2012-2013
Power Smart Annual Review

Power Smart Planning, Evaluation & Research Department
Customer Care & Energy Conservation Business Unit

Approved May 13th, 2014

Manitoba Hydro
POWER SMART

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EXECUTIVE SUMMARY

The 2012/13 Power Smart Annual Review reports the energy and demand savings, customer energy cost savings, customer participation and associated greenhouse gas emission reductions achieved through Manitoba Hydro's Power Smart initiative, including an assessment against the 2012/13 planned targets outlined in the 2012 Base DSM Forecast.

The Power Smart initiative, including persisting savings, has achieved 2,269 GW.h and 637 MW in electric savings (at generation), 84 million cubic metres in natural gas savings and 1,691 thousand tonnes of greenhouse gas emission reductions.

The electric savings resulting from the Power Smart initiative, including persisting savings, equate to nearly a third of Winnipeg's residential and commercial power needs. The natural gas savings, including persisting savings, equate to 1.3 times the residential and commercial natural gas needs of Brandon. Together, the electric and natural gas savings equate to taking an estimated 388 thousand cars off the road for a year.

Overall, 2012/13 was a successful year for Manitoba Hydro's Power Smart portfolio. In 2012/13 alone, the electric Power Smart program achieved 332 GW.h and 221 MW in electric savings (at generation), which exceeded the planned savings of 173 GW.h and 200 MW. The natural gas Power Smart program achieved savings of 14.6 million cubic metres which was above the planned target of 10.0 million cubic metres.

Total Power Smart expenditures in 2012/13 were $44 million, which consisted of $27 million from the Power Smart electric budget, $10 million from the Power Smart natural gas budget, $5 million from the Affordable Energy Fund and $2 million from the Furnace Replacement Budget.

To date, $481 million (nominal dollars) have been invested in the Power Smart initiative, $375 million from the Power Smart electric budget, $79 million from the Power Smart natural gas budget, $21 million from the Affordable Energy Fund and $6 million from the Furnace Replacement Budget.

The customer bill reduction due to 2012/13 Power Smart results, including persisting savings, amounts to an annual reduction of $115 million, with $88 million in reduced electricity bills and $28 million in reduced natural gas bills. By customer sector, $37 million was saved in the residential sector, $37 million in the commercial sector and $42 million in the industrial sector. The customer bill reduction relates only to incentive-based programs and DSM support programs.

Cumulative customer bill reduction is approximately $801 million, consisting of $660 million on electric bills and $141 million on natural gas bills.

Including support costs, the total resource cost (TRC) ratio for electric incentive-based programs was 3.6, the rate impact measure (RIM) ratio was 1.2, the levelized utility cost (LUC) was 1.0¢/kW.h and the levelized resource cost (LRC) was 2.0¢/kW.h . Including support costs and interactive effects, the TRC ratio for natural gas incentive-based programs was 1.2, the RIM ratio was 0.6, the LUC was 11.3¢/m^3 and the LRC was 23.4¢/m^3.

The combined TRC ratio for electric and natural gas incentive-based programs, including support costs and

interactive effects, was 2.7.

Awareness of the Power Smart brand continues to remain high with 95% of Manitoba respondents saying they recognize the brand name. Customers continue to report the strongest association between Power Smart and energy efficiency, with the vast majority (83%) of respondents agreeing that the brand projects that message. Customers continue to strongly agree that the Power Smart brand is greatly associated with 'Helping customers save money on their energy bills', with 75% of respondents providing a 7 or higher out of 10, and one-third (32%) saying they had participated in a Manitoba Hydro Power Smart program.

This report utilizes an integrated approach to evaluating the net energy savings achieved through the Power Smart initiative. The results reported are due to combined electric and natural gas energy conservation efforts. In this regard, increased natural gas consumption resulting from electricity efficiency efforts (interactive effects) are netted against savings achieved directly through natural gas conservation.

2012/13 Electricity Results

In 2012/13 alone, the Power Smart portfolio realized 332 GW.h and 221 MW of electric savings, 92% and 11% above their respective savings targets. The following tables outline the electricity savings achieved by the Power Smart portfolio and associated costs during 2012/13, and provide a comparison between achieved results and planned targets.

