Roadmap to 2035

House Interim Committee on Environment and Natural Resources

Cathy Macdonald
Oregon Global Warming Commission Chair

Alan Zelenka
Assistant Director of Planning and Innovation

Maya Buchanan, PhD
Senior Climate Policy Analyst

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AGENDA

- Brief review of Roadmap purpose
- Overview of the Roadmap Modeling Framework

WHAT IS THE ROADMAP?

Goal is to analyze and develop options for actions across all sectors to serve as inputs for consideration by the Governor and Legislature to develop a plan for Oregon to meet its GHG reduction goals

To Accomplish this, we need to:

1. Understand where we are now in terms of GHG emissions
2. Take stock of progress towards GHG emissions reduction goals from adopted and upcoming programs & projects
3. Highlight additional opportunities to help achieve Oregon's climate goals for consideration by the Legislature and Governor

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MODEL FEATURES

Dynamic integrated system model

- Economy-wide assessment of GHG emissions
- **Customized** framework for Oregon built up from the **county level**
- Incorporates all energy supplies and demands
- Tried-and-true model applied to cities, states, and counties over the past 20 years

Model developed by consultant ***Sustainability Solutions Group***

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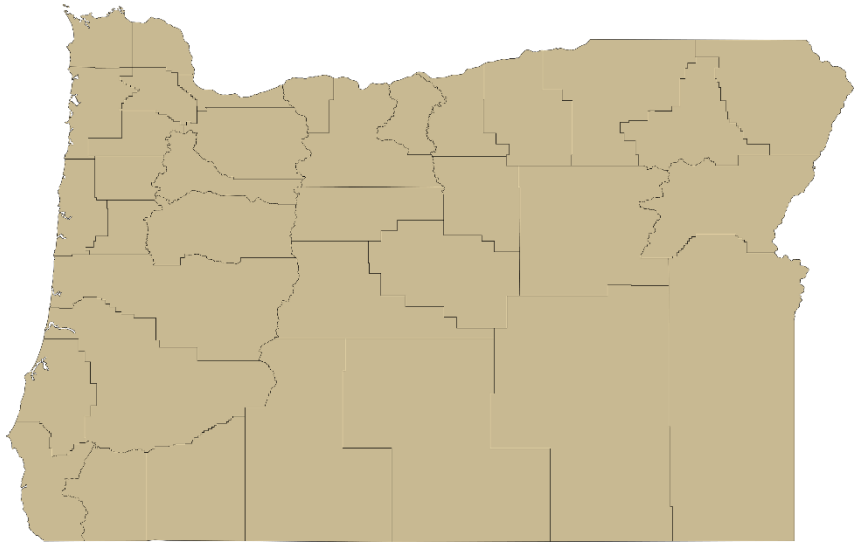
KEY DIFFERENCES FROM SIMILAR MODELS

- Customized for Oregon
  - Oregon-specific data
  - Oregon-specific programs
- Results at the county level (rather than national averages)
- Provides information on associated societal benefits or potential harms from actions



