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International Survey of CFL Program Experience

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Presented at the regional workshop:
**Confidence in Quality: Eliminating Shoddy
CFL Products within ASEAN Countries**

Bangkok, Thailand
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Background to International CFL Survey

- Implemented by:
 - ♦ Efficient Lighting Initiative (ELI), with support from Joint Graduate School for Energy and Environment
- Survey timing:
 - ♦ Sep – Dec. 2006
- Survey Objective:
 - ♦ Document lessons learned from internationally implemented programs to promote market penetration of energy-saving CFLs
- Coverage
 - ♦ Responses from 26 programs in 14 countries



Programs Surveyed (1)

	Country	Program Name
1	Australia	Equipment Energy Efficiency Programme – Greenlight Australia
2	Australia	Energy Australia – Energy Efficiency Campaign
3	Canada	Switch and Save Campaign (2004)
4	Canada (BC)	CFL Giveaway Campaign (4 phases)
5	Canada (BC)	Lighting Rebate Campaign (2 phases)
6	Canada (BC)	Lighting Fixture Campaign
7	Canada (Manitoba)	Power Smart CFL Program
8	Canada (Nova Scotia)	Lighten Up
9	Canada (Quebec)	Programme d'éclairage Efficace Mieux Consommer
10	Canada (Ottawa)	Project Porchlight
11	Canada (Saint John)	Lighting the Way, Save Everyday
12	China	China Green Lights Program
13	Europe	Energy Efficient Residential Lighting Initiative (EnERLIIn)



Programs Surveyed (2)

	Country	Program Name
14	Europe (Hungary)	European Efficient Residential Lighting Initiative – Hungarian part
15	India (Bangalore)	BESCOM Efficient Lighting Program (BELP)
16	New Zealand	National CFL Program
17	New Zealand	Ecobulb projects
18	Philippines	Philippine Efficient Lighting Market Transformation Project (PELMATP)
19	Poland	Poland Efficient Lighting Program (PELP)
20	South Africa	Efficient Lighting Initiative, (ELI)
21	South Africa	DSM Recovery Programme
22	Sri Lanka	CEB – CFL Program
23	United Kingdom	Energy Saving Recommended
24	United States	ENERGY STAR
25	U.S., China, Brazil	CFL Harmonization
26	Vietnam	Compact Fluorescent Lamp Promotion Program

