MID-COURSE REVIEW

Assessing Progress Toward Regional 2030 Climate Goals

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Department of Environmental Programs
Climate, Energy, and Air Program

Built Environment and Energy Advisory Committee Meeting

June 12, 2025



Midcourse Review Approach

Goal: Assess the status of goals, strategies, measures and actions toward the region's existing plan framework and targets.

CEEPC Meeting	Topic
January 2025	Midcourse Review Approach
March 2025	Renewable Portfolio Standards
May 2025	Local Government Questionnaire
July 2025	2023 Greenhouse Gas Inventories
Sept/Nov 2025	Performance Indicators
New Year	Draft Midcourse Review



Green Building Database - Regional Summary

				Design to Earn	till cation of	Green Globes	Passive		New Each	ALU
	Year	LEED	ENERGY STAR	ENERGY STAR	EarthCraft	Rated	House	LFI	Year	Overall
	1999	0	3	0	0	0	0	0	3	3
	2000	0	9	0	0	0	0	0	9	12
	2001	0	8	0	0	0	0	0	8	20
	2002	0	18	0	0	0	0	0	18	38
	2003	3	10	0	0	0	0	0	13	51
	2004	4	11	0	0	0	0	0	15	66
	2005	7	15	0	0	0	0	0	22	88
	2006	6	33	0	0	0	0	0	39	127
	2007	27	31	2	2	1	0	0	63	190
	2008	36	97	3	6	0	0	0	142	332
	2009	126	149	6	17	4	0	0	302	634
	2010	250	151	0	26	2	0	0	429	1,063
	2011	226	117	6	534	8	0	0	891	1,954
	2012	540	153	3	13	2	1	0	712	2,666
	2013	405	88	3	13	3	2	0	514	3,180
	2014	313	84	2	9	3	2	0	413	3,593
	2015	262	193	2	8	4	0	0	469	4,062
	2016	322	130	7	21	9	3	0	492	4,554
	2017	273	77	3	5	5	2	2	367	4,921
	2018	288	89	7	10	6	1	1	402	5,323
	2019	271	30	0	18	2	0	0	321	5,644
	2020	605	53	6	7	3	0	0	674	6,318
	2021	311	58	1	4	3	1	1	379	6,697
	2022	390	61	3	2	7	1	0	464	7,161
	2023	185	80	0	6	5	3	0	279	7,440
_	2024	325	55	3	14	10	4	0	411	7,851
	2025	0	0	0	8	0	11	0	19	7,870
	TOTAL	5,175	1,803	57	723	77	31	4	7,870	

Certification Count

TOTALS



Green Building Database - Local Summary

	Certification Count							
		ENERGY	Design to Earn		Green	Passive		
Jurisdiction	LEED	STAR	ENERGY STAR	EarthCraft	Globes	House	LFI	TOTALS
Arlington County	265	139	1	36	10	1	1	453
Charles County	15	10	1	0	0	0	0	26
City of Alexandria	441	50	4	38	9	1	0	543
City of Fairfax	8	10	0	5	0	0	0	23
City of Falls Church	11	4	0	2	0	2	0	19
City of Manassas	1	11	1	0	0	0	0	13
City of Manassas Park	1	0	0	0	1	0	0	2
District of Columbia	2286	561	3	47	9	21	1	2928
Fairfax County	554	465	3	561	8	2	1	1594
Frederick County	42	23	1	0	11	0	0	77
Loudoun County	111	132	24	28	0	0	0	295
Montgomery County	1023	234	7	1	18	3	0	1286
Prince George's County	372	67	3	0	9	1	1	453
Prince William County	45	97	9	5	2	0	0	158
Regional Total	5175	1803	57	723	77	31	4	7870



Green Building Database Data Centers by Year

		Cert	TOTALS			
	ENERGY Design to Earn Green Globes				New Each	
Year	LEED	STAR	ENERGY STAR	Rated	Year	Overall
2009	0	0	0	1	1	1
2010	0	0	0	0	0	1
2011	0	1	0	0	1	2
2012	2	2	0	0	4	6
2013	1	0	0	0	1	7
2014	2	2	0	0	4	11
2015	1	0	0	0	1	12
2016	0	2	0	0	2	14
2017	2	4	0	0	6	20
2018	2	8	0	0	10	30
2019	3	5	0	0	8	38
2020	2	6	0	2	10	48
2021	2	3	0	0	5	53
2022	1	5	0	0	6	59
2023	2	3	0	0	5	64
2024	3	3	2	2	10	74
2025	1	0	0	0	1	75
TOTAL	24	44	2	5	75	



Green Building Database Data Centers by Jurisdiction

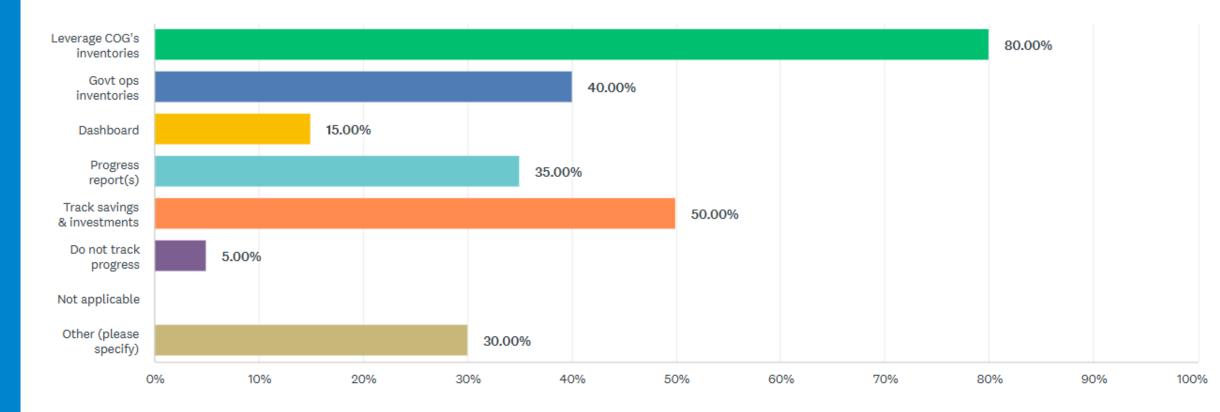
		ENERGY	Design to Earn	Green Globes	
Jurisdiction	LEED	STAR	ENERGY STAR	Rated	TOTALS
Arlington County					0
Charles County					0
City of Alexandria					0
City of Fairfax					0
City of Falls Church					0
City of Manassas					0
City of Manassas Park					0
District of Columbia					0
Fairfax County		3			3
Frederick County					0
Loudoun County	23	36	1	4	64
Montgomery County		1			1
Prince George's County				1	1
Prince William County	1	4	1		6
Regional Total	24	44	2	5	75



GHG Emissions Results – Tracking Progress

How does your jurisdiction track progress toward GHG goal achievement and plan actions?

