

Maryland Commission on Climate Change
Education, Communication, and Outreach Working Group
May 16, 2018
10:30 am to 12:00 pm

Terra Conference Room | MDE
1800 Washington Blvd. | Baltimore, MD 21230

Call-in Number: (605) 475-4000
Access Code: 997763#

Attendees: Kris Hollen, John Kumm, Allison Gost, Grant Samms, Pat Harcourt, Steve Pattison, Bob Hoyt, Donna Balado, Brian Hug, Lisa Nissley, Hannah Brubach

By Phone: Lori Arguelles, Lizelle Espinosa, Sara Luell, Yinka Bode-George,

Agenda

1. Welcome & Introductions (5 minutes)

- Roll Call
- Review of Agenda

2. On Going Projects (10 minutes)

- Metrics for tracking outreach efforts -- <https://goo.gl/forms/Yc6HWs5ZbsjVmEzh2>
- Reports from other working groups (ARWG, MWG)
 - ARWG: The meeting focused on disaster insurance and climate change. ECO Member, Allison Gost, reminded the group to share the [Commission Fact Sheets](#) and fill out the [ECO outreach form](#) whenever reaching out to the public about the Commissions work. Kris Hollen commented that ECO should think about including information on insurance programs as we think about the Annual Report.
 - MWG: The meeting provided for a diverse discussion about natural gas. ECO will follow how this topic fits into the GGRA and Annual Report.

3. Who are our Stakeholders? (15 minutes)

See attached chart - This chart will be used internally for future outreach organization. The chart will be a framework to help ECO ensure we reach all stakeholders. The chart will also help ECO recognize which stakeholders are covered. We will use the topics of interest categories to break down outreach materials and determine the primary message points for different stakeholders. MDE Staff will provide updates on how the chart is being used as we move forward with the GGRA and the Annual Report.

4. Priorities (20 minutes)

- Increase External Awareness of State Climate Change Work
 - Refer back to the discussion above regarding stakeholders.
- Climate Ambassador Program
 - Defining Climate Ambassadors

- Allison, Pat, and Steve provided a short internal document to begin defining Climate ambassadors and Climate champions. The group discussed that while a Climate Ambassador is an individual and a Climate Champion is a business, there is overlap between the two. For example, a Climate Ambassador could work for a Climate Champion business.
- As we move forward, with the Climate Champions Competition, we should think of ways to better recognize the companies in the future.
- Commission Fact Sheets:
<http://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Pages/FactSheets.aspx>
- Recognition of Climate Change Activity Outside State Government

5. Climate Leadership Academy presentation by Daniel Kreeger, Association of Climate Change Officers (30 minutes) - <https://accoonline.org/maryland>

Slides for Dan's presentation are attached: Dan and DNR will work on developing the academy over the next three years. After, the academy will become a tool for the Commission. ECO will continue their dialogue with the Climate Leadership Academy.

6. Wrap Up (5 minutes)

- June Meeting: June 20, 2018, 10:30 am - 12:00 pm
 - **This meeting will be a call.**
- Member Announcements

7. Public Comment (5 minutes) - No public guests, requested to comment.

Comments from the general public can be submitted to the MCCC at climate.change@maryland.gov.

<u>Stakeholders</u>	<u>Sub-groups included in this stakeholder category</u>	<u>Partners</u>	<u>Report/GGRA Topics of Interest and Primary Message Points</u>	<u>How to Reach</u>
Advocates	Non-profits, Faith-based Organizations	Commission Members		
Business	Business Organizations (ex. Chamber of Commerce), Individual Businesses, Sector-based Organizations (ex. Steelworkers Union), Philanthropic	Chamber of Commerce, Businesses related to individual commission/working group members		
Communities	Coastal Communities, Vulnerable/EJ Communities	Non-profits, Office of Communications, BGE, MDE, MDH, DNR, MEA, MSDE		
Decision Makers	Legislators, Local Governments, Policy Makers	DNR, Legislative Members of the MCCC		
General Audience (Broad efforts/catchall category)		State Agencies, Individual Commissioners		



Institutionalizing Climate Change into Decision-Making in Maryland

Advancing Climate Competencies
in Local Government, State Agencies & Infrastructure Sectors

Education, Communication, Outreach Working Group

May 16, 2018

Daniel Kreeger

Executive Director, Association of Climate Change Officers

www.ClimateOfficers.org

Learn. Collaborate. Advance.



ACCO
ASSOCIATION OF CLIMATE CHANGE OFFICERS

Our Background

- A 501(c)(3) nonprofit organization incorporated in 2009 (exempted as of 2012)
- Established the first set of professional competencies for climate change officers through an intensive public comment process
- Developed more than 20 courses covering a broad spectrum of disciplines related to the Core Competencies for Climate Change Officers and professionals leveraging content contributions from nearly 400 experts and members
- Administered the GreenGov Symposium in 2011-2012 on behalf of White House CEQ
- Co-founded the U.S. EPA's Climate Leadership Awards program, including designing 3 of the program's awards categories and establishing evaluation criteria
- Designed and launched Future CCOs, a post-graduate climate fellowship program designed by ACCO members and academic partners with early employers including The Coca-Cola Company, Lockheed Martin, WGL Holdings, City of Las Vegas and Greater Bridgeport Regional Council
- Established an ongoing series of mentoring programs under ACCO's Women's Climate Collaborative initiative
- Provided training to more than 1,000 practitioners in the public and private sectors including several Federal agencies
- Convened more than 5,000 practitioners at industry leading recurring events such as the Climate Strategies Forum, Rising Seas Summit and Operation: Supply Chain

