Maryland Climate Leadership Academy



CC-P® Prep Series

Briefing to Education, Communication & Outreach Working Group

Daniel Kreeger

Executive Director
Association of Climate Change Officers





Recapping the Vision of the Academy





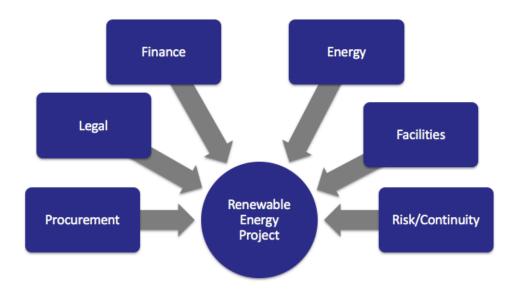
Maryland State Action on Climate Change

- Reducing Risks through Green Infrastructure
- Mobilizing Financing for Climate Projects
- Grid Modernization
- Scaling up Renewable Energy
- Appliance Efficiency Standards
- Building Resilient Communities & Infrastructure
- Increasing Carbon Storage in Landscapes
- Deploying Clean Transportation
- Reducing Super Pollutants

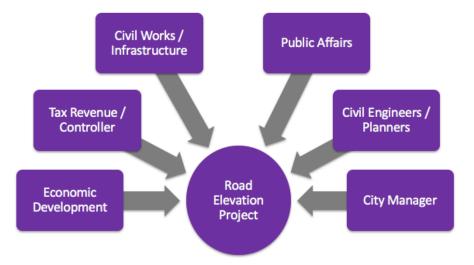


Case for Scaling Up a Climate Smart Workforce

Sample Stakeholders Involved in Building a Clean Energy Project



Sample Stakeholders Involved in Raising Roads to Cope with Flood



Who Needs to Know What?

Foundational Knowledge & Skills	Organizational Knowledge & Experience	Strategic Execution Competencies
 Science Literacy Environmental and Economic Literacy Understanding of the Policy Landscape Management Acumen 	 Strategic Planning Decision-Making Compliance & Enterprise Risk Management Asset Management Value and Supply Chains Communications & Social Responsibility Governance 	 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



Getting Climate into the DNA of Decision-Making

Climate Science Greenhouse Gas, **Organizational Adaptive Design** Risk **Energy & Water** & Vulnerability **Change &** & Capacity Management Assessment Management Governance **Budget &** Stakeholder **Policymaking Finance Engagement Economic Vitality Public Health** Security



An Evolving Vision

Training

State Agencies

Local Government

Infrastructure

Online & In-Person

Cohort

dicated Support

Research

Scenario Modeling

Analyses

Consulting

Staffing Resource

Facilitating Collaboration

Laboratory

Multi-disciplinary solutions

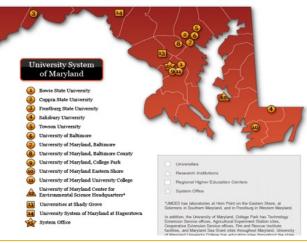
Experimental projects

Creative approaches

Aggregated solutions



University System of Maryland



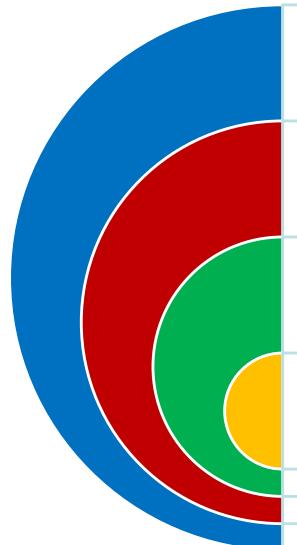
Maryland Climate Leadership Academy

Education, Communication, and Outreach Working Group Briefing June 19, 2019





Overview of 2018-20 Training Programs



Professional Credentialing

 Certified Climate Change Professional[®] (CC-P[®])

