

**City of Ames**

# Climate Action Plan + Target Setting

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**City Steering Committee:  
Introductory Workshop**

Aug. 31, 2021—6:00-8:00 PM



**CITY OF**  
**Ames**™

**SSG**

**SUSTAINABILITY**  
**SOLUTIONSGROUP**

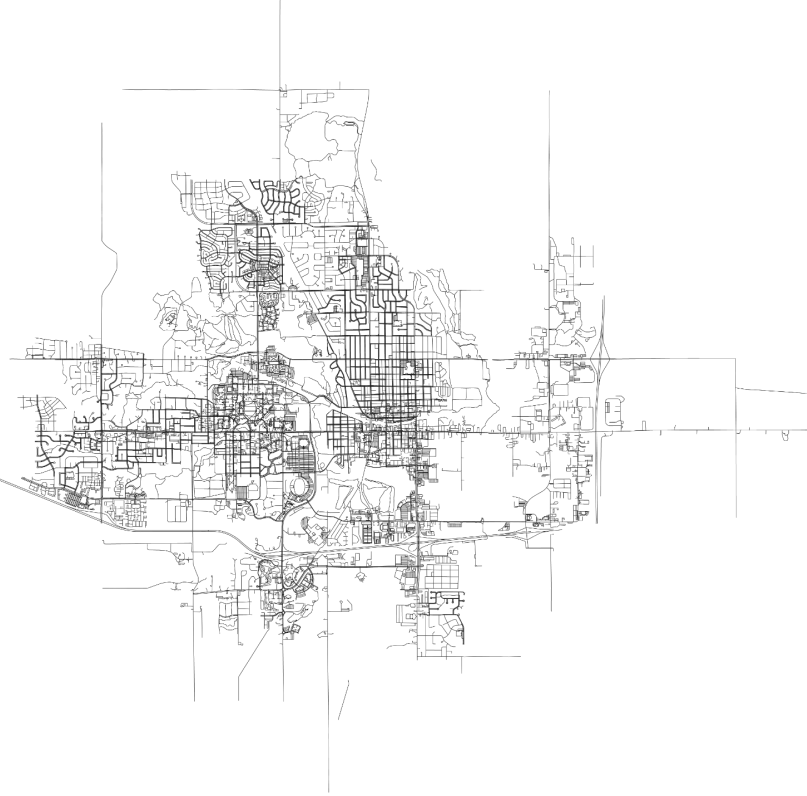


## Meeting Objectives

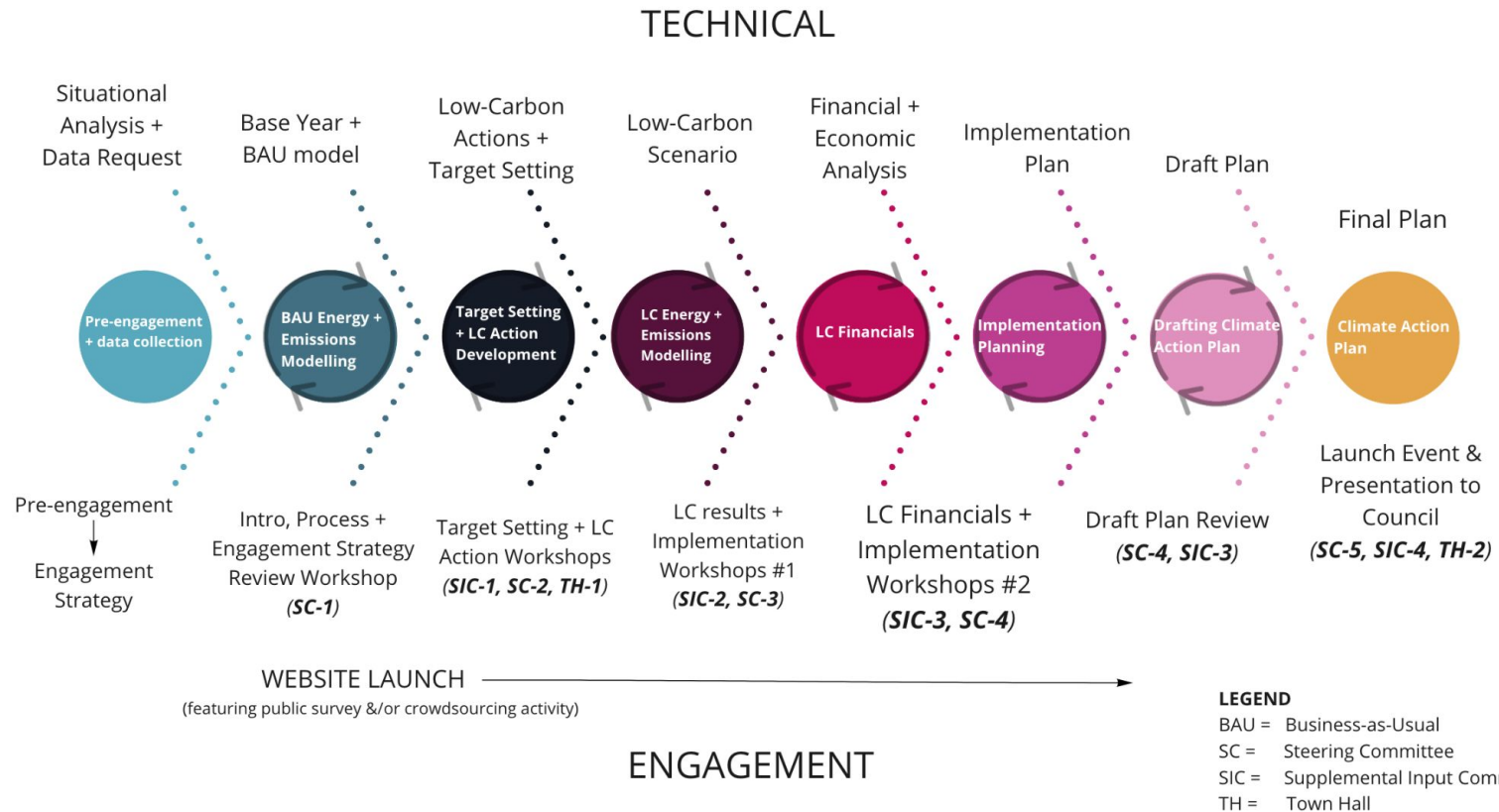
- **To inform** Steering Committee members about:
  - The objectives, scope, and timeline of the project;
  - The engagement plan for the project;
  - Climate action planning and GHG emissions target setting; and
  - The modelling methodology.
- **To consult** Steering Committee members about projects' engagement plan.

