

City of Phoenix Draft Climate Action Plan



Arizona Green Chamber

August 5, 2021



C4O
CITIES

Every action is a climate action.



How you power your home/business



How you get around



How much waste you produce



Every action is a climate action.



How you power your home/business



How you get to work



How much waste you produce

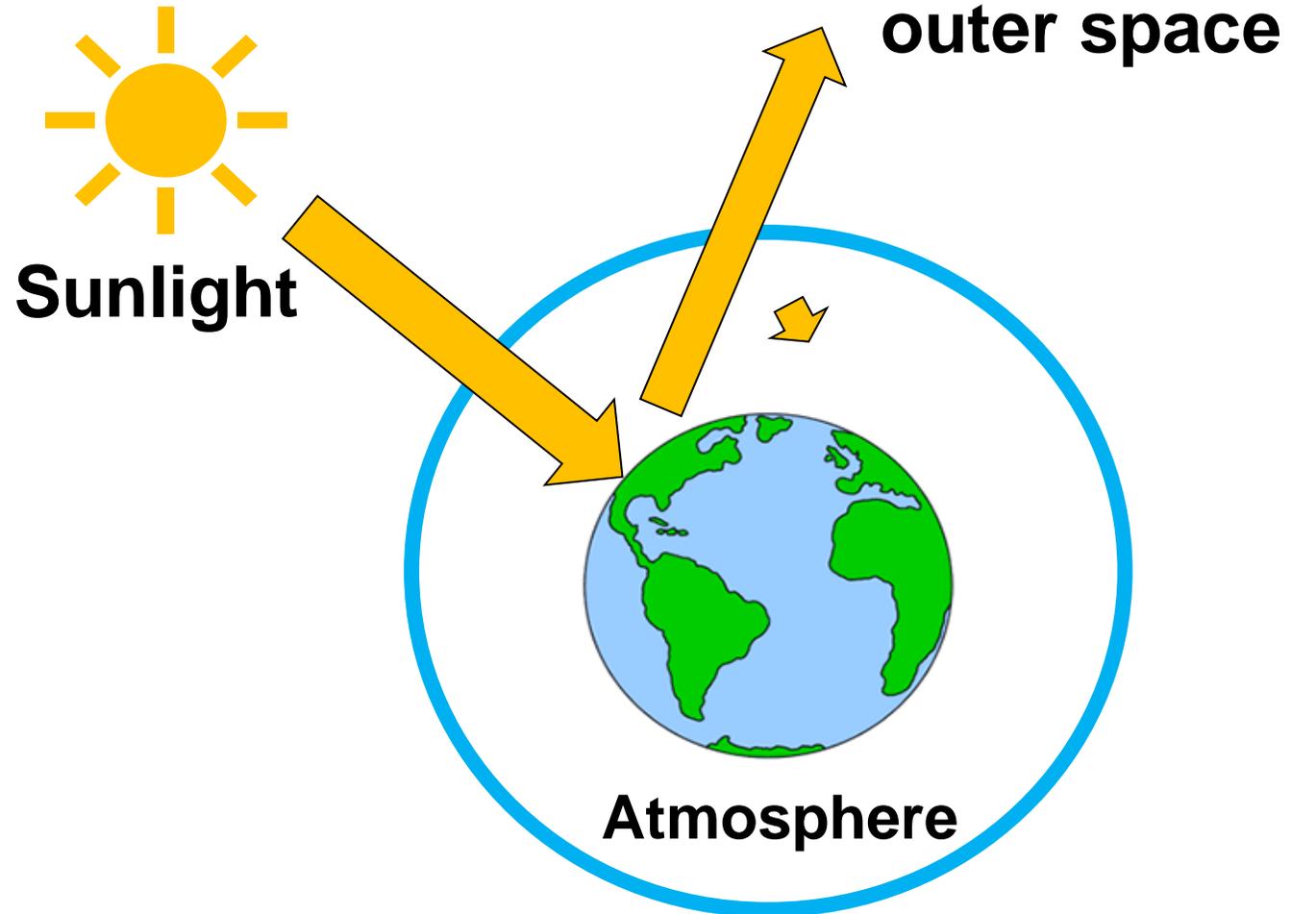


All these activities produce greenhouse gases.

Introduction - Why Greenhouse Gases?



