

Berkeley's Climate Action Plan: Tracking our Progress



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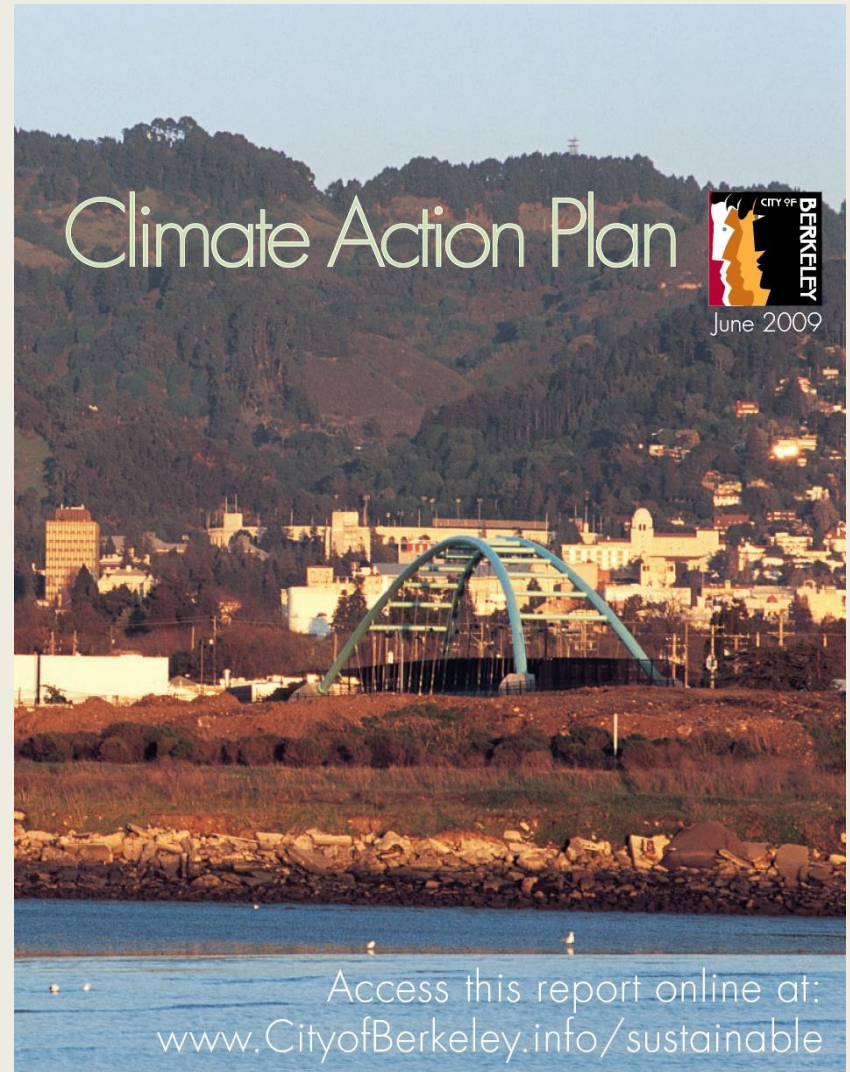


My purpose...

- Communicate the value of tracking progress metrics
- Identify categories of metrics
- Outline some criteria for choosing effective metrics
- Illustrate these points with some real-world examples and lessons learned from Berkeley