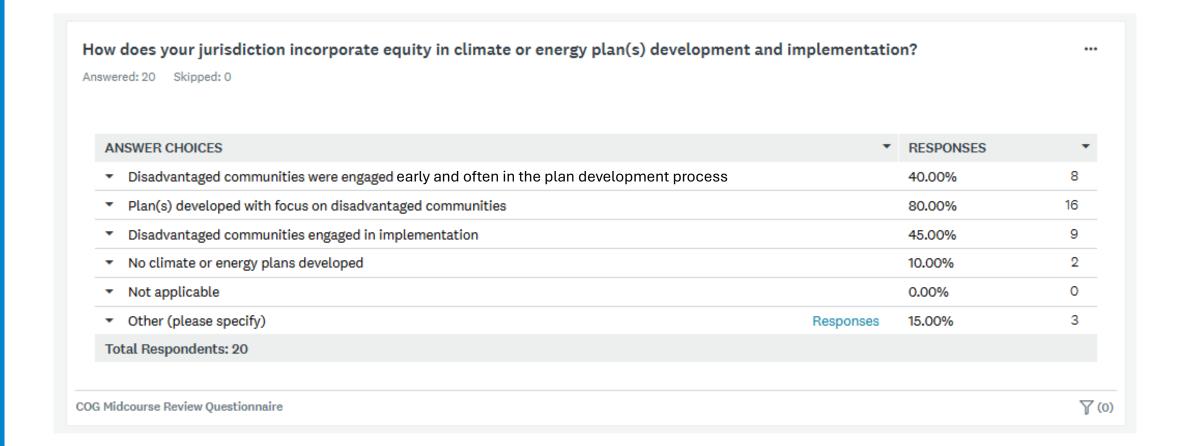
Answered: 20 Skipped: 0





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GHG Emissions Results – Equity in Plans





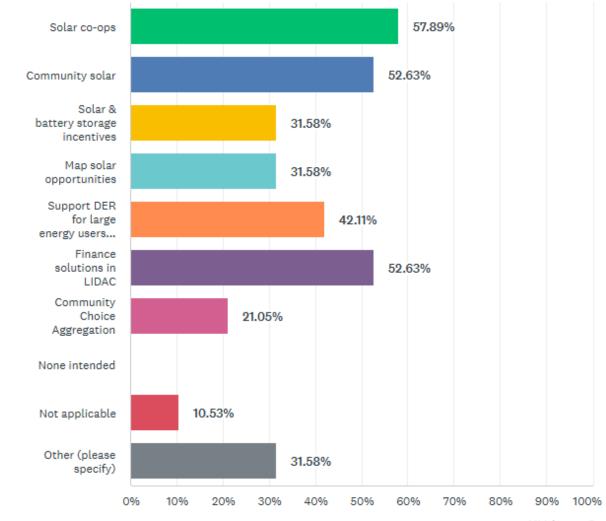
Clean Electricity Results - Government Operations

- Solar Capacity = 28,544.60 kW capacity
- Battery Storage = 0
- District Energy/Microgrids = 10
- Combined Heat and Power (CHP) Systems = 3
- Geothermal Systems = 33
- Power Purchase Agreements (PPA) = 9 jurisdictions have PPAs
- No renewables or distributed energy resources (DER) = 5 jurisdictions confirmed they have none of the above



Clean Electricity Results – Community Wide

How does your jurisdiction accelerate the deployment of renewables and distributed energy resources (DER) community-wide?



Clean Electricity Results - Require or Incentivize Solar

79% of responding local jurisdictions have solar requirements or incentives available to community

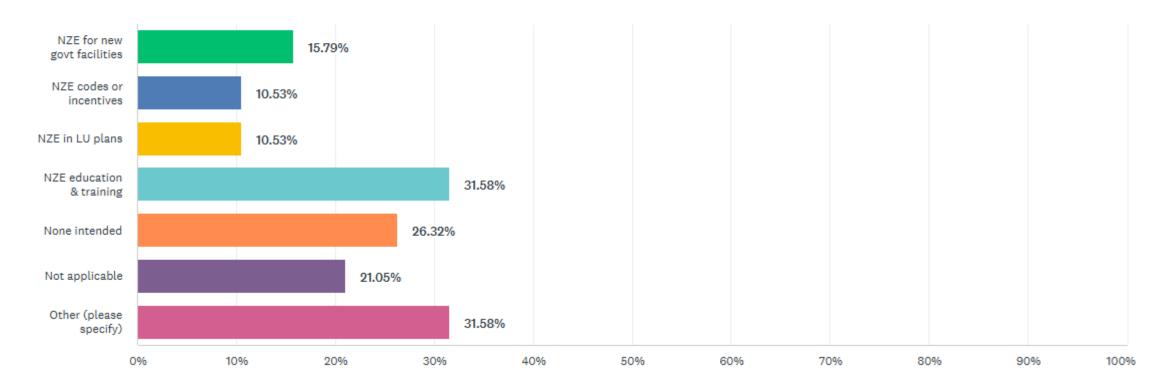
- Alexandria: As part of the planning and zoning process, solar ready is required
- District of Columbia: building code incentive
- Fairfax County: Property tax exemption (5-year length) for value of solar on homes
- Falls Church: Solar-ready new construction is a common Voluntary Concession as part of the Special Exception Process
- Frederick County: Policy requiring solar-ready new construction (for County-owned buildings)
- Loudoun County: <u>Solar energy tax incentive</u>
- Manassas: Comprehensive Plan strategies and Rezoning checklist
- Montgomery County: Solar incorporated into 2021 building codes, solar earns a compliance credit towards BEPS
- Prince George's County: County provides incentives for solar PV installation for residents. FSC First provides incentives for building owners to install solar.
- Rockville: Solar ready building codes



Zero Energy Buildings Results - New Construction

How does your jurisdiction accelerate net zero energy (NZE) building construction through building codes or policies?

