



# RESILIENT CALEDON

CLIMATE CHANGE PLAN

## Getting to 1.5C

Modelling the pathway to a low-carbon Caledon

# Today's Presentation

**Climate emergency declared Jan 28, 2020. Direction from Council to:**

"report back on the actions that are required by the Town and community to reduce local GHG emissions, aligned with the 1.5°C warming scenario as recommended by the IPCC."

**Ask of Council today:**



To endorse a greenhouse gas emissions reduction target of **net zero by 2050** for the updated Community Climate Change Action Plan, Resilient Caledon

# Today's Presentation





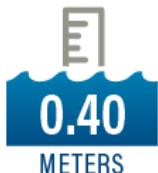
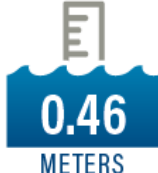


1. Why the net zero by 2050 target is right for Caledon
2. Overview of existing emissions in Caledon
3. Discuss scale of actions required for Caledon to reach net zero emissions by 2050, including high level financial analysis



RESILIENT  
**CALEDON**

# Setting a Target for Caledon

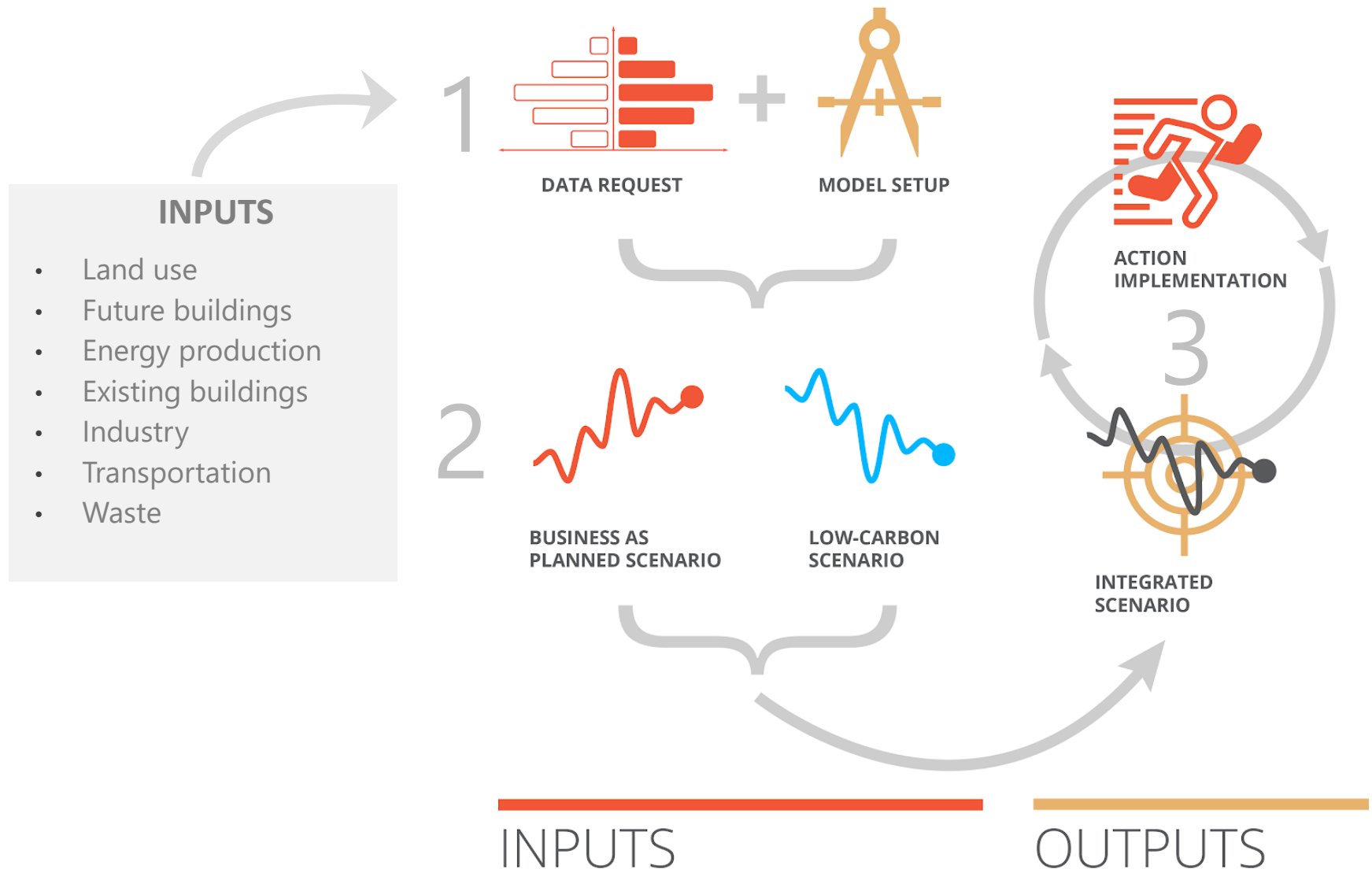
## Staying below 1.5°C...

