

ADDRESSING THE CLIMATE CHANGE CHALLENGE: 10 YEARS OF SUCCESS

Climate and Energy Team
Department of Environmental Programs

November 14, 2018



Metropolitan Washington
Council of Governments

The Genesis



COG – A Legacy of Regional Leadership

1970 COG begins issuing daily air quality readings

1974 COG's Commuter Club Formed

1985 Commuter Club Becomes RideFinders Network

1990 COG Adopts Million Tree Planting Resolution

1991 MWAQC Founded

1996 RideFinders Becomes Commuter Connections

1996 Ozone Action Days Program Begins

1997 ENDZONE Partners Founded

1997 Guaranteed Ride Home Launched

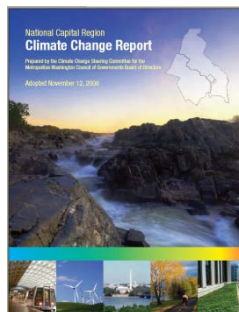
2000 ENDZONE Partners becomes Clean Air Partners

2000 20% Telework Goal Established

2001 Bike To Work Day Program Launched

2008 Car Free Day Program Launched

2008 COG Climate Report Adopted



Capital Region Consortium for Climate Protection Climate Action Project

Presented by:
George Nichols
Metropolitan Washington Council of Governments
November 10, 2005

