

# Moving From Incremental to Transformative Climate Action:

## Lessons Learned from Addressing the Elephants in the Room

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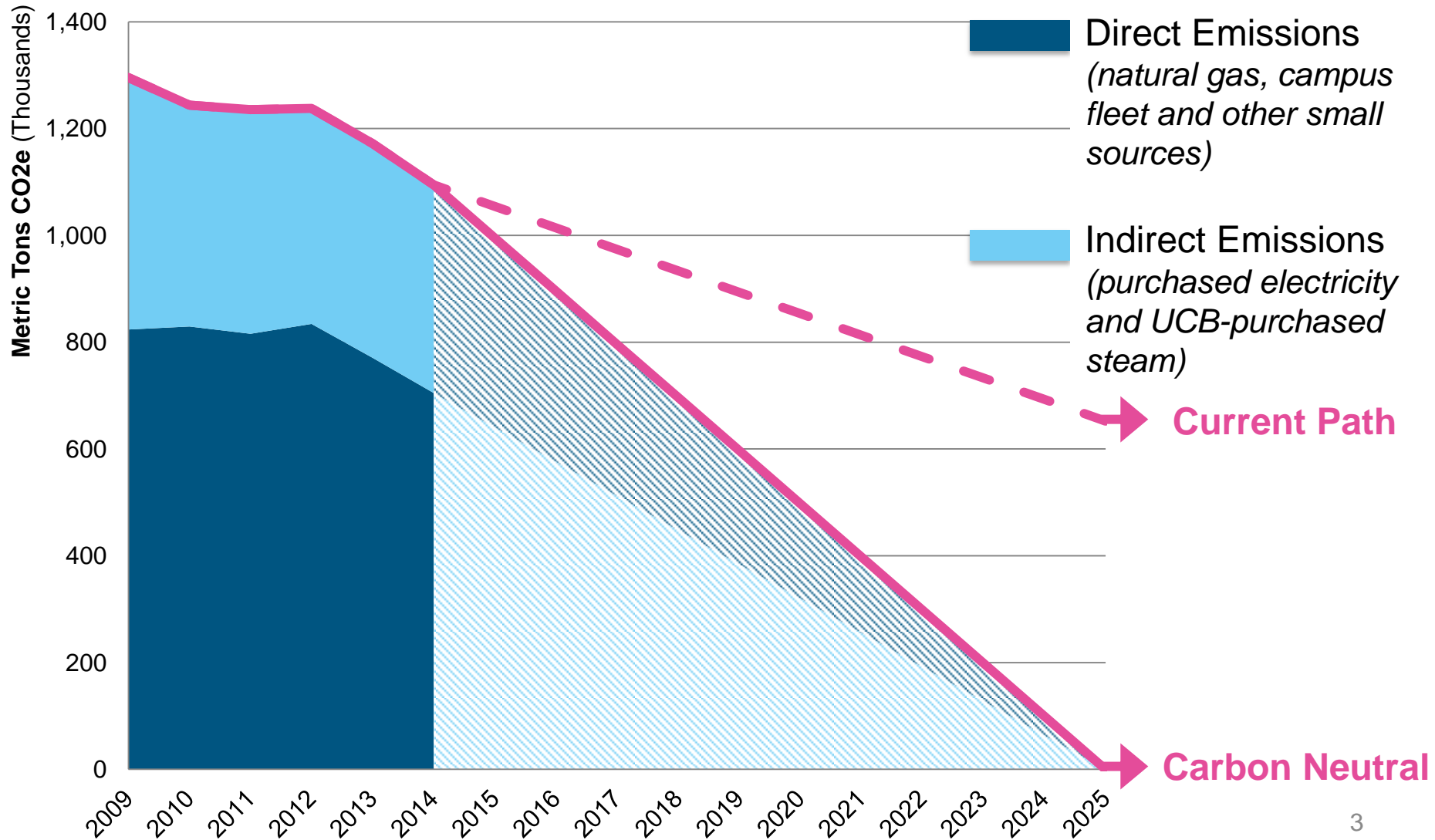
**Carbon Neutrality  
Initiative**

