Commission for Environmental Cooperation

Ecosystems and Climate Change

JPAC Public Forum on Biodiversity and Climate Change

Merida, Mexico; 8 September 2016

CEC and Biodiversity (until 2011)

1. Ecologically Significant Regions

- ✓ Conservation and maintenance of NA terrestrial and marine ecosystems of ecological significance

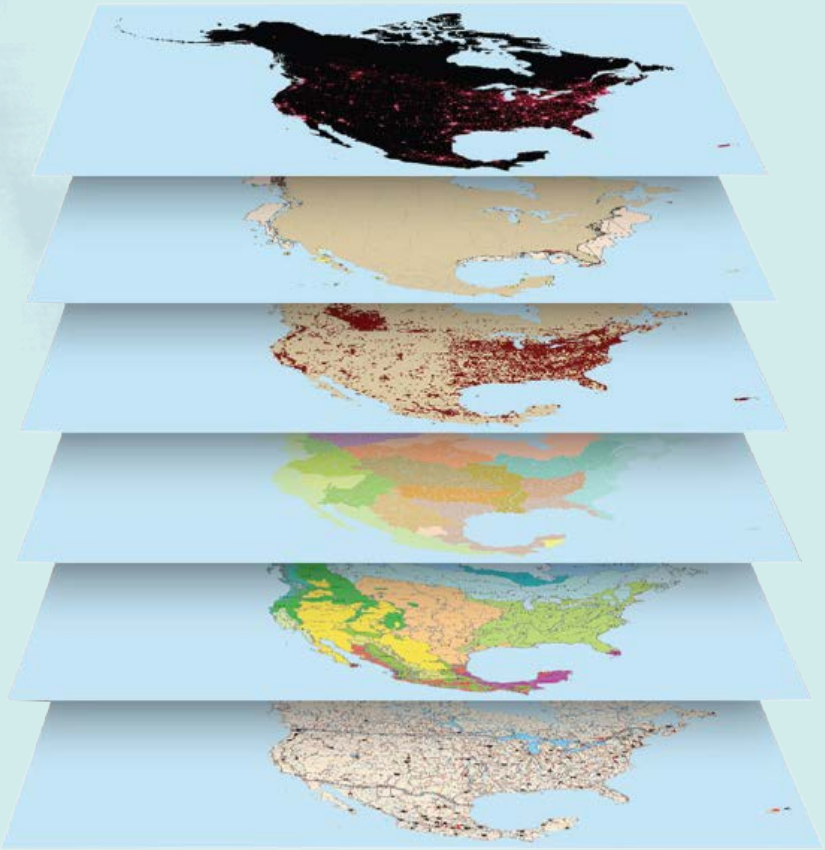
CEC and Biodiversity (to 2011)

2. Conservation of Species

- ✓ Promoted conservation of NA migratory and transboundary species
- ✓ Focused on development of in-depth NA Conservation Action Plans

CEC and Biodiversity (to 2011)

3. Assessment and Information Sharing



- ✓ Facilitated data and information, promoted integrated monitoring to increase understanding of state of North American biodiversity
- ✓ Key outputs: North American Biodiversity Information Network, the North American Environmental Atlas, and the North American Bird Conservation Initiative

CEC and Biodiversity (to 2011)

4. Responding to Threats

- ✓ Collaborative responses on threats to ecosystems, habitats and species
- ✓ Focused on aquatic invasive alien species and establishment of the North American Invasive Species Network

NORTH AMERICAN INVASIVE SPECIES NETWORK
NAISN

CEC and Biodiversity (to 2011)

5. Capacity Building and Training

- ✓ Facilitated communication, sharing of best practices, priorities and opportunities for education and training
- ✓ Conservation of NA grasslands and marine priority conservation areas – especially the Bering to Baja region
- ✓ Cooperated to reduce wildlife trafficking and develop best practices for wildlife enforcement

CEC and Biodiversity (to 2011)