Exhibit E.1

Annual GW.h Savings (at generation) - Power Smart Portfolio

	2012/13 Actual	2012/13 Plan^	Total*
INCENTIVE-BASED PROGRAMS	256	104	1,612
CODES & STANDARDS	75	66	628
DSM SUPPORT PROGRAMS	1	3	29
OVERALL IMPACT	332	173	2,269

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

Exhibit E.2

Annual Average Winter MW Savings (at generation) - Power Smart Portfolio

	2012/13 Actual	2012/13 Plan^	Total*
INCENTIVE-BASED PROGRAMS	201	184	477
CODES & STANDARDS	19	16	150
DSM SUPPORT PROGRAMS	1	1	10
OVERALL IMPACT	221	200	637

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.
MW savings are based on the average of the winter AM & PM system peak savings.
For the Curtailable Rates Program, MW savings reported is expected curtailable load on system at the time a curtailment occurs.

Exhibit E.3

2012/13 Power Smart Portfolio Electricity Costs

Power Smart Portfolio	2012/13
	millions of dollars
INCENTIVE-BASED PROGRAMS	
Efficiency Programs	18.0
Customer Self-Generation Programs	0.3
Rate/Load Management Programs	5.8
	24.1
SUPPORT COSTS, DSM SUPPORT PROGRAMS & STANDARDS	3.3
TOTAL ELECTRICITY PROGRAM COSTS	27.4

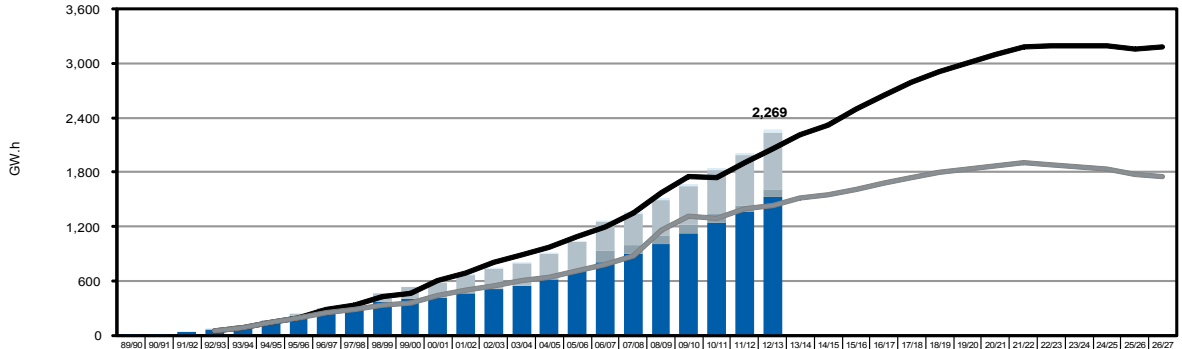
Note: Figures may not add due to rounding.

Total Electricity Results (2012/13 Results & Persisting Savings)

Cumulatively, the Power Smart portfolio has saved a total of 2,269 GW.h and 637 MW, which were 10% and 6% more than planned to the end of 2012/13. Cumulative savings to date represent 71% and 74% of the forecasted energy and demand savings at the benchmark year of 2026/27. To date $375 million has been invested in Power Smart electric activities.

The following graphs present the cumulative energy and average winter demand savings achieved and corresponding targets.

