

# An Atlantic Canadian Energy Future

*Advancing a coordinated energy future  
to strengthen security, reliability, and  
economic growth.*

Championed By

**ATLANTIC**  
ENERGY COLLECTIVE

Supported By



Authored By

**CRUX** ENERGY  
CONSULTING

# ATLANTIC ENERGY COLLECTIVE



## Context: Basis of the Report

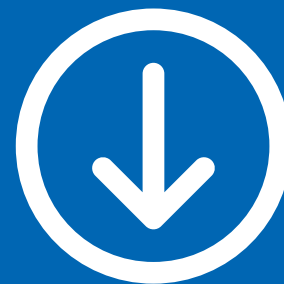
- Founded on conversations with senior stakeholders and Rightsholders.
- Reflects informed judgement and grounded in real dialogue and the practical realities of the Atlantic energy and industrial landscape.
- Not a technical or academic document.
- The approach was designed to move beyond familiar debates and identify a framework for action.

50+

Interviews conducted with market participants, policymakers, developers, and energy industry leaders.



Focused on regional energy collaboration among the four Atlantic Canadian provinces.



Outcome: A Sequential Framework for Collaboration

# Context & Opportunity: The Economic Challenge

*Economic growth depends, in part, on access to energy systems capable of supporting large, reliable loads at competitive cost.*