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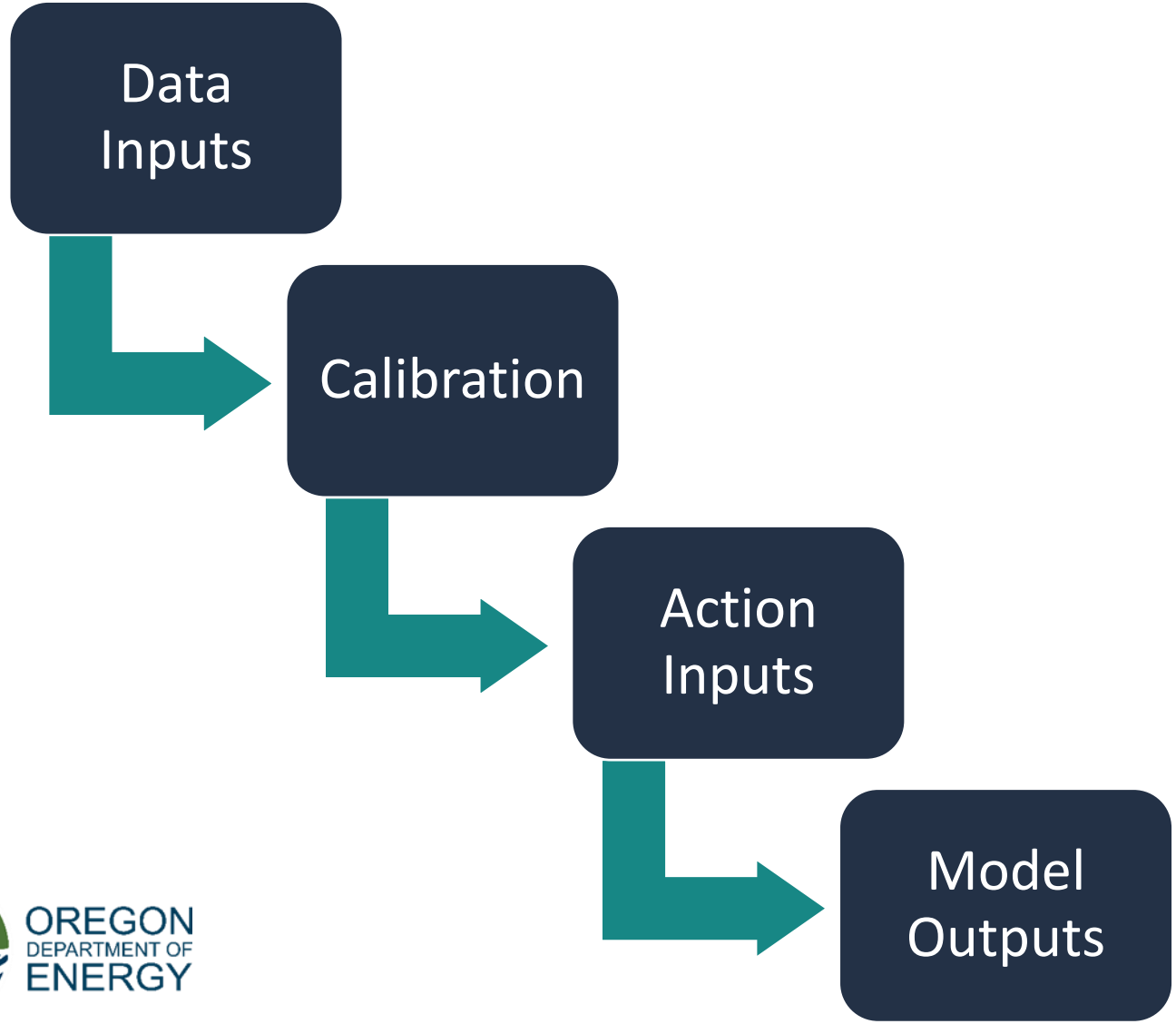
MODELLING FRAMEWORK



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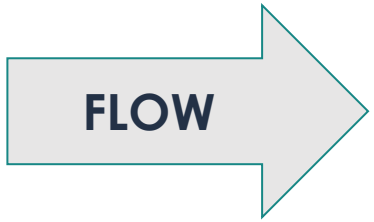
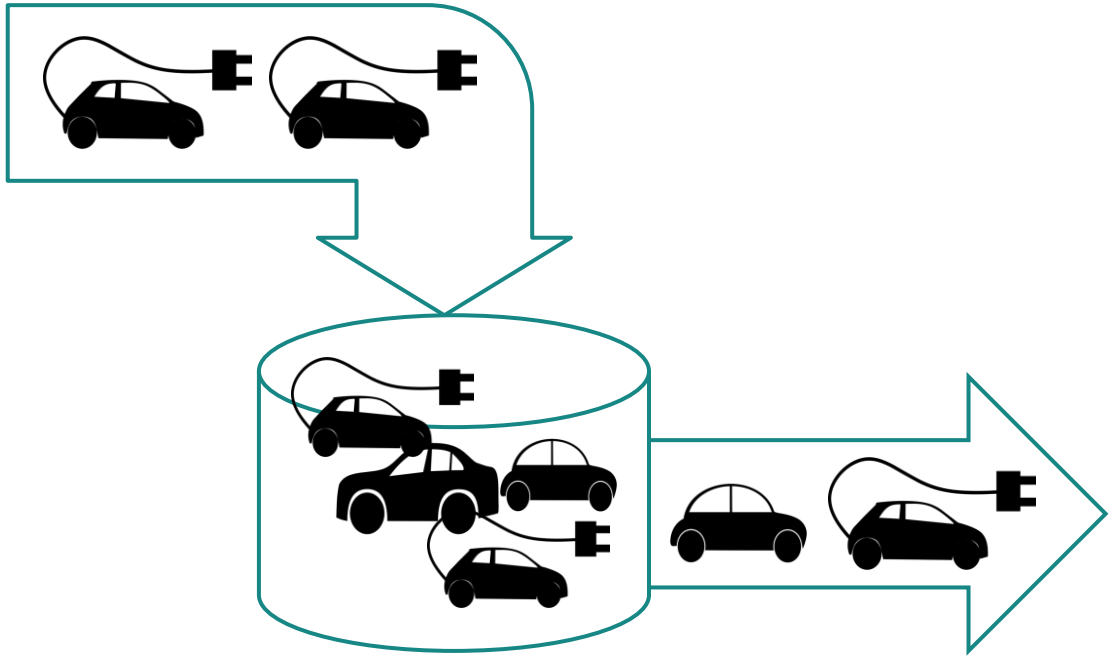
DATA INPUTS: STOCKS AND FLOWS