Answered: 19 Skipped: 1



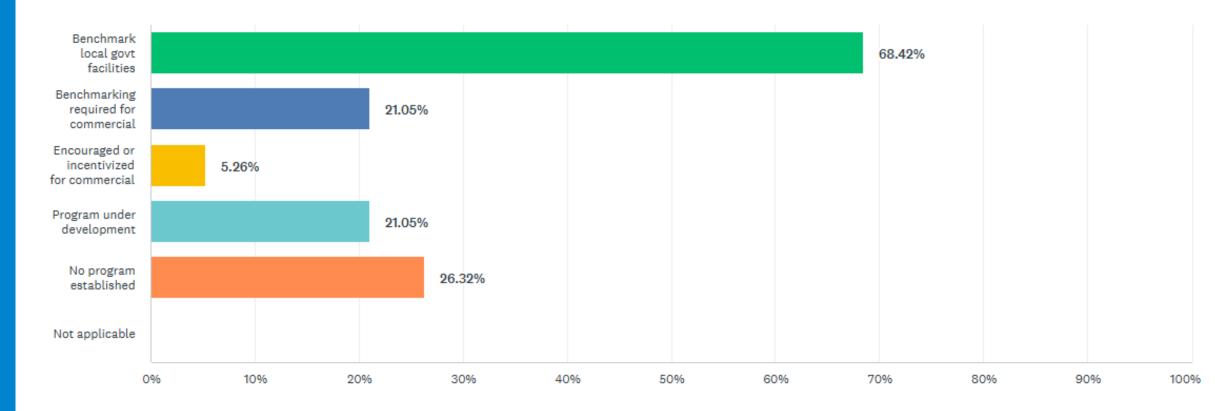
7 local government facilities are net zero – 5 new construction, 2 renovations



Zero Energy Buildings Results - Energy Benchmarking

How does your jurisdiction implement an energy benchmarking program? Select all that apply.

Answered: 19 Skipped: 1





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Zero Energy Buildings Results - Deep Energy Retrofits

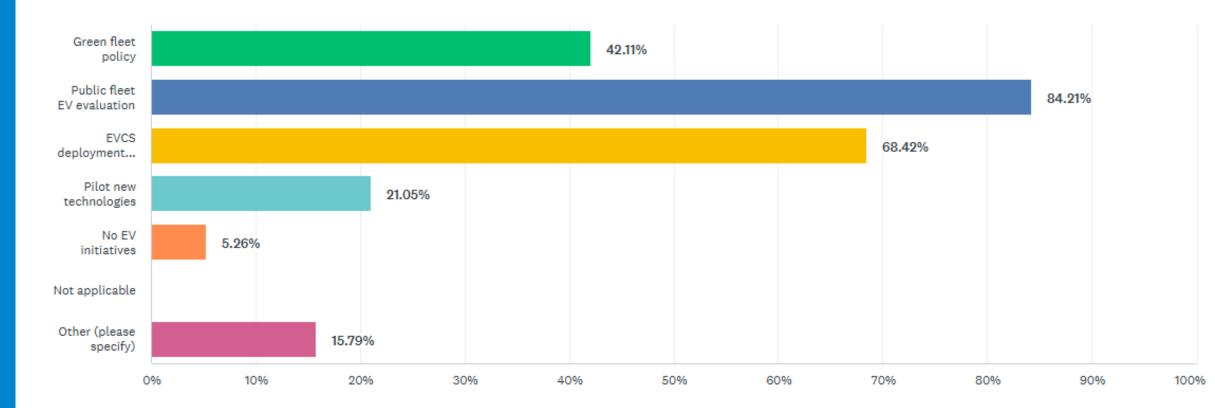
How does your jurisdiction accelerate deep energy building retrofits of existing buildings? Select all that apply.

ANSWER CHOICES ▼	RESPON	SES *
 Provide or promote innovative energy financing solutions for residential or commercial sectors (e.g. green bank, PACE, loan loss reserves, etc.) 	63.16%	12
 Provide or promote state and utility incentives and technical assistance for residential and commercial building energy efficiency retrofits and upgrades 	63.16%	12
 Encourage fuel switching, clean back-up generation, and other building decarbonization strategies for large energy users (e.g. data centers, hospitals, etc.) 	15.79%	3
 Provide or promote programs that implement deep energy improvements in affordable housing and in disadvantaged communities 	63.16%	12
 Energy education campaigns to promote behavioral changes that enhance energy efficiency 	57.89%	11
▼ No deep energy building retrofit initiatives intended	0.00%	0
▼ Not applicable	10.53%	2
▼ Other (please specify) Responses	15.79%	3
Total Respondents: 19		



Zero Emission Vehicles Results - Government Ops

How does your jurisdiction accelerate electric vehicles (EV) and EV charging stations (EVCS) deployment in government op...





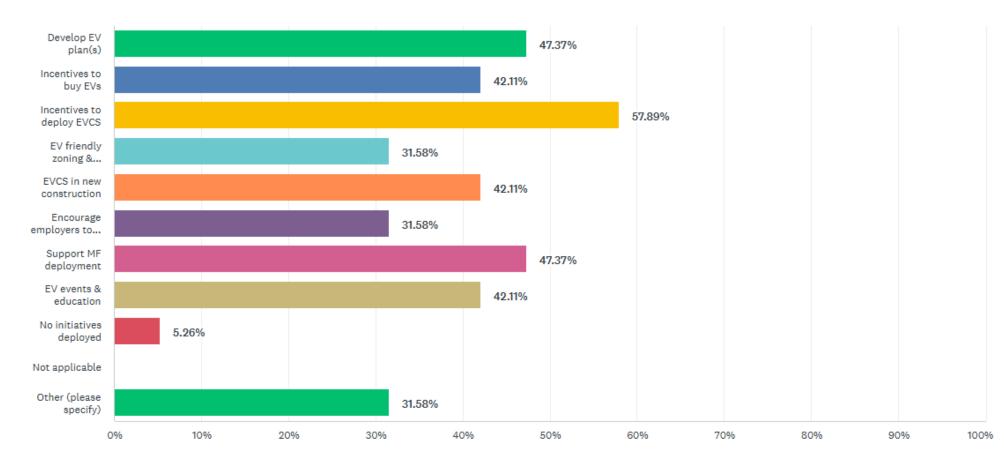
Zero Emission Vehicles Results - Government Fleet

