









Seattle City Light

Innovative Utility Energy Approaches: Quick Lighting Upgrade Initiative

www.seattle.gov/light/conserve

Robert Balzar, PE Director, Conservation Resources Division May 13, 2010





SEATTLE CITY LIGHT MISSION

Our Mission

- Seattle City Light is dedicated to exceeding our customers' expectations in producing and delivering environmentally responsible, safe, low cost and reliable power
 - 90% of our energy is generated through clean and renewable hydroelectric sources
 - Lowest commercial and residential rates of any comparable sized U.S. City (even after recent rate increase)

Service Territory

- 400,000 Commercial, industrial and residential accounts
- Approximately 1 million people
- Customer load 9,708,690 MWh/year = 1200 average MW, Peak load ~ 2000 MW



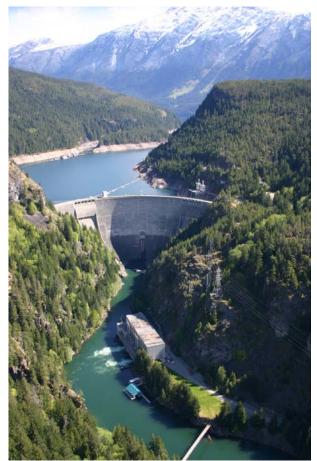


The History

Seattle City Light has been committed to conservation since 1977

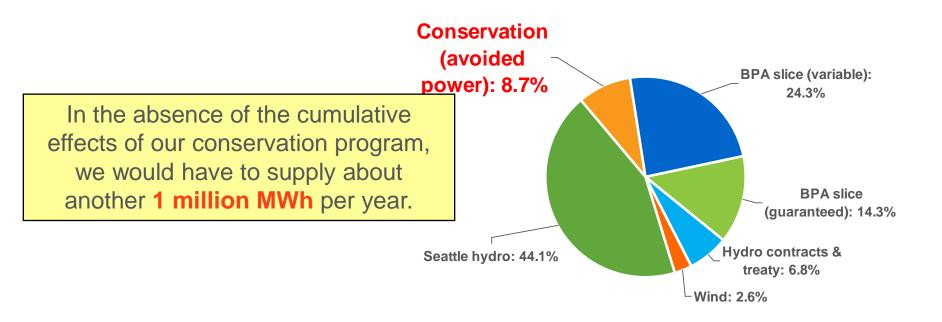
 Our 33-year history of conservation has provided our customers with more than \$680 million in avoided energy costs







Effect of Energy Conservation in Seattle (2007)



City Light Conservation Resources Division



Commercial / Industrial Program

- \$15.1 million budgeted for Commercial/Industrial incentives in 2010
- Custom rebates pay up to 70% of the project cost
 - Lighting upgrades
 - IT efficiency improvements
 - HVAC Improvements
 - Grocery and refrigeration upgrades
 - Air compressors, fans, pumps, and motors
- Simple rebates
 - Quick Lighting Upgrade Initiative
 - Commercial kitchen equipment
 - Lighting controls



Quick Lighting retrofit in progress



Quick Lighting and the federal stimulus package

- The City of Seattle was awarded \$6.2 million for energy efficiency projects, of which \$750,000 was allocated to the Quick Lighting program, to help accelerate these conversions.
- This funding is being used to pay for eight additional staff:
 - Six part-time assistant energy management analysts (field staff)
 - One full-time program coordinator
 - One full-time contracts administrator
- Marketing materials and temporary staff expenses are also funded.
- Job creation: 8 direct, estimated 20 to 25 indirect (contractor employees)
- Utility incentives meet federal matching funds requirements



Commercial & Industrial Program



Quick Lighting Upgrade Initiative

- In 2009, conservation at small, medium and large C/I customers combined accounted for about 60 million kWh of total conservation contracts.
- About 17 million kWh (28%) of that is attributable to the "Quick Lighting"

Quick Lighting: A Bounty on T12s

- Created for the small and medium customers with obsolete lighting systems.
- By paying up to 100% of the project cost, we overcome the past financial obstacles.
- Our goal is to accelerate T12 retrofits prior to the adoption of new federal standards that will phase out T12s on July 14, 2012.