Metropolitan Washington Regional Climate Change Staff Roundtable

Sponsored by the

Metropolitan Washington Council of Governments

Department of Environmental Programs

January 29, 2007

COG Board Room



CLIMATE CHANGE STEERING COMMITTEE AND COG CLIMATE CHANGE REPORT

Resolution R31-07

Adopted April 11, 2007

- Forms Climate Change Steering Committee

Resolution R60-08

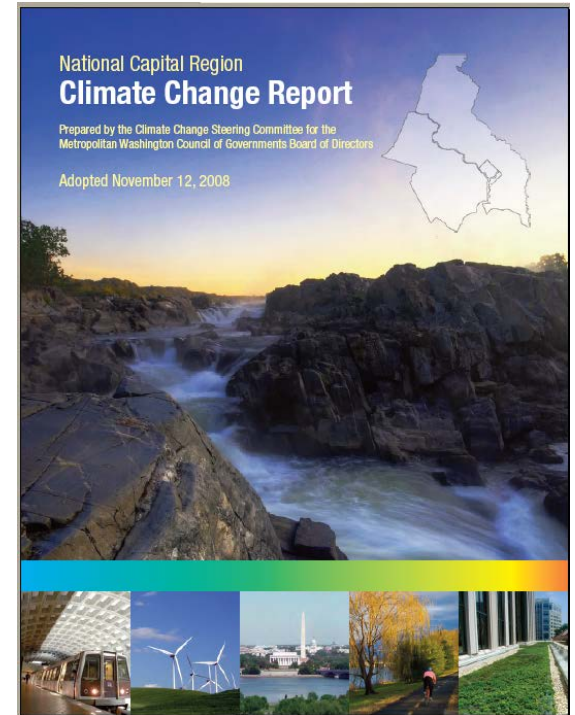
Adopted November 12, 2008

- COG Adopts Climate Change Report

Resolution R9-10

Adopted January 13, 2010

- Climate Goals Incorporated into Region Forward Compact



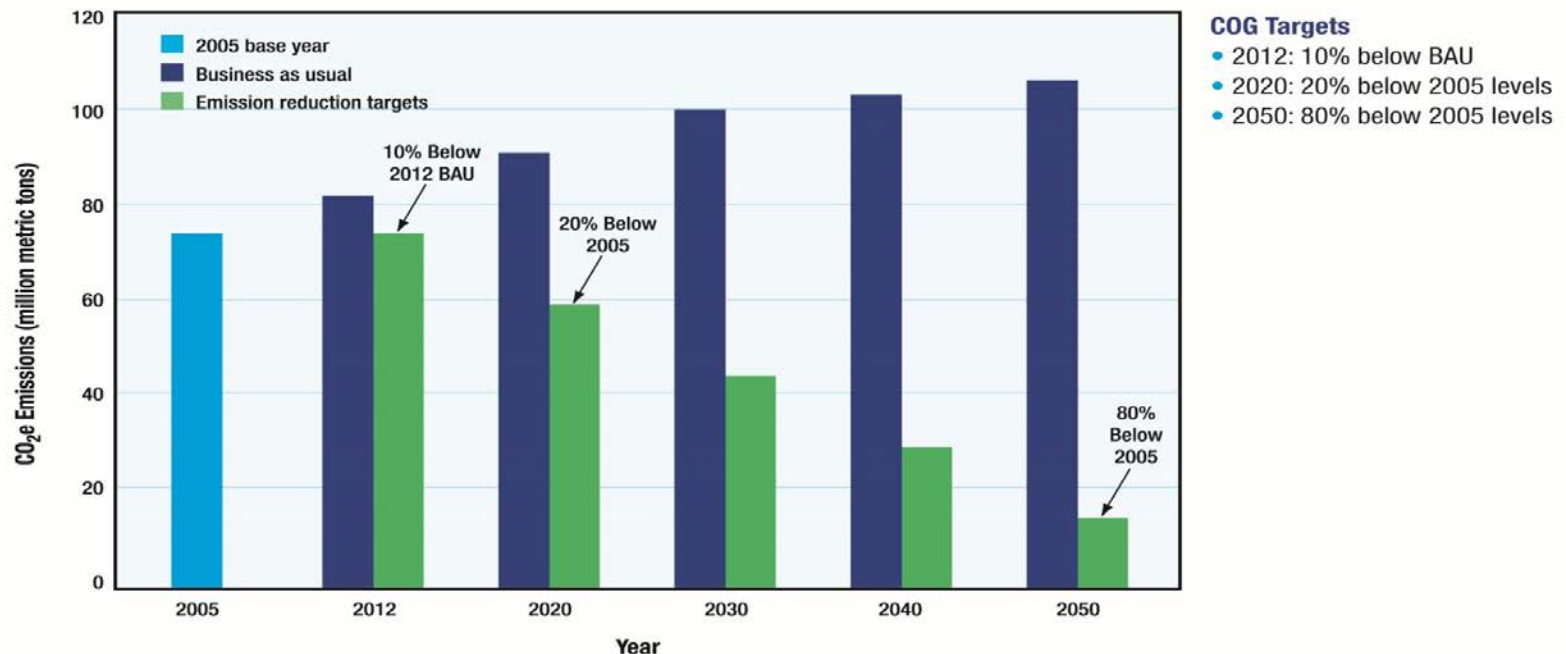
ADOPTED CLIMATE GOALS

2012: Return to 2005 Levels

2020: 20% Below 2005

2050: 80% Below 2005

Recommended Regional Greenhouse Gas Emission Reduction Targets Compared to Regional Greenhouse Gas Emissions Under BAU: 2005–2050



COG FORMS CLIMATE, ENERGY, and ENVIRONMENT POLICY COMMITTEE

**Resolution R18-09
ADOPTED APRIL 8, 2009**

- Jay Fisette – Inaugural Chair
- First meeting: July 22, 2009
- Establishes 2010-2012 Climate and Energy Action Plan, adopted January 27, 2010



Multi-Sector GHG Working Group

Resolution R52-2017

Adopted September 13, 2017

- MWAQC, TPB, CEEPC reconfirm support for actions to reduce emissions of greenhouse gases
- Actions consistent with regional *Climate and Energy Action Plan*



