

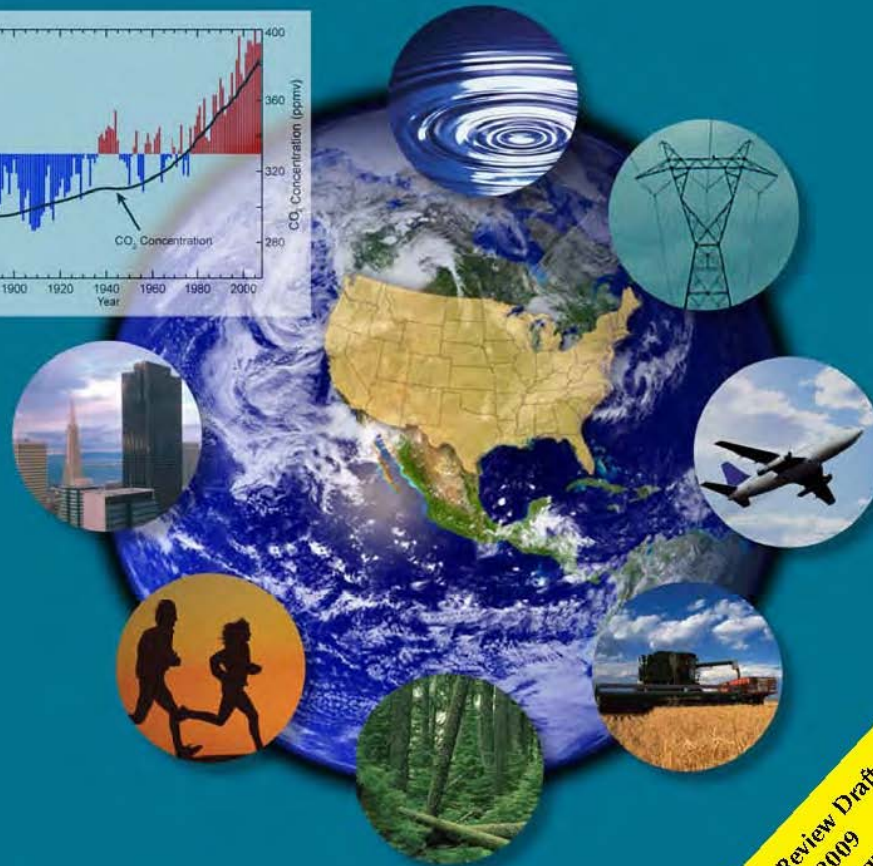
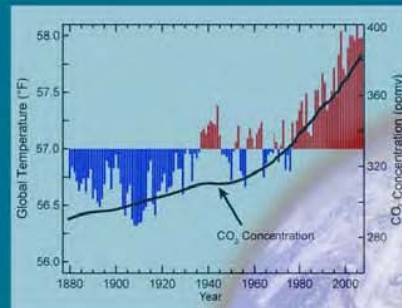
Conference on Governance of  
Emerging Technologies  
21 May 2013

## The Case for Adaptation & the Climate Change Model

Marc Saner  
Director, Institute for Science,  
Society and Policy



# Global Climate Change Impacts in the United States



U.S. Climate Change Science Program  
Unified Synthesis Product

2nd Public Review Draft  
January 2009  
Do not cite or quote

# Mathematical Self-Assessment



- 9 Governance Stances
  - 3 Technology Criteria
  - 10 Arguments for Adaptation
  - 5 Models from Climate Change
- 

= Too many Items

(full manuscript available ...)