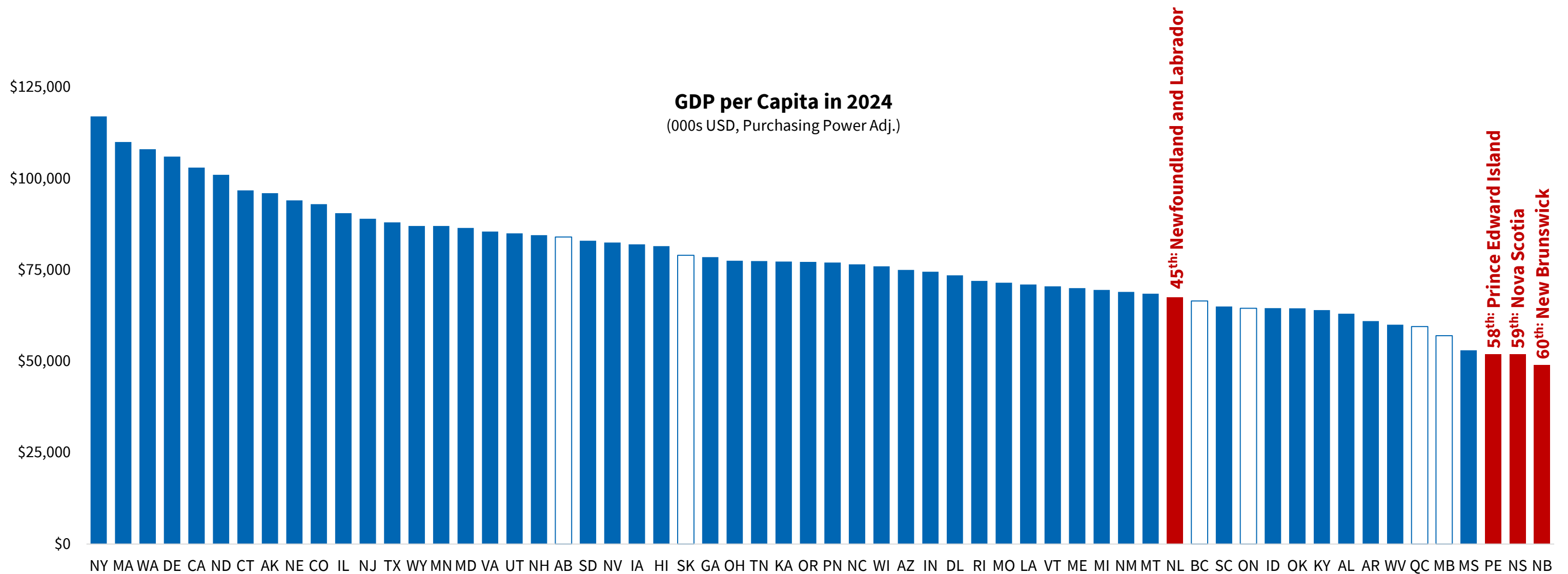
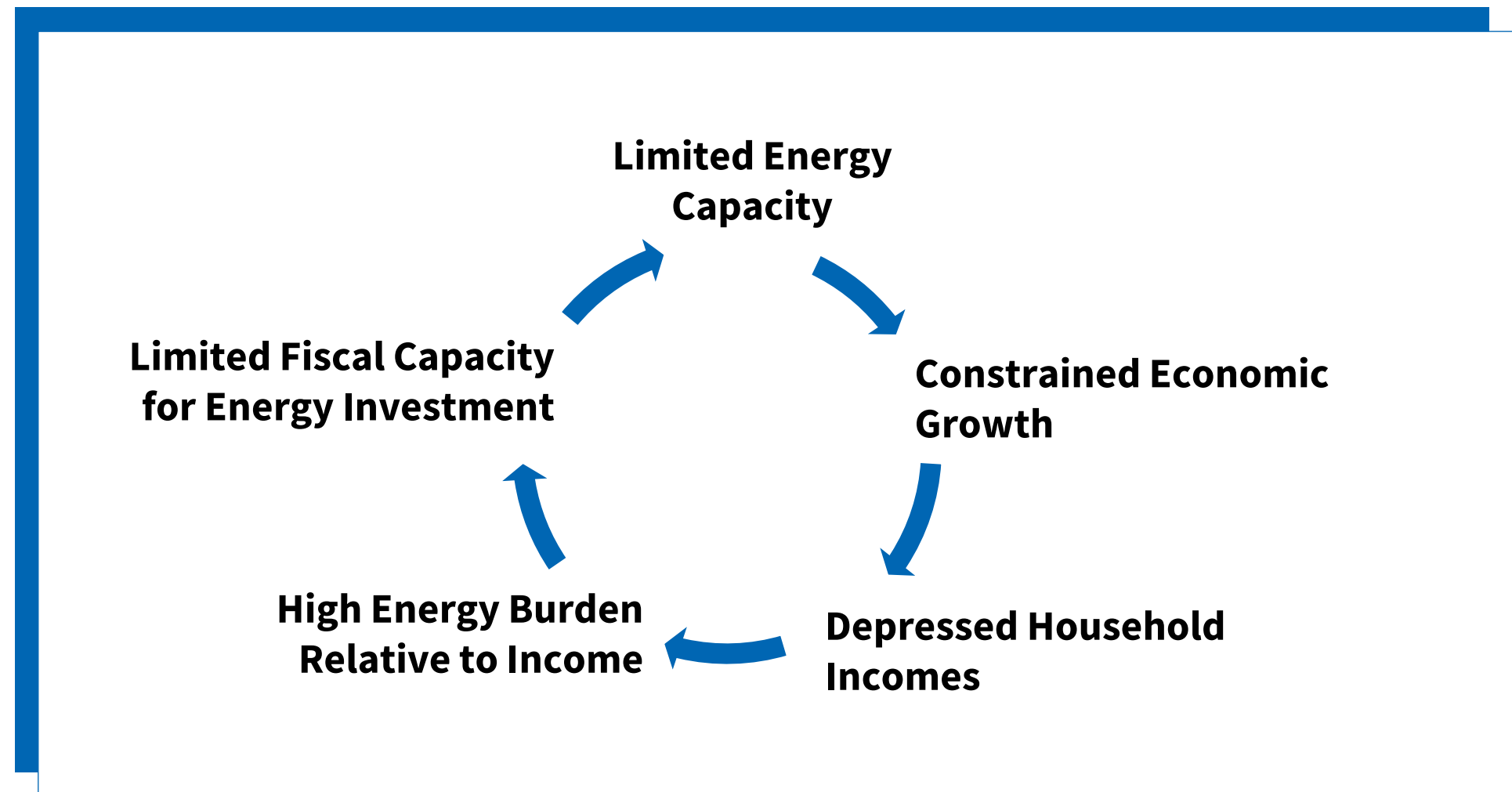


Chart Source: The Hub. Source Notes from The Hub: Own calculations using data from Statistics Canada data table 36-10-0222, and the US BEA. All values are in real PPP-adjusted based on the World Bank PPP for Canada of 1.14 in 2024.

