# Proposed Outline and Approach

## Pennsylvania Climate Action Plan

"Toward a More Sustainable and Resilient Commonwealth"

#### **CAP Outline**

#### High Level Structure

**Executive Summary** 

- 1. Introduction
  - 1.1. Background & Motivation

Will focus on near-term benefits to Pennsylvanians, address the human cause, refer to documented effects

1.2. Summary of Climate Impacts (brief, high-level)

Will refer to works such as the PA Climate Change Assessment and U.S. Global Change Research Program reports

- 1.3. Summary of Pennsylvania's Emissions
  - Overview of GHG Inventory
  - Overview of Electricity Sector Accounting Approach (include 2 page information sheet as an appendix)
  - Overview of BAU Emissions Projections
- 1.4. Goals

Will discuss science-based goal. May include adaptation-focused goals (not necessarily quantitative).

1.5. CAP Organization

Will include table/measles chart listing all strategies that indicates which sector(s) each strategy relates to, which sector the strategy is presented in (based on primary association), which strategies are quantified, and primary benefits for each strategy

2. Sector Impacts and Opportunities for Mitigation and Adaptation

See "Typical Sector Outline" below for details on what will be included for each sector.

- 2.1. Energy Consumption
  - 2.1.1. Residential
  - 2.1.2. Commercial (including Government)
  - 2.1.3. Industrial
  - 2.1.4. Transportation
- 2.2. Energy Production (including electricity generation)
  - 2.2.1. Fossil Fuels
  - 2.2.2. Renewables

- 2.3. Agriculture
- 2.4. Ecosystems (including forestry, wetlands, coastal resources)
- 2.5. Outdoor Recreation & Tourism
- 2.6. Waste
- 2.7. Water (primarily potable and sanitary)
- 2.8. Human Health
- 3. Summary of Strategies, Benefits, and Costs

#### **Typical Sector Outline**

- A. Description of Sector and Its Importance to Pennsylvania
- B. Climate Change Impacts
- C. Sector-Specific Goal(s) or Target(s)
- D. Opportunities to Adapt/Mitigate

  See "Typical Strategy Outline" below for details on what will be included for each strategy.
  - i. Strategy 1
  - ii. Strategy 2
  - iii. Etc.

### **Typical Strategy Outline**

- a. Description of Strategy
- b. Benefits and Costs (qualitative and quantitative)
  - 1. Resilience
  - 2. Emissions
  - 3. Economic
- Performance Indicators/Metrics
- d. Specific Steps/Actions
  - 1. For Citizens
  - 2. For Businesses
  - 3. For Leadership

## Plan for Number and Level of Granularity for Strategies

#### 2015 CAP had:

- 47 "Challenges and Opportunities" as follows:
  - Energy: 26
    - Electricity Generation and Transmission: 4
    - Natural Gas Production, Transmission, and Distribution: 4
    - Energy Consumption Reductions: 13
    - Energy Efficiency Financing: 5
  - Land Use: 1
  - Transportation: 7
  - Forests: 4
  - Agriculture: 4
  - Waste Management: 5
- 13 "Work Plans"

For the 2018 update, we propose the following approach for strategies:

- Keep strategies high-level, e.g.,
  - Increase end-use energy efficiency
  - Promote clean, distributed generation resources
  - Promote production and use of alternative fuel vehicles
  - Encourage smart transportation planning and practices
- Include specific steps/actions within each strategy for each type of actor, e.g., for "Encourage smart transportation planning and practices,"
  - Citizens (Note that Citizen actions will be included in "What You Can Do" callout boxes within each sector to make them more digestible, better engage the public, and separate them from the Commonwealth actions.)
    - Walk, bike, or use public transit, where possible
    - Combine trips
  - Businesses
    - Allow telecommuting
    - Promote better commuting practices (e.g., ridesharing, bicycling)
  - Leadership (Note that this is where specific policies/programs would go.)
    - Improve public transit options
    - Promote smart development
- Present costs and benefits at strategy level
- Qualitatively characterize costs/benefits of individual actions, where possible
- Aim for no more than 11 strategies with quantified economic costs/benefits (per proposal); include additional strategies without quantified costs/benefits, if desired and deemed important for PA. The quantified strategies will include nearer-term strategies,

while the non-quantified strategies might include longer-term strategies as well as strategies that are not conducive to quantification.

