



**pennsylvania**

GREENGOV COUNCIL

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**Mark Hand, Director**  
**Matt Reis, Assistant Director**

# GreenGov Council

The **GreenGov Council** is chaired by the Secretaries of the Department of General Services (DGS), Department of Environmental Protection (DEP) and the Department of Conservation & Natural Resources (DCNR):

**Secretary Curt Topper,  
DGS**



**Secretary Patrick McDonnell,  
DEP**



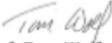
**Secretary Cindy Adams Dunn,  
DCNR**



# Executive Order 2019-01

**"Commonwealth  
Leadership in  
Addressing Climate  
Change and Promoting  
Energy Conservation  
and Sustainable  
Governance"**

**Executive Order**  
Commonwealth of Pennsylvania  
Governor's Office

<b>Subject:</b> Commonwealth Leadership in Addressing Climate Change and Promoting Energy Conservation and Sustainable Governance	<b>Number:</b> 2019-01
 <b>By Direction of:</b> Tom Wolf, Governor	<b>Date:</b> January 8, 2019

WHEREAS, the Constitution of Pennsylvania protects the Commonwealth's citizens' rights to life, liberty, possessing and protecting property, and happiness. Further, the Constitution of Pennsylvania and various other laws also preserve the Commonwealth's citizens' right to clean air, pure water, and the preservation of the natural, scenic, historic and aesthetic values of the environment; and

WHEREAS, the Commonwealth government has long protected, valued, and recognized these rights, specifically under Executive Orders: 1973-9 Environmental Protection by State Agencies; 1980-3 Life Cycle Costing; 1998-1 Governor's Green Government Council; 2002-8 Governor's Interagency Task Force on Energy; and 2004-12 Energy Management and Conservation in Commonwealth Facilities; and

WHEREAS, climate change impacts in Pennsylvania are real and continue to put Pennsylvanians at risk: in recent years, extreme weather and natural disasters have become more frequent and more intense. Like many areas of the United States, Pennsylvania is expected to experience higher temperatures, changes in precipitation, and more frequent extreme weather events and flooding because of climate change in the coming decades; and

WHEREAS, the Commonwealth is committed to further reducing its net greenhouse gas emissions which, left unchecked, would create a high risk of irreversible, widespread, severe climate impacts in the Commonwealth and beyond; and

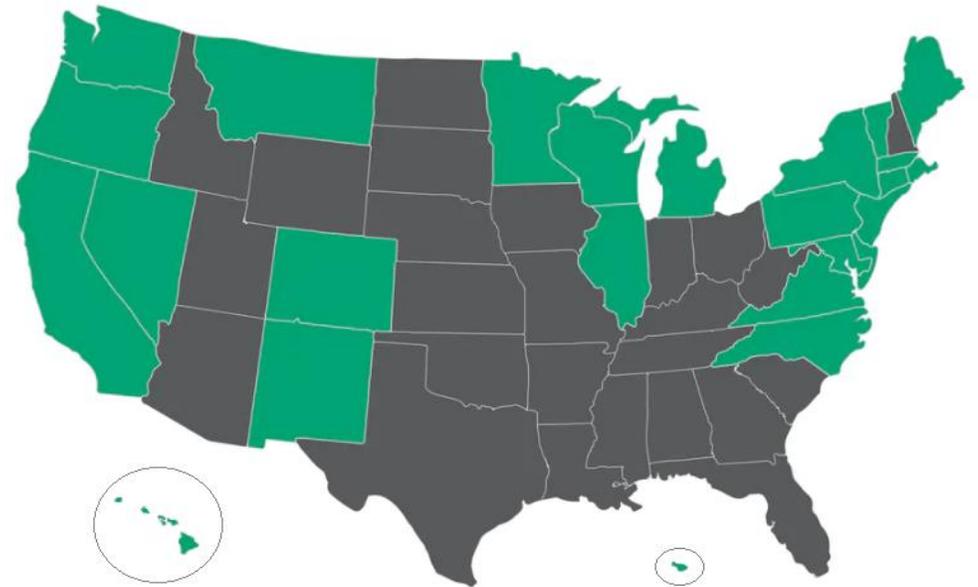
WHEREAS, as a major energy provider, Pennsylvania can take steps to continue to reduce emissions in the power sector, increase reliance on clean energy and improved energy efficiency, and continue reductions of potent greenhouse gasses such as methane; and

WHEREAS, as a major transportation hub, Pennsylvania can take steps to increase reliance on low-carbon transportation solutions, and reduce emissions from the transportation fleet; and

## Climate Goal

Executive Order 2019-01 establishes the goal to strive to achieve a **26% reduction of net greenhouse gas emissions statewide by 2025**, and an 80% reduction of net greenhouse gas emissions by 2050 (from 2005 levels)

- In April 2019, Governor Wolf joined the U.S. Climate Alliance:  
<https://www.usclimatealliance.org>
- The U.S. Climate Alliance now has **25 Governor signatories** agreeing to meet climate reduction goals, track and report progress, and accelerate green policies



# Commonwealth Agency Goals

## Reduce

- Overall energy consumption by 3% per year, and 21% by 2025 from 2017 levels;

## Replace

- 25% of the state passenger fleet with Battery Electric Vehicles and Plug-In Hybrid Electric Vehicles by 2025;

## Procure

- Renewable energy to offset at least 40% of the Commonwealth's annual electricity, and/or directly purchase renewable power generation sited within PA;

## Build

- New buildings, major renovations, build to suit leased buildings to high performance building standards.