## Structural Intervention is Required to Change Outcomes

*A reinforcing set of circular, structural conditions shape both energy system outcomes and broader economic performance.*



# The Electricity Problem We Are Trying to Solve

*Across the region, provinces are responding to immediate reliability, affordability, and investment pressures, but largely doing so in parallel rather than through a coordinated regional approach to planning and investment.*



## Load & Offtake Pressures

Intertie transfer requirements and deliverability constraints under peak and contingency conditions

Limited transmission capacity to export power beyond the province

Reliability constraints during peak demand periods; limited local supply

Lack of capacity for industrial load growth, especially associated with mining

## Demand Pressures & Ambitions

New generation planning, including nuclear; aging hydro infrastructure; assessment of firm capacity options

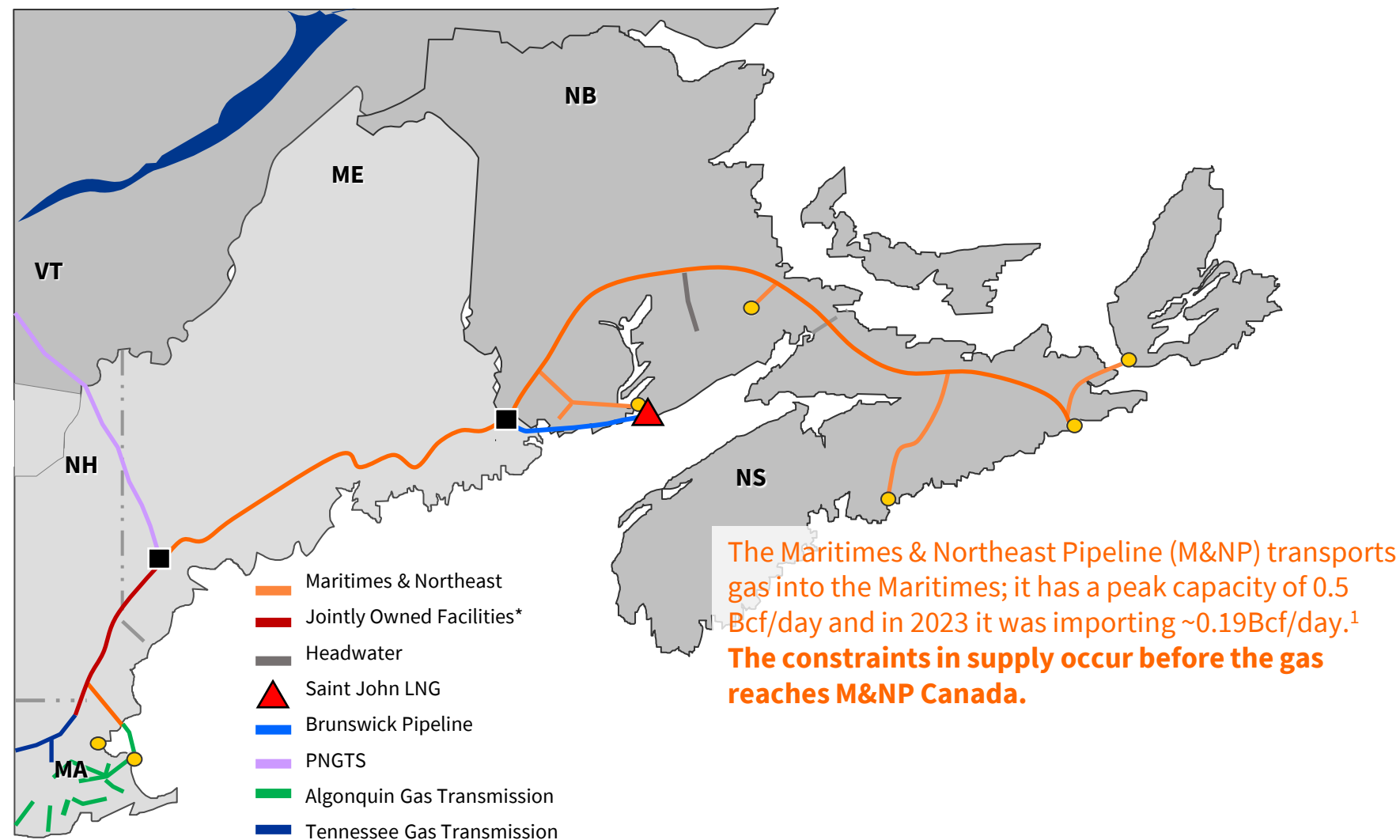
Large-scale wind development ambitions; assessment of firm generation to support system reliability

