Executive Summary

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Local jurisdictions within Napa County (hereinafter referred to as "Napa County Jurisdictions" when describing the collective government entities of the County of Napa, the Cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville) are taking proactive steps to address the urgent challenges posed by climate change through this Napa County Regional Climate Action and Adaptation Plan (RCAAP). This plan was informed by robust technical analyses and extensive community engagement, demonstrating Napa County Jurisdictions' ongoing commitment to sustainability and resilience in the face of climate change. The RCAAP aligns with recent legislation and best practices in climate action planning, and successful implementation of the plan will result in meaningful greenhouse gas (GHG) emissions reductions, effective adaptations, and equitable outcomes for the broader community.

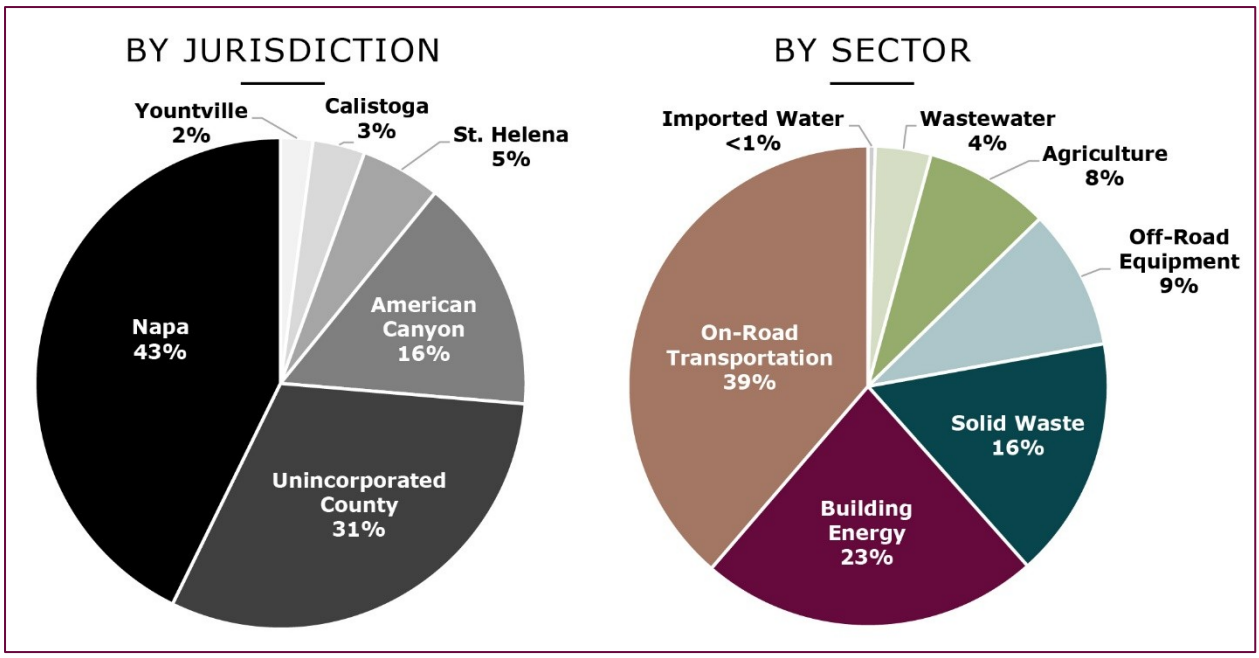
GREENHOUSE GAS EMISSIONS INVENTORY

Napa County Jurisdictions' first step in preparing this RCAAP was to build an understanding of the regional GHG emissions profile by preparing a countywide emissions inventory. Using 2019 as the baseline year, total countywide GHG emissions were estimated at approximately 1,221,861 metric tons of carbon dioxide equivalent ($MTCO_2e$). The results of the 2019 GHG emissions inventory are displayed in **Figure ES.1** below, broken down by jurisdiction and sector. As displayed in the figure, the City of Napa accounted for the largest percentage of countywide emissions at 43 percent, followed by the unincorporated county at 31 percent, American Canyon at 16 percent, and St. Helena, Calistoga, and Yountville each at 5 percent or less. The three largest emissions sectors were on-road transportation, building energy, and solid waste, representing 39, 23, and 16 percent of total emissions, respectively. The four remaining sectors (i.e., off-road equipment, agriculture, wastewater, and imported water) in total accounted for approximately 22 percent of countywide emissions.

