
CFLs Here, There, Everywhere!

What's Next for California Programs?

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CFLs in CA: Seems We're Done...

- 95% awareness
- 75% of homes have at least one CFL
- Many models available from many manufacturers
- 640 retailers, 2400+ stores participate in PG&E's upstream CFL program
- Retail price ~ \$1 w/ & \$3-8 w/o incentive

Or Are We Really?

- Are CFLs = Incandescents?
 - Color rendering
 - Instant full on
 - Mercury
 - Buzzes like a bee
 - Dimmable, 3-way, sensor controlled hard to find, expensive; yet ~ 1/3 of sockets?
- Incandescent bulbs still in 1/2 to 2/3 of sockets

Patience... Pays

- Without upstream program would market continue to evolve quickly?
- Continued support/involvement in market by IOUs will accelerate getting:
 - CFL = Incandescent
 - LEDs better than CFLs - will take time
- This will ensure success for 2012 phase-out & moving towards meeting GHG goals

Let's Look at the Path Travelled

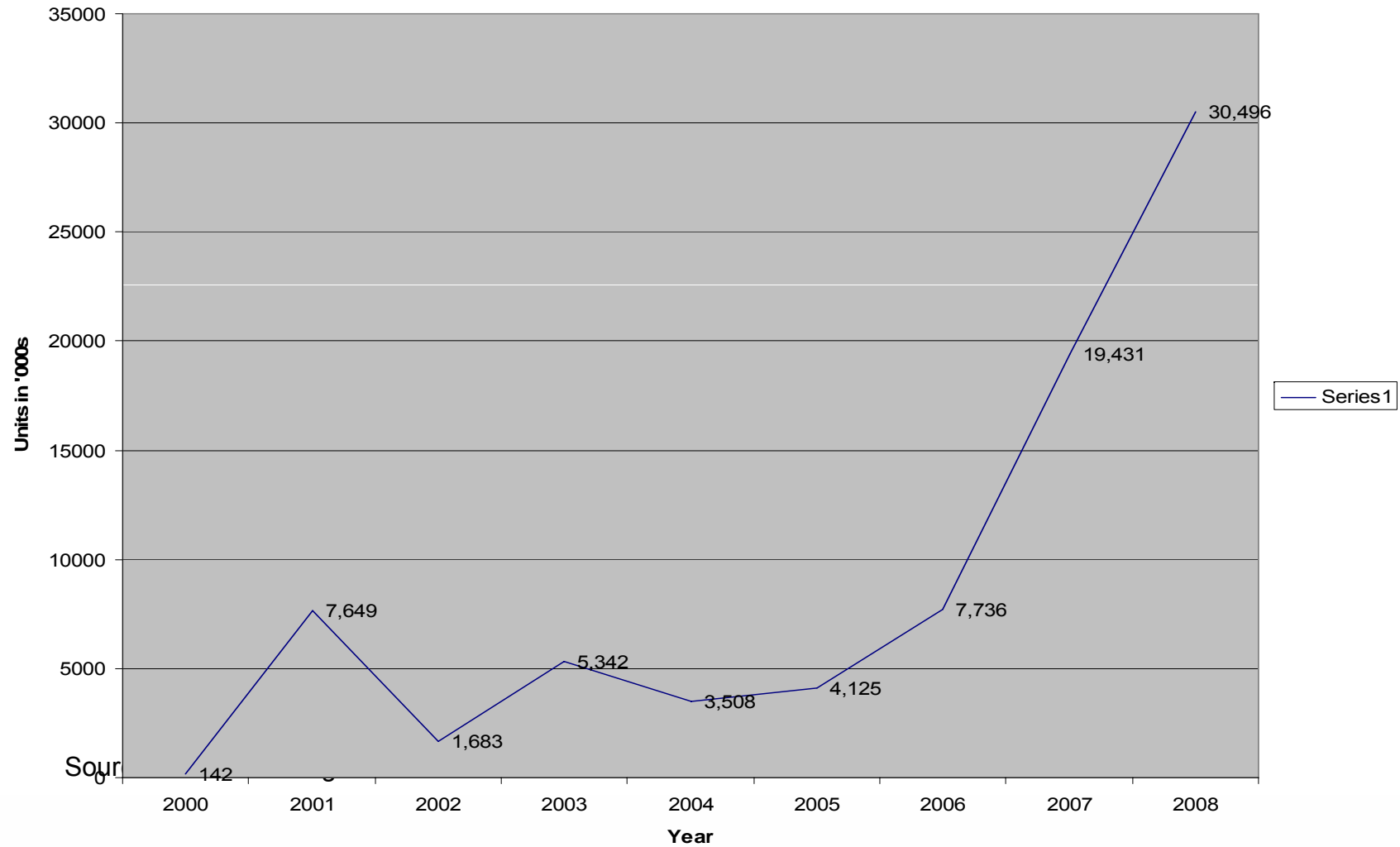
- When they first appeared CFLs were:
 - Unknown
 - Unavailable
 - Inaccessible
 - Unaffordable

