

2023 ENERGY STAR Products Partner Meeting

Peter Banwell Senior Manager EPA ENERGY STAR Program

> Atlanta GA September 26 - 28





2023 ENERGY STAR Products Partner Meeting



Alejandra Nunez

Deputy Assistant Administrator, Office of Air and Radiation

Environmental Protection Agency

Atlanta GA September 26 - 28



Chandra Farley Chief Sustainability Officer City of Atlanta





Moving Atlanta Forward



CITY OF ATLANTA VISION

One City with One bright future. A city of safe, healthy, connected neighborhoods with an expansive culture of equity, empowering upward mobility and full participation for all residents, embracing youth development, and an innovative, dependable government moving Atlanta forward. Together.



MAYOR'S OFFICE OF SUSTAINABILITY & RESILIENCE

The Mayor's Office of Sustainability & Resilience leads science-based analysis informed by the community to establish, develop, implement, and promote policies, programs, and initiatives related to environmental sustainability, climate resilience, circular economy and food security rooted in environmental justice.



MAYOR'S OFFICE OF Sustainability and Resilience

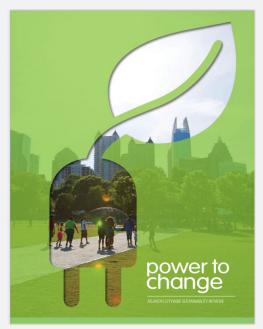
SUSTAINABILITY IS IN ATLANTA'S DNA

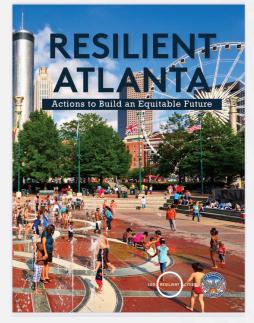
City of Atlanta Climate Action Plan

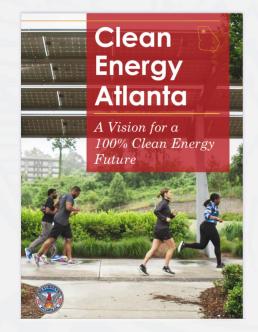


Local Actions and Policies for Reducing City of Atlanta's Greenhouse Gas Emissions

City of Atlanta Mayor's Office of Sustainability Jul 23, 2015



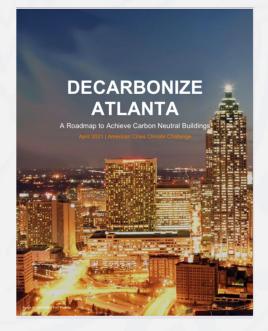








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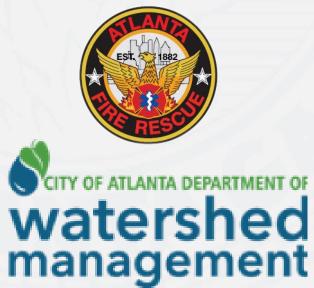












Current # of Sites	23
Installed Capacity (MW)	1.8
Potential Capacity (MW)	30



Hartsfield-Jackson Atlanta International Airport®

DEPARTMENT OF ENTERPRISE ASSET MANAGEMENT

Service, Execution, Accountability

management



A City Built for the Future











advisory board











PLANNING

MAYOR'S OFFICE OF Sustainability and Resilience

Google x Home Energy

Chris LaRosa, Product Management Lead for Sustainability on Google Search



Google's History in Sustainability & Clean Energy



2007

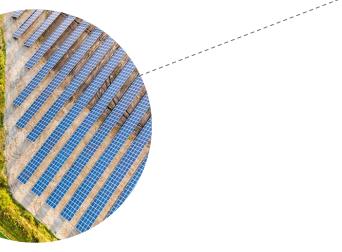
We became the first major company to be carbon neutral.

2017

We reached 10 consecutive years of carbon neutrality & became the first major company to match 100% of our annual electricity use with renewable energy.

We embark on our third decade of climate action with a 10-year climate strategy that goes beyond our own operations.

