

The background of the slide is a photograph of a large, vibrant red rose in full bloom, set against a blurred background of green foliage and other flowers. The rose is the central focus of the image.

Climate Action

A Strategic Planning Initiative

January 10, 2022

Madison is a leader in sustainability initiatives

- Leadership in **energy transition**: installing public EV chargers, smart metering program, investing in both hard and “non-wires” infrastructure for our utilities
- **2020 Master Plan** recognizes a commitment to energy efficiency, sustainability, and resiliency as one of its guiding principles
- **Madison Environmental Commission** and **Sustainable Madison Advisory Committee (SMAC)** focus on conservation and environmental protection, supporting actions to reduce waste, cut greenhouse gas emissions, and improve environmental equity

New Jersey, and Madison, are vulnerable to climate threats

- New Jersey has experienced:
 - increased intensity, frequency, and duration of storm events, including 42 extreme weather events since 1980
 - an increase of 8 percent above average precipitation during the last 10 years
 - average annual temperature increase of 3 degrees Fahrenheit since 1900. Nine of the 10 hottest calendar years on record have occurred since 1990⁽ⁱ⁾
- Consequences include increased flooding, increase in insect-borne diseases, and increased risk of devastation from future Superstorm Sandy-like events
- Long-term economic costs of no action will substantially outweigh the costs of aggressive near-term climate action

(i) <https://www.nj.gov/dep/climatechange/pdf/nj-changing-climate.pdf>

Climate action is an organized response to climate change:

- To reduce greenhouse gas emissions
- To build resiliency to adapt to a changed climate

New Jersey is acting on climate:

- **Global Warming Response Act**, signed into law July 2019
 - Mandates that the state reduce greenhouse gas emissions to 80 percent below their 2006 levels by the year 2050 (known as the “80x50” goal)
 - Executive Order No. 274 established an interim greenhouse gas reduction target of 50 percent below 2006 levels by 2030, strengthening the path to the 80x50 goal
- **Energy Master Plan**, adopted January 2020
 - Issued by the NJ Board of Public Utilities; outlines seven key strategies with energy goals to achieve 100 percent clean energy by 2050
- **Climate Change Resiliency Strategy**, released October 2021
 - Issued by NJ DEP; outlines six resiliency priorities for adapting to a changed climate

How can Madison's ongoing work support state climate law?

- NJ Energy Master Plan established that community-level action is necessary to achieve the state's goal of 100 percent clean energy by 2050
- A Climate Action resolution (R 38-2022) is proposed to incorporate climate action into the Borough's planning and budgeting process

What does the Climate Action resolution (R 38-2022) do?

- Acknowledges the urgent need to address climate change through reduction of greenhouse gases by a significant reduction of the burning of fossil fuels.
- Underscores the need to protect public health, the economy, and our natural and built environment by increasing resiliency and strengthening our community against climate impacts.
- Supports NJ state goals requiring municipal-level climate action.
- Identifies the **Climate Action Process**, an annually recurring review to help Madison incorporate greenhouse gas reduction and climate resiliency into the Borough's planning and budgeting process.

What is the **Climate Action Process**?

The Climate Action Process will incorporate **greenhouse gas reduction** and **climate resiliency** into the Borough's planning and budgeting process by:

1. Setting municipal-level climate **goals** extrapolated from state targets
2. Identifying and measuring key climate **metrics** each year in Madison to assess whether the Borough is on track to meet those goals
3. Recommending climate **actions** or initiatives for the Borough to consider should there be gaps in meeting previously established goals

Resolution R 38 implements a 2022 pilot program of the Climate Action Process for the 2023 budget cycle.

When will the Climate Action Process occur?

- Municipal-level climate **goals** pegged to NJ state goals will be proposed at the start of the pilot program (January – February)
- Measuring key climate **metrics**, comparing to goals, and developing recommendations will occur in the first half of each year, in collaboration with Administration and Department heads (March – May)
- Recommendations for **actions** or initiatives, including estimated financial impact, will be presented to Council (June – July)
- Council will weigh and prioritize desired actions and advise Department Heads before the start of the budget cycle for the coming year (August – September)

Who will participate in the Climate Action Process?