- Battery Electric Vehicles (BEVs) = 569
 - 3% of total fleet vehicles
 - BEV examples Nissan Leaf, Tesla, Ford Mustang Mach-E
- Plug-in Hybrid Electric Vehicles (PHEVs) = 2,168
 - o 11% of total fleet vehicles
 - PHEV examples Chevy Volt, Kia Niro Plug-In Hybrid, Mitsubishi Outlander Plug-in Hybrid
- Hybrid Electric Vehicles (HEVs) = 915
 - o 5% of total fleet vehicles
 - HEV examples Toyota Prius, Honda CR-V Hybrid, Ford Escape HEV
- Total Fleet Vehicles = 19,670



Zero Emission Vehicles Results - Community Wide

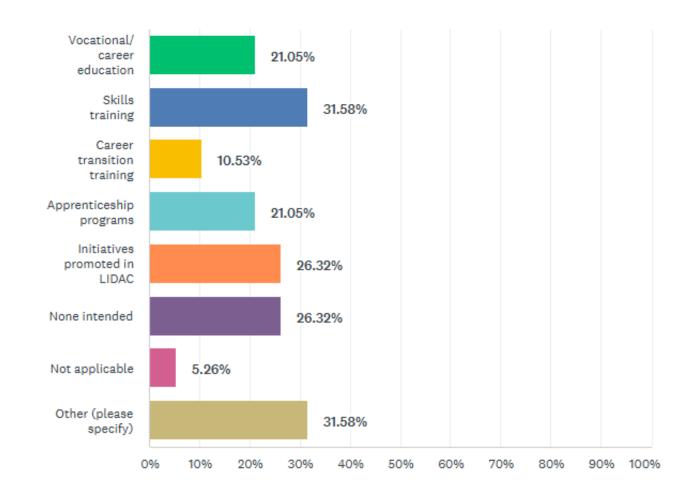
How is your jurisdiction accelerating EV and EVCS deployment community-wide? Select all that apply.





Workforce Development Results

How does your jurisdiction promote or provide climate-related workforce development initiatives? Select all that apply.





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THE FOLLOWING SLIDES INCLUDE THE FULL RESULTS FROM QUESTIONS ASKED IN THE LOCAL GOVERNMENT QUESIONNAIRE



GHG Emissions Highlights

GHG Emission Reduction Goals

- Every responding jurisdiction has or is developing a GHG reduction goal
- 65% of responding jurisdictions have community GHG reduction goals, and 50% have goals for govt ops

GHG Emission Reduction Plans

- Every responding jurisdiction has or is developing a GHG reduction plan
- 60% have both govt ops and community GHG reduction plans

Tracking Progress

- 80% leverage the local GHG inventories developed by COG to track progress toward their GHG emission reduction goals
- 50% track their EERE savings and investments for government operations

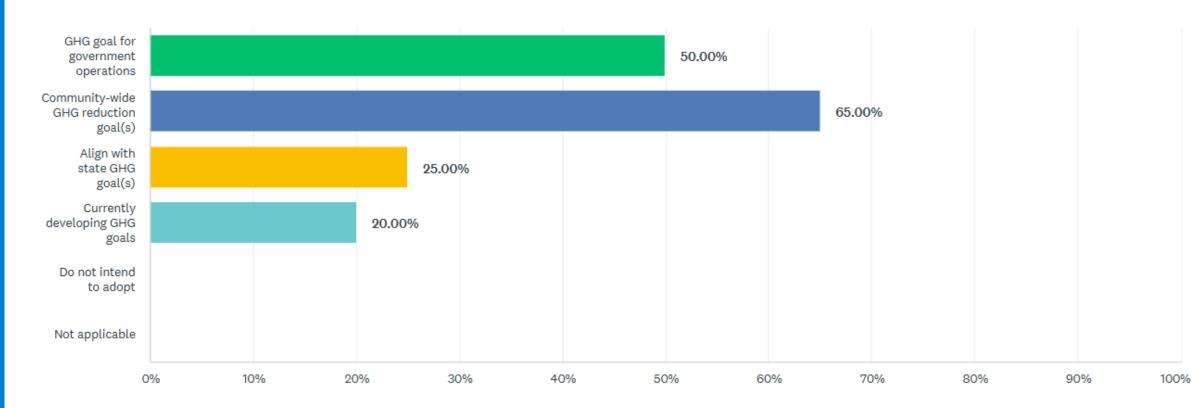
Equity in Climate/Energy Plans

- 80% developed their climate/energy plans with a focus on disadvantaged communities
- 45% are engaging disadvantaged communities in plan implementation



GHG Emissions Results - Goals

What type of GHG emissions reduction goal(s) has your jurisdiction established (ex. 50% GHG emissions reduction by 2030)...

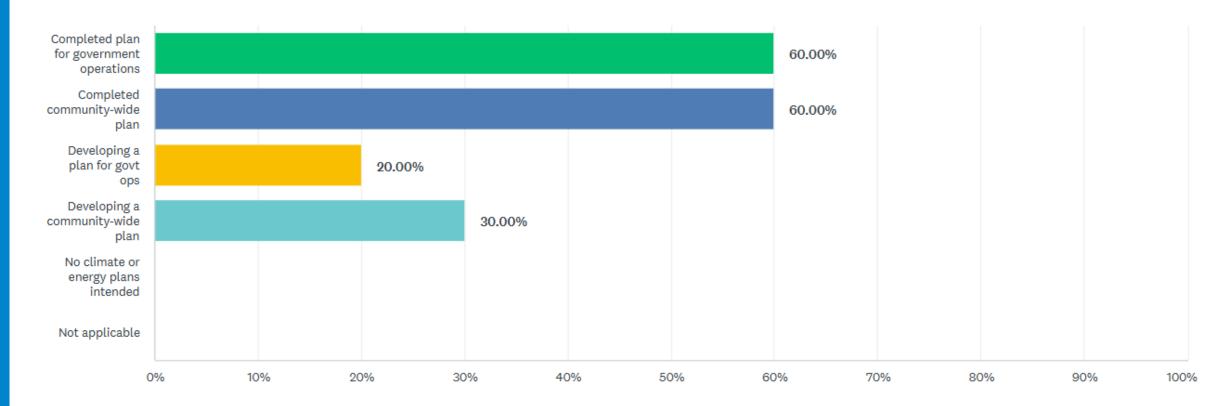




GHG Emissions Results - Climate/Energy Plans

What type of climate or energy plan(s) supporting GHG emission reduction has your jurisdiction established?

