



FINANCING MUNICIPAL CO-GENERATION FACILITIES

Getting to Net Zero III

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OBJECTIVES

1. Introduce TAF and suggest how TAF can provide support
2. Outline potential financial models for municipal co-digestion projects



FORMATION

- Non-Profit Corporation
- Established in 1991 via *TAF Act*
- Originally endowed by the City of Toronto and, in 2016, by the Province of Ontario, and in 2019 the Government of Canada
- Zero tax base funding



CONTEXT

70%

*of global
carbon
emissions
originate in
cities*

MISSION

Enable the acceleration of urban solutions that
reduce carbon emissions

GOAL

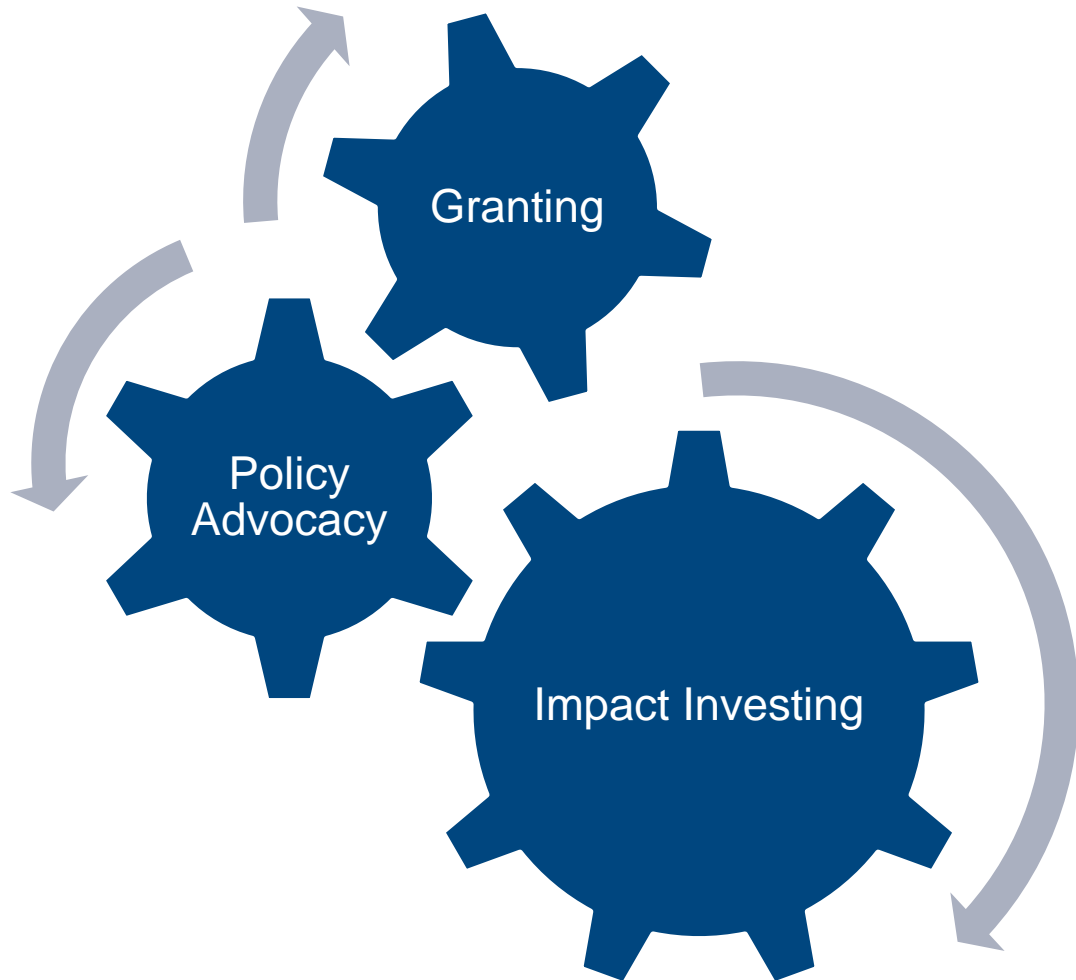
Emissions are reduced at least **80%** by **2050**

TARGET

Carbon Neutral GTHA!



