

MAKING DATA RESONATE WITH DECISION-MAKERS

FMI-PD Week Nov 2023



YOUR PRESENTERS

Peter Weltman

Peter is Ontario's Former Financial Accountability Officer. Over five years, he and his office have produced ground-breaking reports that include an estimate of the cost of climate change impacts on publicly-owned infrastructure, Ontario's economy and fiscal position, cost estimates of the health and education programs, and dozens of others. Peter is a Director and Employee Owner at Technomics Inc., a data analysis and cost engineering company that helps clients make "Better Decisions, Faster" on highly complex projects and programs, and is also a member of the Peel Transition Board, charged with overseeing the dissolution of the Region of Peel into its lower-tier municipal components.



Michael Lionais

Mike recently retired from the public service after 35 years of combined military and civil service. His last position in the public service was Director General, Cost Estimating and Transfer Payments Centres of Expertise. While in this position, he was seconded to CPA Canada where he worked on the Foresight Initiative. This initiative focused on reimagining the accounting profession in the digital economy. Mike has also taught at the Master's level for the Sprott School of Business and the Telfer Certificate in Complex Procurement and Project Leadership. He has received several awards for his work in predictive modeling. He is the Managing Director, Technomics Canada, a decision support company focused on developing data-driven insights to support decision-making.



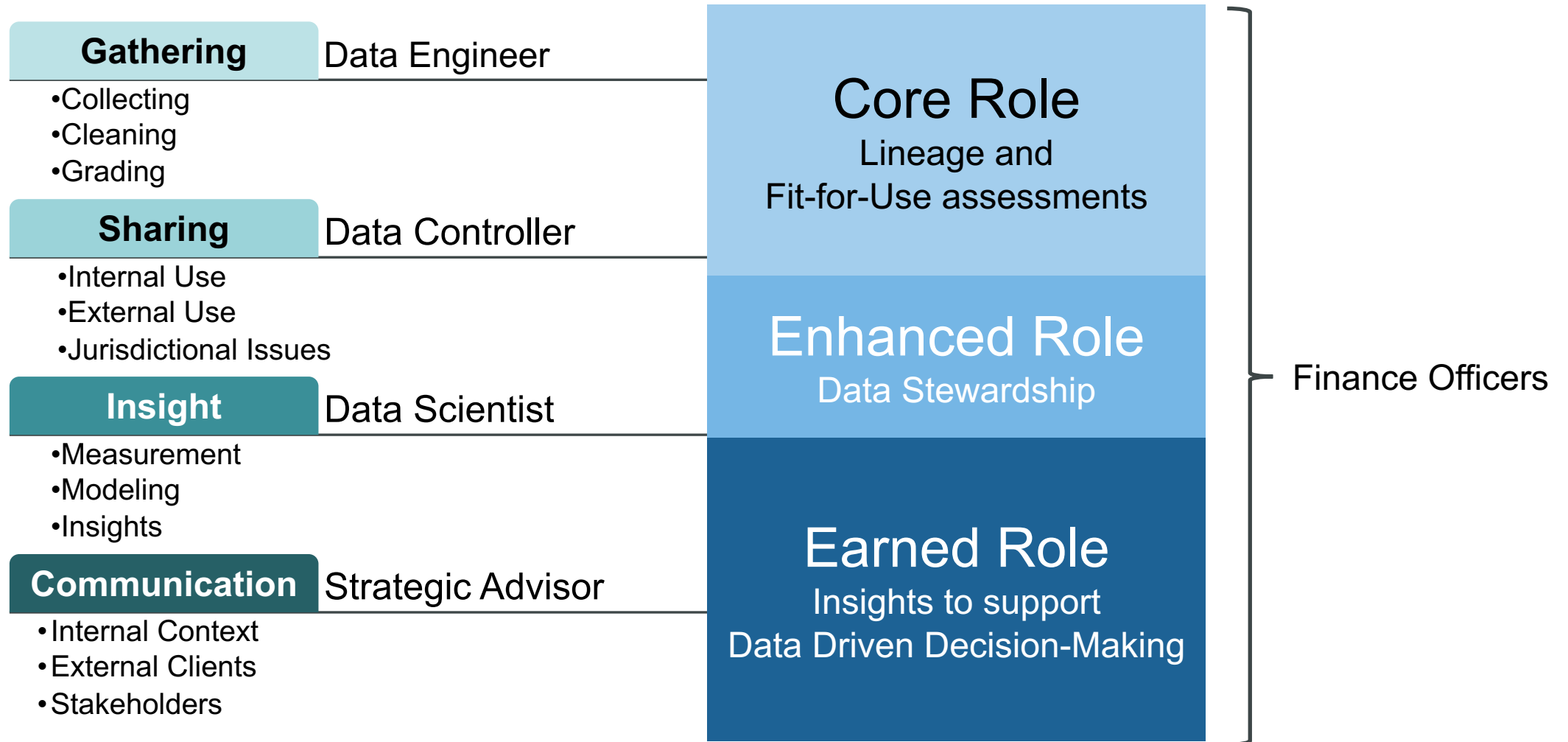
TECHNOMICS AWARDS OVER THE LAST 10 YEARS