# Meeting Agenda

- Introduction
- Engagement + Q&A
- Break*
- The Modeling Process + Q&A
- Climate Action Planning & Target Setting + Q&A
- Wrap-Up & Next Steps



# Project Overview





# Engagement Process



What  
purpose  
does  
engagement  
serve?

**Decision-making  
support**

How is  
engagement  
best  
applied?



# IAP2 Spectrum of Public Participation

IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Engagement  
Design



# Insights from Pre-Engagement

## Pre-Engagement Report



SSC

## What sectors did the key stakeholders represent?

Interviewees included:

- representatives of local businesses, including owners and individuals in leadership roles;
- representatives of non-profit and civic organizations;
- a student; and
- two individuals asked to participate in their capacity as residents.

# Insights from Pre-Engagement

## Pre-Engagement Report



SSC

### **Key recommendations**

**Engage and educate a broad cross-section of the community**

**Use a variety of engagement methods**

**Clear, relatable, ongoing communication is key**

**Tap into the networks of local organizations and individuals**

# Engagement Design

## Pre-Engagement Report



SSG



## Engagement Plan



SSG

# Stakeholders/Interested + Affected Parties

**In addition to providing broad feedback opportunities to the public, the City will engage stakeholders through three groups:**

1. the Supplemental Input Committee, consisting of community stakeholders from various sectors, chosen by the City;
2. the City Steering Committee, consisting of the Mayor and Council;
3. the City Technical Advisory Committee, consisting of the Assistant City Manager, the Head of City Communications, the Iowa State University Head of Sustainability, and the Ames' Utility Energy Services Coordinator, as well as representatives from across City departments (as needed).



# Key Elements of Engagement Strategy

Engagement  
Objectives



**STRATEGY**

Engagement  
Techniques



**TACTICS**



# Key Elements of Engagement Strategy

## Engagement Objectives



### STRATEGY

#### Objective 1

To **inform** and educate the community of the specific targets and actions required to create meaningful and feasible greenhouse gas emission reductions, while engendering a sense of responsibility for continuing this work through to its long-term completion.

#### Objective 2

To **involve** stakeholders in the development of the engagement process and facilitate inclusive conversations among stakeholders in order to document community concerns and aspirations.

# Key Elements of Engagement Strategy

## Engagement Objectives



## STRATEGY

### Objective 3

To **involve** the community and City staff in gathering feedback that will inform: 1) the community's GHG reduction target, 2) the selected low-carbon actions, and 3) the CAP's near term implementation strategy.

### Objective 4

To **inform** stakeholders of how their involvement shaped the plan.

# Key Elements of Engagement Strategy

## Engagement Techniques



## TACTICS

### Phase 1: Pre-Engagement

Pre-engagement interviews + report.

Engagement plan design.

