Multisolving In Climate Policy
Dr. Elizabeth Sawin • Climate Interactive • 19 January 2016
Exploring Climate Solutions Webinar Series
Governor’s Council on Climate Change (GC3)
Helping people see what works to address our biggest climate challenges:

- clean energy
- food and water
- resilience

www.ClimateInteractive.org
The Julis-Rabinowitz Family

The Keating Family

Surdna Foundation
Fostering sustainable communities in the United States

Sixteenth Street Community Health Center

Pontifex Consulting

Fund for Lake Michigan

Georgia Health Policy Center

Angela Park – Mission Critical
The Climate Scoreboard
Global Greenhouse Gas Emissions (Gtons CO₂-e/year)

- **No Action**
- **Current INDC**
- **Ratchet Success**
- **Ratchet to 1.5**

Estimated 2100 temp:
- **4.5°C**
- **8.1°F**
- **3.5°C**
- **6.2°F**
- **1.8°C**
- **3.2°F**
- **1.5°C**
- **2.7°F**
Global GHG Emissions

Estimated 2100 temp:

- 4.5°C (8.1°F)
- 3.5°C (6.2°F)
- 1.8°C (3.2°F)
- 1.5°C (2.7°F)
Needs people feel most urgently in their communities
Irreversible threats to future well being that we must act on now

Needs people feel most urgently in their communities
Global and Local Climate Impact:

- 2016
- 2100 and beyond
- Sea level rise
- Extreme events
- CO2 levels
- Global temperature increase
When and where do we see benefits of ambitious climate action?

**Global**
- Sea level rise
- Extreme events
- CO2 levels
- Global temperature increase

**Local**
- New infrastructure jobs
- Obesity and chronic disease
- Air quality and associated health impacts
- Fuel savings
- New infrastructure jobs

2016

2100 and beyond
When and where do we see benefits of ambitious climate action?

Global
- Sea level rise
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Timeline:
- 2016
- 2100 and beyond
Multisolving: the search for systemic solutions that protect the climate while improving health, equity, and well-being
Four Reasons To Multisolve on Climate

1. **Ethics**
   People today are suffering from poverty, inequality, violence, poor health and other problems. Even in the face of dangerous climate change these other causes of suffering deserve response.

2. **Financial practicality**
   Solving multiple problems with the same investment of time or money makes good fiscal sense when budgets are constrained and needs are high.

3. **Politics**
   A broad, strong base of people committed to climate action has the best chance of overcoming the power of vested interests that hold the current fossil fuel intensive economy in place.

4. **Systems logic**
   In an interconnected world, designing to optimize a singular goal - such as carbon emissions - can lead to poor systems-level performance.
Thursday, December 03, 2015

Gov. Malloy Announces Connecticut Signs Onto Climate Agreement Committing to International Carbon Emission Reduction Effort

Connecticut Moves Forward with Emissions Reduction Efforts that Protect the Environment, Build Energy Security, and Strengthen the Economy

(HARTFORD, CT) - Governor Dannel P. Malloy today announced that as the 2015 United Nations Climate Change Conference, also known as COP 21, meets in Paris this week, he has committed the State of Connecticut to sign onto the Under 2 MOU agreement - a global compact among cities, states and provinces worldwide to limit the increase in global average temperature to below two degrees Celsius (3.6 degrees Fahrenheit).

"Connecticut has set an aggressive goal for reducing carbon emissions to combat climate change - and is determined to do so in a manner that improves our environment and air quality while increasing our energy security, building our economy, and creating jobs," said Governor Malloy. "We are making strong progress on all fronts and our state has emerged as a national leader on climate action. Signing the Under 2 MOU aligns us with other jurisdictions who share our deep commitment to protecting the future of our planet and safeguarding the well-being of every one who lives here."
My goal today: to share our explorations of the scale of the multisolving opportunity and the practices and approaches needed to capture that opportunity. My hope: that this will provide some language and ideas to help inform and inspire the work of the GC3 and the many Connecticut municipalities, universities, and businesses that will help the state meet its climate goals.
Europe Health Care Savings

EU moves its 2020 UNFCCC pledge from 20% reduction to 30%

Annual Benefits in 2020
- 140,000 additional years of life
- 13 million fewer days of restricted activity;
- 1.2 million fewer days of respiratory illness;
- 142,000 fewer consultations for upper respiratory symptoms and asthma;
- 3,776 fewer hospital admissions for respiratory and cardiac conditions.

