



Climate Action Plans and Emissions Inventories: Strengthening the Foundations of Policy Development

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Authors



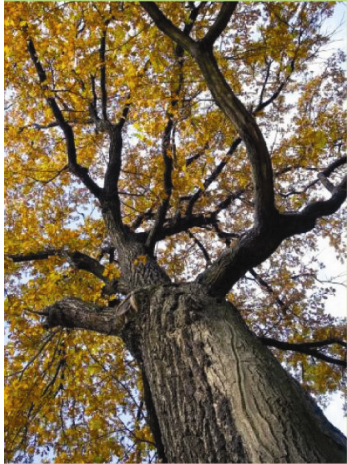
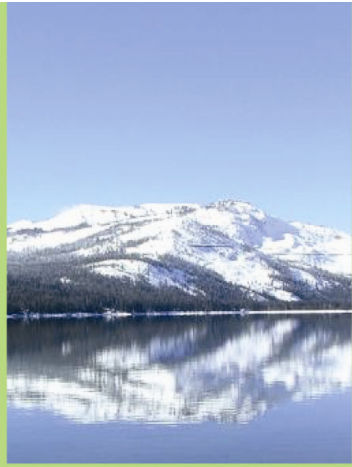
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Outline

- Climate Action Plans (CAPs)
- CAP Analysis
- Research Objectives
- Research Conclusions
- Principles for Practice

Climate Action Plans (CAPs)



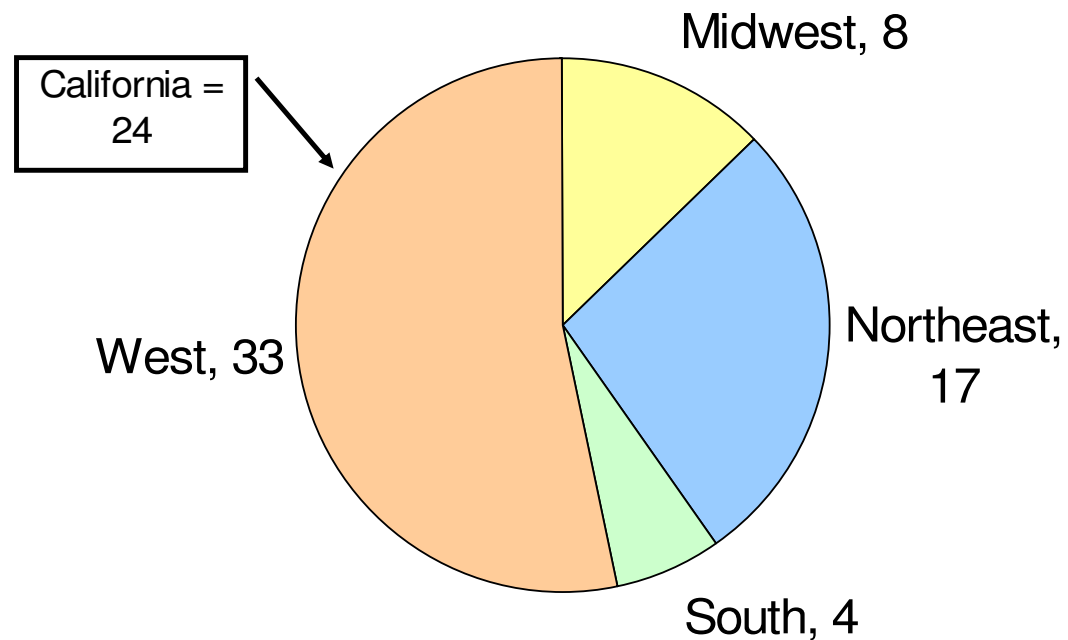
- Climate action plans (CAPs) are strategic plans that establish policies and programs for reducing a community's greenhouse gas emissions.
- They are usually based on greenhouse gas (GHG) emissions inventories which identify the sources of emissions from the community and quantify the amounts.

CAP Analysis



- Analyzed 30 municipal CAPs.
- Nationwide sample included plans from all US regions.
- Municipalities ranged in population from under 4,000 to over 8 million.

City-Level CAPs in U.S.



62 city-level climate action plans (CAPs)
adopted in U.S. (10/09)

CAP Cities



CAP Observations



- Diverse cities (no typical CAP city)
- Differing models for plan authorship: city government prepared plans vs. citizen prepared plans
- Minimal climate adaptation planning
- Lack of identified financing mechanisms

Research Objectives

1. Assess the degree to which CAPs are linked to GHG emissions inventories; and,
2. Identify GHG emissions inventory choices and assumptions that influence CAP development.