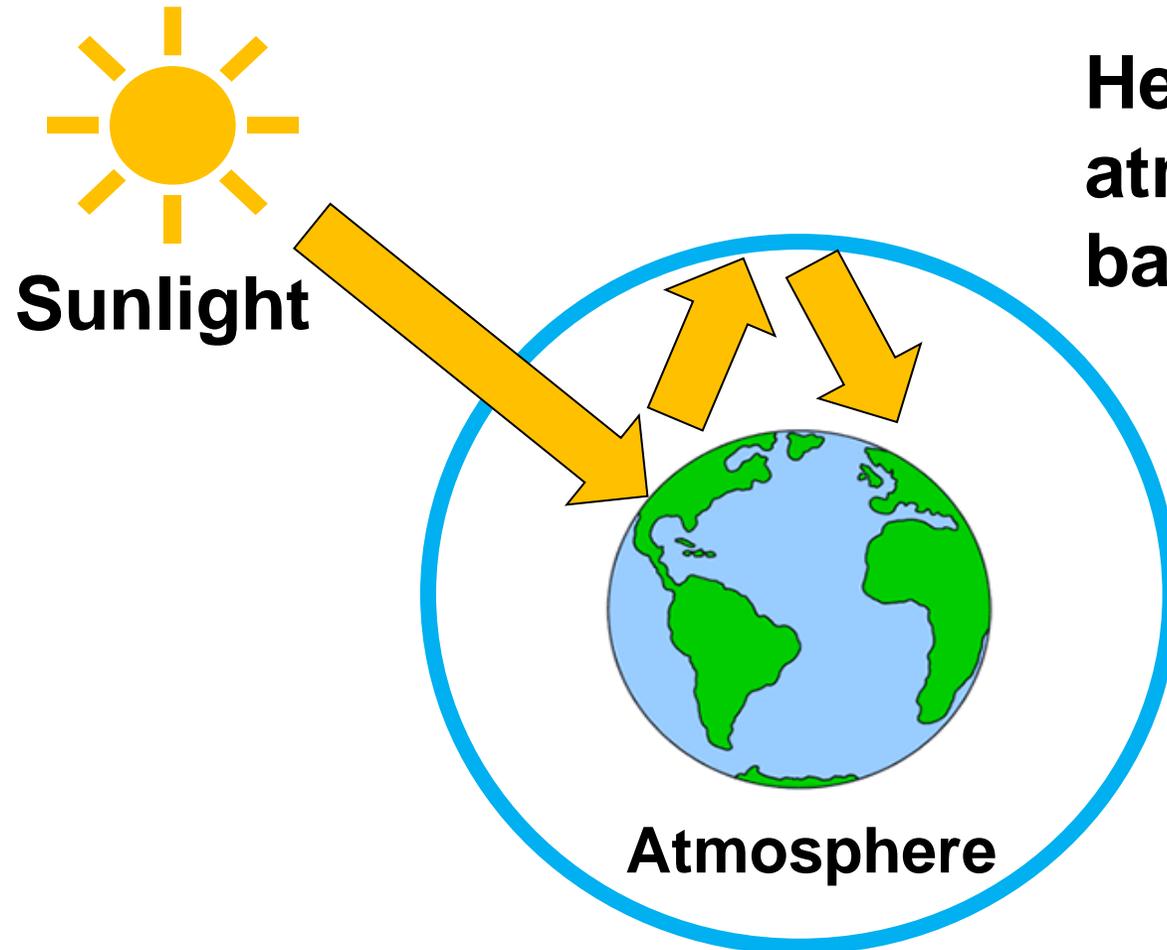
Greenhouse Effect



Introduction - Why Greenhouse Gases?



More GHGs in atmosphere means more heat for us



Heat stays in atmosphere and goes back to surface

Introduction - C40 Cities



- Mayor Kate Gallego affirmed Phoenix commitment to the Paris Climate Accord – reduce GHG emissions by 2050
- Phoenix joined C40 Cities in Feb. 2020
- C40-compliant Climate Action Plan by Dec 2021
- **Deadline 2020** – 67% Reduction in GHG Emissions by 2030.



Climate Action Planning – How it started



Climate Liaisons - 29 Departments



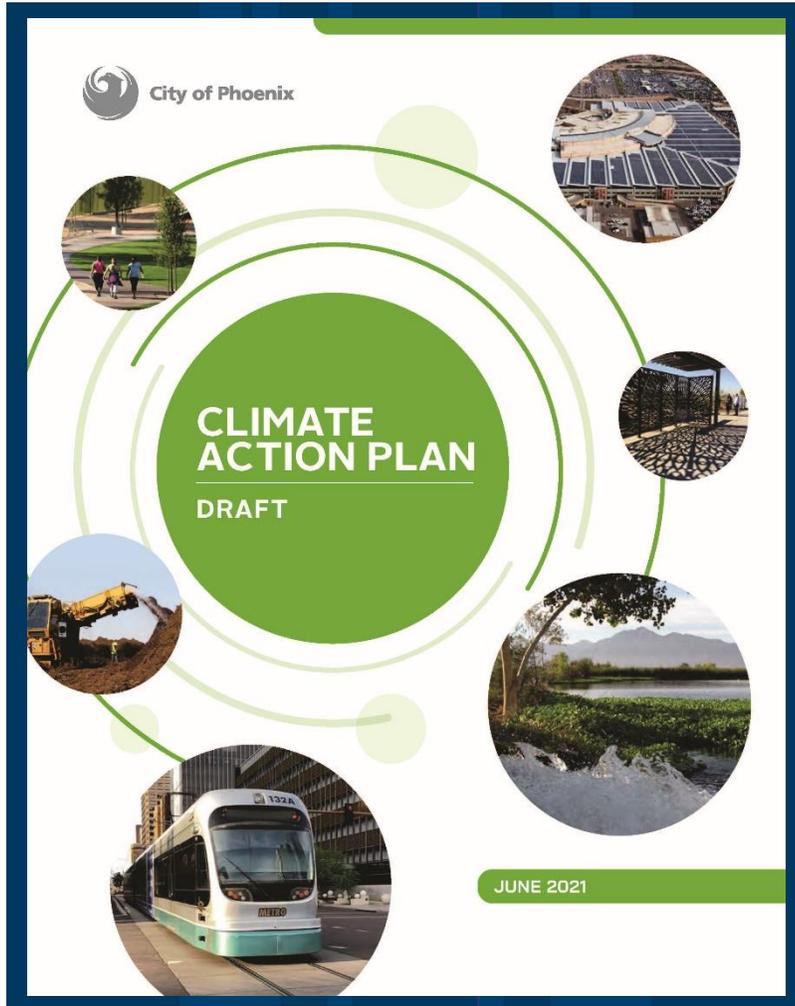
C40 Pathways Modeling
Data Verification



GOALS



Climate Action Plan Draft



phoenix.gov/climate

Community Outreach



Based on Draft Climate Action Plan

- Virtual Workshops – 292 participants
- Presentations – 13 out of 15 VPCs
- Online Survey – 1,100+ Respondents
- Social media – Facebook, Twitter
- PAYS – PHX At Your Service – June
- Radio
- Student Interviews

Trial Budget – **104**
Comments in Support
Climate Change and
Heat Readiness

HOW DO I GET INVOLVED?

- ★ Fill out an organizer form:

Follow us on social media at @azyouthclimate

We're on Instagram, Twitter, and Facebook!

Phoenix.gov | Summer Safety

Be prepared and stay cool! These tips will help you enjoy our #PHXSummer

Summer Fun

- Pool Safety**
Keep children under active supervision at all times! Never swim alone and keep a cell phone handy. Maintain a self-closing, self-latching child-resistant gate. Stay close and be alert!
- Fireworks Safety**
Children should be supervised around fireworks. Have a bucket of water and a hose nearby in case of accidents or fires. Never throw or point fireworks at someone or hold them in your hand. Never try to relight a dud. Leave jumbo fireworks to the professionals.
- Take a Hike. Do It Right.**
Hike early before it heats up. Bring plenty of water and a cell phone, stay on designated trails, dress appropriately, and watch the weather. Pets are not allowed on trails when it's over 100 degrees.
- COVID-19 Precautions**
Follow Centers for Disease Control guidelines for social distancing and mask wearing while participating in summer activities.