- An ad hoc committee is proposed for the 2022 pilot program, including:
 - At least two Borough staff members
 - The Council liaison to DPW, MEC, and SMAC
 - Two to four members of SMAC/MEC
 - Other participants as appointed by the Mayor and as recommended by the Administration and Council
 - Local industry experts and business participants should be considered
- Part of the committee's task will be to make recommendations for who should participate and how to implement the process in 2023 and beyond

Documenting the Climate Action Process

These state programs and tools will be used to document strategies, goals, and recommended actions for the Council and Administration to consider:

- NJ Board of Public Utilities created the **Community Energy Plan** program with a template for municipalities to implement best practices for lowering local greenhouse gas emissions, based on the state's Energy Master Plan.
- NJ DEP issued the **Resilient NJ: Local Planning for Climate Change Toolkit** to guide state and local government climate action with tools to help communities integrate climate resilience and adaptation into local land-use planning.

Sustaining the Climate Action Process

- The Climate Action Process is modeled on the Borough's Strategic Planning Initiative
 - At the start of the initiative, the Climate Action committee will propose municipal-level goals based on NJ state energy and resiliency goals
 - Climate goals and a reporting process will be proposed for adoption similar to the Strategic Guidelines for Finance/Budget and Utilities, adopted in 2015
- Climate Action is an annually recurring process
 - The goals will be a flexible framework to guide the Borough in budgeting and decision making, like the Strategic Guidelines
 - Each year, the Climate Action process will measure the Borough's progress towards meeting those goals and recommend new or adjusted actions for consideration

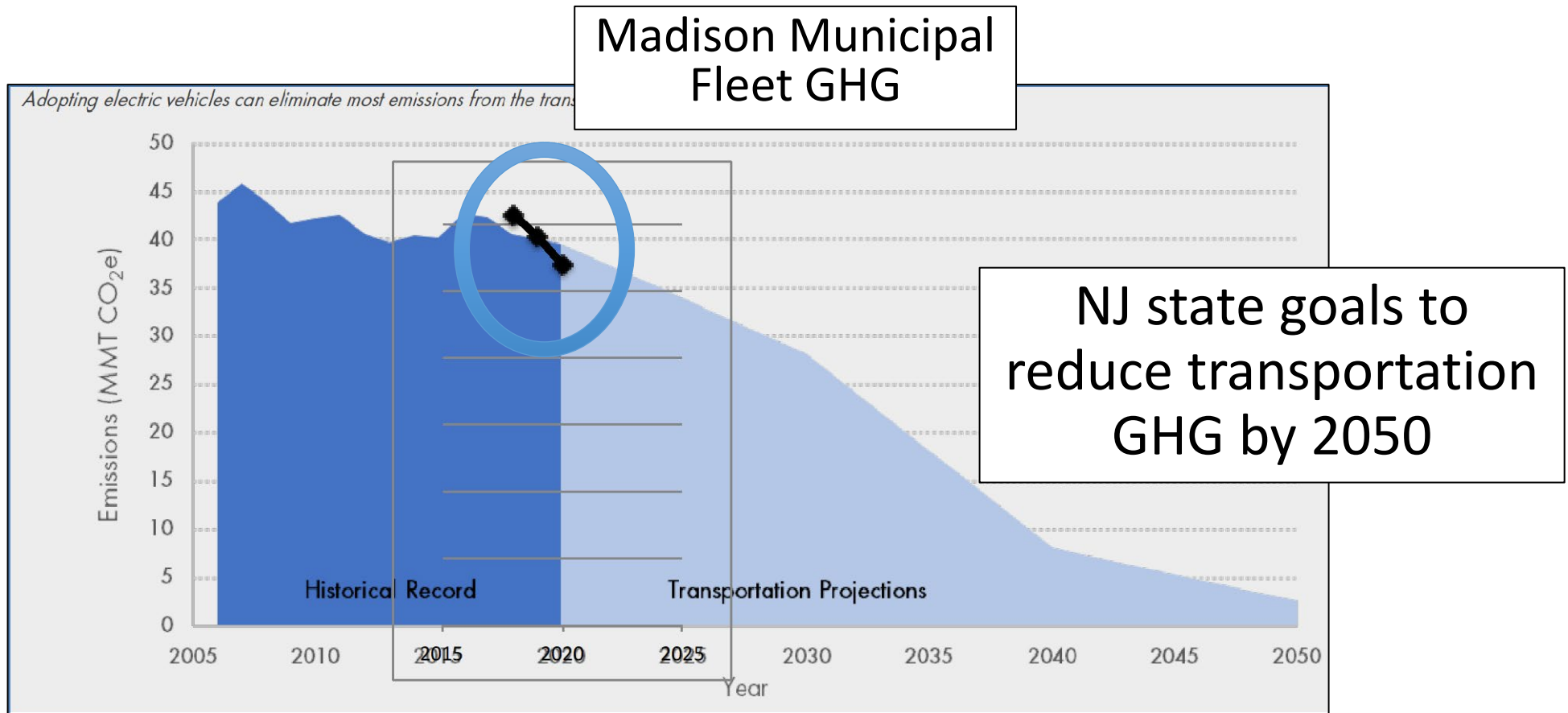
Questions?