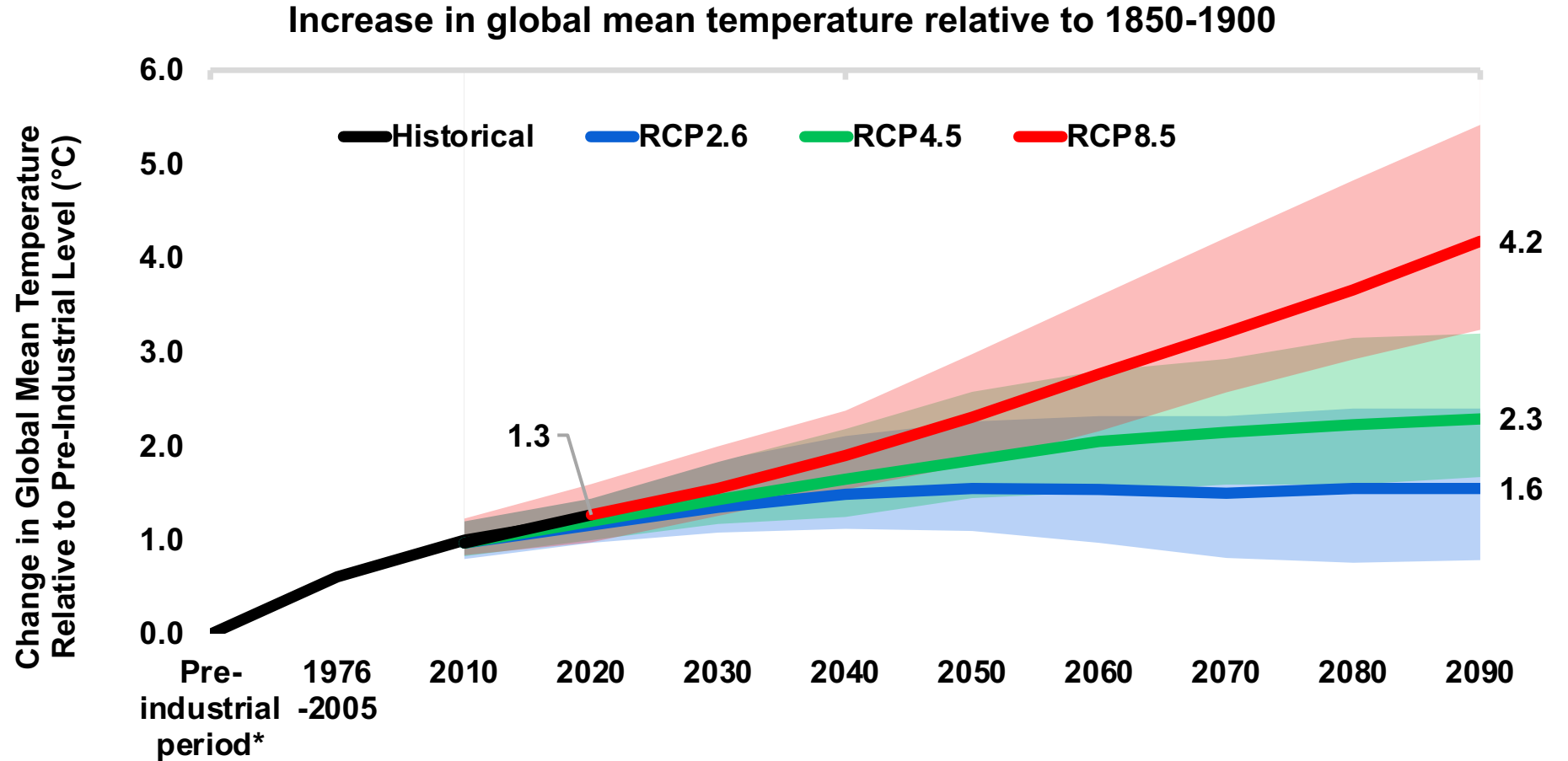
Analytical Methods **2023**
Data Science/Trending Topics **2023**
Strategy **2022**
Analytical Methods & Strategies **2020**
Planning & Strategy, Space & Missiles, Scheduling **2019**
Methods, Data Collection & Management **2019**
Analysis & Modeling, Machine Learning **2019**