Proprietary + Confidential

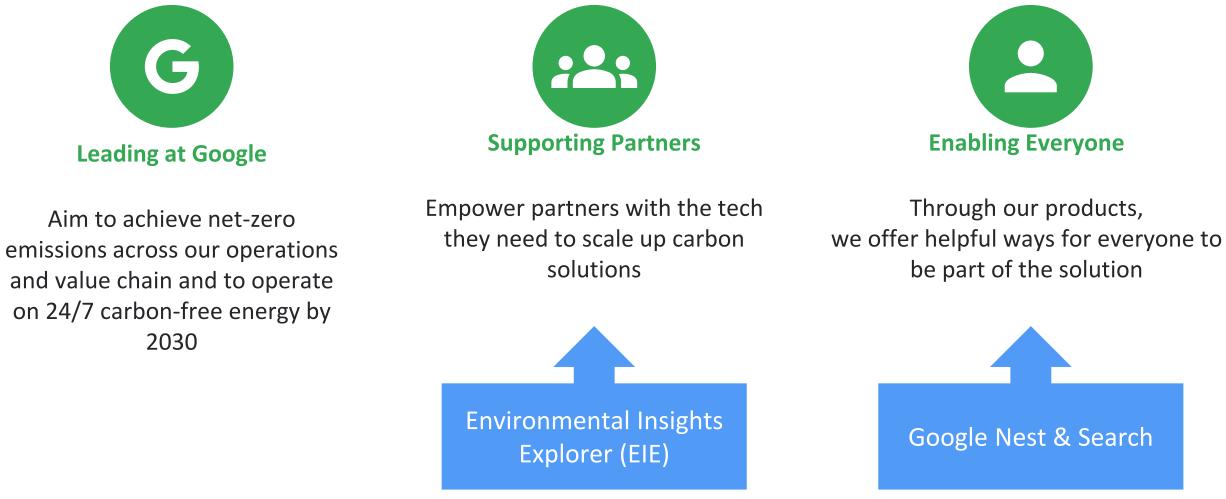


2020



Google's 10-year Sustainability Strategy

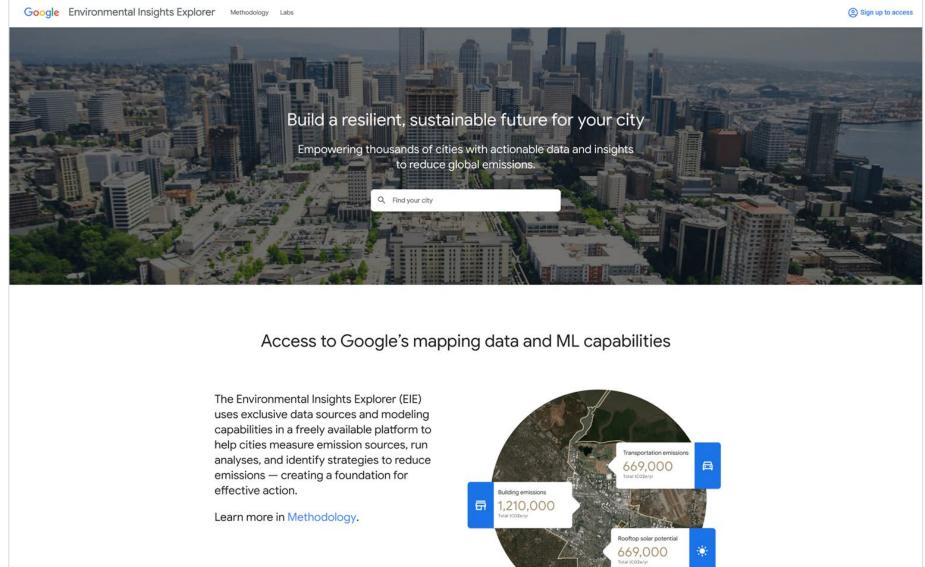
Our ambitious 10-year climate strategy goes beyond our own operations, with a new focus on enabling our partners & our users through Google products.

