

Cities, Energy, & Climate Change Planning



John Post
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IGERT Fellow

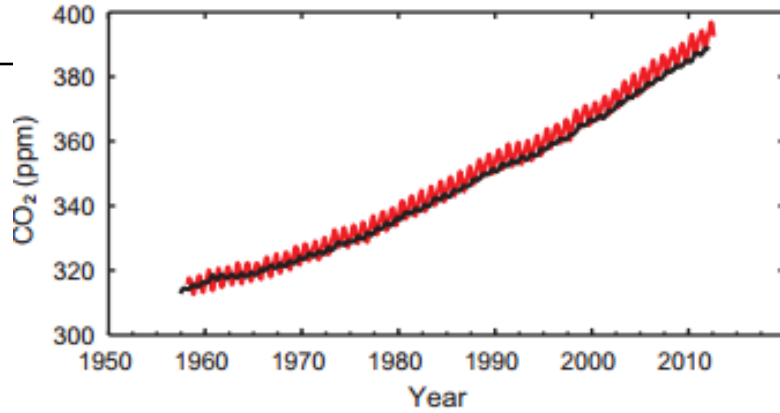
Spring 2015
IGERT
Student
Presentation

Outline

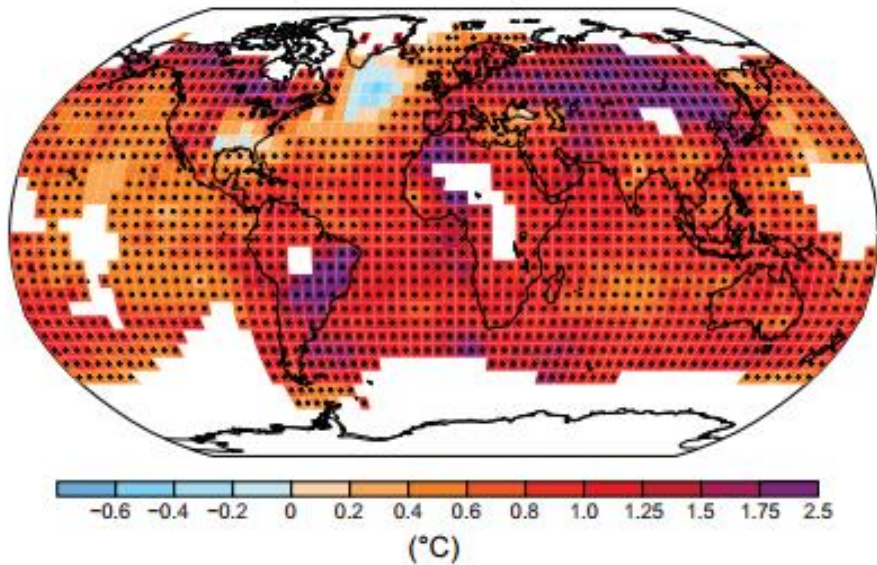
- Climate Change Response
- Cities
- Energy
- Methods, Research, & Themes

Climate change response: A collective social & organizational process of decision-making & adaptation