Acquisition & Operations **2018**
Policy & Standards **2017**
Management, EVM & Scheduling **2016**
Earned Value Management **2014**
Methods & Models **2014**
Management **2013**
Information Technology **2013**

DATA MANAGEMENT VALUE CHAIN



CLIMATE DATA - GLOBAL MEAN TEMPERATURES ARE RISING



*1850-1900 base period.

Note: Lines indicate the median estimate and the shaded areas show the range of 5th and 95th percentile projections.

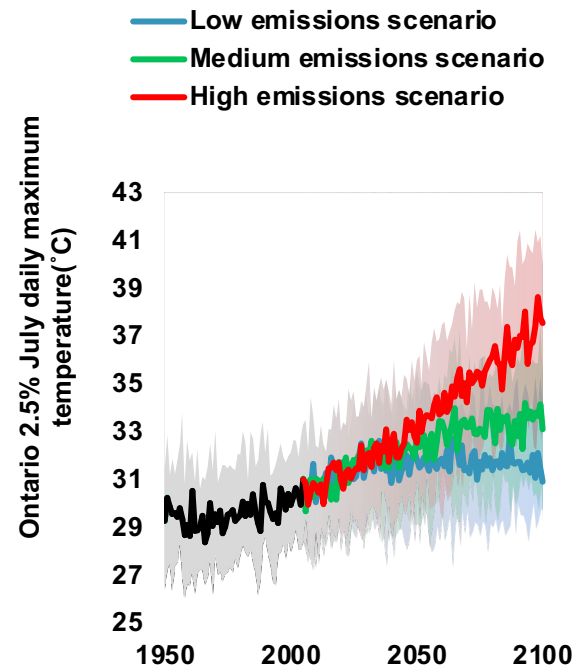
Source: Intergovernmental Panel on Climate Change

