

# THE IMPACT OF CLIMATE CHANGE ON REAL ESTATE DEVELOPMENT

Joseph M. Manko  
Todd D. Kantorczyk  
Manko, Gold, Katcher & Fox, LLP  
401 City Avenue, Suite 500  
Bala Cynwyd, PA 19004

mgkf

MANKO | GOLD | KATCHER | FOX 

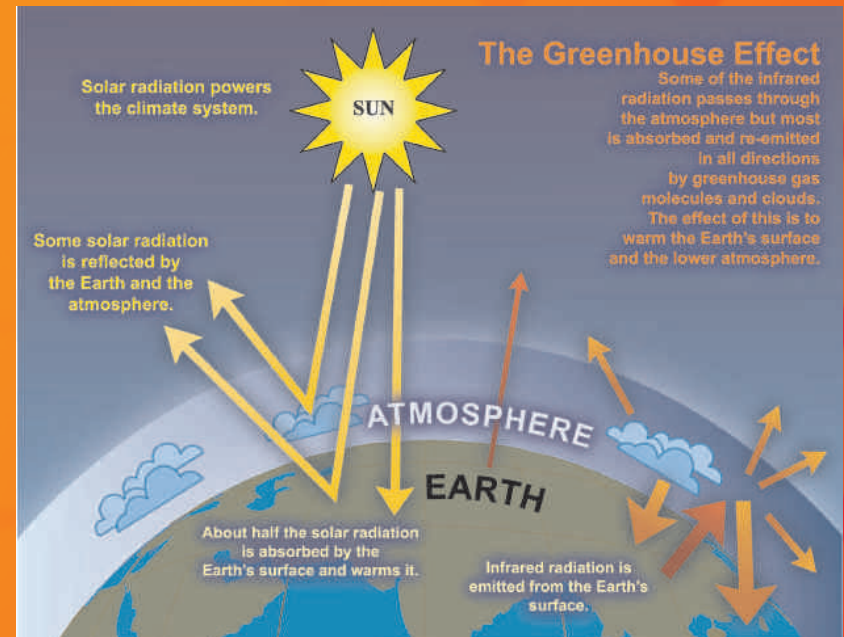
# Historical Glimpse at Global Air Impacts

- Types and Sources
  - Acid Rain
  - Ozone Layer diminution
  - Global Warming
- Geopolitical Response
  - Treaties
  - Developed vs. Developing Countries



# Overview of Climate Change

- Greenhouse Effect
- Types of GHGs
  - Carbon Dioxide (CO<sub>2</sub>)
  - Methane (CH<sub>4</sub>)
  - Nitrous Oxide (N<sub>2</sub>O)
  - Hydrofluorocarbon (HFCs), perfluorocarbon (PFCs), sulfur hexafluoride (SF<sub>6</sub>)



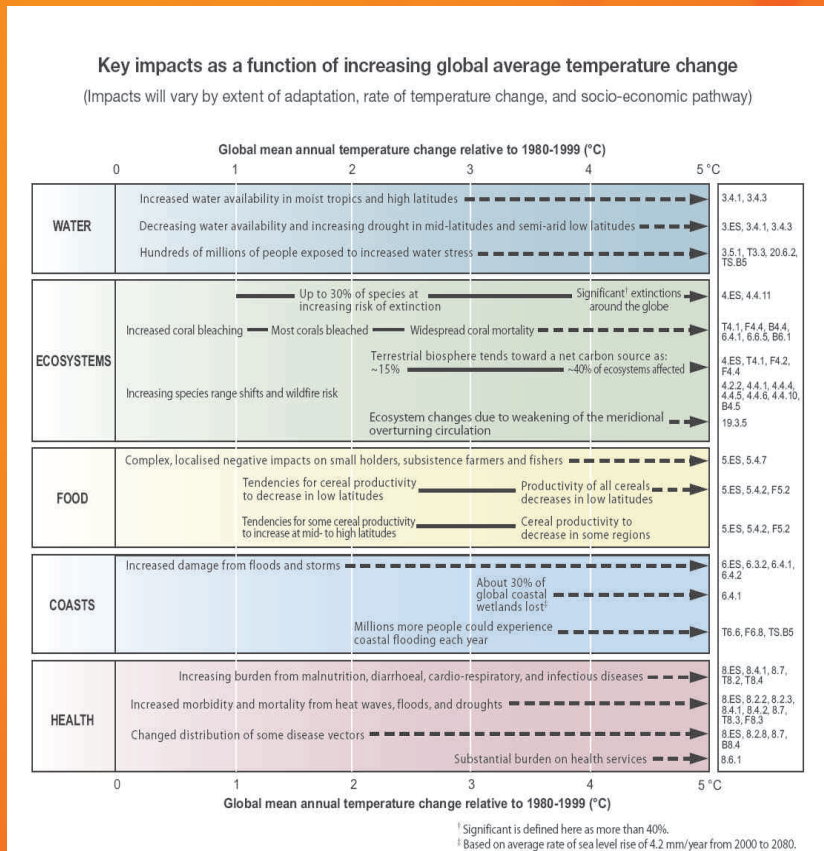
# Overview of Climate Change

- Global warming caused by increased emission of GHGs is generally accepted among scientific community
- “Most of the observed increase in globally – averaged temperatures since the mid-20<sup>th</sup> century is very likely due to the observed increase in anthropogenic GHG concentration.”

*Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment Report (Draft – November 16, 2007)*

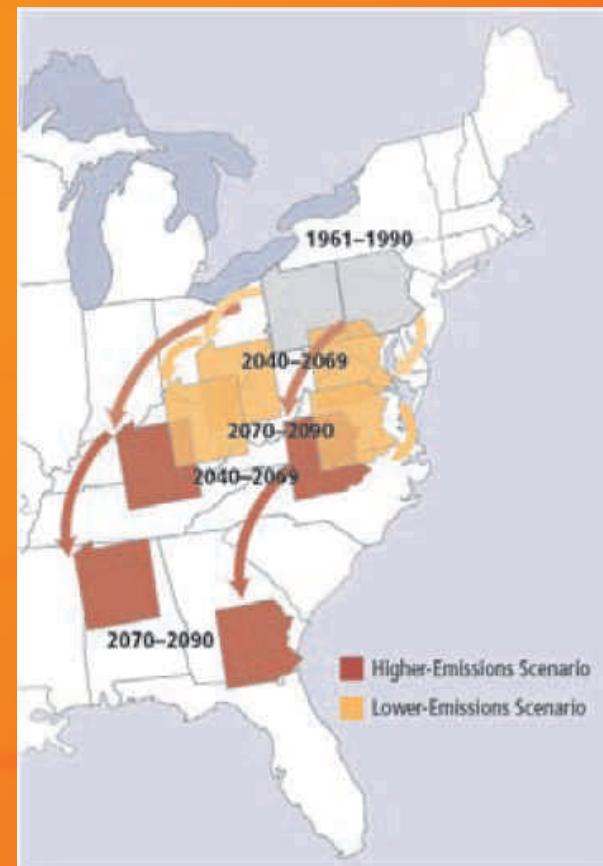
# Overview of Climate Change

- Environmental Impacts
  - Water supply
  - Rising sea levels
  - Major agricultural shifts
  - Species risks
  - Extreme weather



# Overview of Climate Change

- Environmental Impacts in PA & Philly
  - Increased temperatures
  - Georgia summers and 100° days
  - Jersey Shore flooding



# Legal Framework

- International Efforts
  - 1992 Rio Treaty
  - 1997 Kyoto Protocol
    - U.S. withdrawal
  - 2007 Bali conference



# U.S. Federal Efforts

- Pre-2007: questioning science and policy while relying on voluntary efforts
- 2007 events
  - Democrat control of Congress
  - Massachusetts v. EPA
- Upcoming activity
  - EPA tailpipe regulation
  - GHG cap and trade legislation







# Regional State and Local Response

- Pennsylvania
  - Alternative Energy Portfolio Standard and Energy Independence Strategy
  - Rendell climate change strategy
  - HB 110 and SB 266 recently passed



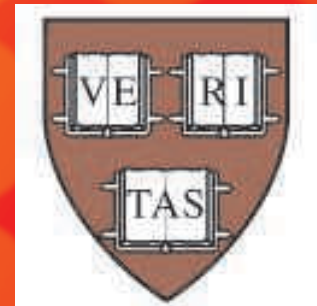
# Regional State and Local Response

- Montgomery County Greenhouse Gas Reduction Task Force
- Lower Merion Environmental Action Plan
- Haverford Township GHG inventory and action plan



# Land Use Responses Elsewhere

- Massachusetts Greenhouse Gas Emission Policy
  - Projects subject to Mass. Environmental Policy Act (“MEPA”) now required to “identify and describe sources of and propose measures to avoid, minimize or mitigate for project related GHG emissions.”
  - Both direct and indirect GHG emissions
  - Developers will be required to commit to GHG reduction measures
- Harvard example
  - First legally enforceable limit on GHG emissions from a major real estate project in US



# Land Use Responses Elsewhere

- California Environmental Quality Act (“CEQA”)
- San Bernardino County lawsuit & settlement
- California legislative compromise
  - All CEQA documents must address GHG emissions and climate change



