

CLEAN & RELIABLE ENERGY



MONDAY MAR 7

VIRTUAL FORUM SERIES

<https://publicinput.com/D4281>



Forum Objectives

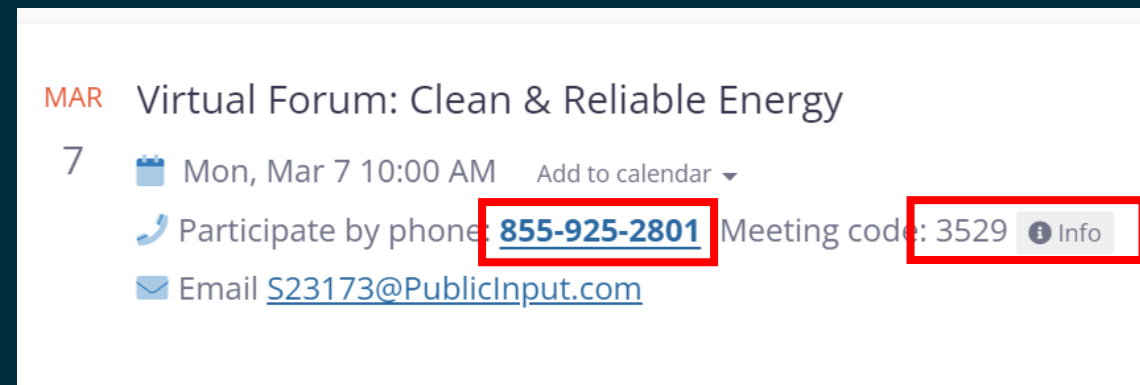
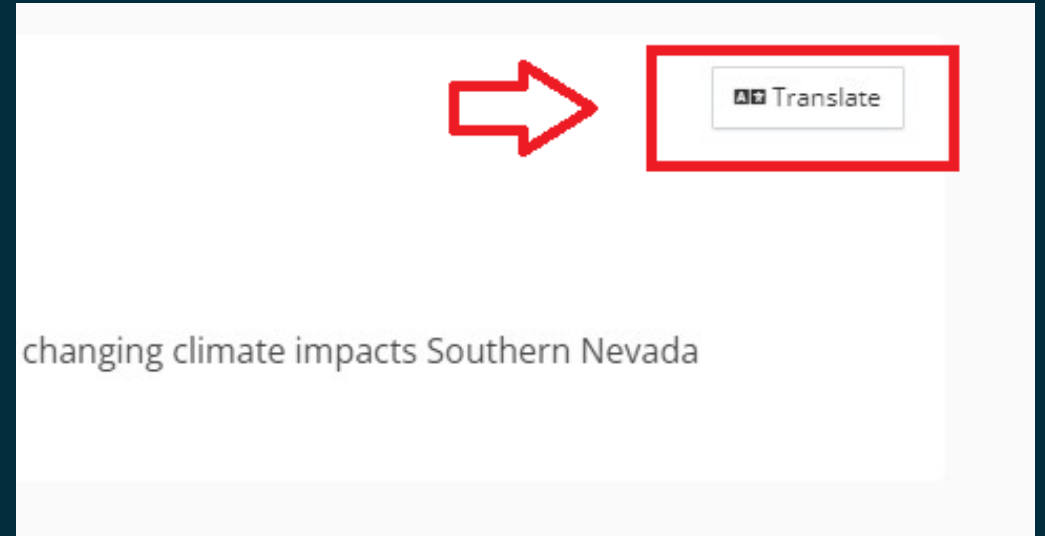
- **Review** how climate change affects energy systems in Clark County
- **Describe** how our actions can contribute to sustainability and resilience
- **Discuss** ideas and considerations to achieve solutions in this focus area





How to Use Public Input

- **Call in** to hear audio and leave voicemail comments
- **Type** comments into the chat
- **Translate** the page and meeting audio





All-In Clark County

Address climate change and create a more sustainable future.

A smart, bold, inclusive approach to ensuring the well-being and prosperity of all, today and for future generations.