CLIMATE CHANGE WILL BRING MORE EXTREME HEAT AND EXTREME RAINFALL, BUT LESS FREEZE-THAW CYCLES IN ONTARIO

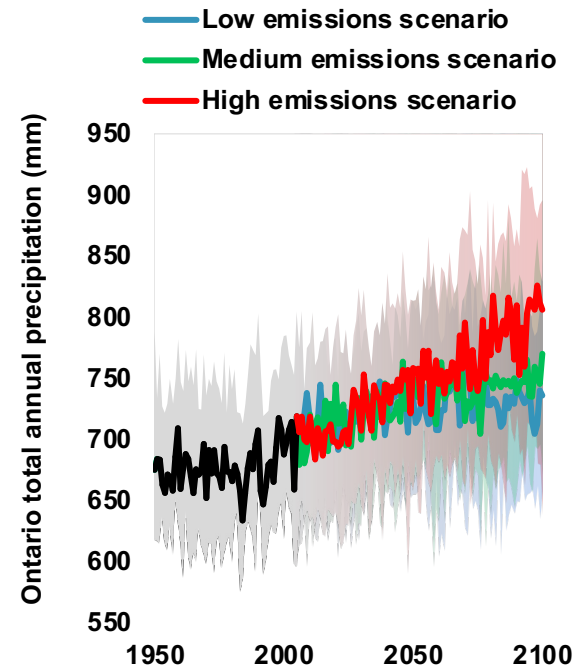
To ensure safety and reliability, public infrastructure is designed, built and maintained to withstand a specific range of climate conditions typically based on historic climate data. But these variables are changing.

Source: Environment Canada, Canadian Centre for Climate Services.