Answered: 20 Skipped: 0



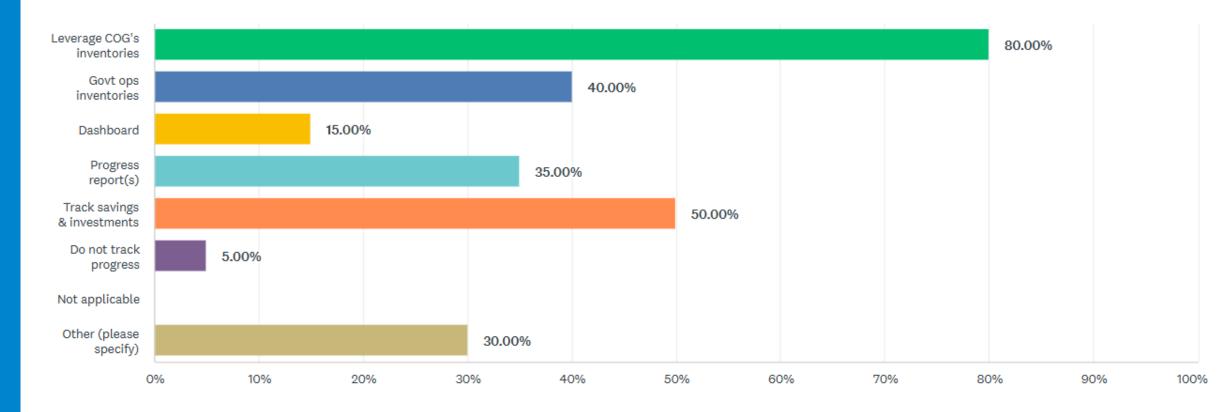


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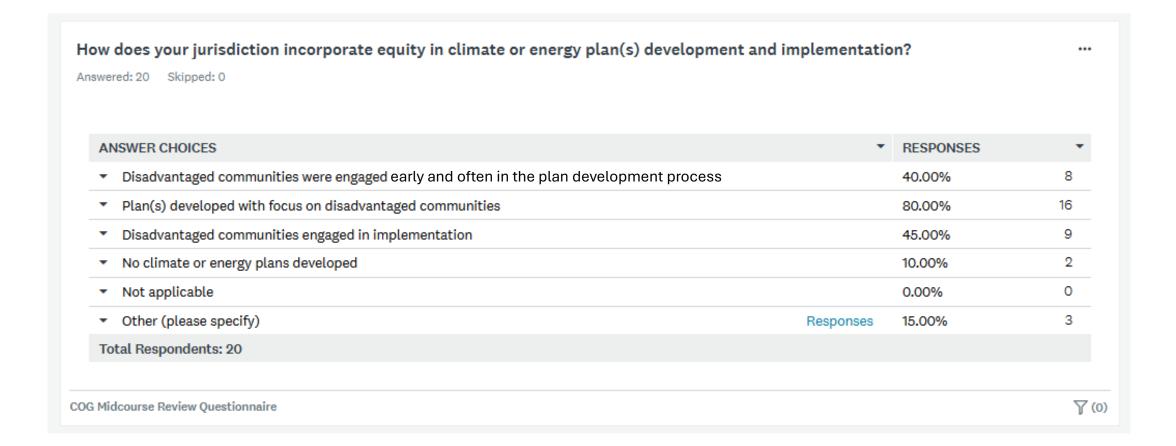
Answered: 20 Skipped: 0





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GHG Emissions Results – Equity in Plans





Clean Electricity Highlights

Government Operations Initiatives

- Solar Capacity = 28,544.60 kW capacity
- District Energy/Microgrids = 10
- Combined Heat and Power (CHP) Systems = 3
- Geothermal Systems = 33
- Power Purchase Agreements (PPA) = 9 jurisdictions have PPAs

Community Wide Initiatives

- 57% of responding jurisdictions provide or promote solar co-ops
- 52% provide or promote community solar
- 52% provide or promote finance solutions in disadvantaged communities

Require or Incentivize Solar

79% have solar requirements or incentives available to community



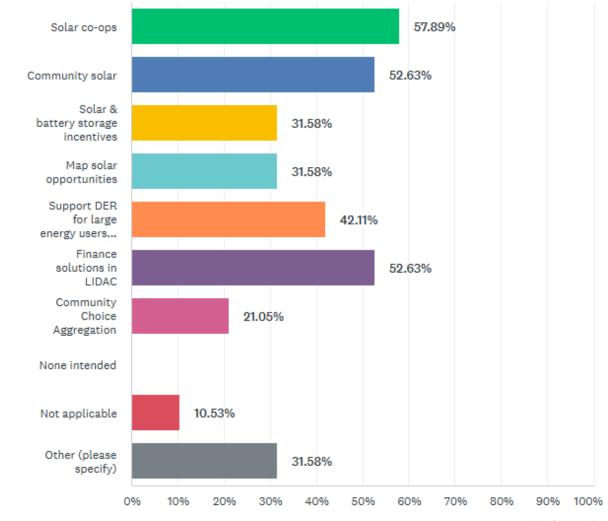
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Zero Energy Buildings Highlights

Zero Energy New Construction

- 32% provide or promote education and training on new and advanced green construction standards
- 7 local government facilities are net zero 5 new construction, 2 renovations

Energy Benchmarking

- 68% conduct energy benchmarking and reporting for local government facilities
- 26% require or encourage commercial energy benchmarking

Deep Energy Retrofits

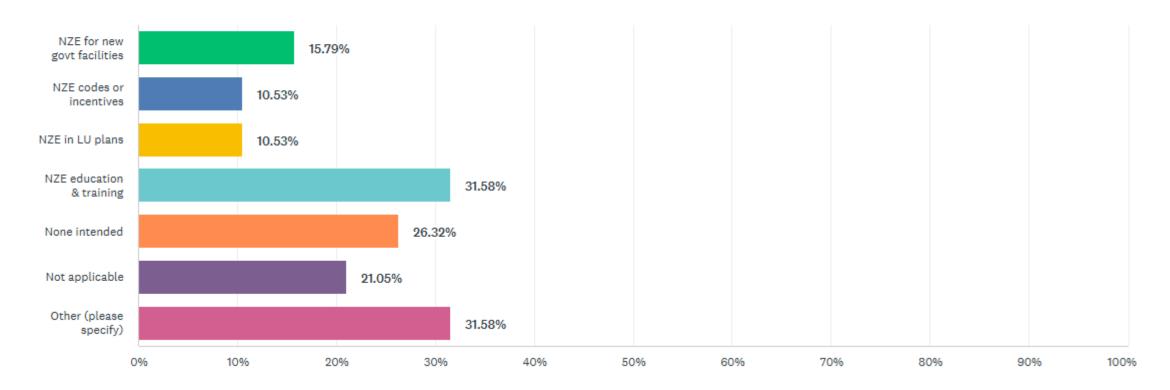
- 63% provide or promote innovative energy financing solutions, such as Commercial PACE and green banks
- 63% promote state and utility energy efficiency incentives and technical assistance
- 63% provide or promote programs that implement deep energy improvements in affordable housing and disadvantaged communities
- 58% have energy education campaigns to promote behavioral changes that enhance energy efficiency