# Key Elements of Engagement Strategy

## Phase 2: Active Engagement Period

### Engagement Techniques



### TACTICS

- Focus groups with key stakeholders
- CAP interactive website
- City Steering Committee (CSC) Workshop 1: The Process
- Supplemental Input Committee (SIC) Workshop 1: Base Year and BAU Results and Target-Setting Workshop
- Launch Event: Town Hall - CAP Inventory and BAU
- SIC Workshop 2: Low-Carbon Action Workshop
- CSC Workshop 2: Review of feedback to date on target setting and low-carbon actions, and low-carbon action workshop.
- CSC & SIC Workshops: Low-carbon scenario modelling results & introduction to implementation
- Community survey: Implementation
- CSC & SIC Workshops: Low-carbon financial results & implementation part 2
- Online Implementation Plan review: CSC + SIC
- Town Hall + Kitchen Table Conversations Workbook

# Key Elements of Engagement Strategy

## Engagement Techniques



**TACTICS**

### **Phase 3: Final Report + Presentation**

- Final report presentation to Council



Website - Behind  
the Scenes Look!

# Engagement

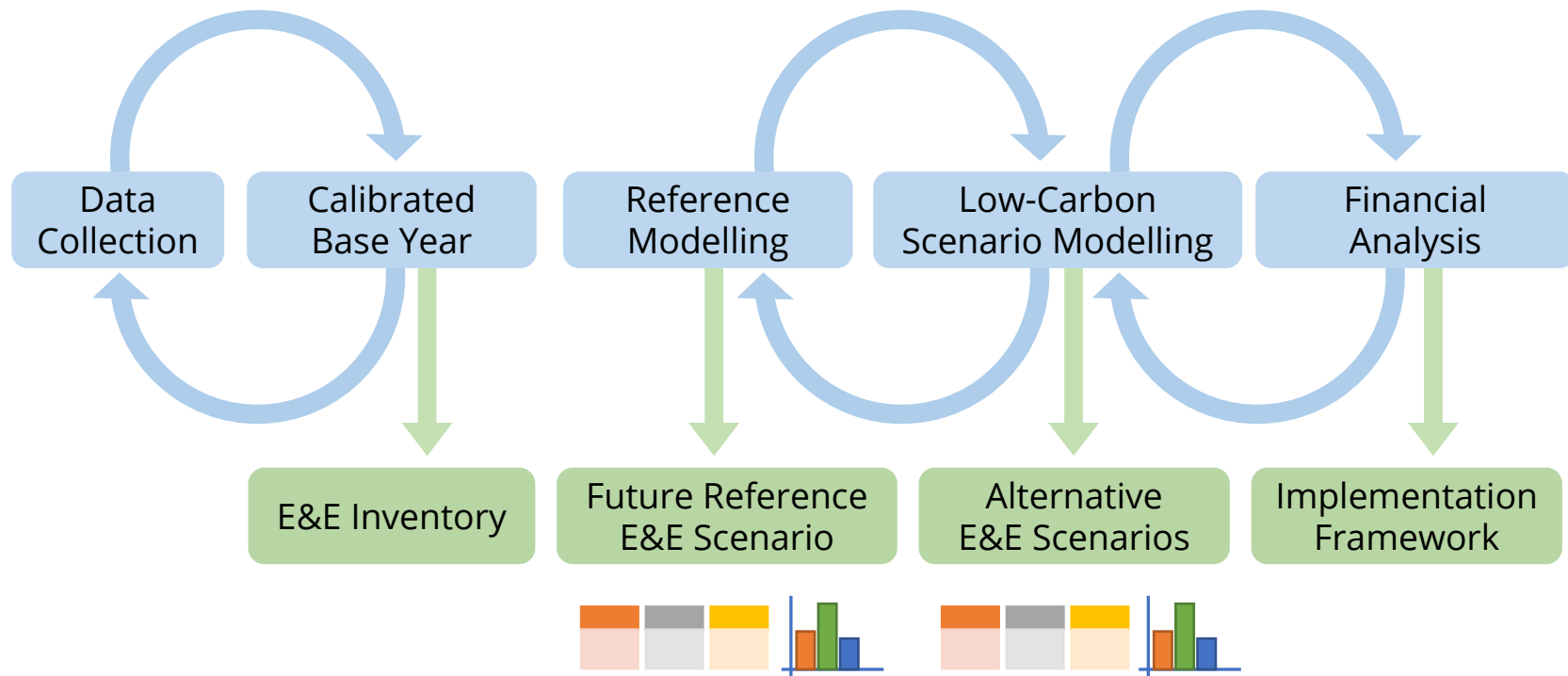
## Q+A

BREAK

# Modeling Method + Process



# Modeling Process





# Model vs. Ames' Current BAU

## Use of higher resolution data

Over 500 traffic zones

Transportation data from Ames' transportation model

## Inclusion of Ames' future plans

ISU coal phase out by 2024

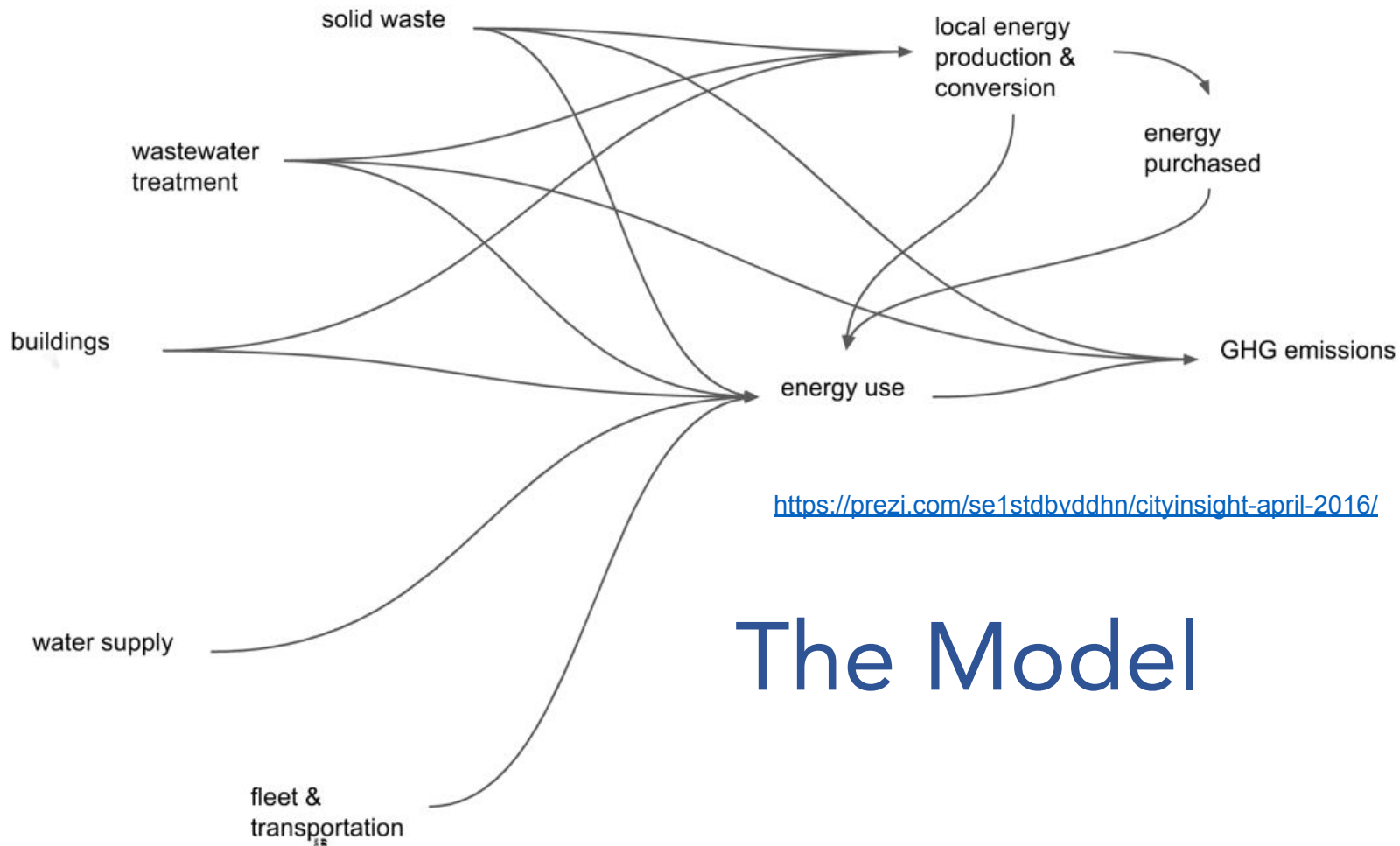
