

# Roadmap to 2035

*Senate Interim  
Committee on Energy  
and Environment*

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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

# MODEL FEATURES

## Dynamic integrated system model

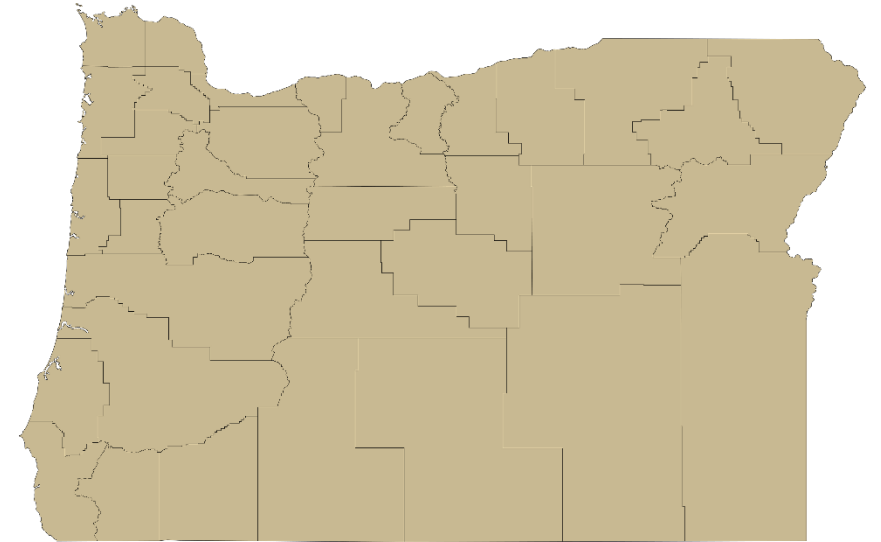
- Economy-wide assessment of GHG emissions
- **Customized** framework for Oregon built up from the **county level**
- Incorporates all energy supplies and demands
- Tried-and-true model applied to cities, states, and counties over the past 20 years

