

**The Decline of Local Revenues from Ontario's Electricity Infrastructure:
A Case Study of Bruce Nuclear, Bruce County, and the Municipality of Kincardine**

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In partnership with

THE COUNTY OF BRUCE AND THE MUNICIPALITY OF KINCARDINE

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Author and Primary Contact:

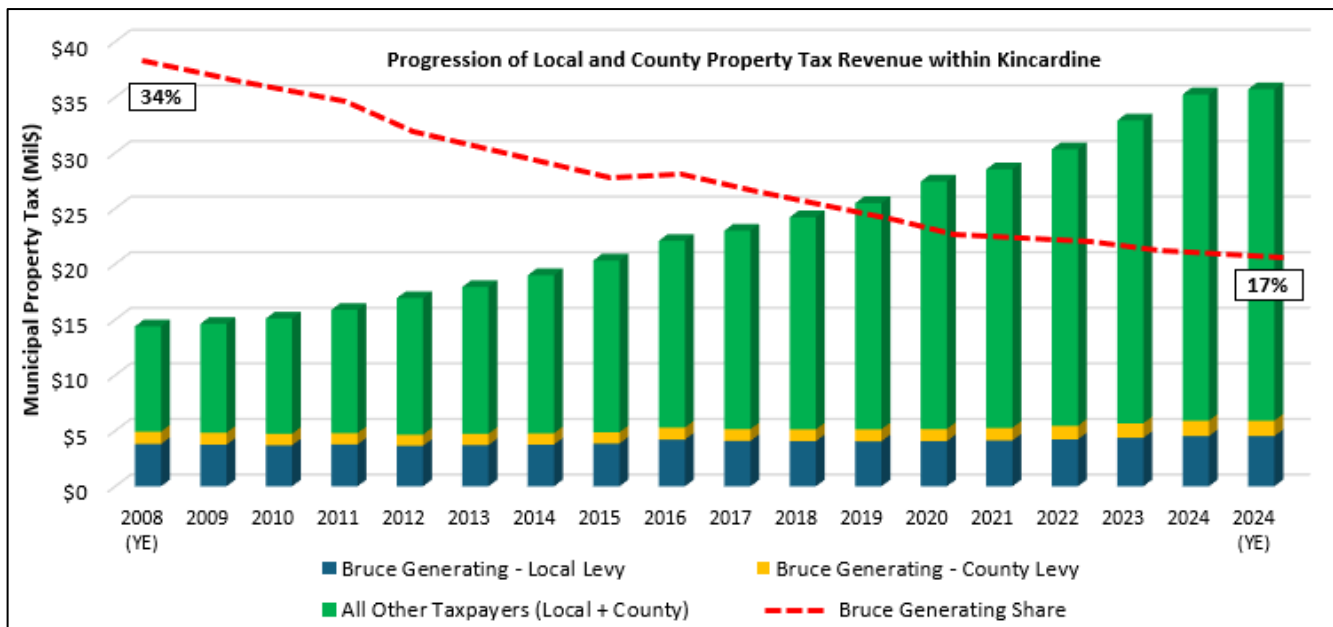
Peter Frise, VP Policy & Consulting Services

peterf@mte.ca

EXECUTIVE SUMMARY

Ontario is positioning itself as a global energy superpower, anchored by the continent's largest expansion of non-emitting nuclear energy. As the Province prepares for a 75% increase in electricity demand by 2050 and ramps up exports of clean power and energy technologies, it must reconcile this ambition with the fiscal realities of the municipalities that host the infrastructure making it possible.

Host communities like Kincardine in Bruce County, home to the very facilities driving Ontario's electrification future have struggled with the ongoing decline of contributions from these sites.



- Over our observation period, the property tax¹ contribution from Bruce Generating has remained virtually unchanged, despite significant increases in both County and local revenue requirements.
- As all increases have been borne by other taxpayers, Bruce Generating's share of the total property tax revenue has dropped from 34% to 17%, a 50% decline in its relative contribution.

Core Driver of Decline

At the heart of the issue is the use of static, non-market valuation formulas for nuclear generating properties. Unlike other properties, which are reassessed to reflect current market conditions, key components of these properties remain tied to outdated formulas and indexing schemes that have failed to keep pace with Ontario's broader market value assessment system.

This structural undervaluation and systemic disconnect has triggered significant and compounding shifts in the municipal burden away from electricity sector properties and onto other taxpayers undermining equity and eroding local revenue capacity.