# Governance by Control ...

... is not our only instrument

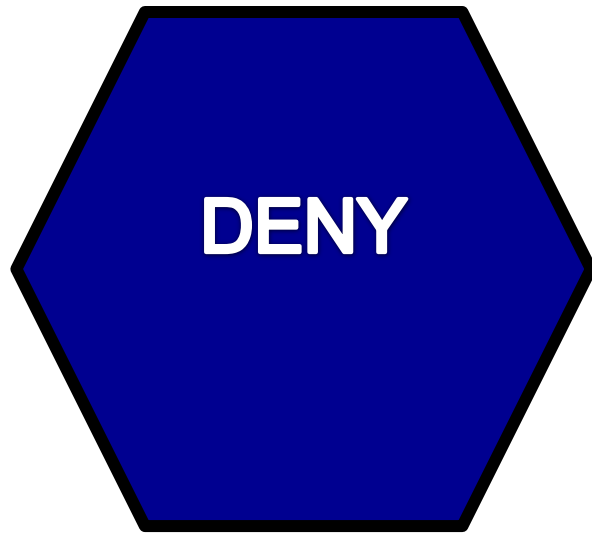
... often fails (prohibition examples)

... is not always performance-oriented

*Who controls whom? (Autonomous Technology)*

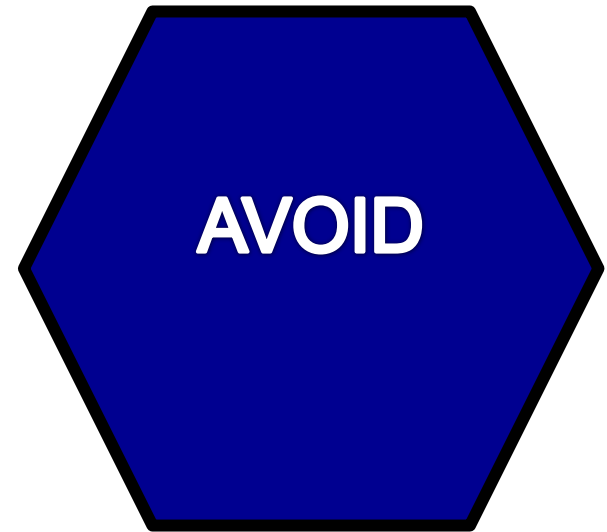
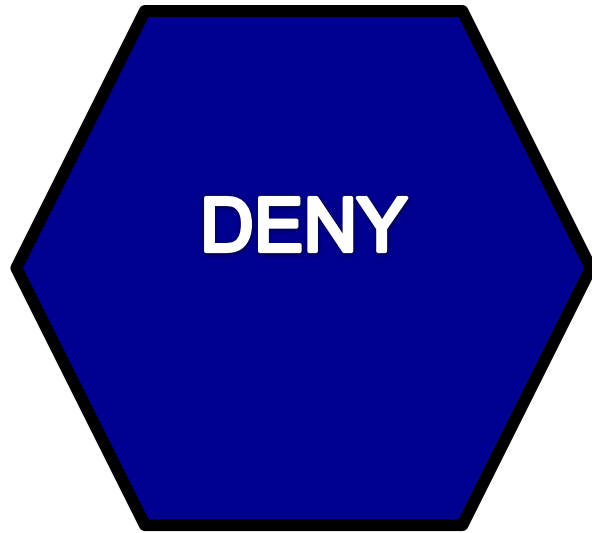


# Governance by Avoidance



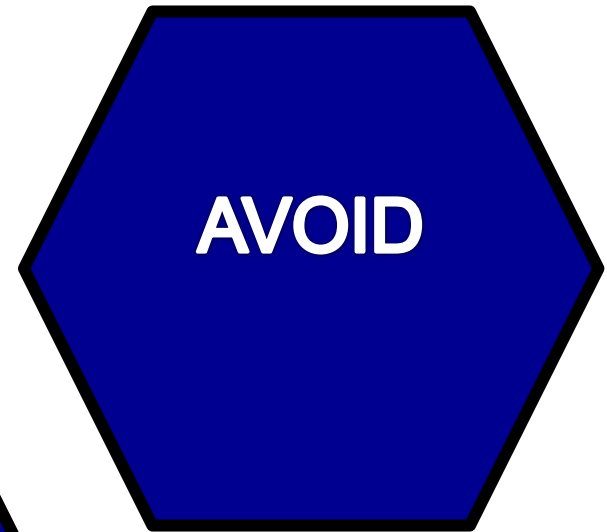
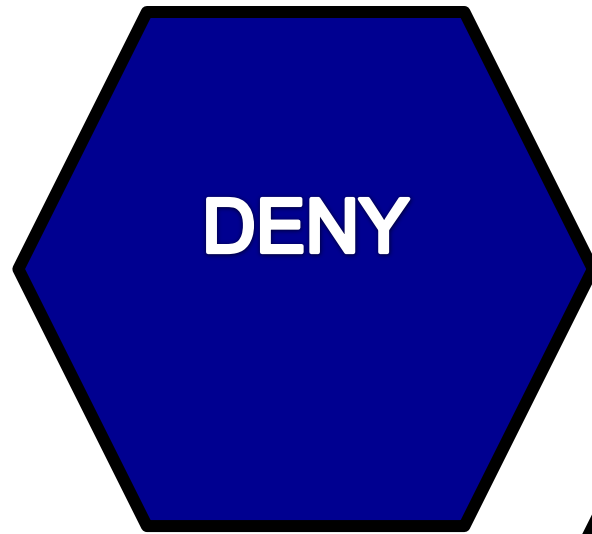