33% Reduction
below 2000
levels by 2020

80% Reduction
below 2000
levels by 2050

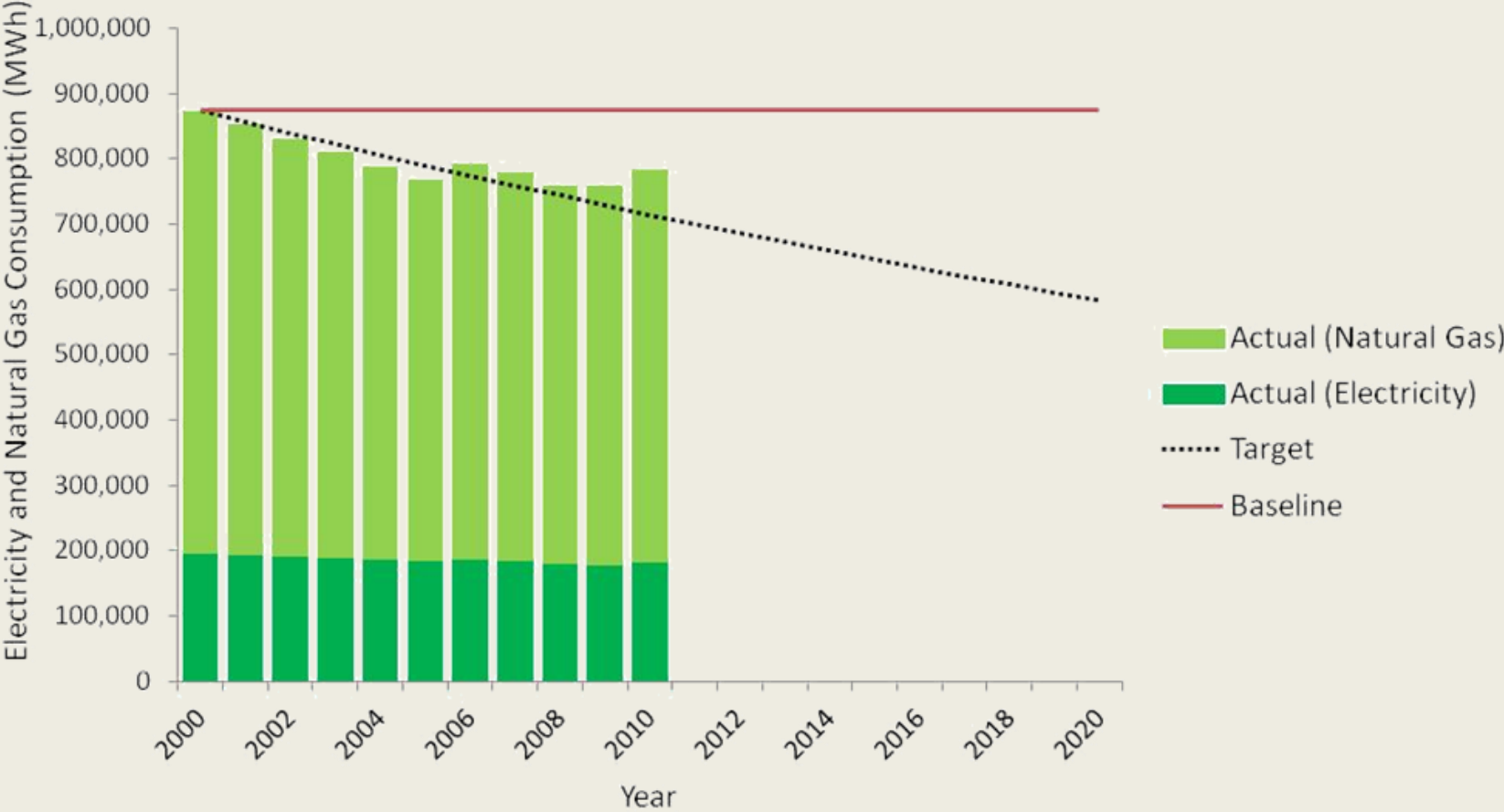


Value of tracking progress metrics...

- Improves accountability by demonstrating status of progress over time
- Provides a way to generate interest in local climate action effort for our audience
- Enables improved, informed management of projects and programs
- Can provide leverage/quantitative support for existing strategies or for changing course

Tracking Building Energy Use

Annual Residential Energy Consumption



Tracking Bike Parking Project

Year	New Bike Rack Installations	New Bike Parking Spaces (estimated)
2004	3	6
2005	3	6
2006	21	42
2007	193	566
2008	19	50
2009	0	0
2010	169	362
By end of 2011	317	694



Categories of progress metrics...