Systemic Implications and Need for Reform

This case is not unique to Kincardine or Bruce County and it highlights a broader, systemic vulnerability facing municipalities that host critical energy infrastructure. Without reform, these burden shifts will persist—leaving local taxpayers to effectively subsidize the costs of electricity consumed in other municipalities, other provinces, and even customers outside Canada.

¹ "Property tax" is used here as a general term for all amounts levied as, or in lieu of, property tax.

INTRODUCTION, PURPOSE AND BACKGROUND

Bruce County is home to one of Canada's most important electricity generating facilities, the Bruce Nuclear Generating Station. Situated within the local municipality of Kincardine, the facility has historically served as a cornerstone of the local and County tax base. However, despite the continued operation and significant refurbishments, the relative financial contribution from these sites has diminished steadily over the past two decades.

This case study draws from a broader technical study of assessment and taxation trends related to the site, prepared by Municipal Tax Equity (MTE) Consultants. Using Kincardine and Bruce County as the lens, the analysis reveals how Ontario's current approach to valuing nuclear generating stations (and most other electricity infrastructure), systematically erodes the local revenue contributions made by these properties. In fact, we not only document that such erosion has occurred, but that under current regulatory protocols, such erosion is an engineered outcome when Unit Value Assessment and other non-market valuation methods are applied within a predominantly fluid, Market Value system.

Scope of the Review

This Case Study focuses on:

- Trends in the property tax contributions of the Bruce Generating from 2008 to 2024;
- The role of prescribed, non-market property assessment protocols in driving tax shifts;
- Impacts on the municipalities and other taxpayers within Kincardine and across the County; and
- Potential shift patterns if current protocols are not replaced with more responsive and dynamic approaches in the near future.

Neither the underlining analysis nor this Case Study attempts to revalue the property or prescribe an alternate model. Instead, our objective has been to isolate and quantify the fiscal implications of Ontario's current legislative and regulatory framework for the property assessment of nuclear facilities.

Approach and Analytical Framework

To fully understand the role and impact of these generating properties on the local revenue landscape over 17 taxation years and four reassessment cycles, our review looked well beyond their own property specific assessment values and tax bills.

To begin to understand how the prescribed valuation model has influenced the distribution of municipal tax burden over time, the analysis separately identified and controlled for:

- Reassessment dynamics
- Real growth within the broader tax base
- Shifting municipal revenue needs and inflationary levy pressures

By disentangling these individual elements, the analysis was able to clearly demonstrate the structural impact of prescribed valuation methods on the distribution of the municipal burden over the long-term.

PRESCRIBED PAYMENTS

Although not classified as traditional property taxes, the Bruce Nuclear Generating Station is subject to annual levies prescribed under Ontario's Electricity Act that function in much the same way. These "prescribed payments" are calculated by applying tax rates to assessed values returned by the Municipal Property Assessment Corporation (MPAC).

The annual County portion is based on its own rates that apply on a County-wide basis. As a local municipality, Kincardine's total prescribed payment is comprised of:

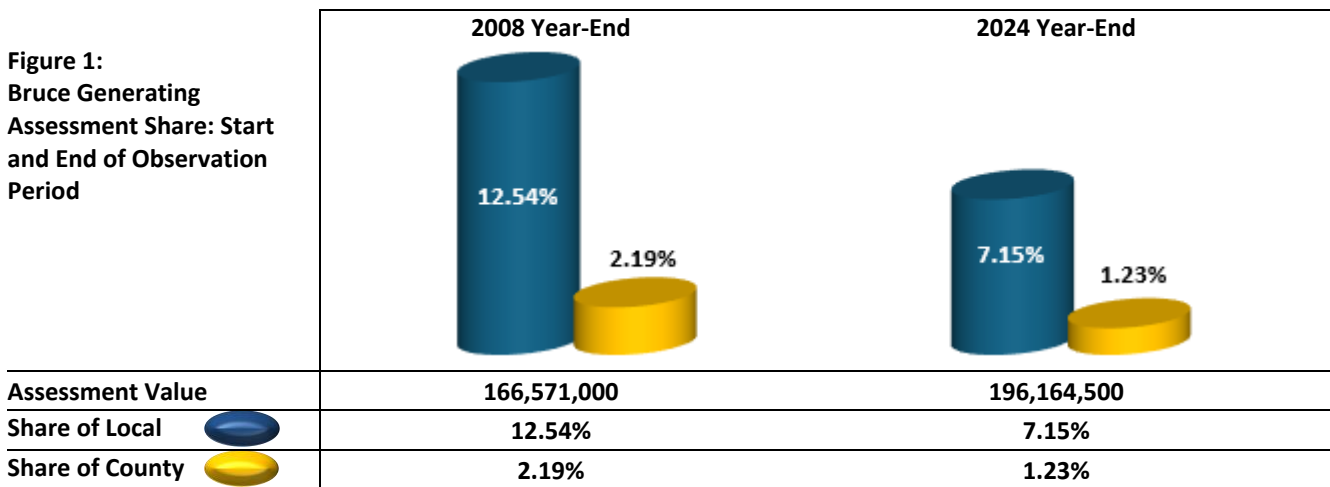
- The amount calculated using their own, locally set tax rates, and
- An amount that would otherwise be levied for school purposes if these were taxable properties, commonly known as "retained education payment".