Let's Look at the Path Travelled

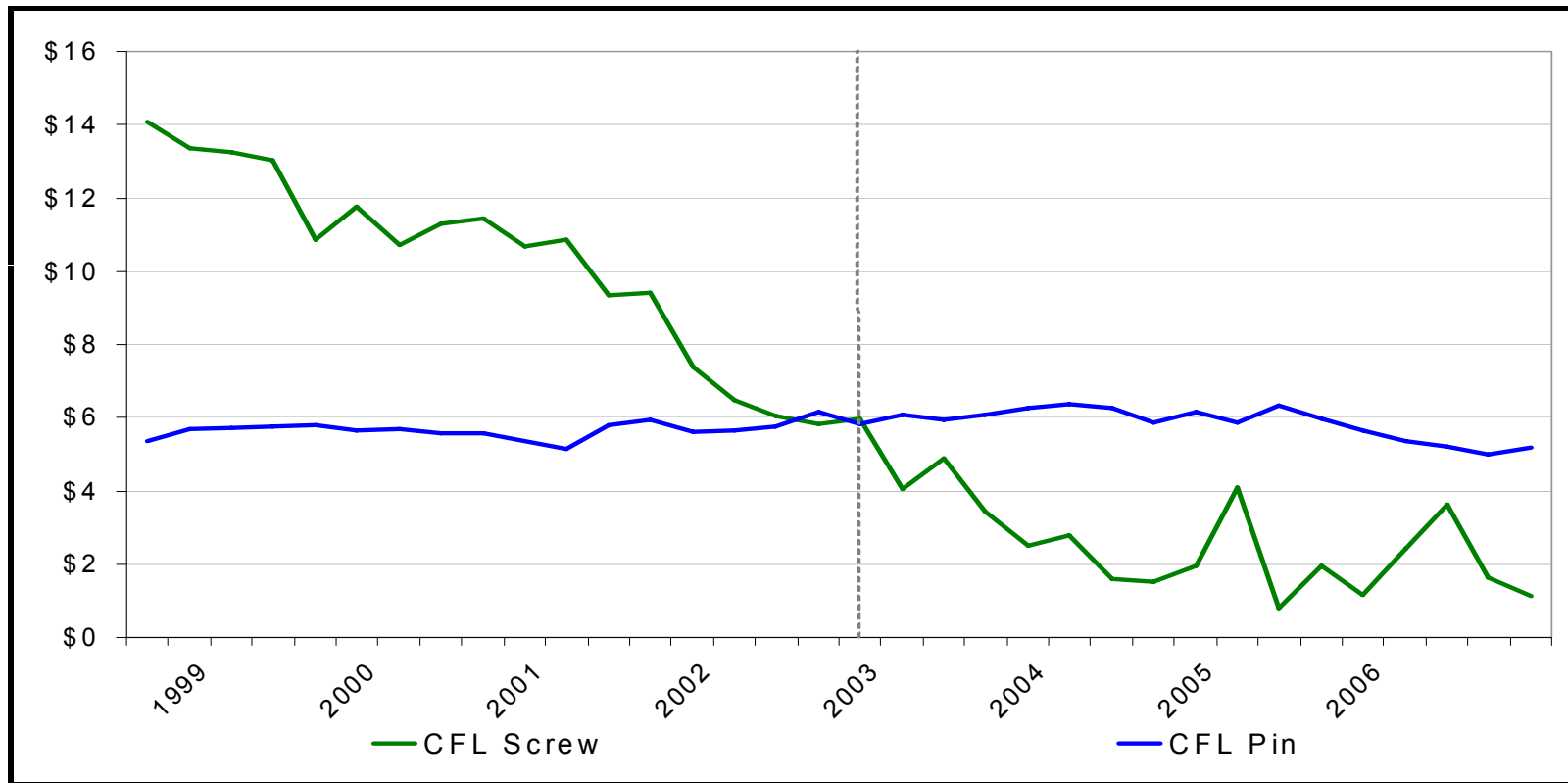
- Since 1980's, the IOUs have:
 - Promoted to enhance **awareness**
 - Specified quality to improve **availability**
 - Partnered with markets to ensure **accessibility**
 - Provided incentives to make them **affordable**

CFLs Incented by PG&E in Program Years 2000-2008

PG&E Incented CFLs



California CFL Prices 1998-2008



* After 2003, the data no longer include home improvement stores.