High renewable penetration with dependence on interprovincial generation and transmission

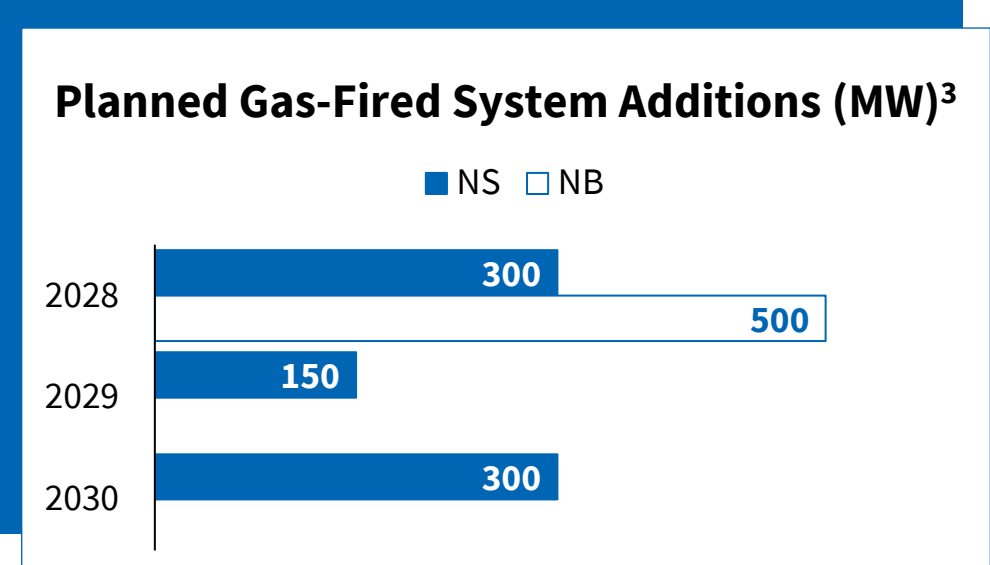
New hydro development; review of HQ MOU; need to retire and replace Holyrood

# Context & Opportunity: The Natural Gas Problem We Are Trying to Solve

*Almost all gas used in Nova Scotia and New Brunswick is imported and transits through the United States before reaching the region. This makes gas a significant energy security issue, not just a fuel choice.*



- Decisions being made on a province-by-province basis.
- Gas flows, constraints, and risks are shared in NB & NS.
- Provincial decisions can increase cost and risk for the region.



<sup>1</sup> Canada Energy Regulator  
<sup>2</sup> Owned by Maritimes & Northeast Pipeline, L.L.C. U.S. & PNGTS  
<sup>3</sup> NSPower 2025 10-Year System Outlook; NB Power News Releases

## Key Insight: Catalysts for Change

*Catalyst: a set pressures sufficiently acute that they compel action rather than continued analysis or bilateral workarounds.*

### THE CATALYSTS

**Energy affordability pressures:** rising demand, aging infrastructure, and extreme weather.

Large-scale energy projects outpacing **existing frameworks** constraining project advancement.

