

The Demand Side Resource

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Karl R. Rábago
karl.rabago@austinenergy.com
Distributed Energy Services
Austin Energy



Successful DSM Portfolios

- Deeply Committed Management and Staff
- Clearly Defined Goals and Objectives
- Data-Driven, Systematic and Comprehensive Portfolio and Program Planning Processes
- Stable Program Funding Sources and Levels



Strategic View

- Demand Side Resources are the first priority and best choice for meeting new load growth
 - Between 1982 & 2002, 500 MW capacity avoided
 - FY 2008, 64 MW, 132 GWh
 - Overall, \$350/kW, \$0.03/kWh
(cf. \$0.07 - \$0.13/kWh for generation)
- Per 2009 Forecast, 23% of demand & 15% of energy
(cf. CPS: 771 MW by 2020, 2X Austin Energy)
- PACE modeling assumptions build to 800 MW by 2020 in some scenarios, based on estimated cost growth parameters AE provided; “achievable potential” figures have not been updated in several years



Residential Programs, 2008

	CO ₂ Metric Tons	Program Cost Per Ton
Appliance Efficiency Program	2,220	\$ 695
H P with Energy Star - Rebate	2,577	\$ 821
Home Performance ES - Loan	247	\$ 1,048
Free Weatherization	324	\$ 2,436
Multi-Family	13,998	\$ 133
Clothes Washer Rebates	137	\$ 387
Duct Leaks Seal/Diagnosis	-	
Refrigeration Recycling	1,899	\$ 313
Power Partner Program	57	\$ 55,323
Cycle Saver Program	4	\$ 62,734
CFL Program	3,665	\$ 45
Subtotal Residential	25,130	\$ 430
TOTAL DSM PROGRAMS	77,597	\$ 228



Commercial Programs, 2008

	CO ₂	Program Cost
	Metric Tons	Per Ton
Commercial Rebate & ILA	25,114	\$ 154
Small Business Lighting	1,417	\$ 521
Municipal	225	\$ 1,014
Power Partner	8	\$ 47,466
Load Coop	11	\$ 7,770
Commercial Smart Vendor	289	\$ 315
Engineering Support & TES	-	-
Small Business Air Conditioner	727	\$ 67
Sub-total Commercial	27,791	\$ 202
TOTAL DSM PROGRAMS	77,597	\$ 228