ACCO/Maryland Certificate Programs

- Clean Energy Procurement & Financing
- Training for Planning Professionals (informed by APA)

Primers & Stand-Alone Workshops

- Primer for Flected Officials
- Deeper-dive vulnerability assessment workshop

Online Toolkit

 Micro-modules including regional climate scenarios, regional energywater-food nexus, state/local policy, public health implications



Year 1 Training Programs





CC-P® Prep Series Curriculum

Class #1	Class #2	Class #3
 Day 1: Climate Science & Vulnerability Assessment Climate-101: Understanding Climate Science & the Latest Projections Climate-103: The Basics of Sea Level Rise and Impacts on Coastal Assets & Infrastructure Climate-104: Public Health Implications of Climate Change Climate-201: Identifying Climate Hazards & Conducting Vulnerability Assessments Climate-202: Leveraging Climate Data & Tools Day 2: GHG, Energy & Water Management 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 & GHG Management Structures 	 Day 3: Governance, Law & Policy 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 Day 4: Materiality, Risk Management & Economics Economics-101: The Economics of Climate Change Economics-201: Assessing Economic Impacts Enterprise-101: Fundamentals of Risk & Materiality Enterprise-201: Analyzing & Managing Climate Risk 	 Days 5-6: Entrepreneurship & Leadership Governance-202: Making the Case for Climate Action to C-Suite & Public Leaders Governance-203: Collaborating Beyond Organizational & Institutional Boundaries Exercise: Mapping Preparedness into Key Decision-Making Roles Additional Leadership & Entrepreneurship Exercises

Maryland Climate Leadership Academy





Summary of Year 1 Programs

- Enrollment was opened in Fall 2018 for the Certified Climate Change Professional® (CC-P®) Prep Series
- 4 cohorts have been announced statewide
 - 3 are completed (Chesapeake College, Ellicott City & Hagerstown)
 - 1 in progress (Germantown); 2 more to be announced shortly (Charles County & Baltimore Inner City)
- More than 200 students enrolled and participated in the first 3 cohorts --
 - 4th cohort (Montgomery College) = 89 attendees at first class
- Faculty consists of experienced ACCO members/partners and regional experts (e.g. Maryland state agencies, local governments, higher ed and private sector experts)
- Approximately one-third of participants are already testing for the CC-P®
 - 55% of participants have indicated they plan to do so



Initial Review of Feedback from ACCO & Participants

- **Faculty:** In order to scale this program and prepare the Academy to stand on its own in the future, a program to train future faculty and provide compensation will need to be established.
- Incorporation of State Agency Leaders: Broader participation of state agency personnel is needed to provide insights on policy initiatives, case studies on projects and connect those agencies to Academy participants. State agency personnel need to be more actively visible and embedded throughout the Academy's programs.
- Desire for Ongoing Collaboration: Clear and intense desire from participants to have ongoing
 opportunities to collaborate with each other and with peers across sectors.
 - Updates, case studies and shared experiences from peers through a newsletter and/or the Academy web site
 - o Regular convening events across the state and an organized presence at third-party events
 - o A formal, member-driven statewide community of practice
 - Safe place for entrepreneurial thinking and conversation
- **Continuing Education:** Participants indicated a strong desire for a broad range of continuing education opportunities. Their feedback and suggestions can be categorized as follows: training in functional areas and on project types, sector-specific and occupation-specific training, and leveraging additional and alternative approaches to providing future education and training programs.