## GreenGov Council Mission

**“Encouraging incorporation of environmentally sustainable practices into the Commonwealth’s policy, planning, operations, procurement, and regulatory functions”**



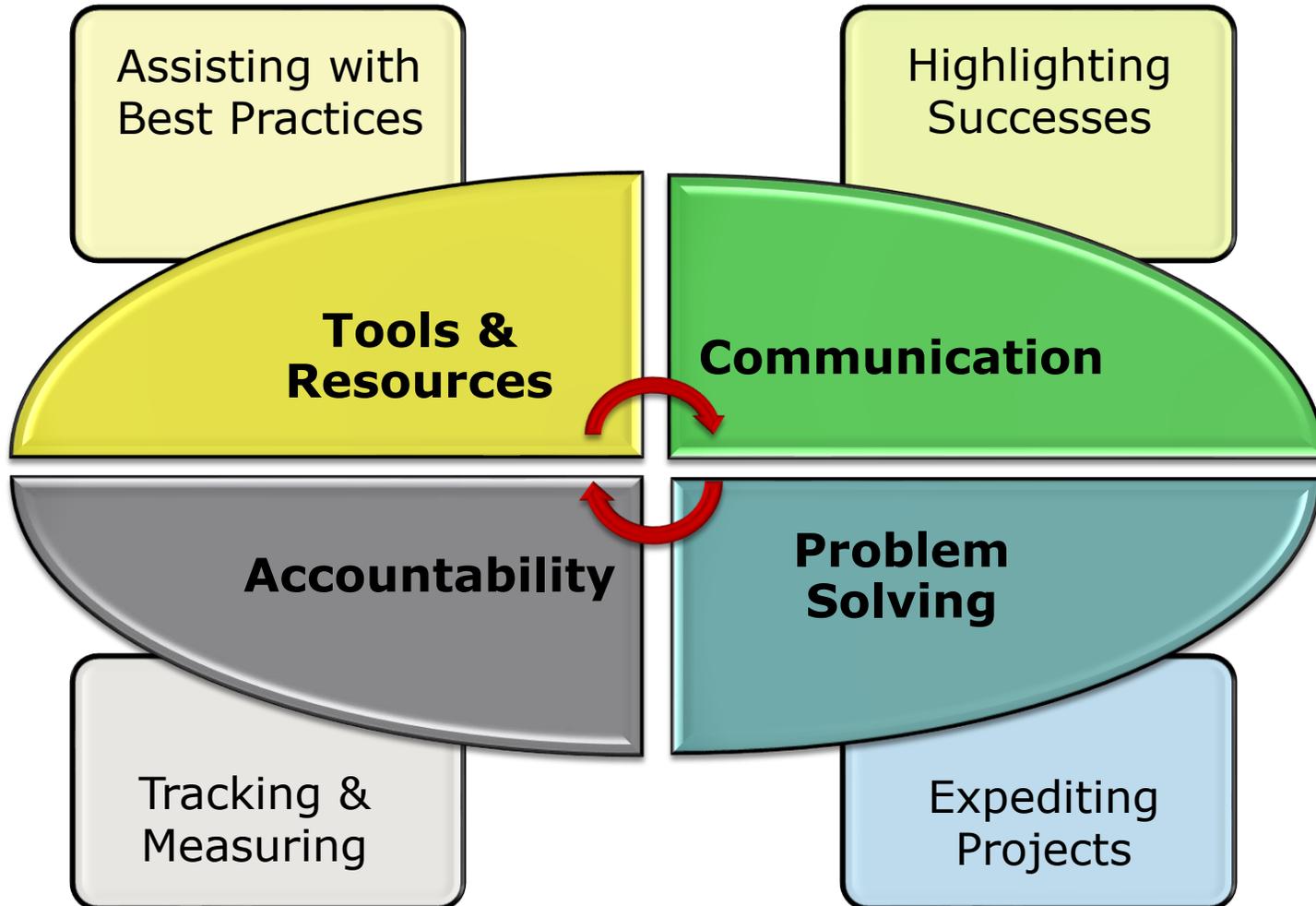
- **Collaborate to Develop** Best Practice models within energy-consuming business areas
- **Continuously Improve** efficiency and performance within state agencies and governmental operations
- **Identify Saving Opportunities** through benchmarking within all program areas
- **Administer and Track** a GreenGov Certification Program

## Commonwealth Agency Responsibilities

***"Incorporation of Environmentally Sustainable Practices into Policy, Planning, Operations, Procurement, and Regulatory Functions"***

- **Work Collaboratively** to create best practice models for energy conservation and management
- **Develop Policies** to achieve the Commonwealth's performance goals
- **Seek to Implement** cost-effective conservation, sustainability, and efficiency strategies
- **Complete & Submit** a GreenGov Agency Certification Checklist annually

# GreenGov Program - Working with Agencies



***"Collaboration  
for  
Sustainability"***

## Open Forum Question & Answer



# Commonwealth Agency Goals

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# Energy Reduction – 3% Annually



FACILITIES  
ENGINEERING  
INSTITUTE

## Commonwealth Energy Consumption - FY 2017/2018 - FY 2018/2019 Reduction

Known Electric Meters	Known Nat. Gas & Steam Meters	State Reporting Agency	Normalized Use (MMBtu)	FY 2017 Baseline MMBtus	FY 2018 Current MMBtus	Percentage Change	Metric Tons CO2 Reduction	Known Meter Count	Percent of Meters Reported
220	70	Dept of Corrections		669,213	655,073	-2.1%	1,352	290	58%
47	29	Dept of General Services		598,249	588,601	-1.6%	1,082	76	75%
191	657	Dept of Military and Veterans Affairs		446,876	434,087	-2.9%	530	848	82%
71	17	Dept of Human Services		346,091	318,019	-8.1%	1,558	88	63%
3,245	141	Dept of Transportation		269,549	260,334	-3.4%	619	3,386	75%
1,876	45	Dept of Conservation and Natural Resources		80,593	80,108	-0.6%	84	1,921	62%
7	3	Dept of Labor and Industry		65,085	64,572	-0.8%	65	10	80%
1,051	79	PA State Police		42,364	41,164	-2.8%	100	1,130	5%
80	18	PA Fish and Boat Commission		31,110	30,847	-0.8%	(53)	98	68%
145	12	PA Historical and Museum Commission		28,147	27,506	-2.3%	106	157	64%
7	5	PA Emergency Management Agency		25,026	25,320	1.2%	(65)	12	50%
113	7	Dept of Environmental Protection		20,362	21,228	4.3%	(77)	120	71%
5	2	Dept of Revenue		12,340	11,547	-6.4%	64	7	71%
224	10	PA Game Commission		10,139	10,279	1.4%	(42)	234	58%
22	1	Dept of Health		9,475	9,778	3.2%	(88)	23	30%
10	5	Dept of Agriculture		1,141	1,092	-4.3%	7	15	40%
<b>7,314</b>	<b>1,101</b>			<b>2,655,761</b>	<b>2,579,554</b>	<b>-2.9%</b>	<b>5,242</b>	<b>8,415</b>	<b>61%</b>