Led by **Department of Environment and Sustainability**

Samantha Baker

Sustainability Program Administrator





Quick Poll



CLIMATE CHANGE & ENERGY SYSTEMS





**CHANGING
CLIMATE
CONDITIONS:**



**WHICH LEAD
TO CLIMATE
HAZARDS:**



**RESULT IN THE
FOLLOWING DIRECT
AND INDIRECT IMPACTS:**



Temperature



Heat Waves



Precipitation



**Intense Storms
Flooding
Drought**

- Heat related illness
- Poor air quality
- Higher energy demands
- Pavement buckling

- Wildfires
- Smoke

- Infrastructure damage
- Blocked roadways
- Power outages
- Water shortages
- Crop/habitat damage

Climate Hazards in Clark County



EXTREME HEAT

30 DAYS
A YEAR

above 106°F expected by mid-century

#1

fastest warming city in the country is Las Vegas



FLOODING



increase in extreme precipitation events and flash floods by mid-century

200%



increase in flash flood runoff expected in Las Vegas metro area by mid-century



DROUGHT

100%

of Clark County in extreme drought conditions, as of summer 2021



Lake Mead is at 36% capacity, the lowest in history



WILDFIRES



increase in smoke events and poor air quality days due to regional wildfires

9.5
MILLION

acres burned in Nevada from 2000-2019, more than double the acres burned from 1980-1999

We are all working together to address these hazards and solve the climate crisis.



What it Means for Clark County's Energy Systems



- Increased demand for air conditioning and therefore electricity.
- Peak energy demand increases in length and intensity, requiring more energy for longer periods of time. This strains power providers capacity to supply reliable energy to all.
- Energy infrastructure undergo prolonged heat stress.
- Wildfires throughout the West can damage energy infrastructure and disrupt the transmission and distribution of energy into Southern Nevada.



Increasing population

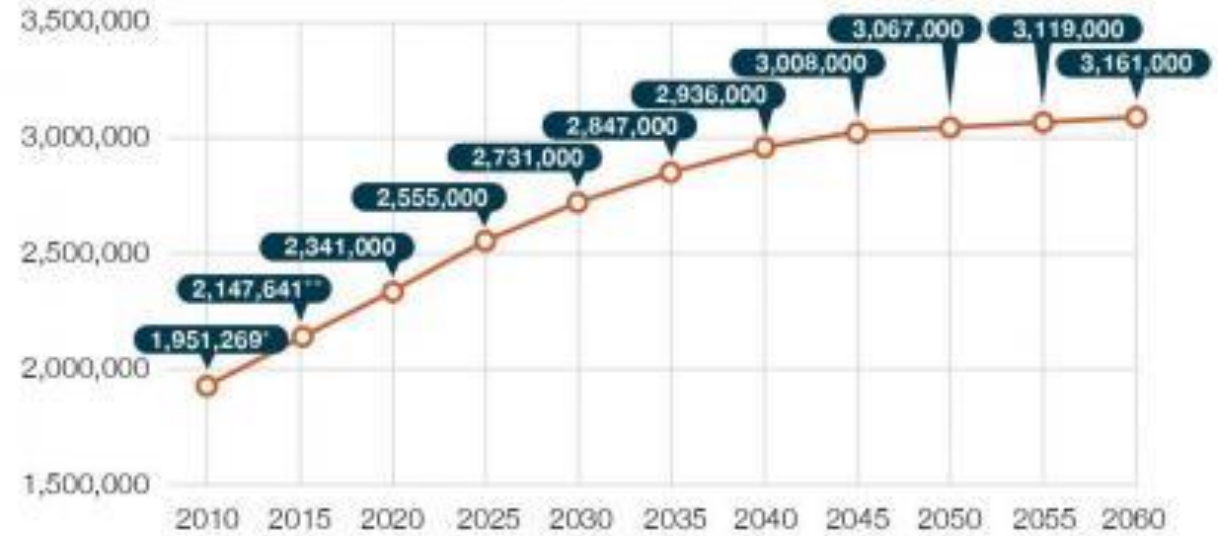
More than

860,000

New residents
expected by

2060

Clark County Population Forecast (2010-2050)