A SHRINKING SHARE

Municipal tax rates are set annually to reflect each municipality's total revenue requirement and the total assessment base, including electricity sector properties, against which that requirement must be raised. Similarly, provincially set education tax rates are calculated province-wide using the same logic.

Without delving into the complexities of Ontario's property tax system, the key implication is this: a property's annual contribution is based on its relative, weighted share of the total assessment base. As such, it is the change in assessment share, not value, that will determine how each property's relative contribution will change from year-to-year and over time.

Figure 1 below documents how proportional assessment share of the Bruce Generating properties has declined dramatically over time, despite a modest increase to the absolute value.



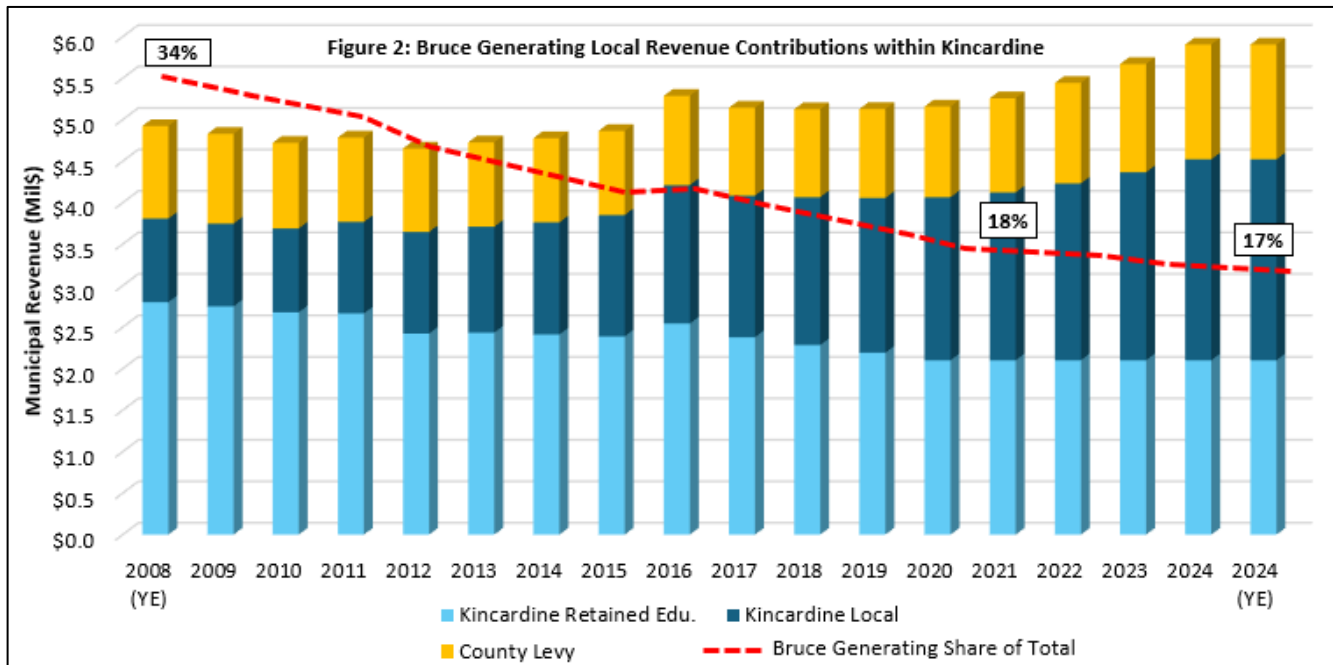
While the total assessment of the Bruce Generating site has increased by about 17% over the review period, the rest of Kincardine's base has increased by nearly 120%.