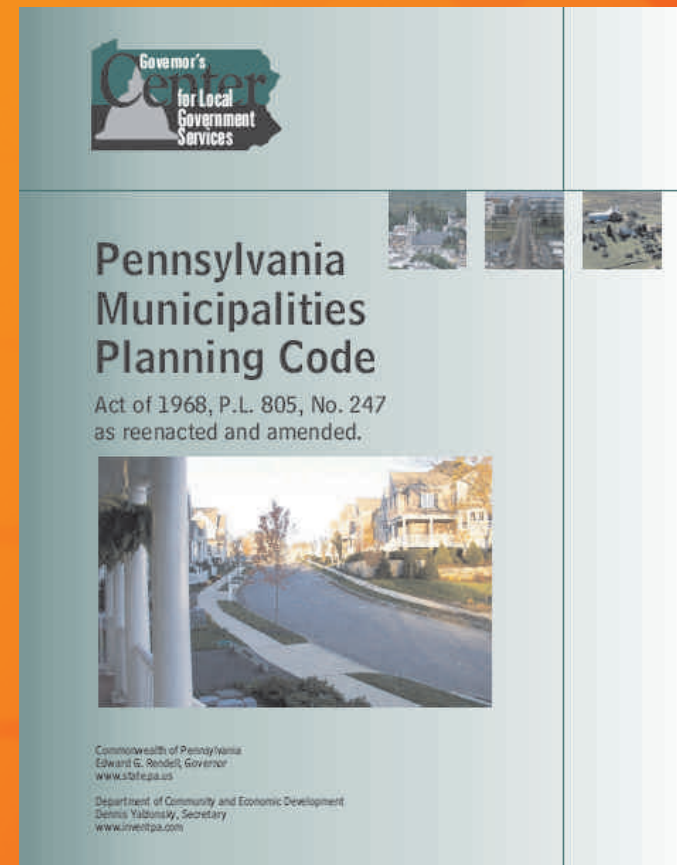
# Land Use Responses in Pennsylvania

- No PA NEPA
- Article I, § 27?
  - Not self-executing for purposes of government regulating
  - Public can challenge that state approval has violated § 27, (but usually loses)
  - Public challenge of DEP or other agency approval for failure to consider climate change?



# Land Use Responses in Pennsylvania

- Municipal control and MPC
  - Section 301.1 – comprehensive plan may include energy conservation element
  - Act 68
    - Comprehensive plan include protection of resources
  - DEP approvals must take into account comprehensive plan under § 619.2
  - If GHG consideration part of comprehensive plan, does DEP need to consider GHG emission before issuing permit?
- Should MPC be amended?



# County and City Efforts

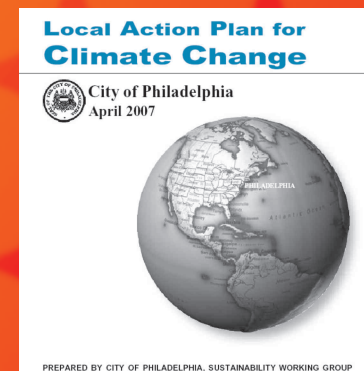
- Montgomery County Greenhouse Gas Reduction Task Force
  - Green buildings and fleet
  - Financial incentive to municipalities
  - Educate municipalities





# County and City Efforts

- City of Philadelphia
  - Commitment to reduce GHG emissions through a number of inter-city agreements
  - 2007 Local Action Plan for Climate Change
    - LEED certification for new construction
    - Transit Oriented Development
    - Establish office of Sustainability and Environment
  - Zoning reform: incentivize green development



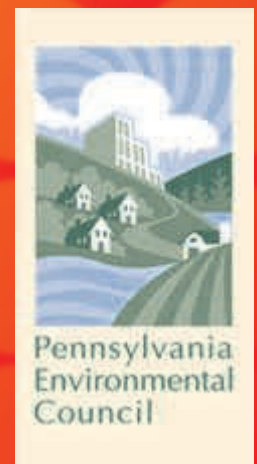
# Smart Growth Comes of Age

- Gov. Ridge 21<sup>st</sup> Century Environment Commission Land Use Task Force
- Act 67
  - Multi-municipal planning
- Transit Oriented Development
- Act 537
- More stringent storm water requirements



# Smart Growth Comes of Age

- Pennsylvania Environmental Council Roadmap for Climate Change
- Land use recommendations
  - Smart Growth & Smart Transportation
  - Incentives for redevelopment of Brownfields
  - Amend MPC for more regional planning
  - Create “greenbelts”



# Changes today – Voluntary Steps – Market Reaction

- Mixed use development near transit stations
- Energy use reduction
  - Green building
  - LEED compliance
  - Density bonuses
- Alternative energy use & generation
  - Inclusionary or exclusionary?



# What Does Future Hold?

- Federal and State future mandates and incentives?
- International impacts?