CLIMATE AND ENERGY ACTION PLAN

DASHBOARD: SHOWING PROGRESS

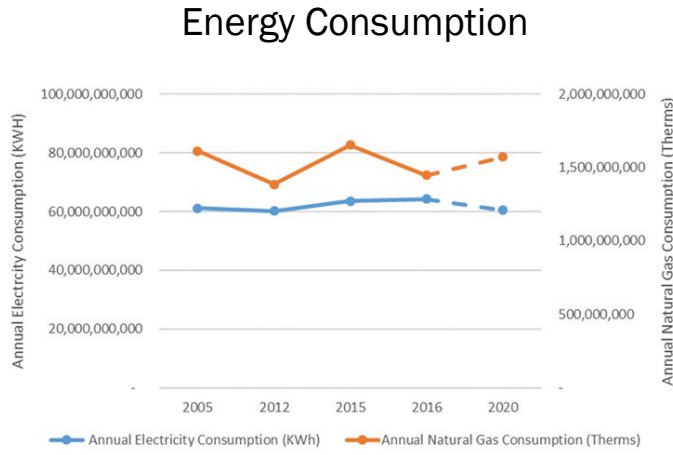
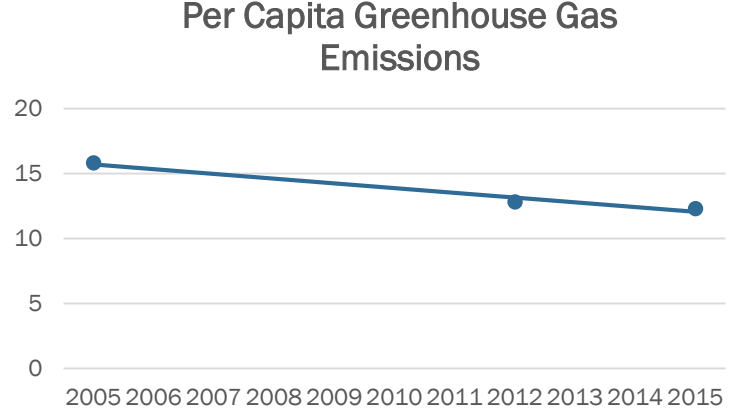
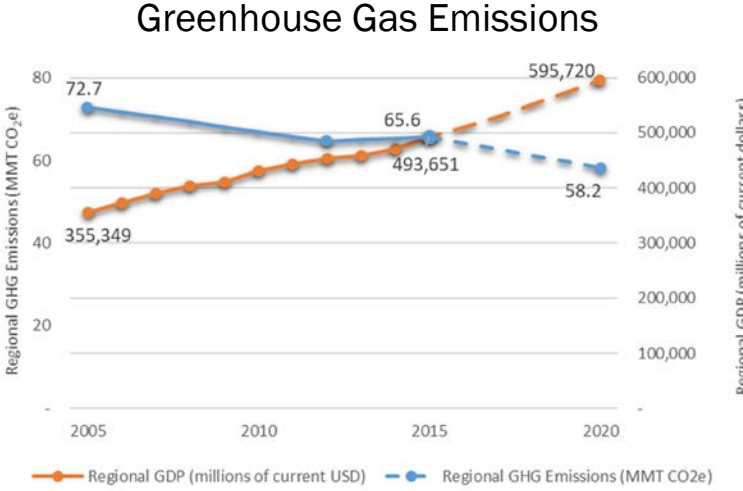
Energy and Climate Action Plan

- 2017-2020 Climate & Energy Action Plan
 1. Reduce Energy Consumption
 2. Increase Share of Renewables
 3. Advance Sustainable Regional Mobility
 4. Increase Sustainable Urban Development
 5. Move Towards Zero Waste
 6. Build Regional Resilience
 7. Protect Equity and Health
 8. Grow the Regional Economy

Increase Number of High Performance Buildings		
1-q	Incorporate high performance building goals and strategies in master plans, comprehensive land use plans, and small area plans.	50%
1-r	Enhance green building policies to require or encourage higher level of green construction standards (e.g., LEED Gold instead of LEED Silver).	50%
1-s	Offer incentives for commercial and residential buildings certified by a high efficiency building/green rating system (e.g., LEED, ENERGY STAR, Passive House, EarthCraft, Living Building Challenge, Net Zero, Well Standard, etc.).	50%
1-t	Provide education and training on new and advanced green construction standards (e.g., Living Building, Net Zero, WELL Standard, Designed to ENERGY STAR, etc.).	50%