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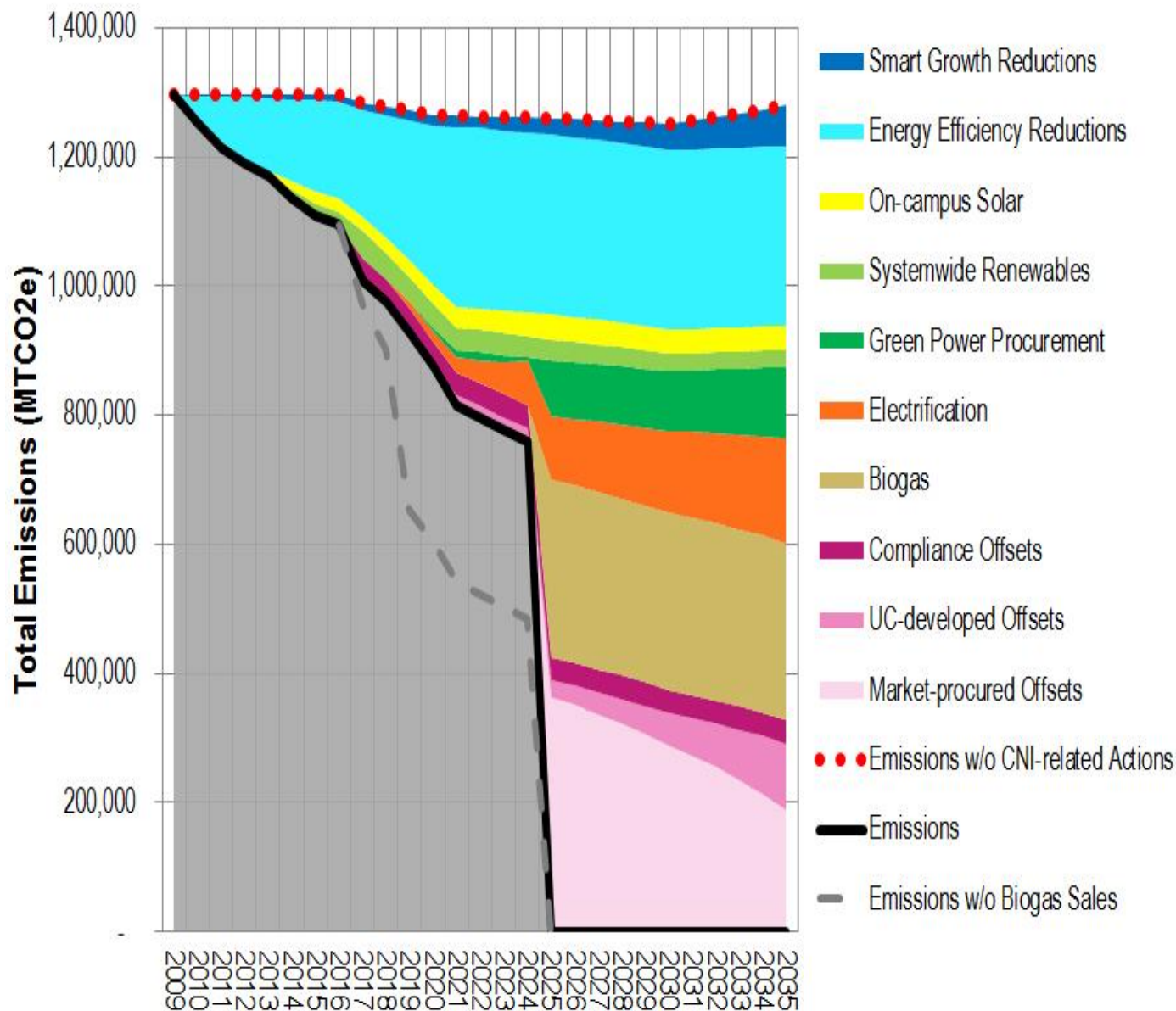
# Overview