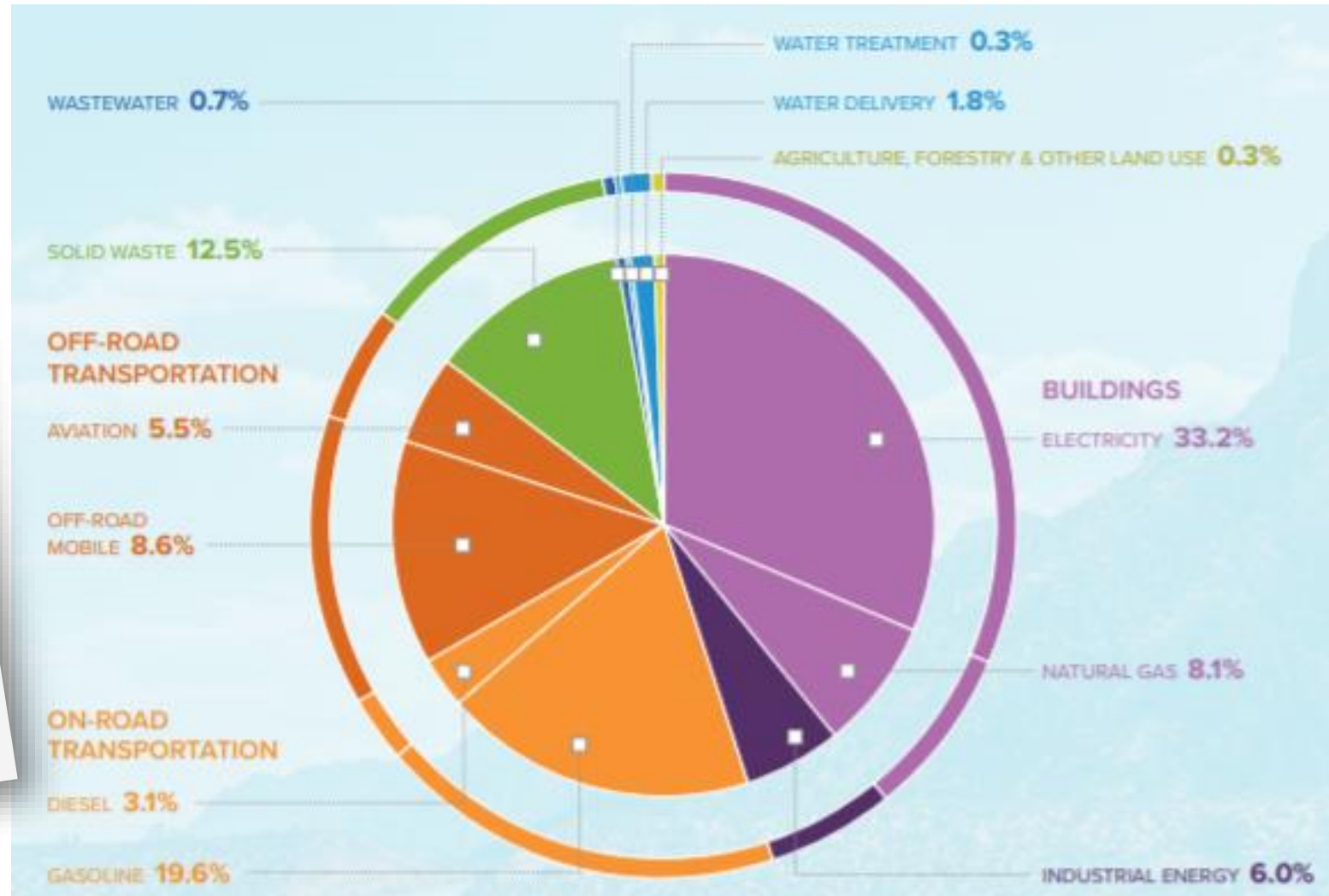
*2010 U.S. Census.
**SNRPC consensus population estimate.

SOURCE: UNLV Center for Business
and Economic Research (CBER), June 2016.