- As a result, the site's relative share of the local assessment base has fallen by 43% since 2008.
- Across Bruce County, the collective assessment of the non-nuclear properties rose by over 110%, leading to a similar 44% decline in the site's share of the County-wide base.

TAX SHARE IMPLICATIONS OF RELATIVE DECLINE

As the assessed value of the Bruce Generating properties has declined relative to the overall tax base, so too has their proportional share of Kincardine's municipal revenue. This trend has been consistent and ongoing throughout the review period.

As shown in *Figure 2*, these properties contributed 34% of the municipal levy in 2008. Today, that share has dropped by half with the difference being shifted to other taxpayers.



Where residents and businesses within Kincardine once carried approximately 66% of the municipal revenue raised from property assessment, they now shoulder over 83%.

Considering the County's levy across all local area municipalities, the revenue share carried by the generating properties declined from almost 3.5% in 2008 to just 2.0%, or approximately 40%.

Beyond the proportional decline in revenue share, *Figure 2* reveals another important dynamic:

- There has been an absolute decline in the locally retained education payments over time; and
- Each reduction in the retained education payment required a compensatory increase in the municipality's local levy to fill the revenue gap (see light to dark blue transition).

Taken all together, these findings show that the issue extends beyond simple tax shifts. Kincardine's local levy has increased in part due to the declining locally retained education revenue, compounding the effects of both assessment-driven tax shifts and inflationary levy pressures. While some of these increases have cycled back to the generating site through proportional tax share, the most substantial share has been absorbed by other taxpayers within the community.

Finally, *Figure 2* also shows that this pattern of relative decline and tax shift stabilizes somewhat following the Province's decision to pause reassessment in 2021, further reinforcing the conclusion that assessment methodology is the primary driver of these long-term shifts.

Root Causes and Policy Concerns: Static Valuation in a Dynamic System

Ontario's assessment system is built on the concept of Current Value Assessment, where valuations are synonymous with Market Value and value estimates are updated periodically to reflect more current markets.

However, electricity industry properties including nuclear generating complexes like the Bruce site represent a stark departure from these foundational principles. Rather than reflecting current or even reasonable valuations, these properties are assessed using rigid formulas and unit-value models rooted in historical assumptions. Most notably:

- Buildings housing generation, transformation, and auxiliary equipment are valued using a fixed rate of \$86.11 per square metre (\$8.00/sq ft) of interior ground floor area.
- Water intake and discharge systems are indexed from a 2003 base, using an inflation factor that underperforms relative to actual capital and replacement costs.

These models, locked in by provincial regulation, have not been updated in 20 years.

Moreover, while these limited valuation formulas are intended to apply only to specific components of electricity infrastructure, in practice, the absence of market-responsive assessment has extended across virtually every element of these sites resulting in systemically suppressed valuations overall.

It is the persistence of these unchanging values within a broader system where the non-nuclear tax base is regularly updated to reflect rising market values that has driven the significant and ongoing tax shifts outlined above.

Table 1: Cumulative Assessment Change (Million \$)
(Bruce Generating Components and Kincardine's Non-Nuclear Base)

Property Group	2008 Year-End	Market Value Change		Real Growth		2024 Year-End	Cumulative Change	
Generating	17.1	-1.12	-6.5%	0.02	0.1%	16.0	-1.1	-6.4%
Water Intake	10.5	-0.28	-2.6%	0.69	6.6%	10.9	0.4	4.0%
Generation Support	27.9	-0.62	-2.2%	3.41	12.2%	30.7	2.8	10.0%
Office Building	48.4	8.14	16.8%	-0.42	-0.9%	56.2	7.7	15.9%
Common Services	43.3	0.00	0.0%	-6.85	-15.8%	36.4	-6.8	-15.8%
Waste Services	19.4	3.63	18.7%	22.99	118.5%	46.0	26.6	137.3%
Bruce Gen. Total	166.6	9.76	5.9%	19.84	11.9%	196.2	29.6	17.8%
Non-Nuclear Base	1,161.29	964.60	83.1%	421.70	36.3%	2,547.6	1,386.31	119.4%

Overall, the non-nuclear property base has experienced cumulative market value increases more than 14 times greater than those observed for the Bruce Generating properties.