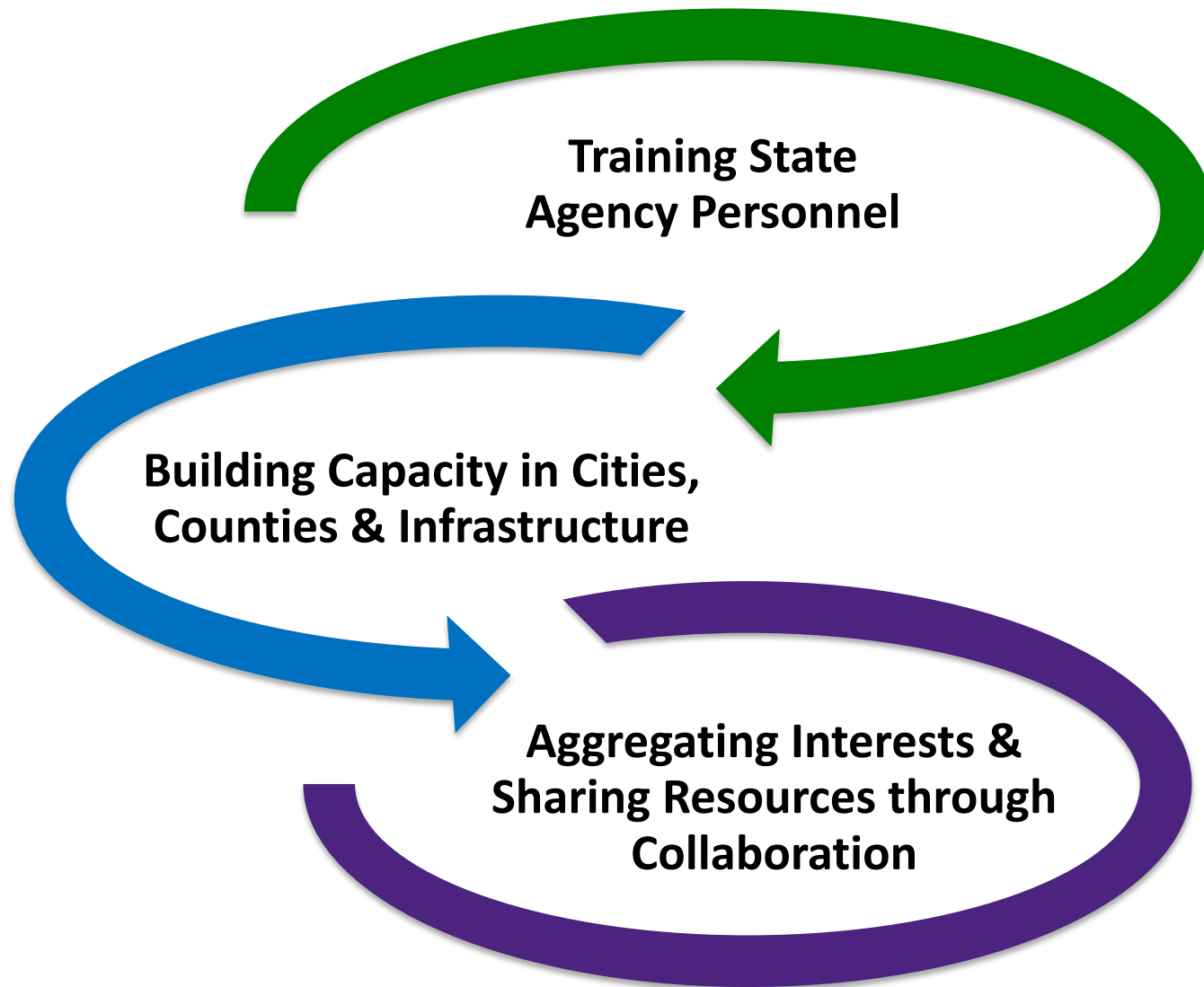


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Building Preparedness Capacity in Maryland

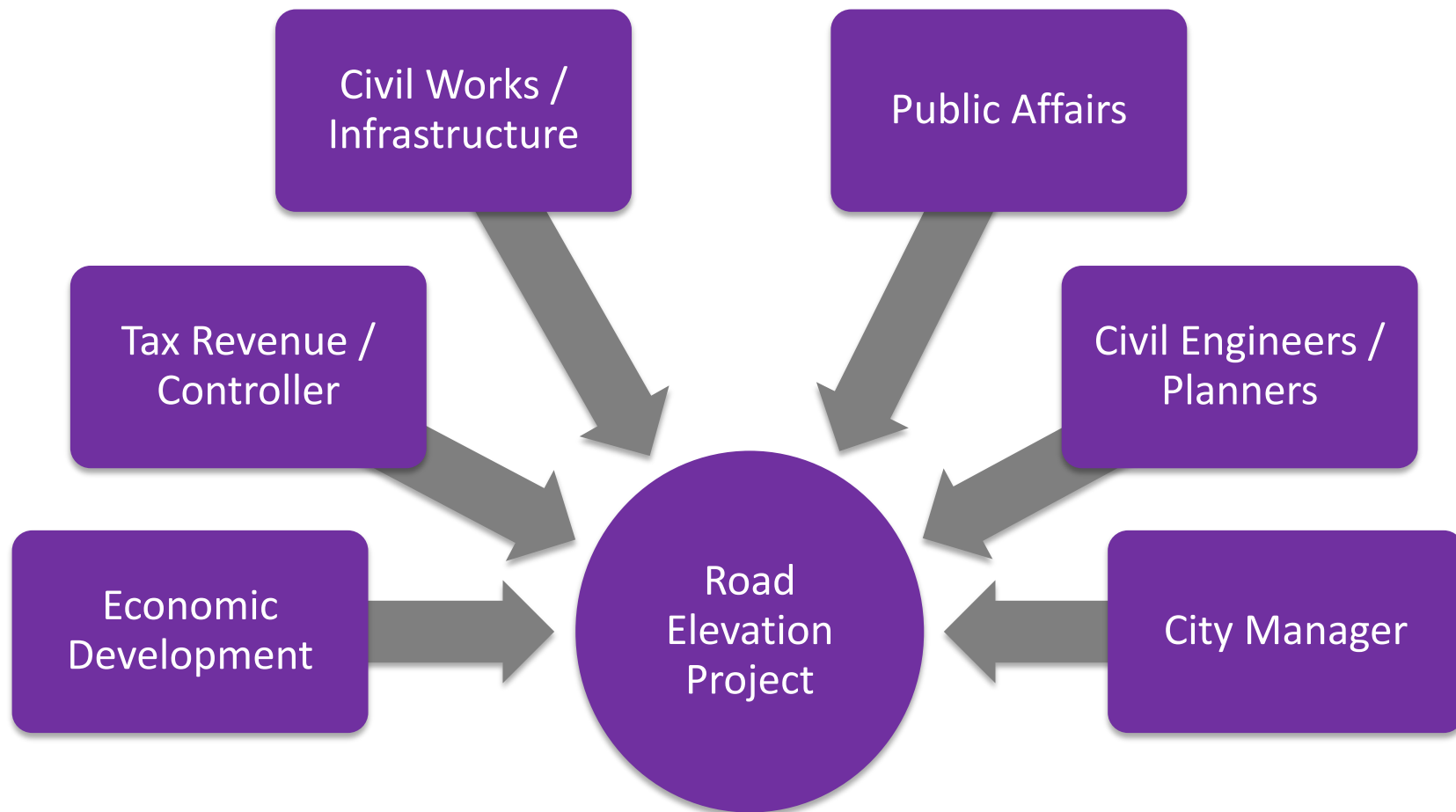


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Sample Road Elevation Project

