Appendix A: Additional Achievable Scenario – 75% Incentive

The body of this report presents the achievable savings potential for two scenarios based on customer payback period, a 1-year payback scenario and a 3-year payback scenario. (See Section 3.3 of the main report for a description of these scenarios.) KEMA also developed a scenario that is based on programs that provide customer incentives at 75% of the incremental measure cost for cost-effective measures. Based on extensive experience in jurisdictions across the nation, KEMA believes this provides an aggressive but feasible scenario under which to estimate the potential of demand side management. This appendix presents the results of this 75%-incentive scenario.

In this scenario, incentives were increased to cover 75 percent of incremental measure costs, with the exception of the measures noted in the main report as modeled without incentive. Program budgets were adjusted to reflect the level of administrative and marketing effort necessary to support this level of incentives.

A.1 Results - Electricity

Overall this produces net energy savings over the ten year horizon of 7,569 GWh, net peak demand savings of 1,797 MW at TRC ratio of 2.96, as shown in Table A1 below.

Table A1 – 75% Incentive Scenario Summary Results

Result - Programs	Program Scenario: 2011 - 2020			
	Residential	Commercial	Industrial	All Programs
Gross Energy Savings - GWh	4,802	3,412	1,735	9,950
Gross Peak Demand Savings - MW	1,557	478	168	2,203
Net Energy Savings - GWh	4057	2250	1,261	7,569
Net Peak Demand Savings - MW	1340	333	124	1,797
Program Costs - Real, $ Million				
Administration	$204	$54	$68	$326
Marketing	$67	$102	$55	$224
Incentives	$852	$552	$210	$1,614
Total	$1,123	$707	$334	$2,164
PV Avoided Costs	$4,235	$1,702	$838	$6,775
PV Annual Program Costs (Adm/Mkt)	$219	$126	$100	$445
PV Net Measure Costs	$971	$606	$266	$1,843
Net Benefits	$3,045	$970	$473	$4,487
TRC Ratio	3.56	2.33	2.29	2.96

Figures A-1 and A-2 below represent the energy and demand savings by sector over time.