35% reduction of ISU emissions

## Integrated sectors

Ex: Future transportation emissions depend on where new buildings are located

## Realistic physical constraints

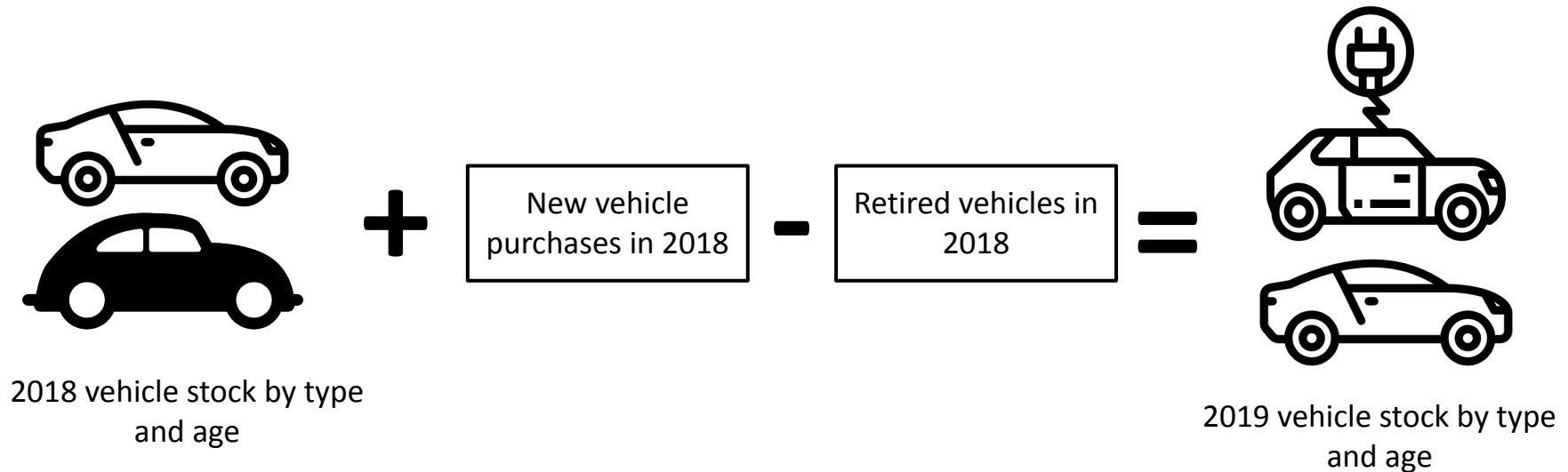
Ex: Vehicle stock takes time to turnover



# The Model

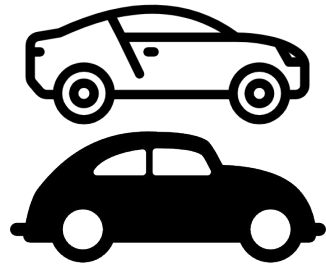
## Stock and flow model

Integrated spatial representation of major stocks and flows involved in the community's GHG emissions



## Physical constraints

- Physical constraints lead to a more realistic simulation
- Example: Vehicle electrification
  - The rate of conversion depends on the rate of new purchases
  - Early retirement of combustion vehicles is possible but financially penalized