GREENHOUSE GAS EMISSIONS FORECASTS

Looking to the future, the RCAAP presents two distinct GHG emissions forecasts: (1) a business-as-usual (BAU) forecast, which assumes a continuation of current trends in activity, population, and job growth without federal, State, regional, or local action being taken to reduce emissions; and (2) a forecast with legislative reductions, which evaluates how countywide GHG emissions would change over time accounting for legislative and regulatory actions at the regional, State, and federal levels. For this RCAAP, each of these forecasts estimate emissions through 2045.

Figure ES.1 Napa County Regional 2019 Greenhouse Gas Emissions Inventory



Source: **Analysis conducted by Ascent in 2022**; **figure developed by Ascent in 2025**.

GREENHOUSE GAS EMISSIONS REDUCTION TARGETS

Napa County Jurisdictions also set countywide GHG emissions reduction targets for 2030, 2035, and 2045, which are aligned with the State's goals. They include:

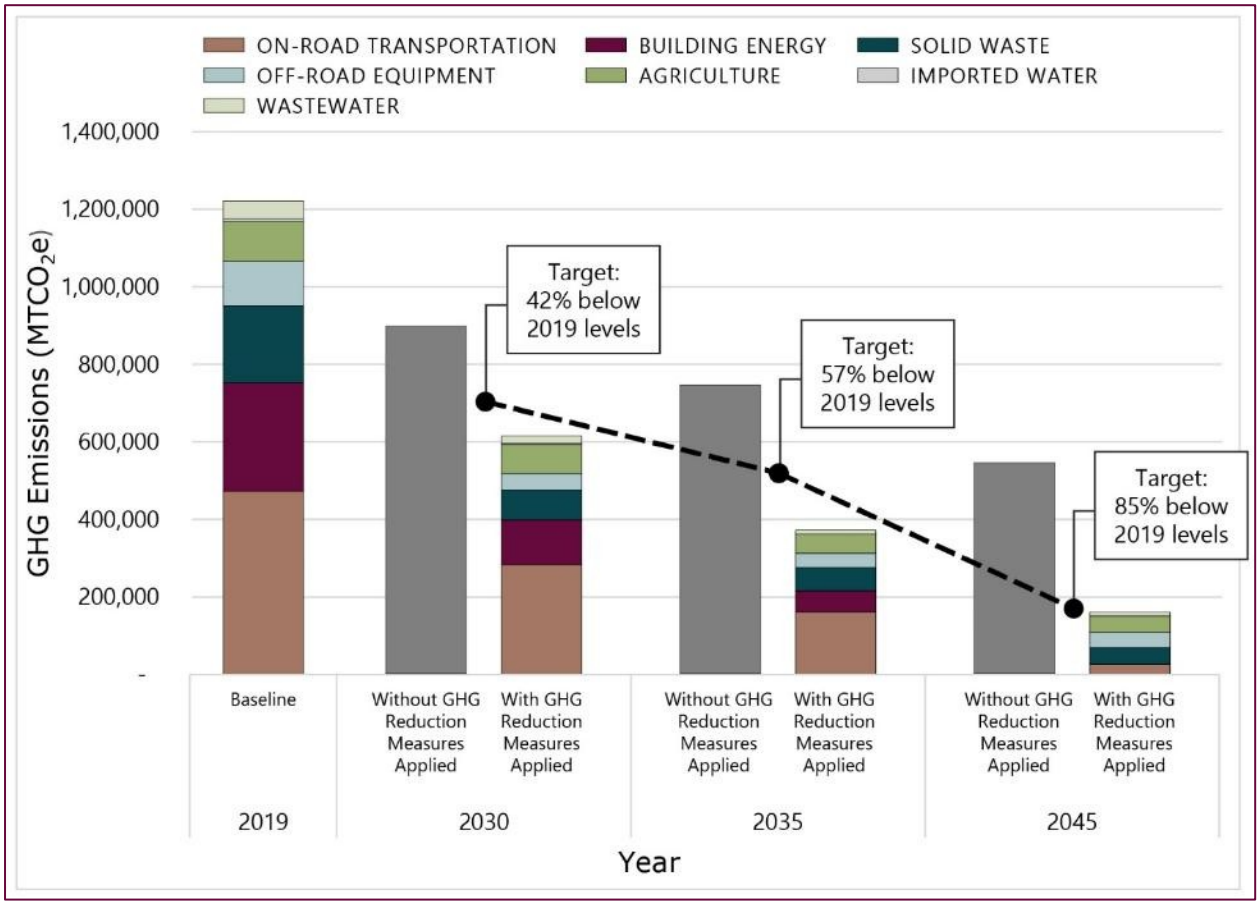
- 42 percent reduction below 2019 levels by 2030,
- 57 percent reduction below 2019 levels by 2035, and
- 85 percent reduction below 2019 levels by 2045.