Measure of the type and amount of items at a specific time

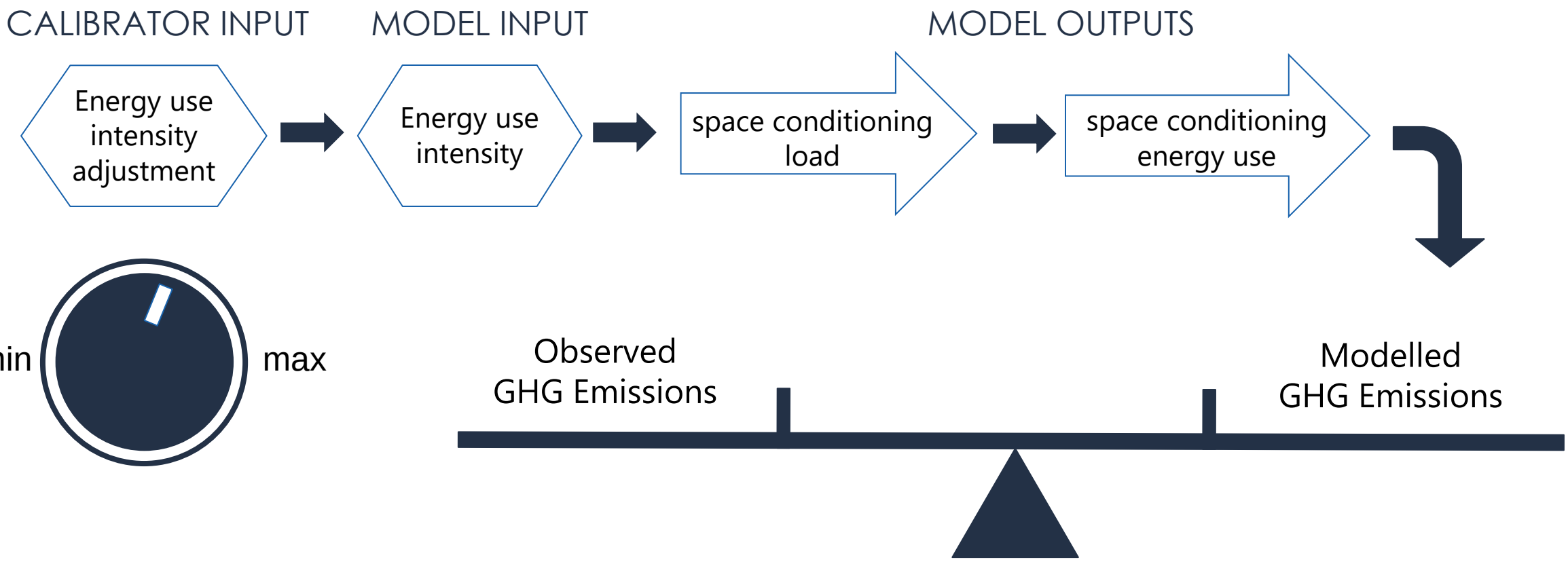


Measures the change of stocks over a period of time



CALIBRATION

Calibrate inputs to ensure that model outputs align with observed data
(DEQ's 2019 GHG Inventory)



ACTION INPUTS (EXAMPLES)

Recent Legislation, Funded Programs, or Rules

- HB 2021 (100% Clean Electricity)
- Energy Efficiency Standards for Appliances
- Manufactured Home Replacement
- Solar + Storage Rebate Program
- Heat Pump Rebate Programs
- Community Renewable Energy Program
- Healthy Homes Repair Fund
- Clean Fuels Standard
- Advanced Clean Trucks
- Climate Protection Program (CPP)

