

Clean Growth Incentive Program

for consultation
March 2018

Purpose

1. Provide an overview of the approach to maintain industrial competitiveness with increasing carbon prices
2. Outline the workplan to consult with industry and stakeholders

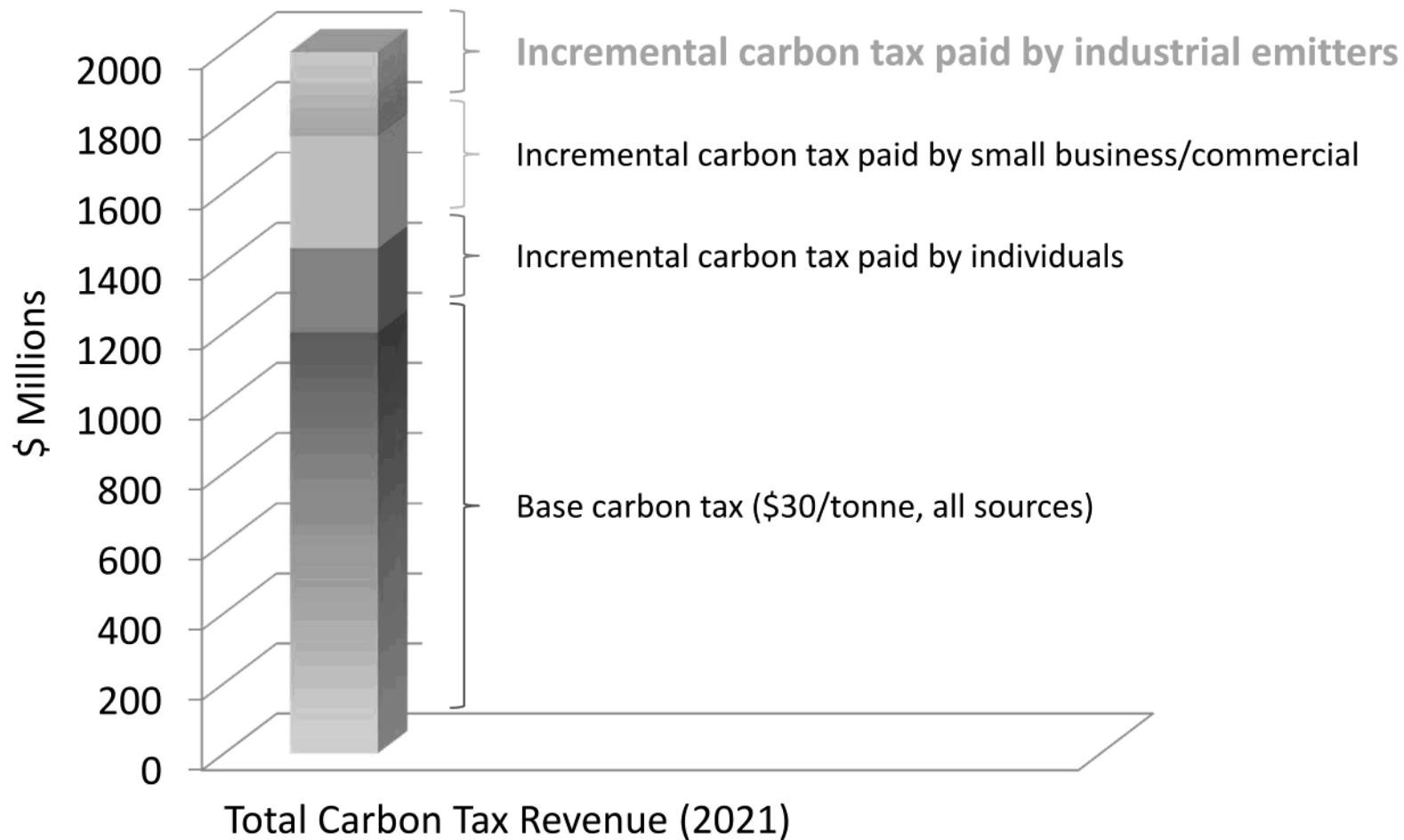
Context

- BC will set a new 2030 greenhouse gas emissions target in 2018, in line with 2050 target.
- Policies to achieve the target impose direct and indirect costs on individuals and industry
- BC's small open economy will be negatively affected if carbon costs exceed global market tolerance
- Carbon prices across Canada will be less than British Columbia for many years
- We need a mechanism to avoid carbon leakage and enable our companies to invest in technology to reduce future carbon costs