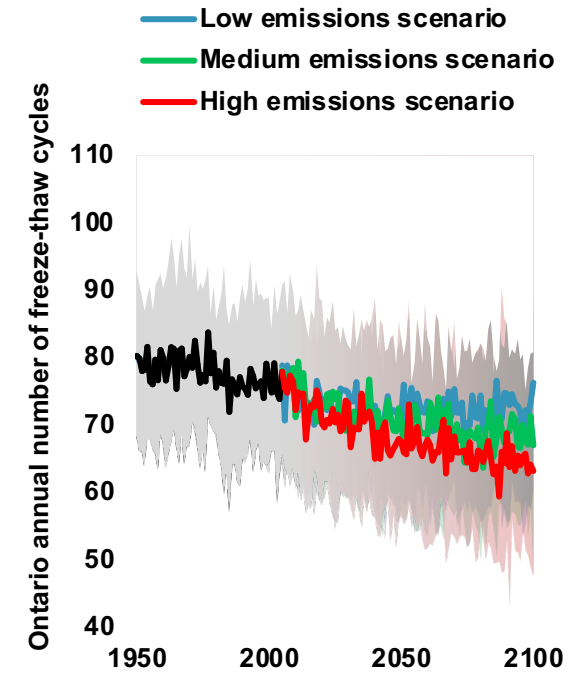
More Extreme Heat



More Extreme Rainfall



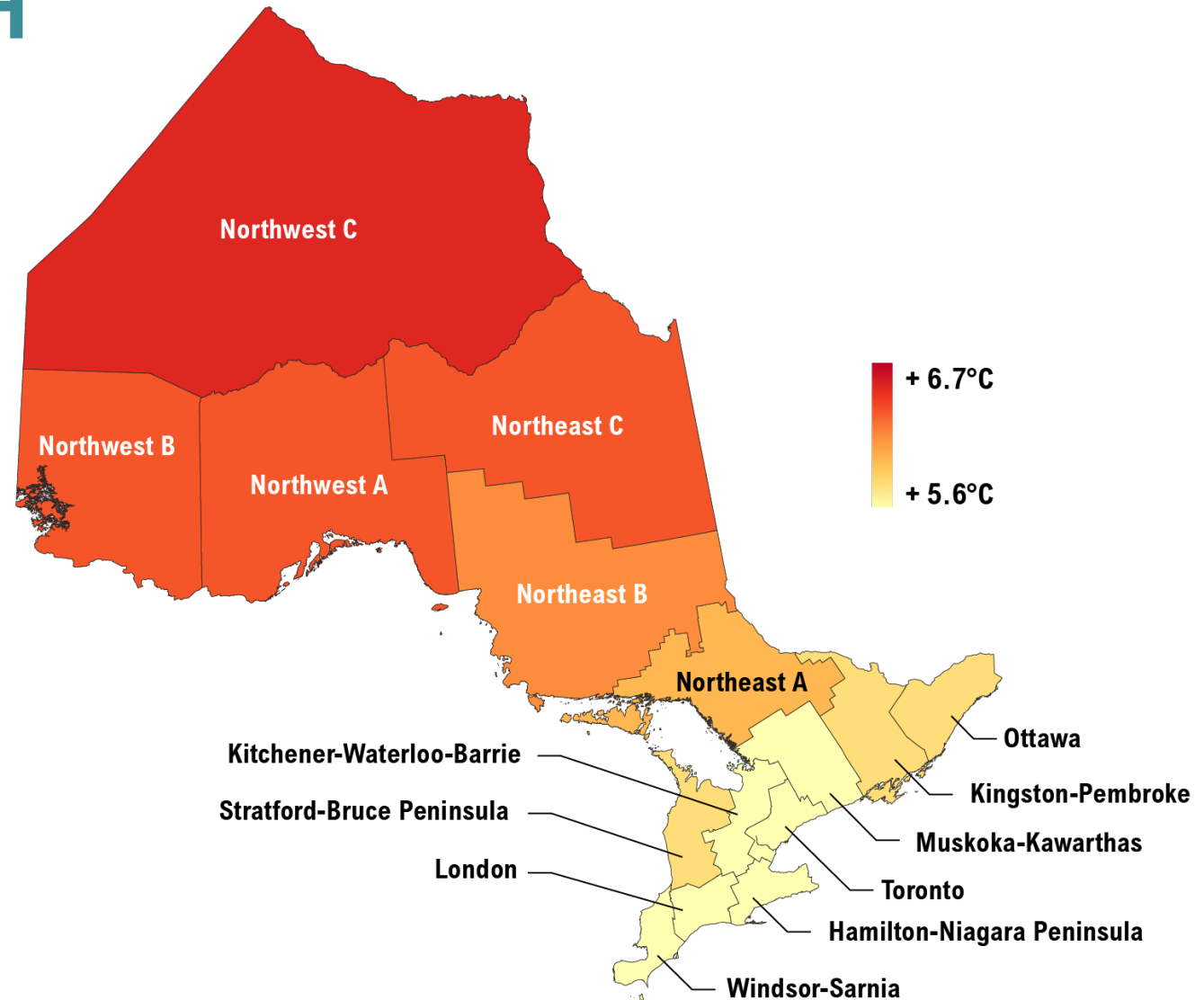
Less Freeze-Thaw Cycles



CLIMATE CHANGE WILL BE MORE SEVERE IN ONTARIO'S NORTH

