure Options



Royalty Structure Options


- TABLE

| Item | Column 1 Dollar Value of the Output of the Mine | Column 2 Royalty Payable on that Portion of |
|------|---|--|
| 1. | 20,000 or less | 0% |
| 2. | greater than 20,000 but not greater than 10 million | 5% |
| 3. | greater than 10 million but not greater than 20 million | 6% |
| 4. | greater than 20 million but not greater than 30 million | 7% |
| 5. | greater than 30 million but not greater than 40 million | 8% |
| 6. | greater than 40 million but not greater than 50 million | 9% |
| 7. | greater than 50 million but not greater than 60 million | 10% |
| 8. | greater than 60 million but not greater than 70 million | 11% |
| 9. | greater than 70 million but not greater than 80 million | 12% |
| 10. | greater than 80 million but not greater than 90 million | 13% |
| 11. | greater than 90 million | 14% |



Royalty Structure Options

Modelling

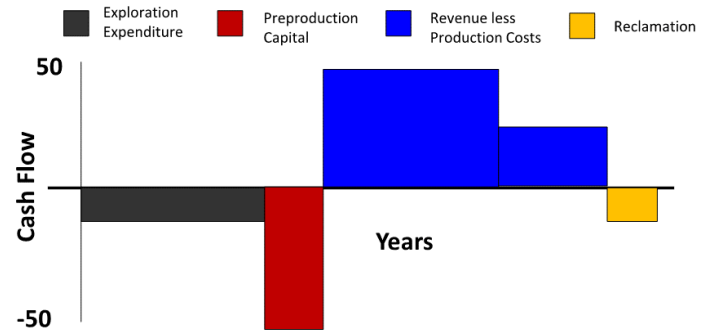
1. Are NWT royalty regulations providing a fair share of the profit? 
2. Are NWT royalty regulations contributing to a stable and competitive investment environment?
3. Is the utility of NWT royalty regulations being maximized?

NWT Financial Model

| USER INPUTS | | | | | EXISTING SYSTEM DEFAULTS AND SENSITIVITY | | | | |
|--------------------------------------|------------------------|----------------|--------------|--------------|--|---------------------|--|------|------|
| Dropdown Lists | | Royalty Rates | | | Bracket | Current Regulations | | | |
| Deposit Type | Existing System | Exhibit System | Variant Rate | Variant Rate | Variant Rate | Multiplier | Deductions without Pools | | |
| Diamonds | Hybrid | 13% | 15% | 17% | 2.00 | | Operating costs [1=on, 0=off] | 1 | 1 |
| Royalty Type Application | 100% Non Carry Forward | | | | | | Property Tax & IGA (allowable Percentage deduction) | 1 | 1 |
| Deductibility | Base Case | | | | | | Off-site Exploration (not included in Development) [1=on, 0=off] | 1 | 1 |
| Commodity Prices | 4% | | | | | | Off-site Exploration (not included in Development) - Max allowable deduction as a % of Mine Output less Opex [0=off] | 10% | 10% |
| Discount Rate | | | | | | | | | |
| ROYALTY PAYMENTS | | | | | | | | | |
| Royalty Payments | | | | | | | Pooled Deductions | | |
| Cash Basis | \$ million CAD | 602 | 602 | 602 | 602 | | Allow Processing Allowance [1= yes, 0= no] | 1 | 1 |
| Present Value Basis | \$ million CAD | 238 | 238 | 238 | 238 | | Allow Tailings to be included in Processing Allowance [3= yes, 0= no] | 1 | 1 |
| AERT | | | | | | | Reclamation Trust [1= yes, 0= no] | 1 | 1 |
| Cash Basis | % | 12.17% | 12.17% | 12.17% | 12.17% | | On-site Exploration - % of cost | 100% | 100% |
| Present Value Basis | % | 13.08% | 13.08% | 13.08% | 13.08% | | Development - Predevelopment and known deposit deductible - % of cost | 100% | 100% |
| CORPORATE INCOME TAX | | | | | | | | | |
| Federal | \$ million CAD | 590 | 590 | 590 | 590 | | | | |
| Territorial | \$ million CAD | 452 | 452 | 452 | 452 | | | | |
| Total | \$ million CAD | 1042 | 1042 | 1042 | 1042 | | | | |
| TOTAL TAX TAKE - CASH BASIS | | | | | | | | | |
| NWT Royalty Payments | \$ million CAD | 602 | 602 | 602 | 602 | | | | |
| FCIT | \$ million CAD | 590 | 590 | 590 | 590 | | | | |
| NWFCIT | \$ million CAD | 452 | 452 | 452 | 452 | | | | |
| Total | \$ million CAD | 1644 | 1644 | 1644 | 1644 | | | | |
| AERT | | | | | | | | | |
| NWT Royalty Payments | % | 12.17% | 12.17% | 12.17% | 12.17% | | | | |
| FCIT | % | 11.93% | 11.93% | 11.93% | 11.93% | | | | |
| NWFCIT | % | 9.15% | 9.15% | 9.15% | 9.15% | | | | |
| Total | % | 33.25% | 33.25% | 33.25% | 33.25% | | | | |
| TOTAL TAX TAKE - PRESENT VALUE BASIS | | | | | | | | | |
| NWT Royalty Payments | \$ million CAD | 238 | 238 | 238 | 238 | | | | |
| FCIT | \$ million CAD | 244 | 244 | 244 | 251 | | | | |
| NWFCIT | \$ million CAD | 197 | 197 | 197 | 197 | | | | |
| Total | \$ million CAD | 669 | 669 | 669 | 681 | | | | |
| AERT | | | | | | | | | |
| NWT Royalty Payments | % | 13.08% | 13.08% | 13.08% | 13.08% | | | | |
| FCIT | % | 13.41% | 13.41% | 13.41% | 13.78% | | | | |
| NWFCIT | % | 10.28% | 10.28% | 10.28% | 10.56% | | | | |
| Total | % | 36.76% | 36.76% | 36.76% | 37.42% | | | | |
| PROJECT METRICS | | | | | | | | | |
| Post-tax Cash Flow | \$ million CAD | \$1,300 | \$1,300 | \$1,300 | \$1,300 | | | | |
| Post-tax NPV8 | \$ million CAD | \$1,151 | \$1,151 | \$1,151 | \$1,119 | | | | |
| Post Tax IRR | % | 23.9% | 23.9% | 23.9% | 23.7% | | | | |

