# The Role of Utilities' Renewable Green Power Programs

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# Objectives

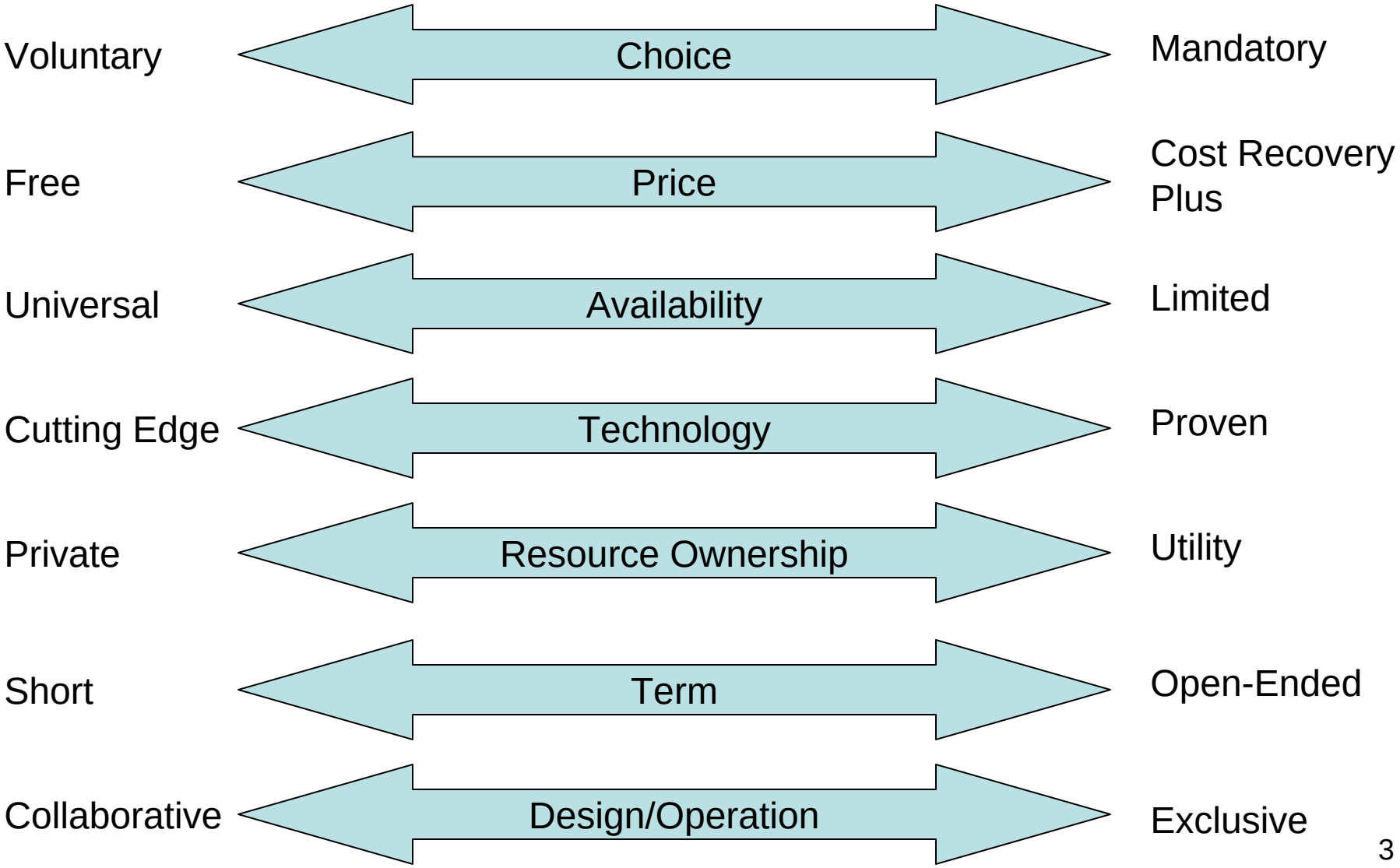
Reduce utility environmental footprint

Promote technology/infrastructure development

Stimulate market/supplier development

Minimize non-participant impacts

# Design Considerations



# Green Power Switch

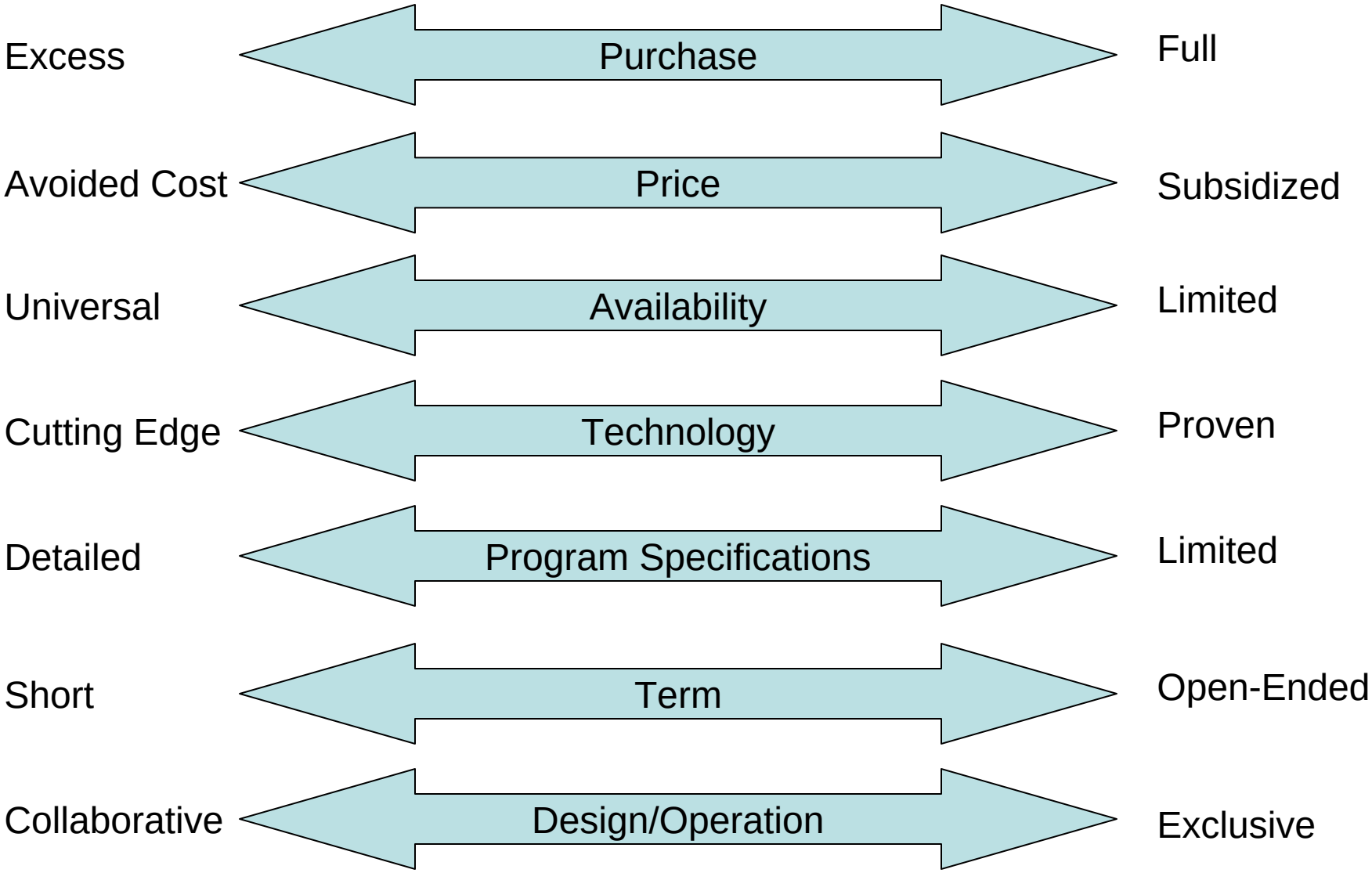
| | |
|---|---|
| Program Launch: | April 2000 |
| Participating Power Distributors: | 104 |
| Participants | |
| Residential: | 12,034 |
| C&I, Government, Institutional: | 476 |
| Total: | 12,510 |
| Blocks Sold (September 2007): | 37,149 |
| FY 07 Sales: | 72,037 MWh |
| FY 07 Generation: | 76,195 MWh |
| Program Sales to Date: | 290,941 MWh |
| Program Generation to Date: | 323,840 MWh |

# Green Power Switch

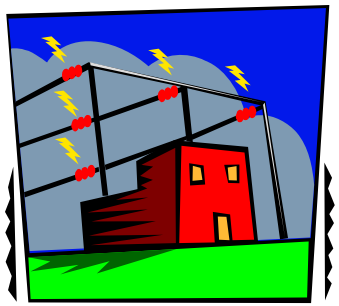