Safe + Smart + Summer Fun!

This is a special edition of the PHX At Your Service monthly newsletter. Subscribe or read issues at Phoenix.gov/PAYS

City of Phoenix

City of Phoenix, AZ USA

Take a moment to check out our #PHX draft Climate Action Plan and provide your input by attending a workshop or taking our survey.

Your input will help #Phoenix city leaders know what you want to see in your community.

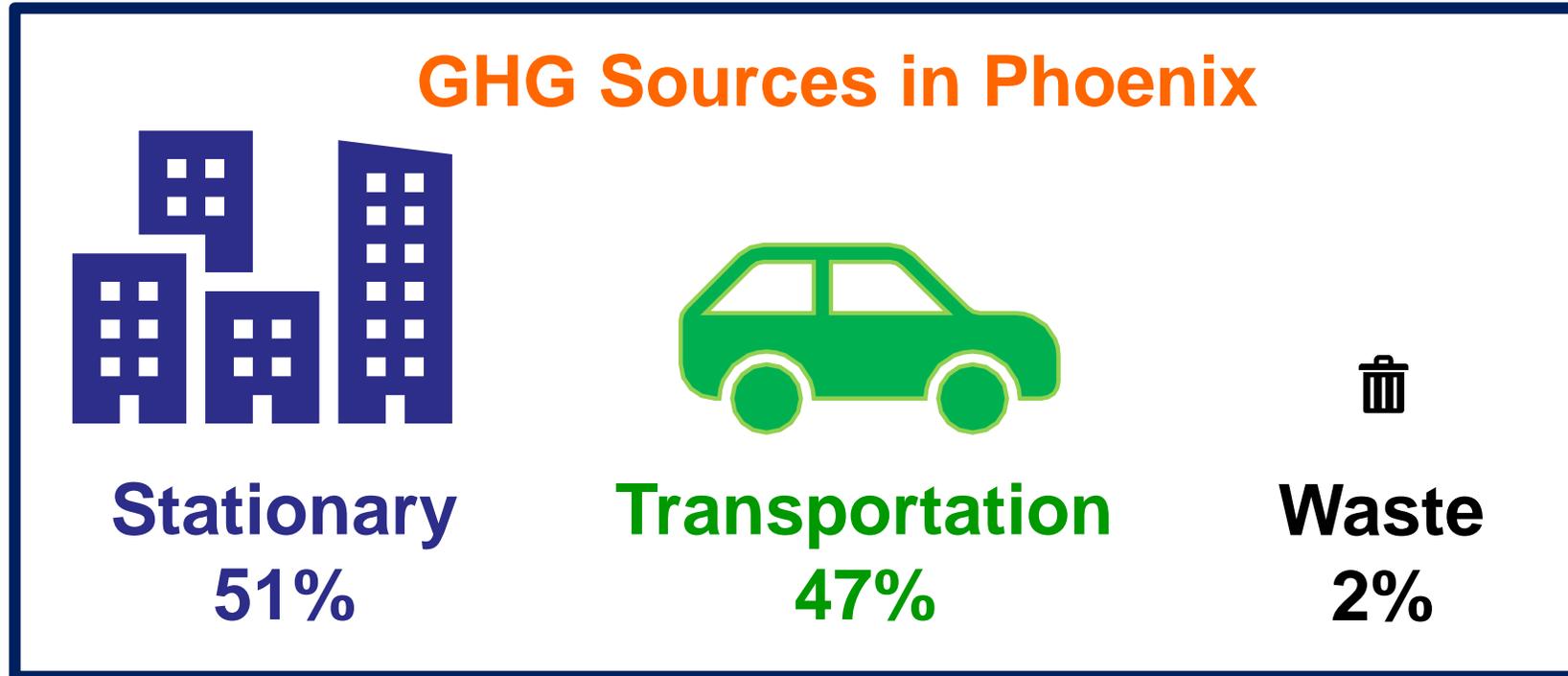
Visit Phoenix.gov/climate for details!
#PHXCimate

Are you experiencing the impacts of climate change in your life?

TELL US HOW
WE CAN CREATE A SUSTAINABLE, EQUITABLE, & RESILIENT PHOENIX.

PHOENIX.GOV/CLIMATE

GHG Reductions Goal - Where we are now



The largest sources of GHGs are from generation of electricity and gasoline fuel.