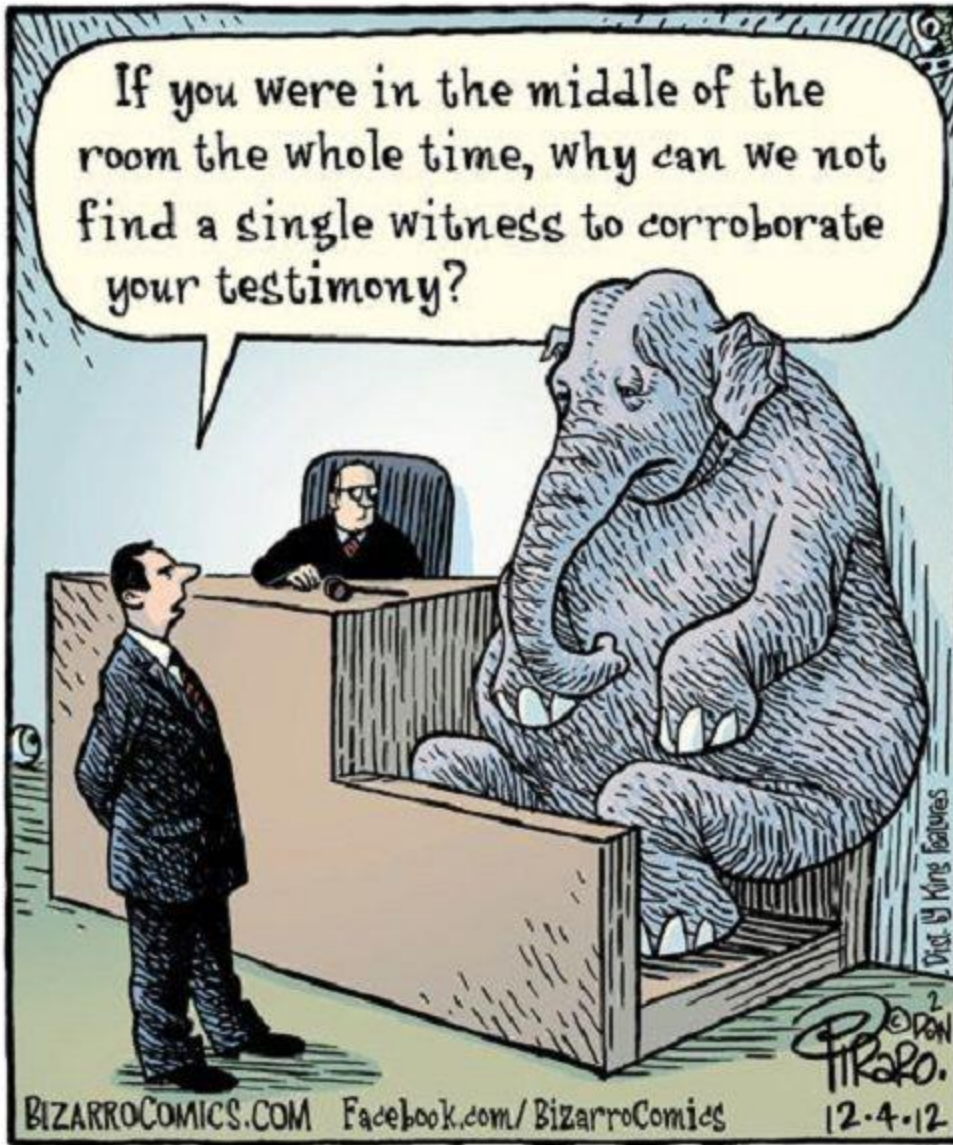
1. Why did we start talking about the elephants in the room?
2. What have we learned from 10 years of climate action plans?
3. Process for identifying barriers and proposing solutions.