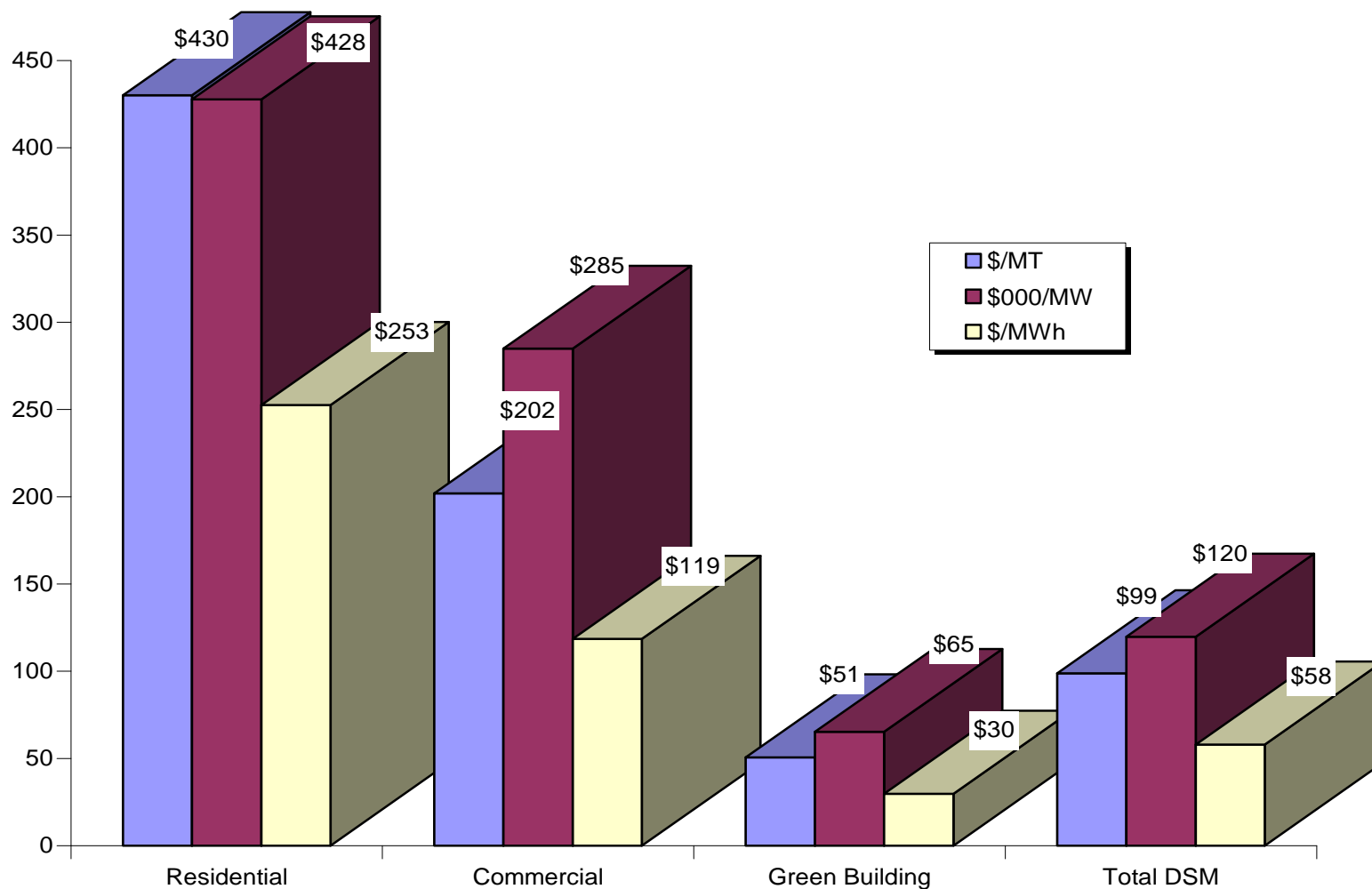
Green Building Programs, 2008

	CO ₂	Program Cost
	Metric Tons	Per Ton
Green Building		
Residential	898	\$ 385
Residential Energy Code	4,646	\$ 18
Multi-Family Energy Code	2,716	\$ 69
Multi-Family tonnage reduction	-	-
Commercial	7,853	\$ 58
Commercial Energy Code	8,564	\$ 10
Sub-total Green Building	24,677	\$ 51
TOTAL DSM PROGRAMS	77,597	\$ 228