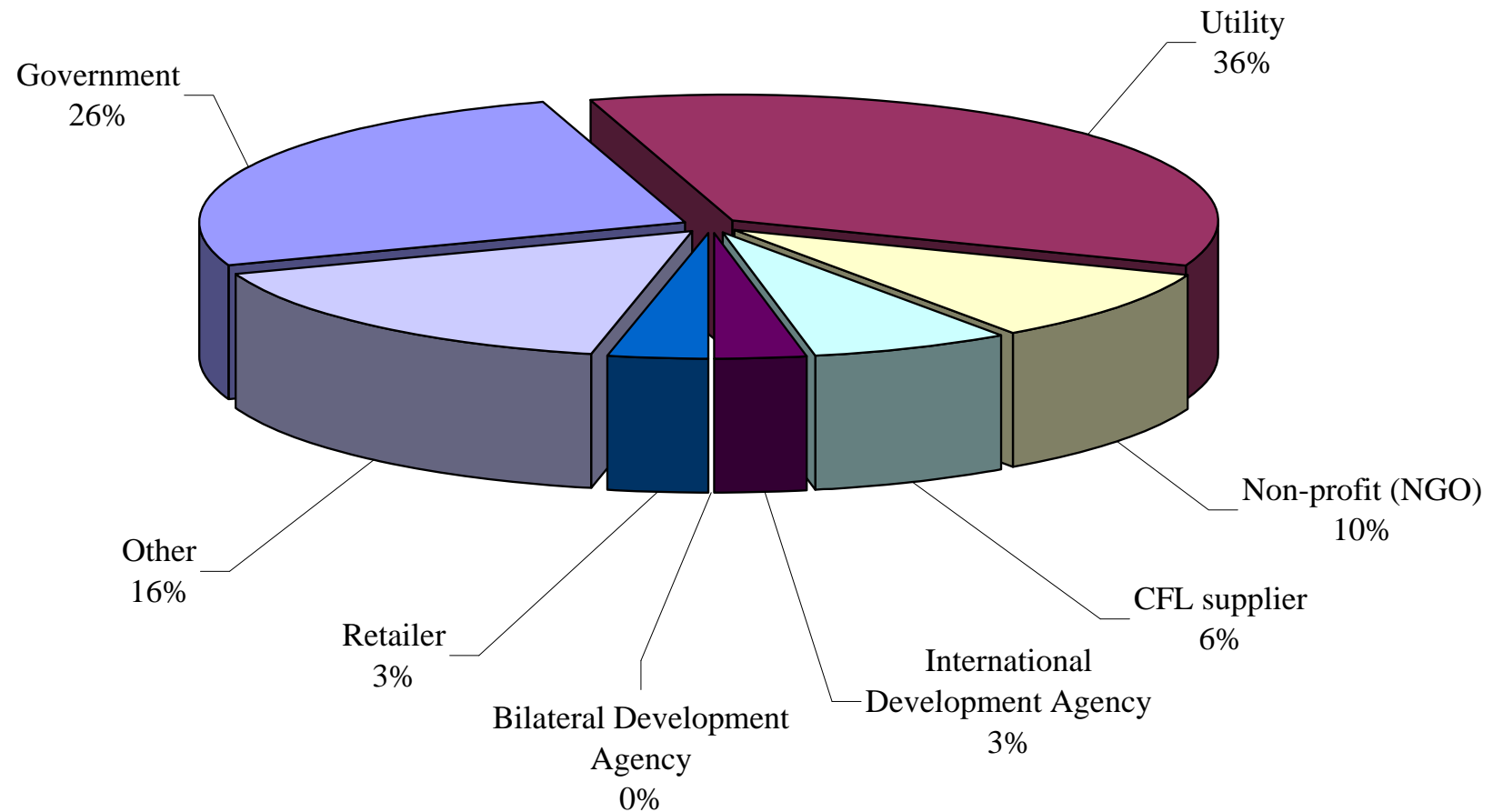


Some Key Data from Programs

Program budget	\$200,000 up to \$15 million
Duration	A few months up to 10 years
Number of lamps	3,000 up to 5 million
Market penetration (relative to GLS)	<5% up to 33%
Energy savings	Up to 435 GWh/yr (direct) Up to 2,328 GWh/yr (indirect)
Peak demand savings	Up to 100 MW
CO2 reduction	Up to 559,000 metric tons CO2