	1.5°C	2°C	2°C IMPACTS
<b>EXTREME HEAT</b> Global population exposed to severe heat at least once every five years	 14%	 37%	<b>2.6x</b> WORSE
<b>SEA-ICE-FREE ARCTIC</b> Number of ice-free summers	 AT LEAST 1 EVERY 100 YEARS	 AT LEAST 1 EVERY 10 YEARS	<b>10x</b> WORSE
<b>SEA LEVEL RISE</b> Amount of sea level rise by 2100	 0.40 METERS	 0.46 METERS	<b>.06M</b> MORE
<b>SPECIES LOSS: VERTEBRATES</b> Vertebrates that lose at least half of their range	 4%	 8%	<b>2x</b> WORSE

## ...means getting to zero

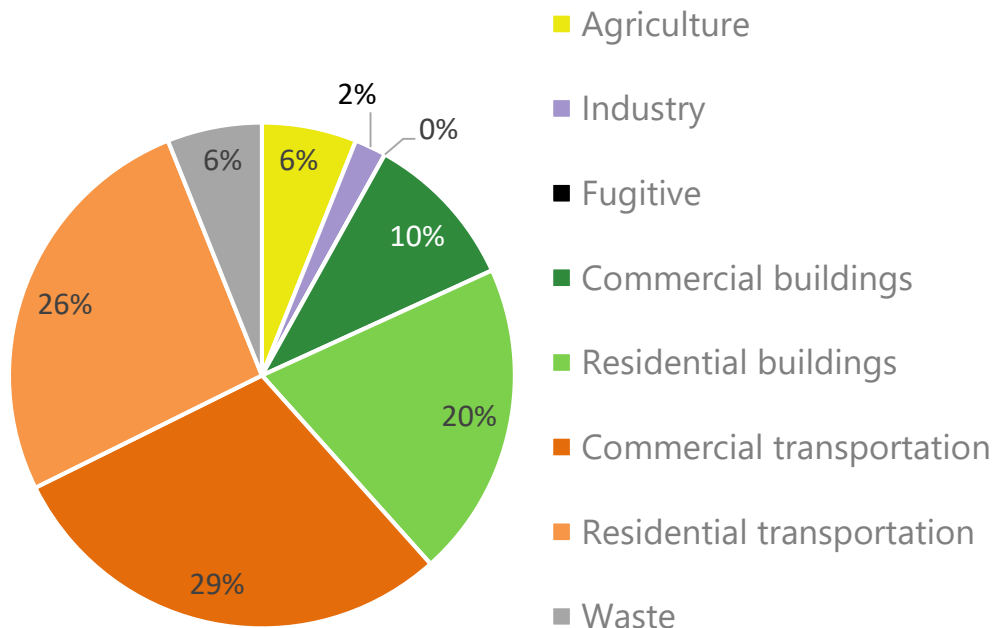
- The IPCC states that global emissions must reach **net zero by 2050** to stay within 1.5°C of warming
- The **Canadian government recently adopted a net zero by 2050 target**, as have a number of nearby municipalities
- Net zero by 2050 is a **realistic, achievable target for Caledon** aligned with international science, and global and local trends