- System-level metric: These measure the overall impact of a combination of strategies (e.g., total residential energy use)
- Program-level metric: These measure impact of a specific activity/program (e.g., bike parking, city hall energy retrofit)
- Milestones/Status Updates: These illustrate whether or not a specific action has been taken (yes/no)

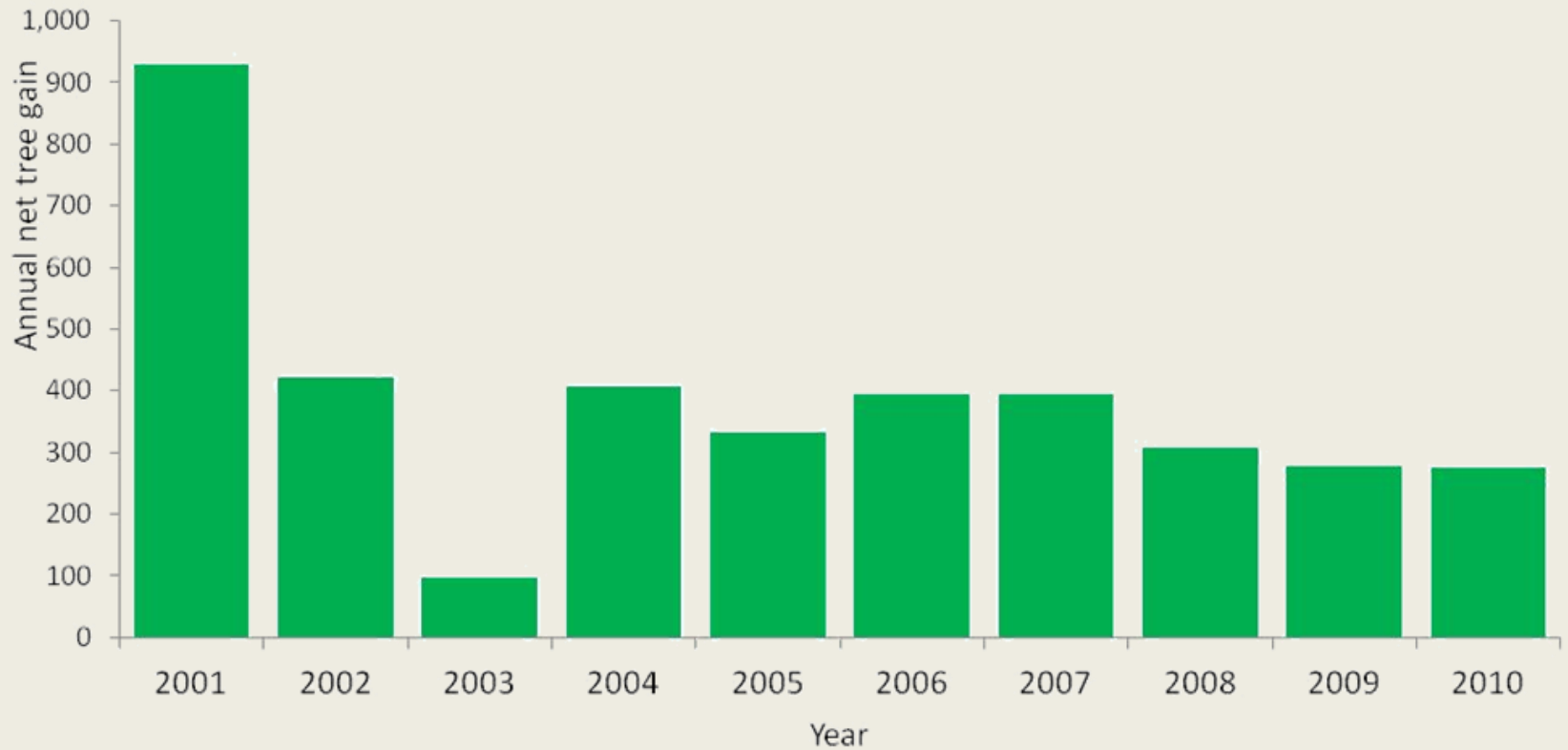
Status Update:

