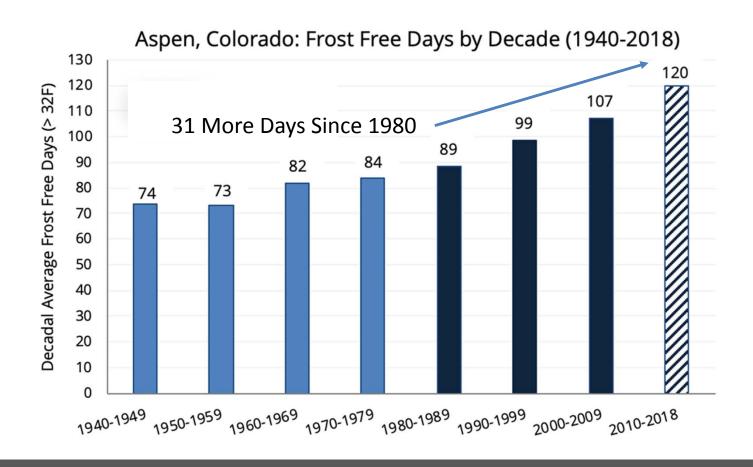


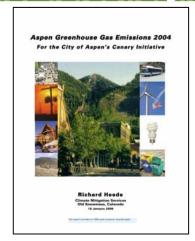
Climate Action in the Mountains

Ashley Perl, City of Aspen - 10/25/19

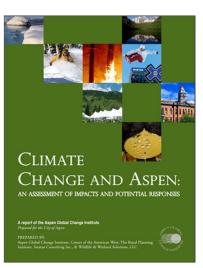




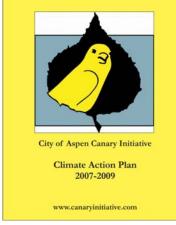
History of Climate Action



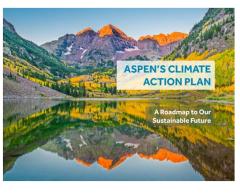
2004 1st GHG Inventory



2006 1st Vulnerability Assessment



2007 1st Climate Action Plan



2018 2nd Climate Action Plan





CAP Update 2018

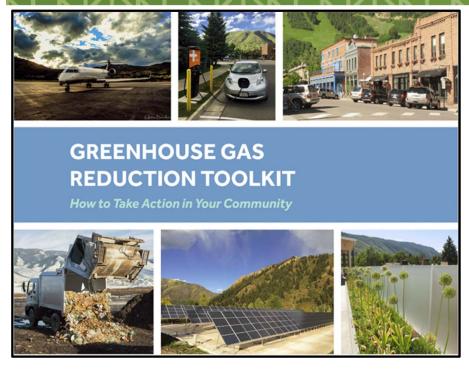


Advisory Committee

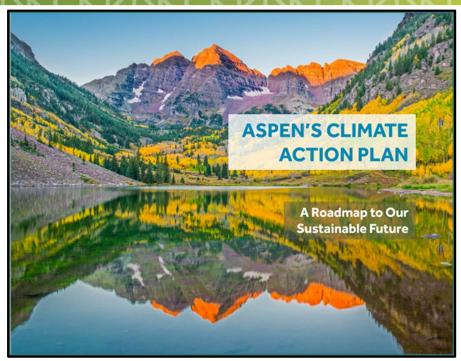
Public & Business Surveys

Analysis & Modeling

Outcomes -Toolkit & CAP



- 250 Actions
- Shortcut for climate action planning



- 46 Actions
- 2018 2020 Implementation

Climate Action Sectors



Energy Supply



Vehicles & Transportation



Residential Energy



Waste and Landfill



Commercial Energy



Aviation and Airport



	OBJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNER
	Replace NG heating and appliances with electric and/or renewable systems	0000	Primary Co-Benefits:		
	ACTIONS				
	Eliminate natural gas coppeditions for all new commercial developments	0000	\bigcirc		
	Integrate geother maneat or ground heat to offset patural graduse	0000	○ 💲 🍪 🗘 📀		
	Pro note swar thermal for water heating	0000	○ ⑤ ○ ⊕ ◎		
	r. Vide rebates and incentives to replace old or inefficient boilers with electric	0000	9 00 0 0		
6 (O.	Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	○○○◆◎		
CAP & TO	Enhance energy and resource efficiency in new commercial developments	0000	Primary Co-Benefits:		
()\	ACTIONS				
	Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○○❸◆∞		
	Provide above-code incentives for new commercial developments	0000	○○❸◆○		
	Level of Potential Promotes Equity	S Fosters Economic Sustainability	Improves Local Environmental Quality	Inhances Public Health & Safety	Builds Resilier



DBJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNERS
eplace NG heating and appliances with lectric and/or renewable systems	0000	Primary Co-Benefits:		
ACTIONS				
Eliminate natural gas connections for all new commercial developments	0000	OOO O O		
Integrate geothermal heat or ground heat to offset natural gas use	0000	○ 🕄 🚷 🗘 🚳		
Promote solar thermal for water heating	0000	○ ⑤ ○ � ◎		
Provide rebates and incentives to replace old or inefficient boilers with electric	0000	●○○◆○		
Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	○○○ 🛨 🚳		
nhance energy and resource efficiency in ew commercial developments	0000	Primary Co-Benefits:		
ACTIONS				
Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○ 8 0 0		