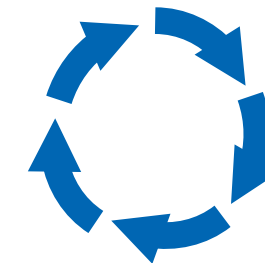
Insufficient supply and transmission are binding constraints on **economic development**.

**Capital investment** required for electricity reliability while advancing decarbonization is beyond capacity. **Federal participation will become necessary.**

- Pressures have outgrown individual provincial solutions.
- Coordinated collaboration required to manage cost, risk, and system reliability.
- Otherwise, pressures will intensify & narrow future options and increasing costs.

# Key Insight: An Unsustainable Trajectory

Over the past five years, energy costs in Atlantic Canada have increased significantly, far outpacing growth in median household incomes and GDP. Without structural change, this pattern risks becoming self-reinforcing.



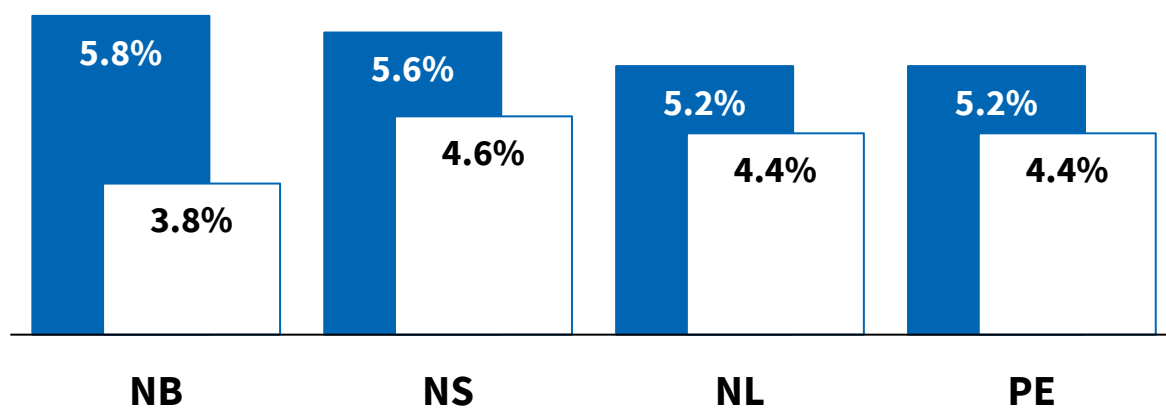
## Illustrative Example of Increased Capital Costs

In 2014, estimates for refurbishing New Brunswick's Mactaquac Dam were \$3 - \$5 billion. Today, these estimates have roughly doubled to \$7.5 - \$9 billion.<sup>1</sup>

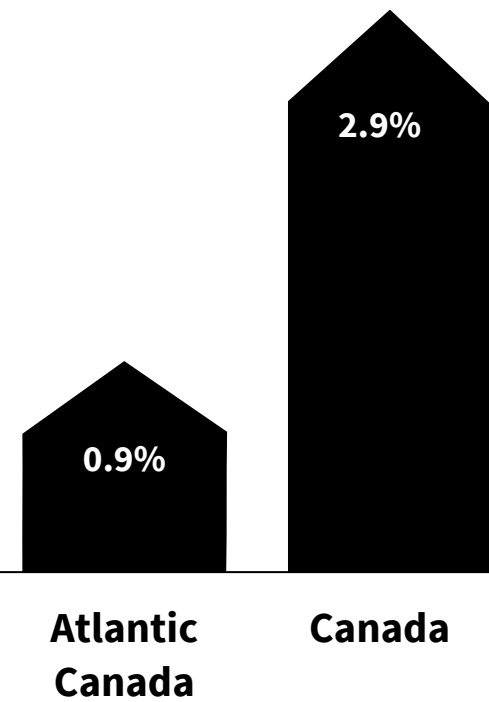
## Median Household's Increased Spend of After-Tax Income on Energy<sup>3</sup>