GHG Reduction Model - What's in our Future



By 2050,

➤ Stationary Energy

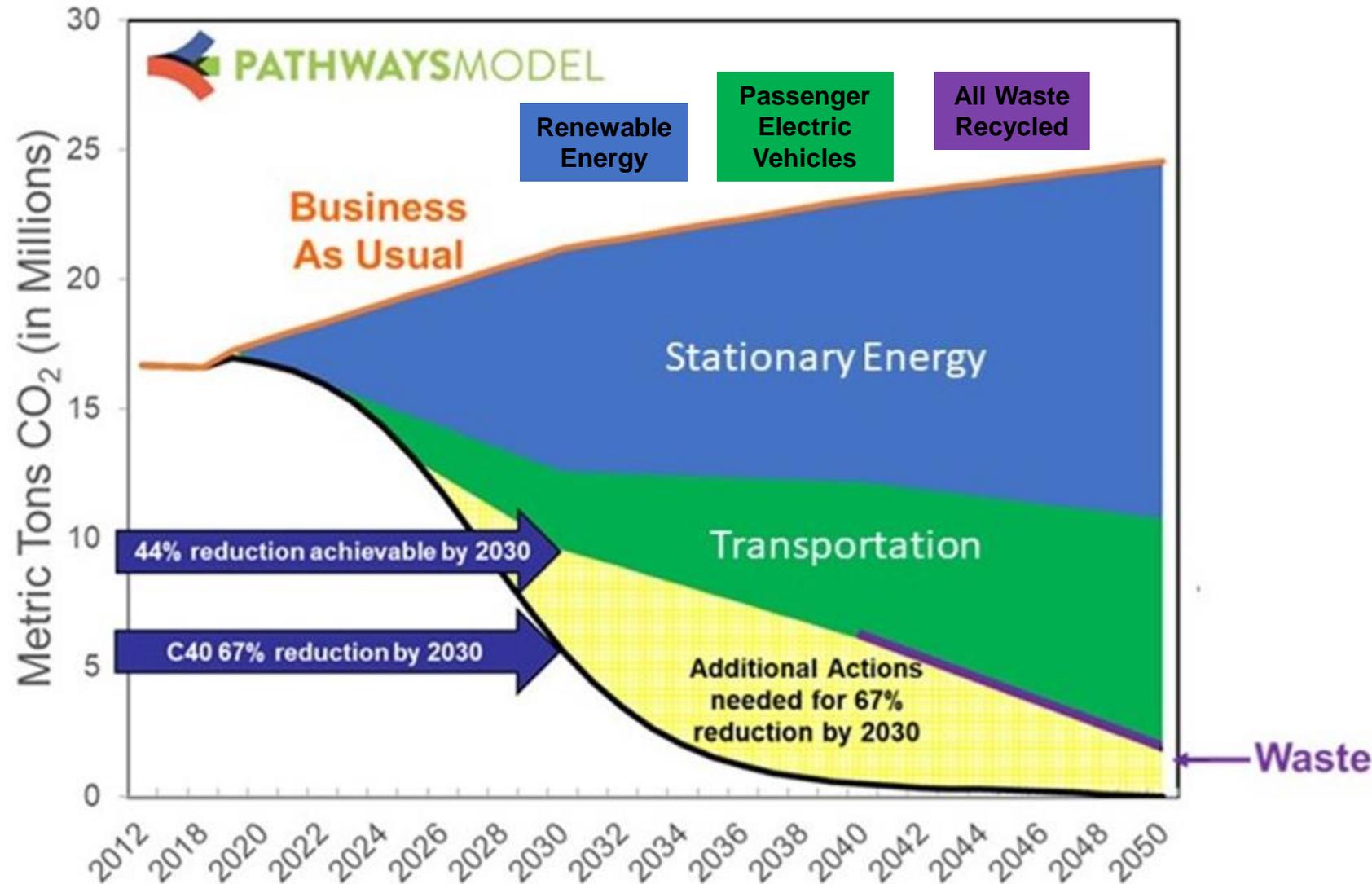
- All electricity from renewable energy

➤ Transportation

- Only electricity-powered travel

➤ Waste

- Everything recycled or composted



Stationary Energy Goals



2050 Goal:



New buildings are
Net Positive
in energy & materials



15
vibrant compact
complete centers

Goal 1
Municipal Operations
net-zero GHG
emissions by 2030.

Goal 2
Three new
conservation and
renewable-energy
programs by 2025.

Goal 3
Promote development
of community-wide
energy projects, like
microgrids.

Goal 4
Net-Positive
Buildings by 2050.

Goal 5
Net-zero electrical
grid for all by 2050

Transportation Goals



2050 Goal:



Transit
in every Phoenix
neighborhood



90%
of residents
within 10-minute
walk of transit



40%
of commutes by
walking, biking,
transit & car-share

Goal 1

Implement the city's Complete Streets Policy and Active Transportation Program to encourage **multiple modes of transportation.**

Goal 2

Increase the use of **low carbon fuels.**

Goal 3

Increase the adoption and rollout of electric vehicles and charging stations **so 30% of new car sales are EVs by 2030.**

Goal 4

Reduce the number of **single occupancy vehicle trips to 60%** of those taken.

Waste as a Resource Goals



2050 Goal:



Zero Waste

through participation
in the circular economy



40%

Waste diversion
by 2020

Goal 1

Implement programs to increase the **reuse and recovery of waste materials** and promote social and economic value.

Goal 2

Increase landfill gas capture by **capturing 100% of methane from SR 85 landfill by 2023.**

Goal 3

Increase waste-diversion **participation by all residents and businesses.**

Goal 4

Transition to **green alternatives** from environmentally hazardous materials.

Goal 5

Expand **brownfield redevelopment along the Rio Salado** in Phoenix.

Goal 6

Reduce GHG emissions from water and wastewater treatment by **capturing biogas from treatment processes.**

Air Quality Goals



2050 Goal:



Clean Air

Out-performing
federal standards



Excellent or
good visibility on
90% of days

Goal 1

Meet U.S. EPA National Ambient Air
Quality Standards (NAAQS)

Local Food Systems Goals



2050 Goal:



Goal 1

All people living in Phoenix should have enough to eat and have access to **affordable, healthy, local, and culturally appropriate food.**

Goal 2

Businesses that produce, process, distribute, and sell local and healthy food should be recognized as integral to the economy and **encouraged to grow and thrive** in Phoenix.

Goal 3

Growing food in Phoenix and the region should be **easy and valued**, for personal or business use.

Goal 4

Food-related waste should be prevented, reused, or recycled via sustainable food production practices that maintain a healthy environment.

Goal 5

Develop food policies and actions that address local and global challenges posed by climate change, urbanization, political and economic crises, population growth and other factors.

Heat Goals



2050 Goal:



Everyone within a
**5-Minute
Walk**
of a park or pathway



25%
Tree and
shade canopy

Goal 1:

Create a network of **80 cool corridors by 2030** in vulnerable communities to facilitate movement from residents' homes to their places of employment, education and play.

Goal 2:

Increase shade provided by trees or constructed shade to **25% by 2030** in parks, streets and right-of-way focusing on pedestrian areas prioritizing communities most vulnerable to heat.

Goal 3:

Provide resources and services to residents to manage heat.

Goal 4:

Increase the use of high albedo, or reflective, materials in infrastructure projects.

Goal 5:

Develop HeatReady certification for cities by 2025.

Water Goals



2050 Goal:



100-Year

Clean & reliable
supply of water

Goal 1:
Identify and implement
infrastructure projects to
ensure **water security**.

Goal 2:
Improve **conservation** of water
resources by improving stormwater
management, optimizing water use,
conducting water audits, and utilizing
wastewater.