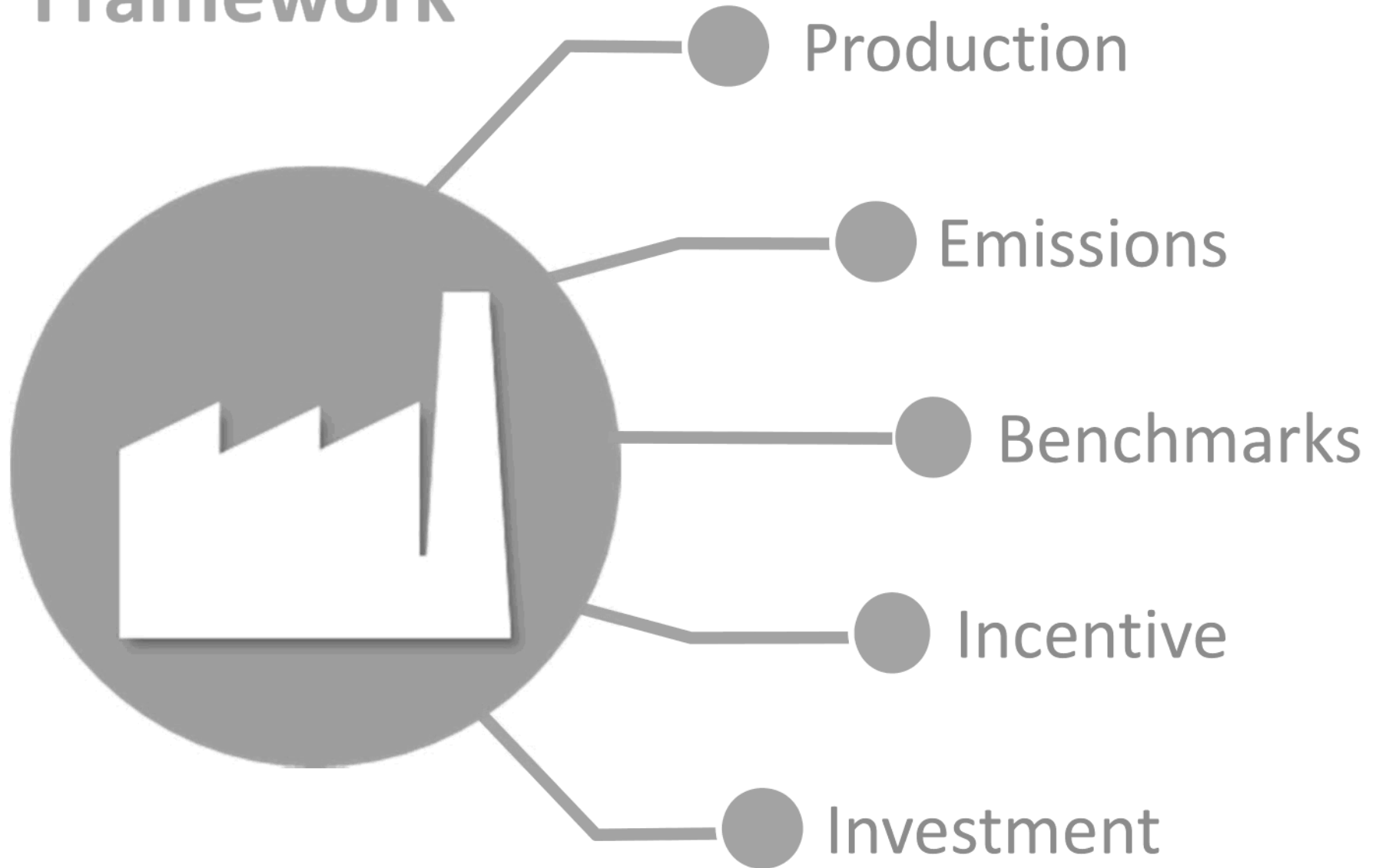
Vision

- Strong, innovative and resilient economy where:
 - The carbon price is not a barrier to investment
 - Government support is designed around innovation and co-benefits
 - Programs target investment in low carbon alternatives
- Provide a pathway for B.C. to prosper economically while meeting carbon pollution targets
 - Incentives are temporary, with transition as the goal
 - Programs are designed with the provincial targets in mind
 - The carbon tax remains a clear, long term message about value of low carbon investment