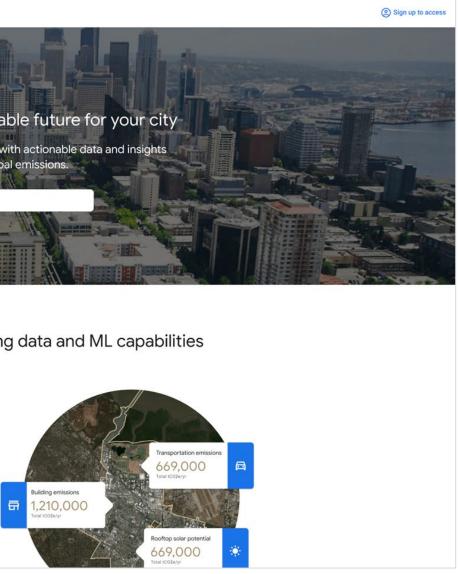




Google Environmental Insights Explorer (EIE)

EIE provides trustworthy, timely insights for cities, to accelerate climate action through data-driven decisions.







EIE Data Insights

EIE data covers:

- Buildings emissions
- Transportation emissions
- Rooftop solar potential
- Tree canopy

Learn more at: insights.sustainability.google



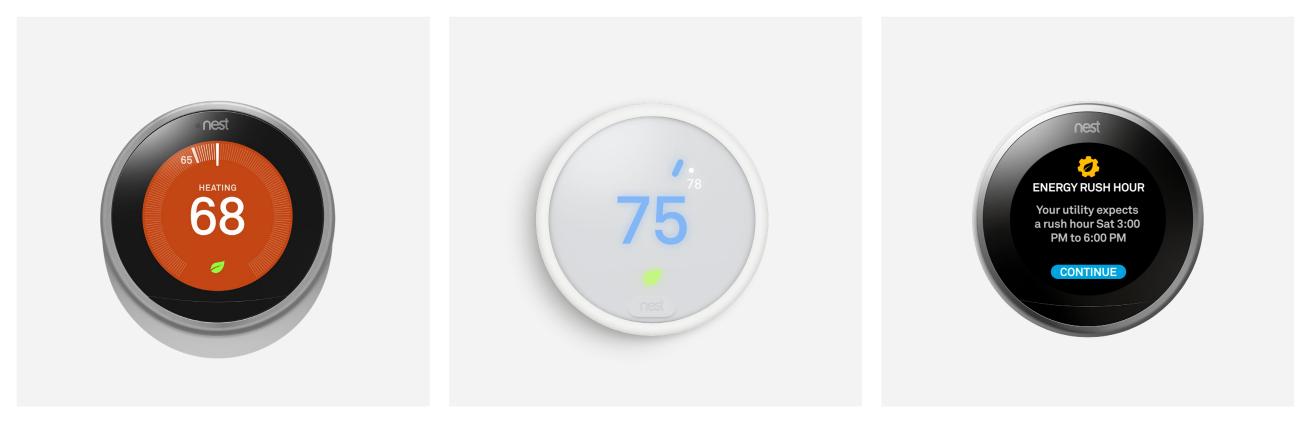


	Building emissions Google estimate	<u>(</u>)	
	366,000		20
	Total tCO ₂ e per year		· land
	∃ Explore and customize		4
	Transportation emissions	<u>(</u>)	
	Google estimate		
	507,000 Total tCO ₂ e per year		
	글는 Explore and customize)	
and the	A. Commercial		
-10-10	Rooftop solar potential Google estimate	<u>(</u>)	
-	242,000		
	Total tCO ₂ e per year Emissions reductions		
Nº.	II. Explore the data		
	C.A.F		



Google Nest

Nest makes it easy for consumers to save energy, but only 17% of US households currently own a smart thermostat



10-12% Heating Savings*

15% Cooling Savings*

Energy Services for Utility Programs

*Independent studies showed that Nest thermostats saved people an average of 10% to 12% on heating and 15% on cooling. Based on typical energy costs, we've estimated average savings of \$131 to \$145 a year.