Goal 3:
Increase outreach and provide
programs to residents and
businesses to reduce water use to
155 GPCD by 2030.

Next Steps



Draft Plan Public Comment Period

June – August 2021

Public Engagement
Virtual Workshops & Survey

June – August 2021

Final Plan to City Council

Fall 2021

Share your Opinions and Ideas

Climate Page, Surveys, Future Workshop Information

www.phoenix.gov/climate

Submit questions to
climate@phoenix.gov



[@phxenvironment](https://twitter.com/phxenvironment)

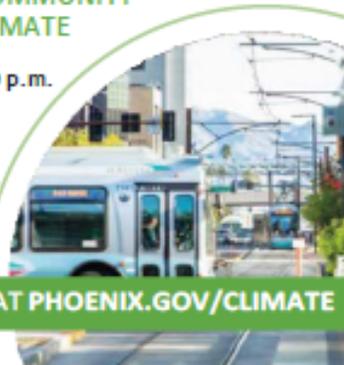


THE FUTURE OF PHOENIX DRAFT CLIMATE ACTION PLAN

Join the City of Phoenix and provide your input on addressing climate change. Share your concerns, needs, and ideas to co-create solutions. Your collaboration is needed to help the City determine priorities, needs, and opportunities to address climate change.

VIRTUAL WORKSHOP SERIES:

- | | |
|--|--|
| BUSINESS AND CLIMATE
June 16th
11:30 - 1:00PM | COUNCIL D7 AND D8
June 26th
10:00 - 11:30AM |
| WATER AND CLIMATE
June 17th
5:00 - 6:30PM | YOUTH CLIMATE
June 26th
3:00 - 4:30PM |
| HEAT AND CLIMATE
June 22nd
11:00 - 12:30PM | YOUR COMMUNITY AND CLIMATE
June 29th
5:00 - 6:30 p.m. |



Help plan the Future of Phoenix

REGISTER ONLINE AT PHOENIX.GOV/CLIMATE



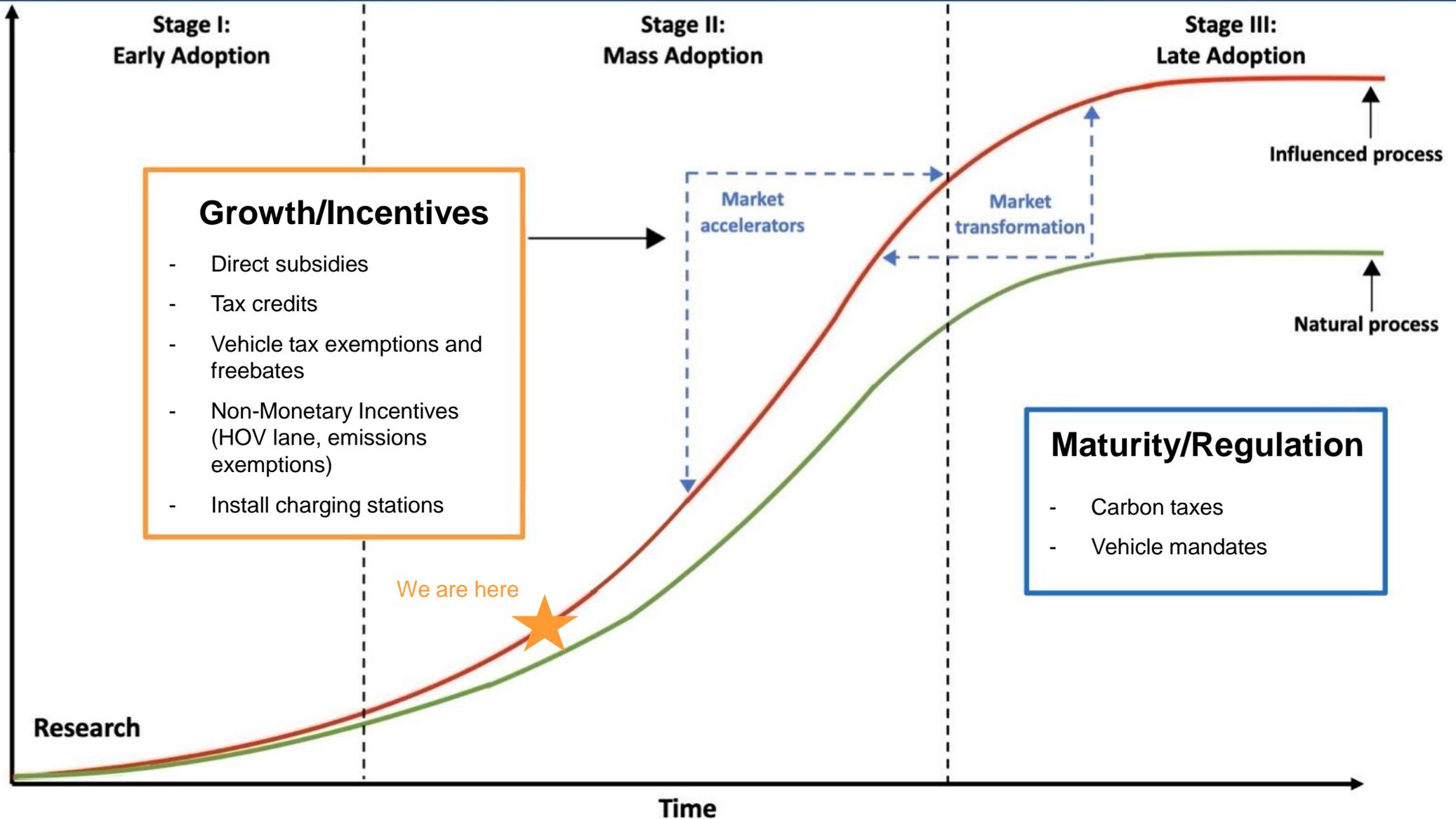
Arizona Green Chamber of Commerce Meeting