2018 vehicle stock by type  
and age

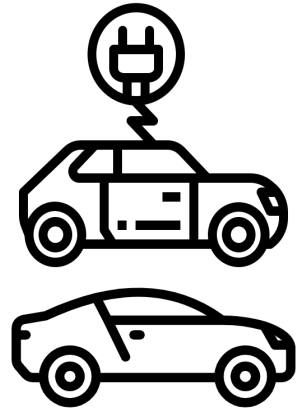
+

New vehicle  
purchases in 2018

-

Retired vehicles in  
2018

=



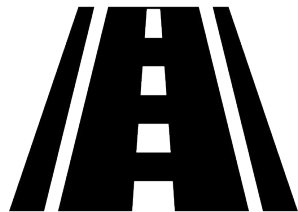
2019 vehicle stock by type  
and age

## How do we model energy and emissions?



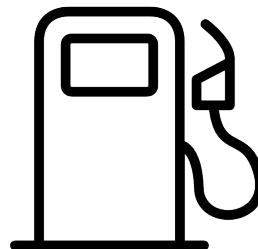
Stock of Ames PUVs

- Vehicle age
- Vehicle type
- 2018 to 2050



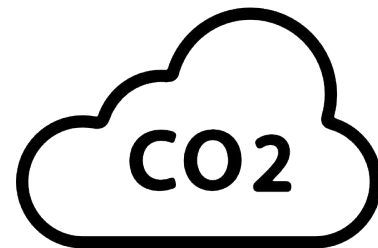
Distance Travelled

- Based on Ames' transportation model
- 2018 to 2050



Energy consumption

- By fuel type
- 2018 to 2050