# Emissions Trend vs. Goal



# How do we get from there to here?



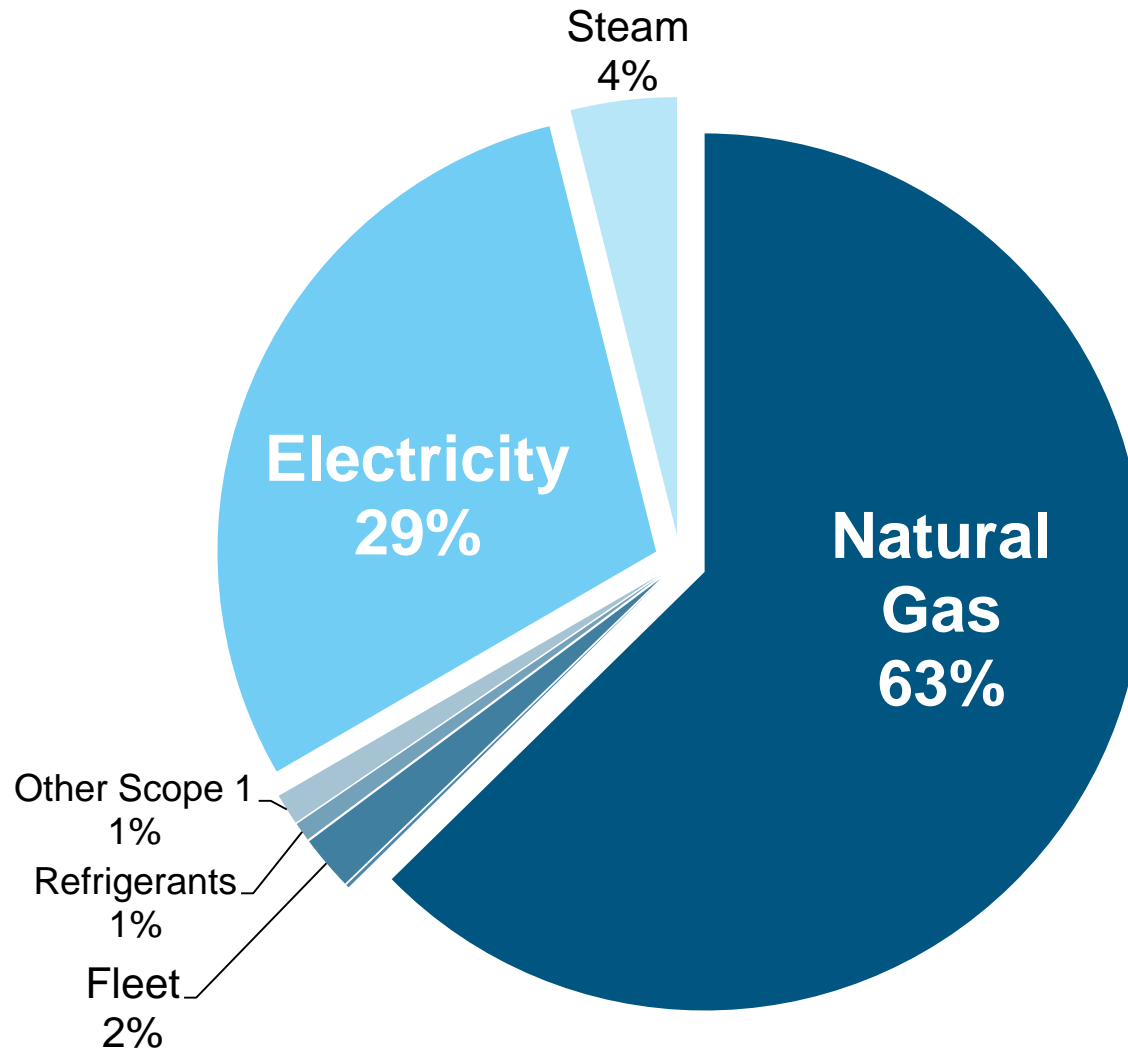






# Overall Emissions by Source

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# Why Organizational Changes Fail

- INSUFFICIENT COMMUNICATIONS (59%)
- LACK OF LEADERSHIP (56%)