# Governance by Avoidance



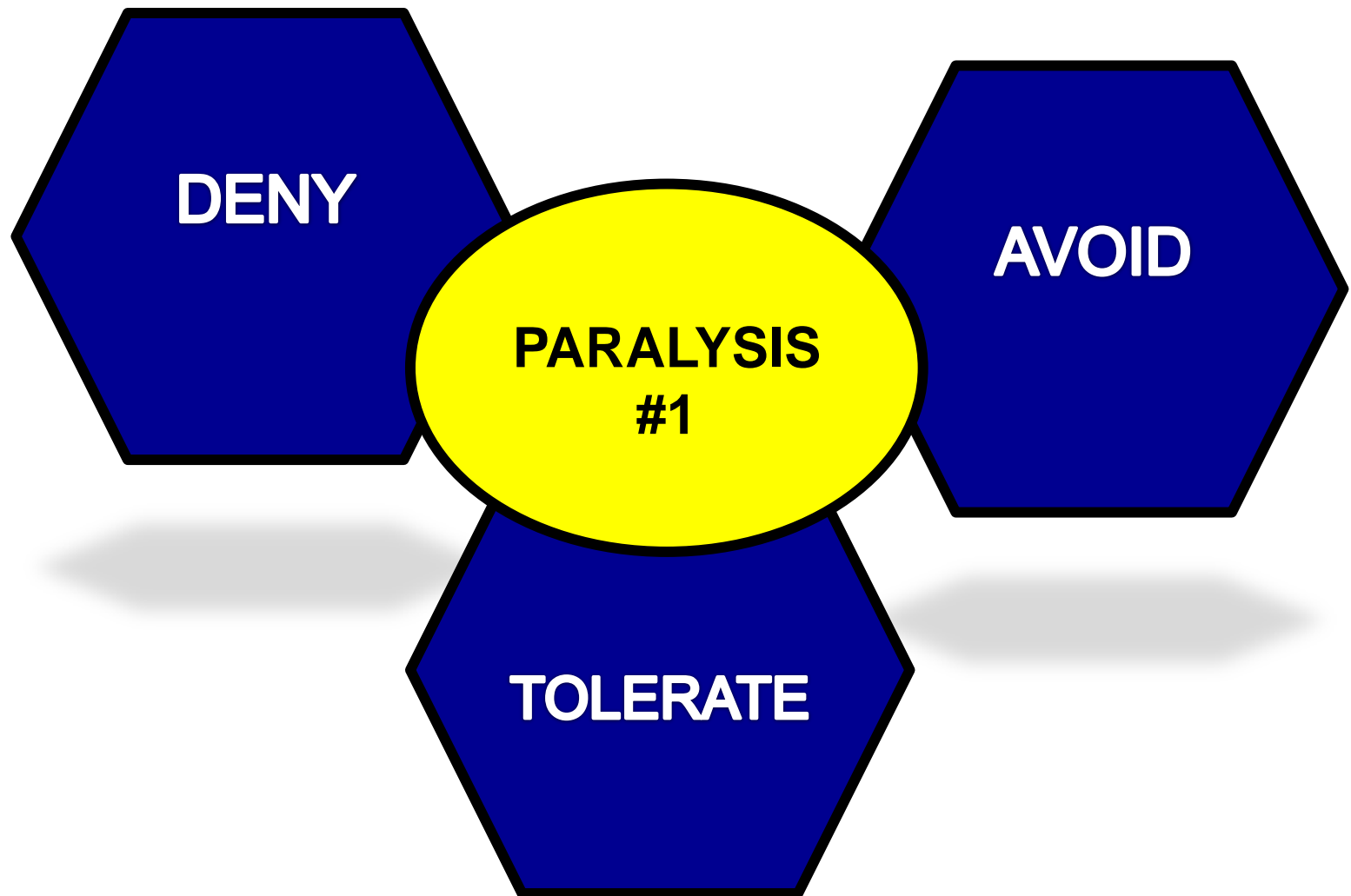


# Governance by Avoidance





# Governance by Avoidance





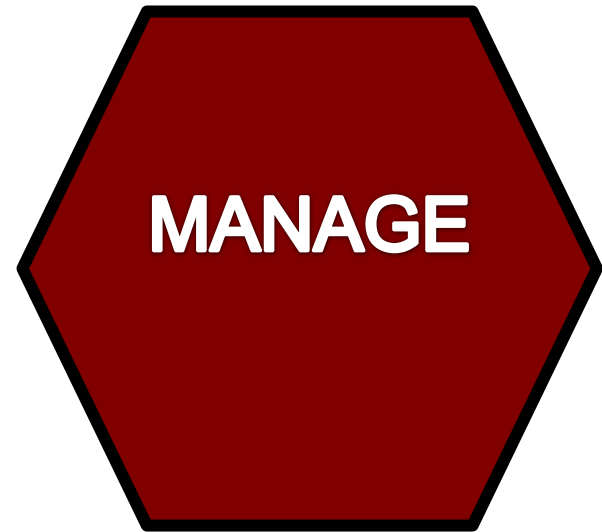