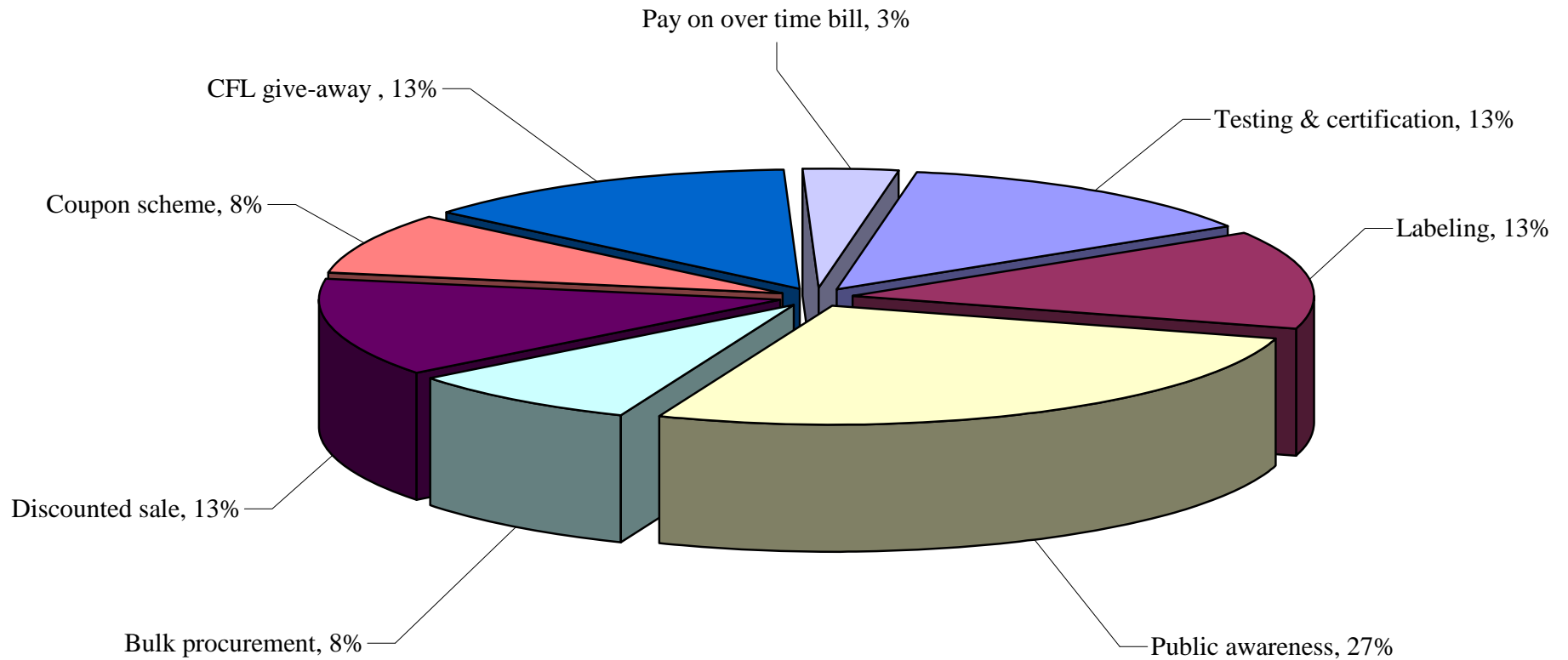


Type of Implementing Agency



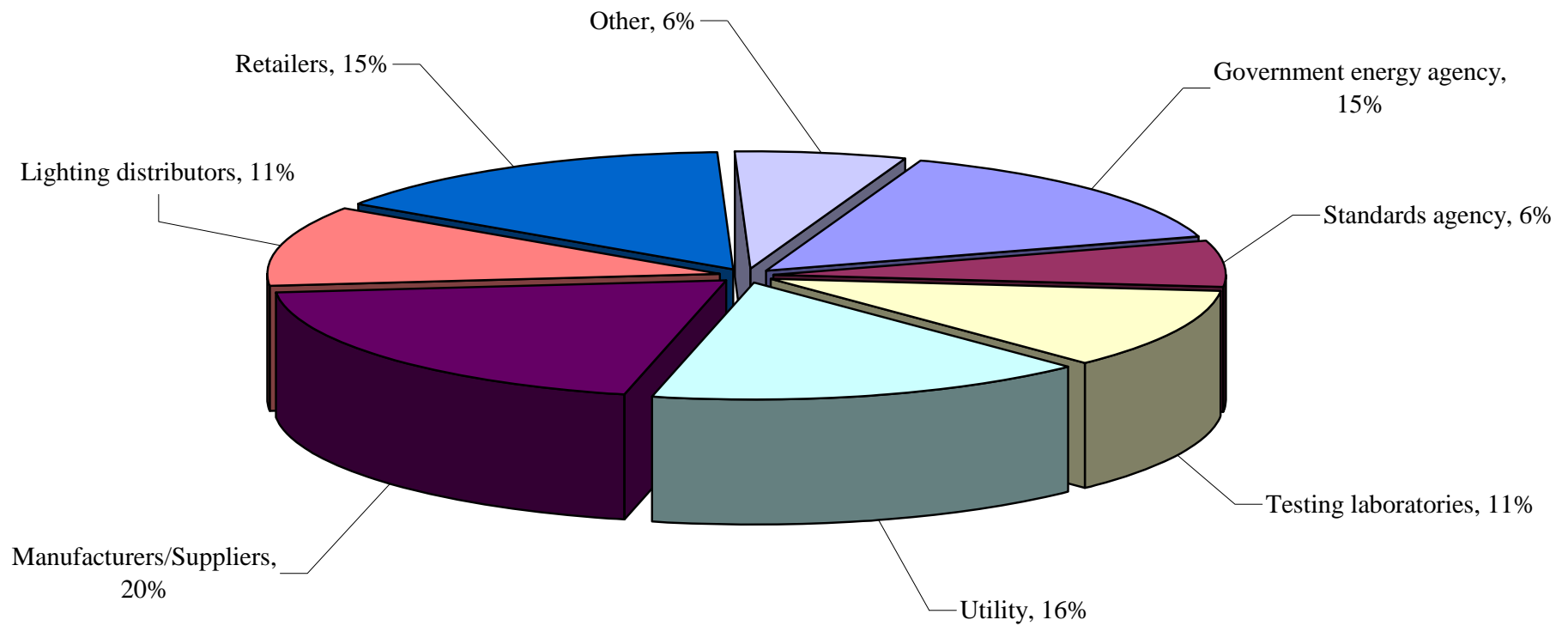


Type of Program





Type of Partner Agency



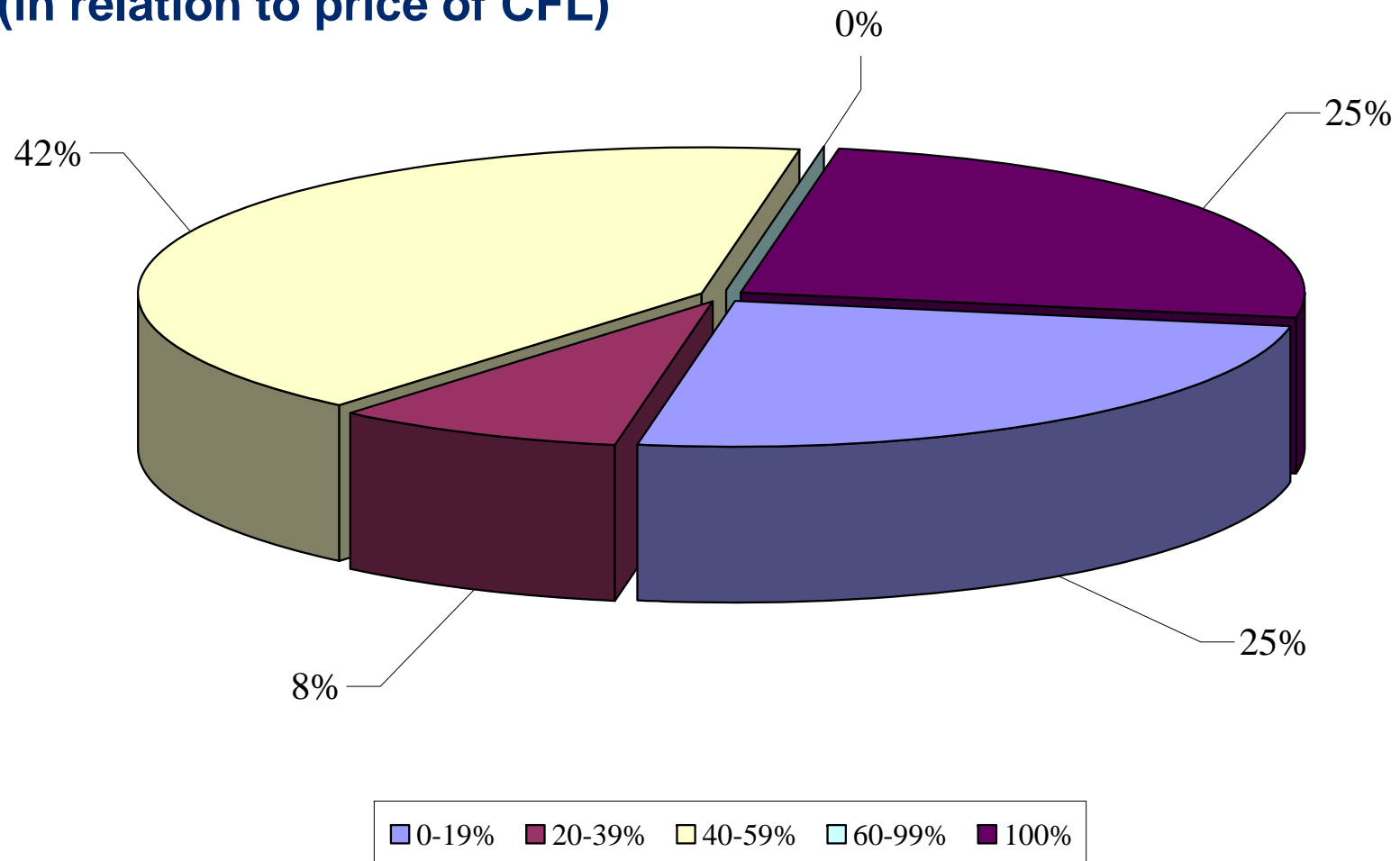


Type of Program Incentive

- Public awareness (27%)
- CFL give-away (13%)
- Discounted sale (13%)
- Testing & certification (13%)
- Labelling (13%)
- Bulk procurement (8%)
- Coupon scheme (8%)
- Pay on over time bill (3%).