Royalty Modelling

- The model developed for this royalty review is meant as tool to examine the implications for government and companies of modifying the existing royalty system.
- Designed to be a realistic geologic target for exploration and mine development.
- Based on historical production and current advanced projects, the deposit types most relevant for royalty modeling are:
 - Base metal deposits of lead, zinc, silver
 - Diamond deposits
 - Gold deposits



Royalty Modelling

| | | Base Metals | Gold | Diamonds |
|--------------------|-----|-------------|---------|----------|
| Reserves | Mt | 40 | 12 | 15 |
| Mining Method | | UG | OP/UG | OP |
| Mine Life | Yrs | 23 | 12 | 30 |
| Mineral Production | | | | |
| Zinc | Mt | 2.29 | 0 | |
| Lead | Mt | 1.25 | 0 | |
| Silver | Moz | 72.0 | 1.45 | |
| Gold | Moz | | 2.34 | |
| Diamond | Mct | | 0 | 44.55 |
| LOM Revenue | \$M | \$10,260 | \$4,582 | \$8,803 |
| LOM Capex | \$M | \$1,090 | \$796 | \$1,463 |
| LOM Opex | \$M | \$4,364 | \$2,068 | \$2,396 |
| Pre-tax Profit | \$M | \$4,806 | \$1,718 | \$3,295 |