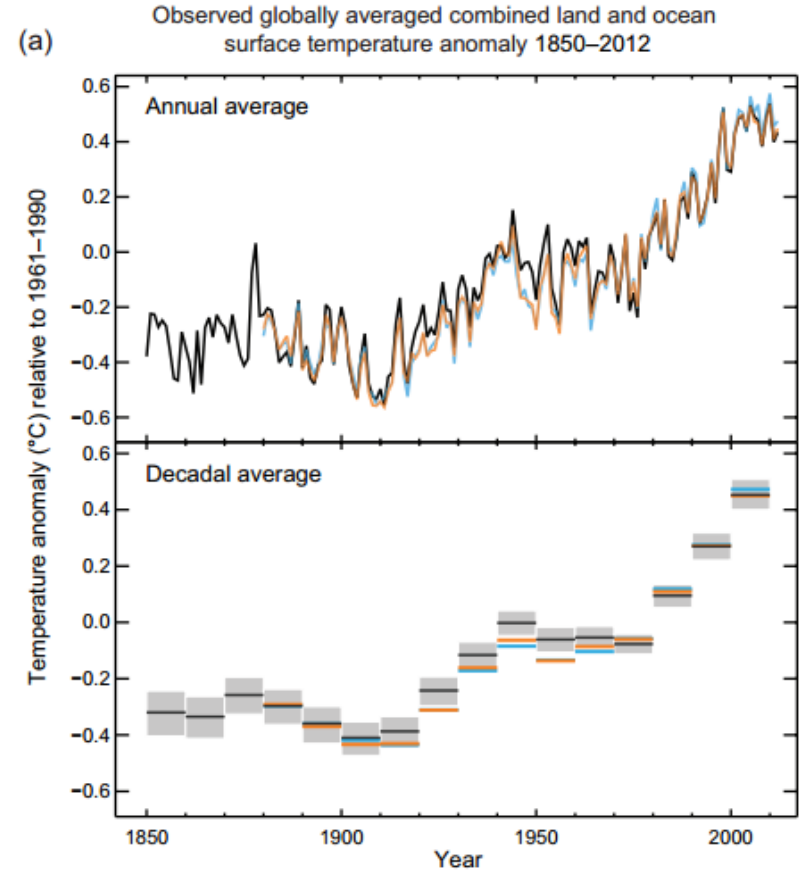
Atmospheric CO₂



Observed change in surface temperature 1901–2012

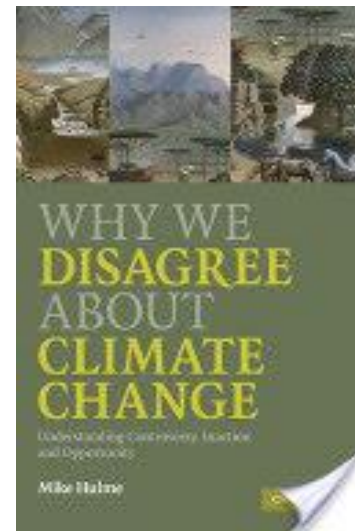
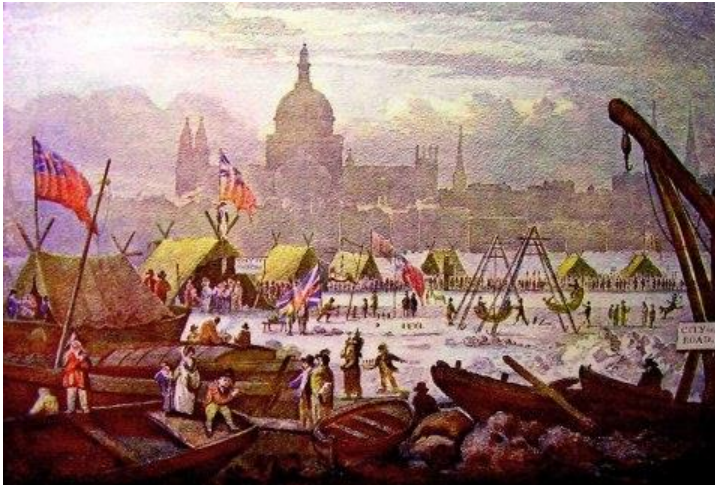


(IPCC Fifth Report, 2014)

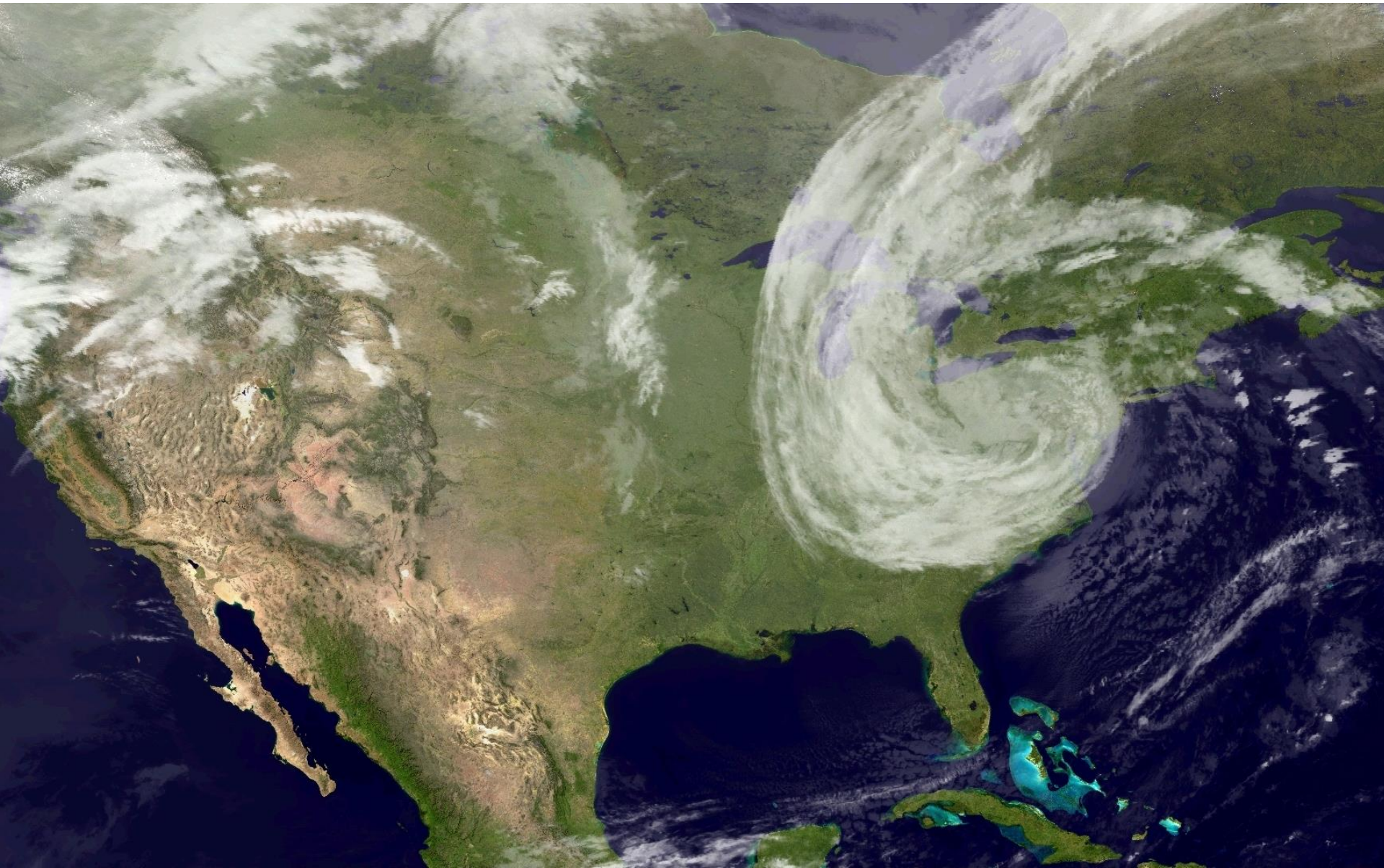


“How’s the weather?”