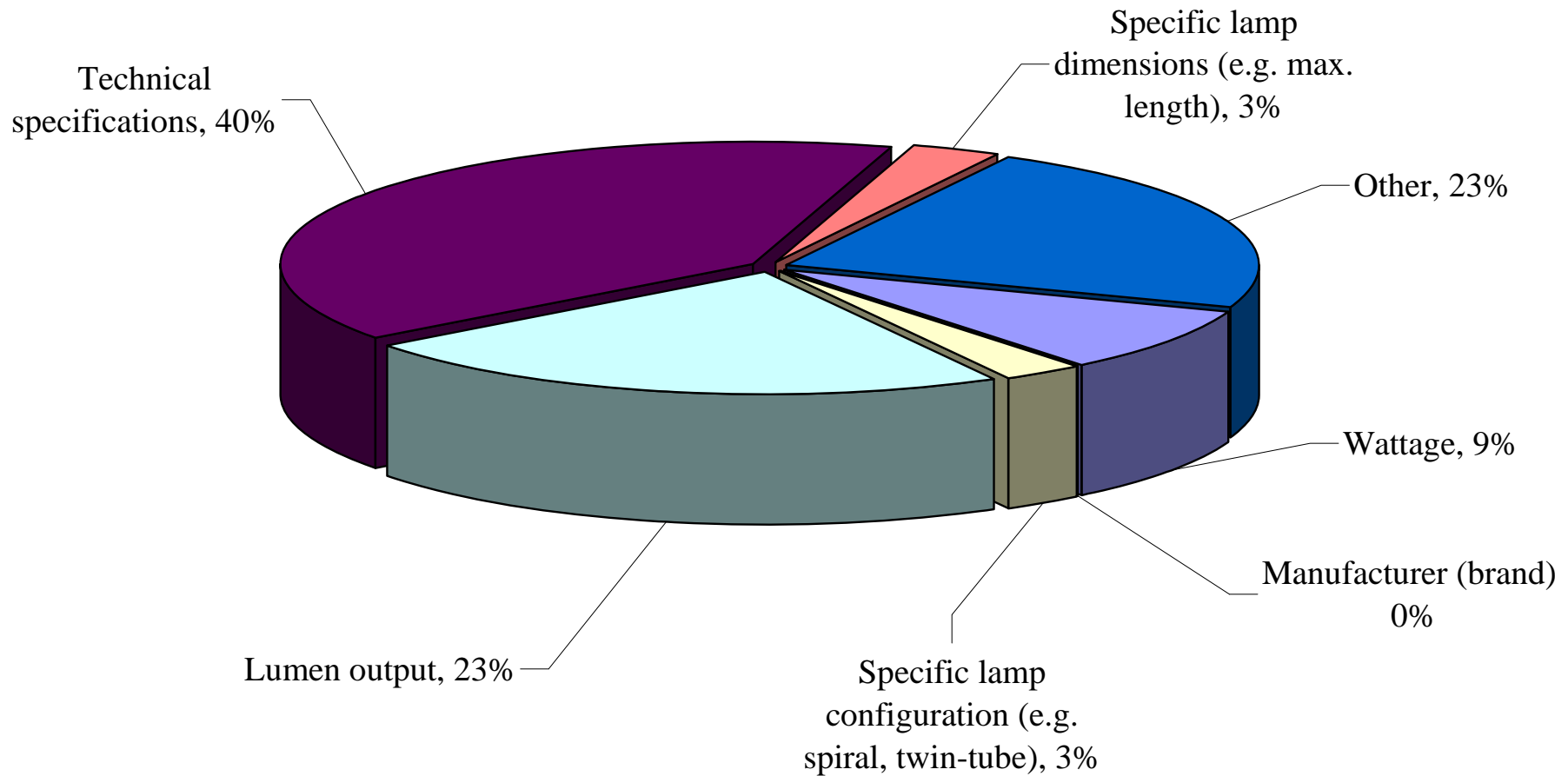


Level of CFL Subsidy/Incentive (in relation to price of CFL)