Study by: Health and Environment Alliance, Healthcare Without Harm
Climate Smart Development - Transport Scenario

Shifting to hybrid and electric vehicles and low carbon fuels

Shifting from cars to public transit

Increasing gov’t investment in transport infrastructure

Shifting freight from trucks to trains and ships

Transport Scenario – Costs and returns

Scenario: Increase the commuter mode share from 5.3% in 2010 to 7.8% in 2020

Cost per Metric ton

- No health benefits
- With estimated health benefits

Boilers By Prescription
Hylton Castle, UK
2014

- Spent about $7,00 per home on windows, insulation, boilers via public health budget
- Average temp 5.5 ° higher
- Saved $46 per month on energy bills
- Visited GP and emergency room “significantly less”

**Enhanced Fleet Modernization Program**
San Joaquin Valley - 2015-2016 (pilot)

- Goal to replace 600 older polluting cars during 2015-2016
- So far 108 families have been helped to purchase a cleaner vehicle
- Partnerships/Extensions-
  - Health screenings
  - Flu vaccinations
  - Home weatherization

But.....

Not all climate policies or investments are created equal when it comes to co-benefits.
London Transport Scenarios

More efficient engines and fuel switching. Some car travel replaced with walking and cycling.

Reduction in transport CO₂ emissions:
- 35%
- 38%

Reduction in premature deaths per million people:
- 17
- 530

Lancet 2009; 374: 1930–43
CA solar jobs, by race

- % of CA population (2013)
- % of CA workforce 2010
- % of CA solar workforce 2013

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<thead>
<tr>
<th>Race</th>
<th>African American</th>
<th>Hispanic/Latino</th>
<th>Asian/Pacific Islander</th>
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<td>% of CA population</td>
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<td>% of CA workforce</td>
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<td>% of CA solar workforce</td>
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Steps to increase the odds of success in Multisolving

- Invite diverse perspectives and cultivate curiosity along with ‘expertise’


Corollary: Expect to go slow at first – learning and exploring intersections and building trust and relationships
FLOWER - Framework for Whole-System, Equity-Based Reflection

- Food & Water
- Jobs & Assets
- Resilience
- Long term benefit (climate, ecosystems)
- Energy Industry & Mobility
- Health, Well Being & Safety

Connection
Steps to increase the odds of success in Multisolving

- Reframe success as the best mix of multiple factors rather than maximizing one (for example carbon reductions)
Steps to increase the odds of success in Multisolving

• Create a checklist to be sure there are policy elements focused on each co-benefit

• For a renewable energy project
  • Jobs - might require a local hiring provision
  • Resilience – might require electricity storage
  • Community building – might require a local ownership structure
Steps to increase the odds of success in Multisolving

- Be willing to restructure jurisdictional silos
  - Capital expenditures might be from energy or transportation budgets
  - Savings might be in the health budget
  - Arriving at the optimal solution for the whole might require a different way of evaluating the performance of each division
Steps to increase the odds of success in Multisolving

- Allocate significant resources and decision making power to more local levels in the system and don’t shy away from questions of justice and equity

- Intersections are often more apparent at local levels

- For multisolving one size doesn’t fit all
  - Participatory budgeting
  - Small grants
Steps to increase the odds of success in Multisolving

- As you make progress remember to track the co-benefits as well as the climate progress
- Interim targets could include co-benefits as well as GHG reduction
Thank You!
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www.climateinteractive.org