■ Today □ 2019

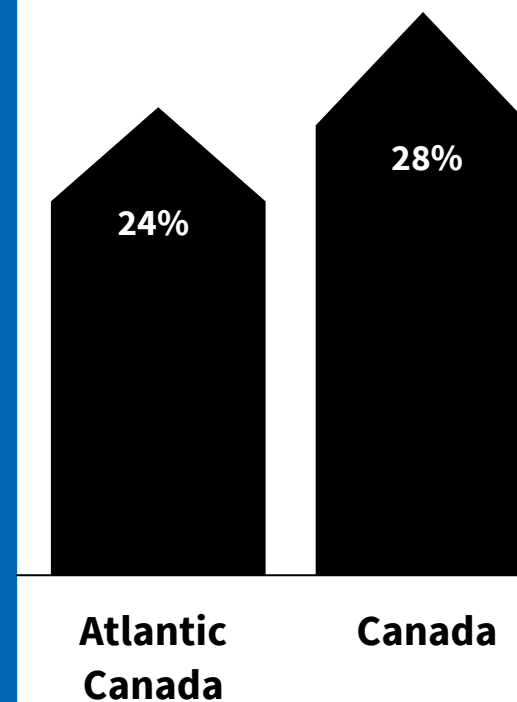
The Threshold for Energy Poverty is 6%



## Median Household's After-Tax Income Increase<sup>4</sup> (2019 - 2023)



## Gross Domestic Product Increase<sup>2</sup> (2018 - 2022)



<sup>1</sup> CBC News

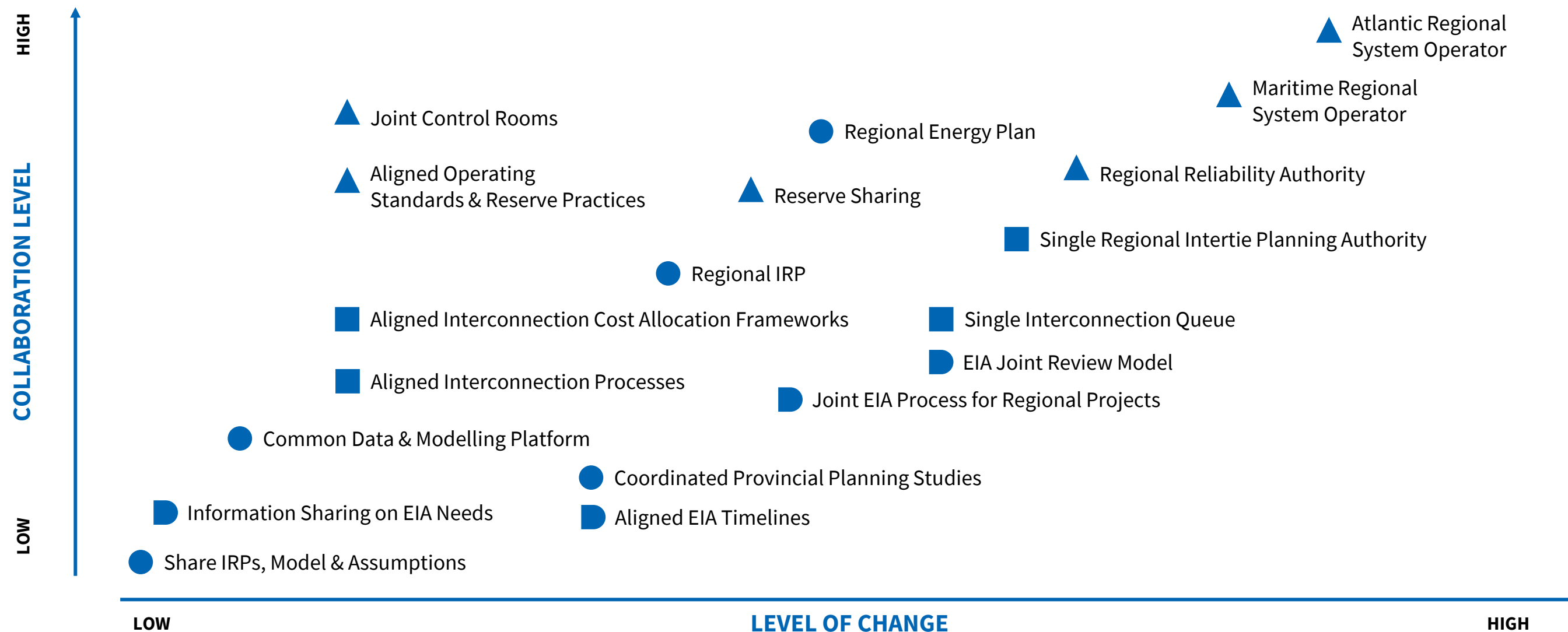
<sup>2</sup> Statistics Canada Table 36-10-0468-01