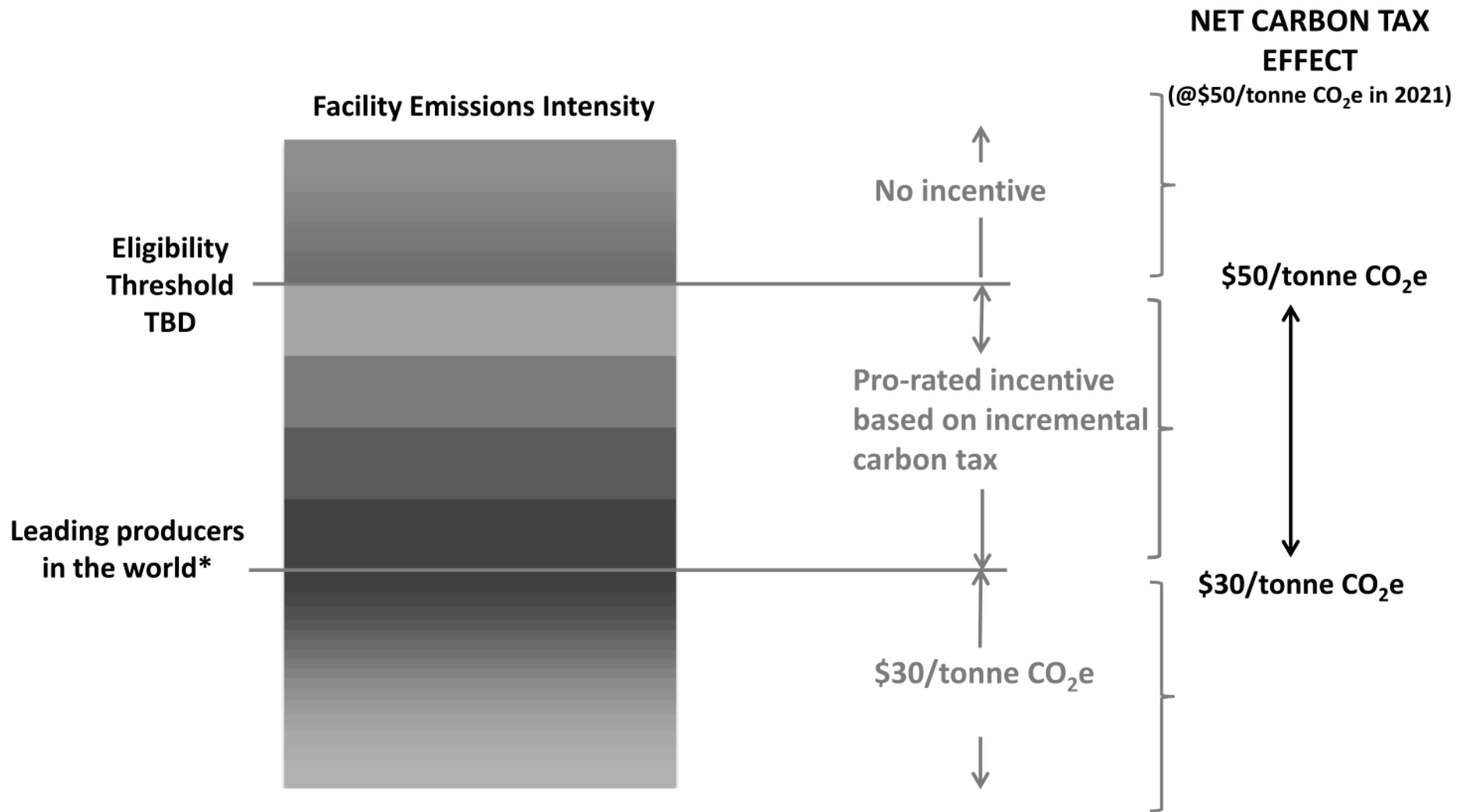
Incremental carbon tax revenue



Framework



Clean growth incentive



* Benchmarks updated on a regular basis

Incentive payment

$$\left(\begin{array}{c} \text{Carbon Tax} \\ \text{Rate over} \\ \$30 \end{array} \right) \times \left(\begin{array}{c} \text{World leading} \\ \text{carbon price} \\ \text{adjustment} \end{array} \right) \times \left(\begin{array}{c} \text{Performance} \\ \text{Factor} \end{array} \right)$$

Example:

$$\left(\begin{array}{c} \$35 - \$30 = \$5 \end{array} \right) \times \left(\begin{array}{c} 100\% \end{array} \right) \times \left(\begin{array}{c} \% \end{array} \right)$$

- Annual incentive payments in August after receipt of annual greenhouse gas emissions and production reports

Emissions

- Industrial facilities emitting over 10,000 tonnes CO₂e per year report GHG emissions annually under the Greenhouse Gas Industrial Reporting and Control Act
- Emissions reports are audited by third party firms with accreditation under ISO 14065 (ANSI/SCC)
- Harmonize with federal government reporting requirements to avoid duplication and use of single window

Production

- Annual production proposed to be reported under the Greenhouse Gas Industrial Reporting and Control Act
- Amount of incentive increases if production increases, and decreases if production increases
- If a facility produces more than one kind of product, each product will need an established benchmark, allowing the facility flexibility to vary production across product lines from year to year

Benchmarks

- Benchmarks are [tCO₂e/unit production]
- **Eligibility** benchmark is lower threshold to be considered in the program:
 - Average BC production intensity
 - National production-weighted average intensity (Federal Backstop)
 - Technology-related
 - Other?
- **Performance** benchmarks will reflect global leading producer intensity
 - revised at regular interval (5 years?)
 - Formula for pro-rating: Quartiles, percentiles, other?