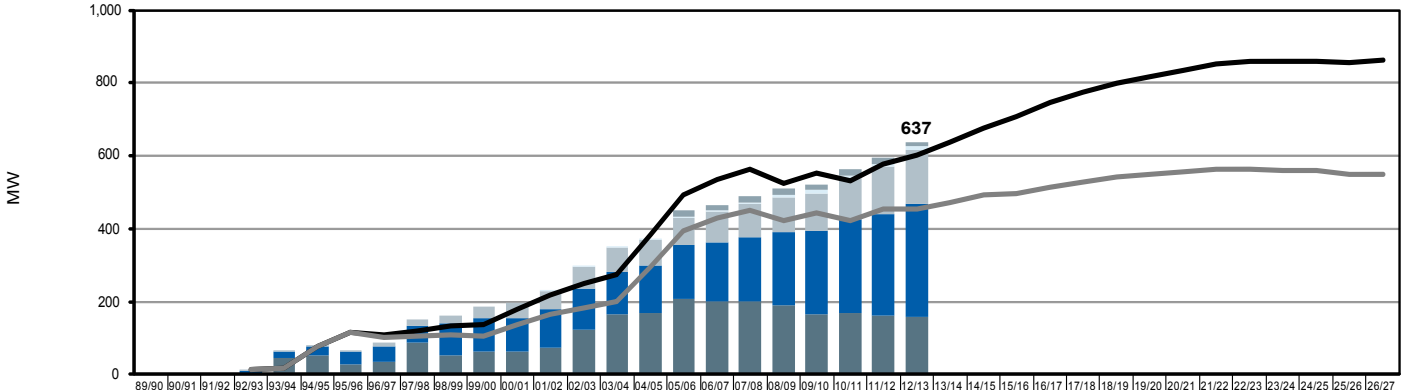
Exhibit E.4
Electric Energy Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan
at generation



	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs													2	4	7	11	13	16	20	22	25	26	27	29														
Codes & Standards	-	-	-	2	8	16	25	40	63	93	125	156	189	228	248	274	298	323	352	382	430	481	553	628														
Incentive-Based - Customer Self Generation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	132	93	103	88	95	77	91														
Incentive-Based - Efficiency	6	10	31	59	99	151	209	259	285	363	407	419	467	511	546	620	715	799	895	1,002	1,126	1,243	1,356	1,521														
Plan	-			50	86	138	195	281	336	422	466	602	686	810	891	970	1,088	1,199	1,350	1,569	1,753	1,736	1,906	2063	2214	2323	2489	2654	2787	2906	3003	3096	3184	3195	3191	3186	3157	3175
Plan (Incentive-Based Programs only)	-			50	86	138	195	252	279	327	350	435	491	544	603	634	713	782	879	1,157	1,310	1,293	1391	1,427	1,509	1,551	1,608	1,675	1,737	1,796	1,835	1,871	1,902	1,881	1,858	1,832	1,771	1,754
Total Achieved	6	10	31	62	107	167	235	299	348	456	532	575	659	743	801	904	1,037	1,270	1,359	1,509	1,669	1,846	2,014	2,269														

Note: Figures may not add due to rounding.

Exhibit E.5
Average Winter Demand Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan
at generation



	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs													1	1	2	3	3	4	6	6	8	9	9	10														
Codes & Standards	-	-	-	1	2	4	6	10	15	23	32	40	49	59	64	70	76	82	89	97	105	113	131	150														
Incentive-Based - Customer Self Generation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16	16	10														
Incentive-Based - Efficiency	0	1	4	10	17	26	34	42	46	86	91	93	105	113	119	131	146	162	179	200	229	254	276	308														
Incentive-Based - Rate/Load	-	-	-	-	45	51	27	36	88	53	64	63	75	121	163	169	208	202	199	190	164	170	162	159														
Plan				12	18	75	114	108	118	134	135	178	216	249	273	385	491	535	564	524	551	531	578	603	638	674	707	746	773	798	816	835	852	858	858	859	856	861
Plan (Incentive-Based Programs only)				12	18	75	114	101	104	110	105	136	166	183	200	296	394	429	449	421	442	421	454	454	472	492	498	513	527	540	548	556	563	563	561	559	550	550
Total	0	1	4	10	64	80	68	87	149	162	187	196	230	295	348	373	450	466	488	509	521	562	594	637														

Note: Figures may not add due to rounding.

2012/13 Natural Gas Results

In 2012/13 alone, the Power Smart portfolio realized natural gas savings of 14.6 million cubic metres, 46% more than planned. The following tables provide a comparison between results and planned targets, where applicable.