Humans not well-equipped to identify long-term, global-scale climate change as morally relevant (Markowitz and Shariff, 2012)



Dynamic cultural processes and roles, shared history, storytelling (Adger, et al. 2012, Sakurai et al., 2011)





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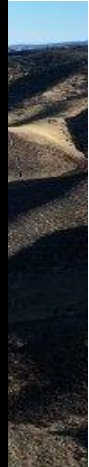
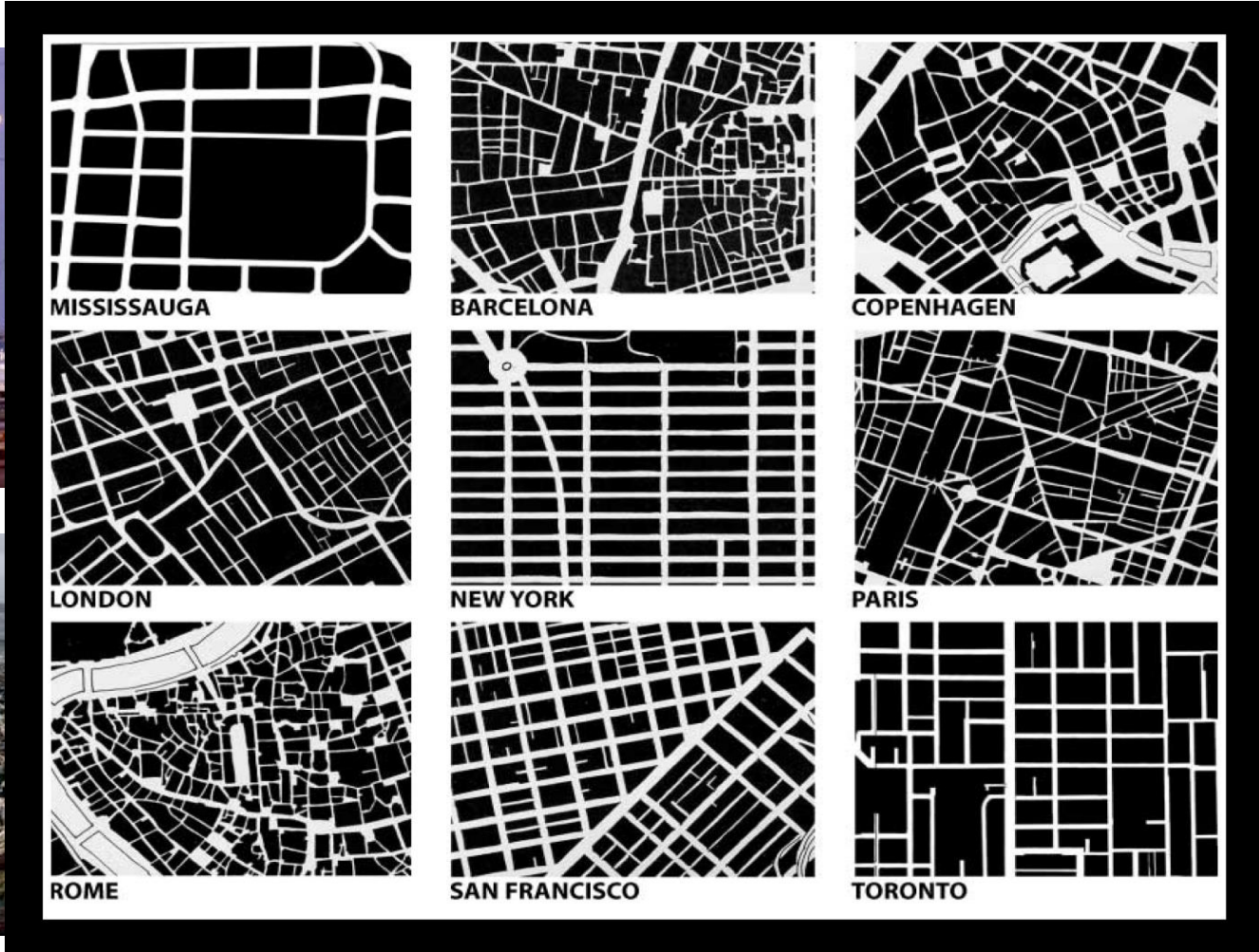
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MASSIVE CLEANUP, POWER OUTAGES IN AFTERMATH OF DEVASTATING BLIZZARD