Zero Energy Buildings Results - New Construction

How does your jurisdiction accelerate net zero energy (NZE) building construction through building codes or policies?

Answered: 19 Skipped: 1



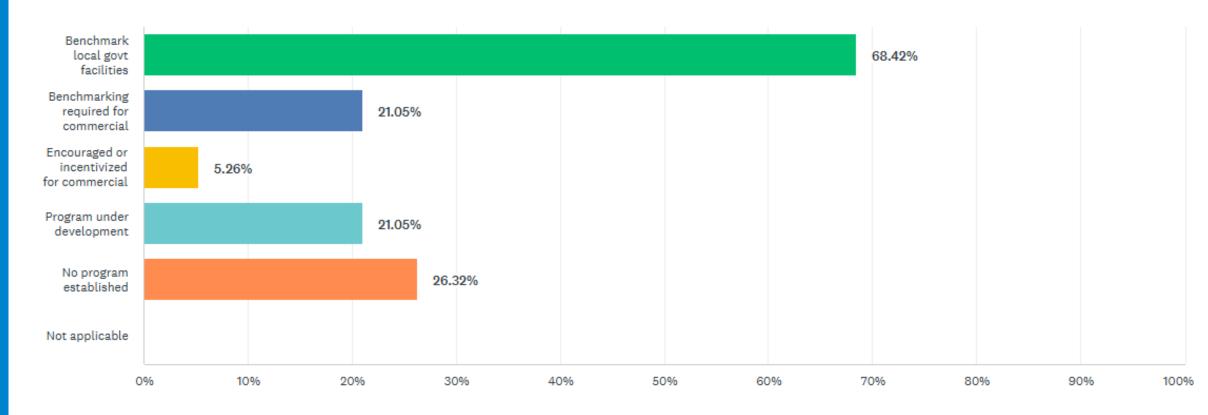
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 Provide or promote state and utility incentives and technical assistance for residential and commercial building energy efficiency retrofits and upgrades 	63.16%	12
 Encourage fuel switching, clean back-up generation, and other building decarbonization strategies for large energy users (e.g. data centers, hospitals, etc.) 	15.79%	3
 Provide or promote programs that implement deep energy improvements in affordable housing and in disadvantaged communities 	63.16%	12
 Energy education campaigns to promote behavioral changes that enhance energy efficiency 	57.89%	11
▼ No deep energy building retrofit initiatives intended	0.00%	0
▼ Not applicable	10.53%	2
▼ Other (please specify) Responses	15.79%	3
Total Respondents: 19		



Zero Emission Vehicles Highlights

Government Operations Initiatives

- 84% have evaluated their public fleet for opportunities to electrify
- 68% have developed an EV charger deployment strategy for public facilities, garages, and refueling facilities

Government Fleet

- 14% of local government fleet vehicles are Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs)
- 5% of local government fleet vehicles Hybrid Electric Vehicles (HEVs)

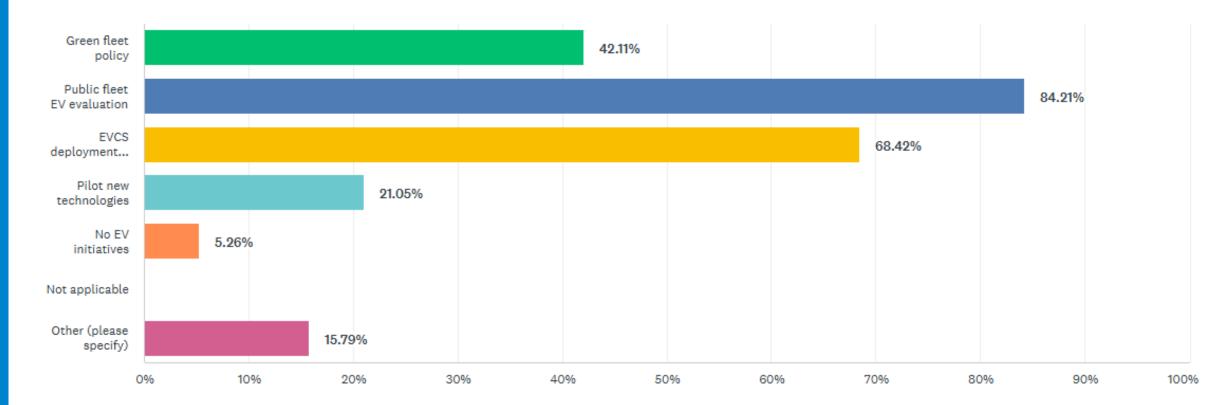
Community Wide Initiatives

- 58% provide or promote incentives for residents and businesses to deploy EV chargers
- 47% have developed an EV plan for community deployment
- 47% support multi-family housing in identifying and overcoming challenges (such as technical and financial challenges) to EV charging for residents and their guests



Zero Emission Vehicles Results - Government Ops

How does your jurisdiction accelerate electric vehicles (EV) and EV charging stations (EVCS) deployment in government op...