# Transportation – 25% EV Fleet by 2025

## Commonwealth Agency Electric Vehicle Fleet & Charging Stations (as of 11/30/2019, rolling annual report)

Description	Count	Equipment Type
Battery Electric Vehicles (BEVs)	6	Chevrolet Bolt, Ford Focus
Plug-In Hybrid Electric Vehicles (PHEVs)	47	Chevrolet Volt, Chrysler Pacifica, Ford Fusion
Owned & Operated Charging Stations	18	Level 2 Stations (240V)
25% Electric Vehicle Goal (by 2025)	990	Battery Electric Vehicles (BEVs) Plug-In Hybrid Electric Vehicles (PHEVs)

## Transportation - Benchmarking

- **Benchmark Performance** through vehicle miles traveled, fuel consumption, and estimated carbon emissions annually
- **Evaluate Opportunities** for the reduction of vehicle miles traveled and incorporate new technology where appropriate

**Commonwealth Agency Vehicle Fleet\* - Counts & Consumption**  
(as of 11/30/2019, rolling annual report)

Vehicle Classification	Total Vehicle Count	Vehicle Miles Traveled (VMT)	Fuel Consumption (Gallons)	Average Miles per Gallon (MPG)	Carbon Emissions (Pounds)
All (Classes 1-8)	20,477	233,281,997	19,177,412	12.16	402,917,426
Passenger** (Class 1-2)	3960	54,106,130	2,176,315	24.86	42,742,827

\* PA Turnpike fleet not included

\* Rental vehicle & personal vehicle use not included

\*\* Law enforcement vehicles & pickup trucks not included

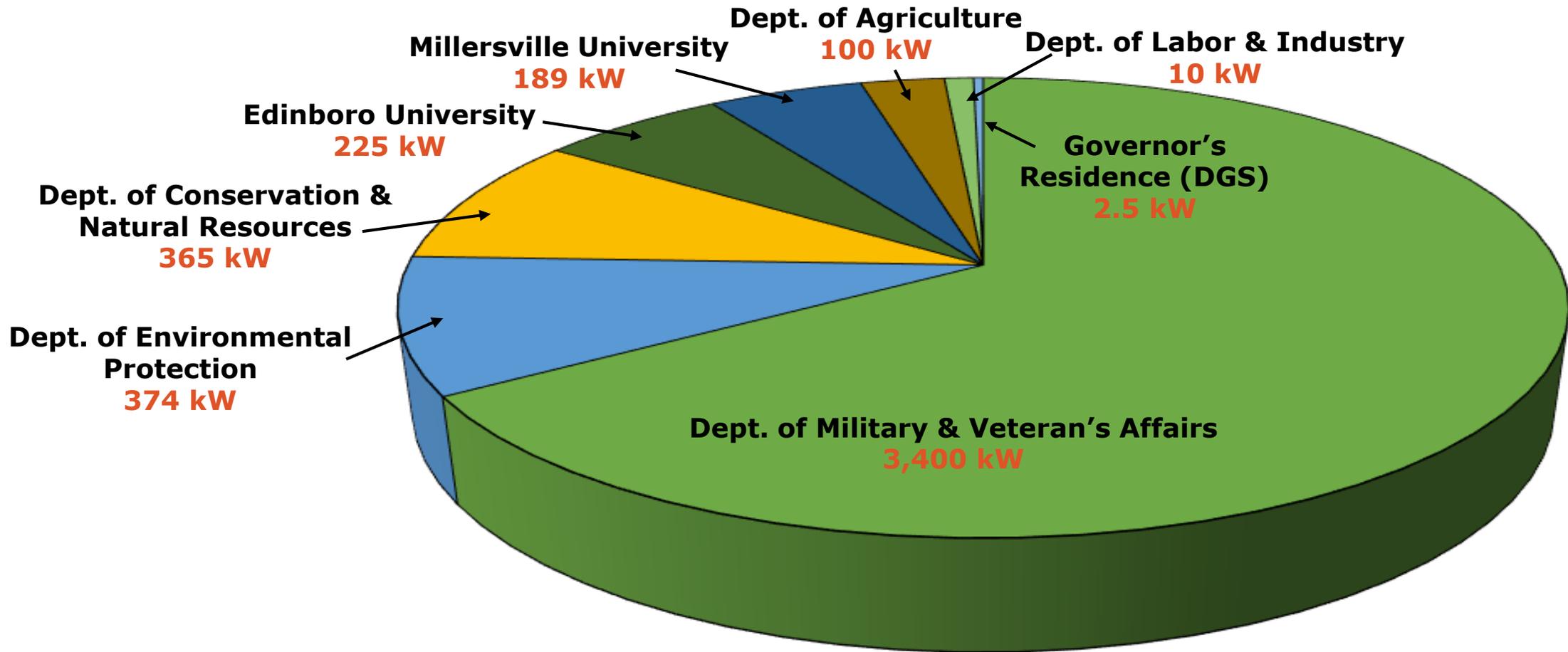
# Renewable Energy – Procure 40% Annually



Partner Name	Annual Green Power Usage (kWh)	GP % of Total Electricity Use*	Industry	Green Power Resources
1. Google Inc.	5,921,710,873	107%	Technology & Telecom	Biogas, Solar, Wind
2. Microsoft Corporation	5,335,585,000	100%	Technology & Telecom	Solar, Wind
3. Intel Corporation	3,897,829,084	101%	Technology & Telecom	Geothermal, Solar, Wind
34. Ahold USA	358,748,135	20%	Retail	Solar, Wind
35. Commonwealth of Pennsylvania	353,978,000	44%	Govt. (State)	Various
36. The Boeing Company	346,402,639	16%	Industrial Goods & Srvcs.	Biomass, Small-hydro, Solar, Wind
37. City of Austin, TX	333,805,639	100%	Govt. (Local, Municipal)	Wind