6. Biodiversity Conservation and Trade

- ✓ Identified and evaluated collaborative opportunities for biodiversity conservation and sustainable use of biological resources arising from regional trade
- ✓ Successful market enhancement for shade coffee

Environment and Climate (to 2011)

Focused on environmental management: chemicals, pollutants releases, air quality and various topics of the “brown agenda” for the three countries

Environment and Climate (to 2011)

CEC work with links to climate change included:

- ✓ The 2001 CEC report, ***Mexico and Emerging Carbon Markets***, examined potential role of small and medium-size enterprises in Mexico to participate in market-based approaches to addressing the climate agenda

- ✓ 2002-2010 – CEC climate change work focused on **energy efficiency and renewable energy** (green building, improving environmental management and energy efficiency)

Strategic Priorities 2010-2015

Healthy Communities and Ecosystems

Climate Change – Low-Carbon Economy

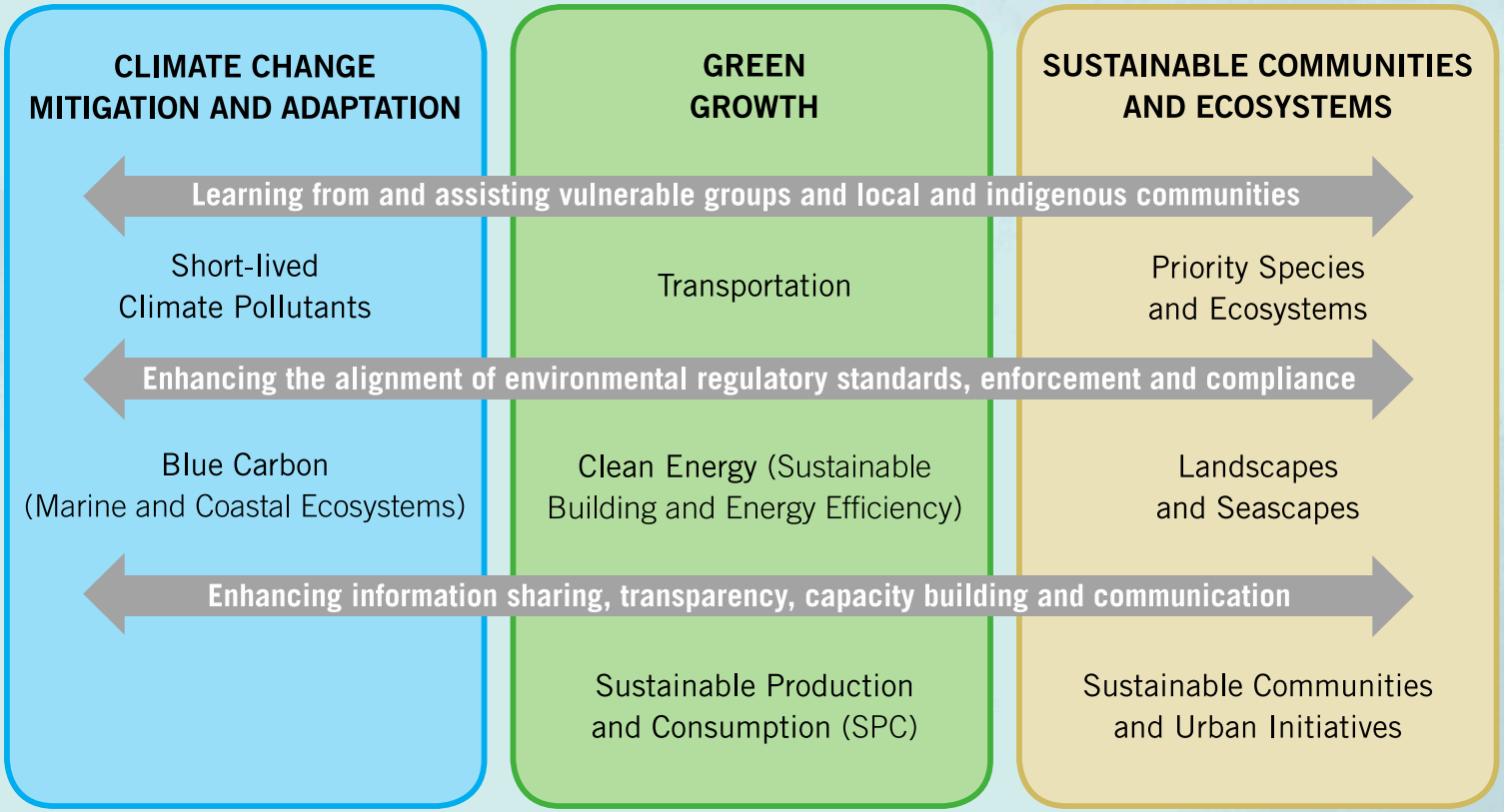
Greening the Economy in North America

- ✓ Improving Comparability of Emissions Data, Methodologies and Inventories in North America **Kick-off project** (September 2010)

Strategic Priorities 2015-2020

Commission for Environmental Cooperation

Strategic Priorities and Cross-cutting Themes, 2015–2020

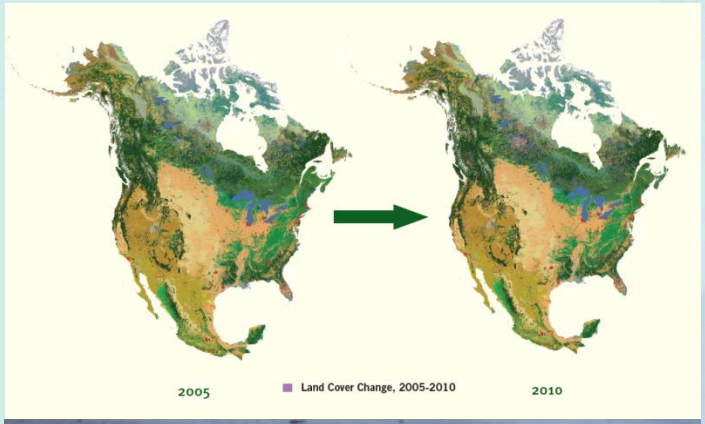


Climate Change and Biodiversity – Impacts (2011 onward)

Focus on assessing ecosystem vulnerability, especially for marine protected areas, coastal areas, transboundary areas (Big Bend-Rio Bravo) and migratory bird habitat

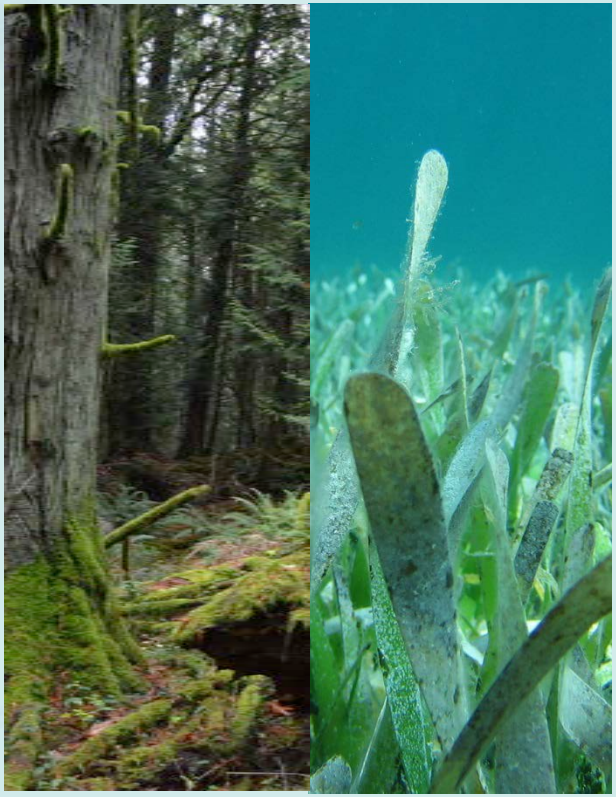
Examples include:

- ✓ Tools for monitoring land cover and landscape-level change, such as the land cover change monitoring system and Big Bend-Rio Bravo work
- ✓ Best practices for considering the impact of climate change on the design of marine protected areas
- ✓ Models for the spread of invasive species
- ✓ Models for changes to Arctic migratory bird habitat



Climate Change and Biodiversity – Mitigation (2011 onward)

Focus on ecosystem carbon and contribution of forest and coastal and marine ecosystems to greenhouse gas emission reduction and climate change mitigation.



Examples include:

- ✓ Science-based work on mitigation options in the forest sector, through better forest management practices, increased afforestation, the use of more long-lived wood products and a better understanding of the end-of-life management of forest products
- ✓ Better understanding of the extent and amount of *blue carbon* stored in coastal marine ecosystems, and ways to bring it into voluntary carbon markets

Climate Change and Biodiversity Adaptation (2011 onward)

Focus on adaptation planning methodologies based on ecosystem function and inclusion of traditional and local ecological knowledge

Examples include:

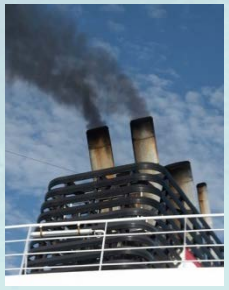
- ✓ Tools to develop the capacity to adapt to climate change at the community level, using vulnerability assessments, ecosystem function analysis and traditional and local ecological knowledge.
- ✓ Monitoring systems to enhance capacity to share environmental monitoring information and traditional ecological knowledge to support decision making on climate change.
- ✓ Local Environmental Observers Network.

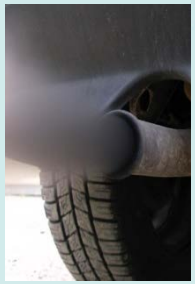
LEO NETWORK

Climate Change and Climate Pollutants
(2011 onward)

Focus on policy-neutral options for improving comparability of foundational elements needed to make the transition to a low-carbon economy

Information to support climate change mitigation policies and consequent greenhouse gas and black carbon emissions reductions in the three countries





- ✓ Assessment of Comparability of GHG and BC emissions inventories
- ✓ Power Plants Air Emissions Report (Update)
- ✓ North American Black Carbon Emissions Estimation Guidelines
- ✓ North American Portal on Climate Pollutants
- ✓ Reducing Emissions from Maritime Transportation

Climate Change, Tools for Adaptation and Mitigation (2011 onward)

- ✓ Tools to strengthen the capacity of communities to share environmental observations.
- ✓ Goals to support decision making on climate change mitigation, and enhance the capacity to monitor health outcomes related to extreme heat events.
  - o *Syndromic Surveillance Systems for extreme heat events*

CEC Priorities and Context

CLIMATE CHANGE	GREEN GROWTH	BIODIVERSITY (SC & E)
Regional acceleration of mitigation and adaptation work	Sustainable consumption and production efforts	Catalyst for science-based initiatives
1) Comparison of mitigation options to enhance forest carbon sinks 2) Systems to monitor health outcomes in extreme heat events 3) Programs to reduce emissions of short lived climate pollutants (methane and black carbon), from maritime transport, landfills, and by diverting and processing organic waste 4) New scientific protocols to measure and map blue carbon	1) Reduction of waste associated with the production and consumption of food 2) Fast-tracking adoption of innovative energy efficiency technology in North American industrial facilities 3) Understanding the migration of chemical substances from consumer products 4) Sustainable trade patterns for CITES species groups and mercury trade statistic	1) Improve our understanding of the vulnerability of coastal and marine ecosystems to climate change 2) Habitat restoration and conservation of Monarchs butterflies and Arctic bird migration corridors 3) Integration of traditional ecological knowledge in climate change mitigation and adaptation

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