# Governance (Proper) by Control



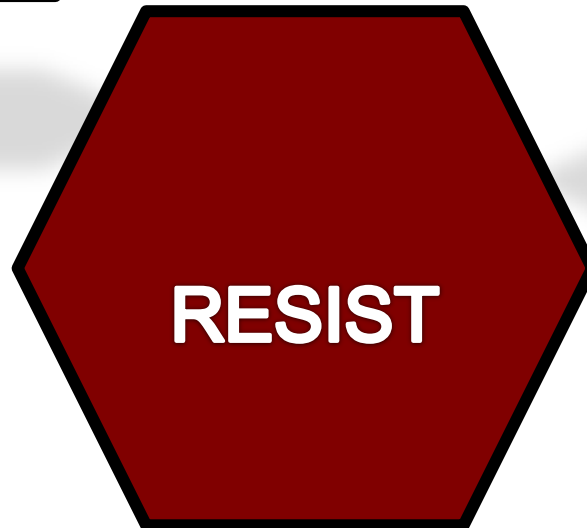


# Governance (Proper) by Control



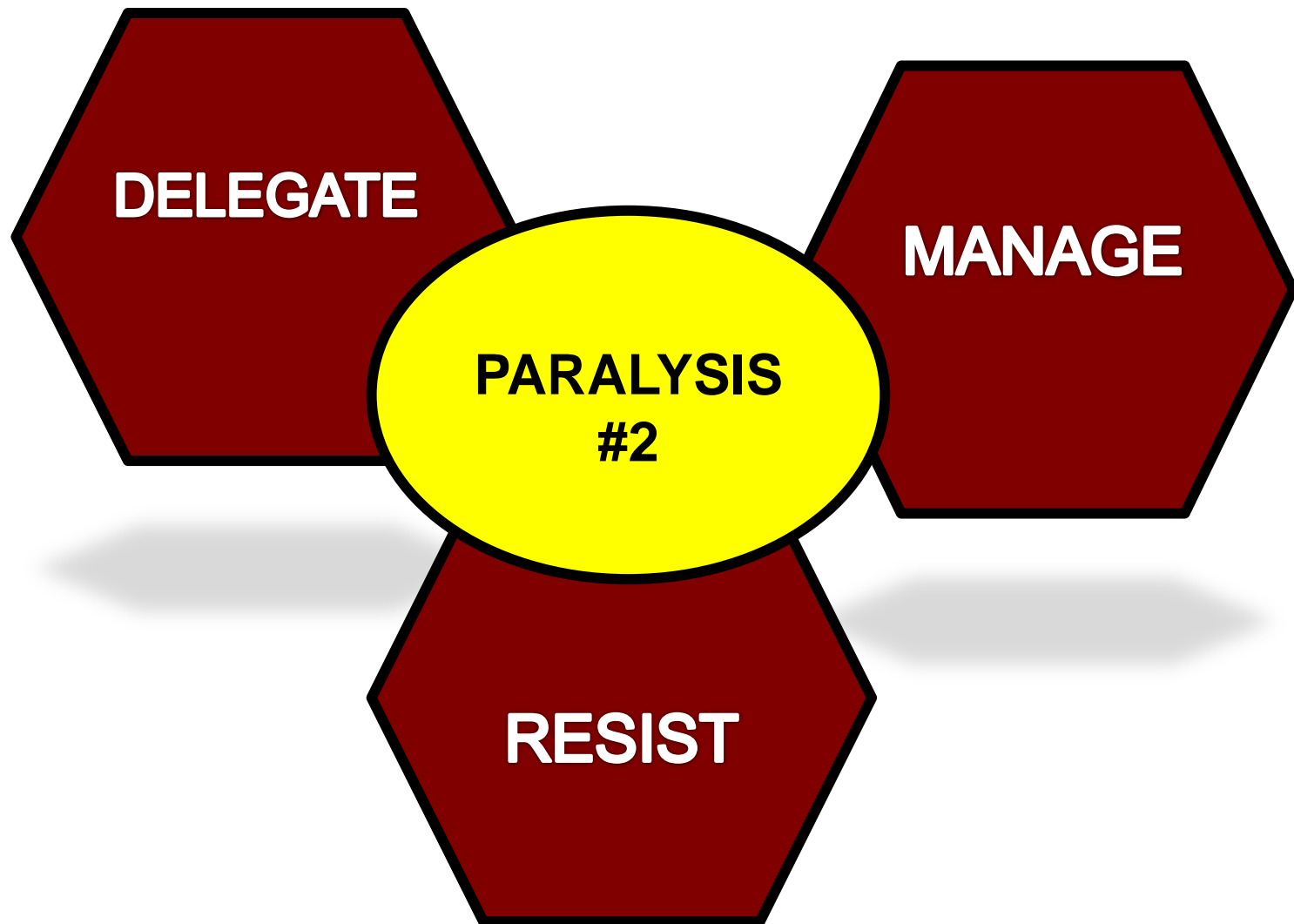


# Governance (Proper) by Control