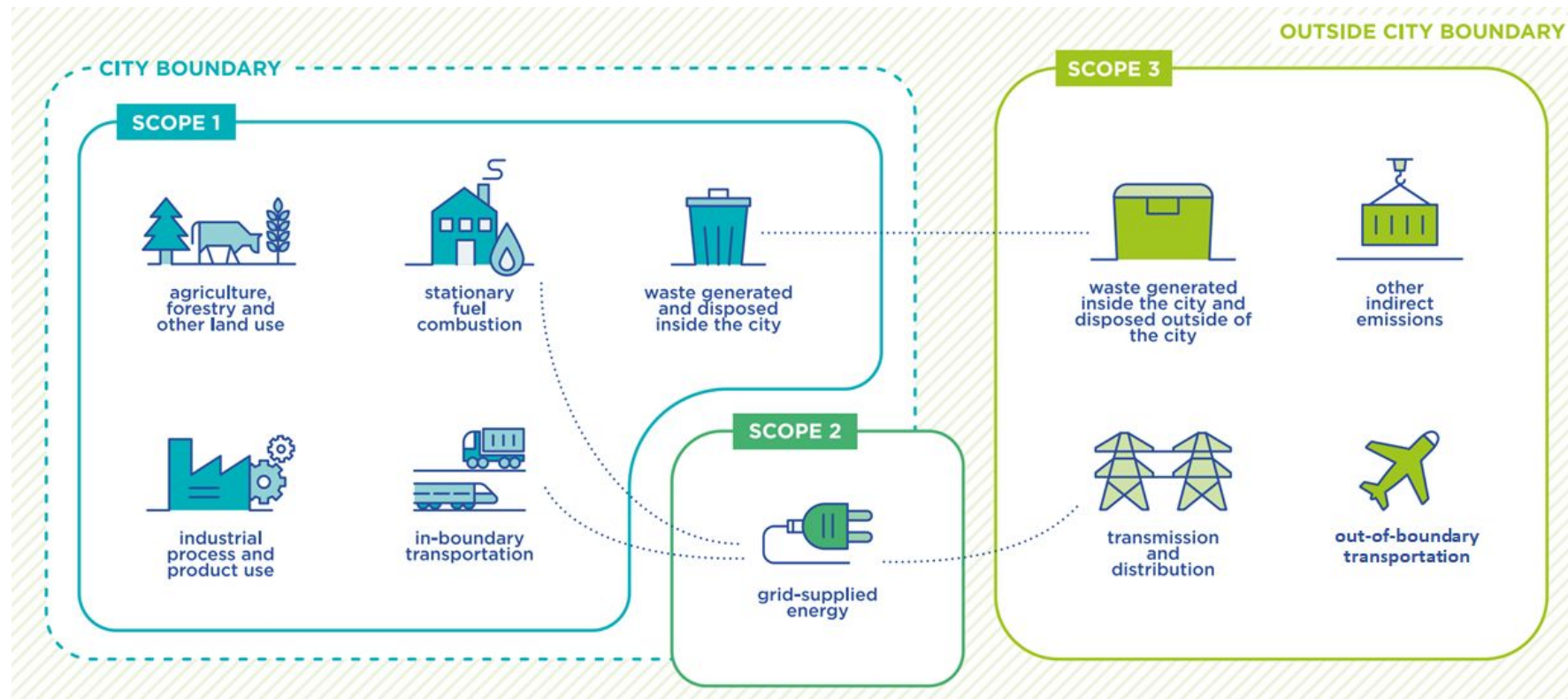
PUV GHG emissions

- 2018 to 2050



# Emissions Modelling

## Reference for Buildings and Transportation, Scopes 1, 2, 3 Emissions



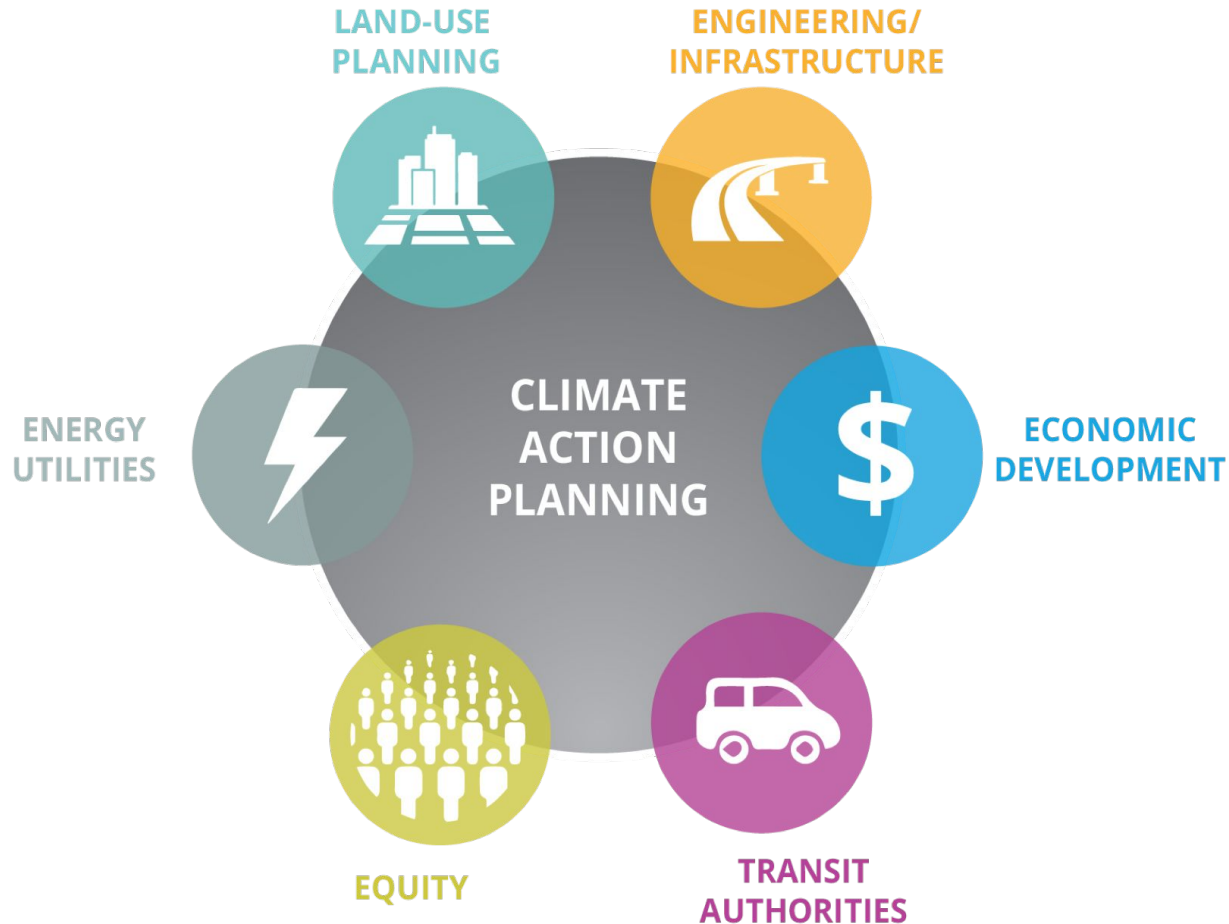
# Modeling

## Q+A

# Climate Action Planning + Target Setting



# Community Climate Action Planning



# What is science telling us?



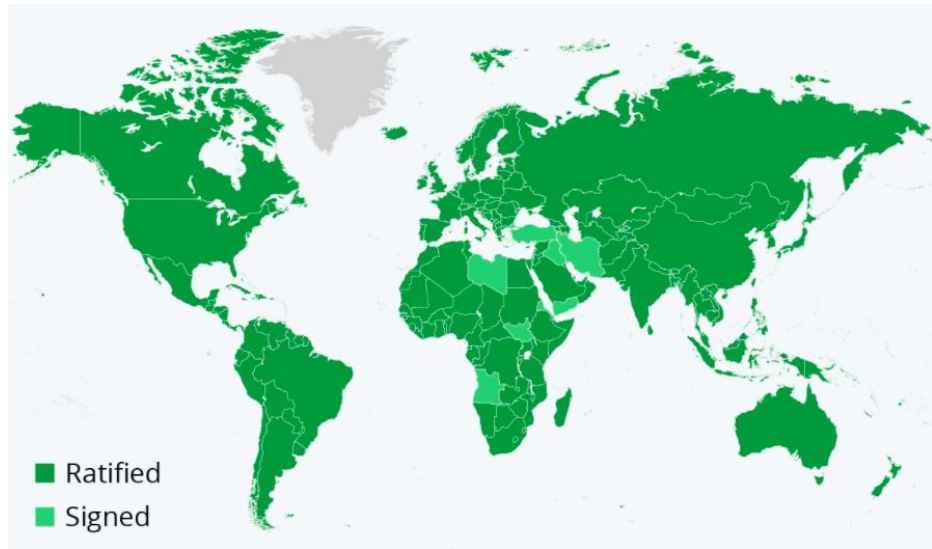
*"Some devastating impacts of global warming are now unavoidable.... But there is still a short window to stop things from getting even worse".*