Additional information: sample strategies, goals, and actions

- The BPU **Community Energy Plan** template is organized to correspond with the seven strategies of the New Jersey Energy Master Plan (EMP)
- The following examples from the Community Energy Plan template are provided to help illustrate possible Climate Action goals, metrics, and actions for Madison
- Checked items are already being measured by the SMAC Green Team

“To fight climate change, first you need to measure it”

EMP Strategy 1: Reduce Greenhouse Gas Emissions in Transportation



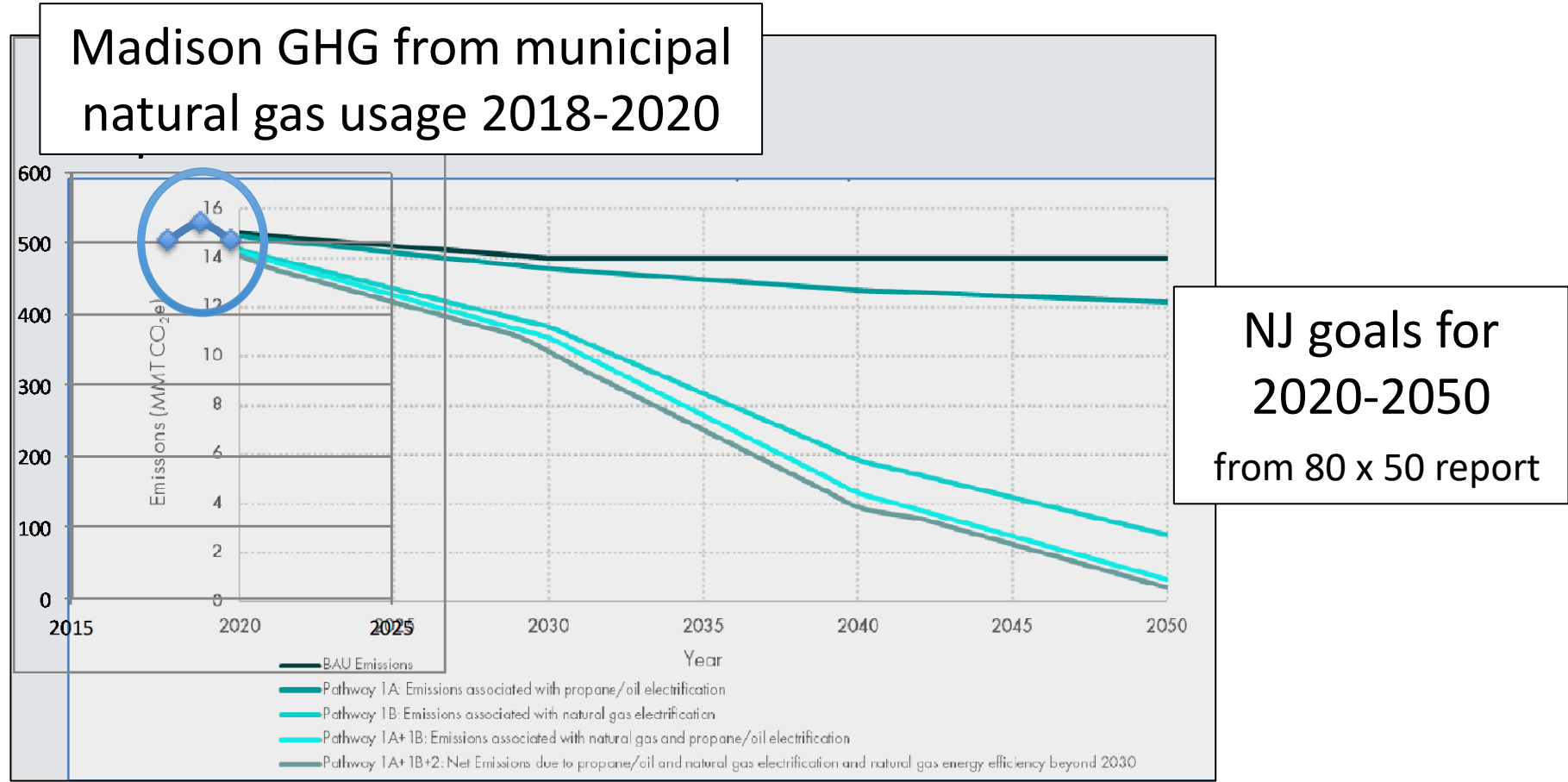
EMP Strategy 1: Reduce Greenhouse Gas Emissions in Transportation

- Key Climate Metrics to measure annual progress:
 - ✓ Electric vehicle (EV) census
 - ✓ Municipal fleet inventory

EMP Strategy 1: Reduce Greenhouse Gas Emissions in Transportation

- Community Energy Plan initiatives:
 - 1.1 Adopt Supportive Zoning and Regulations for EV Infrastructure
 - ✓ 1.2 Train First Responders on EVs and EV supply equipment (EVSE)
 - 1.3 Train Non-Emergency Staff on EVs and EVSE
 - ✓ 1.4 Purchase Alternative Fuel Vehicles