In addition to these quantitative targets, Napa County Jurisdictions have set a goal in this RCAAP of achieving carbon neutrality by 2045, primarily through natural carbon sequestration, in addition to strategies and measures to reduce GHG emissions in furtherance of the 85 percent reduction target by 2045.

GREENHOUSE GAS REDUCTION MEASURES

While legislative and regulatory actions at the regional, State, and federal levels will result in notable GHG emissions reductions on their own, additional efforts need to be taken locally by Napa County Jurisdictions to fully achieve the established targets. These additional efforts come in the form of 46 distinct GHG reduction measures that were prepared for this RCAAP, where the outcome of implementing these measures are presented in **Figure ES.2**. The figure displays two different scenarios for each of the forecast years, one without GHG measures applied (which displays the total estimated emissions from the forecast with legislative reductions), and one with GHG measures applied. As shown, the successful implementation of the GHG reduction measures will enable Napa County Jurisdictions collectively to achieve the GHG reduction targets. Additionally, the successful implementation of measures that focus on enhancing carbon sequestration and storage in natural and working lands will result in achieving the 2045 carbon neutrality goal.

Figure ES.2 Estimated Greenhouse Gas Emissions With and Without Measures Applied through 2045



Notes: % = percent; GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: **Developed by Ascent in 2025**.

ADAPTING TO CLIMATE CHANGE

In addition to reducing GHG emissions, the RCAAP also has a strong focus on adapting to climate change, as climate change is already affecting the region and its impacts are expected to worsen over time. To effectively adapt to climate change, Napa County Jurisdictions first conducted a climate change vulnerability assessment (VA) to determine countywide vulnerabilities of people, the built environment, and natural resources to various climate hazards, which refers to natural hazards that are worsened or altered due to the effects of climate change. The VA directly informed the preparation of 40 distinct adaptation measures included in this RCAAP, which are organized into six different strategies and aimed at reducing vulnerability and adapting to the impacts of climate change. This dual approach of reducing GHG emissions and preparing for climate change impacts ensures that Napa County Jurisdictions are not only working to reduce their contributions to climate change, but also to build resilience to the challenges it presents.

IMPLEMENTATION AND MONITORING

As Napa County Jurisdictions move forward with adopting and implementing the RCAAP, sustained regional coordination and collaboration will be required to ensure adequate staffing is available to guide the many near-term actions necessary to implement the measures. Napa County Jurisdictions must also consider how to best leverage and prioritize existing local funding sources, while developing a strategy for securing new funding, such as state or federal grants, loans, or other special financing mechanisms, to support the longer-term investments required for successful RCAAP implementation. Implementation of the RCAAP will also require regular monitoring and updates to ensure the plan is on target to achieve its near-term and long-term targets, while also remaining adaptable to new challenges and opportunities. RCAAP monitoring efforts will also be tracked, shared, and reported regularly through updates on local websites or presentations to the Climate Action Committee (CAC) or other local governing bodies.

Overall, the RCAAP serves as a comprehensive roadmap for Napa County Jurisdictions to reduce their GHG emissions, adapt to climate change, and create more sustainable and resilient communities. It builds upon existing efforts, sets ambitious GHG reduction targets aligned with State goals, and outlines a clear path forward. With this plan, and through strong partnerships outlined in **Figure ES.3**, Napa County Jurisdictions are positioned to effectively address the challenges posed by climate change while enhancing the quality of life for all its residents.

Figure ES.3 Napa County Partnerships

Note: The list of partners presented in this figure is not meant to be exhaustive or all-encompassing.

Source: **Developed by Ascent in 2025**.

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