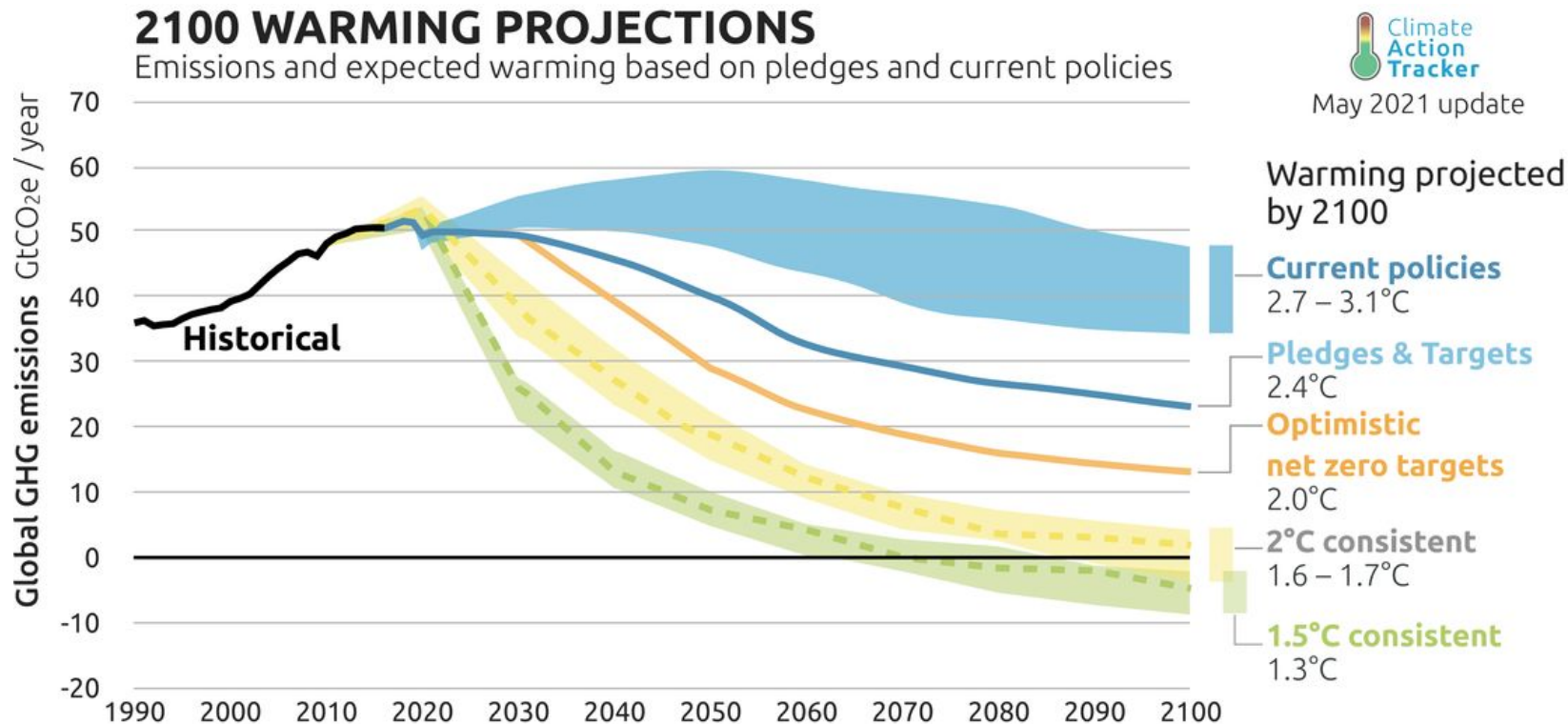
# Where do our emissions need to be in 2050?

191 nations have signed on to the Paris Accord.

All G7 nations have explicitly adopted a target of net zero emissions by 2050.



# The World is **not** on track



# Cities step up

704 cities around the world, including 97 cities that represent 25% of the world's GDP and 1/12 of the world's people have adopted a net zero emissions by 2050 target.







SCIENCE BASED TARGETS NETWORK  
GLOBAL COMMONS ALLIANCE

SCIENCE-BASED CLIMATE TARGETS:

# A GUIDE FOR CITIES

NOVEMBER 2020



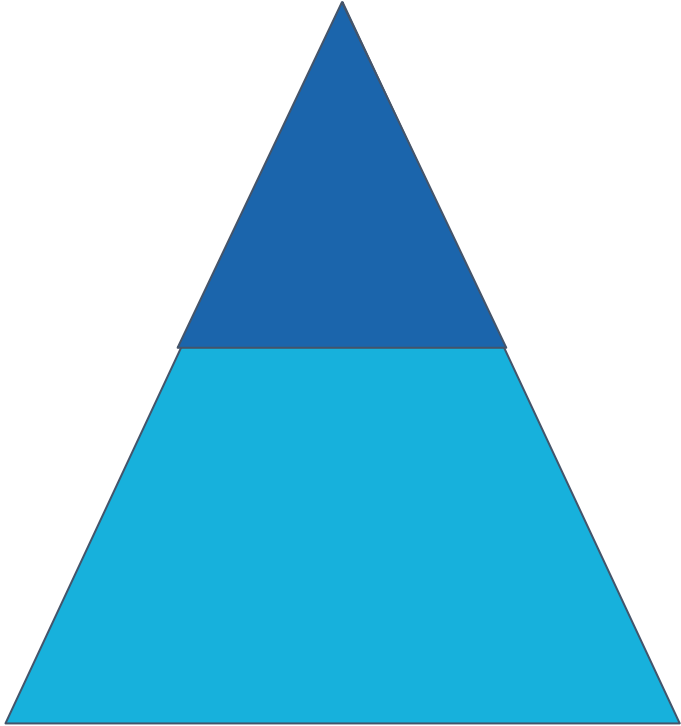
# It's challenging!

Transformation of energy system from fossils to clean sources **is underway!**

## **Many barriers to municipal actions**

- > legislative authority (i.e. buildings, electricity)
- > financing
- > capacity
- > culture and behaviour
- > others?

# How can we get there?



## Technical Modelling:

“All else being equal”, this is a technologically-viable path to get to net zero.

## Climate Action Plan:

An evidence-based path that identifies high level financials, schedules, responsibilities, barriers and risks, and mitigating actions.

# Climate Action Planning + Target Setting **Q+A**

## Wrap Up + Next Steps





# Thank You!