# Modelling Process

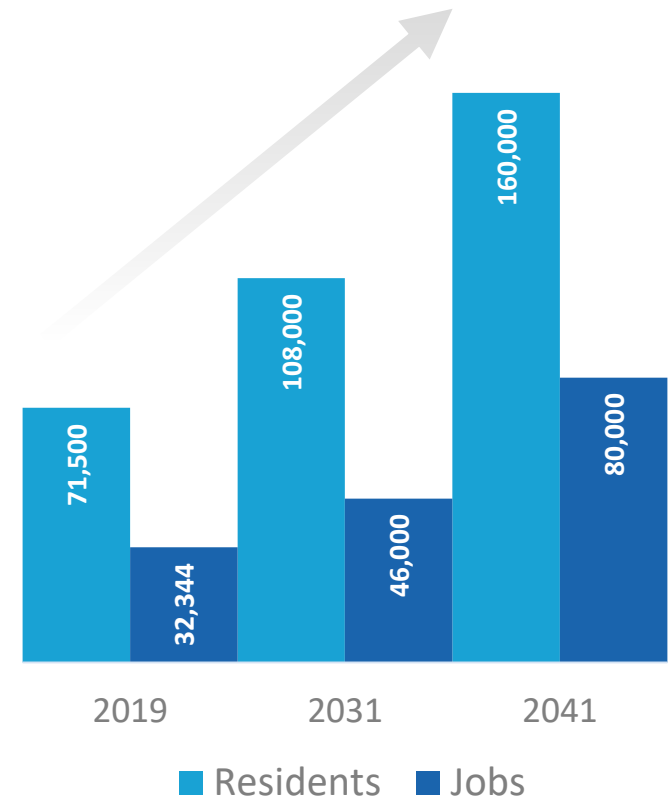


# Caledon's Emissions and Future Growth

## 2016 Emissions

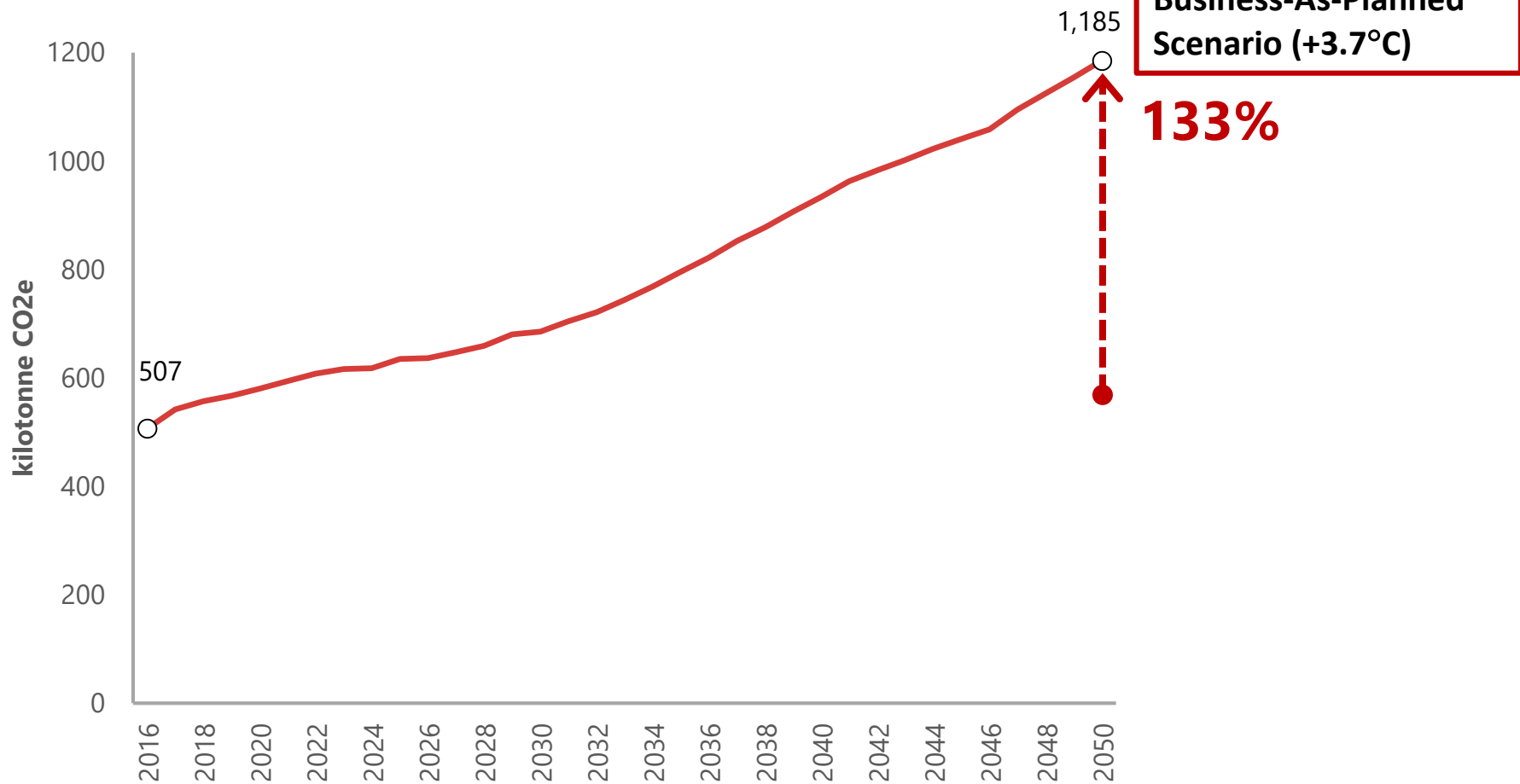


## Population Growth



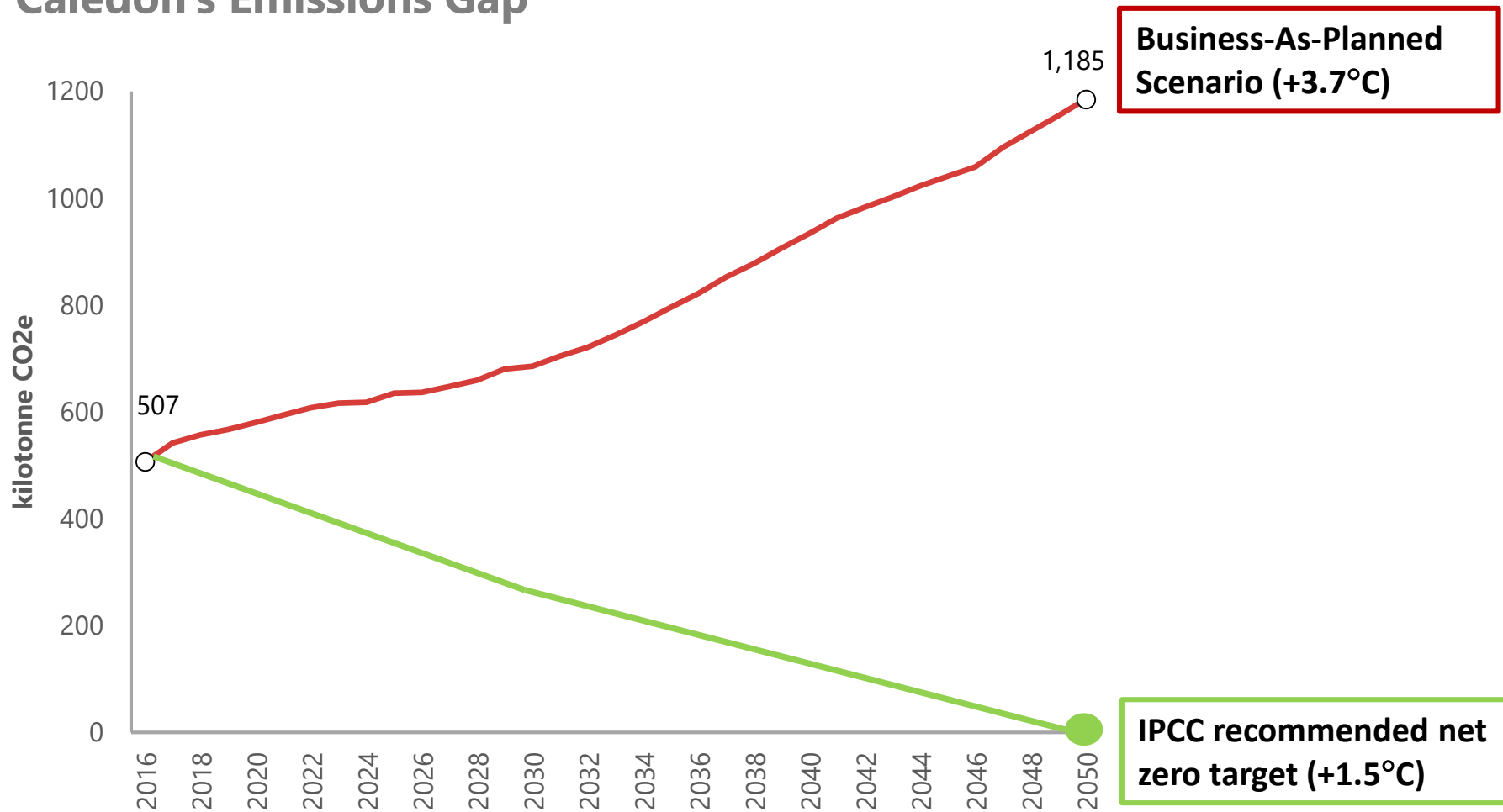
# Business-As-Planned Scenario

## GHG Emissions



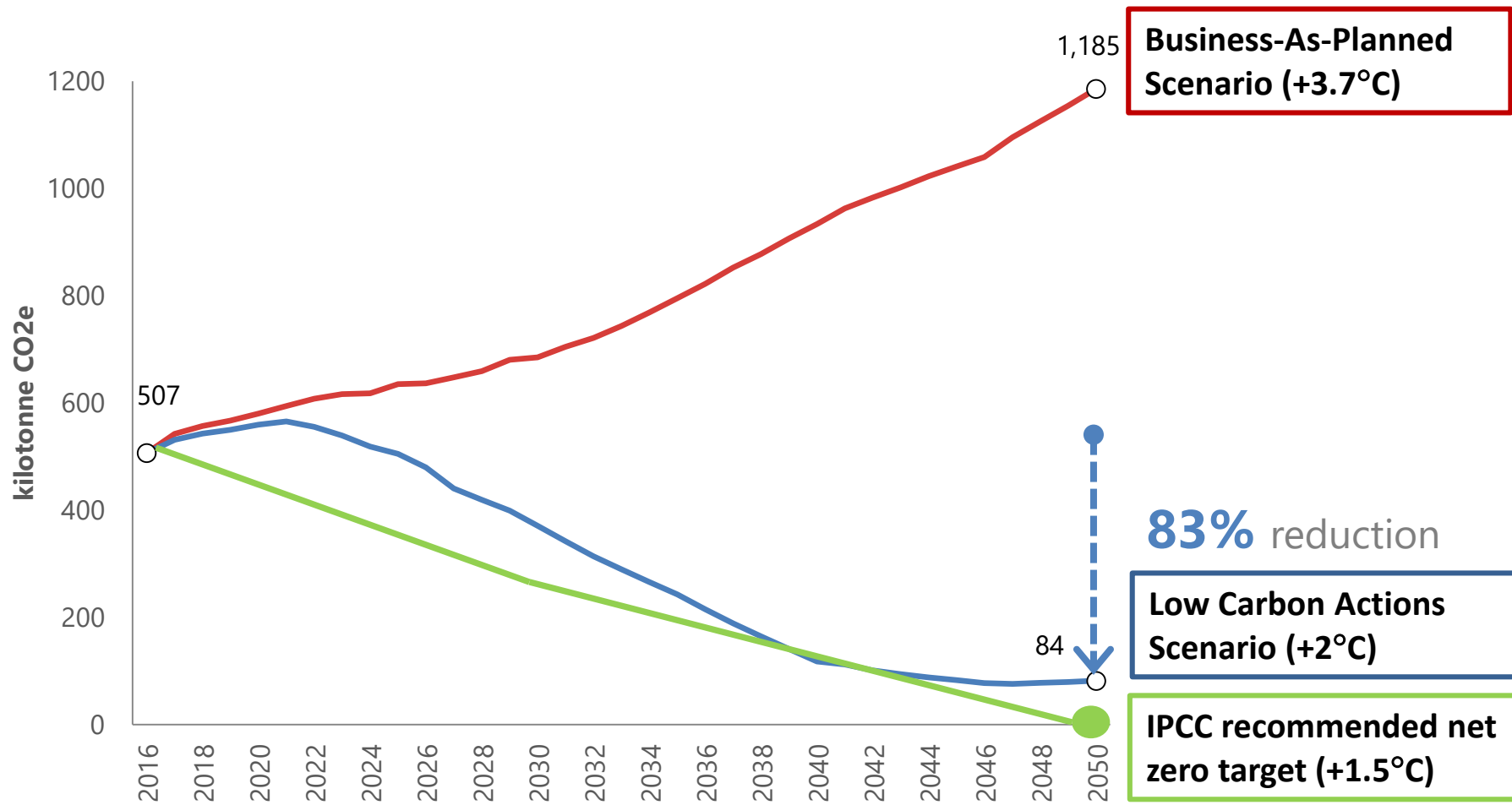
# Emissions Targets

## Caledon's Emissions Gap



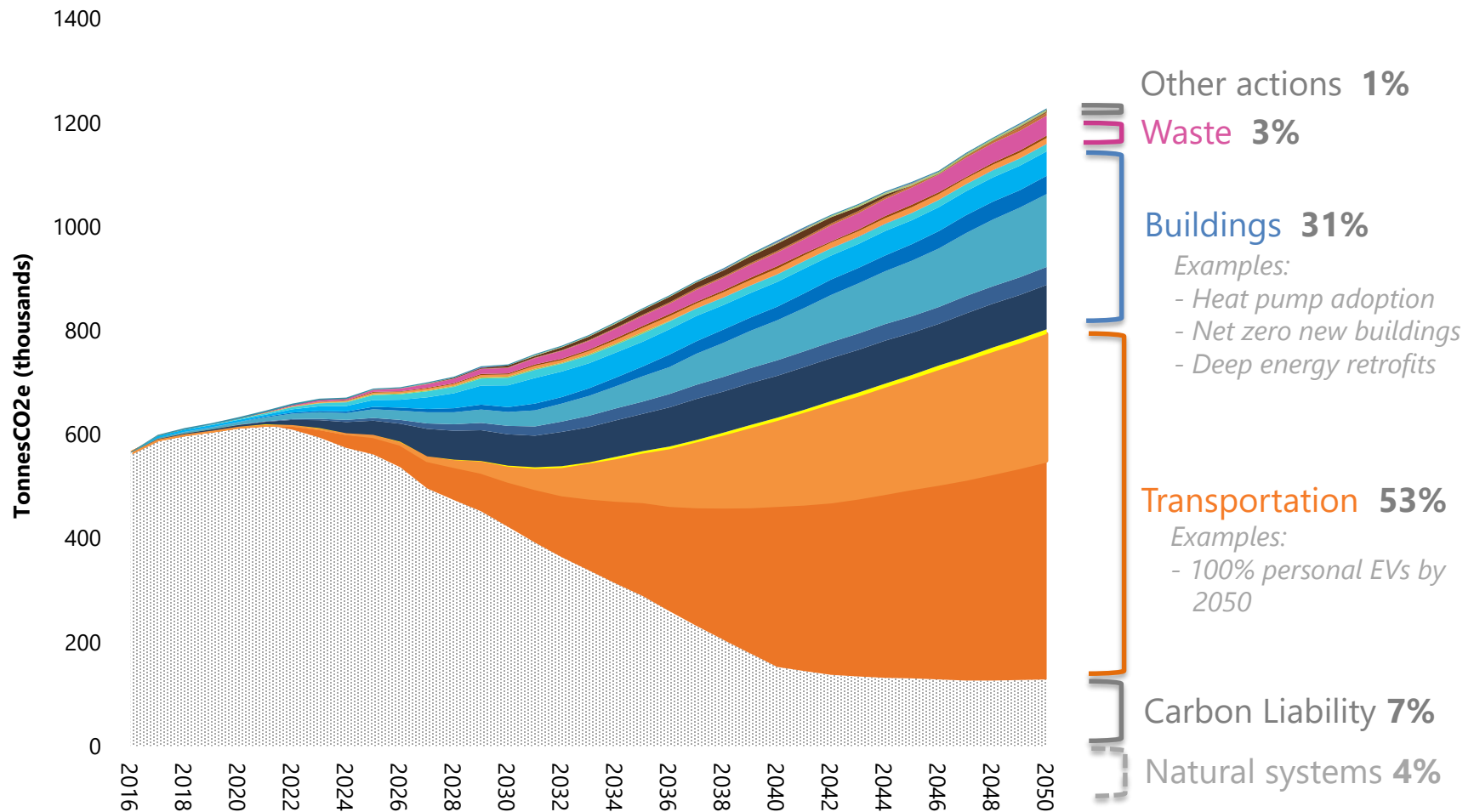