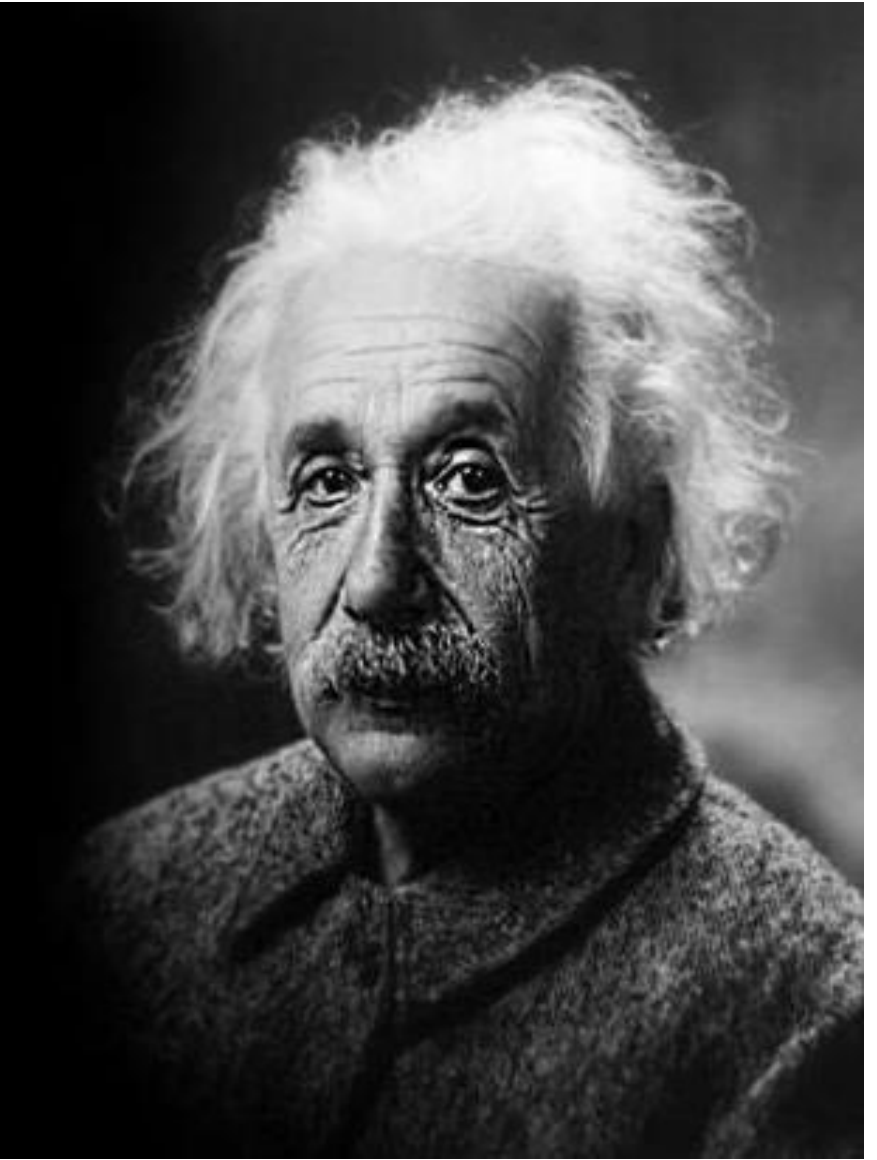


# What have we learned from 10 years of climate action plans??



“Insanity: doing  
the same thing  
over and over  
again and  
expecting  
different  
results.”