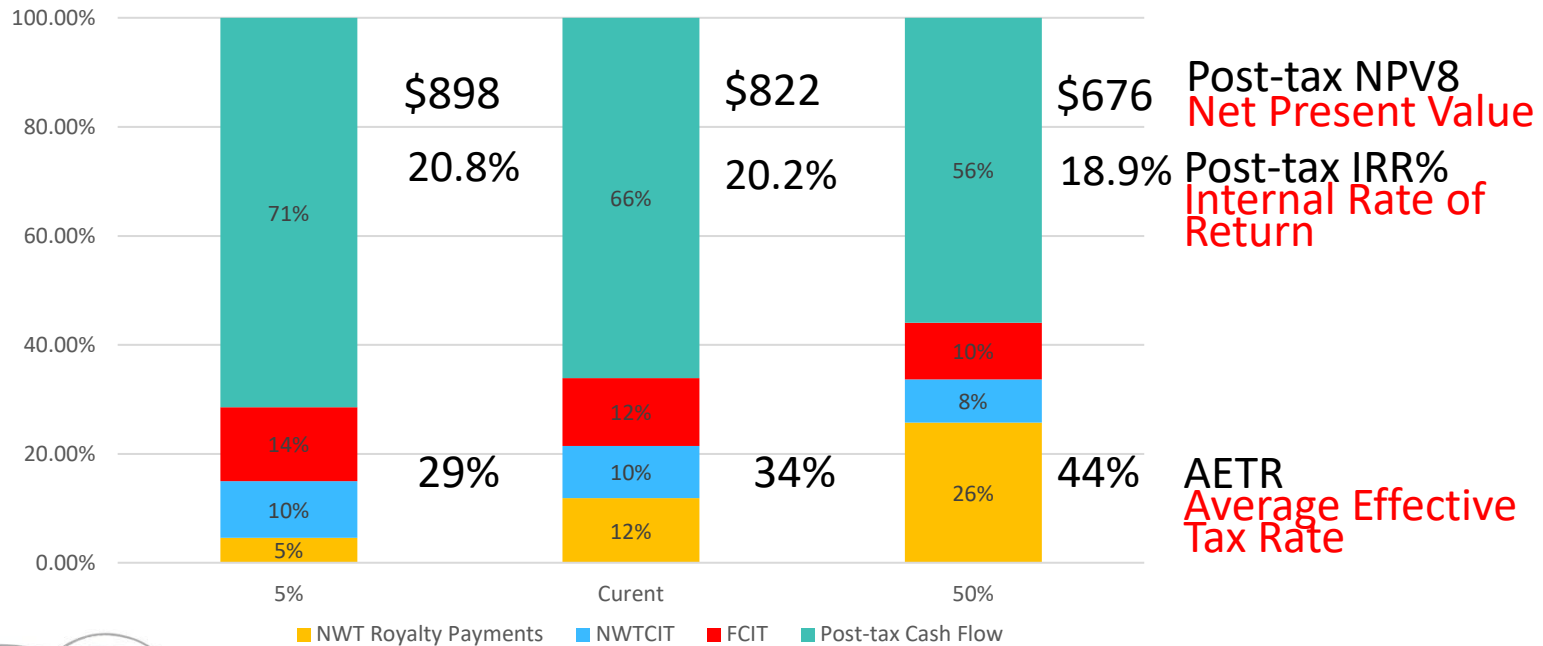
Royalty Modelling

- The model incorporates the status quo for NWT royalties as well as federal and territorial corporate income taxes.
- Changes to the NWT royalty must be considered in the context of the overall Average Effective Tax Rate (AETR). **Because NWT royalty payments are an allowable deduction in the determination of corporate income taxes, any increase in royalty payments is tempered by a corresponding decrease in corporate income tax.**
- The model built for this exercise is NOT meant to replace the existing annual model for the determination of royalty payments in the NWT. Rather this model is meant as a policy tool to be used to assess the impact of possible changes on the amount and timing of royalty collection over the life of realistic mine development scenarios.