THE BIG DIG

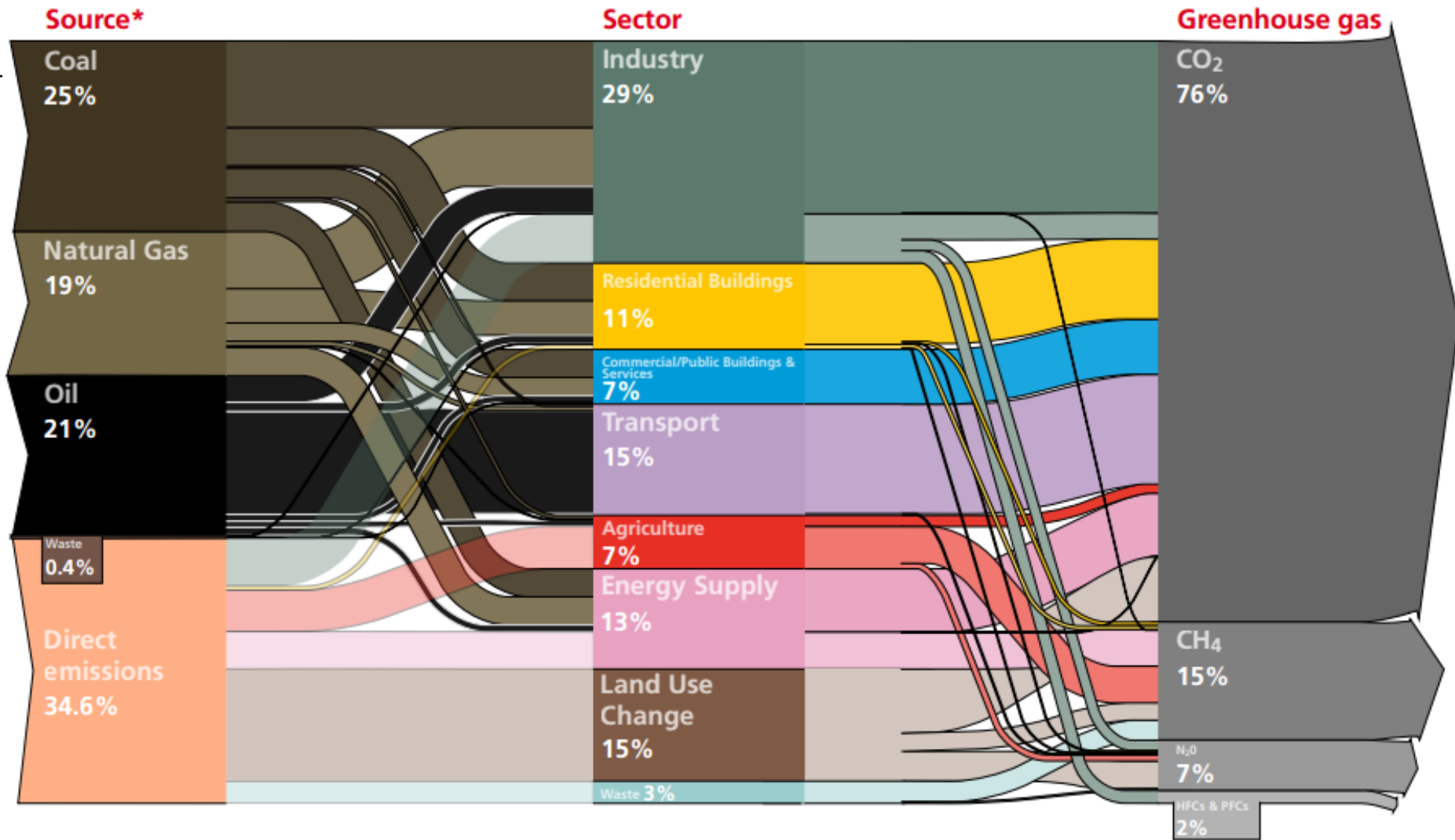
PHOTO: PHOTOGRAPH BY GUY LAWRENCE

Cities



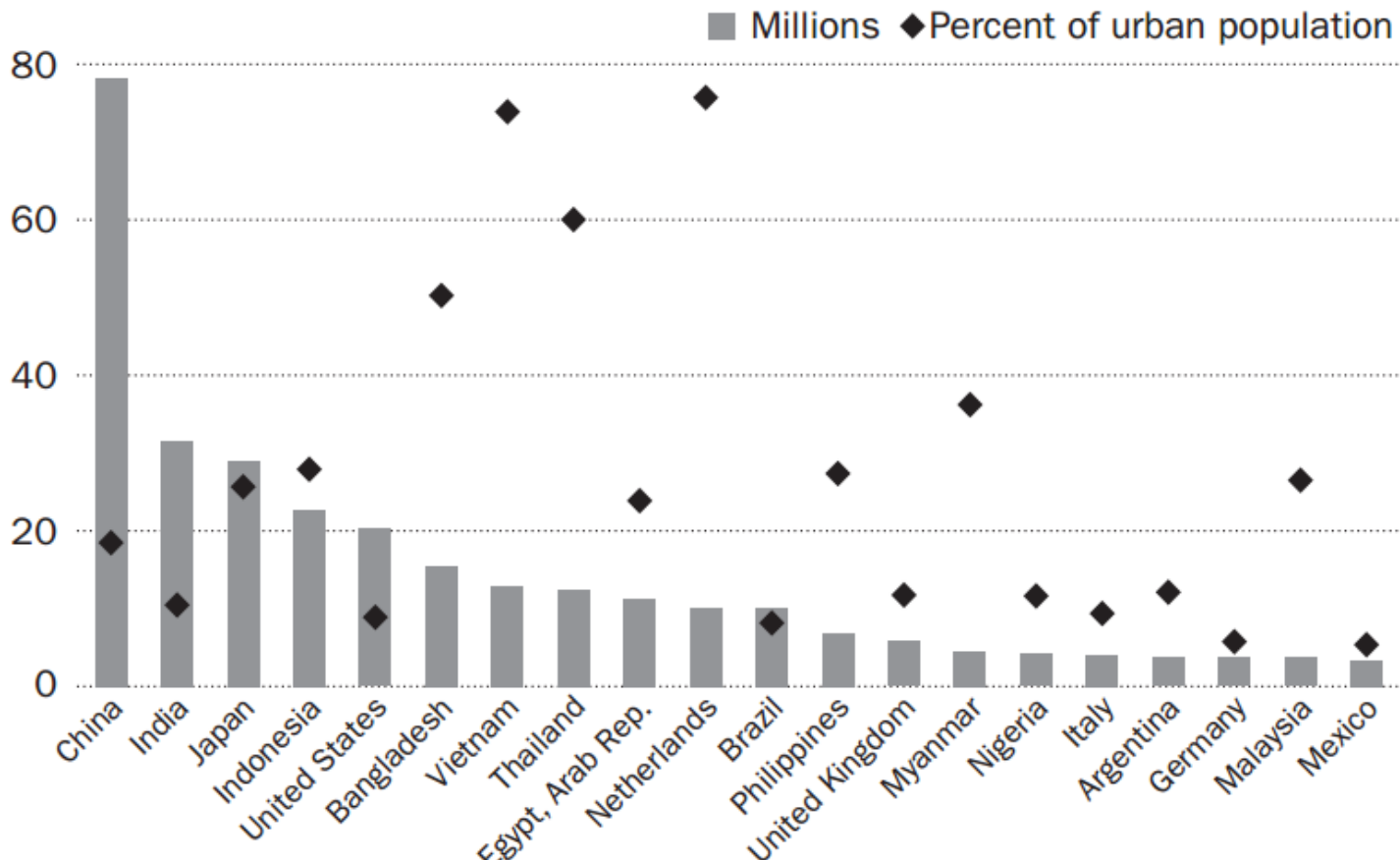
World GHG Emissions Flow Chart 2010