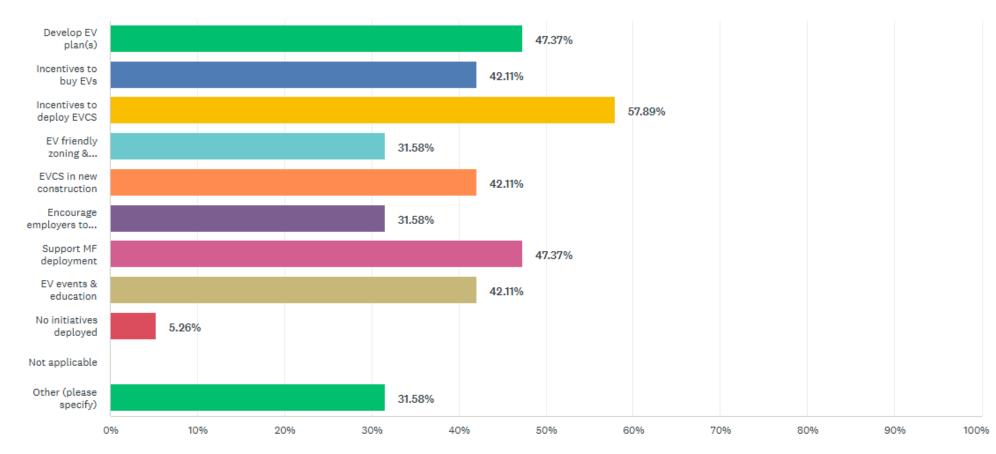
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Zero Emission Vehicles Results - Community Wide

How is your jurisdiction accelerating EV and EVCS deployment community-wide? Select all that apply.





Mode Shift and Travel Behavior Highlights

VMT Reduction - Plans and Policies

- 79% promote design supporting walking and biking within activity centers and near high-capacity transit
- 79% implement complete streets policies or roadway design improvements that make walking and biking safer
- 74% promote development of additional housing units within activity centers and near highcapacity transit
- 74% are working to expand the region's trail network to increase access to opportunities and activities via non-motorized travel

VMT Reduction – Encourage and Incentivize

- 84% provide teleworking opportunities for local jurisdiction employees
- 58% provide transit benefits for local jurisdiction employees

"First and Last Mile" Connectivity

- 74% focused on improving bike and walk access to high-capacity transit stations
- 53% provide or promote micromobility options, including expanding shared bike, e-bike, and scooter programs



Mode Shift/Travel Behavior Results - VMT Reduction

How does your jurisdiction support reduction in vehicle trips & vehicle miles traveled (VMT) through its plans & policies?

ANSWER CHOICES ▼	RESPON	SES *
 Local land use policies or plans promote development of additional housing units within activity centers & near high-capacity transit (i.e. Metrorail, commuter rail, light rail, streetcar, & bus rapid transit) 	73.68%	14
▼ Local land use policies or plans promote design that supports walking & biking within activity centers & near high-capacity transit	78.95%	15
 Implement complete streets policies or roadway design improvements that make walking & biking safer (i.e. adding bike pathways on the road, expanding sidewalks, improving crosswalks, etc.) 	78.95%	15
 Expand the region's trail network to increase access to opportunities & activities via non-motorized travel 	73.68%	14
▼ Implement reduced parking minimums in zoning within activity centers & near high-capacity transit	26.32%	5
▼ Discontinue free parking at employment sites within activity centers & near high-capacity transit stations	5.26%	1
▼ No VMT reduction plans or policies intended	15.79%	3
▼ Not applicable	10.53%	2
▼ Other (please specify) Responses	10.53%	2
Total Respondents: 19		



Mode Shift/Travel Behavior Results - VMT Reduction

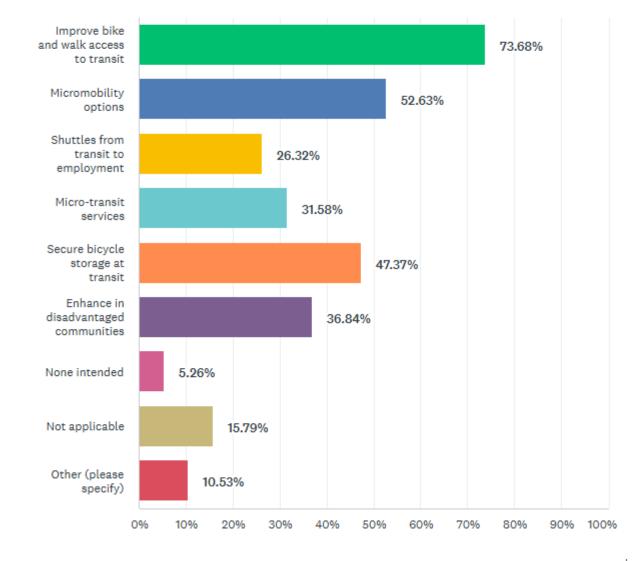
How does your jurisdiction encourage and incentivize reduction in vehicle trips and vehicle miles traveled (VMT) reduction?...

ANSWER CHOICES	•	RESPONSES	•
 Provide or promote carpool and vanpool opportunities 		47.37%	9
 Provide or promote incentives for ride sharing, such as HOV-3 free lanes 		36.84%	7
 Provide or promote incentives for purchasing e-bikes 		15.79%	3
 Provide teleworking opportunities for local jurisdiction employees 		84.21%	16
 Encourage private sector employers to offer teleworking opportunities 		15.79%	3
 Provide transit benefits for local jurisdiction employees 		57.89%	11
 Promote transit benefits programs for private sector employees 		42.11%	8
▼ Provide or promote ride matching		31.58%	6
 No VMT reduction education or incentives intended 		10.53%	2
▼ Not applicable		10.53%	2
▼ Other (please specify)	Responses	10.53%	2
Total Respondents: 19			



Mode Shift/ Travel Behavior Results – First and Last Mile

How does your jurisdiction improve "first and last mile" connections to transit trips?



Zero Waste Highlights

Organics and Composting

- 68% have food composting drop off site(s)
- 58% have a residential curbside organics recycling program

Reduce Solid Waste

- 95% conduct waste education campaigns to promote behavioral changes that encourages waste reduction and diversion at the source
- 58% have adopted recycling requirements for businesses
- 58% have expanded recycling infrastructure in the community and at events

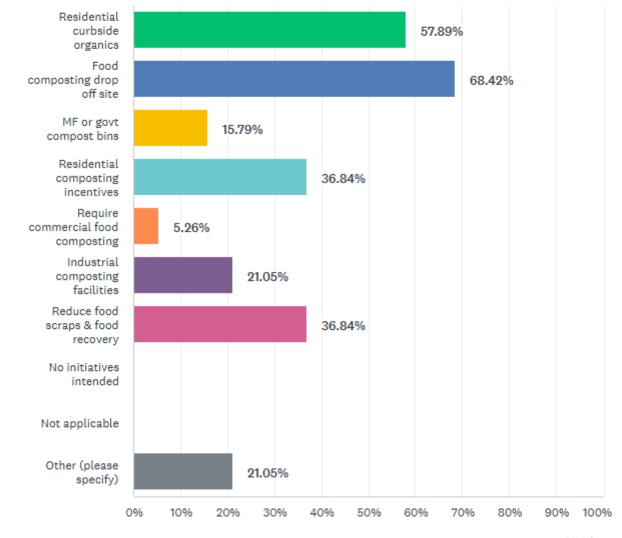
Circularity

- 44% provide or promote exchange programs, reuse, and sharing opportunities (such as tool sharing)
- 44% provide of promote repair and restoration services (such as fix-it-fairs)



Zero Waste Results – Organics and Composting

How does your jurisdiction enhance organics collection and composting? Select all that apply.