While this higher growth rate in the non-nuclear base has contributed marginally to shift in tax shares, it is the absence of market value updates for Bruce Generating properties across multiple reassessment cycles that has not only driven, but effectively guaranteed, the ongoing shifts onto residents and businesses in Kincardine and across Bruce County.

LOOKING FORWARD: THE CURRENT MARKET GAP AND ONTARIO'S NEXT REASSESSMENT

As significant and disruptive as the past tax shifts have been, and as lasting as their impacts on the balance of taxation remain, without meaningful reform now, the next reassessment is likely to trigger shifts that will eclipse those of the past two decades, potentially within just two or three years.

Although property reassessments have been paused in Ontario since 2021, real-world market forces have continued to evolve. Evidence already suggested that the postponed 2021 reassessment cycle could have been the most dramatic since the transition to Ontario's current system in 1998.

In fact, extensive sampling of property sales within Bruce County indicates that actual market values may now be as much as 160% higher than the assessment values currently in use, which are still based on 2016 market conditions.

This growing disconnect sets the stage for extreme volatility and significant tax burden shifts when reassessment resumes, especially if valuation methods for the electricity sector remain frozen in time.

Our high-level data modelling, informed by past reassessment and tax shift patterns, suggests that if the non-nuclear base increases by just 125% overall, and the Bruce Generating Station receives a market adjustment of only 25%, a figure that would be ambitious based on historical precedent, as much as 40% or more of the site's current share of the municipal levy could be shifted to residents and businesses within four years or less.

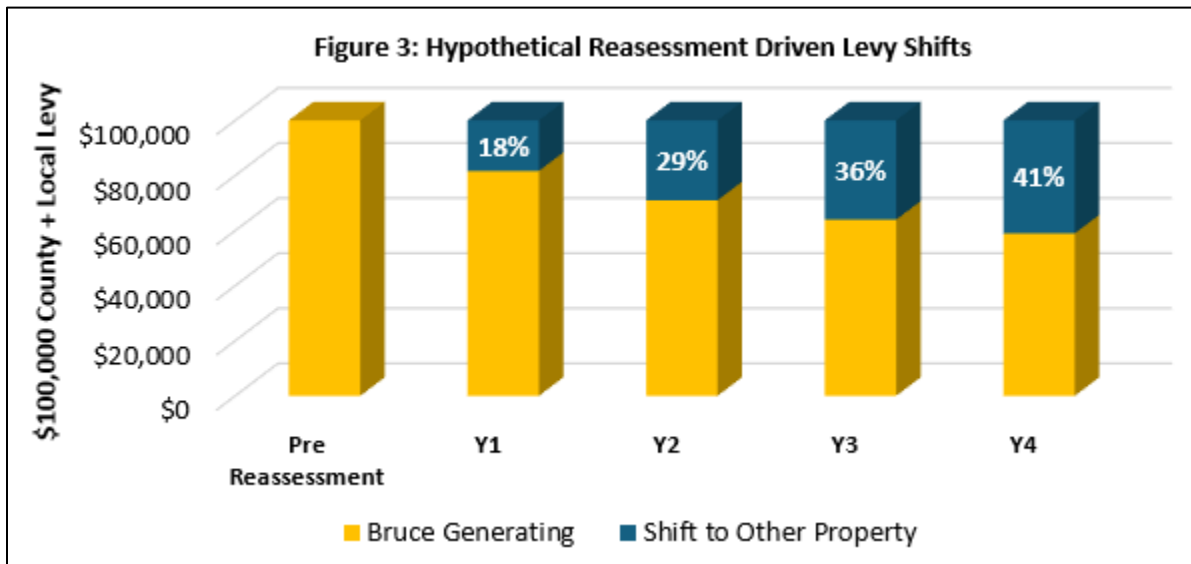


Figure 3 applies our predictive modelling to \$100,000 of municipal (County + Local) levy dollars to consider how that amount might change under a potential reassessment scenario.

- The model indicates that over 40% of the property's pre-reassessment levy share could be shifted to other properties within four years or less even under conservative assumptions.

This projected shift would be further aggravated by unpredictable but potentially substantial losses in locally retained education levy, creating additional upward pressure on the local levy, which must then be absorbed by all other property types. In all, it is reasonable to suggest that a reduction in excess of 50% is a reasonable, and perhaps conservative estimate in the absence of material reform.