# Renewable Energy - Existing Solar Installations



**Total Capacity: 4,665.5 kW**

# High Performance Buildings – 10% Efficiency Gain



## Commonwealth-Owned High Performance Building Delivery Projects in Construction & Planned

Number	Agency	Project	Location	Project Description	Green Standard	Square Footage	Anticipated Delivery	Value
1	Department of Conservation & Natural Resources	Construct New Visitor Center and Office	Hickory Run State Park, Carbon County	Construct new combined visitor center and office for visitor contact, campground check-in, general park administration, visitor interpretive programming and visitor education. Building to include LEED Certification.	LEED Certification	13,300	Construct 2020	\$6.53 M
2	Game Commission	Construct Replacement Regional Office Facility	South-Central Regional Office, Huntingdon County	Demolish existing facility and construct energy-efficient replacement utilizing high performance building envelope and geothermal mechanical systems.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	TBD	Design 2020 Construct 2021	\$3.30 M
3	Department of Military & Veterans Affairs	Construct New Police Station Facility	Fort Indiantown Gap, Lebanon County	Construct new facility utilizing high performance building envelope and systems. Project includes; central alarm systems, holding cell, arms vault, evidence room, locker rooms, security fencing and stand-by generator.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	6,000	Design 2020 Construct 2021	\$2.85 M
4	Department of Conservation & Natural Resources	Construct New Resource Management Center	Delaware State Forest, Pike County	Construct new office and storage buildings utilizing high performance building envelope and systems. Building to include LEED Certification.	LEED Certification	16,000	Design 2020 Construct 2022	\$7.00 M
5	Department of Conservation & Natural Resources	Construct New Park Office	Hills Creek State Park, Tioga County	Construct new park office for visitor contact, general park administration, visitor interpretive programming and education. Building to include PV solar array and LEED Certification.	LEED Certification	6,000	Design 2020 Construct 2022	\$4.00 M
6	Department of Conservation & Natural Resources	Construct New Park Office	Marsh Creek State Park, Chester County	Construct new park office for visitor contact, general park administration, visitor interpretive programming and education. Building to include PV solar array and LEED Certification.	LEED Certification	TBD	Design 2020 Construct 2022	\$2.00 M
7	State-Related Higher Education School	Renovation of Historic Vail Hall	Lincoln University, Chester County	Renovate Vail Hall and construct new 14,000 sq. ft. replacement addition for office consolidation utilizing high performance building envelope and systems.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	14,000	Design 2020 Construct 2022	\$12.00 M
8	State System of Higher Education	Renovation of Baron-Forness Library	Edinboro University, Erie County	Renovate Baron-Forness Library including energy-efficient mechanical systems, high performance windows, exterior façade upgrades and security and access controls.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	102,000	Design 2020 Construct 2022	\$13.30 M
9	Independent Higher Education School	Construct New Community Learning Center	Thaddeus Stevens College of Technology, Lancaster County	Construct new facility including; child care center, STEM laboratory, classrooms, fitness area and computer lab. Building to utilize high performance building envelope and systems.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	13,600	Design 2021 Construct 2022	\$4.00 M
10	Department of Conservation & Natural Resources	Construct New Park Office	Keystone State Park, Westmoreland County	Construct new park office for visitor contact, general park administration, visitor interpretive programming and education. Building to utilize high performance envelope & systems.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	TBD	Design 2020 Construct TBD	\$2.00 M
11	Department of Conservation & Natural Resources	Construct New Resource Management Center	Gallitzin State Forest, Cambria County	Construct new office and storage buildings utilizing high performance building envelope and systems. Facility to include net-zero PV solar array and LEED Certification.	LEED Certification	14,800	Design TBD Construct TBD	\$4.80 M

## Commonwealth-Leased High Performance Building Delivery

Number	Agency	Project	Location	Project Description	Green Standard	Square Footage	Anticipated Delivery	Value
1	Department of Human Services & Office of Administration	Build-to-Suit Office Building	7th Street Harrisburg City, Dauphin County	The new space will be built with energy conservation features including LED lighting, water conservation measures, site design to manage glare and heat gain, and use of recycled materials.	10% Reduction over ANSI/ASHRAE/IES Standard 90.1.2016	120,000	Design 2020 Construct 2021	TBD

# Agency Participation - GreenGov Certification Checklist

- **Assessment Tool** to gauge implementation and achievement efforts of performance goals
- **Menu of Measures** and strategies for conservation and sustainability
- **Annual Program** evaluation to align with the Commonwealth fiscal year
- **Tracking Progress** of implementation
- **Sharing Results** with other Agencies and the public

10/10/2019

**PA** pennsylvania  
GREENGOV COUNCIL

**GreenGov Agency Certification Checklist**

Agency Representative Sign-off: \_\_\_\_\_ Agency Executive Sign-off: \_\_\_\_\_

Points Applicable	Points Earned	Score
142	0	0%

**Instructions:**

1. Review each measure and answer based upon the actions of your Agency within the timeframe of July 1, 2018 through the present.
2. As each measure is evaluated, begin with the following preface: "Since July 2018, as an Agency have you...".
3. The Checklist will automatically tally the points earned based upon measures applicable to your Agency.
4. Once completed, save the document with your Agency name and date.
5. Email the completed Checklist to: [RA-GSGreenGov@pa.gov](mailto:RA-GSGreenGov@pa.gov) by **Monday, December 16, 2019**.

**Scoring:**  
Score will be based upon the percentage of "yes" answers to measures that apply to your Agency. For measures that do not apply to your Agency, select "not applicable".  
Measures that are valued at 4\* points are direct initiatives of Executive Order 2019-01.

**Contact GreenGov:**  
Phone: 717-787-4987 Email: [RA-GSGreenGov@pa.gov](mailto:RA-GSGreenGov@pa.gov) Web: [dgs.pa.gov/greengov](http://dgs.pa.gov/greengov)

*Since July 2018, as an Agency have you...*

I Benchmarking and Evaluation							
		Yes	No	N/A	Points Value	Points Earned	
<b>1 Facility Benchmarking</b>							
1 A	Maintained an inventory of all buildings both owned and leased? (This information is also a key component for the move to the DGS TRIRIGA inventory system.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 B	Implemented EnergyCAP (the Commonwealth's utility tracking program) for the capturing of energy bills within your facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 C	Utilized EnergyCAP for the evaluation of utility bills regarding consumption trends, usage spikes, billing anomalies and establishing reduction targets for compliance with Executive Order 2019-01?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 D	Established a plan to incorporate utility bill tracking within Lessee-paid utility leased facilities for energy benchmarking through the use of EnergyCAP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 E	Received Act 129 or other energy conservation or sustainability incentive program rebates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	
1 F	Demonstrated compliance with Executive Order 2019-01 through an overall 3% annual reduction of energy consumption for Fiscal Year 2018-2019?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4*	0	
<b>Points Total</b>						17	0
<b>2 Transportation Benchmarking</b>							
2 A	Utilized vehicle telematic systems to accurately track all consumption and cost figures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	
2 B	Maintained inventory of vehicle units by type, classification, monthly mileage and fuel consumption for the total fleet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
2 C	Identified parking spaces within your facilities for the installation of electric vehicle charging equipment (through partnership with DGS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
2 D	Calculated transportation carbon footprint through the evaluation of total miles traveled through all forms of transportation including multimodal (bus, train, air, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
<b>Points Total</b>						11	0

