



PRESENTER

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Realpolitik vs Wealth of Notions: Realizing the Benefits of Using Cost-Effectiveness Testing in Building Decarbonization

Objective: Maximize Practical Decarbonization

Various jurisdictions are committing to rapid building decarbonization. But there is pushback against high customer costs. Traditional DSM cost-effectiveness approaches can be modified and applied to prioritize near-term decarbonization investments.

Climate-oriented goals are increasingly being expressed in terms of lifecycle CO2e reductions

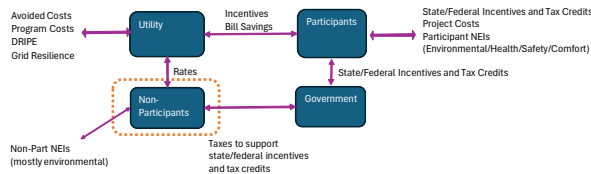
Climate goals should allow both long- and short-term decarbonization measures, if they save CO2e. Non-climate-oriented energy efficiency and demand response can still be a worthwhile pursuit if they are cost effective.

Express building decarbonization measure cost-effectiveness results in terms of lifetime \$/ton CO2e

If the goal of policy is to reduce emissions, expressing cost-effectiveness results as net costs per ton aligns with goals. Methane and other GHGs should be converted to CO2e based on discounted expected lifetime climate impacts.

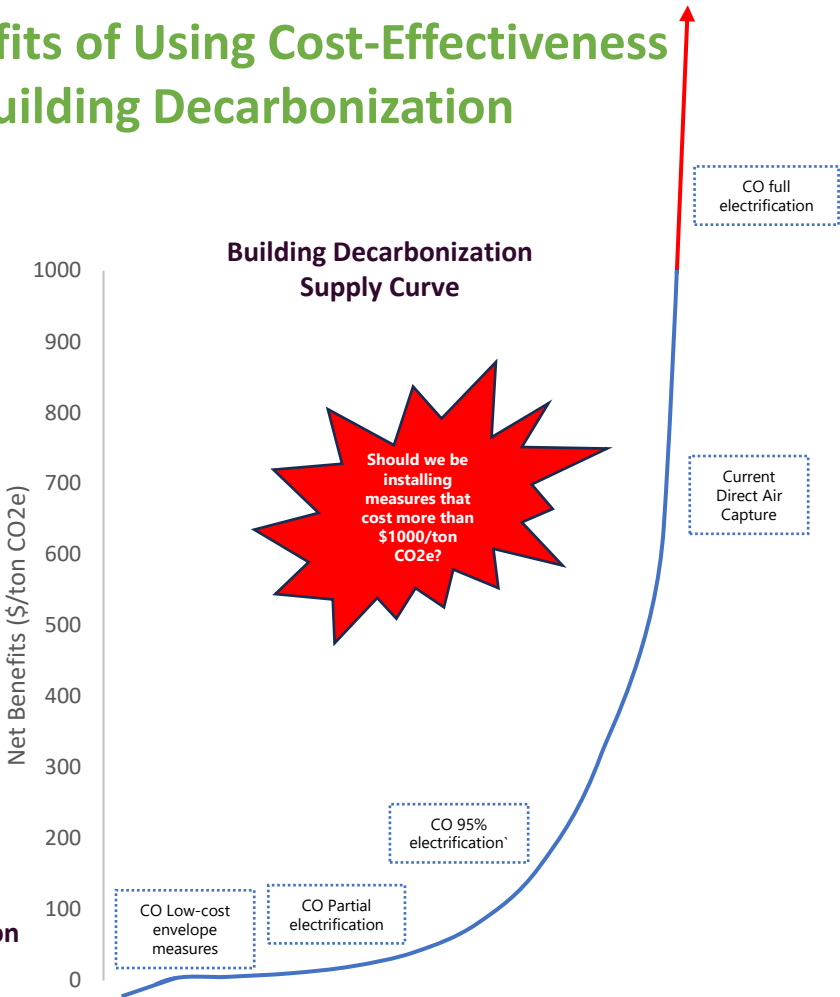
Focus on Non-Participants, but add Environmental Benefits

Using a lens that considers equity is critical. Equity considerations should include the perspective of non-participants. Non-participants DO benefit from reduced environmental impacts.



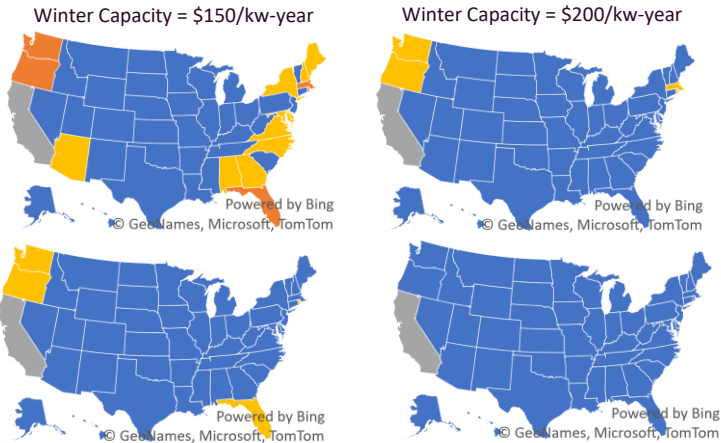
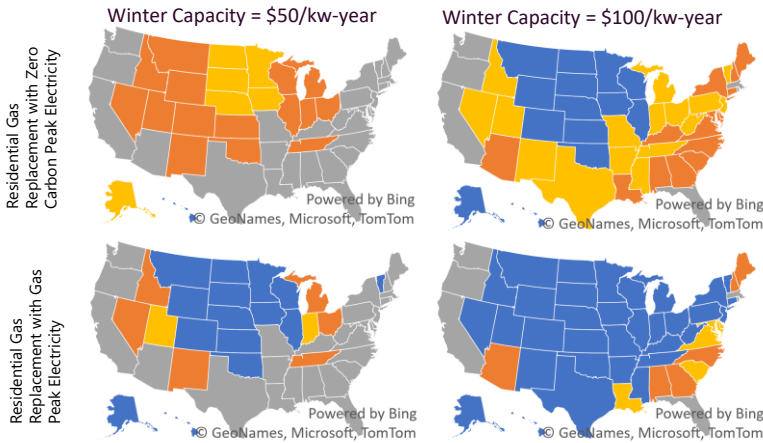
There is a practical limit to available funding for decarbonization

If energy bills or taxes or compliance costs are too high, mainstream will revolt against decarbonization. How do we balance costs with addressing one of the most critical issues of our time?



What social cost of carbon, in \$/ton CO2e, should we be willing to pay for building decarbonization?

∞
1000 -3000
900-1000
800-900
700-800
600-700
500-600
400-500
300-400
200-300
100-200
0-100



No Chance (>\$1,000/ton CO2e)
Do the Math (\$0-500/ton CO2e)
Looks like a good idea (negative costs/ton CO2e)
Slim Chance (\$500-1,000/ton CO2e)

Who should pay for Building Decarbonization?

Utility Ratepayers
Government (Progressive Taxation)
Government (Carbon Tax)
Building Owners
Future Generations (Borrow)
Utility Shareholders