Trends

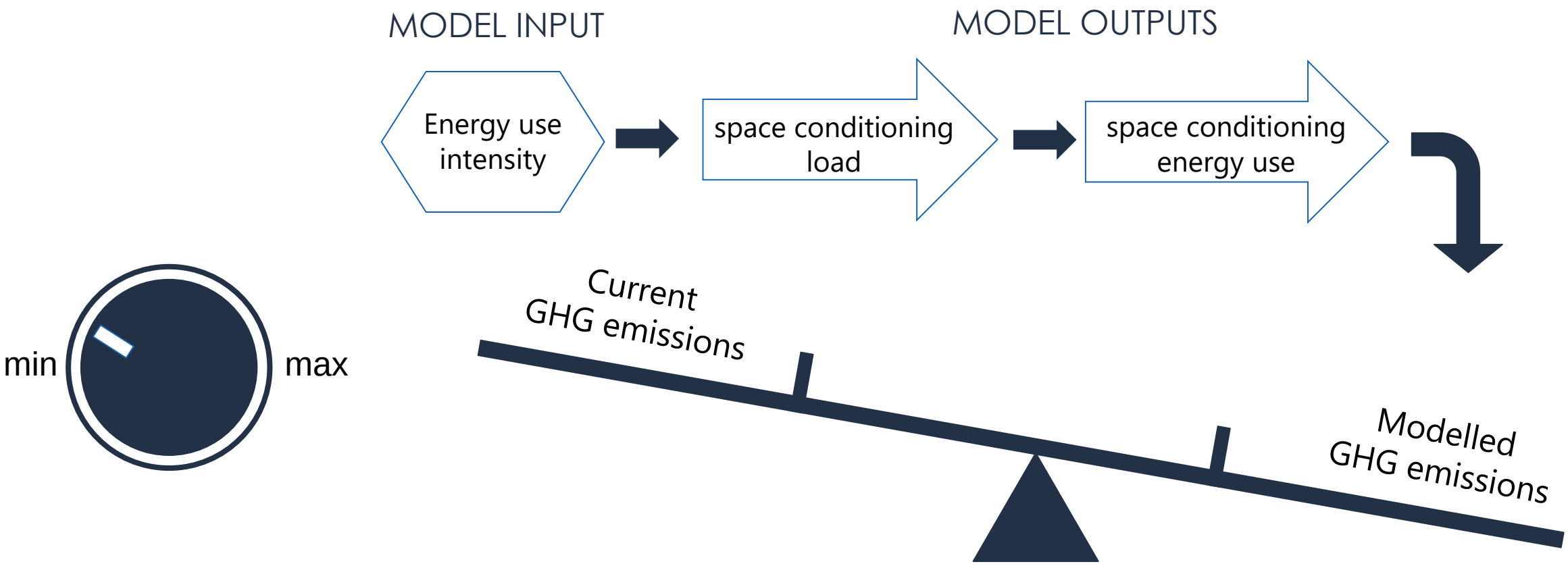
- Increased EV Light-Duty Sales
- Energy Efficiency Programs