**WHAT IS OUR
CURRENT
SITUATION?**

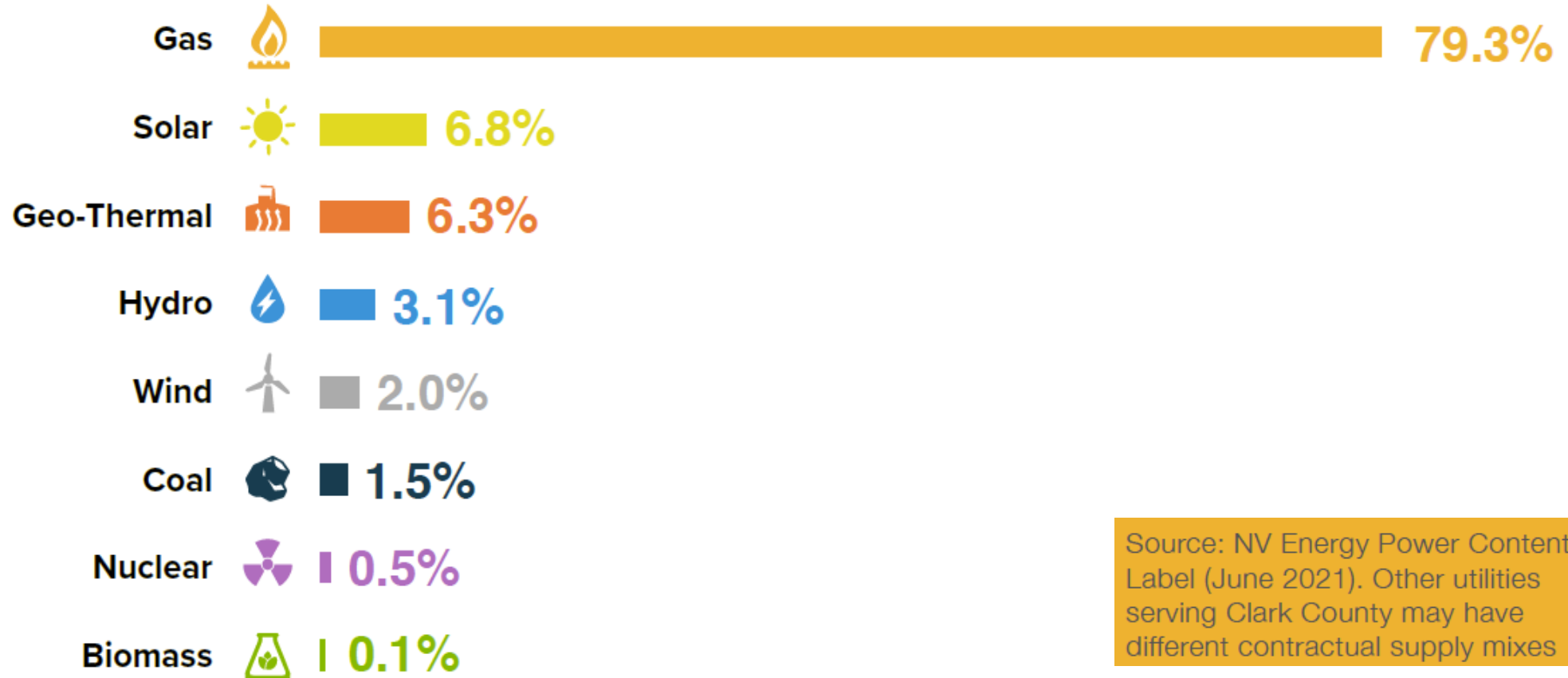


Greenhouse Gas Emissions Inventory - 2019





Sources of our Energy




Source: NV Energy Power Content Label (June 2021). Other utilities serving Clark County may have different contractual supply mixes



Benefits of Clean & Reliable Energy

- Reductions in greenhouse gas emissions.
- Improved air quality.
- Better preparation for climate hazards.
- Strengthen local economy / workforce development.
- Localize energy production.

LEADING BY EXAMPLE





State Level Actions



Renewable Portfolio Standard (RPS) *noun*

A policy designed to increase the use of renewable energy sources for electricity generation by requiring electricity suppliers to provide customers with a minimum proportion of electricity from clean energy.

- 22% in 2020
- 24% in 2021
- 29% in 2022 and 2023
- 34% in 2024 through 2026
- 42% in 2027 through 2029
- 50% in 2030 and each year thereafter



County & Utility Actions



Clark County has installed six solar energy systems on its government owned facilities – five rooftop and one ground-mounted – providing 341 kW of generation capacity.

Southern Nevada currently boasts 2,600MW of utility-scale solar generation capacity

NV Energy commissioned 1,190MW of solar and 590MW of battery storage for 2024.



Progress to Date



46,300+

rooftop solar panel systems
installed in Southern Nevada



18.3%

of the energy in our grid is renewable,
more than tripling since 2005

NV Energy Power Content
Label (June 2021)



7% decrease

in total energy used statewide,
even while population grew
18% (2005-2015)



WHAT IS *ALL-IN*?





Definitions

A ***sustainable*** Clark County balances resource efficiency, social well-being, and environmental stewardship while equitably meeting the needs of a growing community and thriving economy.