Model developed by consultant *Sustainability Solutions Group*

# KEY DIFFERENCES FROM SIMILAR MODELS

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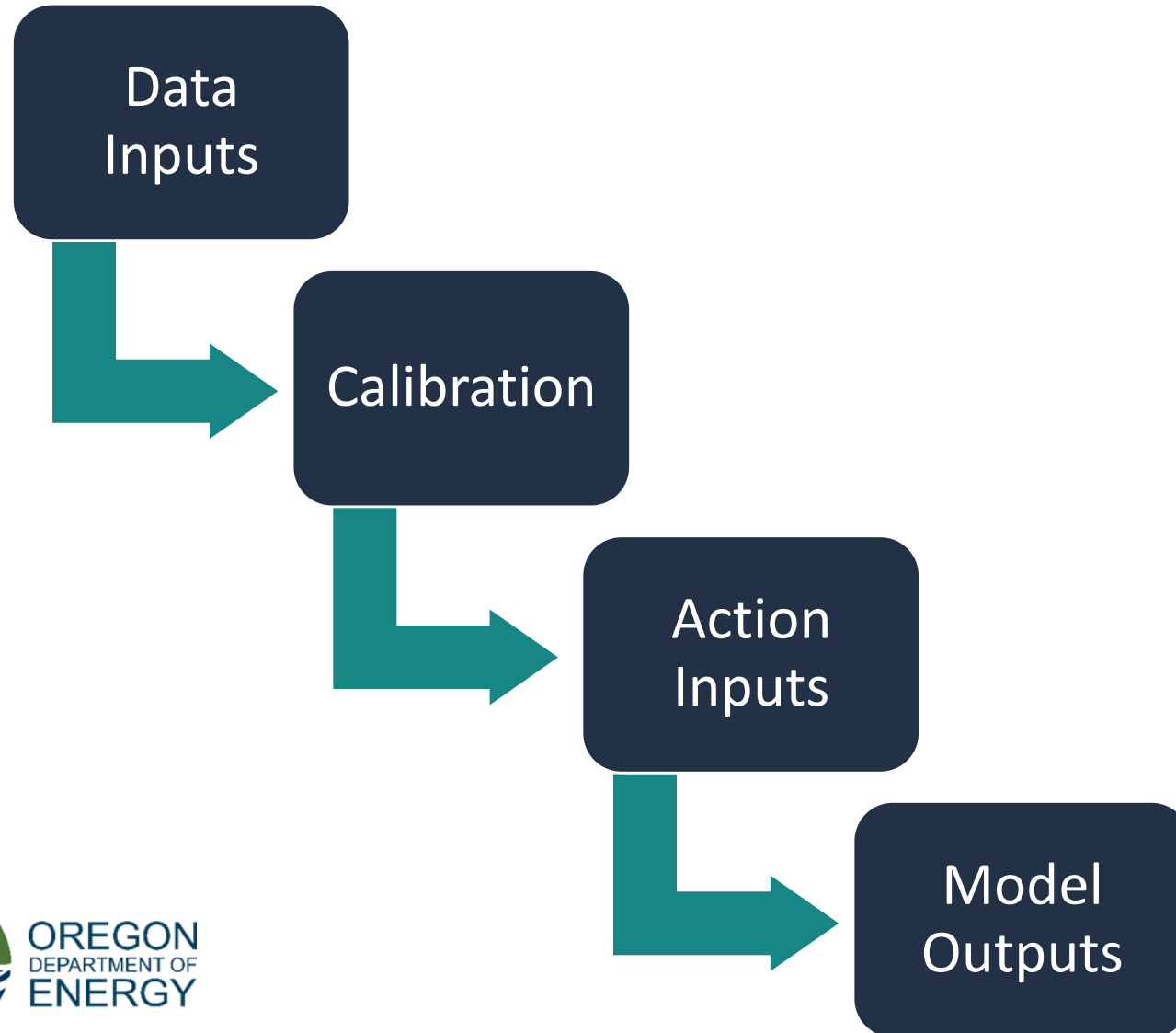
- Customized for Oregon
  - Oregon-specific data
  - Oregon-specific programs
- Results at the county level (rather than national averages)
- Provides information on associated societal benefits or potential harms from actions





# MODELLING FRAMEWORK

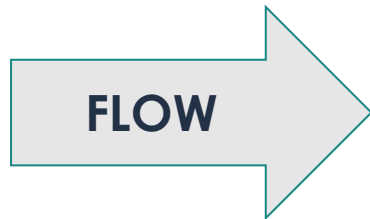
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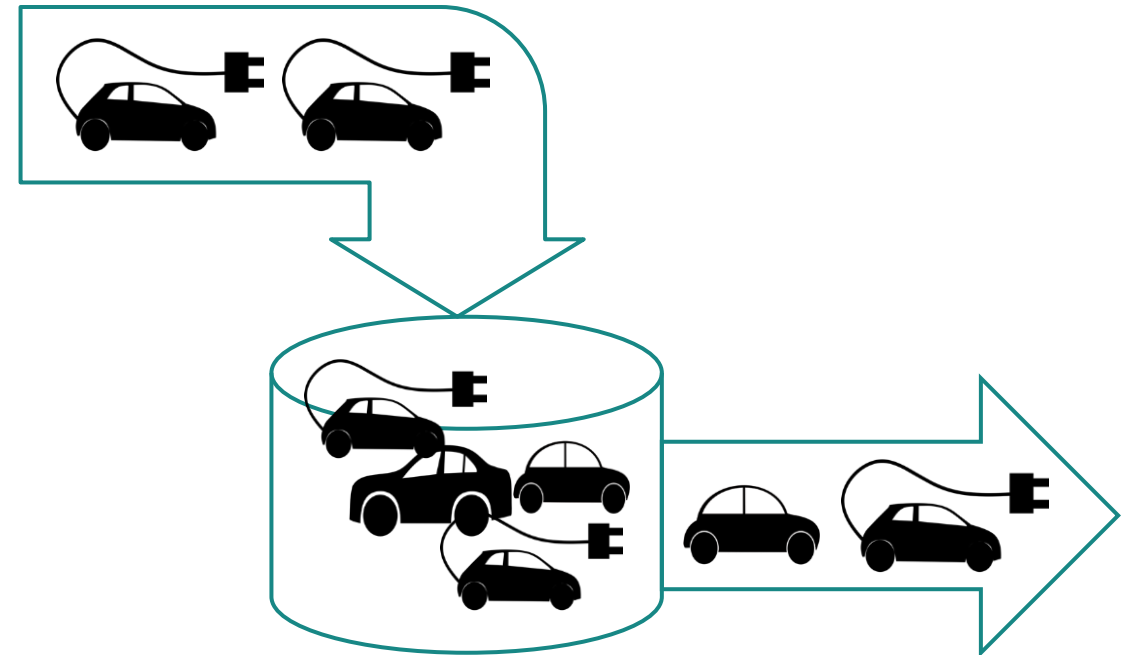
# DATA INPUTS: STOCKS AND FLOWS