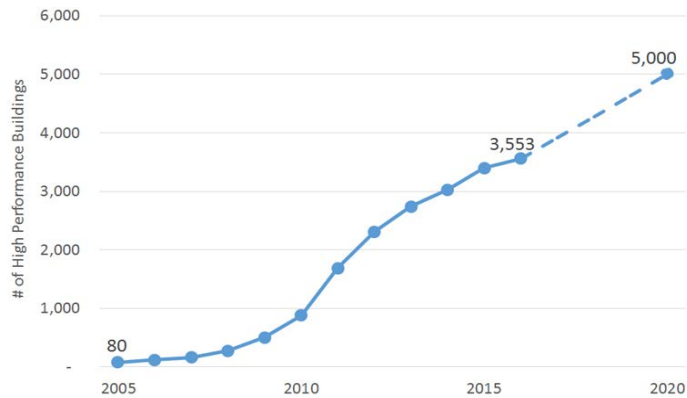


Metropolitan Washington Regional Benchmarks

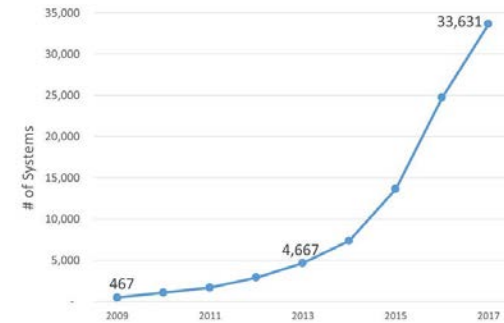


Metropolitan Washington Benchmarks

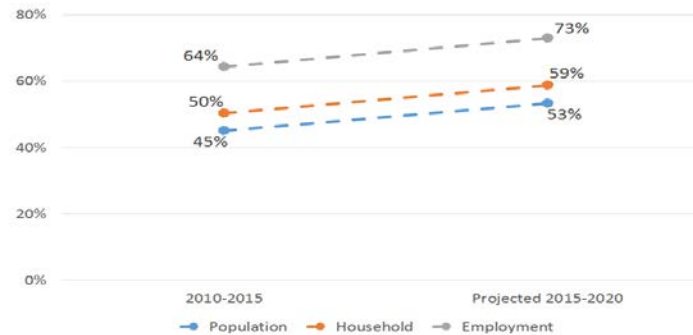
High Performance Buildings



Grid Connected Renewables



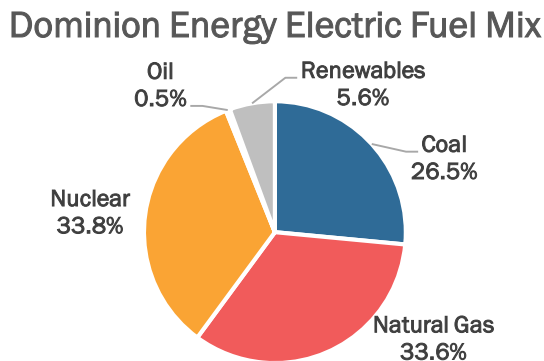
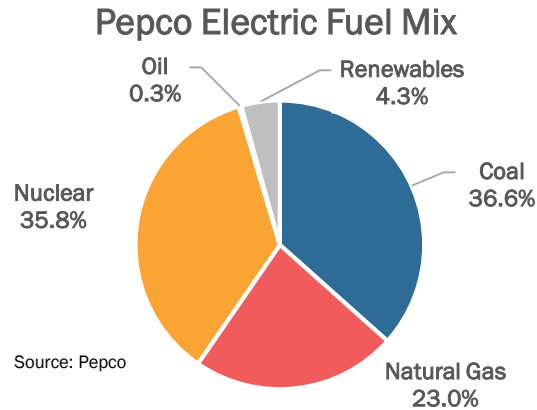
Land Use Planning Growth in Activity Centers



RENEWABLE ENERGY

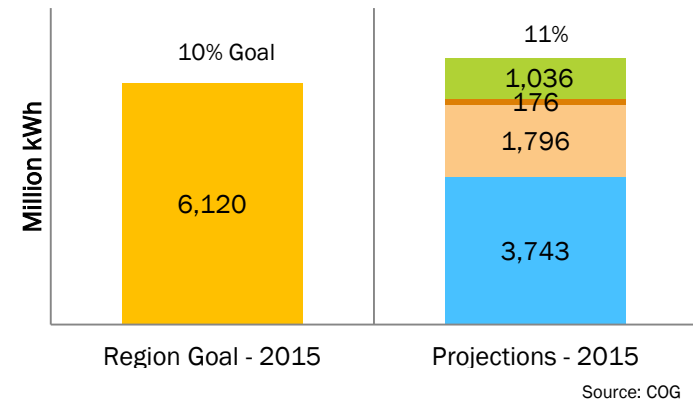


Source: EPA



Metro Washington Renewable Electricity

- COG 10% Target
- Utility RE
- Additional GP Purchases
- DG Deployment
- Large Hydro



MOBILE SOURCE EMISSIONS

- Transportation Planning
 - National Capital Region Transportation Planning Board
 - Visualize 2045 Long Range Plan
 - Quadrennial Update
 - Finances, demographics, modeling, projects/programs/policies
 - Transportation-Land Use nexus
 - Financially constrained and aspirational elements

