

NJIT



New Jersey's Science &
Technology University

THE EDGE IN KNOWLEDGE

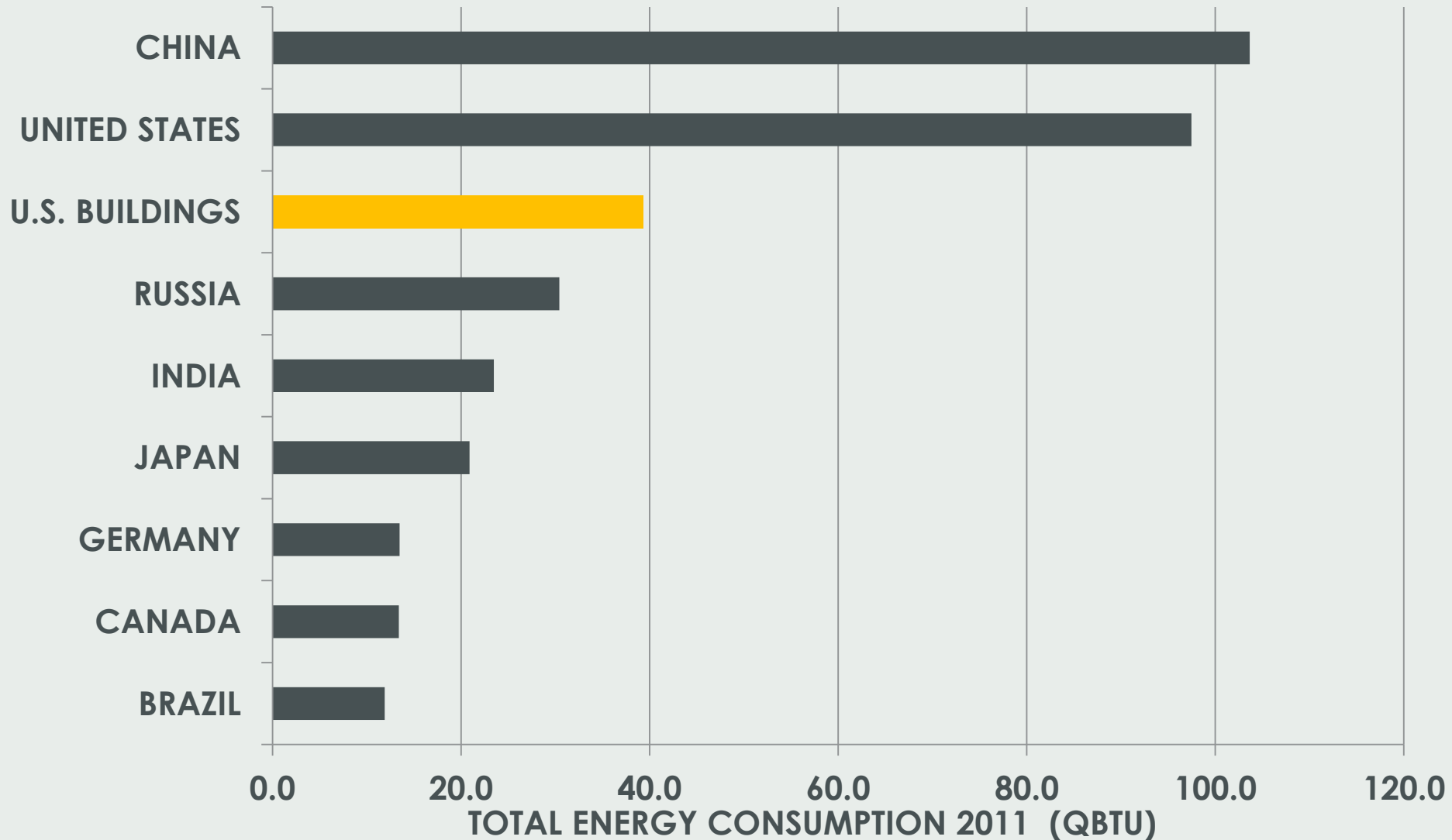
Center for Building Knowledge

An aerial night photograph of a city skyline, likely Los Angeles, with numerous skyscrapers and city lights. In the foreground, a multi-lane highway shows light trails from traffic, indicating long-exposure photography. The sky is dark blue, and the city lights are a mix of white, yellow, and red.