Figure A1 – Energy Savings by Sector – 75% Incentive Scenario

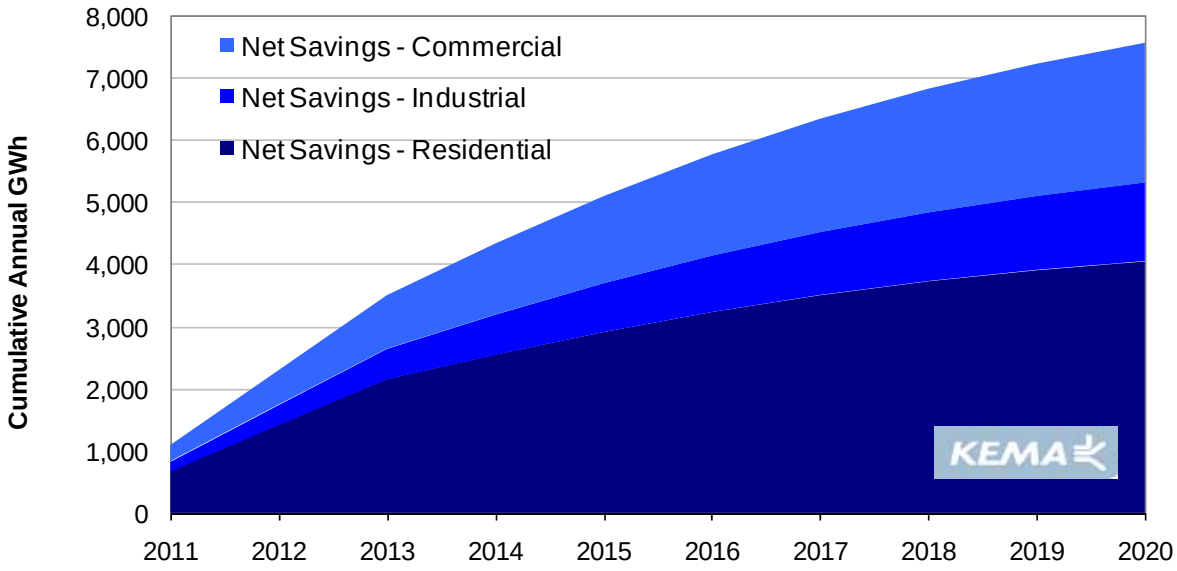


Figure A2 – Demand Savings by Sector – 75% Incentive Scenario