## Open Forum Question & Answer



# Agency Participation - GreenGov Certification Checklist

- **Assessment Tool** to gauge implementation and achievement efforts of performance goals
- **Menu of Measures** and strategies for conservation and sustainability
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*Since July 2018, as an Agency have you...*

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		Yes	No	N/A	Points Value	Points Earned	
<b>1 Facility Benchmarking</b>							
1 A	Maintained an inventory of all buildings both owned and leased? (This information is also a key component for the move to the DGS TRIRIGA inventory system.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 B	Implemented EnergyCAP (the Commonwealth's utility tracking program) for the capturing of energy bills within your facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 C	Utilized EnergyCAP for the evaluation of utility bills regarding consumption trends, usage spikes, billing anomalies and establishing reduction targets for compliance with Executive Order 2019-01?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 D	Established a plan to incorporate utility bill tracking within Lessee-paid utility leased facilities for energy benchmarking through the use of EnergyCAP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
1 E	Received Act 129 or other energy conservation or sustainability incentive program rebates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	
1 F	Demonstrated compliance with Executive Order 2019-01 through an overall 3% annual reduction of energy consumption for Fiscal Year 2018-2019?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4*	0	
<b>Points Total</b>						17	0
<b>2 Transportation Benchmarking</b>							
2 A	Utilized vehicle telematic systems to accurately track all consumption and cost figures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	
2 B	Maintained inventory of vehicle units by type, classification, monthly mileage and fuel consumption for the total fleet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
2 C	Identified parking spaces within your facilities for the installation of electric vehicle charging equipment (through partnership with DGS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
2 D	Calculated transportation carbon footprint through the evaluation of total miles traveled through all forms of transportation including multimodal (bus, train, air, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	
<b>Points Total</b>						11	0

# GreenGov Agency Certification Checklist Categories

## Benchmarking & Evaluation

- Assessment of key indicators for measuring and tracking sustainability in buildings, transportation, and product procurement

## Buildings & Structures

- Review of facility operations and maintenance improvements and building systems efficiency upgrades

## Transportation

- Review of vehicle fleets for opportunities to improve maintenance intervals and efficiency (i.e. electric and hybrid vehicles)

## Products & Materials

- Review of environmental attributes of products purchased and whether products are being recycled

## Culture

- Review of how an agency is interacting with its employees and the public with regards to sustainable practices, policies, and education

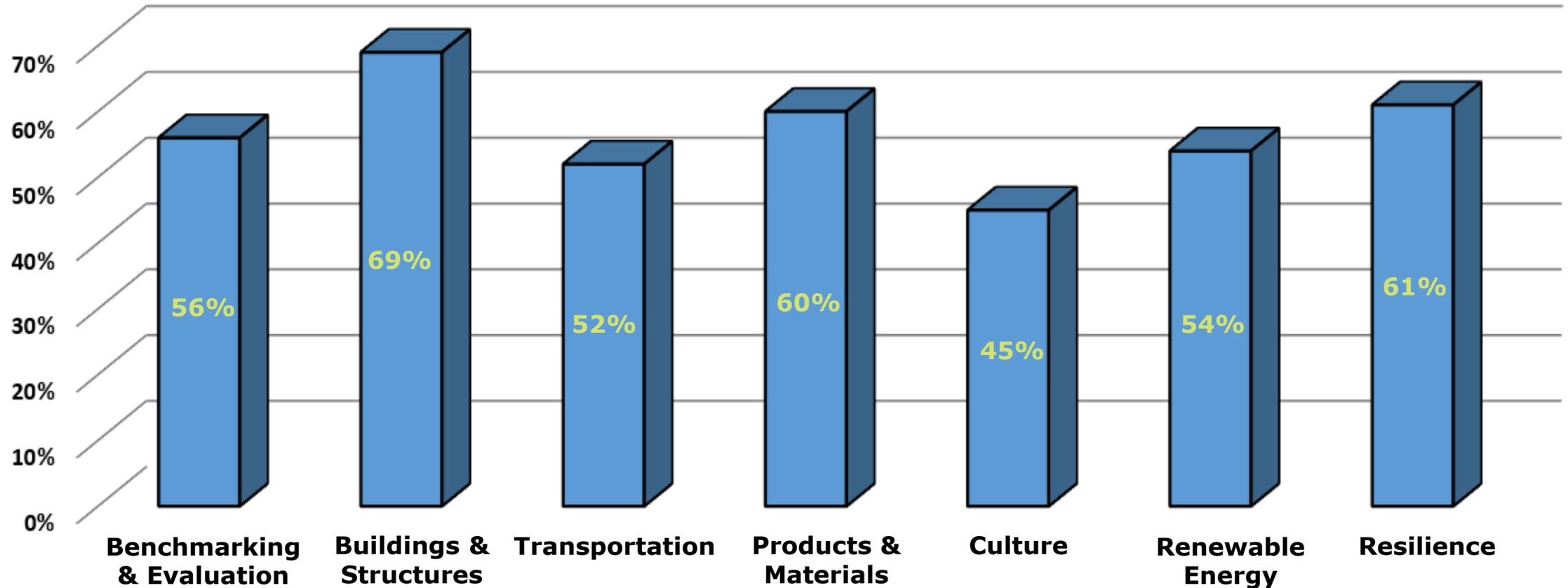
## Renewable Energy

- Review of progress made to purchase or site new renewable energy facilities in the Commonwealth

## Resilience

- Analysis of operations, equipment, policies and practices that support agency preparedness & recovery from incidents such as severe weather impacts