## Resources

| | |
|---|---|
| Wind: | 29.0 MW |
| Solar: | 0.3 MW |
| Bio-gas: | 8.0 MW |
| Generation Partners | |
| Wind: | 33.8 kW |
| Solar: | 170.6 kW |
| TOTAL | 37.5 MW |

# Generation Partners

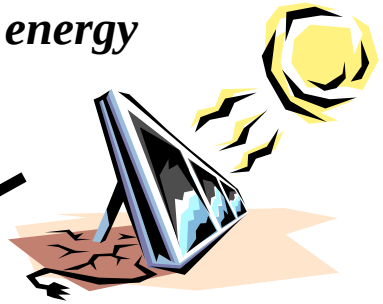


# Generation Partners



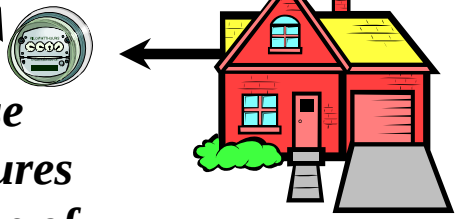
*Home consumes most of the energy generated, but during low demand may pass energy through to power distributor's grid*

*Qualified generation source creates electrical energy*



A

B



*Whole-house meter measures net exchange of energy with power distributor*

*Electrical meter measures total output as Green Power Switch resource*

**Monthly Energy Charge = (A + B) * Distributor Retail Rate**
**Monthly Generation Credit = B * Credit Amount**
**Monthly Bill = Energy Charge + Customer Charge – Generation Credit**