Develop grey
water
guidelines

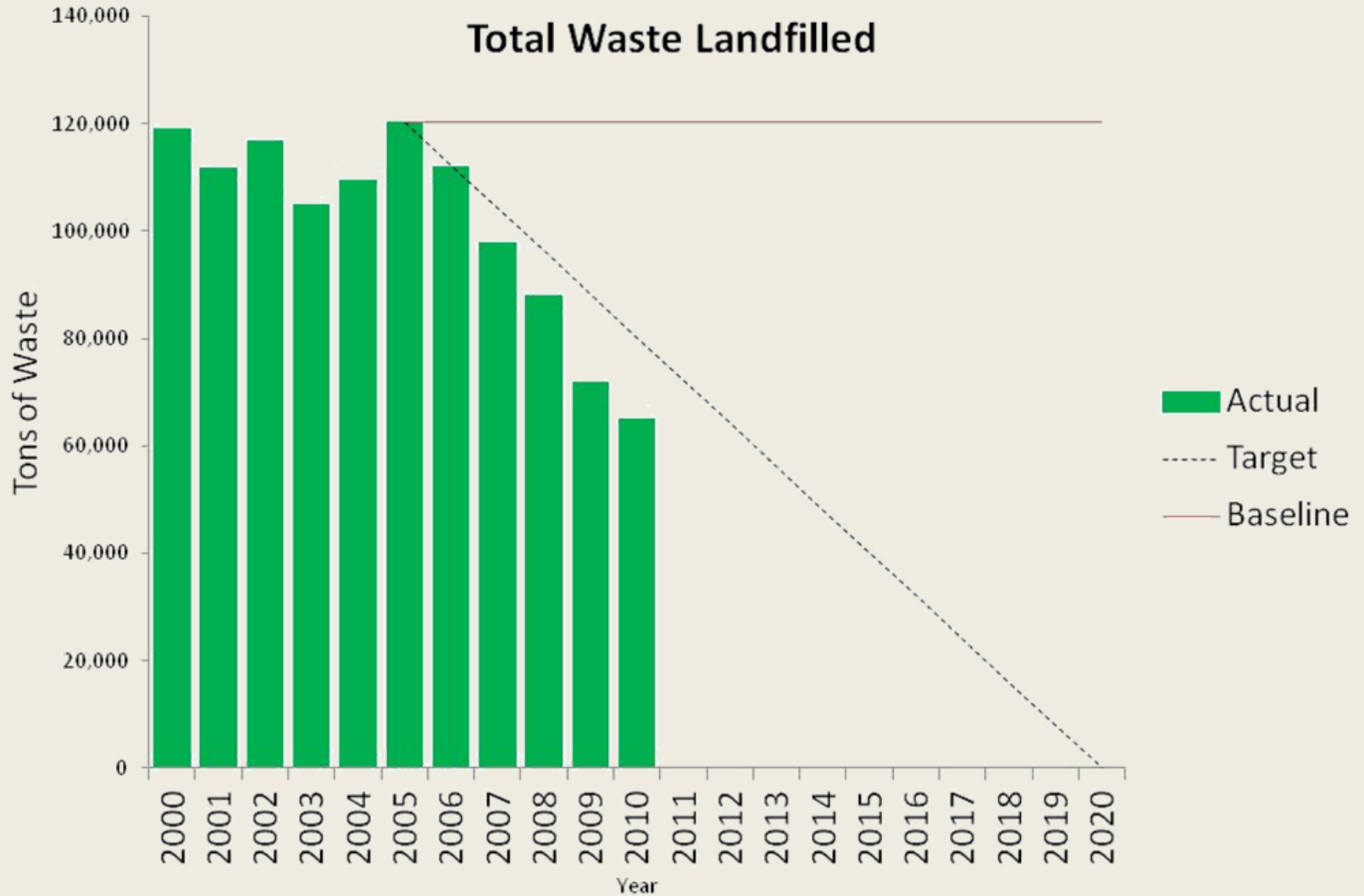


Program-level metric

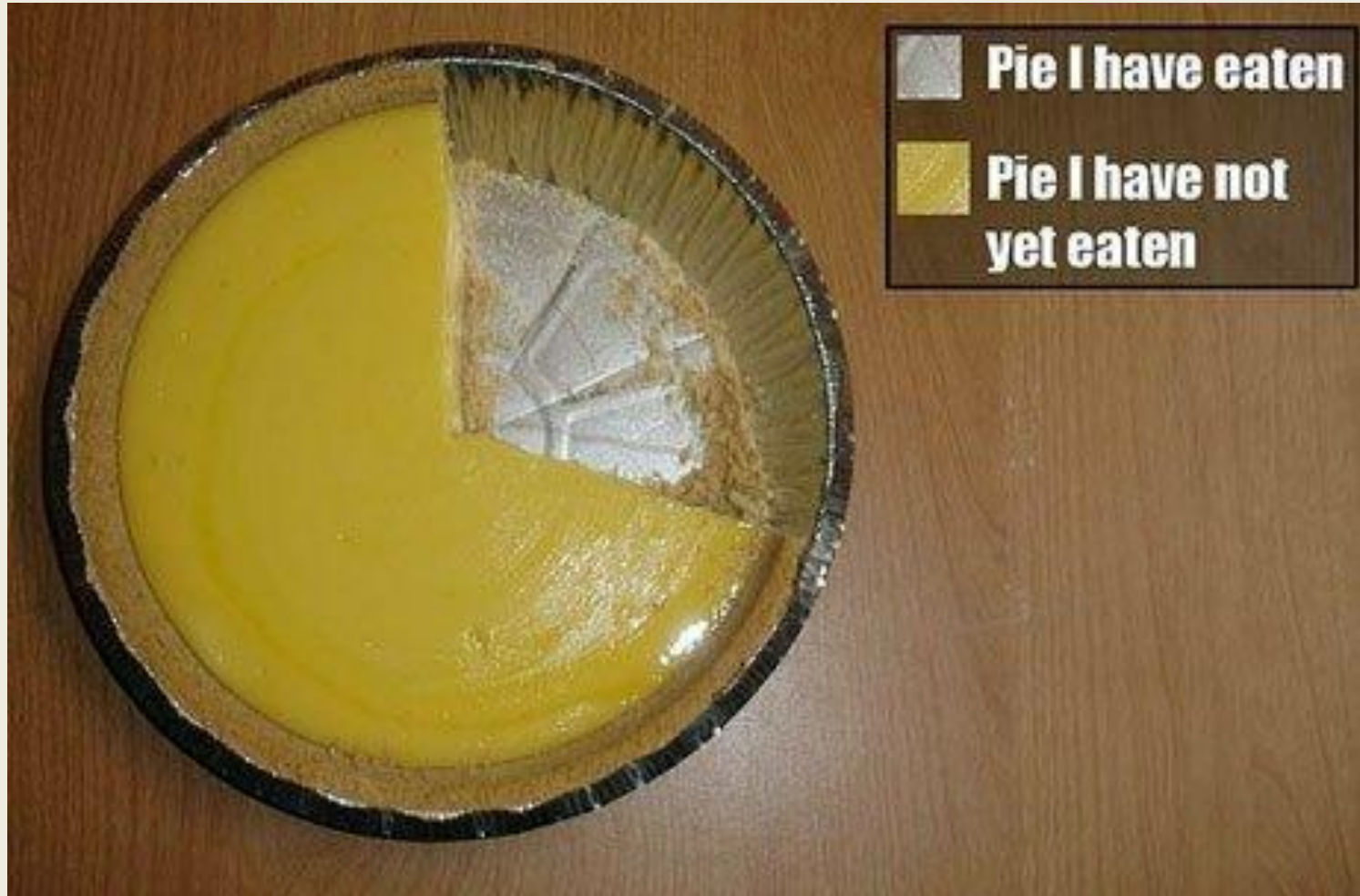
Annual Net Tree Gain



System-level metric