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

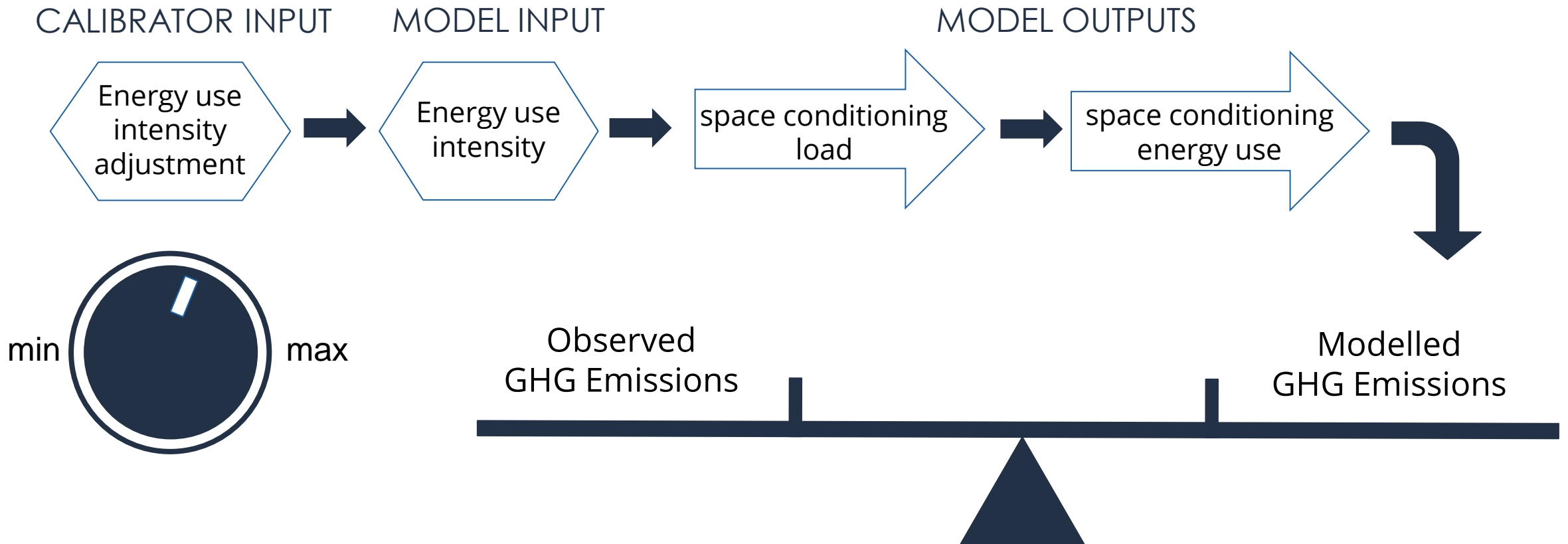


Measures the change of stocks over a period of time



# CALIBRATION

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





# ACTION INPUTS (EXAMPLES)

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## 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