Tapping into the transformative power of building energy data

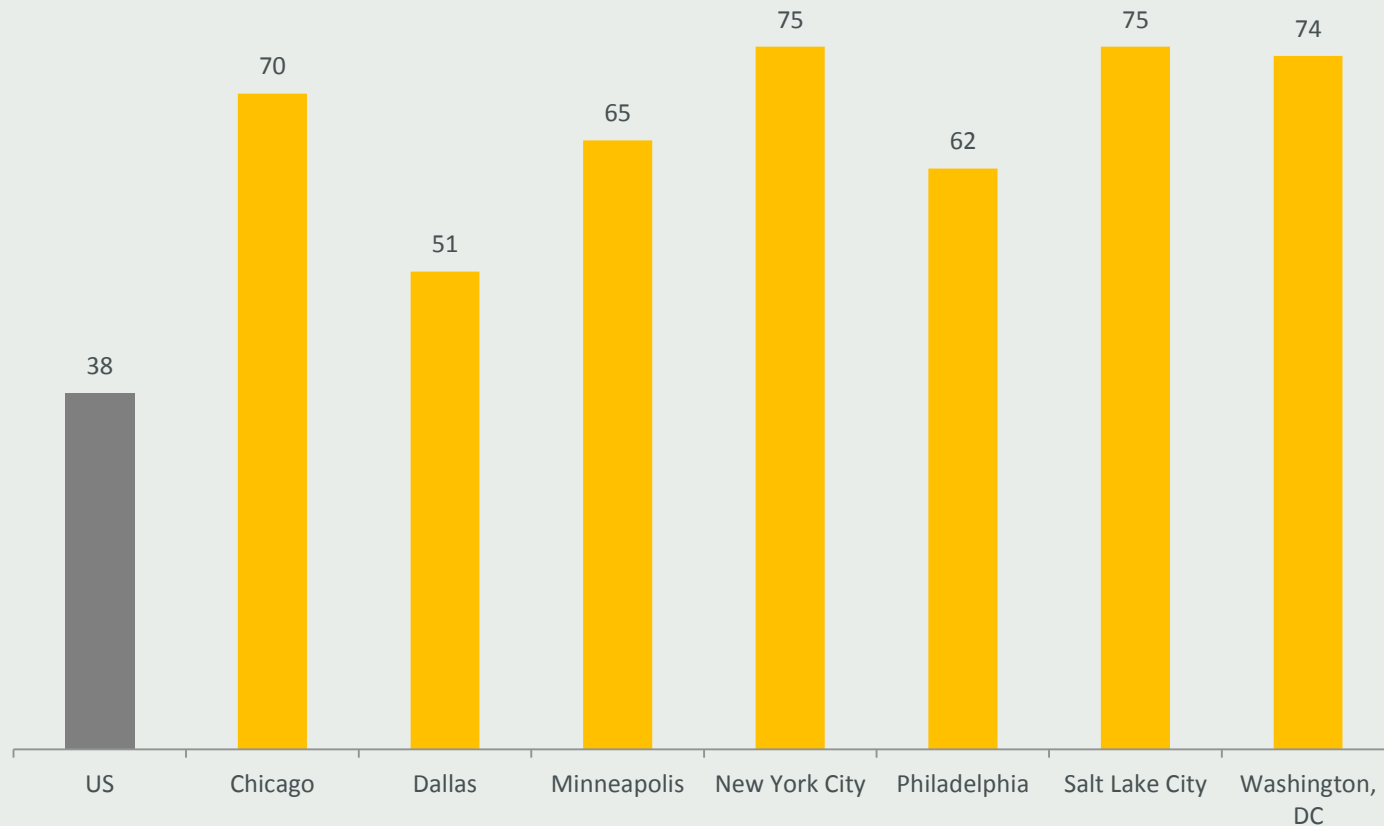
Sustainable Jersey | September 16, 2015
Lauren Zullo, LEED APO+M
Natural Resources Defense Council

PROBLEM: U.S. BUILDINGS USE MORE ENERGY THAN MOST COUNTRIES IN THE WORLD



IN CITIES, BUILDINGS CONTRIBUTE ABOUT 50-75% OF POLLUTING GHG EMISSIONS

Percentage of Total Carbon Emissions
from Building Sector



SOLUTION: ADVANCE ENERGY EFFICIENCY IN EXISTING BUILDINGS



YOU CAN'T MANAGE WHAT YOU DON'T MEASURE

	Calories	Platters
	meal**	
	300	Hot Cakes
	450	Hot Cakes
	450	Big Breakfast
	600	Deluxe Breakfast
	430	Breakfast
	580	
	510	
	660	
	410	
	560	
	570	