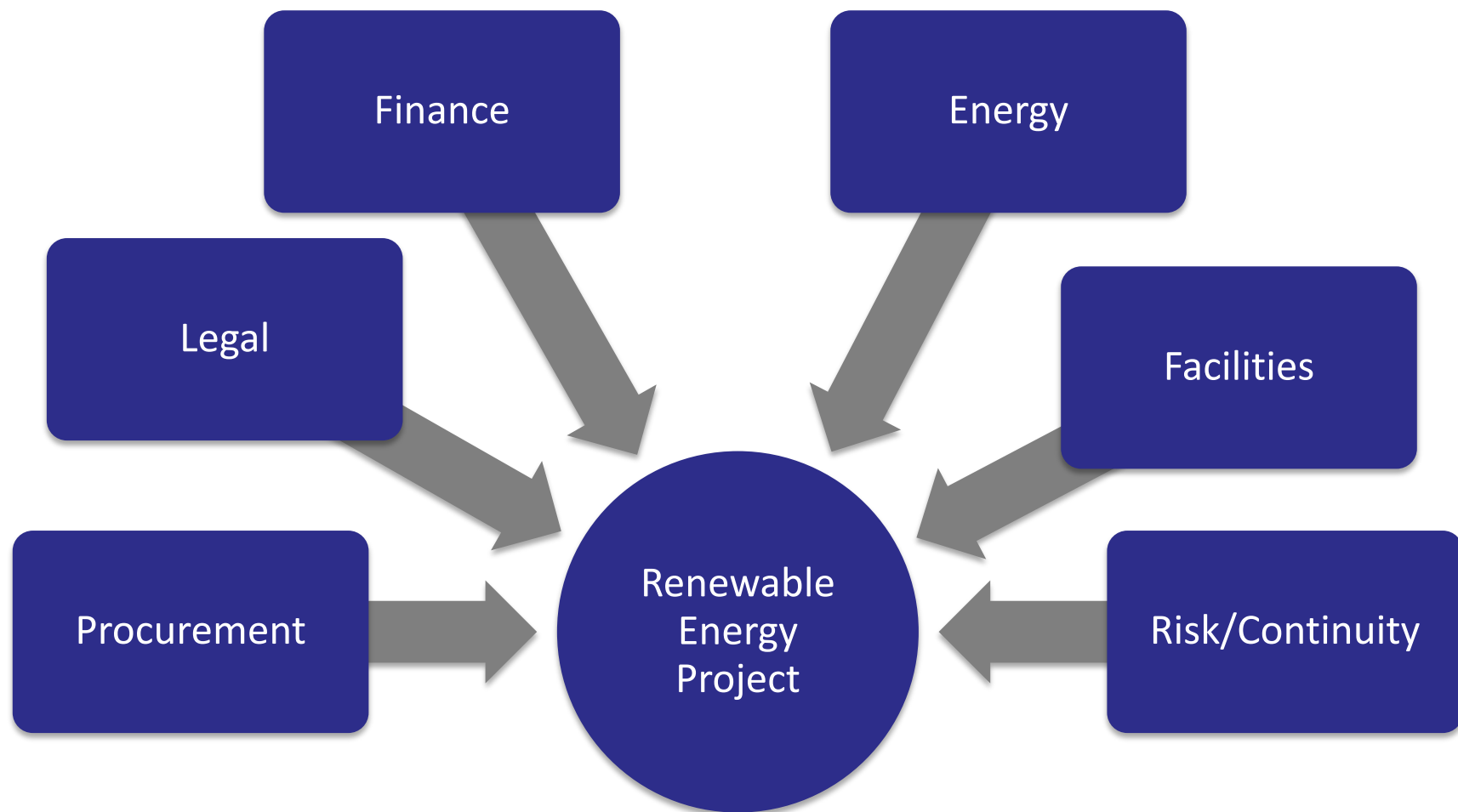


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Sample Renewable Energy Project



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Who Needs to Know What?

Foundational Knowledge & Skills	Organizational Knowledge & Experience	Strategic Execution Competencies
<ul style="list-style-type: none"> • Science Literacy • Environmental and Economic Literacy • Understanding of the Policy Landscape • Management Acumen 	<ul style="list-style-type: none"> • Strategic Planning • Decision-Making • Compliance & Enterprise Risk Management • Asset Management • Value and Supply Chains • Communications & Social Responsibility • Governance 	<ul style="list-style-type: none"> • Enterprise Risk Mitigation • Supporting Change Within the Organization • Stakeholder Engagement • Reaching Beyond the Organization

Related Literature:

- Core Competencies for Climate Change Officers and Professionals
<https://accoonline.org/core-competencies>
- Institutionalizing Climate Change into Decision-Making
<https://accoonline.org/insights/2017/5/18/part-6-building-and-mobilizing-a-climate-smart-army>
- Advancing the Occupation and Growing the Supply of Climate Leaders
<https://accoonline.org/insights/2017/4/3/part-4-advancing-the-occupation-and-growing-the-supply-of-climate-leaders>



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Overview of ACCO Credentialing

- Bestowing recognition of capabilities in leading and implementing climate change strategies
- Designed for the climate leader in an organization, a practitioner with a broader responsibility set, a mid-level practitioner aspiring to be a climate change officer, or a professional working in another occupation

Target Audiences



Program Structure:

- Designed for mid-level practitioners with 2-4 years of experience working on climate change related initiatives
- Stepping stone for the Certified Climate Change Officer[®] credential
- Some requirements will support earning occupation-specific credentials

CC-P[®]

Certified Climate Change Professional[®]

- Designed in collaboration with peer credentialing bodies to facilitate integration of climate competencies into professions with significant responsibilities in climate preparedness and action planning
- To be unveiled in 2017/2018

Certified Climate Change[®]
Credentials for Other Occupations

- Designed for senior-level executives with 7-10 years of experience leading and driving climate change related initiatives.
- Must satisfy requirements for CC-P[®] or occupation specific credential
- To be unveiled in 2017/2018

CC-O[®]

Certified Climate Change Officer[®]