Source: Itron 2008

The Future: Building on the Past

- Making CFLs = Incandescent bulbs: the “Super” CFL!
 - Usable everywhere
 - Instant full-on
 - Lower mercury (< 3mg/CFL)
 - High efficacy
 - Great color rendering
 - No flickering
 - Long and assured useful life

The Future: Building on the Past

- Making CFLs = Incandescent bulbs: Make the “Super” CFL a market favorite!
 - Promote them via:
 - Information campaigns in media
 - Higher incentives to market allies
 - Promote extensive distribution across California in 2009-11
 - Partner with markets to create a market pull

The Future: Building on the Past

- **Just over the horizon?? LEDs!**
 - Need to improve the technology
 - Higher specs and testing requirements
 - Current models get ~ 40 lumens/Watt
 - Resolve “cooling” issues
 - Develop more LED-based fixtures

The Future: Building on the Past

- **Just over the horizon?? LEDs!**
 - Continue to support market evolution
 - Expanding use in niche markets where clearly superior
 - Refrigerated case lighting
 - Holiday lights,
 - Outdoor, Streetlighting, etc.
 - Promote them via:
 - Information campaigns in media; careful w/too much hype
 - Partnering w/ Feds & Others
 - Higher incentives to market allies also supports ongoing R&D
 - Negotiate extensive distribution across California
 - Partner with markets to create a market pull

The Future: Building on the Past

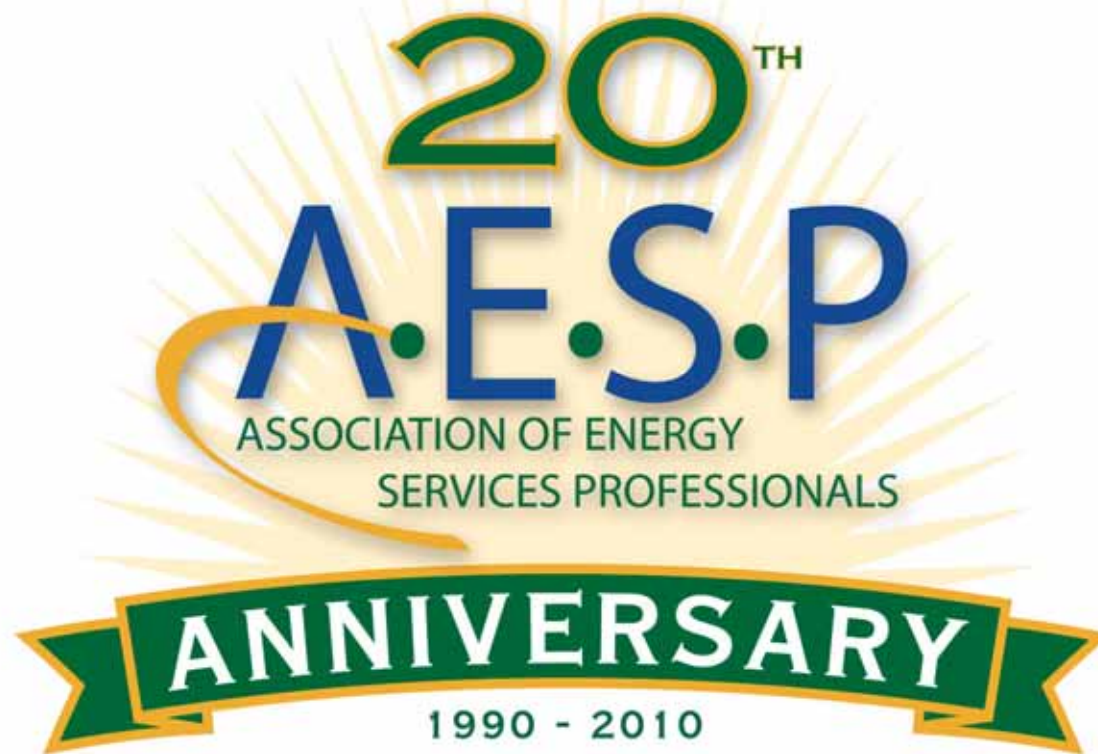
- Optimize the use of daylighting
 - Increase design capability & integration w/ controls
 - Support market evolution by promoting use in markets where clearly superior
 - Office buildings – perimeter lighting
 - Residential – enhanced architectural design tools
 - Promote via:
 - Trainings on daylighting concepts and tools
 - Support development of enhanced architectural design tools and demonstrations
 - Incentives to incorporate in buildings
 - Integrate with other offerings (DR, Solar...)
 - Partner with trade allies (AIA, USGBC-LEED, E Star...)

The Future: Building on the Past

- Customer's want quality lighting products
- Utility's programs "oil" the EE lighting "machinery" via ongoing push/pull to improve lighting options
- Utility programs provide ongoing support to
 - Information/outreach to customers
 - Incentives to cover higher initial costs
 - Quality assurance
 - Foster widespread marketing

Thank You

- Any Questions?
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