# Closing the Gap



# How do we get there?

## Caledon Low Carbon Actions Pathway



# How do we get there?

## Building a *Community Plan*



**RESILIENT  
CALEDON**

**COMMUNITY CLIMATE  
CHANGE ACTION PLAN**

### ACTIONS FROM:



**Community  
Groups**



**Residents**



**TOWN OF CALEDON  
Climate Change  
Task Force**



**Businesses**



**Farmers**



### SUPPORT FROM:

Regional, Provincial, Federal Governments, Conservation  
Authorities, etc.



# Key Action Areas

## BUILDINGS



**Community Vision:** all residential and commercial buildings in Caledon are zero carbon and resilient by 2050

### How the Town can support:

- Create a **Green Development Standard** for new development
- Establish a **home retrofit financing** program
- Move towards **zero carbon** municipal buildings

# Key Action Areas

## TRANSPORTATION



**Community Vision:** Cycling and walking is the norm in urban areas and 100% of vehicles are zero emissions by 2050

### How the Town can support:

- Prioritize **compact, mixed use** development in land use planning
- Invest in **pedestrian and cycling** infrastructure
- Expand **electric vehicle charging** network across Caledon
- Transition to **zero carbon Town fleet**





# Key Action Areas

## ENERGY



**Community Vision:** Caledon' energy supply is diversified with zero carbon renewable energy sources including solar, heat pumps, biogas, etc.