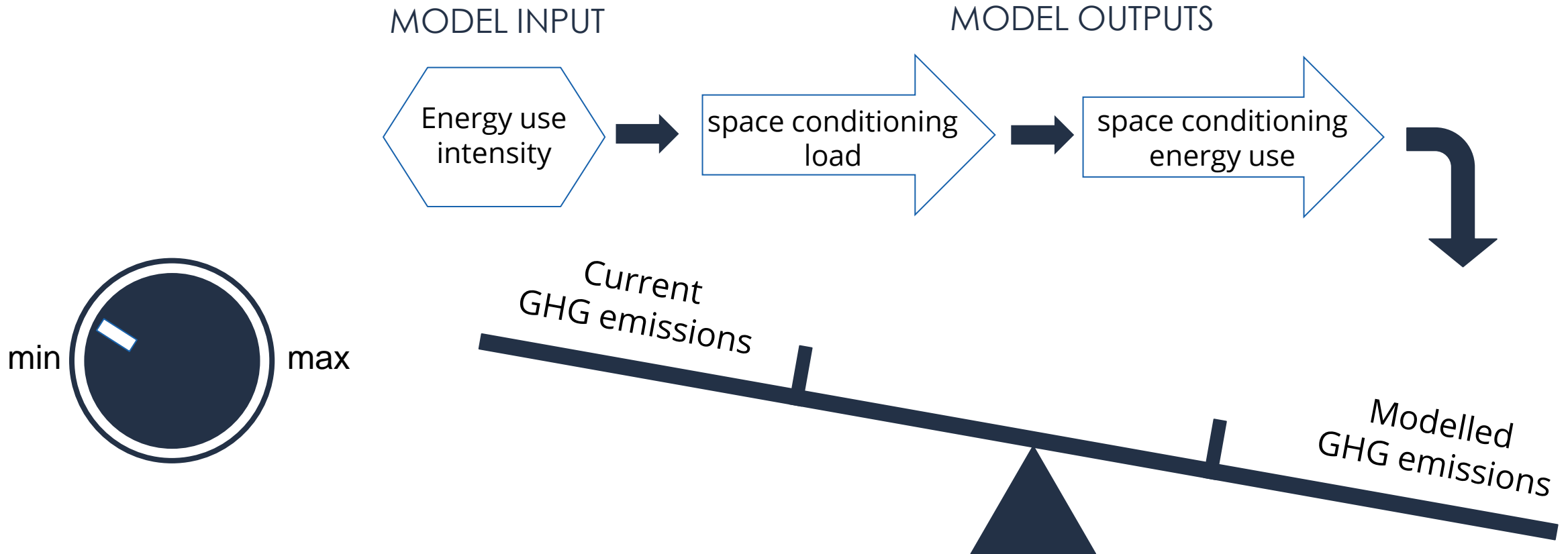
- Increased EV Light-Duty Sales
- Energy Efficiency Programs