KEY ACTIVITIES



INVESTMENT CRITERIA

- CleanTech & focused on GHG reductions for GTHA
- Additional co-benefits
- Scalable & path to commercialization
- Demonstrates & de-risks investible opportunities
- Proven technology & demonstrated proponent competency
- Capital stack - not senior debt nor venture capital
- Risk-adjusted returns

INVESTMENT RESULTS

\$53M

Net Asset Value (set to increase)

12.3%

Average performance (4 years)

\$35M

Return from 47 Direct Investments

2+MT

Direct GHG reduction

! Recognition !

Awards from FT/IFC, Scotiabank, Clean50, & others



INSIGHT

“Cities that collaborate with other actors are able to deliver **twice** as many climate actions as those that govern through a less partnership-based approach”

C40 Cities / ARUP, *Potential for Climate Action*



FINANCING

3 models ...

- Municipal “Green” Bond Structure
- Partnership Structure
- Performance Contract Structure



BOND STRUCTURE – GOOD ECONOMIC SENSE?

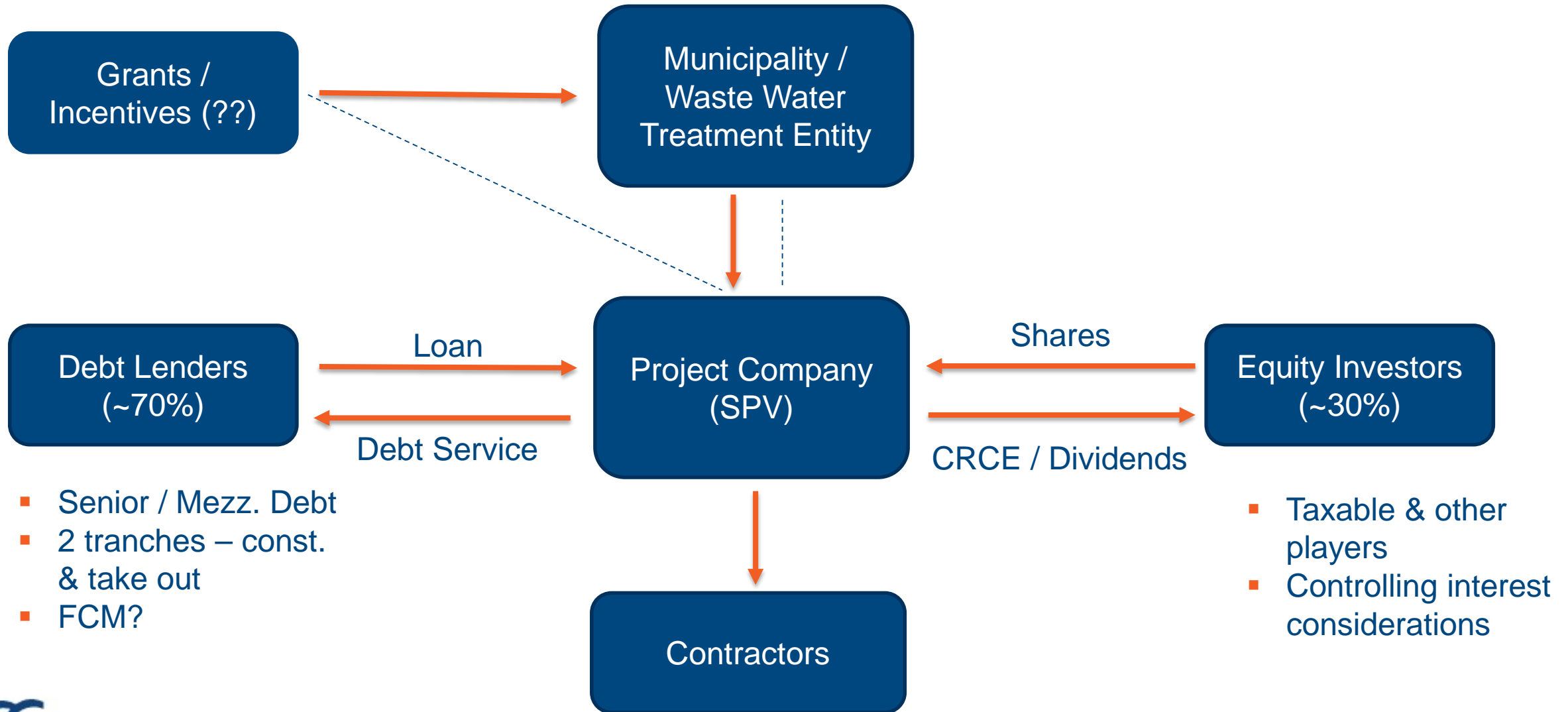
Advantages

- Equitable & efficient means to finance capital investments
- Little difficulty borrowing
 - interest rates are low
 - demand for long-term bonds is strong
 - investor base is expanding
- Extremely limited re-financing risk
- Predictable cash flow
 - term can be 1 to 30 years, but typically ≤ 10 years

Disadvantages

- Debt charges divert revenues from other uses
- Increased exposure to interest-rate shocks
- Limits on borrowing
 - In Ontario, debt service must not exceed 25% of revenues
- Must have adequate & reliable revenues to make debt payments