A ***resilient*** Clark County supports residents, businesses, and visitors to be healthy, successful, and adaptable to changing climate conditions.



Regional Greenhouse Gas Emissions Inventory

To assess regional sources of greenhouse gas (GHG) emissions contributing to climate change.



Climate Vulnerability Assessment

To confirm climate hazards and the areas and systems most vulnerable to these hazards and identify solutions to enhance our community's overall resilience.



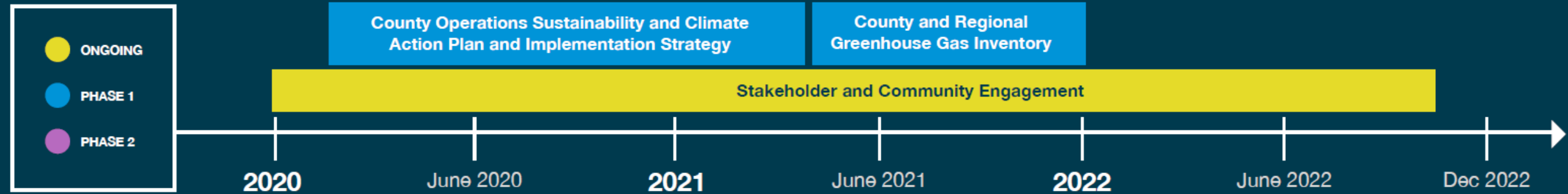
Community Sustainability & Climate Action Plan

To grow climate literacy in the community and work together to develop a plan of action to ensure a sustainable and resilient future for all.



All-In Timeline

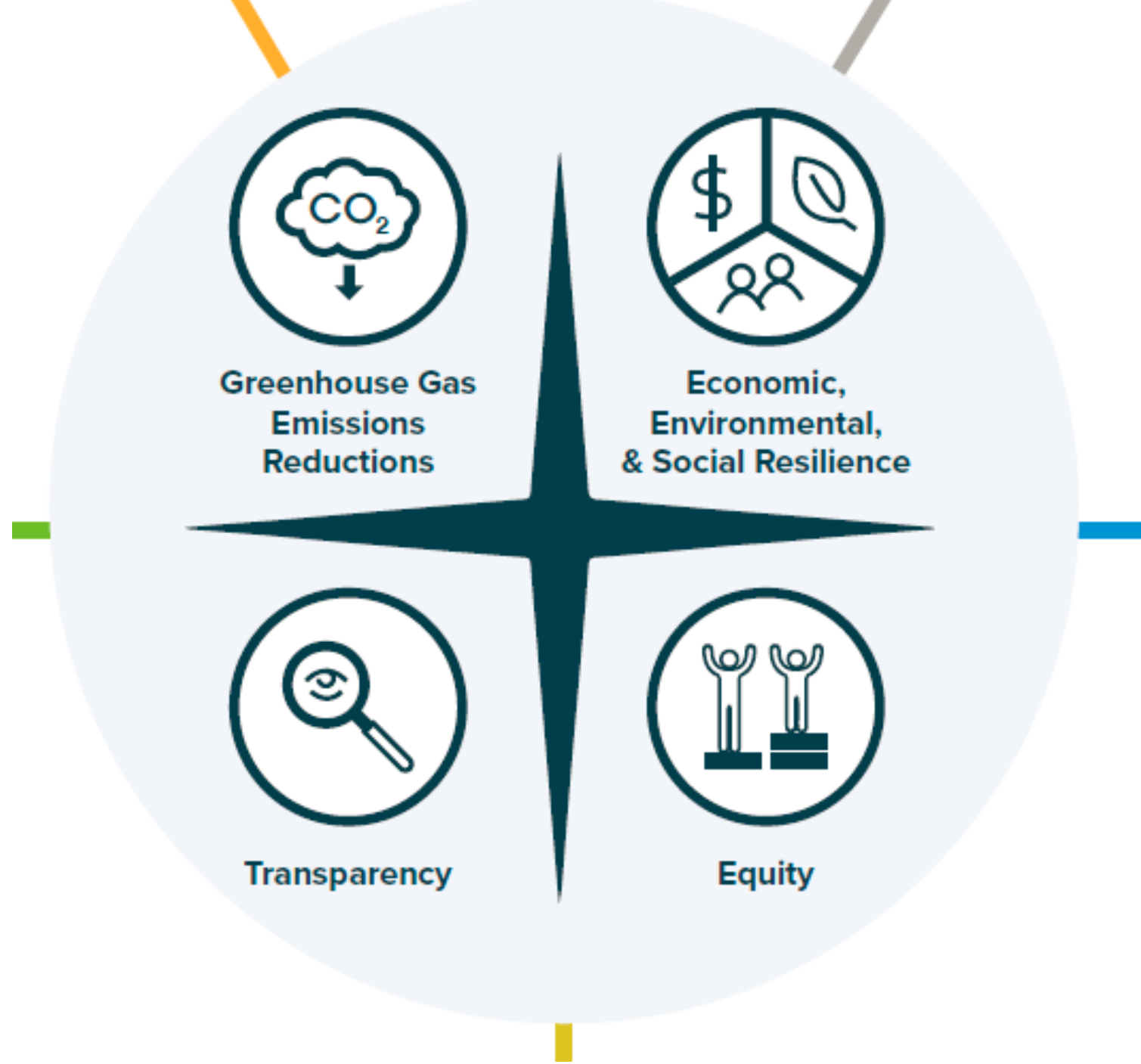
All-In Clark County Planning Process Timeline