Exhibit E.6

Annual Natural Gas Savings - Power Smart Portfolio

	2012/13 Actual	2012/13 Plan^	Total*
	millions of cubic metres		
PROGRAM & INITIATIVE			
Incentive-Based Programs	11.3	7.9	62.2
Codes & Standards	3.4	2.7	13.2
DSM Support Programs	0.6	0.5	20.3
	15.3	11.1	95.7
INTERACTIVE EFFECTS			
Incentive-Based Interactive Effects	(0.7)	(1.1)	(12.0)
NET IMPACT OVERALL	14.6	10.0	83.6

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

Exhibit E.7

2012/13 Power Smart Portfolio Natural Gas Costs

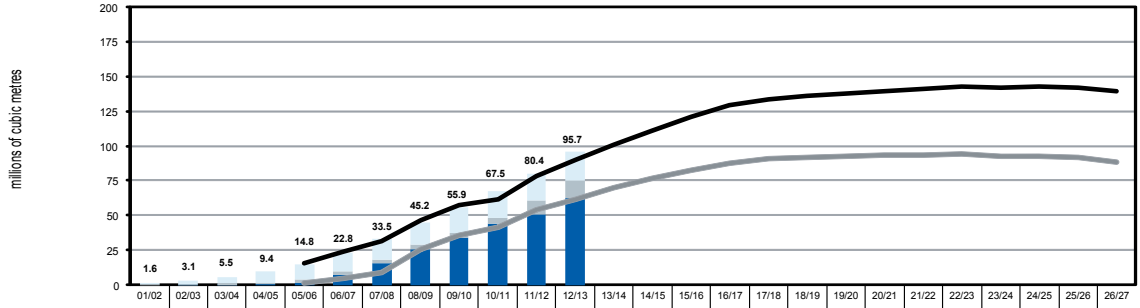
Power Smart Portfolio	2012/13
	millions of dollars
INCENTIVE-BASED PROGRAMS	8.4
SUPPORT COSTS, DSM SUPPORT PROGRAMS & STANDARDS	1.4
TOTAL NATURAL GAS PROGRAM COSTS	9.8

Note: Figures may not add due to rounding.

Total Natural Gas Results (2012/13 Results & Persisting Savings)

Cumulatively, the Power Smart portfolio has saved 83.6 million cubic metres of natural gas, 5% more than planned to the end of 2012/13. The cumulative savings to date represent 61% of the forecasted savings at benchmark year of 2026/27. To date, $79 million has been invested in Power Smart natural gas activities. The following graphs present cumulative natural gas savings achieved and corresponding targets.

Exhibit E.8
Natural Gas Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan



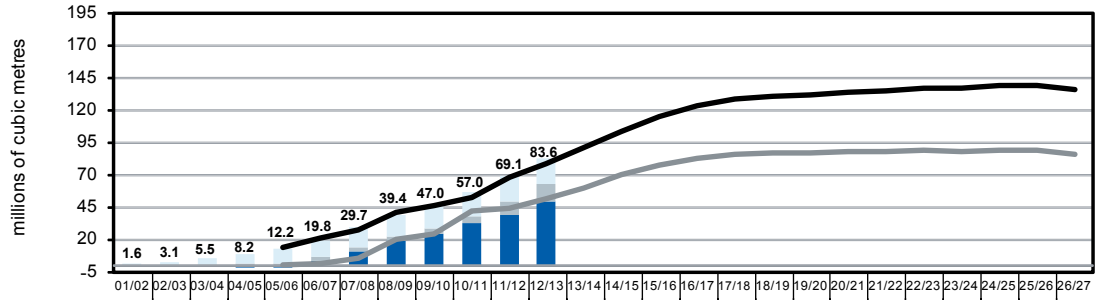
	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs	1.2	2.4	4.3	7.7	11.3	13.2	15.3	16.4	18.3	19.0	19.7	20.3														
Codes & Standards	0.3	0.7	1.1	1.6	2.0	2.4	2.7	3.0	3.5	4.4	9.9	13.2														
Incentive-Based Efficiency	0.0	0.1	0.1	0.2	1.6	7.3	15.5	25.9	34.1	44.0	50.9	62.2														
Plan					15.4	23.9	31.2	46.4	57.3	61.2	78.0	89.8	101.2	111.4	120.8	129.3	133.6	135.9	137.6	139.5	141.0	142.6	142.2	142.5	142.2	139.6
Plan (incentived-based programs only)					1.5	4.3	9.0	25.7	35.6	41.7	54.1	61.7	69.9	76.8	82.8	87.9	91.0	92.0	92.6	93.3	93.8	94.3	92.9	92.5	91.6	88.5
Total Achieved	1.6	3.1	5.5	9.4	14.8	22.8	33.5	45.2	55.9	67.5	80.4	95.7														

Note: Figures may not add due to rounding.