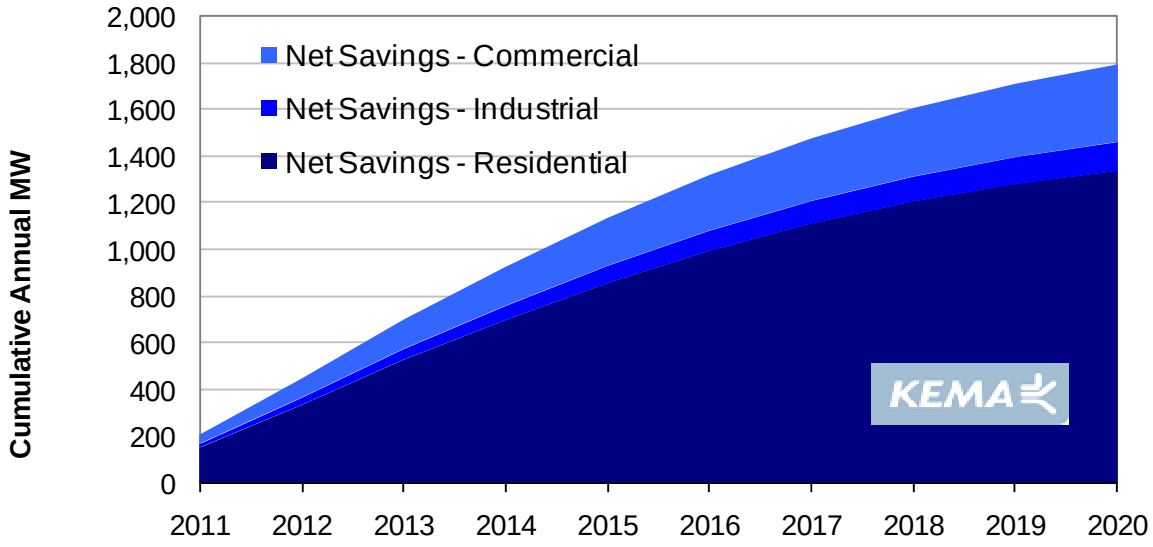
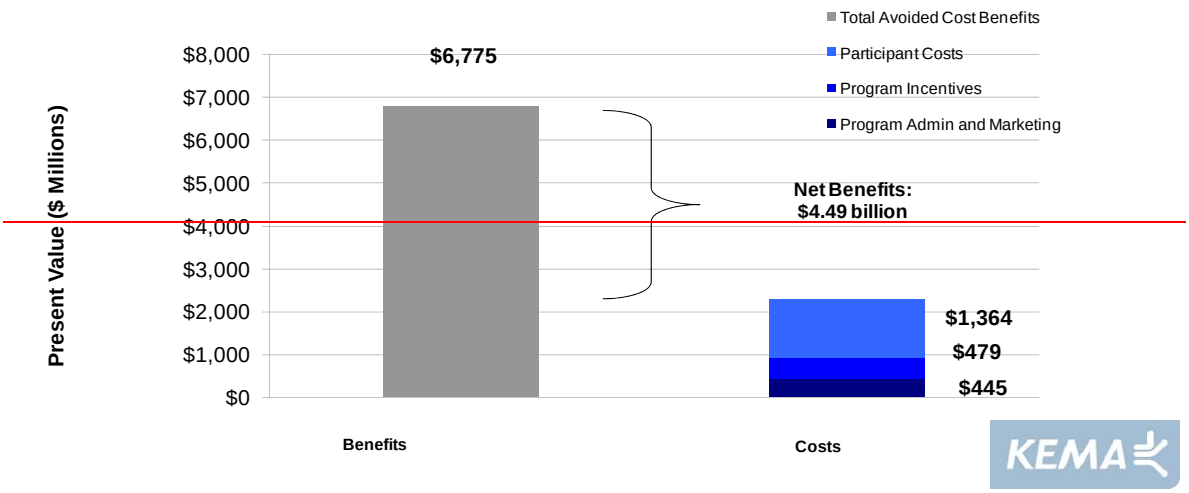
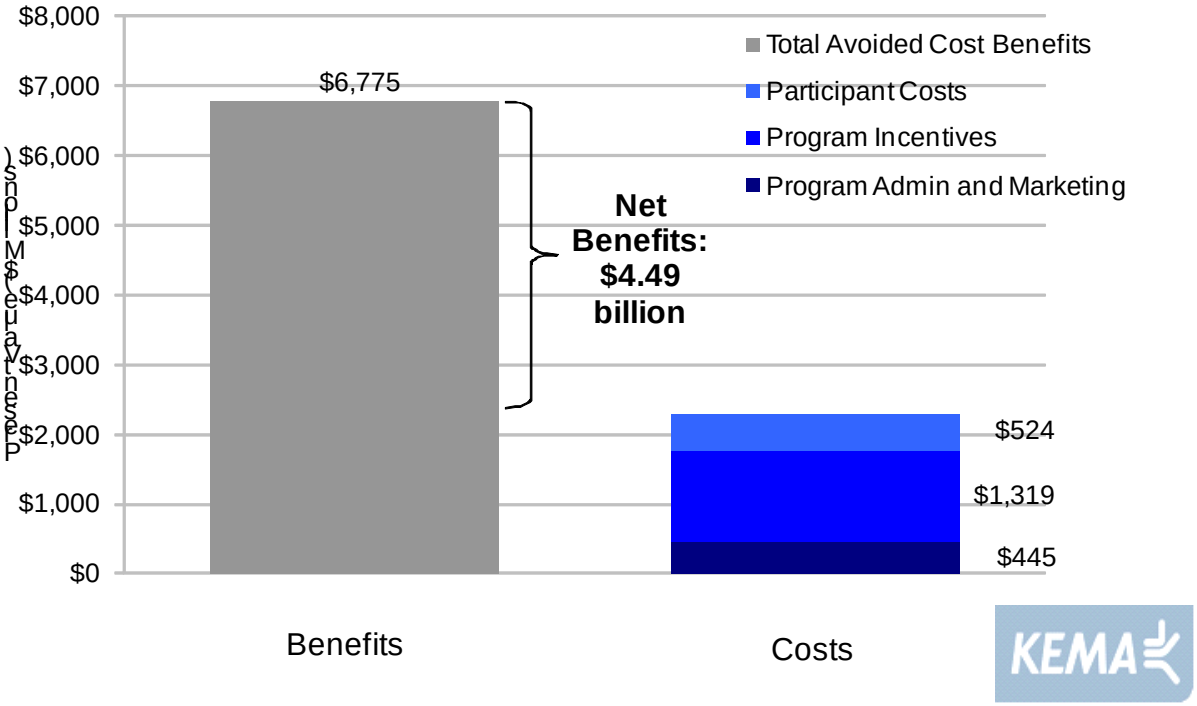