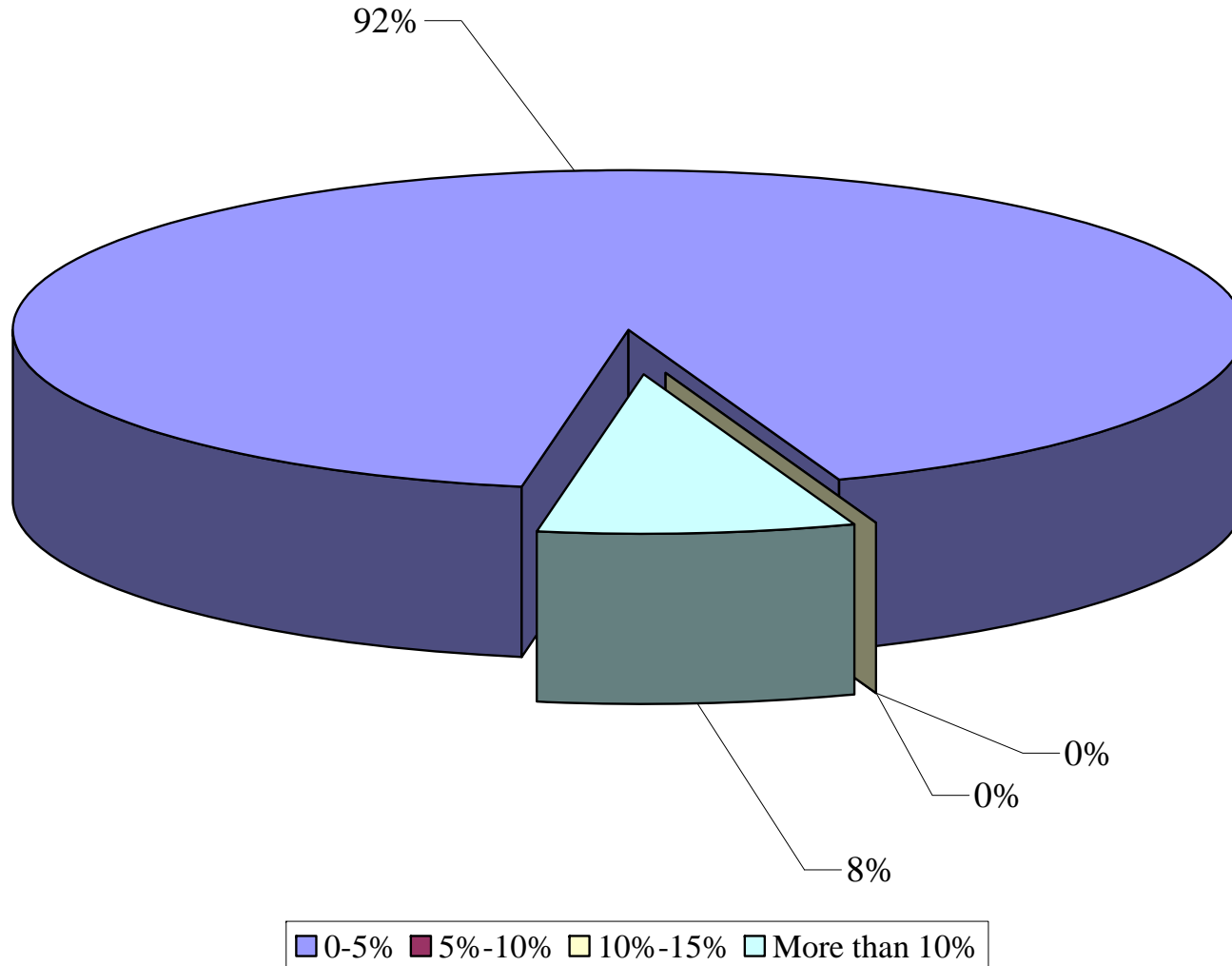


Primary *Technical* Criteria for CFL Selection



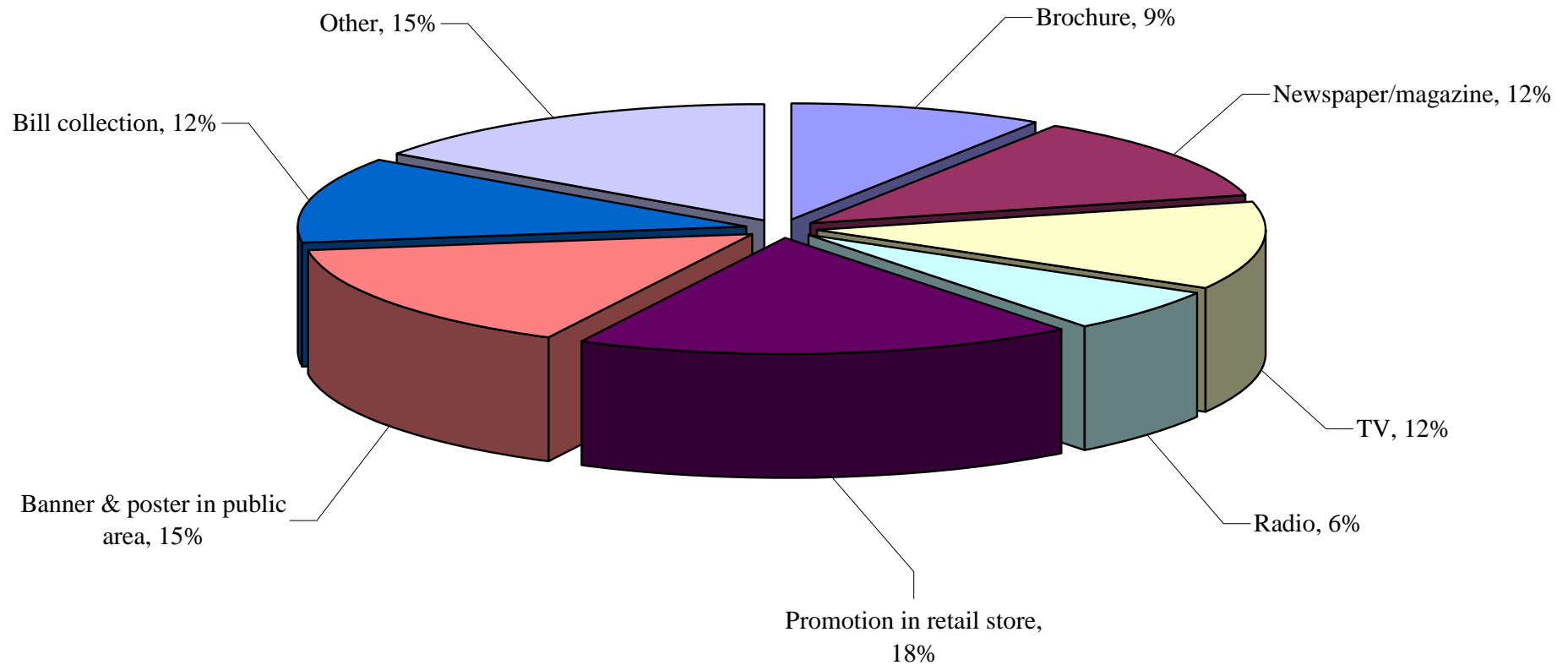


Lamp Failure Rate in the CFL Programs



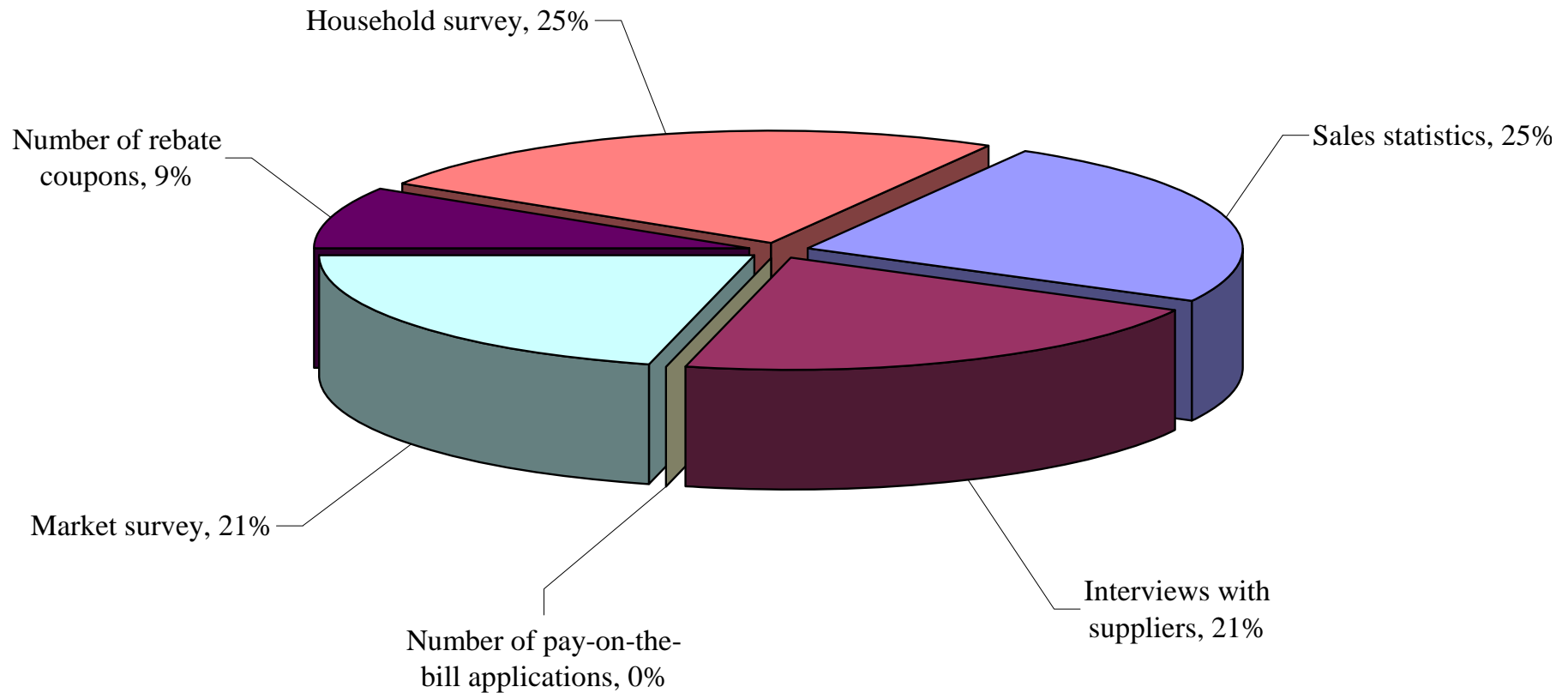


Most Effective CFL Promotion Method



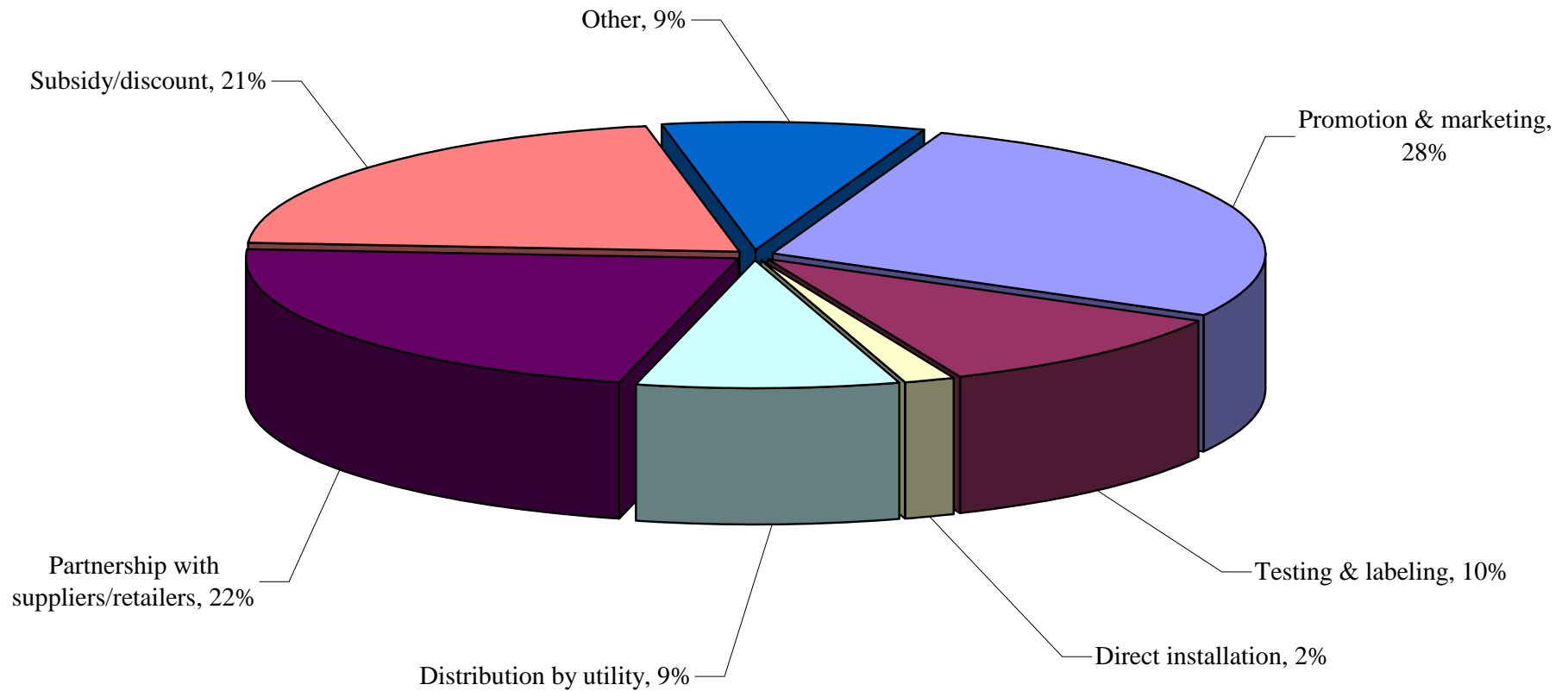


Methods Chosen to Analyze Program Impact



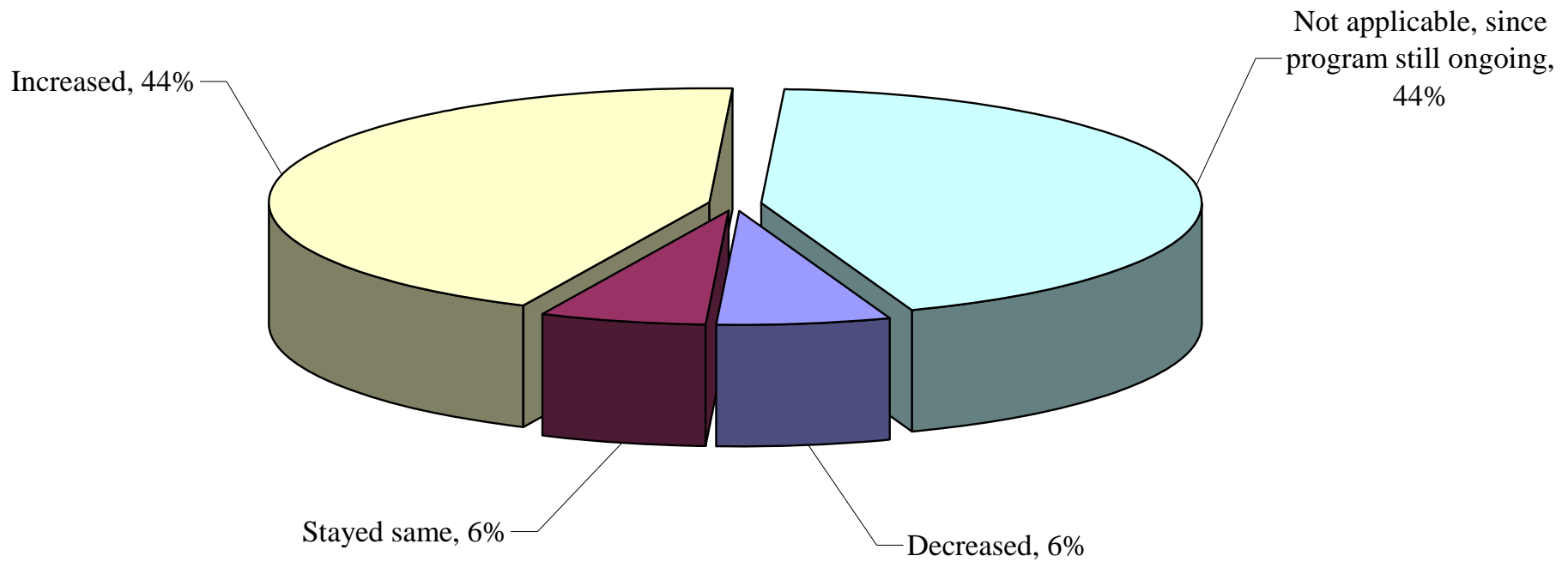


Key Success Factors in CFL Program Implementation





Impact of Program on CFL Sales





Key Lessons Learned re Program Design (as Reported by Respondents)

- Partnerships with industry critical
- Participation in program declines slightly each year (Need to better target hard-to-reach customers)
- Customers prepared to pay higher prices for known brands
- Providing CFL on bill installments difficult (expensive)
- Competition among suppliers resulted in reduced costs
- Develop methods/systems for remote location rural customers to participate.
- Difficult to manage logistics in the supply chain for CFL availability
- CFL warranty of 2 years is not required (in case of manufacturing defects, most CFLs failed in the first three months)
- Recycling of used CFLs must be addressed at the beginning of the program (most frequently asked question)



Key Lessons Learned re Promotion (as Reported by Respondents)

- Need clear and simple message
- Need customer education (i.e. how to select, places to install CFLs, lumen/wattage comparison, warm-up time, energy savings)
- Utility endorsement important for consumer confidence
- Size, quality (including long life) and availability of CFL are important to customers
- Useful to quantify CO2 reduction by using of CFL
- Poor-quality CFLs in market damage credibility of good CFLs
- Public recognition of certification is very low
- Programme monitoring and evaluation critical to identify and overcome the barriers as program continues
- Need comprehensive training materials for customer promotion
- Need to link free CFLs to actual installation of the lamp



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Thank you