Natural Gas Integrated Results

Some electric Power Smart programs have interactive effects which increase the consumption of natural gas. For example, a more energy efficient lighting system emits less heat and therefore results in more energy required for space heating. The integrated natural gas results are adjusted for interactive effects, and are represented in the following graph.

Exhibit E.9
Integrated Natural Gas Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan



	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs	1.2	2.4	4.3	7.7	11.3	13.2	15.3	16.4	18.3	19.0	19.7	20.3														
Codes & Standards	0.3	0.7	1.1	1.6	2.0	2.4	2.7	3.0	3.5	4.4	9.9	13.2														
Incentive-Based Integrated	0.0	0.1	0.1	-1.0	-1.0	4.3	11.7	20.0	25.3	33.5	39.6	50.1														
Integrated Plan					14.8	21.5	27.9	41.4	46.3	52.8	68.6	79.6	91.8	105.1	116.1	124.6	128.8	131.0	132.7	134.5	136.0	137.6	138.0	139.8	140.2	137.5
Integrated Plan (Incentive-Based Programs only)					0.8	1.9	5.7	20.8	24.6	42.2	44.7	51.5	60.5	70.5	78.1	83.1	86.2	87.2	87.7	88.4	88.8	89.3	88.7	89.8	89.7	86.4
Total Achieved	1.6	3.1	5.5	8.2	12.2	19.8	29.7	39.4	47.0	57.0	69.1	83.6														

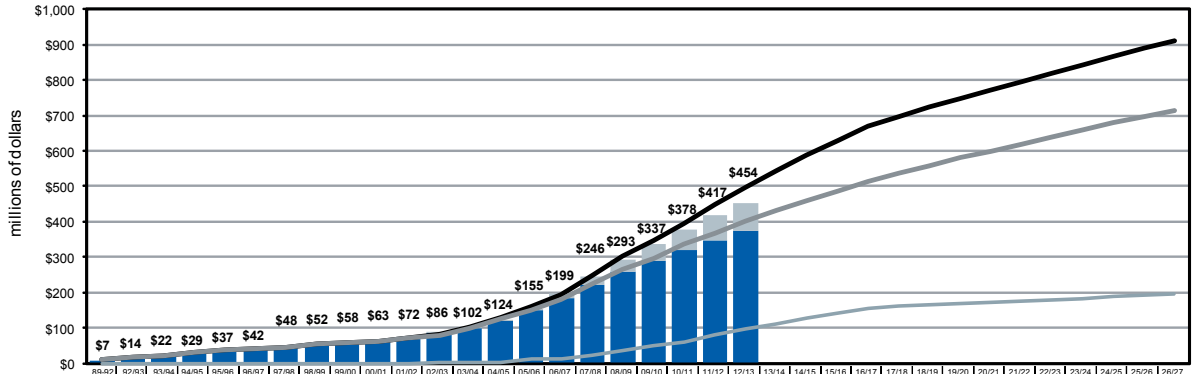
Note: Figures may not add due to rounding.
Targeted savings are unadjusted for programs not running or other revisions.

Power Smart Utility Costs

Total Power Smart expenditures in 2012/13 were $37 million, of which $27 million was spent on electric initiatives and $10 million was spent on natural gas initiatives. Cumulative Power Smart expenditures were $454 million, or 8% lower than the budgeted amount of $496 million. The positive spending variance can be credited to electric and natural gas efficiency spending, which were both below budget, 6% and 18% respectively.

Cumulative Power Smart expenditures of $454 million represent 50% of the overall cumulative 2026/27 budget, as reported in the IFF-12. The following graph depicts actual annual expenditures against planned.