<sup>3</sup> Based on internal calculations.

<sup>4</sup> Statistics Canada Table 11-10-0190-01

# Key Insight: Collaboration Has Optionality

*Movement across these options is not linear and does not require convergence to a single end-state.*



**Legend:**

- Long Term Planning
- Interconnection Management
- ▲ System Operations
- ◐ Environmental Assessments

## Recommendation: A Sequential Framework for Collaboration

THE ACTIONS

THE GOALS

### **Create a regional all-energy model and IRP**

Explore if systems could operate more effectively and economically as an interconnected whole.

### **Assess gas and electric load interconnections**

Evaluating investment value to the region.

### **Test governance options against regional objectives**

Focus on functions vs. predetermined structure.

### **Sequenced implementation**

Clear decision points to assess progress before advancing to more formal arrangements.

1

Transparency between regions & understanding of functional outcomes vs. institutional labels.  
Quantify system costs and economic benefits.

2

Identify where coordinated planning could reduce risk, avoid duplication, or unlock value.

3

Credible to investors, regulators and Indigenous partners, & align regional objectives.

4

Demonstrated value, growing confidence, and participation across provinces and Indigenous partners.

## Recommendation: What to Avoid

*The success of regional collaboration depends as much on what is avoided as on what is pursued.*

### **Moving to structure before value is clear.**

Alignment on objectives and demonstrated value must come before formal governance decisions and institutionalization.

### **Predetermining a provincial centre of gravity.**

Approaches should not position any one province as the operational or strategic hub of a regional system. Such assumptions risk reinforcing perceptions of dominance and discouraging participation.

### **Framing collaboration as zero-sum.**

Collaboration should not be assessed on relative gains. The objective is to expand opportunity by attracting Federal funding and private investment that might not otherwise flow to the region.

### **Defaulting to existing institutional models.**

Collaboration should not be premised on extending any single province's current arrangements. Institutional design should flow from regional objectives and functions, not precede them.

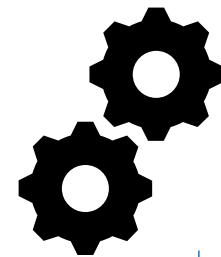
### **Governance arrangements that concentrate influence.**

Even the perception that one province's interests dominate decision-making can undermine confidence. Governance must be demonstrably neutral, balanced, and credible to all participants.

## Implementation: Create a Regional All-Energy Model and IRP

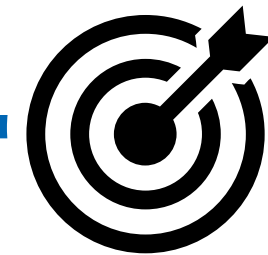
### The Action

Create a regional all-energy model and IRP using existing IRPs as inputs. Make assumptions explicit, identify regional system pressures. How might an interconnected systems operate more effectively and economically.



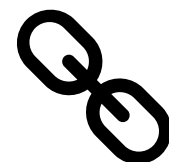
### The Goal

Transparency between regions, and an understanding of functional outcomes over institutional labels. Quantify system costs and economic benefits.



### Suggested Responsibility

Establish a joint task force of gas and electric System Operators facilitated by third party with a regional mandate. Additional expertise for economic analysis.



### Suggested Timeline

Six months for high level technical modelling (explore detailed refinements concurrently). Economic modelling to follow technical.