- Paying more to borrow relative to the provincial and federal government

BASIC PARTNERSHIP STRUCTURE – MONETARY FLOW



FLOW THROUGH SHARES (CRCE)

Opportunity

- A FTS is a tax-based financing incentive
- FTS allow the issuer corporation, e.g. the SVP, to transfer certain expenses to an investor - tax deduction!
- Corporations undertaking renewable energy and conservation issue FTS to help finance project development activities

Challenges

- The total value of CRCE compliant FTS are not enough to finance the entire equity portion
- FTS players must be taxable entities
- The equity player with a controlling interest will not benefit from FTS

TAF'S ENVISIONED ROLE

- “Skin in the Game” via mezzanine debt or equity (up to \$2M)
- Act as finance syndication coordinator
- Support development of the business case
- Establish ‘*standardized*’ agreements to realize ease of replication

Mobilize Greater Capital in Low Carbon Solutions!



PERFORMANCE CONTRACTS

- Enables a project **without** upfront capital costs to the owner
 - Not a loan!
- Extensively used in energy-saving projects
 - TAF realized successes
- Potential opportunity for the longer term
 - demonstration of 5 to 15 projects
 - need for identification of baseline and actual savings available
 - Applicable during the useful life of the equipment



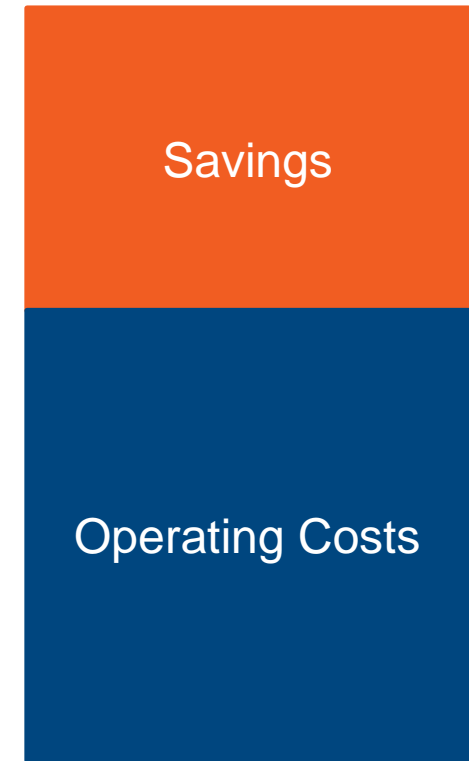
PERFORMANCE CONTRACTS



Before Improvements



During Financing Term



After Financing Term

THANK YOU

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