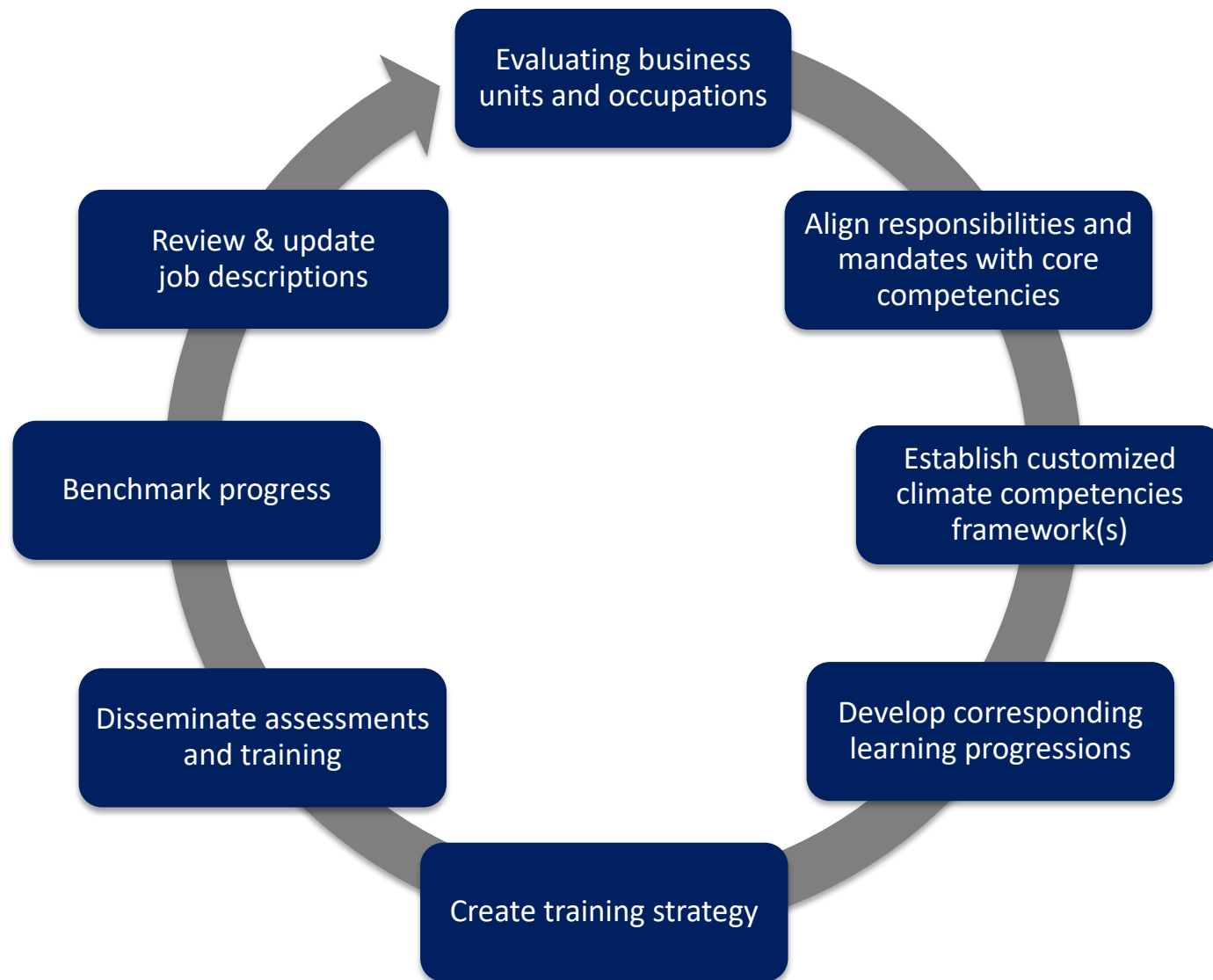


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Our Process



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Sample Courses

CLIMATE SCIENCE, RISK & ADAPTATION PLANNING

Climate-101: Understanding Climate Science & the Latest Projections

Climate-102: Understanding Climate Variability, Extreme Events & Long-Term Climate Change

Climate-103: The Basics of Sea Level Rise and Impacts on Coastal Assets & Infrastructure

Climate-104: The Public Health Implications of Climate Change

Climate-201: Identifying Climate Hazards & Conducting Vulnerability Assessments

Climate-202: Leveraging Climate Data & Tools

Climate-203: Developing an Adaptation Plan for Your Organization

GHG MANAGEMENT, REPORTING & REDUCTION

GHG-101: Basics of GHG Accounting, Reporting & Disclosing GHG Emissions

GHG-102: Fundamentals of the Energy, Water & Food Nexus

GHG-201: Establishing GHG Reduction Goals & Management Structures

GHG-301: Developing and Managing and Internal Carbon Fee *(in development)*

GOVERNANCE, ENGAGEMENT & BEHAVIOR CHANGE

Governance-101: Engaging Stakeholders & Establishing Early Strategies for Leading Organizational Change

Governance-102: The Legal/Policy Landscape of Climate Change & Related Implications

Governance-103: Ethics, Liability & Professionalism

Governance-201: Building, Maintaining and Benchmarking a Stakeholder Engagement Program

Governance-202: Making the Case for Climate Action to the C-Suite and Public Leaders *(in development)*

Governance-203: Collaborating Beyond Organizational & Institutional Boundaries

ENERGY MANAGEMENT & PROCUREMENT STRATEGIES

Energy-101: Creating a Comprehensive Energy Efficiency Management Program

Energy-102: Energy Markets and Regulation and Other Issues Affecting Energy Costs *(in development)*

Energy-103: LEED Core Concepts *(in redevelopment)*

Energy-201: Developing & Enhancing Your Renewable Energy Strategy

Energy-202: Price Stabilization and Renewables Procurement through Power Purchase Agreements

Energy-203: Establishing a Renewable Energy Goal *(in development)*



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Sample Courses

COMMODITIES & MARKETS

Commodities-101: [Understanding & Leveraging RECs](#)

Commodities-102: [Offsets, Markets & Driving Offset Projects](#)

Commodities-201: [Procuring REC and Offset Projects with Tangible Benefits \(in development\)](#)

SUPPLY CHAIN MANAGEMENT

SupplyChain-101: [Introduction to Assessing Climate Related Risks in the Supply Chain](#)

SupplyChain-201: [Getting Actionable Supply Chain Data and Engaging Suppliers](#)

SupplyChain-202: [Prioritizing Supply Chain Initiatives and Strategies for Implementation](#)

ECONOMICS & PROJECT FINANCE

Economics-101: [The Economics of Climate Change](#)

Economics-201: [Putting a Price on GHG Emissions \(in development\)](#)