Google Nest and the IRA



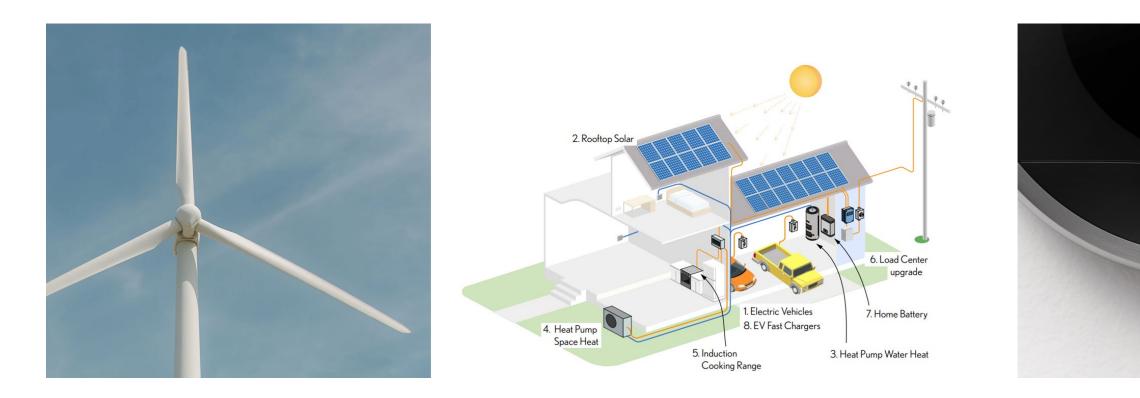
With recent guidance from US DOE, Smart Thermostats like Nest are now eligible for IRA incentives.

Nest thermostats have also been updated with more **intelligent heat pump control features** that help customers save energy.¹ They continuously optimize the heat pump by actively adjusting auxiliary heat usage based on temperature and performance.





Demand Response & Nest Renew



Nest thermostats also enable **demand response programs** help customers automatically adjust their thermostat energy usage during peak hours helping to **improve grid reliability** and **lower energy grid costs**. These types of critical programs can help accelerate grid flexibility and Virtual Power Plants (VPPs) across the country.

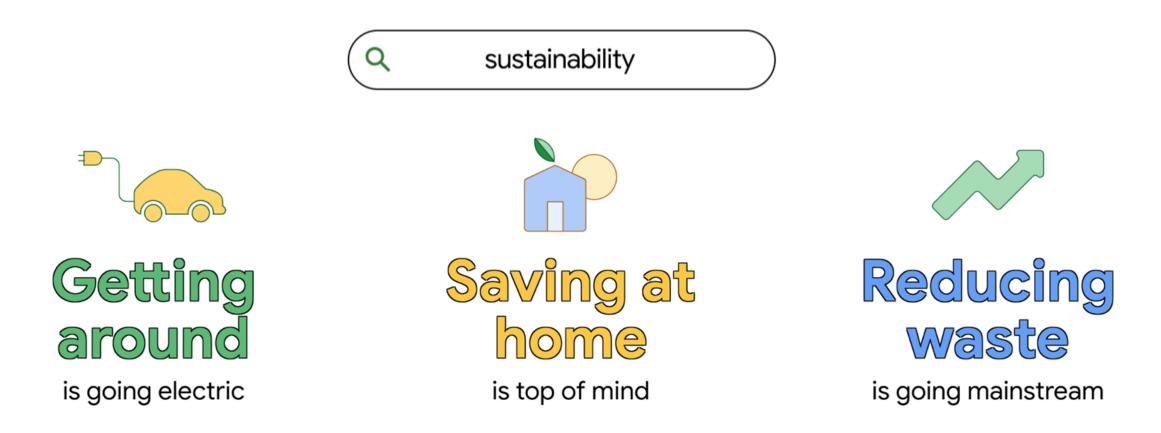
Nest Renew empowers individual households to take advantage of cleaner or less expensive energy at home.