| Discount Rate | 8% | Existing System | Variant Rate 1 2% | Variant Rate 2 3% | Variant Rate 3 4% |
|---|----------------|-----------------|----------------------|----------------------|----------------------|
| ROYALTY PAYMENTS | | | | | |
| Royalty Payments | | | | | |
| Cash Basis | \$ million CAD | 530 | 563 | 580 | 598 |
| Present Value Basis | \$ million CAD | 158 | 180 | 191 | 203 |
| AERT | | | | | |
| Cash Basis | % | 11.04% | 11.70% | 12.08% | 12.45% |
| Present Value Basis | % | 12.05% | 13.66% | 14.56% | 15.45% |
| CORPORATE INCOME TAX | | | | | |
| Federal | \$ million CAD | 605 | 600 | 598 | 595 |
| Territorial | \$ million CAD | 464 | 460 | 458 | 456 |
| Total | \$ million CAD | 1069 | 1060 | 1056 | 1051 |
| TOTAL TAX TAKE - CASH BASIS | | | | | |
| NWT Royalty Payments | \$ million CAD | 530 | 563 | 580 | 598 |
| FCIT | \$ million CAD | 605 | 600 | 598 | 595 |
| NWTCIT | \$ million CAD | 464 | 460 | 458 | 456 |
| Total | \$ million CAD | 1599 | 1623 | 1636 | 1649 |
| AERT | | | | | |
| NWT Royalty Payments | % | 11.04% | 11.70% | 12.08% | 12.45% |
| FCIT | % | 12.59% | 12.49% | 12.43% | 12.38% |
| NWTCIT | % | 9.65% | 9.57% | 9.53% | 9.49% |
| Total | % | 33.28% | 33.77% | 34.04% | 34.32% |
| TOTAL TAX TAKE - PRESENT VALUE BASIS | | | | | |
| NWT Royalty Payments | \$ million CAD | 158 | 180 | 191 | 203 |
| FCIT | \$ million CAD | 185 | 182 | 180 | 183 |
| NWTCIT | \$ million CAD | 142 | 139 | 138 | 141 |
| Total | \$ million CAD | 485 | 501 | 510 | 527 |
| AERT | | | | | |
| NWT Royalty Payments | % | 12.05% | 13.66% | 14.56% | 15.45% |
| FCIT | % | 14.04% | 13.81% | 13.69% | 13.94% |
| NWTCIT | % | 10.77% | 10.59% | 10.49% | 10.69% |
| Total | % | 36.86% | 38.07% | 38.74% | 40.09% |

Royalty Modelling

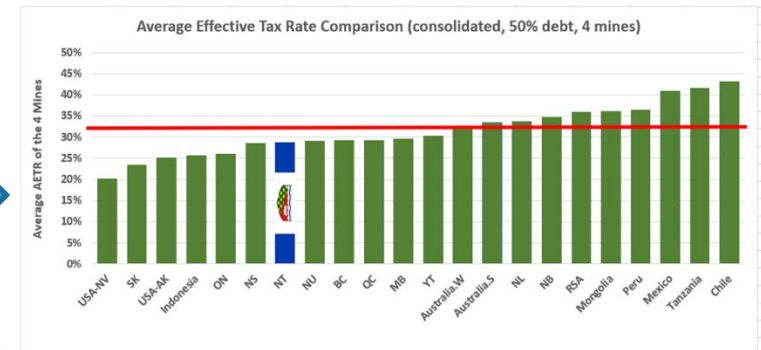
Base Metal Mine Base Case



Royalty Structure Options

1. Are NWT royalty regulations providing a fair share of the profit?
2. Are NWT royalty regulations contr to a stable and competitive investment environment?
3. Is the utility of NWT royalty regula being maximized?


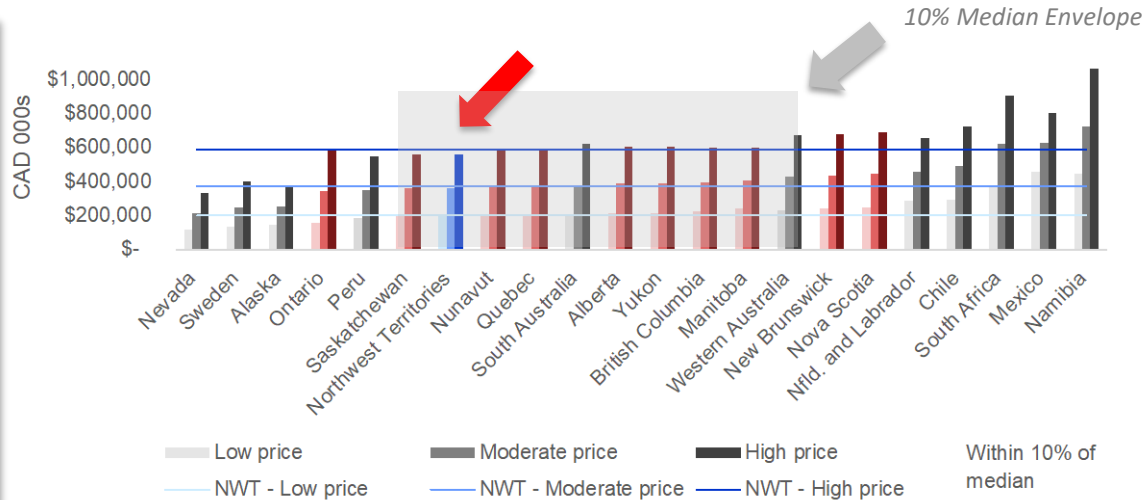
International Jurisdictions AETR



Royalty Structure Options

Modelling

Tax and royalty benchmark Mining in the Northwest Territories

Royalty Structure Options

Modelling

INTERNATIONAL MINING TAX STUDY - Focusing on Northwest Territories (Preliminary)