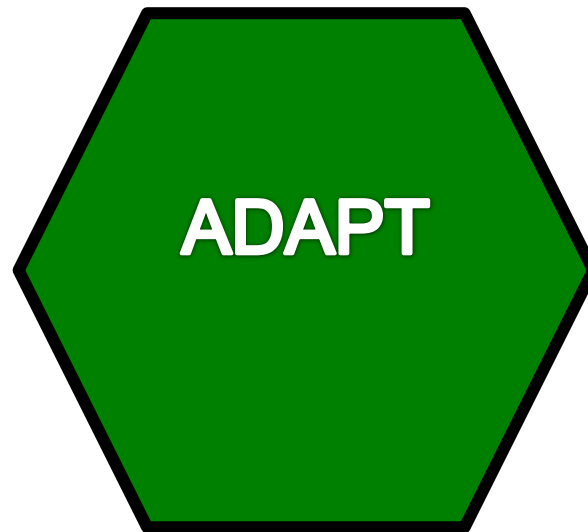


# Governance (Proper) by Control





# Governance by Adaptation



S&S 2013



# Criteria

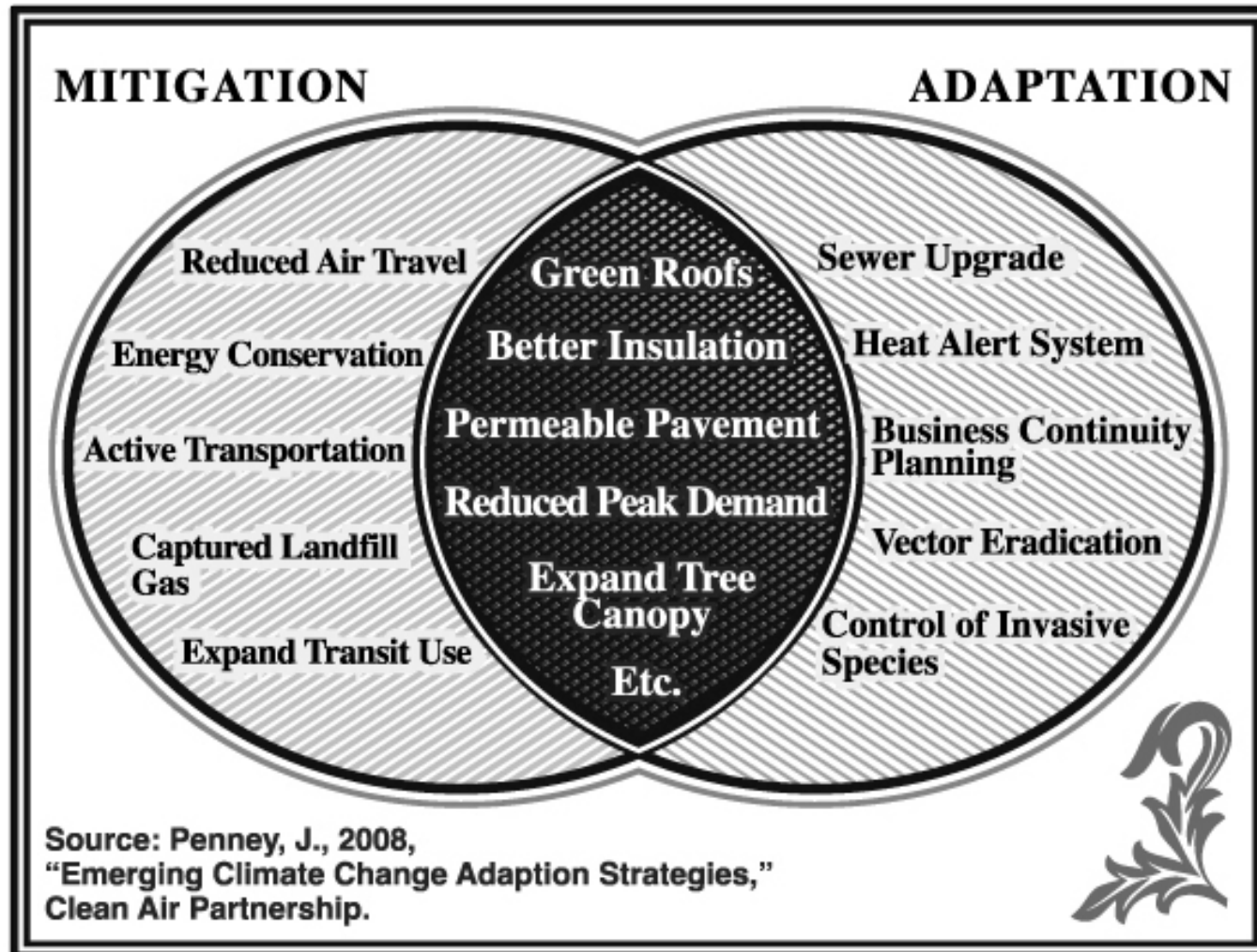
Adaptation is especially important if:

1. Extreme **pace** (time) – or:
2. Extreme **diffusion** (space) – or:
3. Extreme novelty (**ethics**)

# Benefits of Adaptation Lens

For Example:

# The Climate Change Analogy





# UN Adaptation Research



## REPORTS - ASSESSMENT REPORTS

### IPCC Fourth Assessment Report (AR4)

#### Climate Change 2007: Impacts, Adaptation and Vulnerability



#### Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change

M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds.  
[Cambridge University Press, Cambridge, UK, 976 pp](#)

#### Contents

[Introduction to the Report](#)  
[Summary for Policymakers](#)  
[Technical Summary](#)

# UN Adaptation Framework



**United Nations**  
Framework Convention on  
Climate Change

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Your location: Home > Adaptation > Cancun Adaptation Framework

## NOTIATIONS

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## Cancun Adaptation Framework

Parties adopted the Cancun Adaptation Framework (CAF) as part of the Cancun Agreements at the [2010 Climate Change Conference](#) in Cancun, Mexico (COP 16/ CMP 6). In the Agreements, Parties affirmed that adaptation must be addressed with the same level of priority as mitigation. The CAF is the result of three years of negotiations on adaptation under the [AWG-LCA](#) that had followed the adoption of the  [Bali Action Plan](#) at the 2007 Climate Change Conference in Bali, Indonesia (COP 13/ CMP 3).

A [chronology](#) provides an overview of all relevant negotiations, meetings and documents on the Cancun Adaptation Framework

# Global Adaptation Committee



**United Nations**  
Framework Convention on  
Climate Change

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## Adaptation Committee

As part of the [Cancun Adaptation Framework](#), Parties established the Adaptation Committee to promote the implementation of enhanced action on adaptation in a coherent manner under the Convention, inter alia, through the following functions:

1. Providing technical support and guidance to the Parties
2. Sharing of relevant information, knowledge, experience and good practices
3. Promoting synergy and strengthening engagement with national, regional and international organizations, centres and networks
4. Providing information and recommendations, drawing on adaptation good practices, for consideration by the COP when providing guidance on means to incentivize the implementation of adaptation actions, including finance, technology and capacity-building
5. Considering information communicated by Parties on their monitoring and review of adaptation actions, support provided and received

# UN Adaptation Fund



**United Nations**  
Framework Convention on  
Climate Change

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## Adaptation Fund

The Adaptation Fund was established to finance concrete adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change.

The Adaptation Fund is financed from the share of proceeds on the [clean development mechanism \(CDM\)](#) project activities and other sources of funding. The share of proceeds amounts to 2% of [certified emission reductions \(CERs\)](#) issued for a CDM project activity.

The Adaptation Fund is supervised and managed by the [Adaptation Fund Board](#) (AFB). The AFB is composed of 16 members and 16 alternates and meets at least twice a year ( [Membership as of March 2012](#) (45 kB) ).

Upon invitation from Parties, the Global Environment Facility (GEF) provides secretariat services to the AFB and the World Bank serves as trustee of the Adaptation Fund, both on an interim basis.



## Adaptation Private Sector Initiative (PSI)

**New!!! Submit your case study now**

Following a successful launch in 2011/2012, the Adaptation Programme of the UNFCCC Secretariat under its Nairobi work programme (NWP) on impacts, vulnerabilities and adaptation to climate change is calling upon private sector organizations and other stakeholders to submit case studies that show innovative activities of adaptation to climate change.

Please tell us your story on how your organization is engaging and adapting to climate change in a sustainable manner, reducing business risks, reducing and avoiding the impacts and the vulnerabilities posed by extreme climate events, and also profiting from the opportunities that changes in climatic conditions present.

[Download](#) and fill in the submission form with your organization's case study, and send it to [nwp@unfccc.int](mailto:nwp@unfccc.int). Please, refer to "NWP case study" in the subject line.

The case studies will be shared publically in our dedicated [online database](#)



# Take Home



- For “wicked” cases, one better uses the **entire toolkit** of policy instruments
- Much can be said to **explicitly address adaptation**
- Climate change provides **several models** that could be ported to emerging technologies

*Thanks to Jackie Dawson and Thank You!  
msaner@uottawa.ca*