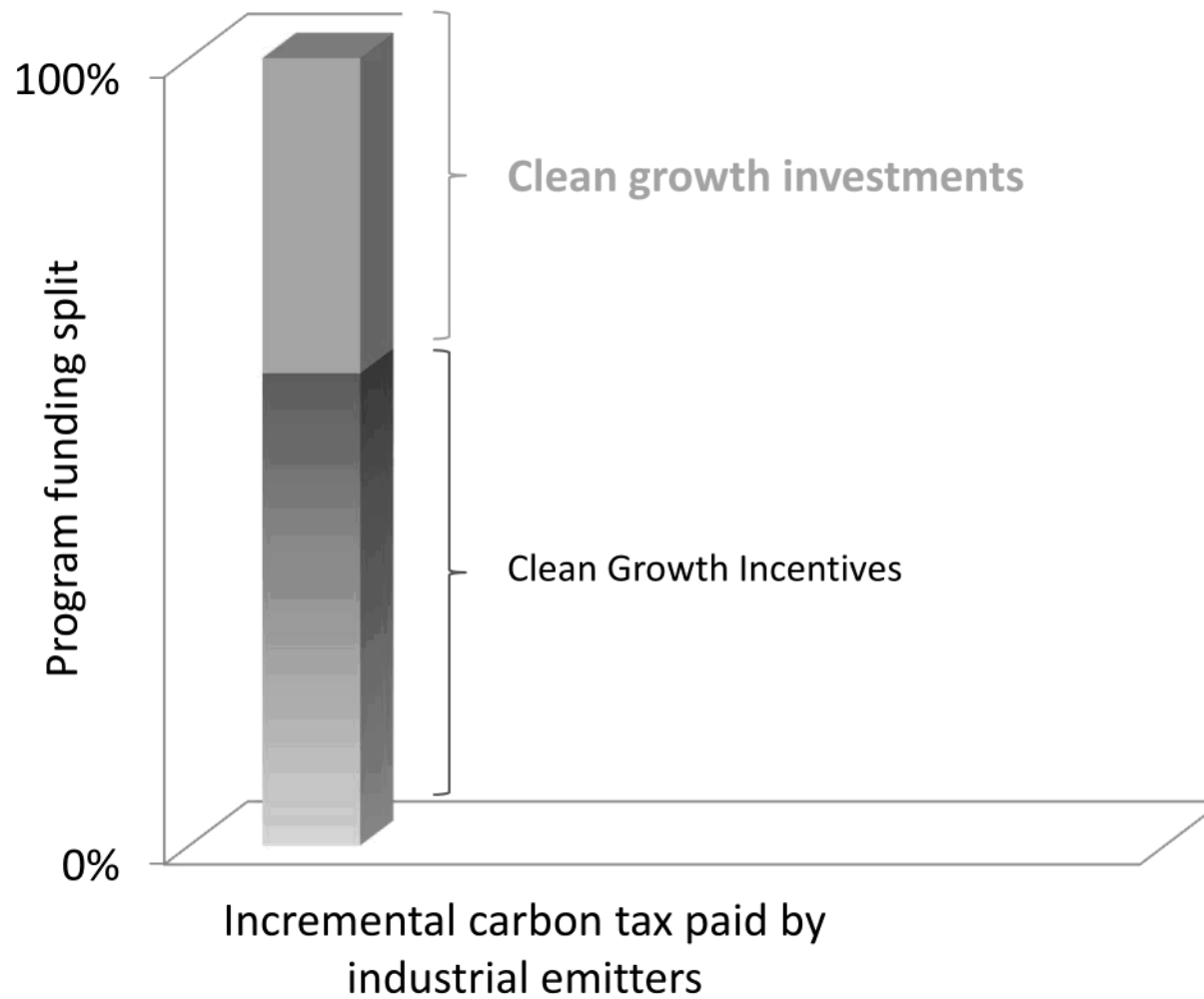
Benchmark studies

- Based on list of BC's industrial products and services
 - Identify facilities with lowest GHG emissions intensities for same industrial products and services worldwide
 - Emission intensities should include direct GHG emissions and could include relevant indirect GHG emissions (e.g., from used electricity) by unit of production
 - Emissions intensities should include combustion, venting, and fugitive
 - Use BC methodology for calculating all GHG emissions

Benchmark studies

- Describe for each leading facility:
 - the facility's process description, owner, location, and age
 - the facility's energy source(s)
 - the facility's power generated on-site and sold to other facilities
 - the facility's total GHG emissions by emissions source and type
 - any explicit carbon price or significant regulation that applies directly to the facility's GHG emissions
 - production levels/output by product and/or service type
 - GHG emissions intensities by product and/or service in tonnes CO₂e/unit of production

Clean investment



Clean investment

$$\left(\begin{array}{c} \text{Incremental} \\ \text{Industrial} \\ \text{carbon tax} \end{array} \right) = \left(\begin{array}{c} \text{Incentive} \\ \text{payments} \end{array} \right) = \left(\begin{array}{c} \text{Clean} \\ \text{Investment} \\ \text{Fund} \end{array} \right)$$

- Allocation of industrial carbon tax over \$30/t that is not distributed through incentive payments
- Available annually
- Investment in industrial transition projects:
 - Competition
 - \$/t
 - Other?

Clean investment structure

- Annual funding based on forecast carbon tax revenue from industrial emitters and expected incentive program payments
- Open to all companies over 10,000 tCO₂e per year
 - Should it have additional focus beyond large industry?
 - Opt in for smaller emitters?
- Business Cycle Alignment
 - Are there business considerations that government should incorporate in fund design. E.g. steps and timelines would be needed for an investment decisions.

Clean investment projects

- Scope
 - Should the fund be applicable existing technology, or also include to earlier stage technology research, development and deployment?
- Fair and Objective Criteria - under consideration:
 - Lowest \$/t reductions
 - Deployment of sector-leading emission reduction technologies.
 - Representation of industrial sectors and regions receiving funding.
- Potential for Partner Funding
 - There may be opportunities to partner with other funding sources (ICE Fund, SDTC). Are there other opportunities to leverage investments from range of sources, including industry?

Timeline