Research Conclusions

1. GHG reduction targets should be justified.
2. The effect of external change should be accounted for in GHG emissions forecast and reduction targets.
3. The special challenge faced by fast-growing communities should be acknowledged and accounted for in GHG emissions reduction targets.



Setting GHG Reduction Targets



Case 1: Chattanooga, TN

Population: 170,880



Case 2: Cincinnati, OH

Population: 333,336



Case 3: San Carlos, CA

Population: 27,718

Setting GHG Reduction Targets

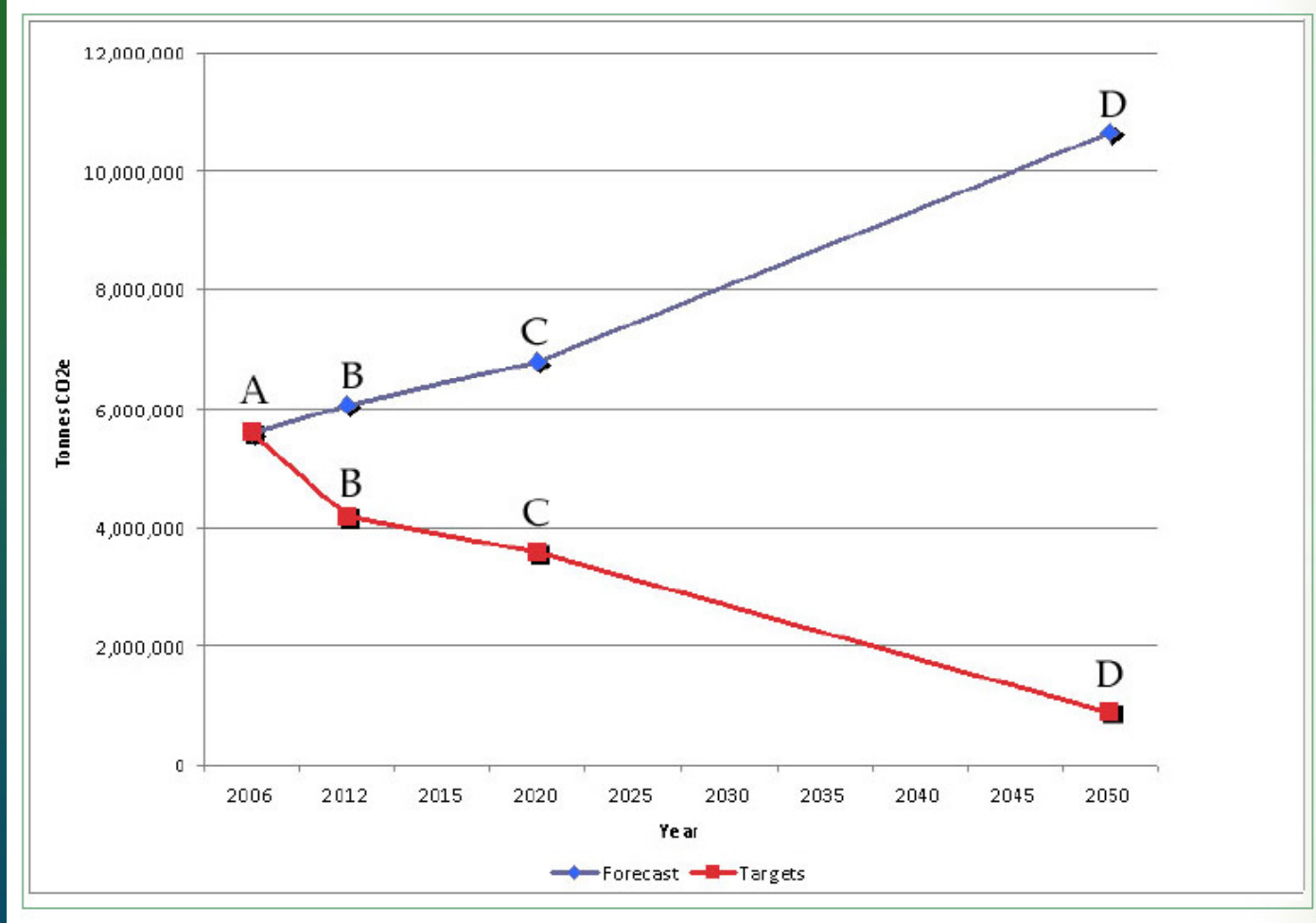
Case 1: Chattanooga, TN

Goals & Justification:

- 7% below 1990 by 2012 (B)
 - U.S. Conference of Mayors & Kyoto Protocol
- 20% below 1990 by 2020 (C)
 - European Union Council
- 80% below 1990 by 2050 (D)
 - Intergovernmental Panel on Climate Change



Setting GHG Reduction Targets



Setting GHG Reduction Targets

Case 2: Cincinnati, OH

Goals:

- 8% below 2006 by 2012
- 40% below 2006 by 2028
- 84% below 2006 by 2050

Justification:

1. Reductions to stabilize the Earth's climate.
2. Goals established by other cities and counties.
3. Practical, affordable reduction measures consistent with local objectives.



Setting GHG Reduction Targets

Case 3: San Carlos, CA

Goals:

- 15% below 2005 by 2020
- 35% below 2005 by 2030

Justification:

1. Consistent with California Global Warming Solutions Act (AB 32).
2. Consistent with General Plan build-out assumptions.



Setting GHG Reduction Targets

Principles for Practice

- Provide a rationale for the emissions reduction target.
- Decide whether the target is to be “achievable” or “inspirational.”
- Evaluate international, state, and similar jurisdiction’s targets.
- Tailor the target.

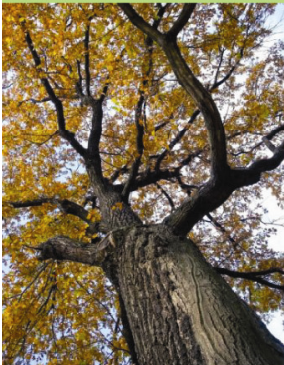


Accounting for External Change

Case: City of Hayward, CA

Created two GHG emissions forecasts:

- Business as Usual (BAU)
 - Proportional to projected population growth
- Adjusted Business as Usual (ABAU)
 - Accounts for State and Federal policy
 - Reduces BAU by 170,000 MTCO₂e
 - Just under half way to the 2020 target



Accounting for External Change

Principles for Practice

- Forecasting state and federal policy change allows for more accurate estimate of local GHG reduction needs.
- External change will be critical to reaching local reduction targets.
- Coordination between federal, state, and local agencies increases reduction success over larger scales.



Dealing with Rapid Growth

Case: Denver, CO

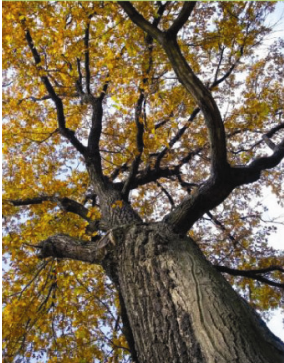
- 24% population growth 1990-2005
- Emissions Baseline
 - 1990 & 2005: 25.3 MTCO₂e/pp
- Emissions Targets
 - 2012: 22.7 MTCO₂e/per person (10% reduction)
 - 2020: 25% absolute reduction

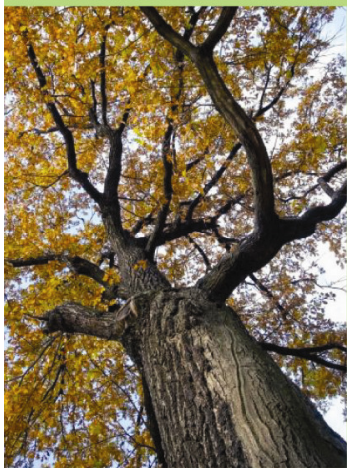
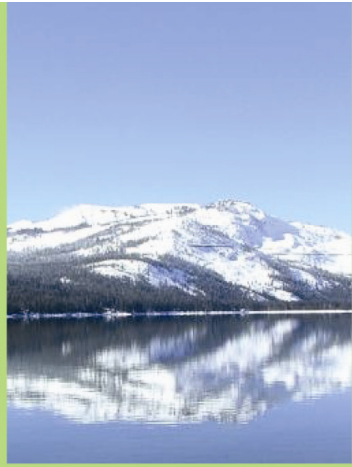


Dealing with Rapid Growth

Principles for Practice

- Recognize the role of rapid growth in absolute GHG reduction feasibility.
- Consider per capita targets to maximize near-term GHG reduction feasibility.
- Combine per capita targets (in the short-term) with more aggressive long-term absolute targets.





Thank you!

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Learning Objectives



1. Address the link between greenhouse gas emissions inventories and climate action plans.
2. Describe the current state of practice.
3. Suggest principles for improving practice.