### How the Town can support:

- Create **guidelines and resources** for community members to facilitate more rooftop solar and other renewable energy
- Explore participation in a **Renewable Energy Cooperative**
- Expand alternative energy at Town facilities

# Key Action Areas

## Nature & Agriculture



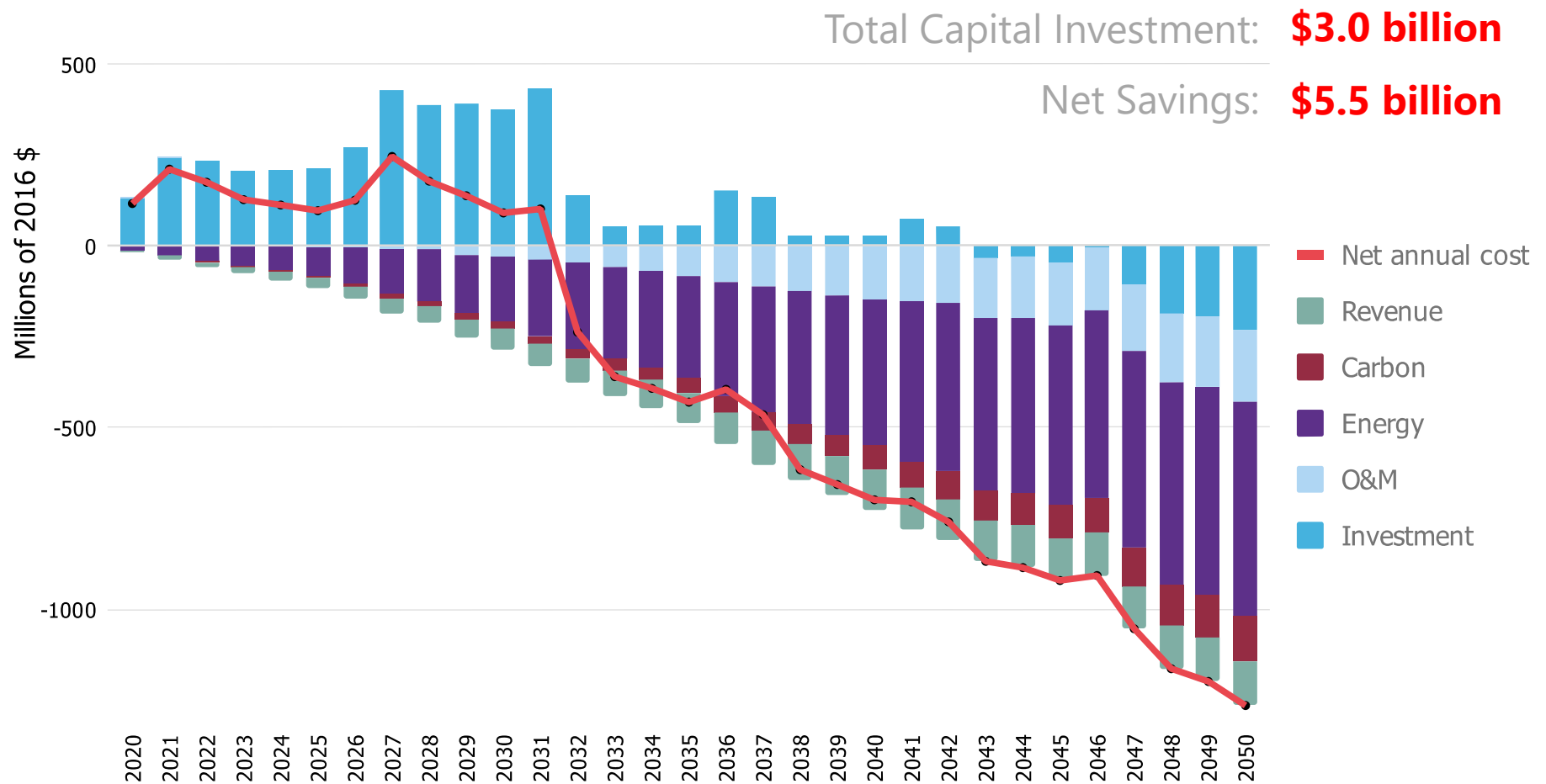
**Community Vision:** Caledon's natural and agriculture systems remain protected and opportunities for carbon sequestration are maximized