RISK MANAGEMENT & ENTERPRISE STRATEGY

Enterprise-101: [The Basics of Risk Management \(in development\)](#)

Enterprise-201: [Analyzing Climate Risks, Assessing Materiality & Disclosure](#)

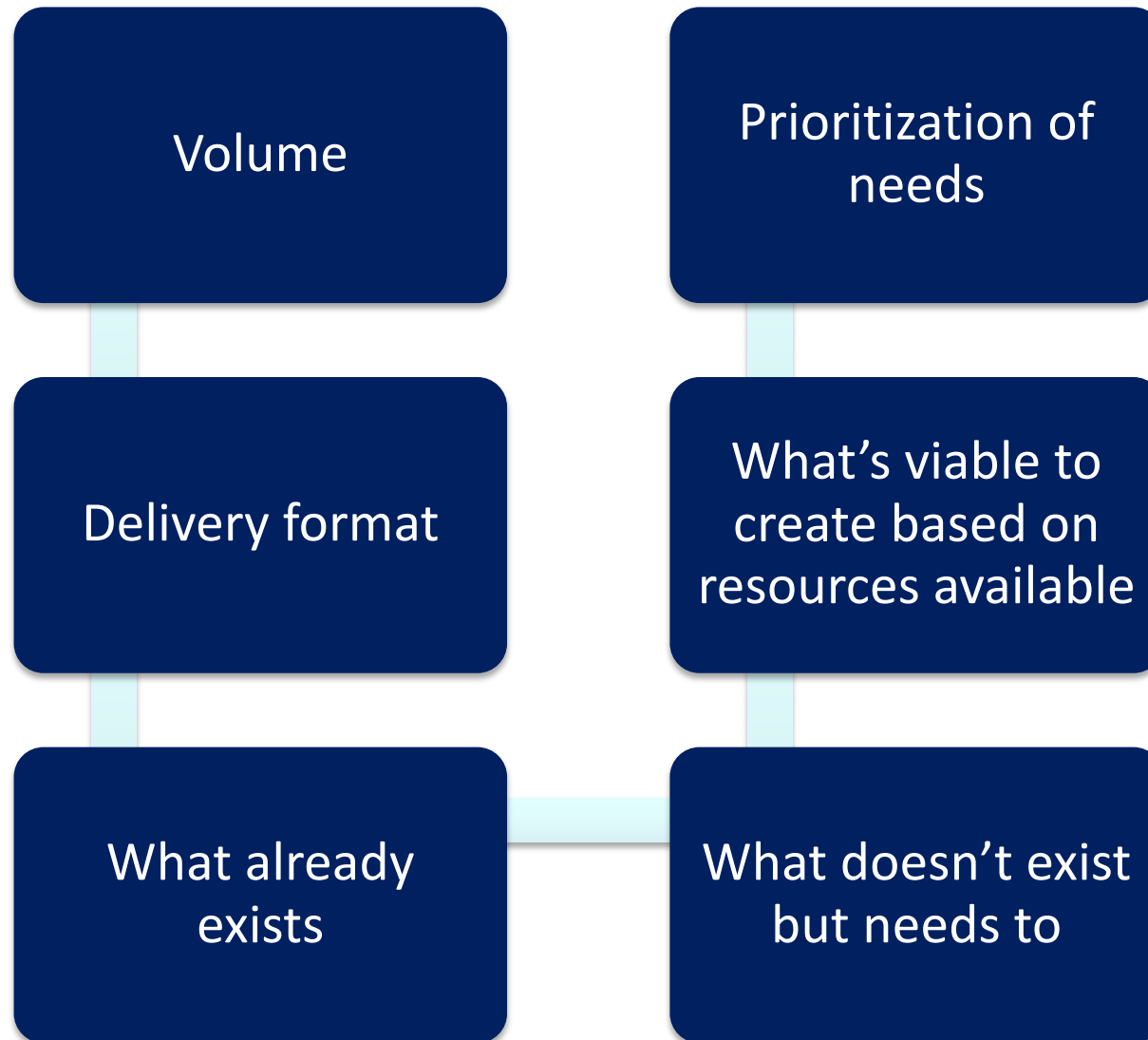


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Training Development



Key Issues:

Strategy needs to include redundancy of skill sets in order to ensure continuity

Embed skillset requirements in job description to ensure new hires are already trained or will receive training at beginning



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Sample Course Module:

Climate-201: Identifying Climate Hazards & Conducting Vulnerability Assessments

Course participants will receive an introduction to available community-relevant information sources and tools, climate data sets, and a template to help assess an organization's (or region's) climate risks and current resilience. Attendees will learn how to define climate-related hazards, recognize differential impacts of those hazards, identify existing and future risks, fully understand their current vulnerabilities and strengths, identify and utilize stakeholder partnerships to inform the decision making process, and evaluate the most critical vulnerabilities for their organization.

Learning Objectives

- Clarifying relevant terminology
- Understanding the importance of doing cross-sector, cross-discipline and whole community analysis
- Understanding the basics of risk analysis framework and risk management approaches (i.e. defining criticality, prioritizing vulnerabilities), and incorporating climate change into risk analysis activities, strategies and portfolios
- Learning how historical data on climate hazards and community indicators are accessed and used (including socioeconomic and health data)
- Evaluating gaps in data and vulnerability knowledge
- Learning about vulnerability assessments and natural catastrophe modeling, and the resources necessary to undertake vulnerability assessment work
- Grasping timeframes and frequency of different climate hazards, aligning these with decision making processes, and effectively communicating about these issues

Course Architects

- **Alison Adams** – Chief Technical Officer, Science and Technology Division, Tampa Bay Water
- **Kathleen Ave** – Renewable Energy & Climate Project Manager, Sacramento Municipal Utility District
- **Christine Baglin** – Principal, Project Performance Corporation
- **Dan Basoli** – Associate, Environment & Natural Resources Division, Abt Associates
- **Keely Brooks** – Climate Change Analyst, Southern Nevada Water Authority
- **Kelly Burks-Copes** – Ecologist, U.S. Army Engineer Research and Development Center, U.S. Army Corps of Engineers
- **Alan Cohn** – Director of Climate and Water Quality, New York City Department of Environmental Protection
- **Nancy Gassman** – Assistant Public Works Director, Sustainability Division, City of Fort Lauderdale
- **Juliette Hayes** – Acting Hazard Mitigation Assistance Branch Chief, FEMA Region IX
- **Mark Sutherland** – Former Senior Analyst, Marstel-Day
- **Susanne Torriente** – Chief Resiliency Manager, City of Miami Beach



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Ensuring Security, Health & Economic Vitality through Training Decision-Makers

Climate
Preparedness

Greenhouse Gas,
Energy & Water
Mgmt.