Additional Actions

- TBD

PROJECTIONS

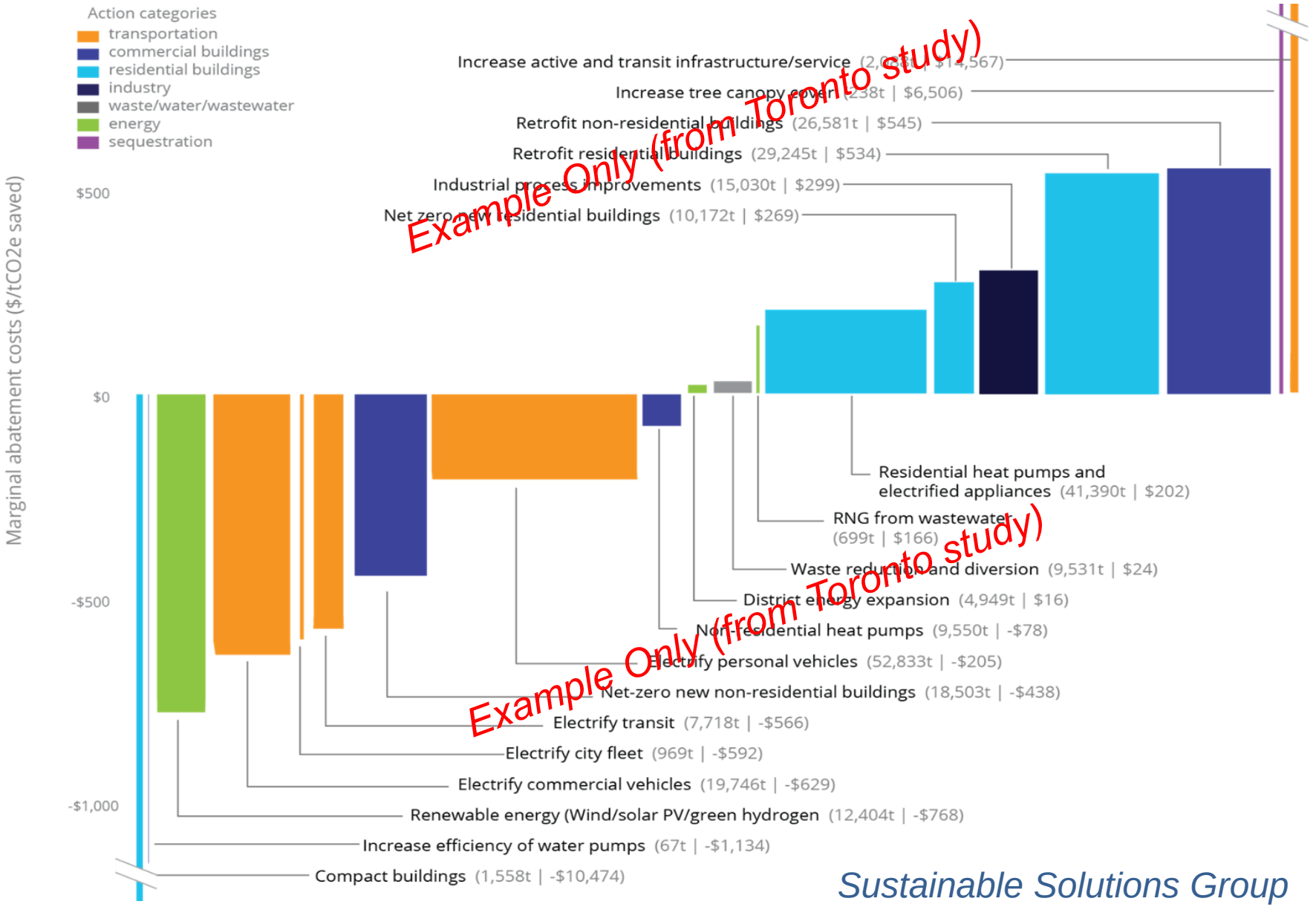
Add Action Inputs to model effect on the system



EXAMPLE MODEL OUTPUT: EMISSIONS & COSTS/SAVINGS

MARGINAL ABATEMENT COST Curve:

Information on the net costs & savings per metric ton of CO2e reduced

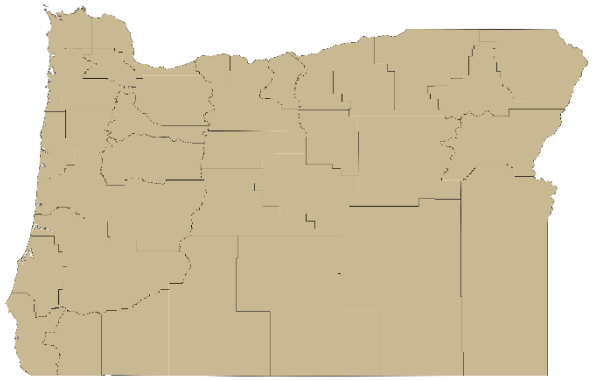


MODEL OUTPUT: CO-BENEFITS ANALYSIS

Measurement of additional societal benefits associated with actions inputs

Include:

- Health and quality of life impacts
- Equity impacts on historically and currently underserved populations and communities
- Impacts on economic development and jobs
- Environmental impacts