# Average Checklist Scores by Category



Overall Average: 57%

# Agency Checklist – Highest Percentage of “Yes” Answers\*

Average Score	Category	Program Area	Item	Conservation Measure
100%	Transportation	Operations & Maintenance	8 A	Followed recommended maintenance schedules for vehicle service including regular oil and filter changes, tire pressure and rotations, and other preventative measures?
95%	Buildings & Structures	Operations & Maintenance	5 C	Installed light fixture dimmers, occupancy/motion sensors and timers to reduce energy consumption (through partnership with DGS or other)?
	Buildings & Structures	Operations & Maintenance	5 D	Inspected entry doors and windows for proper closing and sealing to reduce heat loss?
93%	Culture	Employee Engagement	13 G	Established or participated in a recycling program?
	Culture	Employee Engagement	13 R	Reduced vehicle miles traveled (VMT) through the use of Skype conferencing and remote classroom training options?
90%	Benchmarking & Evaluation	Transportation Benchmarking	2 B	Maintained inventory of vehicle units by type, classification, monthly mileage and fuel consumption for the total fleet?
	Buildings & Structures	Building Systems Efficiency	6 C	Upgraded 10% or greater of lighting and fixtures to LED?
89%	Buildings & Structures	Operations & Maintenance	5 B	Established maintenance plans and/or contracts for your facilities to ensure peak operations (Ex: General Services Administration Public Building Maintenance Standards 10-2018)?
	Transportation	Vehicle Efficiency	9 C	Selected the most efficient light, medium and heavy-duty vehicle(s) for the operational need or work task?
	Resilience	Buildings & Structures	17 C	Established and/or maintained periodic inspections and testing on back-up generator and UPS units?

\*10 highest scoring measures out of 70 total

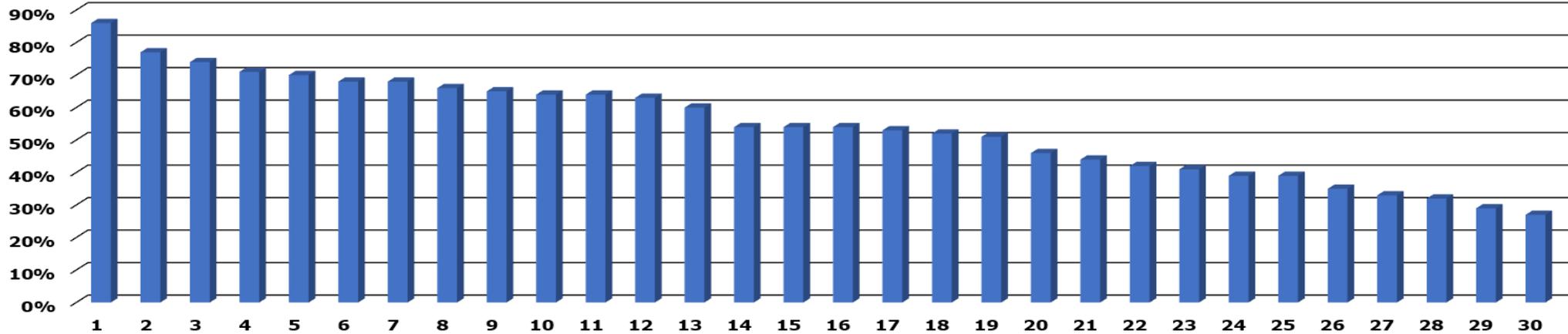
# Agency Checklist – Lowest Percentage of “Yes” Answers\*

Average Score	Category	Program Area	Item	Conservation Measure
23%	Culture	Employee Engagement	13 B	Established a Sustainability Communications Plan for the continued messaging of sustainability policies, practices and initiatives throughout your organization?
17%	Benchmarking & Evaluation	Facility Benchmarking	1 D	Established a plan to incorporate utility bill tracking within Lessor-paid utility leased facilities for energy benchmarking through the use of EnergyCAP?
	Culture	Employee Engagement	13 I	Established or participated in a litter reduction plan, initiative or survey?
14%	Transportation	Vehicle Efficiency	9 D	Installed electric vehicle charging stations as part of an electrified vehicle fleet plan?
13%	Renewable Energy	On-Site Renewables	16 B	Installed large scale renewable energy at facility(s) equal to or greater than the 3 megawatt net metering threshold (through partnership with DGS or other)?
	Resilience	Transportation	18 B	Purchased alternative fuel vehicles and/or alternative fuel technology within your fleet that are not included in the Executive Order, such as CNG, LNG, LPG, hydrogen?
11%	Culture	Employee Engagement	13 H	Established or participated in a recycling program that incorporates organic and food waste materials?
10%	Culture	Employee Engagement	13 C	Established a sustainability awareness training or initiative to raise awareness with staff?
7%	Benchmarking & Evaluation	Transportation Benchmarking	2 D	Calculated transportation carbon footprint through the evaluation of total miles traveled through all forms of transportation including multimodal (bus, train, air, etc.)?
3%	Culture	Employee Engagement	13 J	Established employee awards and/or incentives for participation in sustainability?

\*10 lowest scoring measures out of 70 total

# Agency Overall Checklist Scores – FY 2018-2019

State Agencies	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Department of Banking and Securities	97	142	142	138	123	136	76	134	137	139	135	40	57	140	93	54	75	138	121	52	61	76	44	142	59	138	42	137	87	142	
Department of General Services	83	110	105	98	86	93	52	89	87	89	87	25	34	75	50	29	40	72	62	24	27	32	18	55	23	48	14	44	25	39	
Department of Transportation																															
Dept. of Conservation																															
Pennsylvania State Police																															
PA Emergency Management Agency																															
Dept. of Community and Economic Dev.																															
Department of Corrections																															
Department of Labor and Industry																															
Turpike Commission																															
Dept. of Military and Veterans Affairs																															
Milk Marketing Board																															
Office of General Counsel																															
Department of Human Services																															
Office of State																															
Office of Administration																															
Public Utility Commission																															
Historical and Museum Commission																															
State Fire Commission																															
Department of Education																															
Department of Aging																															
Insurance Department																															
Office of State Inspector General																															
Department of Environmental Protection																															
Department of Drug and Alcohol Prog.																															
Game Commission																															
Office of the Budget																															
Department of Health																															
Department of Revenue																															
Department of Agriculture																															