 - ✓ 1.5 Improve Municipal Fleet Efficiency
 - ✓ 1.6 Install Public EV Charging Infrastructure
 - 1.7 Encourage Non-Municipal Fleets to Improve Efficiency
 - 1.8 Encourage Workplace EV Charging Infrastructure
- Additional actions:
 - 1.9 Publicize EVs, incentivize adoption through parking availability, etc.

EMP Strategy 4: Reduce Greenhouse Gas Emissions from Buildings



EMP Strategy 4: Reduce Greenhouse Gas Emissions from Buildings

- Key Climate Metrics to measure annual progress:
 - ✓ Municipal natural gas and electricity usage
 - ✓ Borough-wide natural gas and electricity usage

EMP Strategy 4: Reduce Energy Consumption and Emissions from Buildings

- Community Energy Plan initiatives:
 - 4.1 Construct New Municipal Buildings as Model Green Buildings
 - ✓ 4.2 Encourage Benchmarking and Commissioning for Existing Buildings
 - ✓ 4.3 Require Developers to Complete Green Development Checklists
 - 4.4 Conduct Outreach Targeting New Construction in the Community
- Additional actions:
 - 4.5 Publicizing and Incentivizing Home Electrification
 - 4.6 Green Building Training for Borough Staff and Board Members (Planning, Zoning)