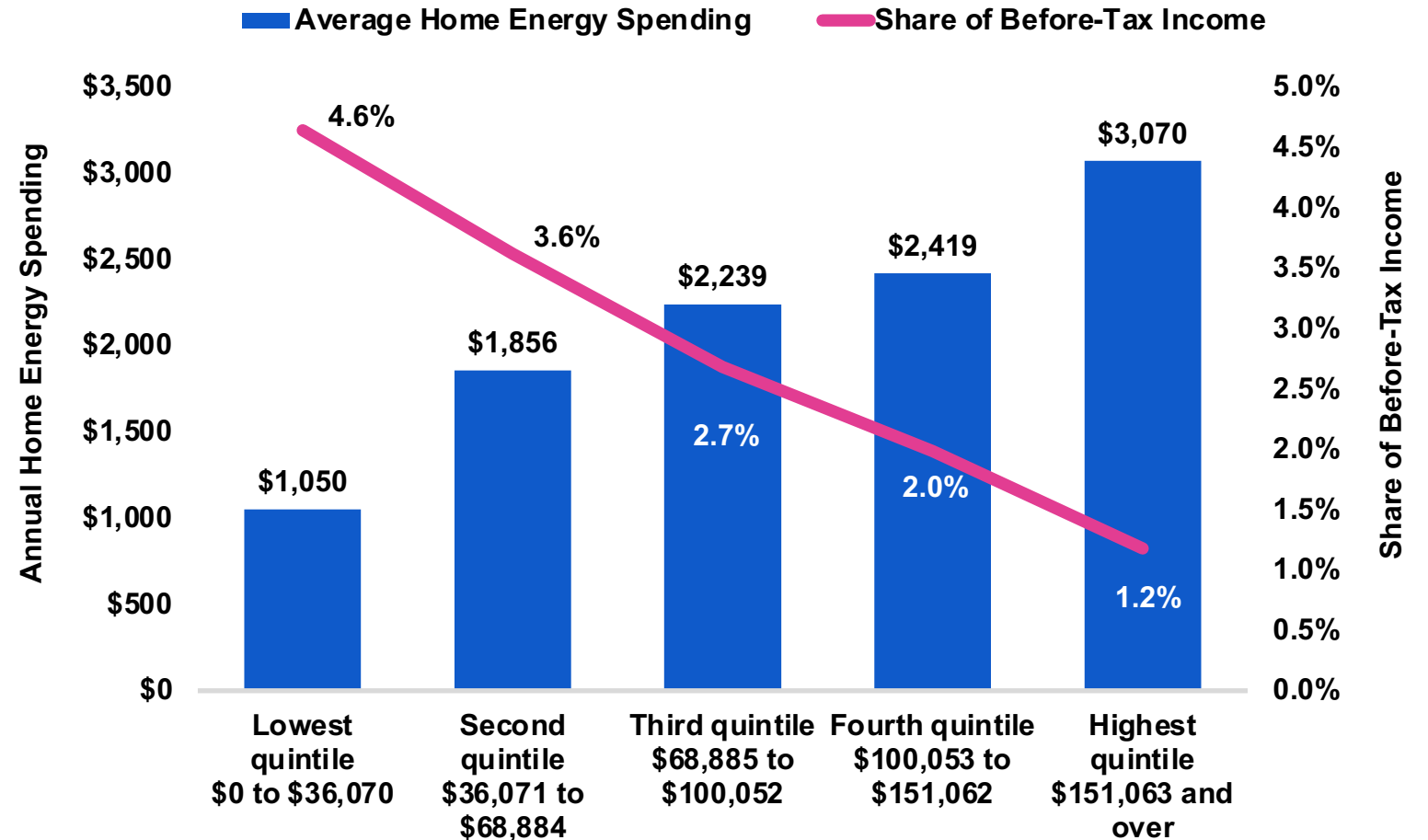
Median projected change in annual mean temperature from 1976-2005 to 2071-2100, RCP8.5

Note: Colour distribution is based on the multi-model median projection
Source: Canadian Centre for Climate Services.