### How the Town can support:

- **Enhance protection** for natural systems and agriculture lands in the Official Plan
- Implement a Town-wide **tree protection by-law**
- Support local food and soil health initiatives

# Financing the plan

## Year-over-year Community Investments and Returns





# Next Steps



- **Implementation planning and staff consultation** (Summer 2020)
- **Develop an interim target for 2030** (Summer 2020)
- **Finalize review of Official Plan discussion paper** to ensure alignment with the CCCAP
- **Draft Plan for public consultation** (September 2020)
- **Resilient Caledon Plan to Council** (December 2020)

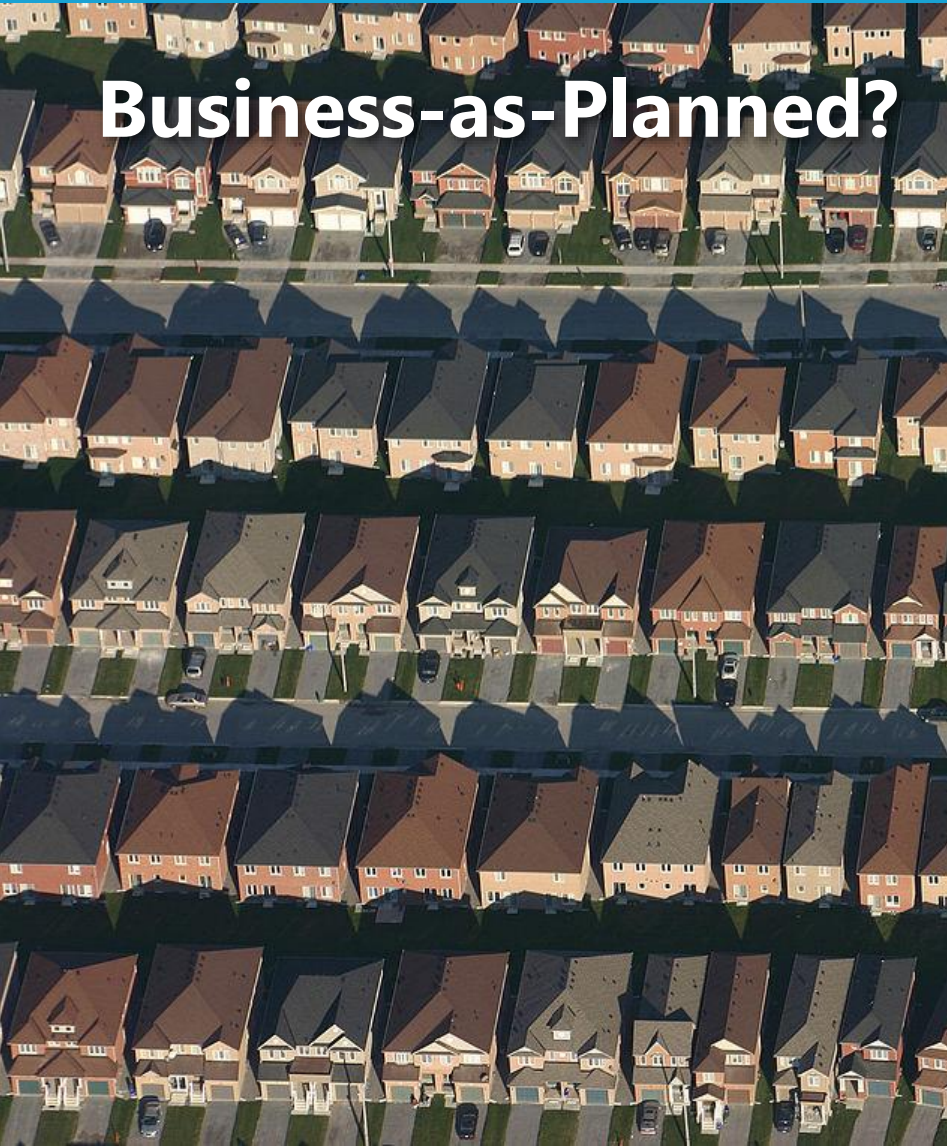
What could a



RESILIENT  
CALEDON

look like?

**Business-as-Planned?**



**OR? ...**