Highest Score: 86%

Lowest Score: 27%

Average Score: 54%

# GreenGov Program Area Focus Groups

**Utility  
Management**

**Small Agency  
Operations**

**Electric  
Vehicles &  
Charging**

**Green Facility  
Management**

**Construction &  
Leasing Specs**

**Products &  
Materials**

***"Supporting Executive  
Order Goals and  
Agency Performance  
through GreenGov  
Certification"***

# GreenGov Program Area Focus Groups

## GreenGov Program - Focus Group Summary

Small Agency Operations (Sustainability Team)	
Participants in the Small Agency Operations (Sustainability Team) group will be tasked with the development of sustainability policies and business (reduction/consolidation) strategies, such as, those outlined within the GreenGov Agency Certification Checklist. This group may also explore outreach opportunities for employee and public engagement.	Meeting Date Targets: <b>January 16 &amp; June</b>
EV's & EV Charging	
Participants in the EV and EV Charging group will be tasked with assessing agency vehicle fleets and identifying opportunities for electrification. The group may develop plans & specifications for new charging station projects. The group may work on new policy, such as, workplace and home headquartered EV charging policies .	Meeting Date Targets: <b>February 13, July &amp; October</b>
Green Facility Management	
Participants in the Green Facility Management group will be tasked with the development of a facility management manual for the use of all agencies, revision of Management Directive 720.5 to focus on energy conservation and the development of best practices for the scoping and delivery of GESA projects.	Meeting Date Targets: <b>March 9 &amp; August</b>
Products & Materials (Recycling)	
Participants in the Products & Materials (Recycling) group will be tasked with the development of an enhanced standardized recycling plan within owned and leased facilities state-wide that will include employee participation and education components as well as pilot programs. This group may also explore existing green products and materials on state contract, and suggest expansion of products not represented.	Meeting Date Targets: <b>March 26 &amp; September</b>
Utility Management	
Participants in the Utility Management group will develop agency energy portfolios and data management using the EnergyCAP system. The group will be focused on delivering standardized reports for the tracking and benchmarking of utilities, in order to identify new energy and cost savings investment opportunities to share with their executive level staff.	Meeting Date Targets: <b>April 9 &amp; September</b>
Construction & Leasing Specs	
Participants in the Construction & Leasing Specs group will be tasked with the development, evaluation and inclusion of energy-saving specifications, techniques and measurements within Commonwealth construction projects and lease agreements through the sharing of information and collaboration of agencies and private industry.	Meeting Date Targets: <b>April 20 &amp; October</b>

***"GreenGov Program Success through Collaboration and Commitment"***

## Focus Group: Utility Management

- **Tracking Performance** of reduction measures, initiatives & projects (EnergyCAP, ENERGYSTAR, etc.)
- **Identifying Energy-Saving Projects** (Guaranteed Energy Savings Act (GESA))
- **Develop Executive Reporting** for strategic investment in facility performance goals



***"You Can't Manage  
What You Don't  
Measure"***

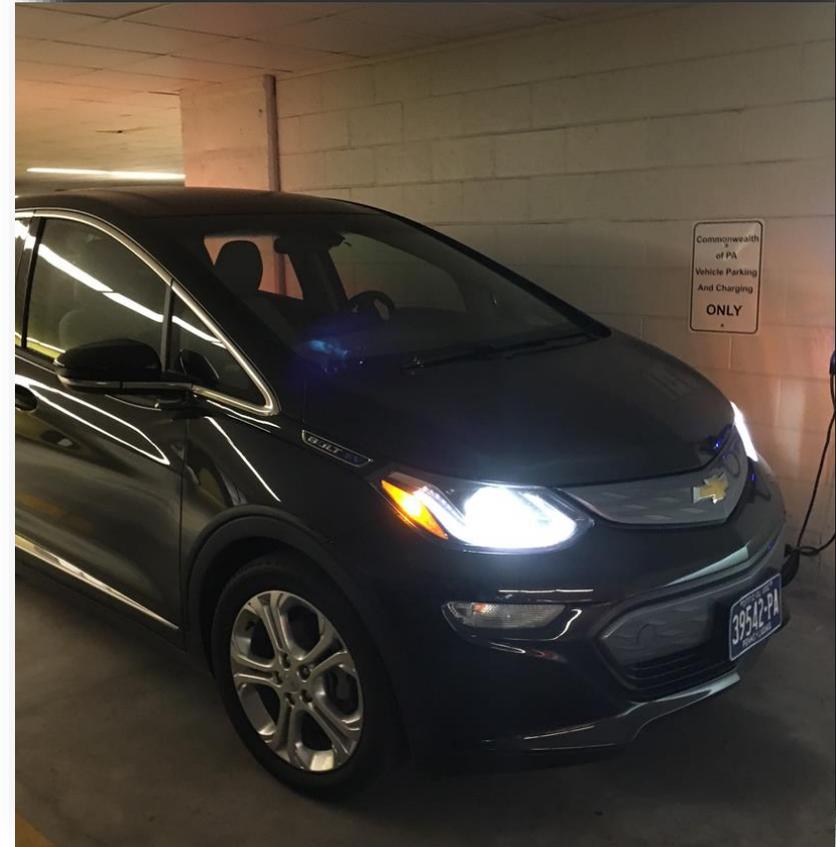
## Focus Group: Small Agency Operations

***"Best Practices to Reduce Energy and Resource Consumption, Realize Savings and Protect the Environment"***

- **Identify Top Conservation Measures** for rollout within agency operations
- **Create Solutions** to conservation measure barriers
- **Develop Policies** to incorporate conservation measures for achievement of performance goals
- **Share Strategies** of conservation measure implantation for the success of all agencies

## Focus Group: Electric Vehicles & Charging

- **Explore Options** for the development of a statewide vehicle charging network
- **Define Project Specifications** for the delivery of facility charging stations
- **Develop Educational Plan** for the benefits, use, charging and service of EVs by employees
- **Collaborative Effort** to achieve 900+ passenger electric vehicles in service by 2025 (25%)