Figure A3 – Overall Electric Benefit Cost of 75% Incentive Scenario





A.2 Results – Natural Gas

Overall, the 75% incentive scenario produces net savings of 171 million therms over the ten year analysis period at a benefit cost ratio of 2.03.

Table A2 – Summary Table for the Gas 75% Incentive Scenario

Result - Programs	Program Scenario: 2011 - 2020			
	Residential	Commercial	Industrial	All Programs
Gross Energy Savings - Therms (Millions)	138	62	35	235
Net Energy Savings - Therms (Millions)	92	52	27	171
Program Costs - Real, $				
Administration	$92,649,723	$22,596,455	$8,046,818	$123
Marketing	$10,058,561	$17,251,421	$6,256,368	$34
Incentives	$327,190,134	$110,185,063	$34,482,925	$472
Total	$429,898,418	$150,032,938	$48,786,111	$629
PV Avoided Costs	$695,809,603	$386,653,865	$204,489,480	$1,287
PV Annual Program Costs (Adm/Mkt)	$83,411,183	$32,180,969	$11,530,776	$127
PV Net Measure Costs	$347,284,428	$121,636,216	$37,160,978	$506
Net Benefits	$265,113,993	$232,836,679	$155,797,727	$654
TRC Ratio	1.62	2.51	4.20	2.03