Organizational
Change &
Governance

Risk
Management &
Economic Impact

Policymaking

Building Public
Awareness
& Will

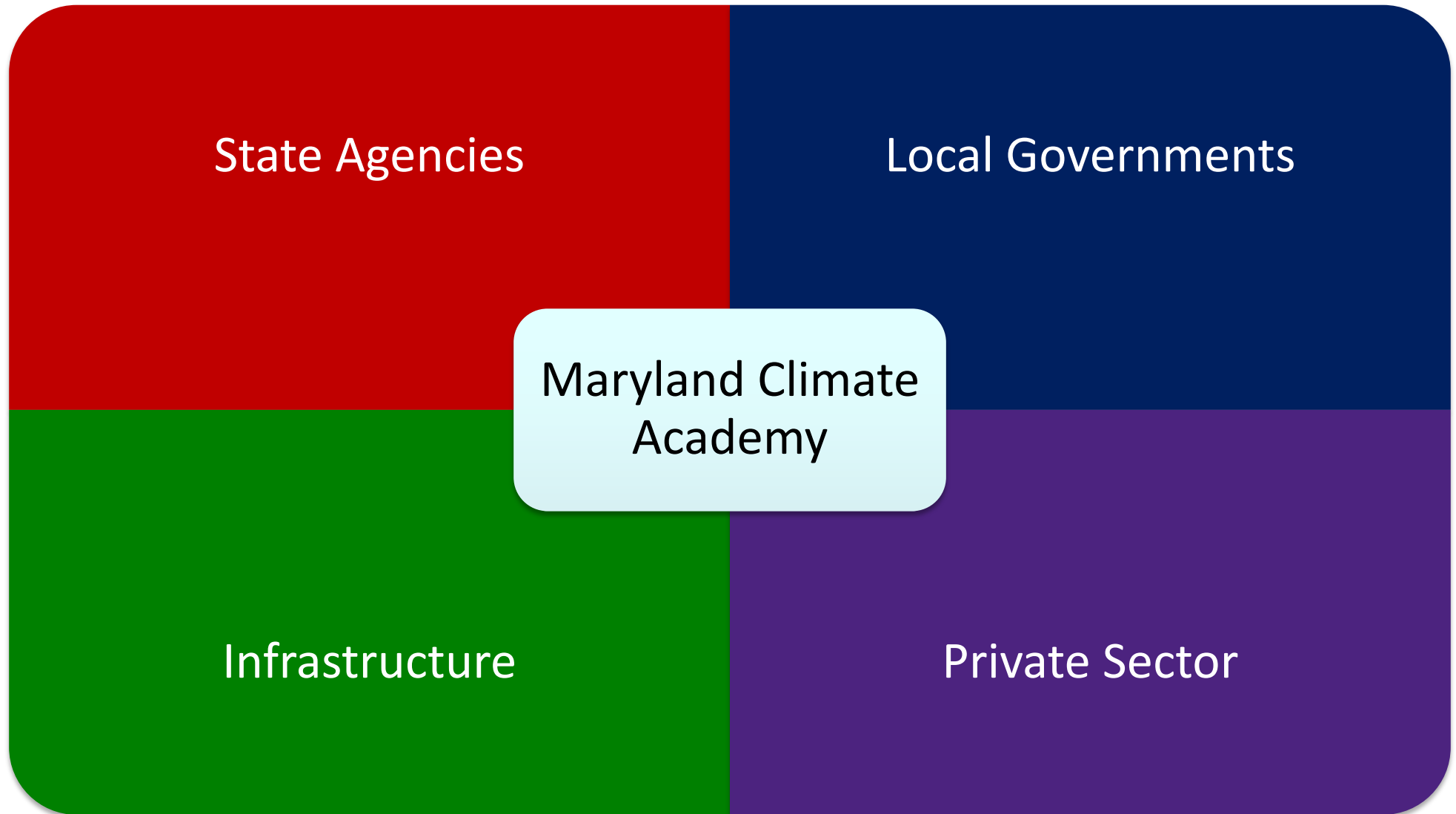


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Cohort Learning Across Organizations