Guiding Principles

Foundation for evaluating goals and actions across the *All-In Initiative*



2 WAYS CLARK COUNTY CAN ADDRESS CLIMATE CHANGE



1 Reduce greenhouse gas emissions



2 Prepare for impacts of climate change



Six Key Areas



**Clean & Reliable
Energy**



**Connected &
Equitable Mobility**



**Diverse &
Circular Economy**



**Sustainable
Water Systems**



**Resilient & Healthy
Community**



**Smart Buildings
& Development**

Learn more about each of these areas at allinclarkcounty.com

OUR VISION

A vertical white line is positioned to the right of the text 'OUR VISION', extending from the top of the text to the bottom of the text.

Our Vision

Implementing policies, programs, and projects that support the generation and delivery of clean and reliable energy to all.



What is 'Clean & Reliable Energy'?



- Generating energy from **renewable resources.**
- Ensuring all community members have **access to affordable and clean energy.**
- A **resilient grid that delivers clean energy** to support current and future demand.
- **Energy storage sufficient to support a flexible and renewable energy system**



Examples from Other Communities

- Meet 100% of energy demand with renewable energy.
- Adopt Rooftop solar widely and successfully.
- Fund and install Community renewable energy projects.
- Fortify energy systems to ensure no service disruptions from climate related events.
- Create Energy storage systems to reduce stress on the grid during peak hours.

**PARTICIPATE IN
THE PROCESS**





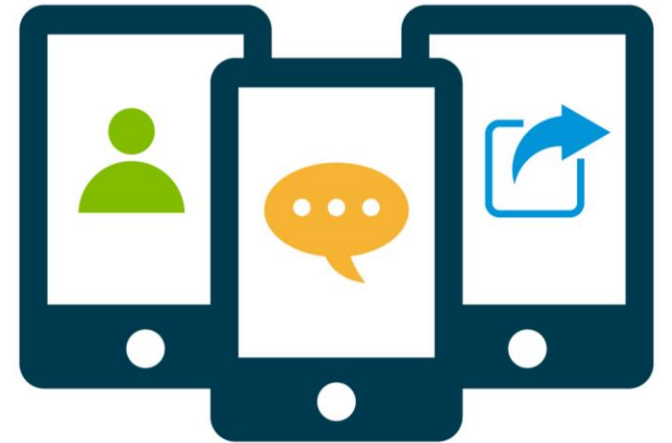
Your Thoughts





Stay Involved!

- Share your thoughts on Public Input and share with friends!
- Visit *allinclarkcounty.com*
- Follow *Sustain Clark County* on [Facebook](#), [Twitter](#), and [Instagram](#)
- Stay tuned for the second Community Survey in the spring.





Upcoming Forums

Topic Area	Date & Time
Climate Change in Southern NV	4pm, Tuesday February 15th
Resilient & Healthy Community	12pm, Thursday February 24th
Sustainable Water Systems	9am, Wednesday March 2nd
Clean & Reliable Energy	10am, Monday March 7th
Connected & Equitable Mobility	4pm, Wednesday March 16th
Smart Buildings & Development	7pm, Thursday March 24th
Diverse & Circular Economy	12pm, Monday March 28 th



Thank You!