Provide above-code incentives for new commercial developments	0000	○○❸◆○		





COMMERCIAL ENERGY

GHG REDUCTION TOOLKIT: Commercial Energy

OBJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNERS
Replace NG heating and appliances with electric and/or renewable systems	0000	Primary Co-Benefits:		
ACTIONS				
Eliminate natural gas connections for all new commercial developments	0000	0000		
Integrate geothermal heat or ground heat to offset natural gas use	0000	○ 6 8 0 0		
Promote solar thermal for water heating	0000	○ ⑤ ○ ♣ ◎		
Provide rebates and incentives to replace old or inefficient boilers with electric	0000	=		
Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	○○○ 🖸 🚳		
Enhance energy and resource efficiency in new commercial developments	0000	Primary Co-Benefits:		
ACTIONS				
Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○ 8 0 0		
Provide above-code incentives for new commercial developments	0000	○080		
Level of Potential	Fosters Economic Sustainability		Inhances Public Realth & Safety	Builds Resilience





OBJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNERS
Replace NG heating and appliances with electric and/or renewable systems	0000	Primary Co-Benefits:		
ACTIONS				
Eliminate natural gas connections for all new commercial developments	0000	00000		
Integrate geothermal heat or ground heat to offset natural gas use	0000	○ 🛇 🚷 🗘 🔯		
Promote solar thermal for water heating	0000	○ ❸ ○ � ◎		
Provide rebates and incentives to replace old or inefficient boilers with electric	0000	0000		
Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	○○○ 🖸 🥸		
Enhance energy and resource efficiency in new commercial developments	0000	Primary Co-Benefits:		
ACTIONS				
Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○ (((((((((((((((((((
Provide above-code incentives for new commercial developments	0000	○ 🚷 🗘 ○		















BJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNERS
eplace NG heating and appliances with lectric and/or renewable systems	0000	Primary Co-Benefits:		
ACTIONS				
Eliminate natural gas connections for all new commercial developments	0000	0000		
Integrate geothermal heat or ground heat to offset natural gas use	0000	○ 🔇 😵 🗘 📀		
Promote solar thermal for water heating	0000	○ ⑤ ○ ۞ ◎		
Provide rebates and incentives to replace old or inefficient boilers with electric	0000			
Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	00000		
nhance energy and resource efficiency in ew commercial developments	0000	Primary Co-Benefits:		
ACTIONS				
Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○ 8 0 ∞		
Provide above-code incentives for new commercial developments	0000	○ 😵 🗘 ○		