HOME ENERGY SPENDING BY INCOME LEVEL

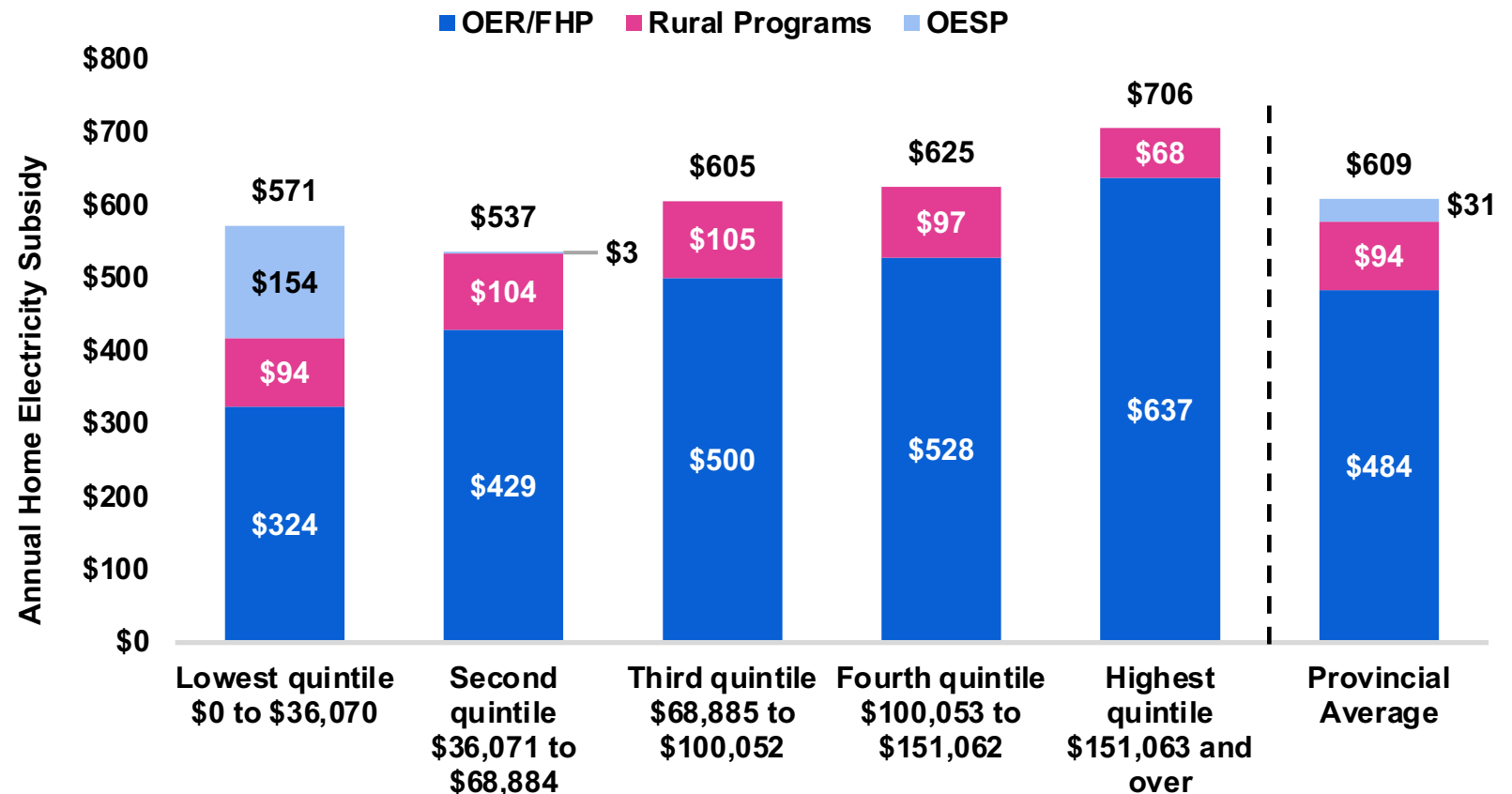
- In 2019, the average Ontario household spent \$2,128 on home energy. However, average home energy spending varied significantly by income level.
- In general, home energy spending tends to increase with income primarily because higher income households have larger homes.
- Although lower income households spend less overall on home energy, they spend a higher percentage of their household income on home energy.



Source: Adapted by FAO from Statistics Canada, Table 11-10-0223-01 Household spending by household income quintile, Canada, regions and provinces.

EFFECT OF PROVINCIAL ELECTRICITY SUBSIDIES BY INCOME

- Overall, the FAO estimates that the Province's electricity subsidy programs reduced the cost of electricity for the average Ontario household by \$609 in 2019.
- In general, as a household's average income increased, the average electricity subsidy provided by the Province increased, with the exception of households in the lowest income quintile, which received higher average subsidies than households in the second income quintile.



Note: "OER/FHP" is the Ontario Electricity Rebate program (previously the Fair Hydro Plan); "Rural Programs" is the Distribution Rate Protection Program, the Rural or Remote Electricity Rate Protection Program, and the On-Reserve First Nations Delivery Credit; and the "OESP" is the Ontario Electricity Support Program.