Some criteria for choosing effective metrics



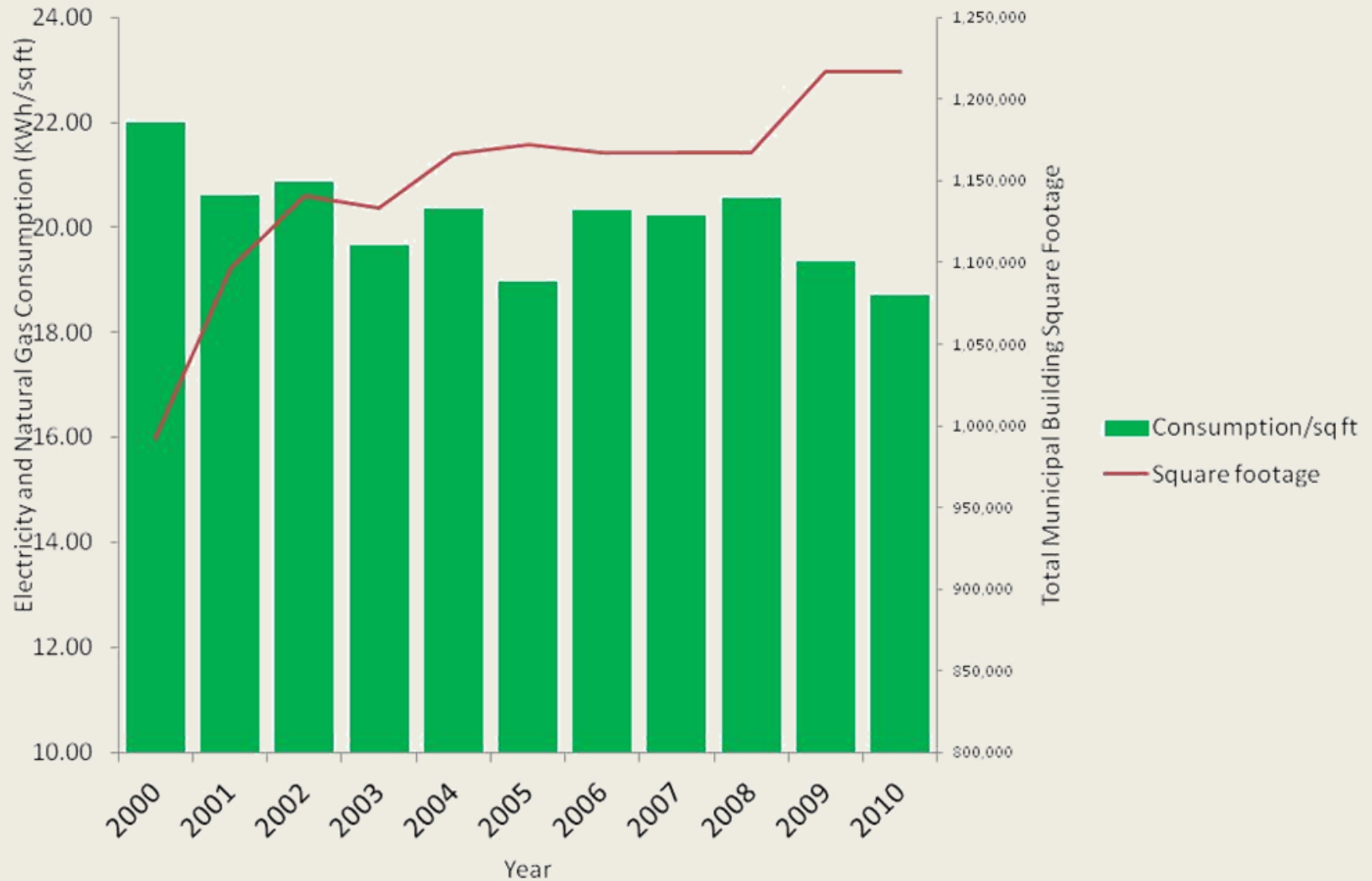
Source: Timothy's kitchen table

Some criteria for choosing effective metrics

- Data are accessible, reliable, well-documented
- Data are easily understood by the audience
- Data clearly demonstrate progress (or lack thereof)
- Normalized metrics illustrate relationship between two variables