Level of Potential GHG Reduction



Promotes Equity







Enhances Public Health & Safety



CAP & Toolkit Layout

GHG REDUCTION TOOLKIT: Commercial Energy

OBJECTIVE	GHG REDUCTION POTENTIAL	CO-BENEFITS	TIMEFRAME	PARTNERS
Replace NG heating and appliances with electric and/or renewable systems	0000	Primary Co-Benefits:		
ACTIONS				
Eliminate natural gas connections for all new commercial developments	0000	\bigcirc		
Integrate geothermal heat or ground heat to offset natural gas use	0000	○ 🛭 🚷 🗘 🥸		
Promote solar thermal for water heating	0000	○ 🔞 ○ 🗘 🕸		
Provide rebates and incentives to replace old or inefficient boilers with electric	0000	9000		
Encourage integration with air conditioning systems if future AC need is anticipated (e.g., dual ground/air-source heat pumps)	0000	0000∞		
Enhance energy and resource efficiency in new commercial developments	0000	Primary Co-Benefits:		
ACTIONS				
Strengthen building codes to promote energy and resource efficiency in new commercial developments	0000	○		
Provide above-code incentives for new commercial developments	0000	○○❸◆○		
Level of Potential Promotes Equity	S Fosters Economic Sustainability		Enhances Public Health & Safety	Builds Resilience

Implementation

COMMERCIAL ENERGY

Commercial Energy: Recommended Actions

During the CAP process, the Advisory Committee initially brainstormed over 38 potential actions for reducing GHG emissions in the Commercial Energy Sector. The CAP recommendation is to pursue implementation of the following seven actions over the next

three years. These actions align with the cr

OBJECTIVE

Promote energy benchmarking and reporting in commercial buildings

Support commercial energy benchmarking and incremental EE improvements through policy

Enhance energy and resource efficiency in new commercial developments

Provide incentives for new and remodeled buildings to build above code

Limit GHG emissions from future development through the use of controlled growth and coordinated land use in and around the Urban Growth Boundary

Delay the need for air conditioning via building design and management

CAP: 46 Actions

→ 25 in progress

65 unique projects or programs











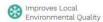
Commercial Energy continues on the next page.





Promotes Equity











Colorado Communities for Climate Action







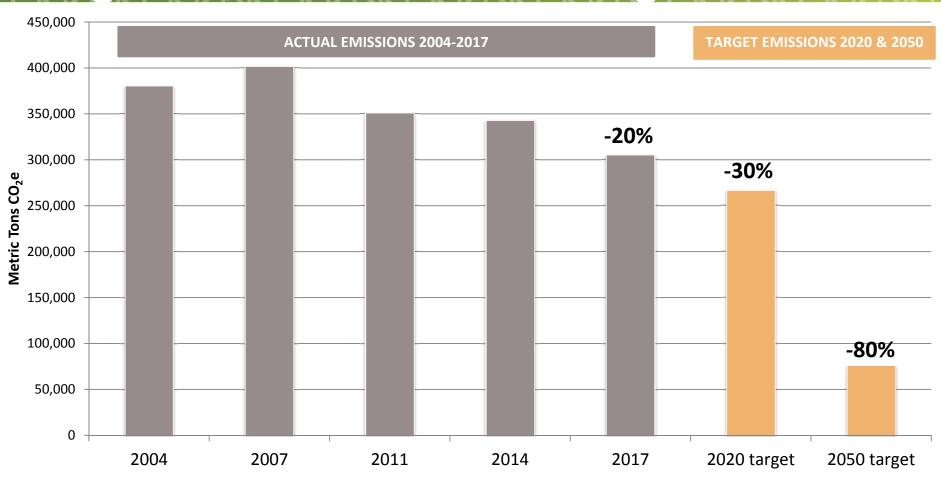




Implementation Priorities

Local Action + Policy

Progress, 2020 & 2050 Targets



Next Steps for Aspen



Higher impact needed to hit goals



Supply and demand efforts both necessary



Local action + state/federal policy is essential & complementary



Regional and cross-sectoral collaboration for systems change





Thank You!

Toolkit http://tinyurl.com/yyedrkec