

Moving Best Practices Forward for Sustainable Communities

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**National Academy of Sciences
May 29, 2013**

Points of Inquiry

- **What have we learned about cities as agents of sustainability?**
- **What big opportunities are not being realized?**
- **What should be the top priorities for scaling municipal accomplishments?**
- **How can we bring private capital, foundation capital and federal support to this effort?**

Carbon Neutral City Research

THE KRESGE FOUNDATION

“What are the building blocks for carbon neutral communities, and what are the developmental stages for getting there?”



<http://carbonneutral.in4c.net>

What Does It Mean to Achieve “80X50”?

An 80%
reduction in
total emissions
by 2050

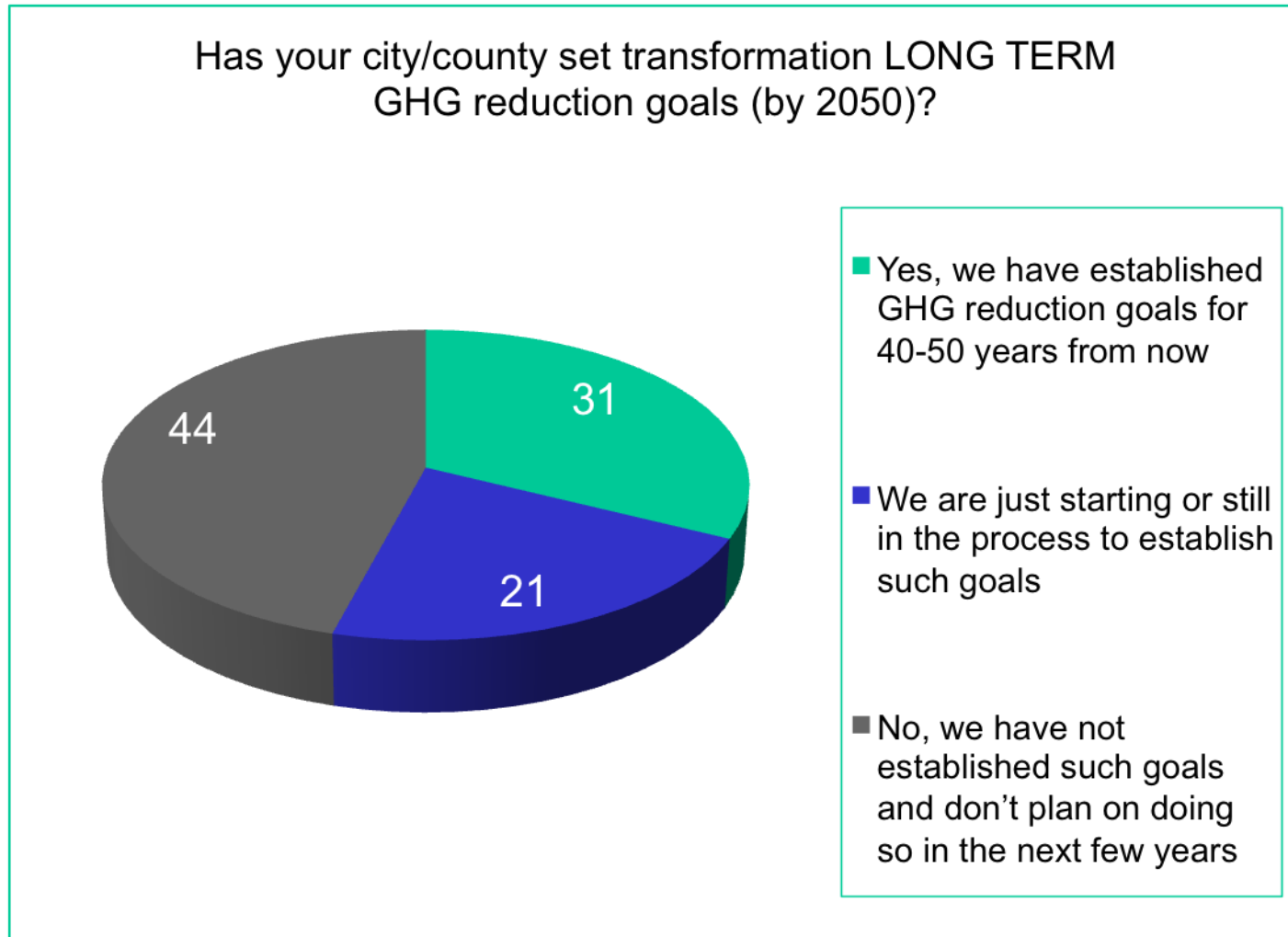
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88% reduction in per
capita emissions

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97% reduction in per unit
GDP emissions

In a recent survey of the Urban Sustainability Directors Network (USDN) members 52 out of 96 (54%) respondents indicated that they have long term plans in place for GHG emissions reduction.



There are Nine Key Strategies Across Six Sectors

Emissions Source	Carbon Reduction Strategy
<i>Commercial & Residential Buildings</i>	Achieve net zero emissions in 100% of new buildings by 2030
	Achieve 30%-50% emissions reductions in 100% of existing buildings
<i>Industrial</i>	Achieve 3%+ annual improvements in energy efficiency of industrial processes, and reduce building energy use by at least 15%
<i>Transportation</i>	Achieve annual net decreases in total Vehicle Miles Traveled (VMT)
	Decrease emissions per VMT by 50%-75%
<i>Waste</i>	Eliminate 100% of solid waste disposed of via landfill or incinerator
<i>Energy Generation</i>	Achieve 80%-90% de-carbonization of the electricity and heating supply
<i>System-Wide</i>	Implement efficient land use planning
	Design municipal infrastructure for low carbon performance

These strategies require multi-decade “roadmaps”.

Some Issues & Challenges

- 80X50 requires fundamental redesign of multiple systems
- System “owners” must internalize the goals to drive innovation
 - Buildings
 - Industrial
 - Transportation
 - Waste/Water
 - Energy Generation
 - Land Use
- 80X50 GHG emissions scopes typically omit significant emissions sources – cities can’t “go it alone”
- Leading cities will serve as the “innovation labs” for broader policy solutions

Panel Members

- Melanie Nutter, Director, San Francisco Department of the Environment
- Jill Fuglister, Program Officer, Meyer Memorial Trust
- Susan Anderson, Director, Bureau of Planning and Sustainability, City of Portland
- Julia Parzen, Coordinator, Urban Sustainability Directors Network