Total emission worldwide (2010) **48 629** MtCO₂ eq



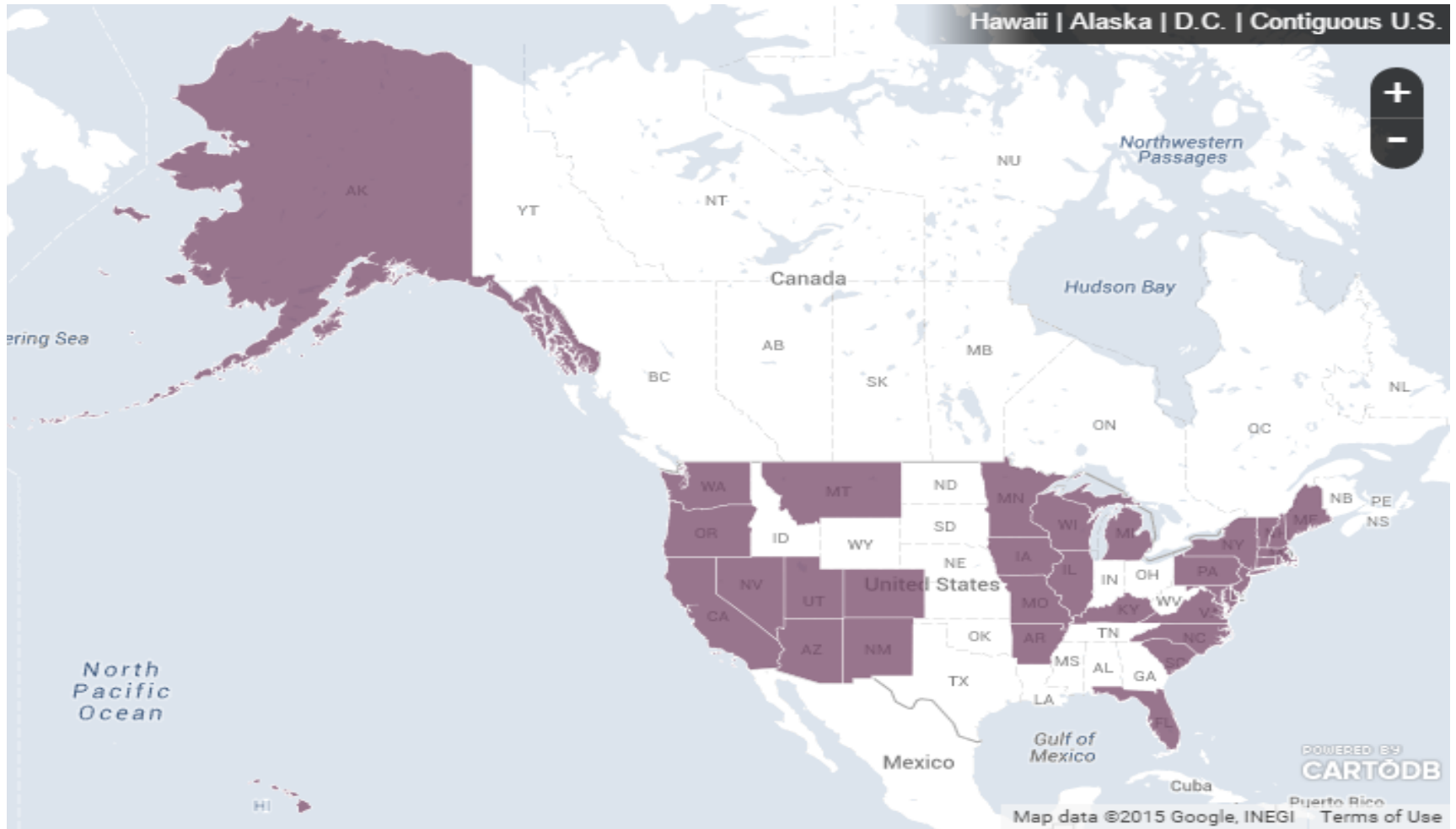
UN Habitat, Planning for Climate Change, 2014