Year 2 Program and Curriculum Development

The Menu of Options for Year 2



Training for Elected
Officials & City/County
Managers



Online Toolkit Providing Awareness, Literacy & Case Study Resources

If we can find funding:



Primer for Community Leaders



Training for Planning Professionals



Solutions Lab for Budget & Finance Professionals

Maryland Climate Leadership Academy

Education, Communication, and Outreach Working Group Briefing June 19, 2019



Training for Elected Officials & City/County Managers

Aimed at elected officials and city/county mangers, whose leadership and policymaking activities will play an invaluable role in shaping the community's success in climate-related endeavors (also play a significant role in the community's awareness and understanding of key issues that affect people's health, security and economic vitality)

- **Goal:** To ensure that elected officials are sufficiently knowledgeable about the implications of climate change upon their communities and the various mechanisms they can leverage to reduce emissions and ensure preparedness.
- Program Design: 1-day program that examines how economies, markets, infrastructure and public health are affected by climate change and addresses the policy authorities that affect local government leaders, tools that policymakers can apply, and the related governance/workforce needs. Launched in Fall 2019 in Annapolis with presence of a senior state official to draw attendance.
- Program Development: Establishing a task force comprised of national experts and Maryland experts/officials will inform development of the program agendas, course objectives and outlines.



Sample Curriculum for Elected Officials & City/County Managers

Climate change and impacts on local governments and communities

- · Understanding climate change impacts on global/national economies and markets and regional/local businesses and communities
- Explaining implications of projected climate change scenarios and their corresponding uncertainty
- Conceptualizing short-term and long-term implications on critical infrastructure, core public services, operating budgets and capital investments

Building a dialogue and partnership with the public on climate change

- Understanding public opinion about climate change and effectively communicating about related risks, opportunities and response strategies to different audiences
- · Leveraging sound practices in stakeholder engagement to identify strategic internal and external stakeholders, understand their motivations and value, and mobilize action
- · Effectively and persuasively communicating the nexus of climate change and key community priorities (e.g. public health, economic vitality, security)
- Assessing the value of and prospective leadership roles in different partnership opportunities with government entities, private sector and other institutions

What are the policy authorities that local leaders have? Where are they incentivized or prohibited?

- · Understanding the international, national and local legal/policy landscape on climate change
- Understanding the authorities that local leaders are bestowed and how those authorities intersect with climate change and clean energy
- Establishing internal/external vision to address community-oriented climate change considerations
- Integrating climate change into broader policies and resolving related conflicts
- Understanding when/how to advocate for policy at all levels

Tools that policy makers can apply

- Understanding the basics of enterprise risk management (i.e. defining criticality, prioritizing vulnerabilities) and incorporating climate change into risk analysis activities, strategies and portfolios
- · Learning about vulnerability assessments and scenario modeling
- Leveraging and evaluating policies to drive and implement local climate action (e.g. building codes, land use, ordinance, funding structures)
- Understanding the prospective cost/benefit analysis of climate (in)action with regard to operations, budget, economy, health and security

Governance, human resource and workforce needs

- Understanding the fundamentals of organizational and behavioral change strategies and tactics
- Gaining a realistic understanding of options and emerging/best practices for advancing organizational structures, performance expectations and operating processes
- · Establishing a time-sensible framework for driving systemic change in climate action that accounts for long-term vision, leadership continuity/legacy and incremental steps/gains
- · Leveraging external expertise and sharing staffing resources with other organizations
- Fostering a culture of adaptive capacity within an organization

Online Learning Center

- Establishing an online learning center with short modules designed to develop awareness and literacy (not competencies) → Launch September/October 2019
- Will include regionally specific content, and can be an opportunity for state agencies to deploy educational materials related to state policy activities
- Currently developing a set of administrative and editorial guidelines that account for process and content contribution
- Sample Modules:
 - The Facts of Climate Change
 - Weather, Climate & Climate Change
 - The Basics of Greenhouse Gases
 - Climate Change & Oceans
 - SLR Implications for Maryland and the Chesapeake Bay
 - The Intersection of Energy, Water, Food & Waste

- Tips for Reducing Energy Usage
- Tips for Reducing Water Footprint
- Tree Canopy, Urban Heat Islands & Water
- Guarding Health in a Changing Climate
- Managing Your Waste



Primer for Community Leaders

- A half-day or whole day program designed to serve as a catalyst to get community leaders aware and interested in climate change implications/opportunities
- Can be conducted in conjunction with other events and as standalone events
- Can be foundational to subsequent training activities or serve as a first step in a progression of training activities