Google Search's Mission, Applied to Sustainability

Organize the world's information & make it universally accessible & useful



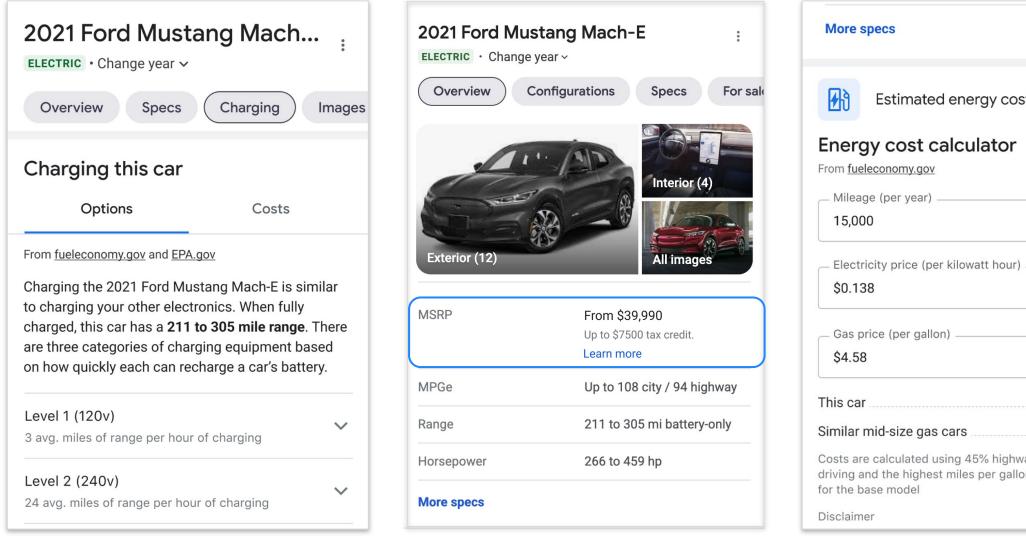






Search Features for Electric Vehicles

In 2022, we launched features that provide users with helpful information about EVs, like: charging, fuel cost-savings, and financial incentives



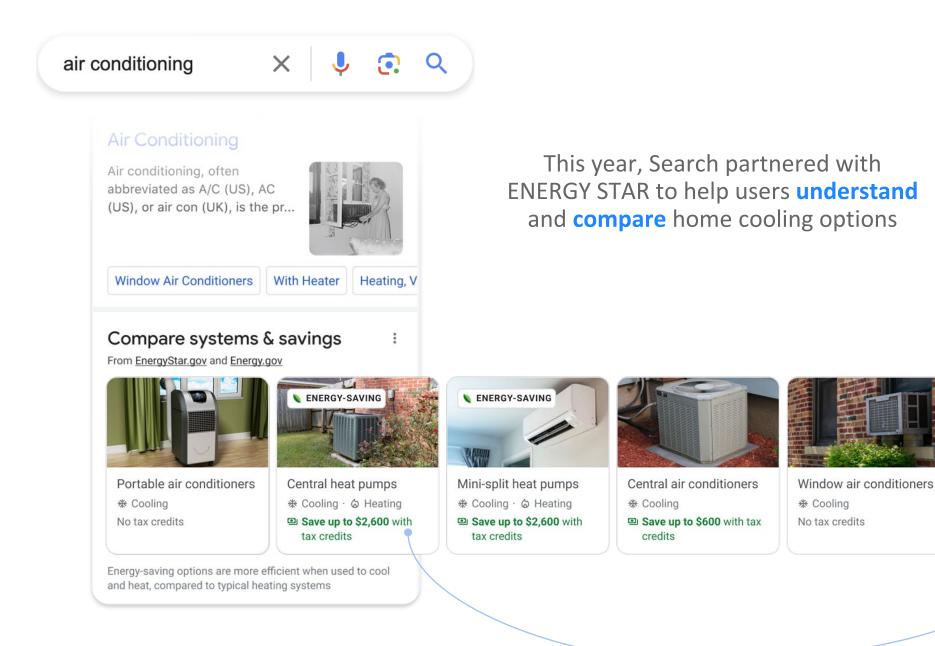
Enabling Everyone

for this car	^
\$750	hr
\$700	/ y i
\$2,48	RO/vr
ψ2,40	JOIYI
y driving, 55% ci	ty
equivalent (MPG	
 Contract metric transmission (2010) 	



Note: Available on mobile only

Google Search x ENERGY STAR





How they work

From EnergyStar.gov and Energy.gov

Central heat pumps cool and heat your home by working as a combined central air conditioner and heating system. They move heat in and out of buildings instead of generating it, and distribute air through central ducts.