Natural Resources Canada

November 18, 2022



Natural Resources
Canada

Ressources naturelles
Canada

Canada

Royalty Structure Options

International Jurisdictions AETR

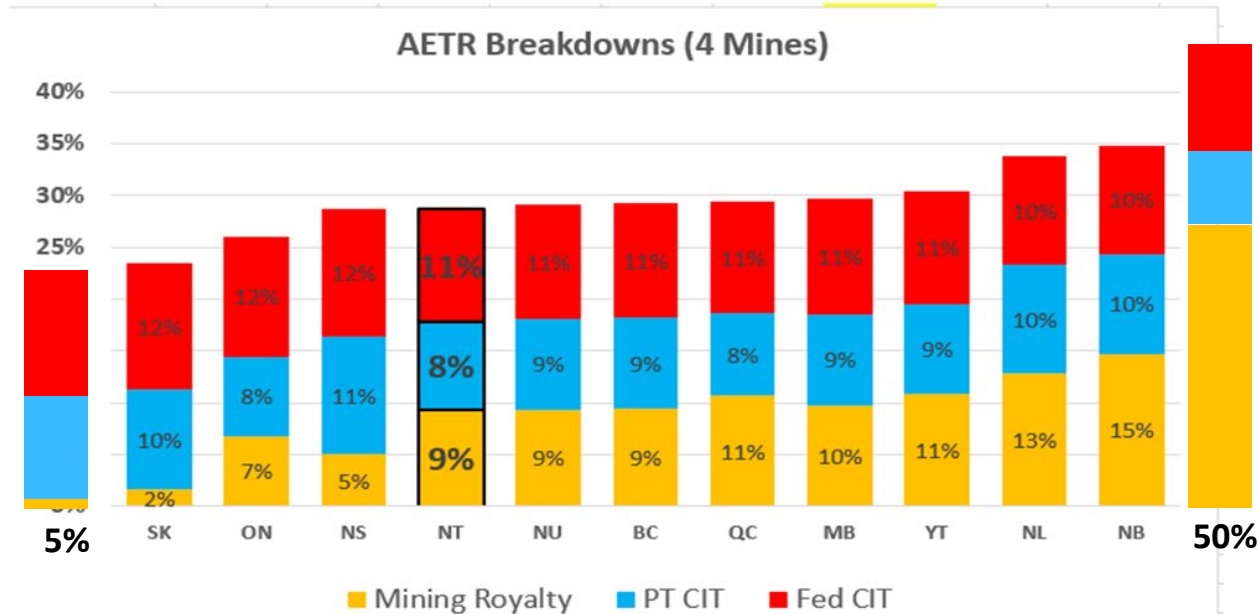


Royalty Structure Options

AETR Components Comparison

Modelling

9



Refined Royalty Review Items



Royalty Structure Options

- Royalty Structure
- Hybrid
 - Value Based
 - Gross Value
 - Net Smelter
 - Profit Based
 - Net Proceeds
 - Net Profits
- Progressive Tiers
- Royalty Rate



Deductions and Allowances

- Additions
 - Property Tax
 - Benefit Agreements
 - Socio-Economic Agreements
 - Offsite Infrastructure Investments
 - Mining Reclamation Trust (Functionality)
 - Greenhouse Gas Compliance
 - Insurance
- Removals
 - Enhanced Offsite Exploration
 - Processing Allowance
 - Streaming Costs (Make not deductible)



Administrative

- Transparency
- Ring Fence
- Commencement of Production
- Interest Rate
- Compliance

Deductions and Allowances

| Additions | Removals |
|--|------------------------------|
| Property Tax | Enhanced Offsite Exploration |
| Benefit Agreements | Processing Allowance |
| Socio-Economic Agreements | Streaming Costs (Disallow) |
| Offsite Infrastructure Investments | |
| Mining Reclamation Trust (Functionality) | |
| Greenhouse Gas Compliance | |
| Insurance | |
| Northern Procurement and Contracting | Others? |

Questions?