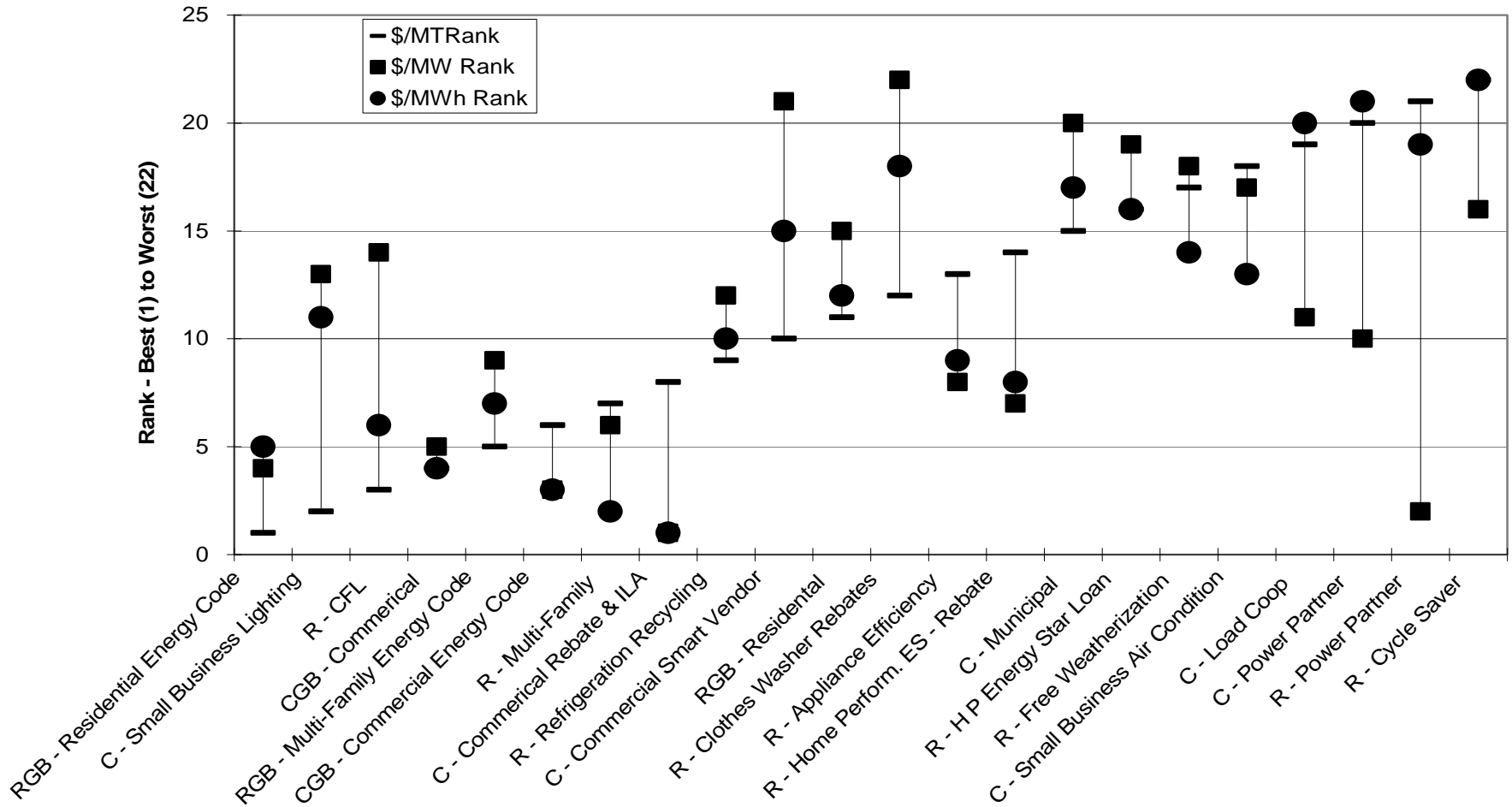
Cost- and Carbon-Effectiveness

DSM Performance Measures 2007-2008



Cost and Carbon Ranking

DSM Measures - 2007-2008
Rank, Best = 1



Current Goals

Initiative Goals for 2020	MW	GWh
Appliance Energy Efficiency	34	74
Residential Efficiency Rebates	41	9
Free Weatherization Direct Install	10	11
Multi-Family Rebates	59	130
Residential Efficiency Loans	10	67
Residential Direct Load Control	57	1
Residential Energy Code (GB)	144	274
Multi-Family Energy Code (GB)	30	41
Municipal Energy Efficiency	8	23
Small Business	22	52
Commercial Efficiency Rebates	137	512
Commercial Energy Code (GB)	80	206
Thermal Energy Storage	38	-
Commercial Load Curtailment	31	4
Total	700	1,403

Sector 2020 Goals	MW	GWh
Commercial/ Industrial Existing	235	590
Commercial New Construction (incl. GB)	80	206
Residential Existing	231	297
Residential New Construction (incl. GB)	154	309
Total	700	1,403



Approach

- “Silver Buckshot”
- Progression
 - Pilots
 - Rebates
 - Ratings
 - Standards & Codes
 - Self-Sustaining Markets
- Systematic research; data-driven strategies and goals



Mechanisms

- Rebates
- Rates
- Free Programs
- Codes & Standards
- Markets
- Education & Outreach
- Other – Federal stds., etc.



Strategic Vectors

- Carbon and Baseload Efficiency
- ZECH & Performance-Based Building Code
- Demand Response
- Rate Design
- Smart Grid & Pecan Street Project



Issues & Opportunities

- Thermal Storage
- Combined Heat & Power
- T & D System Efficiency
- ARRA Projects
- Technical, Economic & Achievable Potential
- Direct Install
- Local Contractors
- ACPP Integration



Questions/Discussion