Figure A4 – Gas Savings by Sector – 75% Incentive Scenario

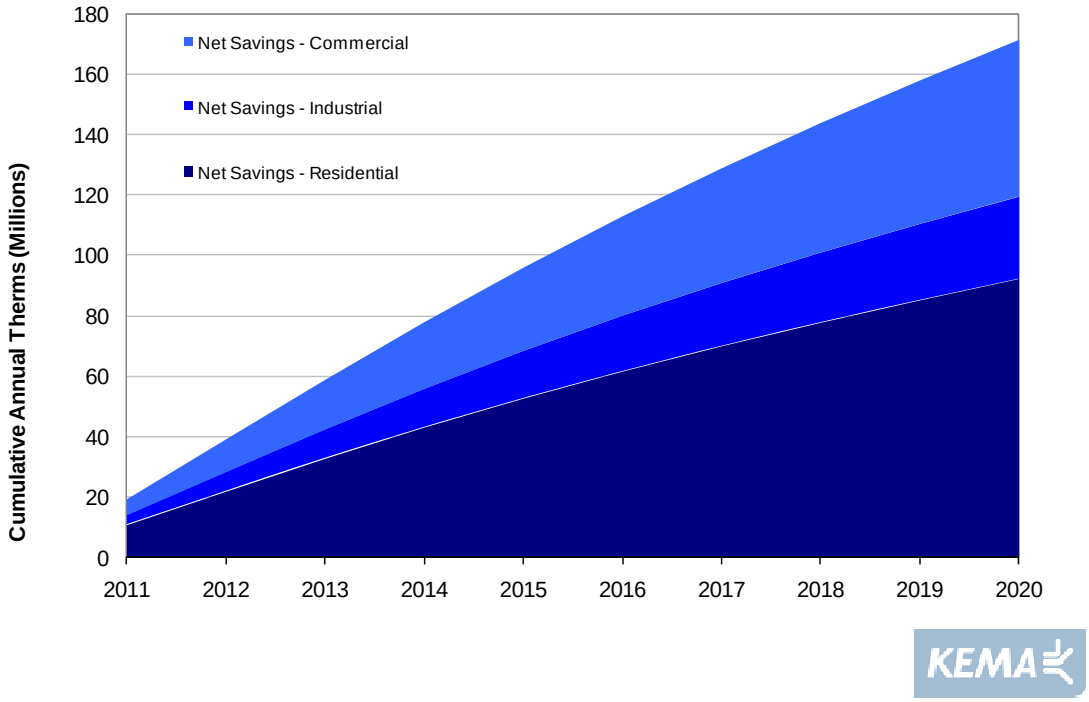
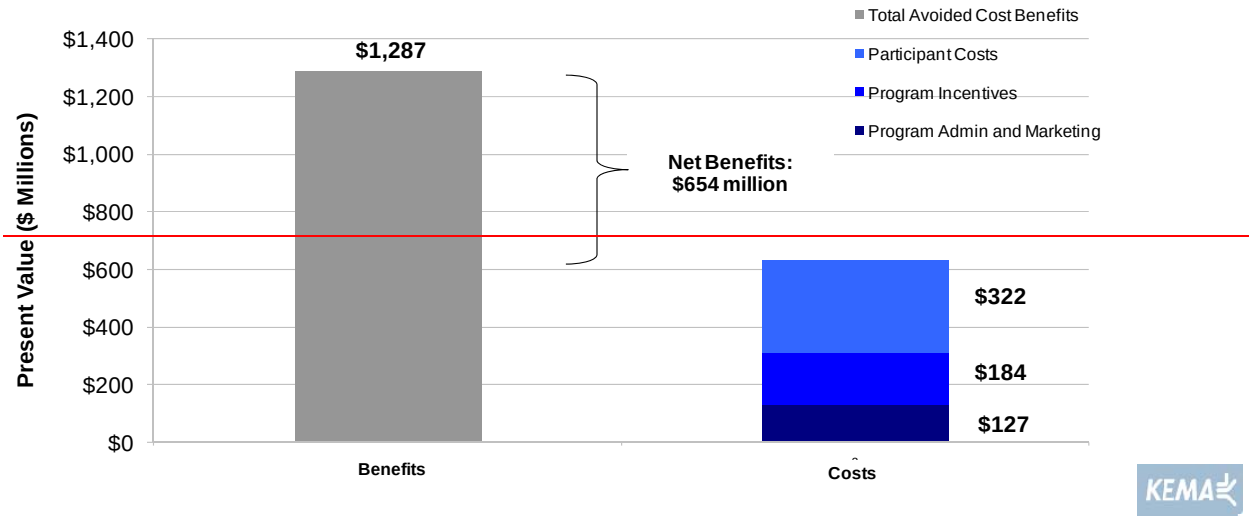
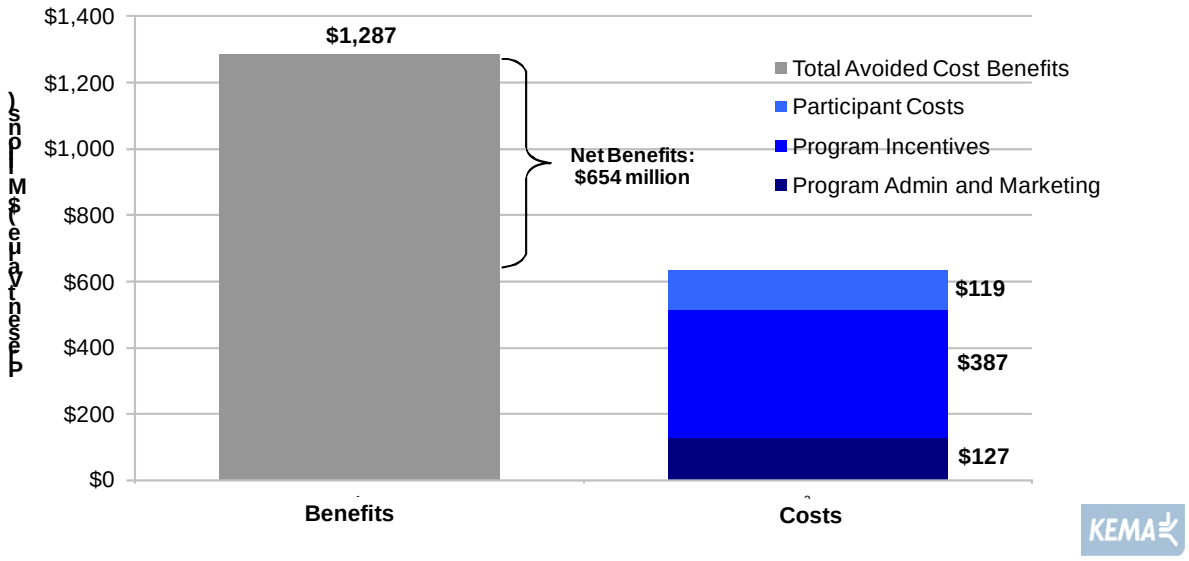


Figure A5 - Overall Gas Benefit Cost – 75% Incentive Scenario




$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
$1,287
Net Benefits:
$654 million
Total Avoided Cost Benefits
Participant Costs
Program Incentives
Program Admin and Marketing
$119
$387
$127
Benefits
Costs