## Additional Actions

- TBD

# PROJECTIONS

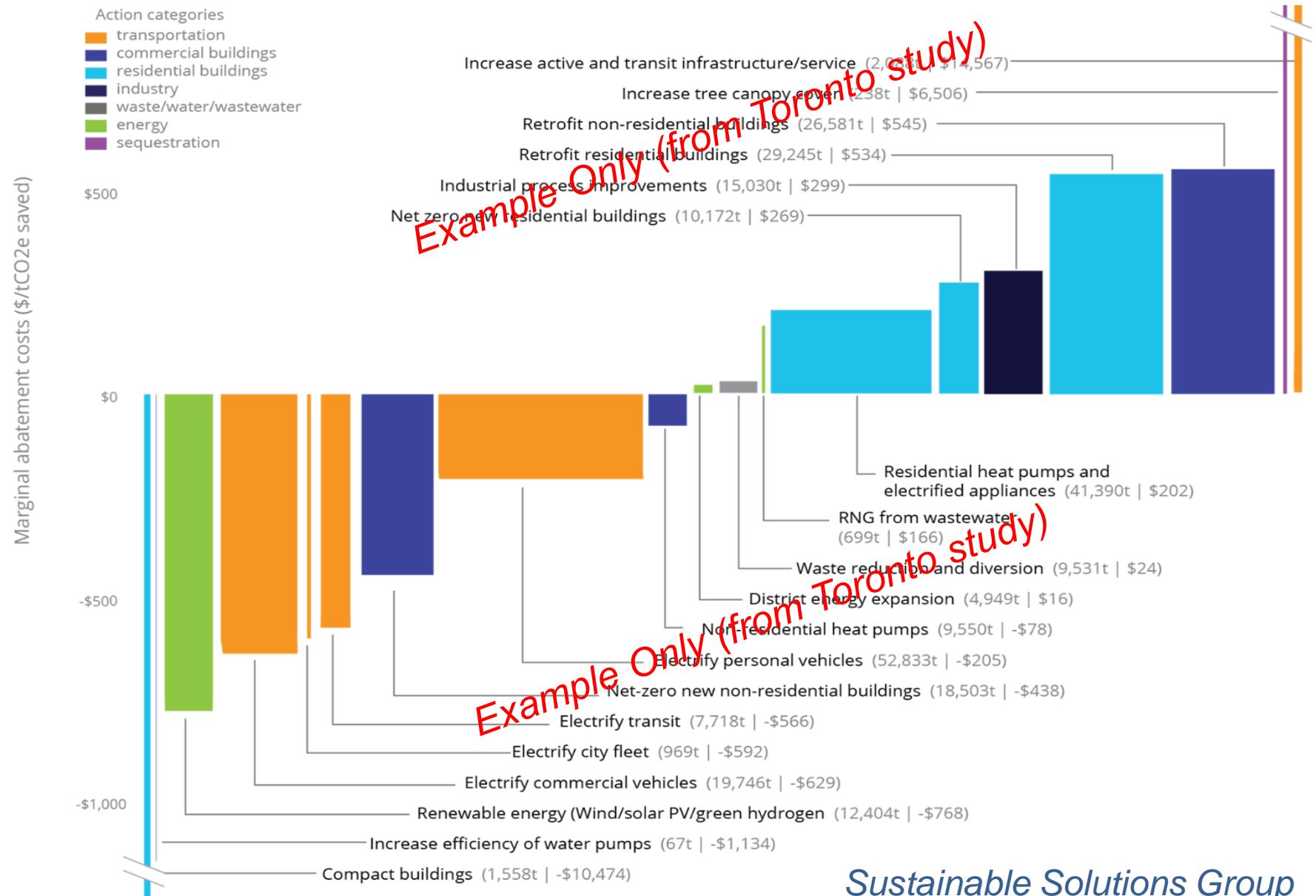
Add Action Inputs to model effect on the system