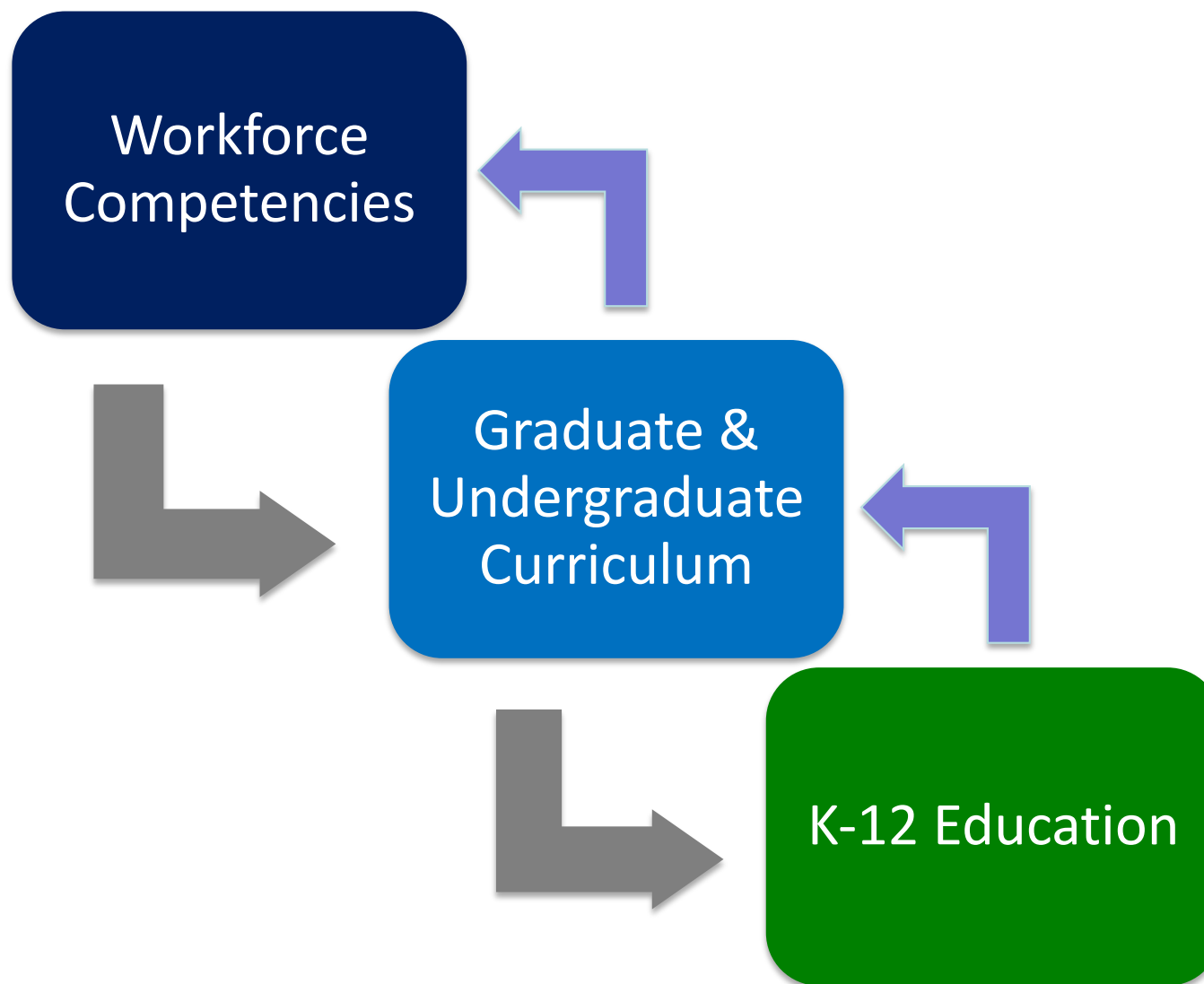


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A Key Component of Environmental Literacy



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Sample Cohorts

Staff with Significant Decision-Making Authority (e.g. City Planners, Director of Civil Works, etc.)

Proposed Training Modules	Time
Climate Science & Vulnerability Assessment: <ul style="list-style-type: none"> Climate-101: Understanding Climate Science & the Latest Projections Climate-103: The Basics of Sea Level Rise & Impacts on Coastal Assets & Infrastructure Climate-104: The Public Health Implications of Climate Change Downscaled modules on projected Maryland & mid-Atlantic scenarios Climate-201: Identifying Climate Hazards & Conducting Vulnerability Assessments 	7.5 hours
GHG, Energy & Water Management: <ul style="list-style-type: none"> GHG-101: Basics of GHG Accounting, Reporting & Disclosing GHG Emissions GHG-102: Fundamentals of the Energy, Water & Food Nexus GHG-201: Establishing GHG Reduction Goals & Management Structures 	5.0 hours
Governance, Law & Policy: <ul style="list-style-type: none"> Governance-101: Establishing Early Strategies for Leading Organizational Change Governance-102: The Legal/Policy Landscape of Climate Change & Related Implications Governance-103: Ethics, Liability & Professionalism Presentations on Maryland Policies & Programs 	7.5 hours
Economics & Enterprise Management: <ul style="list-style-type: none"> Economics-101: The Economics of Climate Change Enterprise-201: Analyzing Climate Risks, Assessing Materiality & Disclosure 	6.0 hours



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Sample Cohorts

Elected Officials, City/County Management & Executive Leadership

Proposed Training Excerpts

Time

Climate Science & Vulnerability Assessment:

- Climate-101: Understanding Climate Science & the Latest Projections
- Climate-103: The Basics of Sea Level Rise & Impacts on Coastal Assets & Infrastructure
- Climate-104: The Public Health Implications of Climate Change
- Downscaled modules on projected Maryland & mid-Atlantic scenarios

4.0
hours

GHG, Energy & Water Management:

- GHG-101: Basics of GHG Accounting, Reporting & Disclosing GHG Emissions
- GHG-102: Fundamentals of the Energy, Water & Food Nexus

2.5
hours

Governance, Law & Policy:

- Governance-101: Establishing Early Strategies for Leading Organizational Change
- Governance-102: The Legal/Policy Landscape of Climate Change & Related Implications
- Governance-103: Ethics, Liability & Professionalism
- Presentations on Maryland Policies & Programs

4.0
hours

Economics & Enterprise Management:

- Economics-101: The Economics of Climate Change
- Enterprise-201: Analyzing Climate Risks, Assessing Materiality & Disclosure

2.5
hours



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Key Attributes and Opportunities

- Aligning climate action, public health and economic vitality
- Advancing statewide preparedness and resilience
- Scaling up clean energy development and consumption
- Engaging the public to build better understanding & support
- Developing goals and implementation strategies
- Providing support to member communities for local action
- Sharing and aggregating community and staff resources
- Cohort training to institutionalize clean energy and climate preparedness into critical decision-making roles



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An Evolving Vision

Training

State Agencies
Local Government
Infrastructure
Online & In-Person
Cohort

Dedicated Support

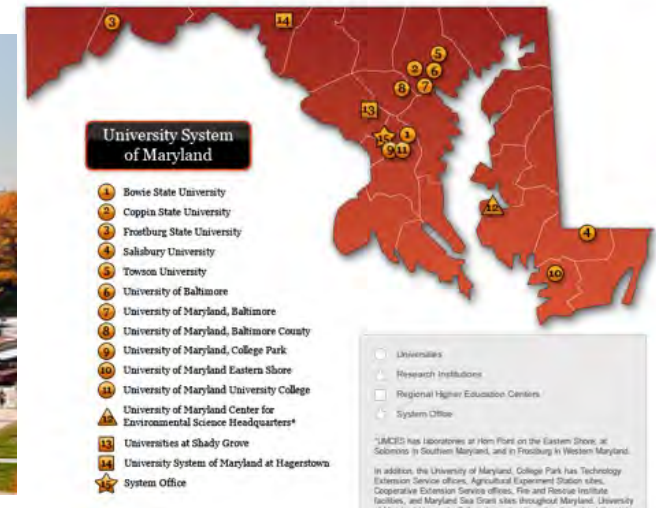
Research
Scenario Modeling
Analyses
Consulting
Staffing Resource
Facilitating Collaboration

Laboratory

Multi-disciplinary
solutions
Experimental projects
Creative approaches
Aggregated solutions