Normalized data

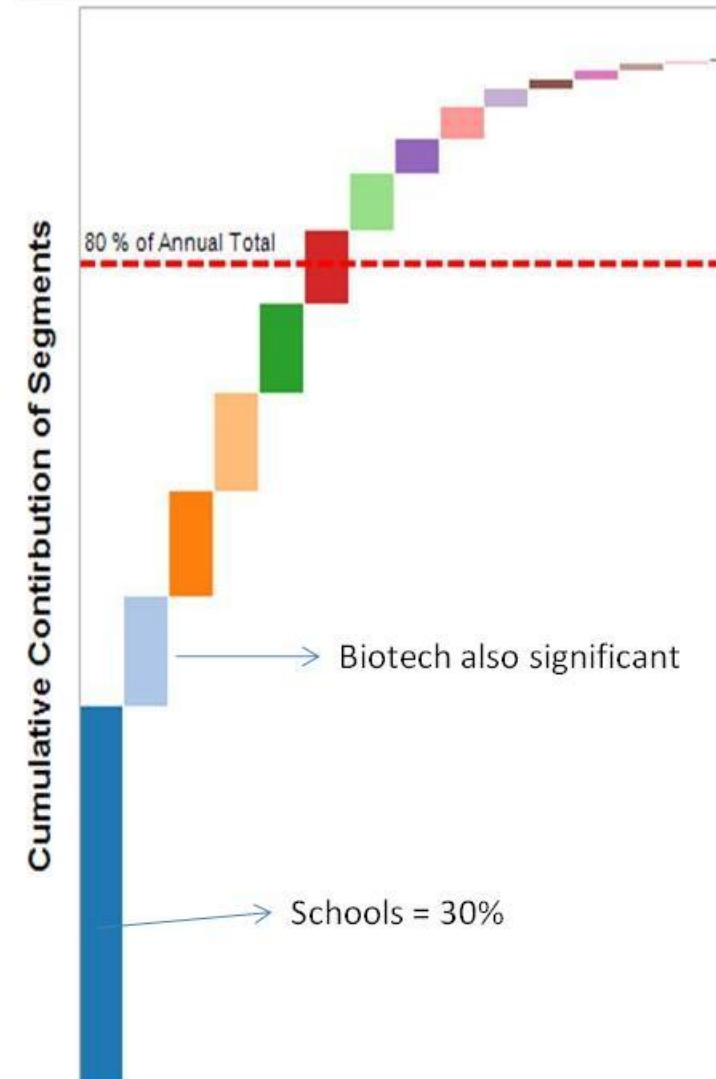
Annual Municipal Energy Consumption Per Square Foot



Non-Residential Electricity Overview for 2010

Market Segments <i>Service Location Types</i>	Annual Total Electricity Usage		Average Electricity Usage per Service Agreement		# of Electricity Service Agreements	
	Rank		Rank		Rank	
Schools	1		2		10	
Biotech	2		1		16	
Offices	3		12		1	
Hospitality	4		8		4	
Retail	5		11		3	
Manufacturing & Transportation	6		3		7	
Healthcare	7		6		5	
Uncategorized	8		17		2	
High Tech	9		7		6	
Government	10		10		9	
Food Processing	11		4		12	
Unallocated	12		15		8	
Residential	13		13		11	
Agricultural Manuf. & Transportation	14		9		13	
Chemicals & Minerals	15		5		14	
Wastewater & Water Treatment	16		14		14	
Agriculture	17		16		17	

Segment Contribution to 2010 Annual Total Electricity Usage



Who is going to do all this work?

- Lead coordinator
- Staff in different divisions provide the data annually
- IT staff are a good resource
- Excellent role for interns
- Build partnerships with key data providers

Takeaways...

- Progress metrics are a tool for continuous improvement
- Progress metrics can also help keep local sustainability effort high-profile
- Use them as a vehicle for providing other resources and info
- Document data sources and manipulation so you don't have to reinvent next year
- Track co-benefits too

www.cityofberkeley.info/climateprogress

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