



Technology Procurement: Looking Back on U.S. Experience

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Projects Reviewed

- Super-Efficient Refrigerator Program (SERP)
- Super-Efficient Apartment-Size Refrigerator Program
- Sub-CFL Technology Procurement



SERP

- **Goal:** Induce a manufacturer to produce and sell a CFC-free refrigerator 25% more efficient than U.S. standard
- \$30 million offered to winner of competitive solicitation; award money tied to sales
- Award made to Whirlpool; promised units beat standards by 30% to 41%
- Less than 250,000 units sold; withdrawn from market
- Probably influenced level of new U.S. standard



Super-Efficient Apartment Size Refrigerator Program

- **Goal:** Pull highly efficient apartment-size RFs (15 cu. ft.) into the market
- Used NYCHA as anchor buyer; agreed to purchase 20k units/year
- Multi-year program; expanded to include 19 cu. Ft. units (lead buyer was LADWP)
- Over 250k units sold to date; successfully introduced high efficiency RFs to public housing market





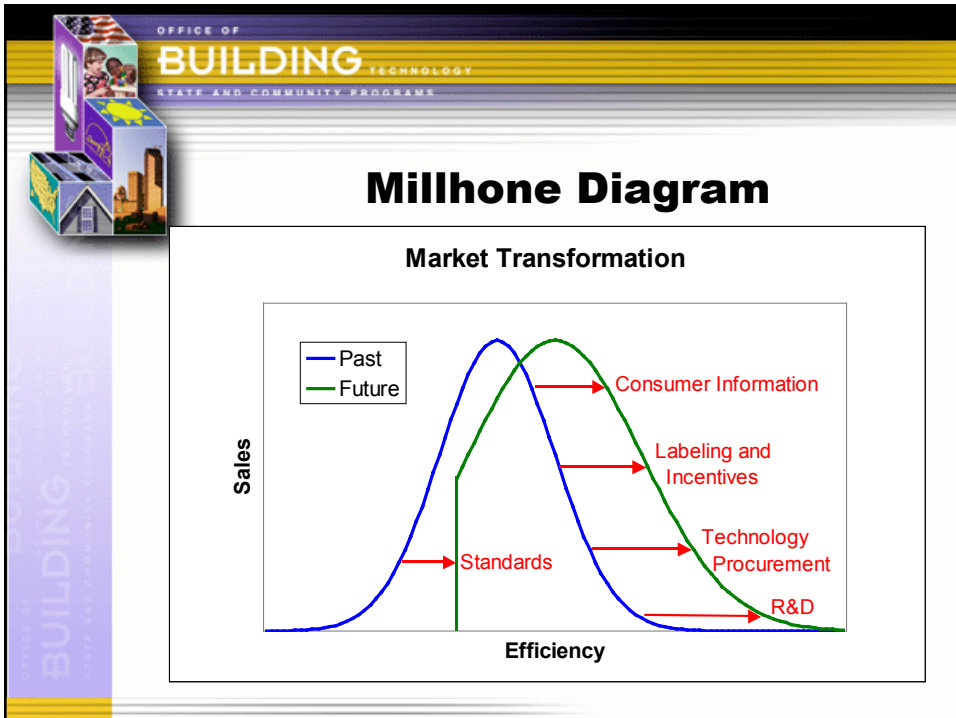
DOE Sub-CFL Technology Procurement

- **Goal:** pull smaller, lower cost, good quality CFLs into the market
- Used **purchasing power** of multi-family housing owners and electric utilities
- Successfully introduced **17 new “sub-CFL” models** to the market
- At program close, February, 2001, **over 2 million lamps sold**




How Does Tech Procurement Fit into MT Paradigm?

- Useful to identify non-energy characteristics that make the broader class of products more successful in the market
- Useful as pump primer for programs designed to promote broad market acceptance
- Useful to identify and develop niche markets that are often necessary precursor to broader market adoption (attract multiple suppliers, drive product costs down, refine technology)



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- ### Lessons Learned
- The program development process should be **buyer** driven
 - It's very easy for technologists to push a certain technology, rather than allowing the buyers to drive technology selection
 - Preferable to make more than one award in response to competitive solicitations
 - The competition that serves the project during the proposal stage should also be used during the implementation stage



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Lessons Learned

- Guaranteed sales are not necessary to attract aggressive bids
 - SERP and Sub-CFL programs are good examples
- Some buyers, particularly government buyers, need a long period of time to take advantage of opportunities
 - Apartment Size RF Program took substantial resources and time to make arrangements for public buyers