Nutrition Facts

Serving Size 1 cup (228g)
Servings per Container 2

Amount Per Serving	Calories from Fat 120
Calories 280	
	% Daily Value*
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 2mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 3g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%

*Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

U.S. Government Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Refrigerator-Freezer
• Automatic Defrost
• Side-Mounted Freezer
• Through-the-Door Ice

XYZ Corporation
Model ABC-L
Capacity: 23 Cubic Feet

Estimated Yearly Operating Cost

\$67

Cost Range of Similar Models: \$57 to \$74

630 kWh
Estimated Yearly Electricity Use

Your cost will depend on your utility rates and use.

- Cost range based only on models of similar capacity with automatic defrost, side-mounted freezer, and through-the-door ice.
- Estimated operating cost based on a 2007 national average electricity cost of 10.65 cents per kWh.
- For more information, visit www.ftc.gov/appliances.

EPA Fuel Economy Estimates

These estimates reflect new EPA methods beginning with 2008 models.

CITY MPG 18 Expected range for most drivers 15 to 21 MPG	<p>Estimated Annual Fuel Cost \$2,039 based on 15,000 miles at \$2.80 per gallon</p> <p>Combined Fuel Economy This Vehicle 21 10 ——— 31 All SUVs</p>	HIGHWAY MPG 25 Expected range for most drivers 21 to 29 MPG
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Your actual mileage will vary depending on how you drive and maintain your vehicle.