Quick Lighting Upgrade Initiative: Highlights

- Limited-time offer (July 1, 2009 March 30, 2010) to encourage local trade allies to aggressively pursue T12 to T8 retrofits
- Program launched as pilot, July 2009
 - Initial program paid up to the full cost, based on flat-rate incentives
 - Flat-rate incentives were set based on an analysis of bids, actual costs from previous jobs, and estimated cost-effectiveness (Total Resource Cost).
- Pilot results analyzed and changes made to improve results and costeffectiveness, November 2009. Changes included:
 - Original incentive structure sent the wrong price signal to contractors (like-for-like retrofits were paid more)
 - Revised rebates paid higher incentives for lamp reductions and encouraged the use of 28w lamps



The Opportunity



SCL estimates 9,500 potential projects

- These customers still have T-12 lighting
 - 450,000 fixtures need to be upgraded
- Realizing energy savings from these opportunities is a program delivery challenge, not a technical challenge
- The usual reasons for slow adoption of energyconserving technologies apply:
 - Customer isn't interested in lighting as long as lights work
 - Customer doesn't know how much lights cost
 - Customer has other things to do

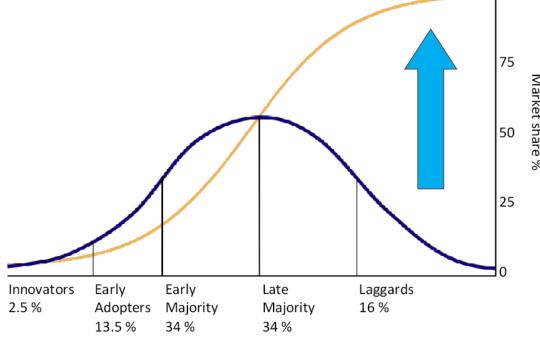


Philosophies of utility programs

Most utility incentive programs are focused at getting the latest NEW technologies <u>into</u> the market.

Quick Lighting is focused at getting OLD technologies <u>out</u> of the market.

 Utility programs usually provide incentives for new technologies - those in the "innovator" or "early adoption" stage.



100



What our customers and contractors say...

An actual e-mail from a *Quick Lighting* contractor:

"We tested it out and we are good for de-lamping with the reflector. We put in some samples and it looks great! YOU MADE ME A BELIEVER!

June Hwang – Energy Management Services



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"The lighting in our production area is vastly improved! Bottom line, we've got better lighting that uses less energy, we're more productive, and we got a hefty rebate from City Light!"
--- Lynn Krinsky, President, Stella Color



Quick Lighting results, July – April 2010

Overwhelmingly Successful!

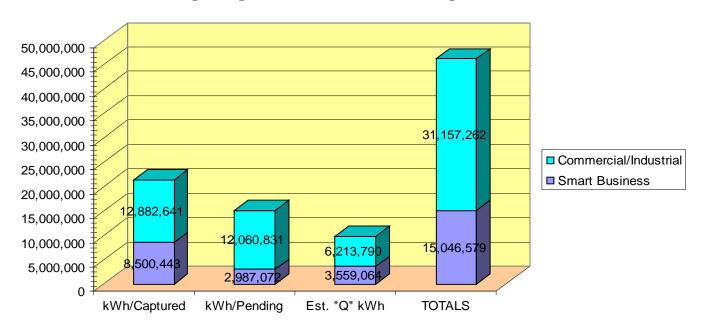
- Original program was slated to save 6.7 million kWh over 18 months
- So far, we have tripled the original savings estimate in just about one-half the time

	Contracts or rebates	kWh saved	Incentives
Small businesses	535	8,500,443	\$2,502,001
Medium & Large businesses	202	12,060,831	\$3,172,040
Totals	737	21,383,084	\$5,769,497



Quick Lighting program wrap-up continues...

Quick Lighting Estimated kWh Savings - 4/30/2010



- In addition to the 21 million kWh already captured, we have another 15 million kWh under contract, and 10 million kWh waiting in our queue.
- Quick Lighting has been an outstanding success! 1,376 customers will help us to save more than 46 million kWh.

THANK YOU!

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