

# Wind-Hydrogen Fiscal Framework

March 2, 2023

# 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 to the Province for use of its resources – land, wind and water.
- The framework design utilizes the following concepts:
  - Fees/payments occurring earlier in the project to align with land and water 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 fee
- Crown land lease 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 until Crown land lease has been issued

## **Crown Land Lease Fee**

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

## **Market Value Determination**

- Direct comparison approach to calculate land values. Based on recent known private land sales in the area and then considers any Municipal Assessment Agency land assessments to create a larger pool of data if required. Assessments are conducted by a Land Management Specialist (Valuation).

# 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 projects ( $\geq 5$  megawatts) producing electricity for the purposes of producing hydrogen
- Legislative framework to be developed which will detail tax rules

# Wind-Hydrogen Fiscal Framework – Water Use Fees

## Water Use Fee (Hydrogen Facility)

- 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 Use Fees

- Water use fees are applicable to licensing for use of provincial fresh water and seawater resources and payable to the Province of Newfoundland and Labrador.
- The Water Resources Management Division does not approve high water use industries to be serviced by municipal water supply systems due to the risk to the system relating to yield and infrastructure.
- The Water Resources Act outlines the licensing requirements for water use.

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Water Royalty

- Payments begin with project cost recovery
- Applicable to hydrogen projects
- Payable based on the calculated residual value of the water
- Rates linked to revenue over cost index calculation (rates from 10% to 25%)
- Royalty will be implemented through legislation
- 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

| Revenue Over Cost Index (R)  | Water Royalty Rate |
|--|--------------------|
| Project Start to $R < 1$   | 0%                 |
| $1 \leq R < 2$   | 10%                |
| $2 \leq R < 3$   | 20%                |
| $R \geq 3$   | 25%                |
| where $R = (\text{cumulative project revenue}) \div (\text{cumulative project costs})$ |                    |
| Water Royalty = Residual Value of Water x Rate   |                    |

## Water Royalty Calculation Formula

Revenue from Sale of End Product  
(Ammonia)

Less: *Transportation costs to Point of Sale*

*Conversion costs of Hydrogen to Ammonia*

= **Value of Hydrogen produced**

Less: *Conversion costs of Water to Hydrogen*

*Costs of Energy consumed in conversion*

*Costs of Water system to collect water*

= **Value of Water Converted**

X *Royalty Rate*

= **Water Royalty Payable to the Province**

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Water Royalty Payable Calculation:

- Where R (calculated on a cumulative basis) =  
[cumulative project revenue less cumulative transportation costs less cumulative water royalty payments paid to prior month]  
divided by  
[cumulative project costs (hydrogen to ammonia conversion, water to hydrogen conversion, energy consumed, water system, other project costs) plus cumulative taxes and fees (crown land use fees, water use fees, wind electricity tax, etc.) plus cumulative return allowance]
- Water Royalty Payable =  
[project revenue less transportation costs less project costs less fees and taxes]  
multiplied by  
[royalty rate determined by R calculation above and table on preceding slide]
- If the calculated water royalty payable is less than zero, then payment is zero.

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Return Allowance (RA)

- The water royalty framework includes a return allowance provision as a proxy for project debt financing costs.
- The return allowance will be applied on eligible project pre-development and development costs until 1x cost recovery or simple payout.

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Return Allowance (RA)

- RA Cost Pool = cumulative direct project pre-development and development costs to the month before first production
- RA Rate = the Government of Canada 10 Year Benchmark Bond Rate plus 2%
- Return Allowance = [(Cumulative RA Cost Pool plus cumulative return allowance to prior month) minus (cumulative project revenue minus cumulative transportation costs)] multiplied by RA Rate
- RA Start and End Date: Return Allowance calculation starts in the month of project sanction and ends with Simple Payout. RA compounding limited to development period
- Simple Payout = year/month when [cumulative project revenue net of transportation costs] is greater than or equal to [cumulative project costs (hydrogen to ammonia conversion, water to hydrogen conversion, energy consumed, water system, other project costs) plus cumulative taxes and fees (crown land use fees, water use fees, wind electricity tax, etc.)]

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Project Eligible Costs

- Royalty is assessed and costs reported on a cash basis
- A project cost shall generally qualify as eligible only to the extent that:
  - It is directly attributable to the project
  - It is not a cost under another project (i.e. projects are ring fenced)
  - Transportation costs are related to transporting the product (hydrogen or ammonia) to the point of sale or where ownership of the product changes hands
  - Decommissioning project costs will be allowed with the potential inclusion of carryback provisions

# Wind-Hydrogen Fiscal Framework – Water Royalty

## Project Eligible Costs (continued)

- Interest or other financing charges are not included as eligible costs given the RA has been incorporated
- Eligible project costs will not be reduced by any economic assistance or incentives received in Canada whether from the federal or provincial government. (e.g. investment tax credits, government grants)
- Federal and Provincial corporate income taxes are not included as eligible costs
- Other taxes and fees (e.g. municipal, property, payroll, etc.) related to a project will be included as eligible costs

# Next Steps

- Submit questions to [windlandbids@gov.nl.ca](mailto:windlandbids@gov.nl.ca)
- Important Deadlines

**March 16, 2023**

**12:00pm - March 23, 2023**

**12:00pm - March 23, 2023**

**Deadline for Questions**

**Deadline for Requests for Presentations**

**Deadline For Acceptance Bid Submissions**