Zero Waste Results - Reduce Solid Waste

How does your jurisdiction reduce solid waste? Select all that apply.

Answered: 19 Skipped: 1

ANSWER CHOICES	•	RESPONS	ES T
 Develop a zero waste plan, policies, or initiatives 		31.58%	6
▼ Single-use plastic and polystyrene ban(s)		47.37%	9
 Provide free recycling bins to residents 		73.68%	14
 Adopt recycling requirements for businesses 		57.89%	11
▼ Invest in waste collection systems that increase waste reduction, reuse/recovery, and recycling		36.84%	7
▼ Expand recycling infrastructure in the community and at events		57.89%	11
▼ Improve waste collection services in disadvantaged communities		21.05%	4
 Conduct waste education campaigns to promote behavioral changes that encourage waste reduction and diversion at the source. 		94.74%	18
▼ No solid waste reduction initiatives intended		0.00%	0
▼ Not applicable		0.00%	0
▼ Other (please specify)	s	15.79%	3
Total Respondents: 19			

Total Respondents: 19



Zero Waste Results – Circularity

How does your jurisdiction support building a market for circularity? Select all that apply.

ANSWER CHOICES	•	RESPONSES	•
 Implement strategies and good practices for circular consumption in government operations 		22.22%	4
 Provide or promote exchange programs, reuse, and sharing opportunities (such as tool sharing) 		44.44%	8
▼ Provide or promote repair and restoration services (such as fix-it fairs)		44.44%	8
 Incentivize markets for second-hand products and upcycling 		16.67%	3
▼ No circular economy initiatives intended		16.67%	3
▼ Other (please specify)	ses	27.78%	5
Total Respondents: 18			



Sequestration Highlights

Policies and Practices

- 63% have adopted a jurisdiction wide tree canopy goal
- 58% have adopted or enhanced local ordinances to increase tree conservation during land development process

Public Lands

- 84% strategically planting trees to improve water quality and flood control
- 63% maintain or improve community initiatives supporting tree management or planting
- 63% have targeted tree planting on public land to reduce heat island in disadvantaged communities

Private Lands

52% provide or promote local tree planting and protection incentives



Sequestration Results – Policies and Practices

How does your jurisdiction enhance its capacity to retain carbon stored in existing trees and forests through tree conservation policies and practices? Select all that apply.

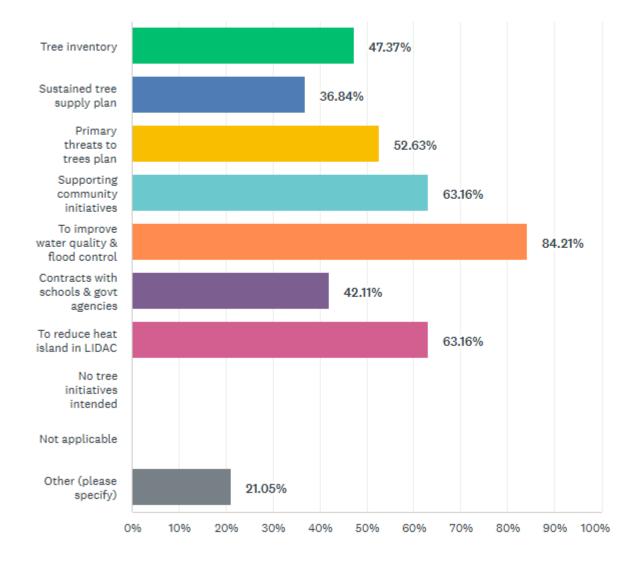
ANSWER CHOICES	•	RESPONS	ES 🕶
▼ Adopt a jurisdiction wide tree canopy goal		63.16%	12
▼ Identify smaller scale canopy goals for watersheds, census blocks, or major categories of land use		21.05%	4
▼ Embed desired tree and forest conservation outcomes within comprehensive land use policies and plans		42.11%	8
▼ Adopt or enhance local ordinances to increase tree conservation during land development processes		57.89%	11
▼ Define the mechanism, metrics and timeline required to report progress on tree conservation goals and programs		36.84%	7
▼ No tree conservation policies and practices intended		0.00%	0
▼ Not applicable		0.00%	0
▼ Other (please specify) Response	38	36.84%	7
Total Respondents: 19			



Sequestration Results – Public Lands

How does your jurisdiction strategically protect, maintain, and plant trees on publicly owned lands? Select all that apply.

Answered: 19 Skipped: 1



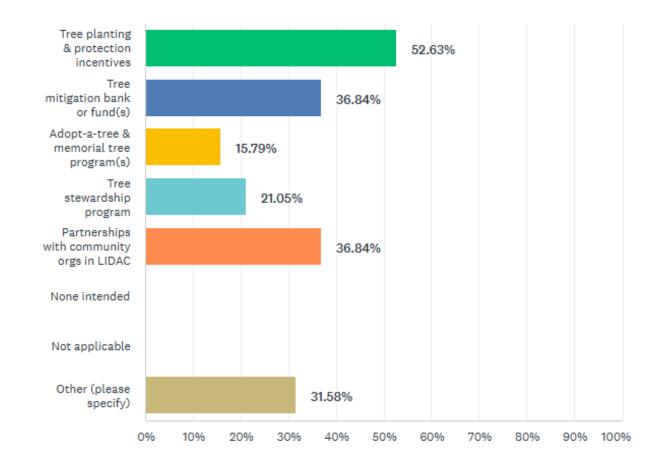
LIDAC = Disadvantaged Communities



Sequestration Results – Private Lands

How does your jurisdiction strategically protect, maintain, and plant new trees on private land? Select all that apply.

Answered: 19 Skipped: 1



LIDAC = Disadvantaged Communities