**City of Phoenix
Electric Vehicles & Electric Vehicle
Infrastructure**

August 5, 2021

**Karen Apple, EV Program Manager
Office of Sustainability**

EV Market Transformation and Adoption Curve

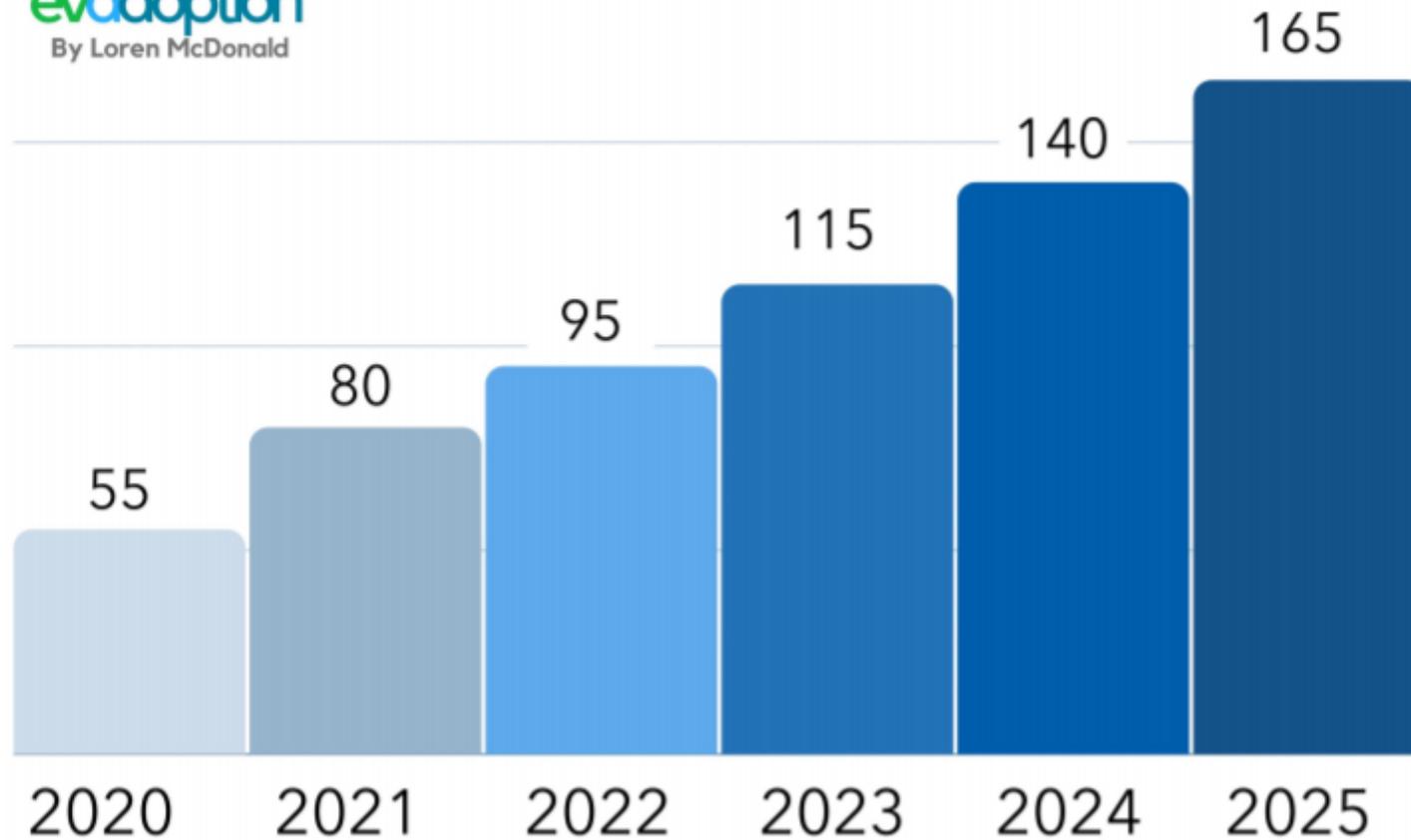


EV Model Availability Growth

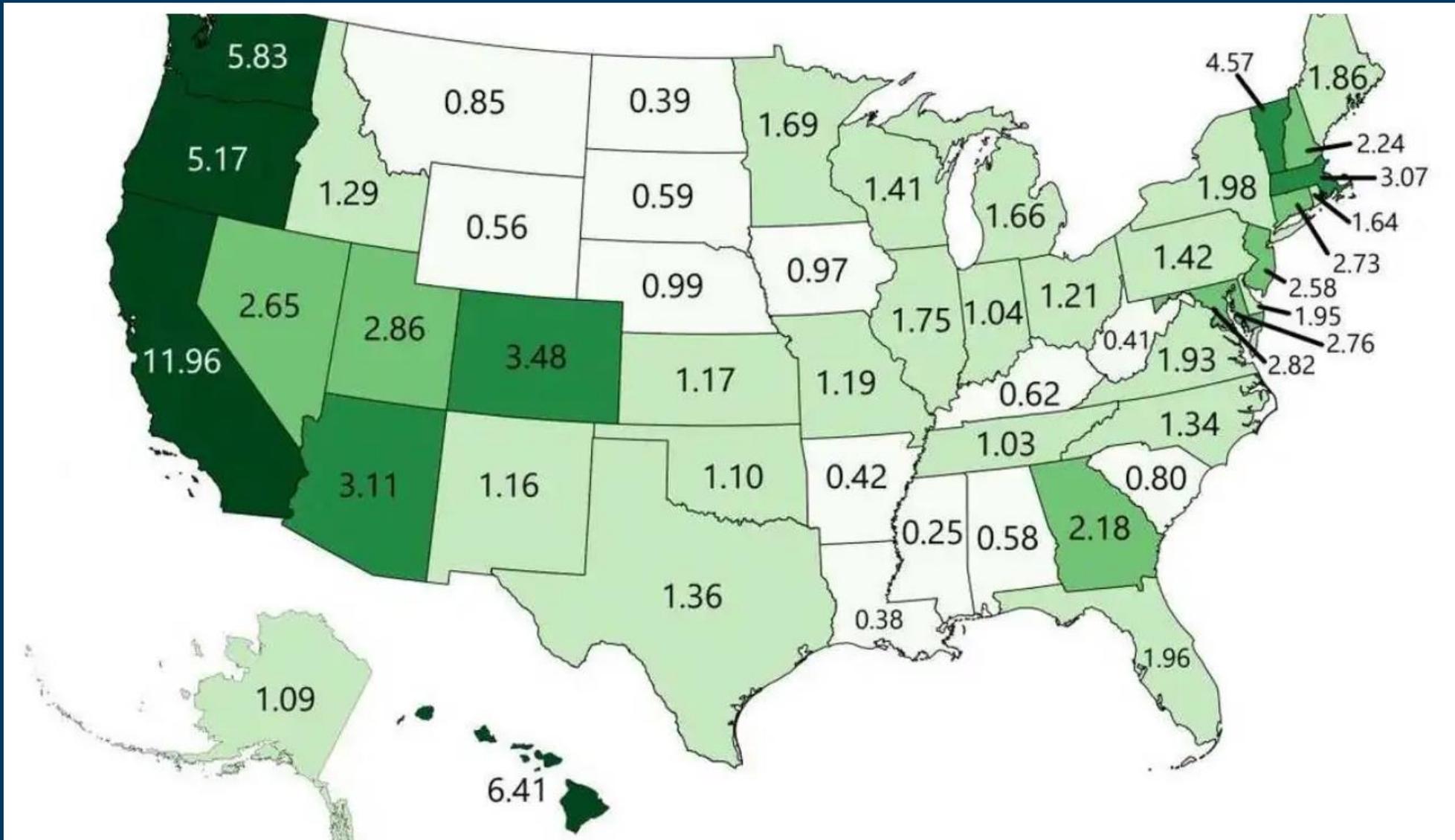


Number of EVs (BEV + PHEV)
Available in the US by Year

evadoption
By Loren McDonald



EV Sales Share: February 2021

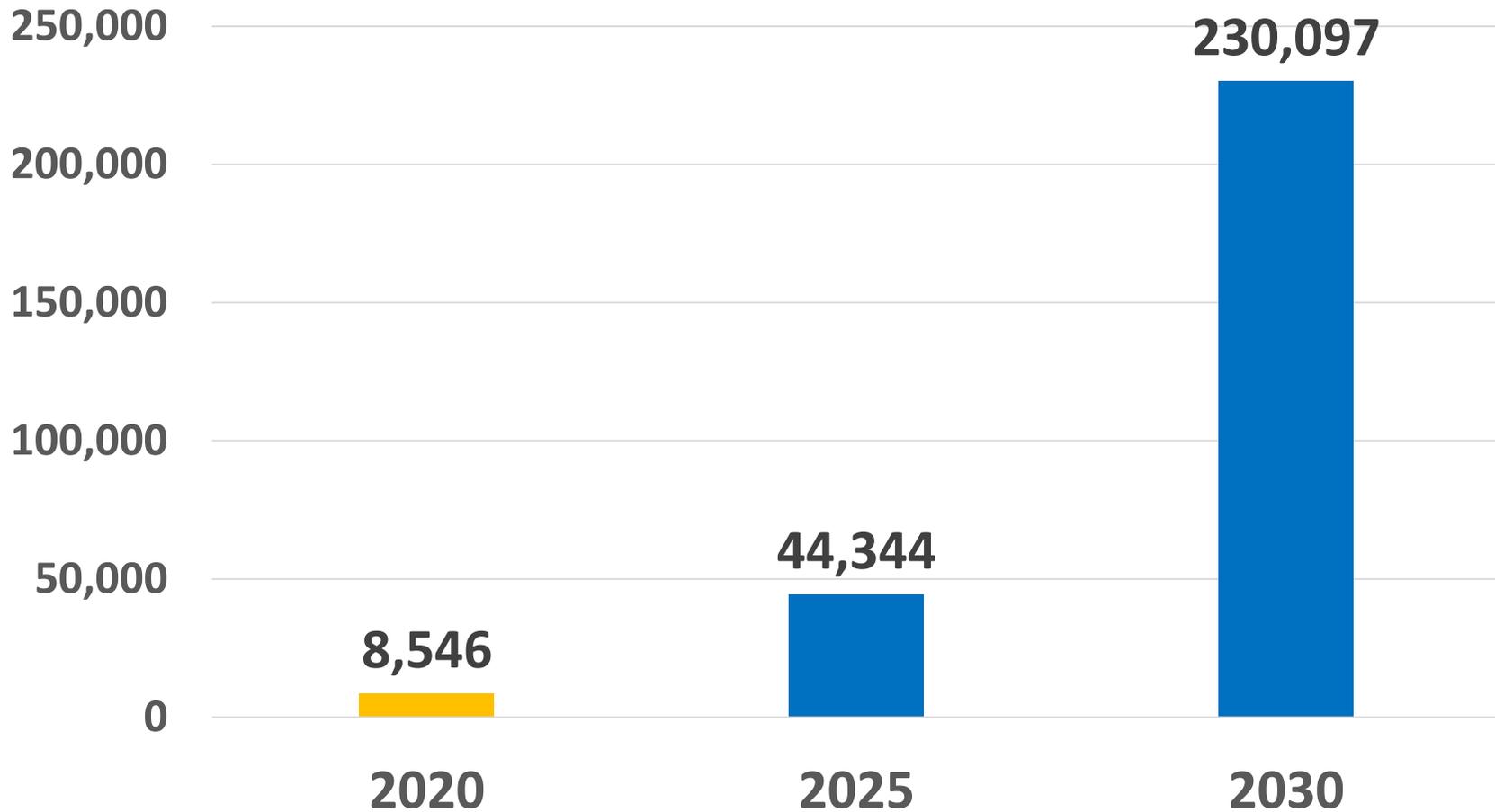


AZ
ranked **6th**
in EV
Sales in
Feb 2021

Phoenix - EV Growth



Phoenix EV Actuals and Forecast



**EV Chargers Needed
by 2030**

Level 2 – 3,031

DCFC - 359



Overall Strategy and Vision



Proposed CAP Goal: Net-zero GHG Emissions by 2050

Proposed EV Goal: 100% Zero Carbon Emissions in City Fleet by 2050

EV Objectives

Increase EV Charging Infrastructure

Explore building code updates

Increase EV Chargers on City Property

Currently 106 EV City provided charging ports

Replace light duty City ICE fleet with EV's

Target Action: 200 new EV sedans by 2030

Develop Community Outreach and EV Engagement Campaign