Countries with highest urban populations living in the low-elevation coastal zone, 2000



World Bank Report on Cities and Climate Change: An Urgent Agenda, 2010

Climate Action Planning, 1993- onward

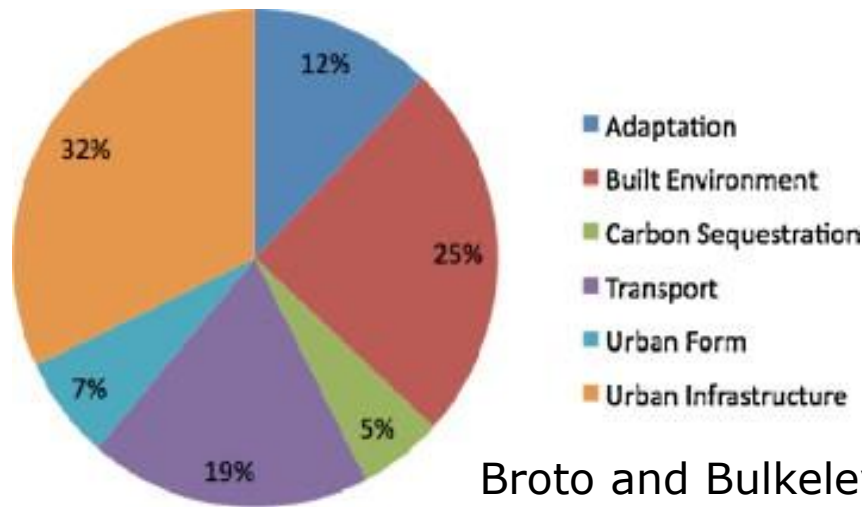


“Laboratories of Sustainability”

Experiments in design, scale, and function

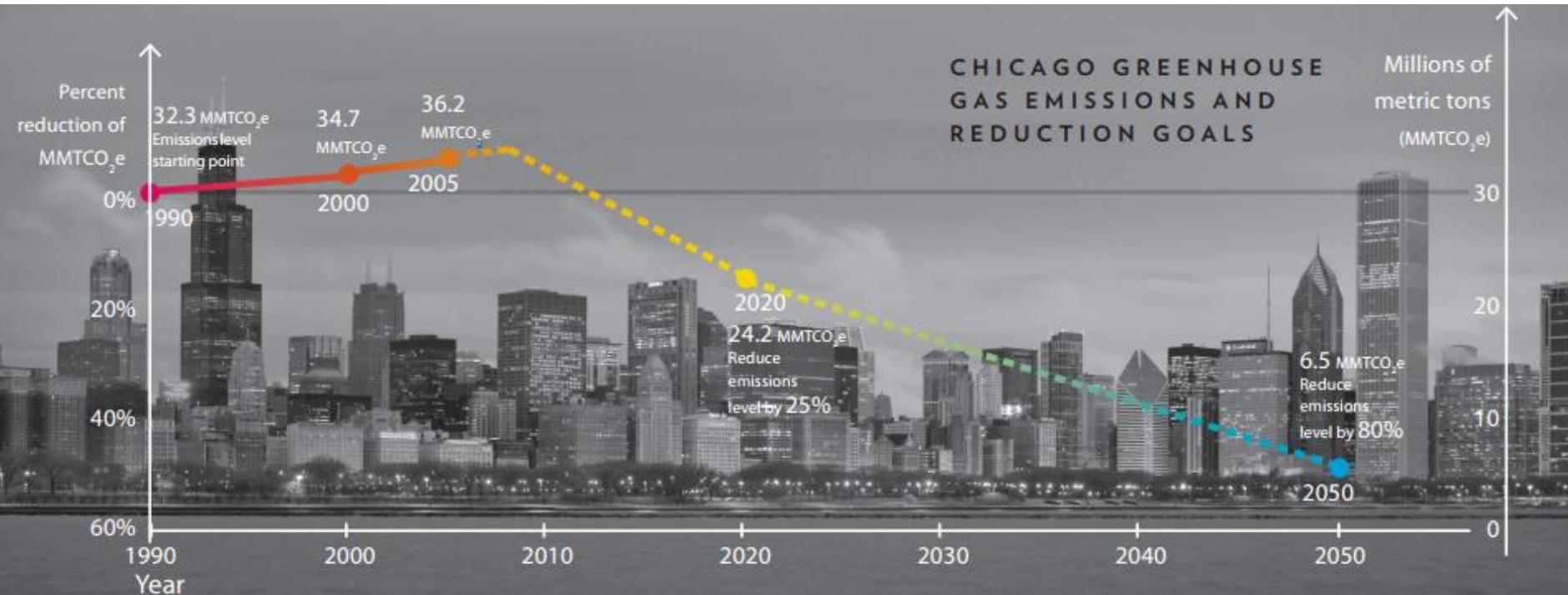
Incentives, ideas, capacity (Carmin et al., 2010)