Mobile Source Greenhouse Gas Emissions



Regional Activity Centers Map

Submitted to COG Board for Approval January 13, 2013

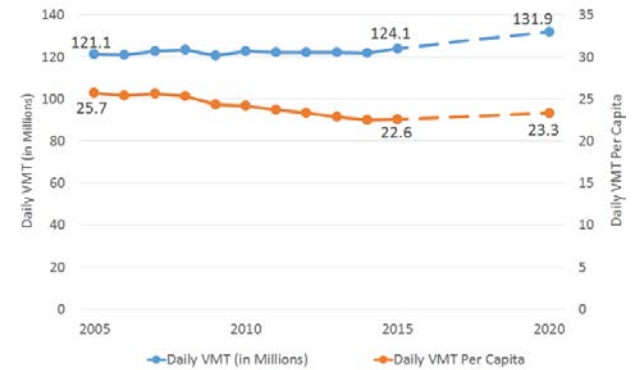


Mobile Source Benchmarks

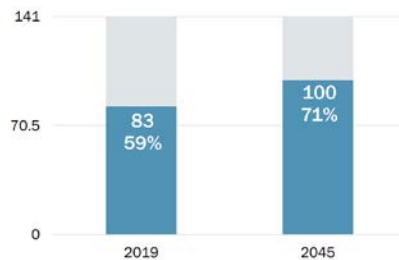
Land Use Planning Growth in Activity Centers



Vehicle Miles Traveled

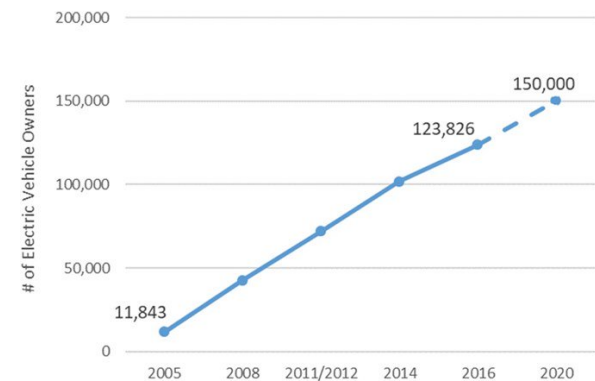


Activity Centers connected to High-Capacity Transit



* Proximity defined as within one mile of rail or within ½ mile of BRT/Streetcar

Metropolitan Washington EV Ownership



CELEBRATING 10 YEARS OF SUCCESS STORIES



Pillars of Climate Action

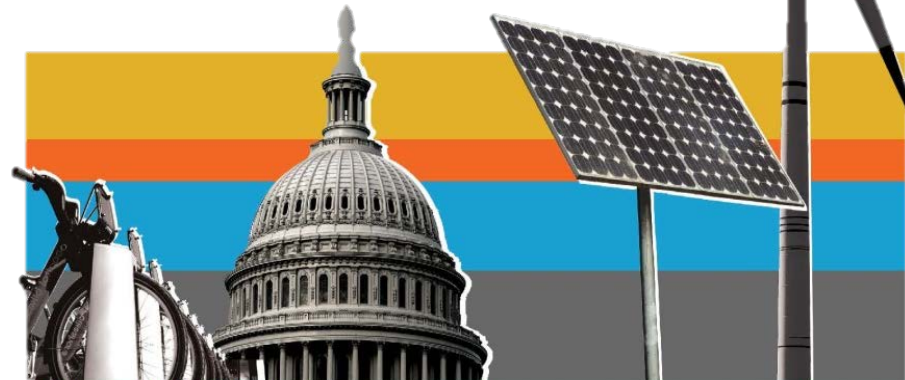
Leadership:

- Commitment
- Action
- Partnerships
- Policies
- Programs



With Focus on:

- Economic development
- Efficiency and Productivity
- Innovation
- Finance
- Equity



REGIONAL AND NATIONAL PARTNERSHIPS

Carbon Disclosure Project
Rockefeller 100 Resilient Cities
Bloomberg American Cities Climate Challenge
Georgetown Transportation and Climate Initiative (TCI)
Clean Cities Coalitions
Maryland Clean Energy Center (MCEC)
DC Sustainable Energy Utility (SEU)
Institute for Sustainable Communities Leadership Academies
NESCAUM NE Corridor EV Infrastructure Strategy Steering Committee
Mid-Atlantic Sustainability Network (MASN)
Mid-Atlantic Purchasing Team (MAPT)
Mid-Atlantic PACE Alliance (MAPA)
Mid-Atlantic CHP TAP
The Annapolis Accords (MCEC/COG/SEU)
COG/NVRC Solar Map and Solarize
NARC Rooftop Solar Challenge Team
Dominion Solar Market Pathways Team
NARC Fleets for the Future Team
SEU Workforce Development Program
Sustainable Maryland
Corporate Sustainability Pledges
DoD Collaboration/Energy Security, Renewables
Washington Auto Show