KEY FINDINGS AND CONCLUSIONS

This case study examined the assessment and levy impacts associated with the Bruce Generating Station, focusing on tax share shifts and their implications for the Municipality of Kincardine and Bruce County. The comprehensive analysis confirms that **current assessment protocols applied to electricity industry properties systematically disadvantage host municipalities and other taxpayers.**

The following conclusions are supported by the findings:

Assessment and Tax Share Shifts

- There has been a consistent decline in the tax share carried by the Bruce Generating site, driven primarily by static valuations that have not kept pace with growth in the broader assessment base.
- While this trend appeared to stabilize during Ontario's reassessment pause, that stability reflects a temporary freeze—not a resolution of the underlying issue.

Non-Market Valuation Models

- Prescribed valuation methods such as area-based unit values and indexed formulas for water intake/discharge assets have materially reduced the site's relative contribution over time.
- In practice, the application of non-market treatment has extended beyond its intended scope, affecting a broader range of property elements than the Regulations explicitly prescribe.

Levy and Revenue Implications

- Rising municipal levies have not offset the shift in burden; instead, they have magnified disparities, with non-hydro properties absorbing a growing share of municipal costs.
- The loss of locally retained education levy, compounded by static education tax rates, has required municipalities to increase the local levy further, placing additional pressure on residents and businesses.

URGENT NEED FOR REFORM IS CLEAR

While we do not advance or prescribe a specific solution, this case study and the underlying analysis clearly and conclusively substantiate the urgent need for reform.

Without meaningful change to outdated assessment protocols which, by their very design, ensure the continued erosion of local revenue contributions from the electricity industry, residents and other businesses with host communities will face increasingly unsustainable shifts in the coming years.

Similarly, although this analysis does not propose how new or expanded generation infrastructure should be treated within the municipal revenue system, it highlights the need for a more responsive, and dynamic approach to ensure the long-term viability and capacity of host communities. Without such changes, Ontario's electricity expansion ambitions may be undermined by the fiscal weakening of the very municipalities that support and enable them.

Proper funding of host communities is not just a fairness issue, but one of feasibility. Ontario's energy transition and growth agenda depends on strong partnerships with local communities. Undermining the contribution of major facilities undermines these relationships and risks stalling progress.

DISCLAIMER AND CAUTION

The information, views, data and discussions in this document and related material are provided for general reference purposes only.

Regulatory and statutory references are provided for convenience only and in many instances, are not directly quoted excerpts. The reader should refer to the relevant provisions of the legislation and regulations for complete information.

Decisions should not be made in the sole consideration of or reliance on the information and discussions contained in this report. It is the responsibility of each individual in either of a decision-making or advisory capacity to acquire all relevant and pertinent information required to make an informed and appropriate decision with regards to any matter under consideration concerning municipal finance issues.

MTE is not responsible or liable to the municipality, nor to any other party for damages arising based on deficiencies, defects, errors, omissions, completeness, suitability, or accuracy of the data or due to the misuse of the information contained in this study, including without limitation, any related, indirect, special, punitive, incidental or consequential damages.

RELATION TO UNDERLYING COUNTY AND LOCAL ANALYSIS

This Case Study Summary is intended to provide a high-level overview of the key themes, issues, and findings drawn from two comprehensive technical studies conducted in support of this work.

It is not intended to fully document the detailed analytical methodologies or all underlying results. Rather, the purpose of this summary is to highlight the most pertinent findings and present them in a format that is reasonably accessible to both technical and non-technical audiences, including those less familiar with the complexities of Ontario's property assessment and taxation systems.

ABOUT MUNICIPAL TAX EQUITY (MTE) CONSULTANTS INC.

MTE provides expert consulting services and tailored solutions to municipalities and other public sector entities in the areas of property assessment, taxation, and municipal finance.

While MTE's service offerings are broad-ranging, they share a common focus: equipping public sector staff and decision-makers with the knowledge, tools, and resources needed to design, implement, and sustain effective policies and practices.

This includes specialized expertise in policy analysis and development, through which we assist clients in evaluating legislative frameworks, interpreting regulatory changes, and crafting locally responsive policy solutions aligned with prevailing objectives.

MTE's core municipal client base is located in Ontario; however, we are regularly engaged by a diverse range of public sector stakeholders, including provincial governments, professional associations, and industry working groups. These engagements draw on our unique combination of technical proficiency and policy insight to support the delivery of complex and specialized projects.