Source: FAO.

HOUSEHOLD NET BENEFIT (HEALTH CARE SCENARIO)

Distribution Illustrator

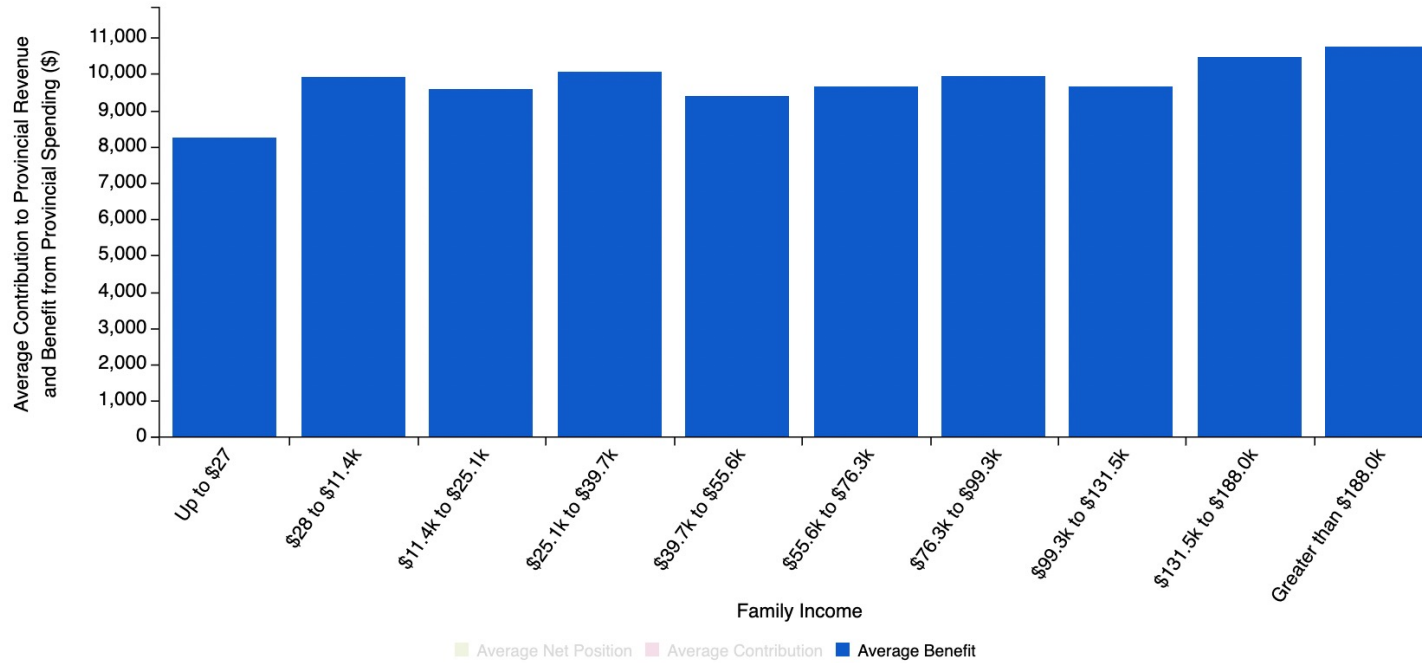


This interactive graph shows the average **benefit** and **contribution** amounts for families in each income decile, and their resulting average **net position**. To display the distribution of benefits from specific government services or contribution to specific government revenue sources, select the item of interest from the drop down boxes.

Benefits ?

Health

Contributions ?



HOUSEHOLD NET BENEFIT (SOCIAL SERVICES SCENARIO)

Distribution Illustrator



This interactive graph shows the average **benefit** and **contribution** amounts for families in each income decile, and their resulting average **net position**. To display the distribution of benefits from specific government services or contribution to specific government revenue sources, select the item of interest from the drop down boxes.

Benefits ?

Social Services and Income Supports

Contributions ?