Albert Einstein



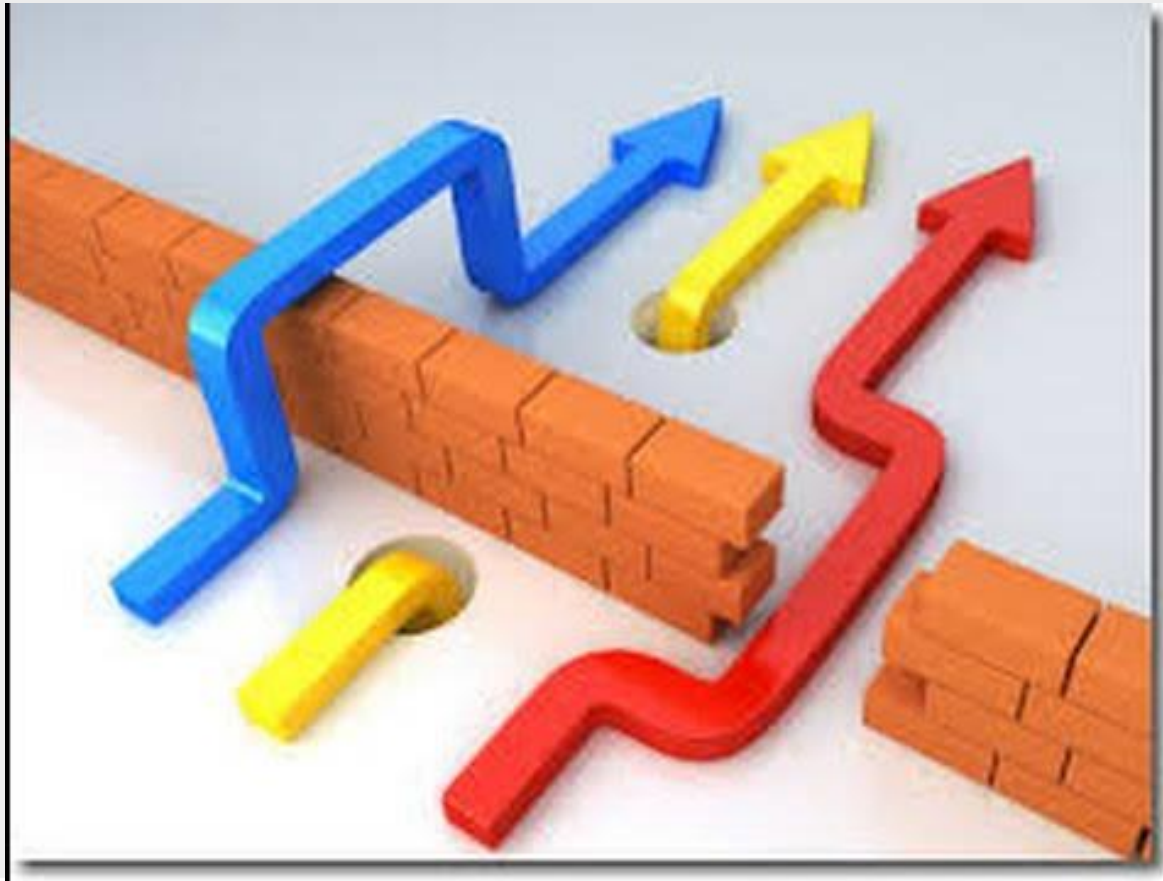
# What we've learned... from 10 years of Climate Action Plans

- Process is more important than the plan itself
- CAPs haven't been fully implemented
- Most plans aren't formally approved
  - Even if formally approved, they don't constitute a funding commitment or budget approval
- Limited financial analysis
  - Sometimes not even allowed to do financial analysis
- Don't require any specific action on new buildings

# What's missing in updated CAPs?

- Only one campus listed next steps for implementation along with responsible departments
- Four campuses included some level of cost information
- Not all of the campuses quantified the carbon impact of mitigation strategies
- Five campuses have a preferred scenario for reaching CN along with quantification of each strategy
- Most don't have specific goals, just general possible approaches/projects

# Carbon Neutrality Finance and Management Task Force



# Task Force Membership

## **Ann Carlson (Chair)**

Shirley Shapiro Professor of Environmental Law  
University of California, Los Angeles

David Auston  
Adjunct Professor  
University of California, Santa Barbara

Wendell C. Brase  
Vice Chancellor of Administration & Business  
Services  
University of California, Irvine

Dr. Sandra A. Brown  
Vice Chancellor for Research  
University of California, San Diego

Peggy Delaney  
Vice Chancellor for Planning and Budget  
University of California, Santa Cruz

Sandra Kim  
Associate Vice President  
Capital Asset Strategies and Finance  
University of California Office of the President

Marc Fisher  
Vice Chancellor & Campus Architect  
University of California, Santa Barbara