# Focus Group: Green Facility Management

## GUARANTEED ENERGY SAVINGS PROJECTS

10 GESA Projects

Total Project Investment



\$89.9M

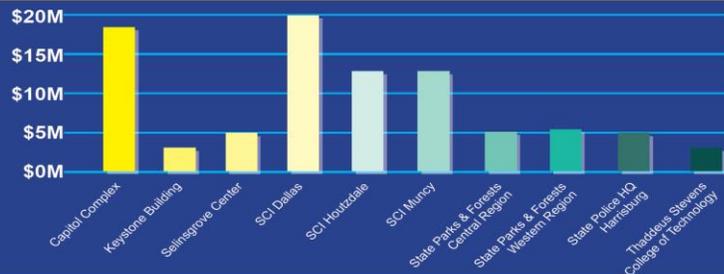
Minimum Annual Savings



\$4.6M



### PROJECT INVESTMENT



### MINIMUM ANNUAL ENERGY SAVINGS EQUIVALENT TO:



More than 3,100  
Cars off the road



More than 37,000  
Trees planted



More than 1,500  
Homes' energy use

***"Striving to manage facilities to high-performance building standards"***

- **Facility Manager Collaboration** for the development of a comprehensive Facility Operations Manual for all agencies
- **Management Directive 720.5 Revisions** to reflect the modernization of energy conservation standards within Commonwealth facilities
- **GESA Project Best Practices** for agency identification, scoping and administration of projects

## Focus Group: Green Construction & Leasing Specs

- **Standardized Construction Specs** to achieve 10% energy savings over ANSI / ASHRAE / IES Standard 90.1.2016
- **Standardized Green Lease Specs** for energy savings developed through agency & lessor partnerships
- **Evaluation and Incorporation** of nationally recognized green facility standards to meet & exceed Executive Order performance goals
- **Information Sharing** of energy saving techniques and programs with outside industry professionals



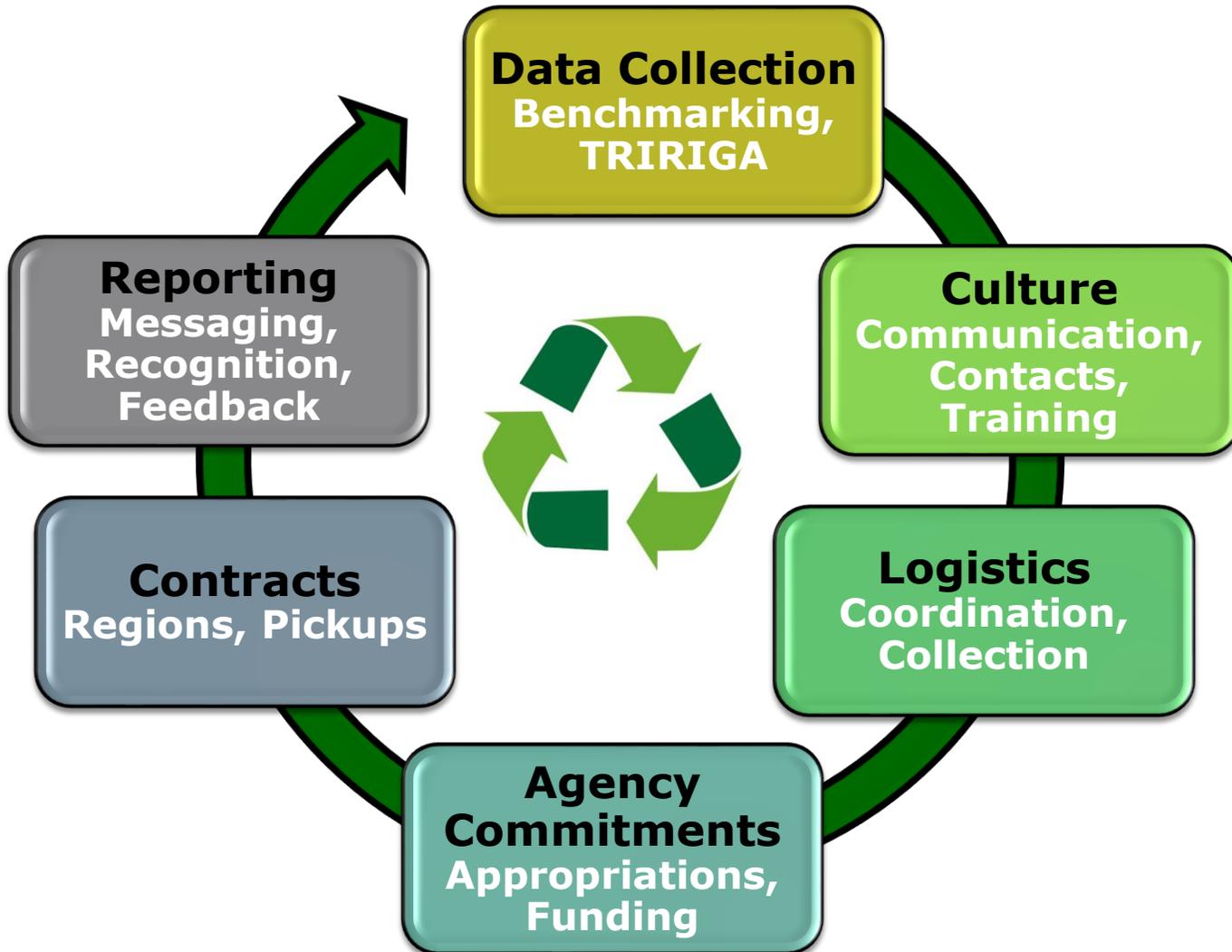
Photo Credit: BuildingToday

## Focus Group: Products & Materials (Procurement)

- **Revise and Modernize** existing recycling policies including Management Directive 205.22 (Commonwealth Recycling)
- **Expand Recycling Operations** to include additional material streams
- **Develop Plans** for employee education and participation in recycling programs
- **Specify Recycled Content** within procurement selections
- **Select Low Environmental Impact** products & materials for agency purchase

***"Environmentally-Preferred Products for the Conservation of Resources"***

# Focus Group: Products & Materials (Recycling)



***"Program Success through Partnership and Commitment"***

## Open Forum Question & Answer



## Public Outreach & Participation

- **Highlighting Agency Successes** through website and media channels
- **Solicitation and Sharing of Ideas** by involving public stakeholders
- **Publishing Results** of the GreenGov Agency Certification Checklists
- **GreenGov Annual Report** to track Executive Order goals



***"Commonwealth  
Agencies Leading  
by Example"***

**Thank You!!**



**pennsylvania**  
GREENGOV COUNCIL

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