Capability	Cooli
Ducts required	Yes
Average lifespan	10-1
Energy efficiency ()	Produ STAR efficie

used to cool and heat compared to typical heating systems ()

Q Shop central heat pumps

Save with incentives

Enabling Everyone

ling, heating

5 years (year-round use) ducts with the ENERGY R label have high iency ratings

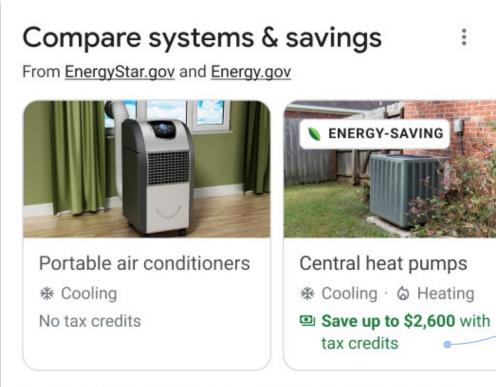
Energy-saving: More efficient when

Gooale

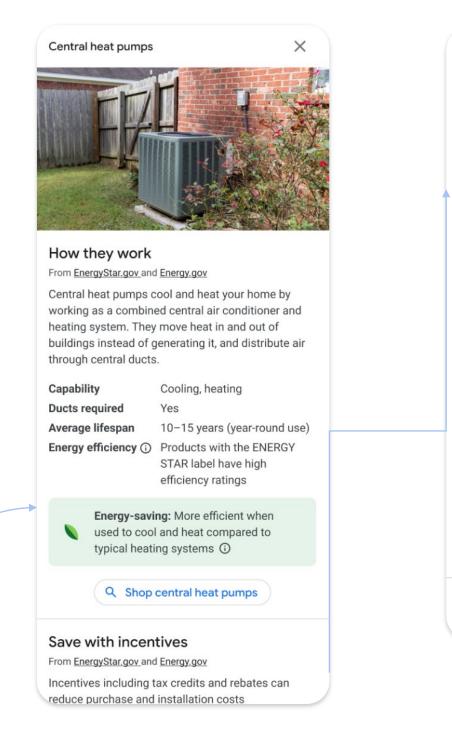
bile only

Google Search x ENERGY STAR

Through our partnership with ENERGY STAR, we're empowering users with information about capabilities, efficiency, and cost-saving **financial incentives**



Energy-saving options are more efficient when used to cool and heat, compared to typical heating systems



Total sa efficiency, project cost, and household income.

Enabling Everyone

Save with incentives				
From EnergyStar.gov and Energy.gov				
Incentives including tax credits and rebates can reduce purchase and installation costs				
Tax credits	Up to \$2,600 🔥			
These may reduce the amount of tax you owe or increase your tax refund. Learn more				
Air source heat pump	Up to \$2,000			
Electrical panel upgrade	Up to \$600			
Geothermal heat pump	Learn more			
Rebates	Vary by location			
These additional savings can be combined with tax credits.				
Local rebates	Learn more			
Future rebates	Learn more			
Total savings depend on multiple	factors including appliance			

Find a contractor

From EnergyStar.gov



To learn more or discuss collaboration opportunities, each out to our Partnerships team: <u>haleymoskow@google.com</u>



EPA is grateful to our facilitating meeting co-sponsor, Southeast Energy Efficiency Alliance (SEEA), for their assistance with meeting planning and execution. We would also like to thank other ENERGY STAR partners for their generous support of food and beverage and audio visual offerings at the 2023 ENERGY STAR Products Partner Meeting*



SAMSUNG





*No EPA funds were used for food and beverage offerings associated with the 2023 ESPPM or related events and activities.