Dan Kammen  
Class of 1935 Distinguished Professor of Energy  
Founding Director, Renewable and Appropriate  
Energy Laboratory  
University of California, Berkeley

Pierre Ouillet  
Chief Financial Officer  
University of California, San Diego

David Phillips  
Associate Vice President  
Energy and Sustainability  
University of California, Office of the President

Pallavi Sherikar  
Student Representative  
University of California, Berkeley

Paul H. Watkins  
Chief Administrative Officer  
University of California, Los Angeles



# Issues Studied by the Task Force

## 1. Funding and financing

Accounting for the cost of carbon, integrating carbon management and purchased utilities budgets.

## 2. Energy efficiency and conservation

Investing in deeper energy efficiency and developing and paying for qualified staff to operate finely tuned building systems.

## 3. New buildings

Designing new buildings to carbon-neutral standards.

## 4. Communication and change management

Engaging faculty, students, and staff in the commitment to achieving carbon neutrality.

## 5. Medical centers

Addressing the barriers unique to hospitals, including regulatory requirements and the primacy of patient care and safety.

# Change Management Process for Transformative Change Ideas

- Top Down Mandate + Bottom-up Ideas
- 6 months to develop report + 6 months to vet report
- Sprints: project management strategy
  - Product Owners
  - Sprint Team
  - Surveys and interviews

# Two Key Conclusions

- *The successful transition to carbon neutrality hinges on securing broad support for the initiative among senior administrators, faculty, and our students.*
- *The way in which carbon neutrality measures are implemented must respect campus autonomy in charting their own progress toward carbon neutrality while providing campuses with the leadership, tools, and authority to accomplish the goal.*

# Recommendations: Funding and Financing

- Integrate purchased utilities and carbon management functions as a stand-alone financial unit.
- Implement internal carbon accounting

# Recommendations: Energy Efficiency

- Develop a comprehensive funding plan for energy efficiency projects
- Increase staffing for energy efficiency programs

# Recommendations: New Buildings

- Prioritize net zero carbon strategies for new building projects, including all-electric designs
- Strengthen design standards and incentivize low-energy design
- Base new building design decisions on life-cycle cost analysis (LCCA)



# Recommendations: Communication & Change Management

- Position carbon neutrality as a campus and systemwide priority, especially among campus leaders
- Emphasize the connection to the UC mission
- Engage the support of the UC Regents
- Continue support for faculty engagement in curriculum development and research related to the CNI
- Engage and support students in advancing the CNI
- Continue programs that focus on energy conservation

# Next Steps

Recommendation	Next Steps
Integrate Purchased Utilities and Carbon Management as a Stand-alone Financial Unit	<p>Document case study/benefits from pilot campus efforts</p> <p>Collect case studies where UC campuses already are using shadow prices on carbon for financial analysis.</p> <p>Estimate what level of carbon fee would generate what revenue and how that compares to funding needs for offsets, biogas, and CN buildings.</p>
Implement Internal Carbon Accounting	Find a campus willing to pilot a more formal program
Integrate Campus-Specific Energy, Climate Action, and Long-Range Development Plans	Develop more detailed financial analyses for campus CAPs
	Insert into Chancellors' annual performance reviews for President Napolitano.
Track Campus and Medical Center Energy Efficiency Goals as New Chancellor-Level Metrics	<p>Develop new policy language for the Clean Energy section, and include reporting in annual sustainability report for Regents</p> <p>Complete cost feasibility study</p>
Prioritize Net Zero Carbon Strategies for New Building Projects including All-electric design	<p>.</p> <p>Develop policy proposal.</p>

**...Funding Required, Schedule, Owner, Executive Sponsor, Responsible, Consulted...**

# Lessons Learned

- To win support from senior administrators and faculty, give them a role, do most of the work for them, but let them steer to create real ownership
- The creation of working groups, surveys and workshops can be effective engagement strategies
- Engagement does not equal commitment
- Universities are crisscrossed with third rails, and it's usually best to avoid them
- Faculty-led , high-level groups provide an effective way to build support for sustainability initiatives.