See the FREE Fuel Economy Guide at dealers or www.fueleconomy.gov

LEAD BY EXAMPLE WITH MUNICIPAL BUILDINGS

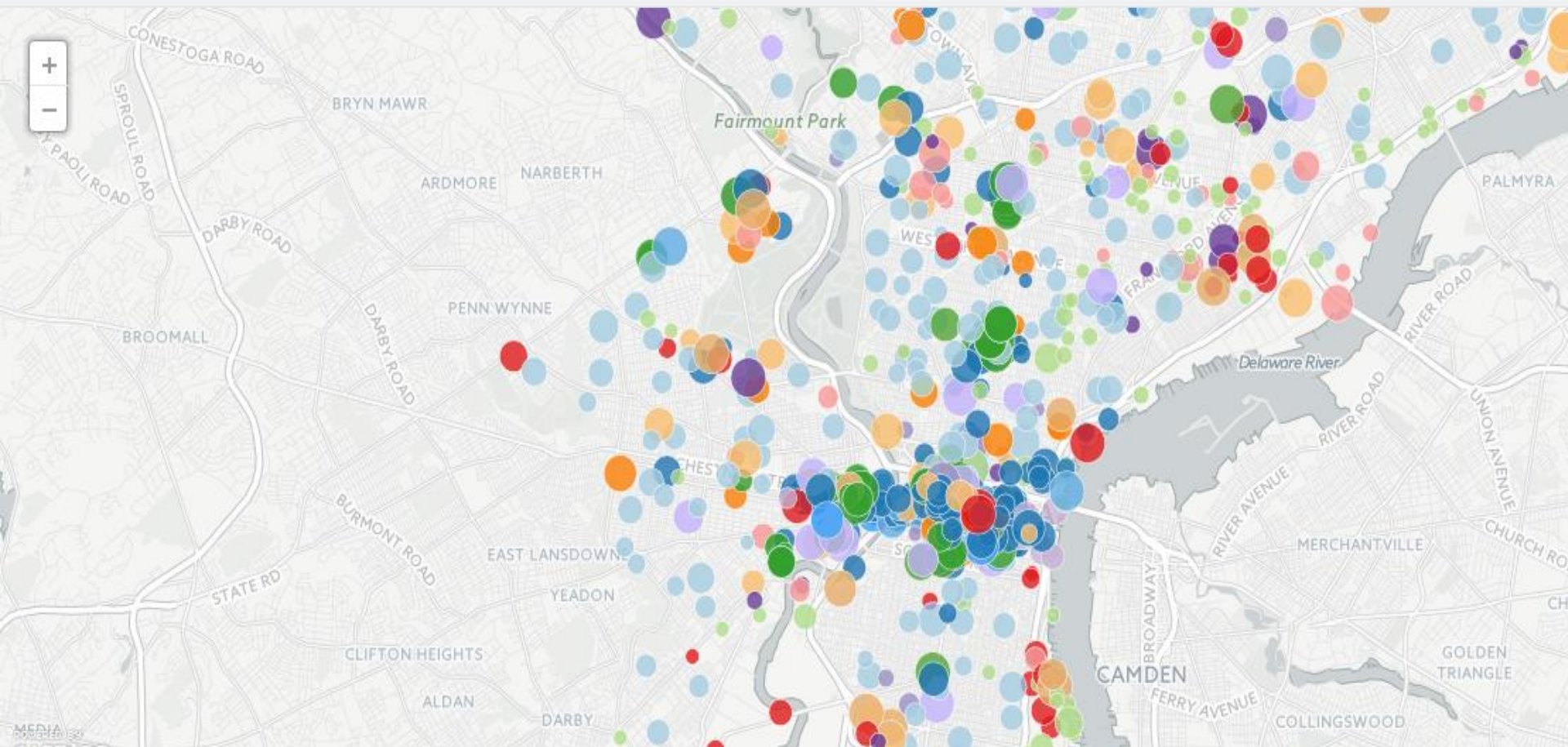
THE CITY OF PHILADELPHIA
MAYOR'S OFFICE OF
SUSTAINABILITY

Search:

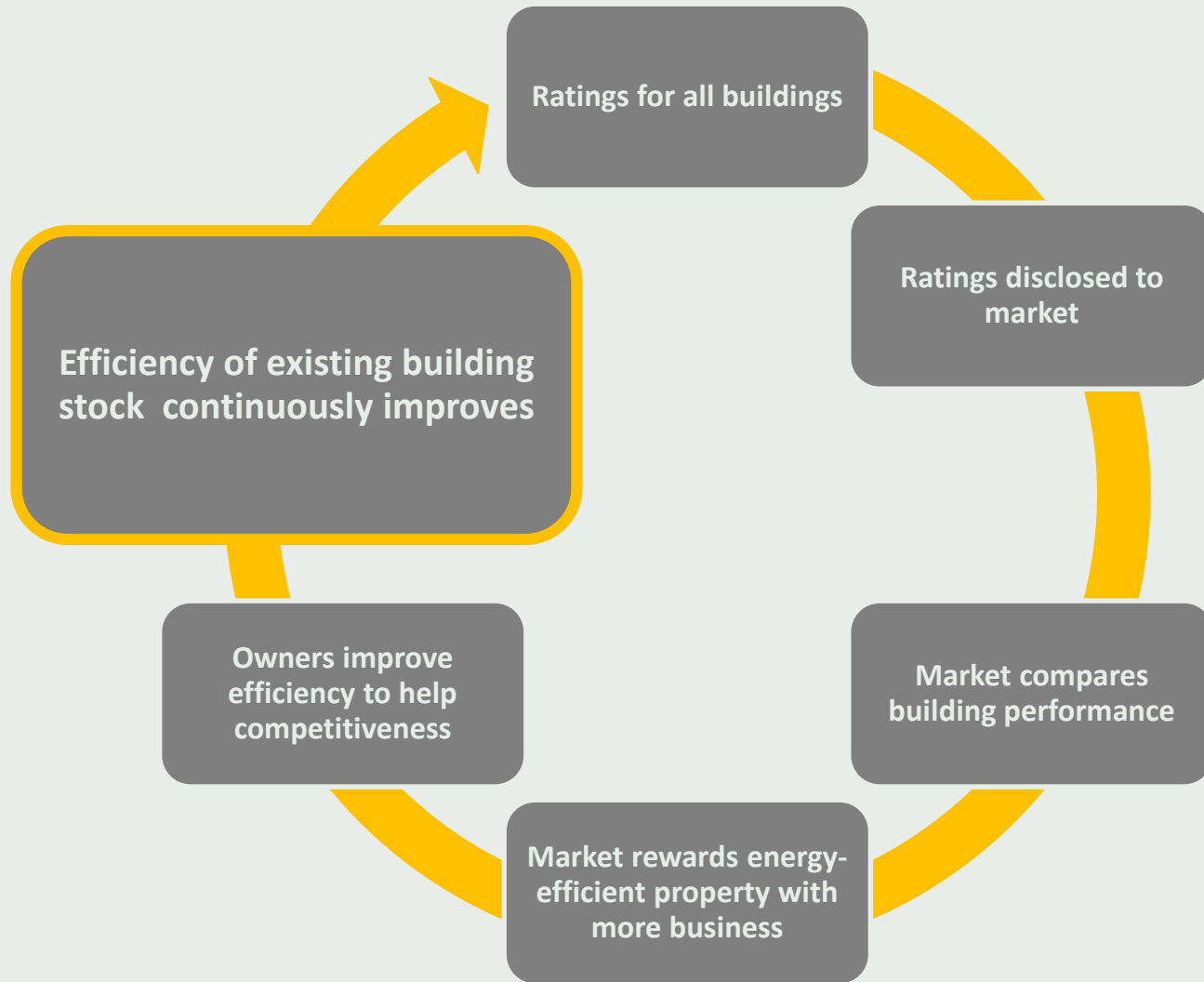
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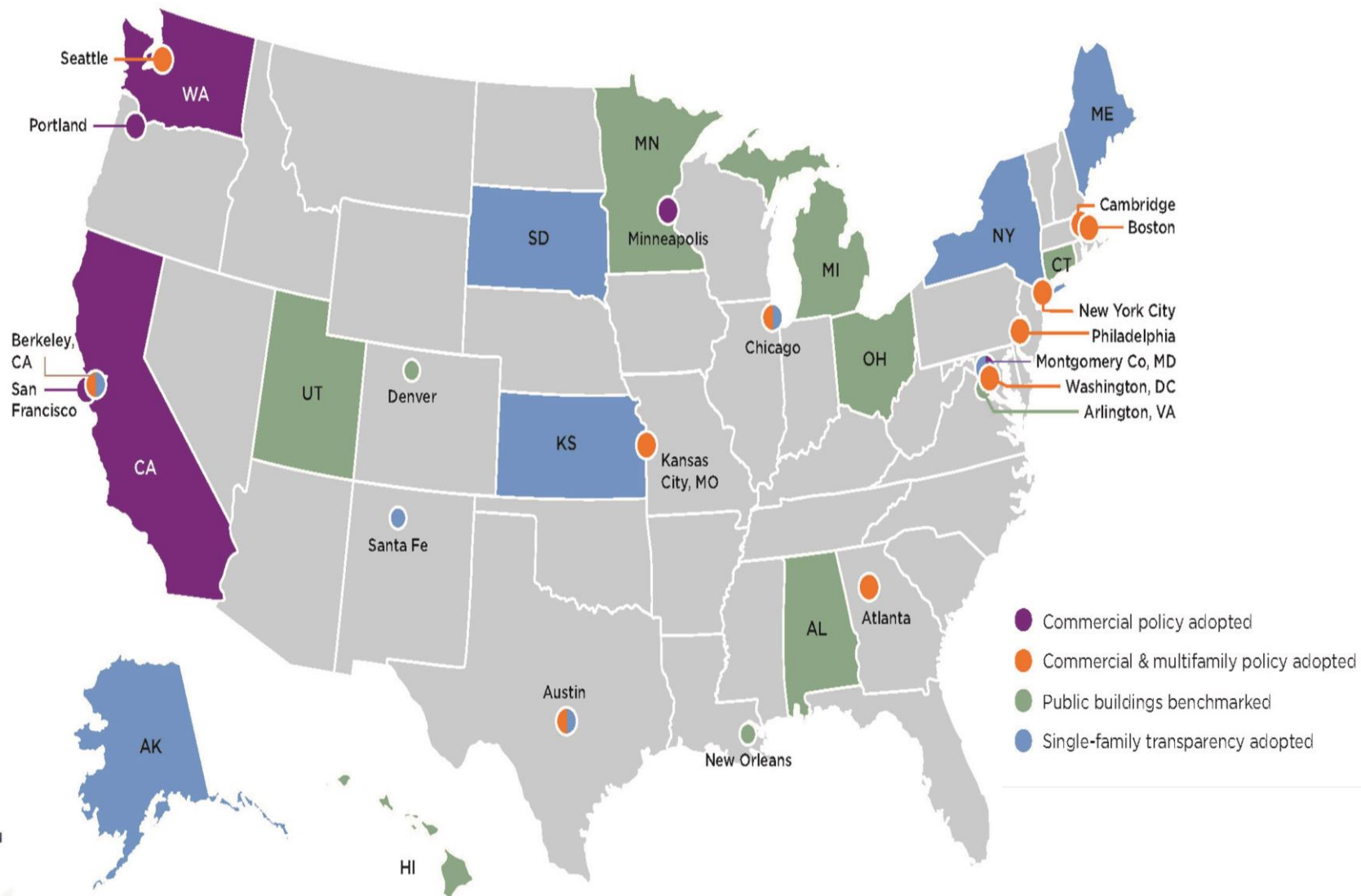
Usage:



TRANSPARENCY DRIVES CYCLE OF IMPROVEMENT



THERE IS MOMENTUM IN THE MARKET FOR BENCHMARKING AND TRANSPARENCY



U.S. Building Benchmarking and Transparency Policies

CITY ENERGY PROJECT: ADVANCING ENERGY EFFICIENCY IN 10 LEADING AMERICAN CITIES

Funders

Bloomberg
Philanthropies

THE
KRESGE
FOUNDATION

DD

DORIS DUKE
CHARITABLE FOUNDATION

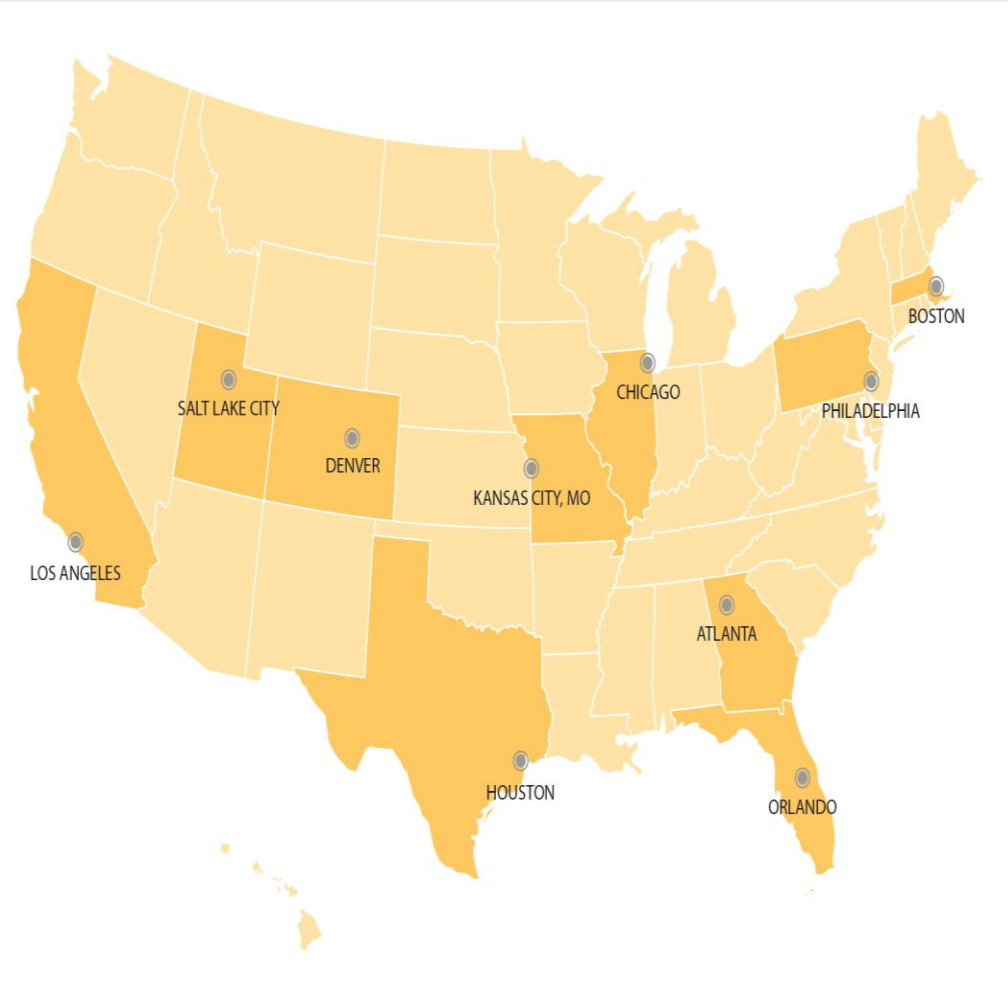
Hub Staff




Implementing
Partner



10 Cities



PATH FORWARD FOR LARGE SCALE ENERGY EFFICIENCY IN THE BUILT ENVIRONMENT

- 
- AMERICAN CITIES WILL LEAD**
 - FOCUS ON LARGE EXISTING BUILDINGS**
 - ADVANCE PROVEN SOLUTIONS**
 - CREATE PARTNERSHIPS**
 - DATA IS EVERYTHING**

THANK YOU

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