# EXAMPLE MODEL OUTPUT: EMISSIONS & COSTS/SAVINGS

## MARGINAL ABATEMENT COST Curve:

Information on the net costs & savings per metric ton of CO<sub>2</sub>e reduced

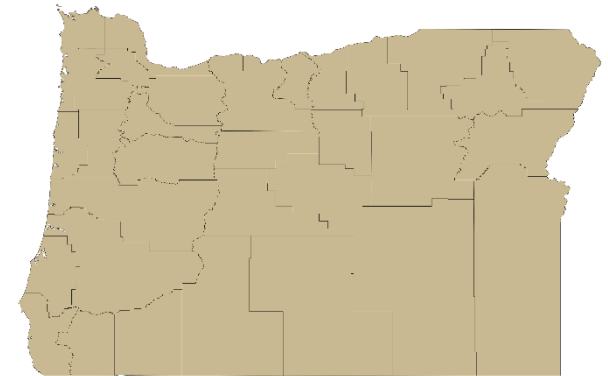


# MODEL OUTPUT: CO-BENEFITS ANALYSIS

Measurement of additional societal benefits associated with actions inputs

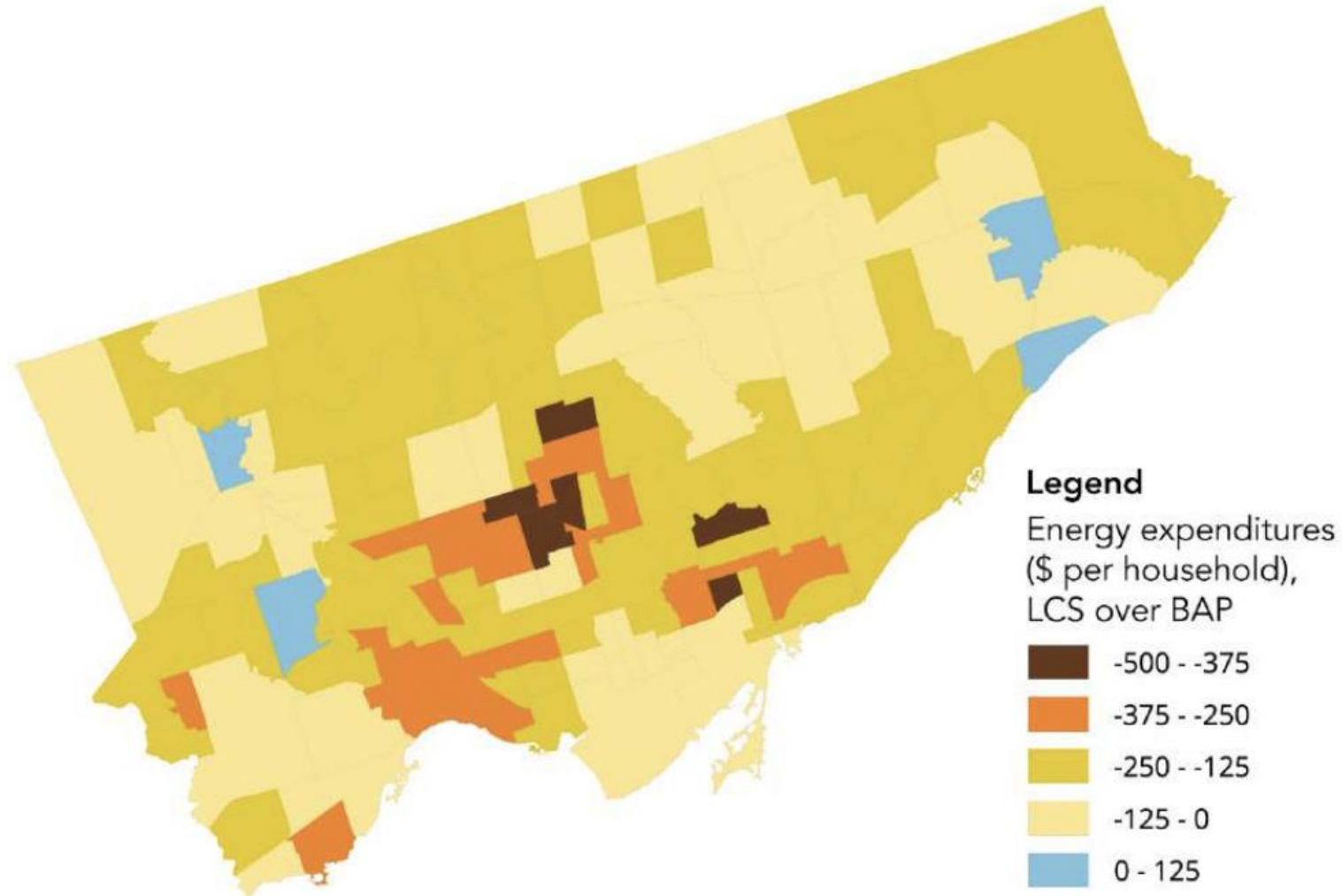
## Include:

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



# EXAMPLE MODEL OUTPUT: CO-BENEFITS

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





# NEXT STEPS

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- 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

# More Information

[www.keeporegoncool.org/TIGHGER](http://www.keeporegoncool.org/TIGHGER)

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**Comments:**

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

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