University System of Maryland



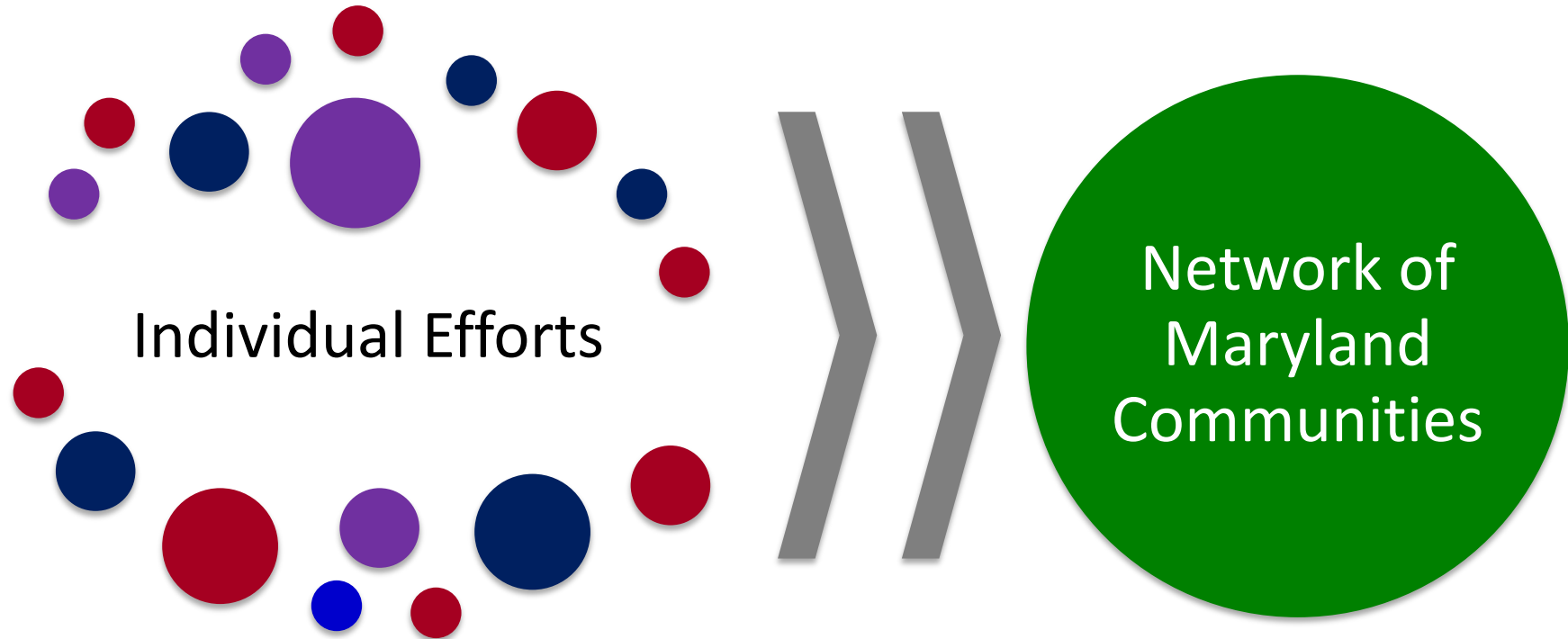
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Establishing a Network of Maryland Communities

Ensures that city, county and regional efforts to address climate change, resilience to extreme events and grow a clean energy economy throughout Maryland communities will be greater than the sum of their individual efforts

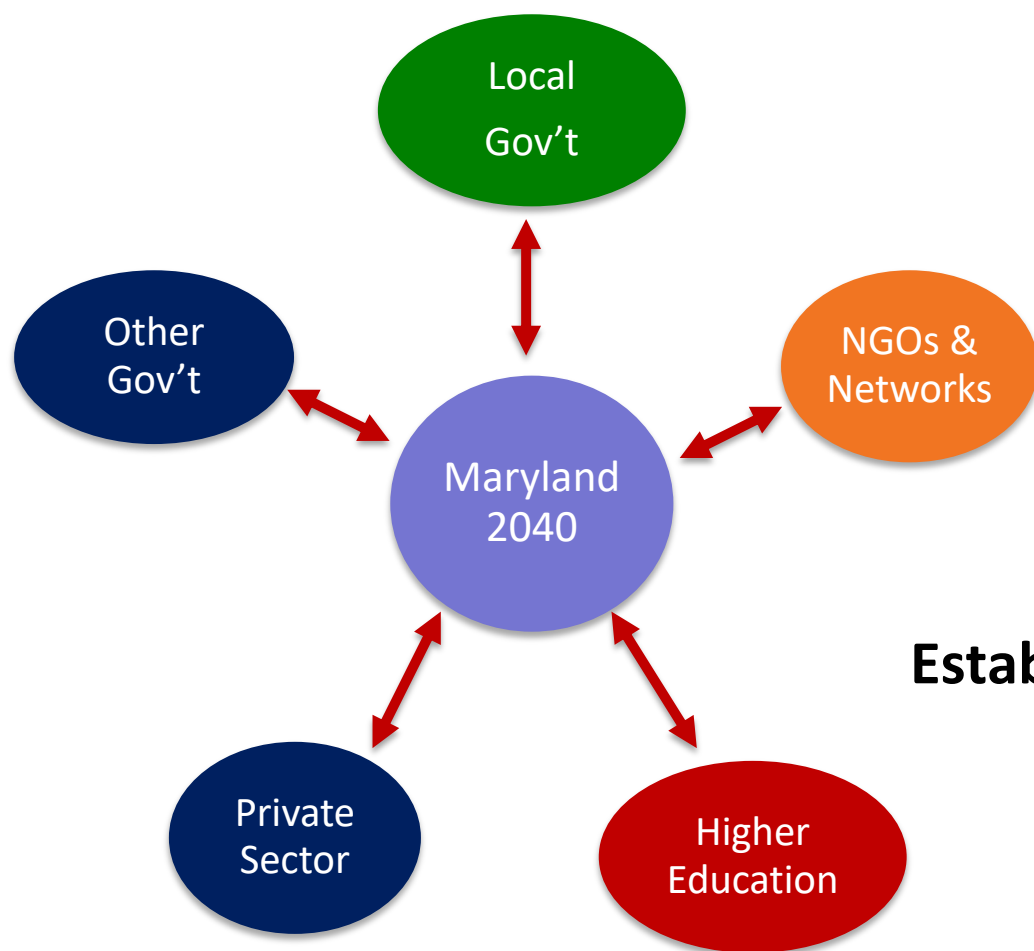


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Building Capacity & Linking Nodes



Serves as a linking force between numerous nodes and networks.

Facilitates important knowledge exchange, collaboration and resource sharing.

Establishes a conduit for project funding and public-private partnerships.



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Contacts

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