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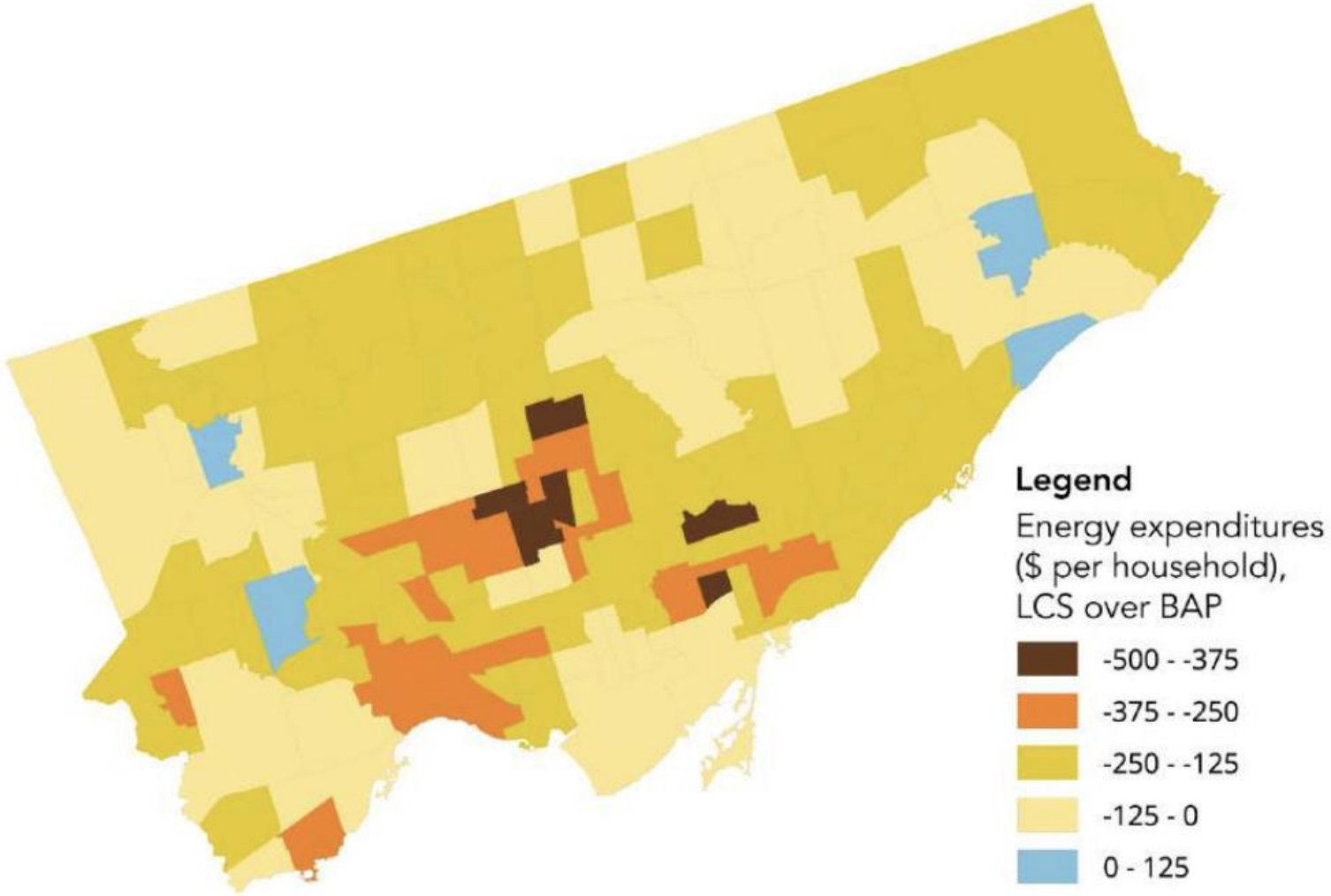
EXAMPLE MODEL OUTPUT: CO-BENEFITS

HOUSEHOLD ENERGY EXPENDITURES IN THE CITY OF TORONTO LOW CARBON SCENARIO (LCS) VERSUS BUSINESS AS PLANNED (BAP) SCENARIO, 2050



Economic and Equity Benefits: Example from Toronto

NEXT STEPS

- Completion of Analyses (May-August)
- Additional Public Input (July 13 & Fall Commission Meetings)
- OGWC Develops Recommendations (June-Sept.)
- OGWC creates a new “Roadmap to 2035” (Sept-Jan.)
  - ✓ Recommendations for the Governor and Legislature

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More Information

www.keeporegoncool.org/TIGHGER

Alan Zelenka

Alan.zelenka@energy.oregon.gov

Comments:

https://odoe.powerappsportals.us/en-US/tighger/

Oregon.GWC@energy.oregon.gov

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