COG SUPPORT FOR REGIONAL AND LOCAL PROGRAMS

- White House Climate Action Champion
- GHG Inventories/ClearPath
- Collaborative Solar PV Procurement
- Electric Vehicle Readiness Plan
- Intl Code Council Scholarships
- Regional Green Building Policy
- Portfolio Manager Benchmarking
- Recycling Committee
- Tree Canopy Plan
- Community Energy Task Force
- Green Cooperative Procurement
- Grants and Technical Support



LOCAL PROGRAMS

- Local government voluntary programs catalyzing action:
 - Eco-City Alexandria
 - Arlington Initiative to Reduce Emissions and Rethink Energy (AIRE)
 - Montgomery County Green Bank
 - Loudoun Green Business Challenge
 - Fairfax County Energy Task Force
 - Frederick Green Homes Challenge
 - Clean Energy Plan DC
 - Prince George’s County Sustainable Energy Program



Montgomery County
GreenBank
Your partner for clean energy™



SUCCESS STORIES: SOLAR MARKET DEVELOPMENT



SUCCESS STORIES: MONTGOMERY COUNTY MICROGRID



STATE CLIMATE PROGRAMS

State Energy and Climate Plans Involve Significant New Clean Transportation, Energy Efficiency and Renewable Initiatives



Maryland

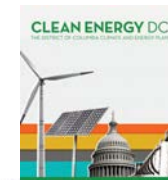
- EmPOWER Maryland Energy Efficiency
- Renewable Mandate (40% by 2030)
- Member of RGGI
- Maryland Clean Cars Program
- Maryland C-PACE

Virginia

- Carbon Trading Rule
- Clean Power Legislation
- EV Charging Infrastructure
- Electric Transit Buses
- Joined Transportation Climate Initiative
- Addressing Methane

The District

- Carbon Neutral by 2050
- Sustainable DC, Clean Energy DC, Climate Ready DC
- DC PACE, Green Bank
- Renewable Mandate (50% by 2032)
- Building Energy Benchmarking Requirements
- Net Zero New Buildings



TRANSPORTATION INITIATIVES

- What Would It Take Scenario Study
- Greenhouse Gas Emissions Inventories Annually
 - Regional and Local
- Annual CLRP Performance Indicators
- Regional EV Plan
- Multitude of Supportive Programs
 - Commuter Connections
 - Pedestrian and Bicycle Planning
 - Freight and Transit Subcommittees
 - Electric and CNG Buses



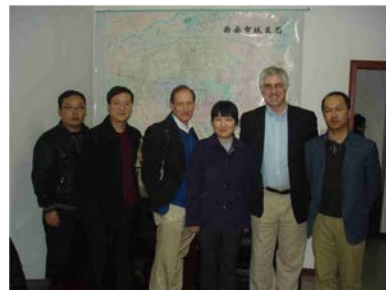
SUCCESS STORIES: LOW EMISSION MOBILITY



INTERNATIONAL COLLABORATION

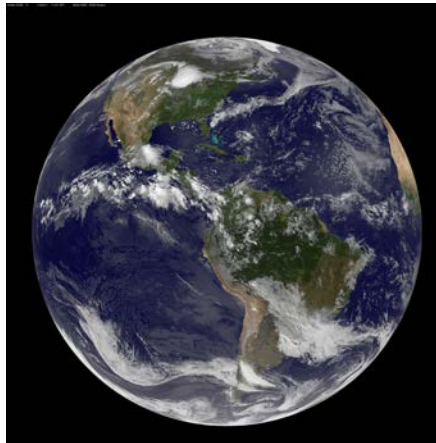
U.S. State Department - ICMA Climate Fellows Program
– China, Singapore, Vietnam, Philippines

NVRC Transatlantic Urban Climate Dialogue - Germany



THE NEXT 10 YEARS

Captain Planet Says -
LET OUR POWERS
COMBINE. EARTH!



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