Collaboration



Broto and Bulkeley, 2013

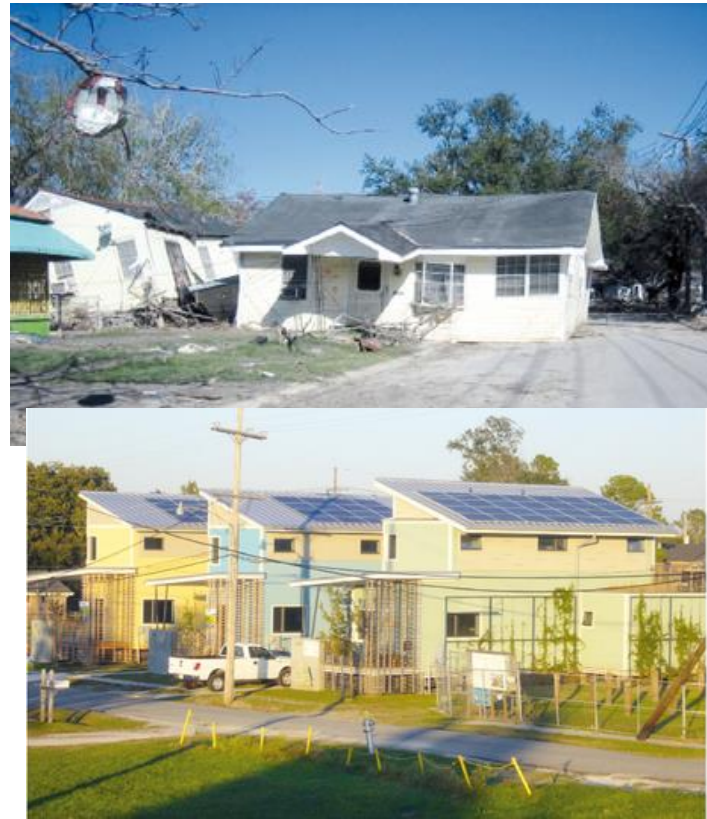
Energy



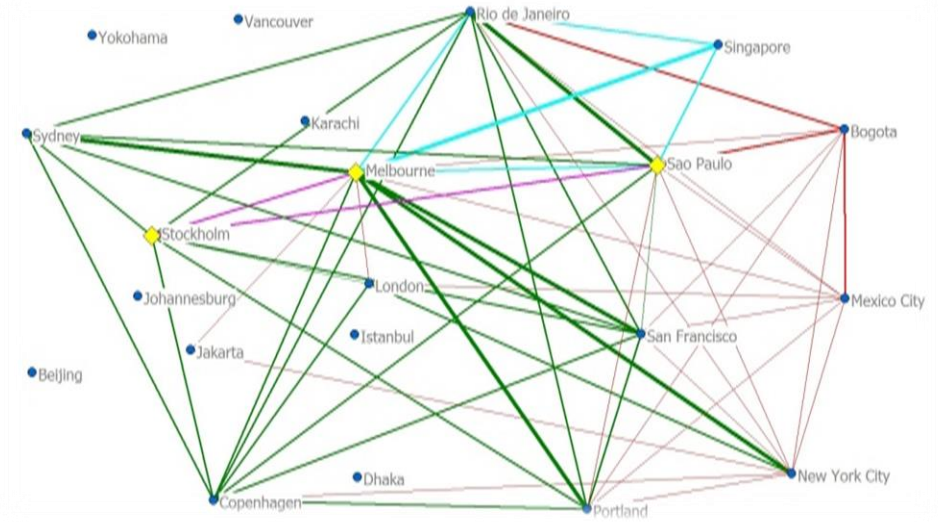
Chicago Climate Action Plan, 2010

Energy

Incentivizing & mainstreaming renewables “Municipalization”



