

# Wind-Hydrogen Fiscal Framework

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1

### Wind-Hydrogen Fiscal Framework Principles

- Provide a predictable and transparent fiscal system to inform investment decisions and resource development for wind-hydrogen projects.
- An approach that provides a sharing of financial returns between investors and the Province to achieve a balance between:
  - Recognition of project investment and risk; and
  - Benefits the Province for use of its resources land, wind and water.
- The framework design utilizes the following concepts:
  - Fees/payments occurring early in the project authorizations/permitting. Fee payments scale to size of project.
  - Water Royalty payments occurring later in the project during operations phase, after a project has recovered initial investment costs.
- Taxes applicable to all wind projects producing electricity for the purposes of producing hydrogen.



#### Wind-Hydrogen Fiscal Framework Components

## Land

Crown land reserve feeCrown land license fee

## Wind

• Wind electricity tax

## Water

- Water use fee
- Water royalty



### Wind-Hydrogen Fiscal Framework – Crown Lands

#### **Crown Land Reserve Fee**

- Payments begin upon issuance of Letter awarding exclusive right to pursue project on lands
- Annual charge of 3.5% of market value of reserved lands
- Applicable to Crown lands held in reserve during site and wind resource assessment period

#### Crown Land Lease Fee

- Payments begin upon issuance of Crown Land lease
- Annual charge of 7% of market value



### Wind-Hydrogen Fiscal Framework – Wind

#### Wind Electricity Tax

- Payments begin when the turbines are "in-service"
- Annual charge of \$4,000 per megawatt on installed capacity
- Applicable to all wind-hydrogen projects (≥ 5 megawatts) producing electricity for the purposes of producing hydrogen



### Wind-Hydrogen Fiscal Framework – Water Fees

#### Water Use Fee

- Payments begin with permit issuance
- Annual charge of \$500 per 1000m<sup>3</sup> of water licensed and used
- Annual charge of \$50 per 1000m<sup>3</sup> for water licensed and not used
- Fees adjusted annually by the Canadian consumer price index as per current Environment and Climate Change regulatory practice.
- Applicable to all hydrogen facilities



### Wind-Hydrogen Fiscal Framework – Water Royalty

#### Water Royalty

- Payments begin with cost recovery
- Applicable to hydrogen projects.
- Payable based on the calculated residual value of the water
- Rates linked to revenue over cost index calculation (10 per cent to 25 per cent)
- The Province will have the ability to enter into agreements to modify terms in same manner as offshore oil projects



#### Wind-Hydrogen Fiscal Framework – Water Royalty

• Rates linked to revenue over cost index calculation (10 per cent to 25 per cent)

#### Water Royalty Calculation Formula Revenue from Sale of End Product (Ammonia)

- Less: Transportation costs to Point of Sale <u>Conversion costs of Hydrogen to Ammonia</u>
  - = Value of Hydrogen produced
- Less: Conversion costs of Water to Hydrogen Costs of Energy consumed in conversion <u>Costs of Water system to collect water</u>
  - = Value of Water Converted
  - X Royalty Rate
  - = Water Royalty Payable to the Province

- Tier 1: R-factor = 1; Rate = 10 per cent (applied after 1x cost recovery)
- Tier 2: R-factor = 2; Rate = 20 per cent (applied after 2x cost recovery)
- Tier 3: R-factor = 3; Rate = 25 per cent (applied after 3x cost recovery)



### **Fiscal Framework – Example Financial Impacts**

Estimated NL Government returns over the 30 year project life for a single Project:

Project Net Cash Flow Summary (MM\$ Cdn)	Price (-20%)	Capex (+20%)	Reference Case	Capex (-20%)	Price (+20%)
NL Government Return Details	\$2,196	\$3,162	\$3,559	\$3,940	\$4,895
- NL CIT	\$1,278	\$1,703	\$1,737	\$1,774	\$2,201
- NL Water Royalty	\$759	\$1,299	\$1,663	\$2,008	\$2,535
- NL Other Fees & Taxes	\$159	\$159	\$159	\$159	\$159

#### **Reference Case Assumptions**

- 1000MW Wind Farm / 500MW Hydrogen (Ammonia) Facility
- Capital Costs \$3.5 Billion (Cdn)
- Annual production at 60k tonnes of hydrogen converted to 344k tonnes of ammonia



### **Next Steps**

- Fiscal Framework has been released as part of the Crown Lands Call for Bids process
- Deadline for submitting bids has been extended to March 23, 2023
- Successful Bidders will be awarded the exclusive right to pursue their project through the Crown Lands and Environmental Assessment processes
  - No projects have yet been awarded

## **Thank You**