Sample Agenda

- Climate Change Fundamentals and Impacts on Local Governments and Communities
- The Present & Future of Energy,
 Water, Food & Waste in the Dallas
 Metroplex &
- Basics of Public Health, Climate
 Change and Sensible Preparedness
- A Glance at Maryland's Policy Response
- Considering Climate Change through Risk & Opportunity Management



Training for Planning Professionals (if funded)

Goal: To ensure that planning professionals are equipped to meet these requirements in the context of climate change and provide their communities, employers and colleagues with informed capabilities and decision-making, the ACCO and the American Planning Association will co-develop the following programs to be offered through the Maryland Climate Leadership Academy:

- **Deep Dive Training:** Designed for individuals with 5+ years professional experience that develops technical competencies and organizational/leadership skills.
- **Shorter Training:** Designed for individuals with less than 5 years professional experience that focuses exclusively upon technical competencies.
- **Activator:** A 1-day primer designed to build basic awareness and literacy in professionals with 15+ years experience in senior planning roles.

Program Development:

- Establish a sub-committee charged with developing the program agendas, course objectives and outlines.
- American Planning Association will identifying APA members to participate in steering committee and devote staff to support and facilitate the development of program content



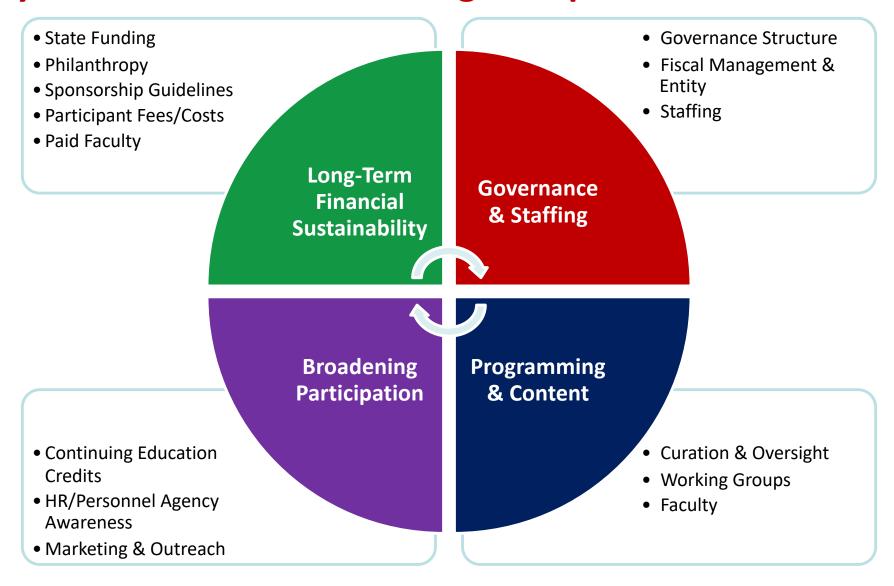
Training for Budget & Finance Professionals (if funded)

Proposal developed for the Maryland Treasurer

- **Purpose:** Develop framework for decision-making on prospective resilience investments for a specific project (e.g. stormwater drainage infrastructure in Annapolis or Ellicott City or alternate selected by the client) that specifically considers climate change impacts to revenue and expense (cash and capital) streams over the tenor of the investment as applied to a specific opportunity (e.g. disaster response). Will either be stand-alone or will 'bolt onto' existing decision processes, such as project approval processes, based upon findings of this pilot research.
- **Deliverable:** A draft model of an Instructive and clear step-wise decision support process, including identification of data sources, for review and consideration by the State Treasurer and discussion during the 2-day learning laboratory convened through the Maryland Climate Leadership Academy.

From Initial Implementation to Long-Term Planning

Key Considerations & Working Groups





Education, Communication, and Outreach Working Group Briefing June 19, 2019