Collaboration



www.c40.org/networks



Case Studies

Document and policy analysis

Interviews

Organizational ethnography

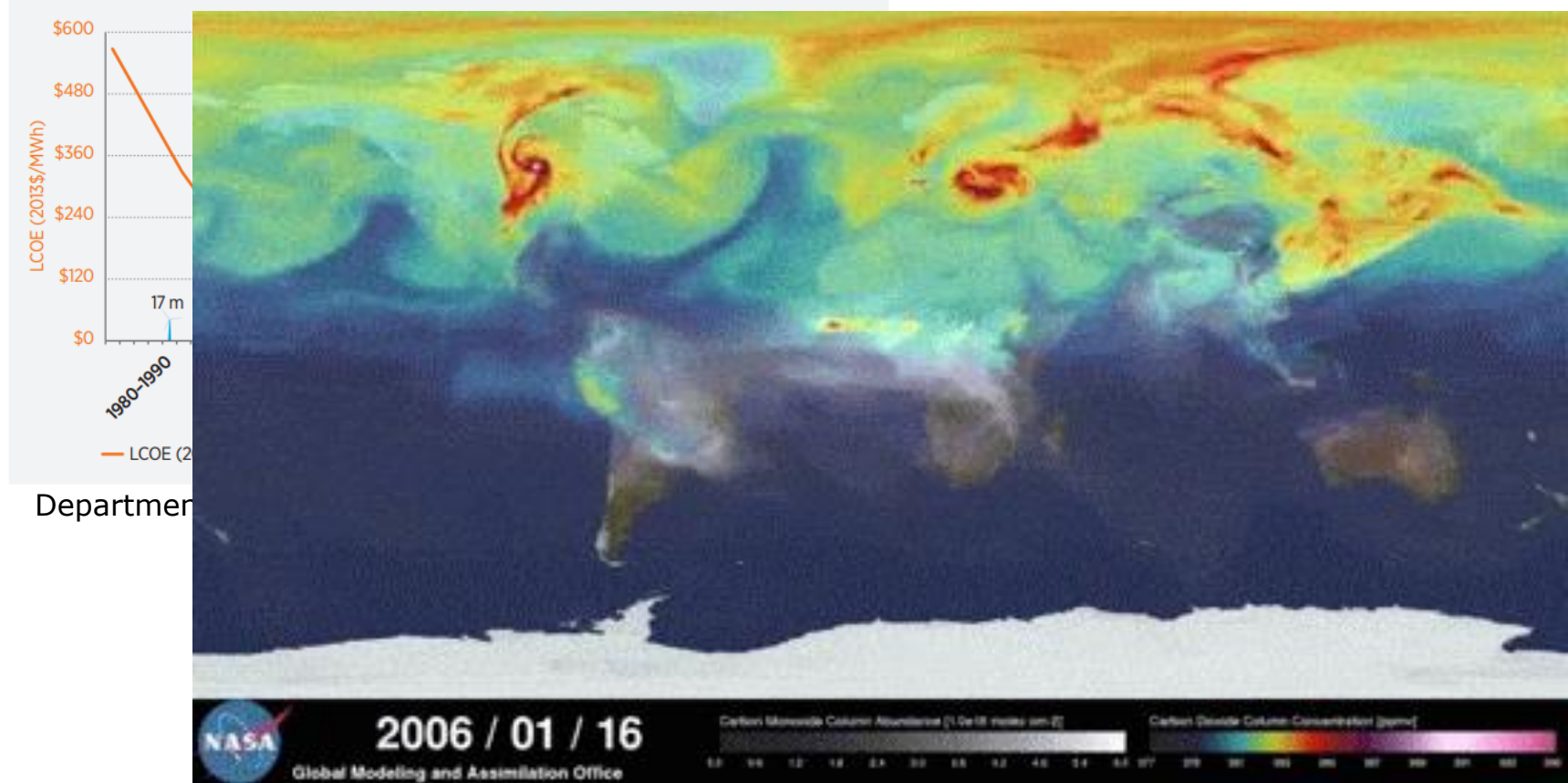


Processes & Tools

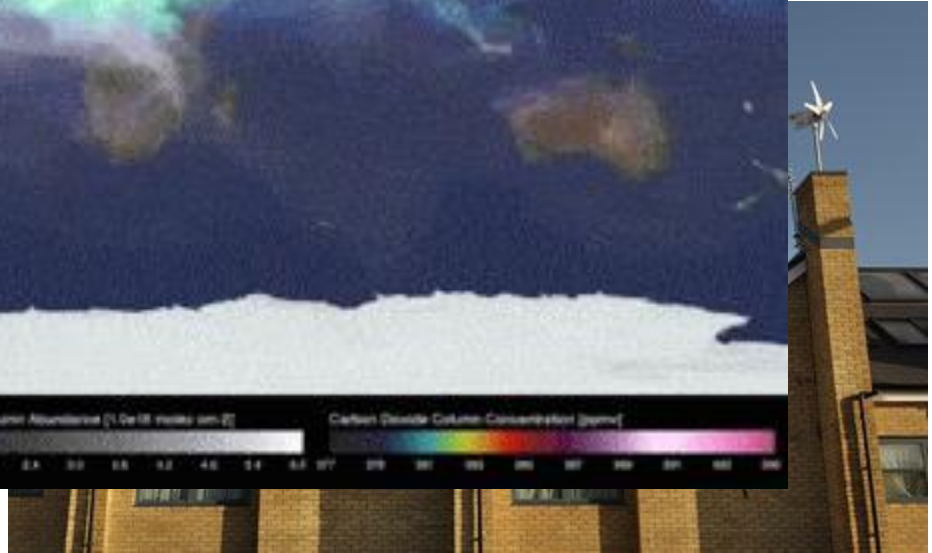
- Public Engagement
- Policy Tools
- Educational Tools
- Bridging the Divide

Scale & Spatial Match

Scale-up of wind technology has supported cost reductions.



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Learning

Exchange/diffusion of ideas and practices (Rao et al., 2000)

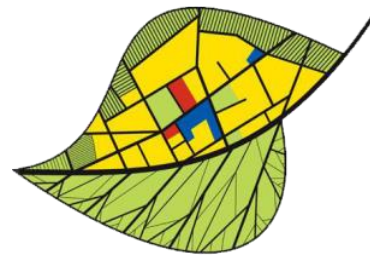
- Social movements, local advocacy, and education



Thanks!

"It's very, very important for us to take action at the local level [...] when we think of global problems, we get disempowered. But when we take action at the local level, we are empowered."

- Wangari Maathai, 2004 Nobel Peace Prize Laureate



Special thanks: IGERT, LARP, Dr. Elisabeth Hamin (LARP), Dr. Henry Renski (LARP), Dr. Laurel Smith-Doerr (SOC), Bob Darrow, Ryan Wallace

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