Partner with utilities and stakeholders

Implement Equity Principals into EV Policies and Programs

Identify focus areas

Working with new City Council Ad Hoc EV Working Group led by Councilwoman Ansari



EV – Environmental Benefits



Reduced Emissions

- Zero exhaust emissions



Health Benefits

- Cleaner air, environment



Increased Vehicle Safety

- Lower center of gravity



Recycled Materials

- Use of recycled plastics or renewable materials



Increased Efficiency

- 90% of energy from battery into motion



Reduced Noise Pollution

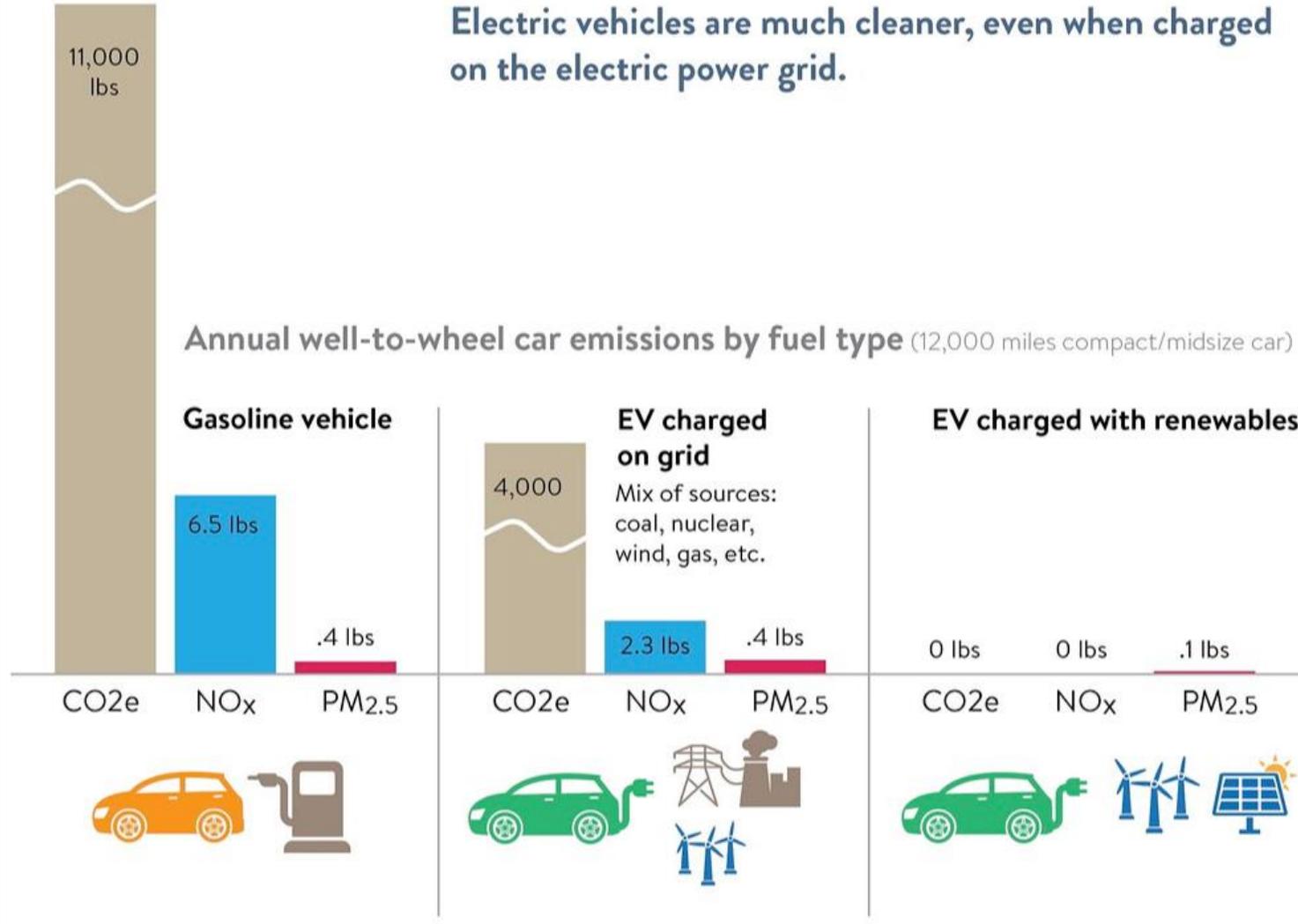
- Quiet and minimal noise

EV Emission Comparisons



Electric vehicles are much cleaner, even when charged on the electric power grid.

Annual well-to-wheel car emissions by fuel type (12,000 miles compact/midsize car)



City Projects – In Process and Planned



Fleet	EV Chargers	Education & Outreach	Building Codes
In Process	In Process	In Process	In Process
<ul style="list-style-type: none">• Increase EV fleet transitions for 2030 Goal	<ul style="list-style-type: none">• Installation of 35 Level 2 chargers	<ul style="list-style-type: none">• Partner with APS/SRP and stakeholders	<ul style="list-style-type: none">• Coordinate with builder associations
Planned	Planned	Planned	Planned
<ul style="list-style-type: none">• Develop Green Sustainable Fleets Plan	<ul style="list-style-type: none">• Develop City EV Charger Siting Study with MAG	<ul style="list-style-type: none">• Develop events and EV Roadmap	<ul style="list-style-type: none">• Exploring EV Ready building codes

A close-up photograph of a person's hand holding a white and black charging cable, about to plug it into the charging port of a white electric car. The car's body is highly reflective, showing the surrounding environment. The background is filled with out-of-focus, warm yellow and white lights, creating a bokeh effect. The overall scene is set at night or dusk.

Thank You

Karen Apple
Karen.Apple@Phoenix.gov

Comment and Questions



Please feel free to ask your questions or leave a comment in the chat.



Share your Opinions and Ideas

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