Exhibit E.10
Utility Costs - Power Smart Portfolio
Cumulative Total Utility Cost vs. Plan
nominal dollars



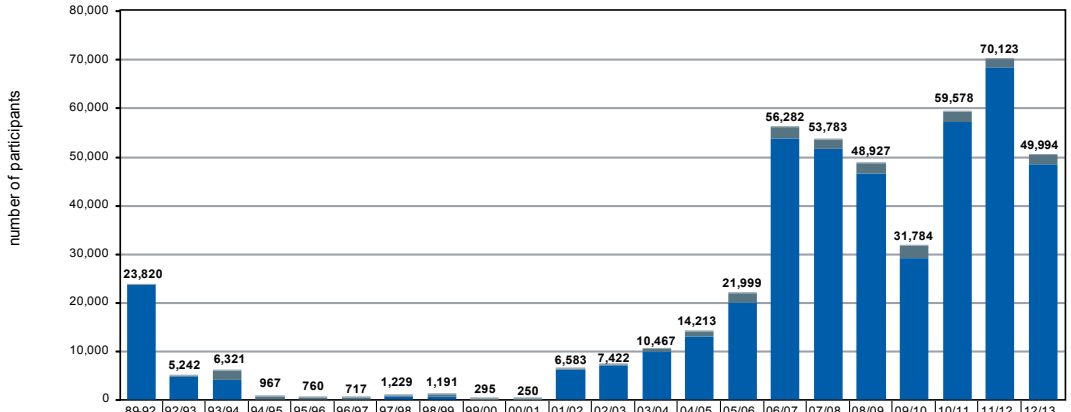
	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Eval - Natural Gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1	$1	$2	$3	$6	$14	$24	$35	$47	$58	$69	$79														
Eval - Electricity	$7	$14	$22	$29	$37	$42	$48	$52	$58	$63	$71	$84	$100	$121	$149	$185	$222	$257	$290	$319	$348	$375														
Plan- Electricity & Natural Gas	$10	$16	$20	$32	$36	$41	$44	$54	$58	$63	$72	$81	$102	$130	$161	$195	$248	$302	$347	$396	$449	$496	$544	$587	$628	$668	$698	$725	$749	$773	$796	$819	$843	$866	$889	$910
Plan- Electricity	$10	$16	$20	$32	$36	$41	$44	$54	$58	$63	$72	$80	$100	$128	$150	$182	$225	$265	$298	$335	$369	$400	$431	$459	$486	$513	$536	$559	$580	$600	$620	$639	$659	$679	$698	$715
Plan - Gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1	$1	$2	$11	$13	$23	$37	$49	$61	$80	$96	$112	$128	$142	$156	$161	$166	$169	$173	$176	$180	$184	$187	$191	$195
Total Eval	$7	$14	$22	$29	$37	$42	$48	$52	$58	$63	$72	$86	$102	$124	$155	$199	$246	$293	$337	$378	$417	$454														

Note: Figures may not add due to rounding.

Customer Participation

The following graph illustrates that participation levels in Manitoba Hydro's Power Smart programs remain strong.

Exhibit E.11
Power Smart Program Participation



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Industrial	24	157	202	229	185	182	195	8	4	9	17	25	32	48	50	49	81	99	116	90	73	110
Commercial	65	273	1,959	738	575	334	325	502	291	241	305	364	538	1,020	1,849	2,364	2,041	2,136	2,491	2,256	1,526	1,895
Residential (excluding CFLs)	23,731	4,812	4,160	0	0	201	709	681	0	0	6,261	7,033	9,897	13,145	20,100	53,869	51,661	46,692	29,177	57,232	68,524	47,989
Total Achieved (excluding CFLs)	23,820	5,242	6,321	967	760	717	1,229	1,191	295	250	6,583	7,422	10,467	14,213	21,999	56,282	53,783	48,927	31,784	59,578	70,123	49,994

Note: Includes electric and natural gas participants of DSM support programs, cost recovery and incentive-based programs.
Participation for codes and standards is excluded.
Curtailable Rates Program participation is included in the industrial sector.
Customers may participate in more than one Power Smart program.
The 343,381 sales under the Residential Compact Fluorescent Lighting Program during 2004/05-2010/11 are excluded.
Figures may not add due to rounding.

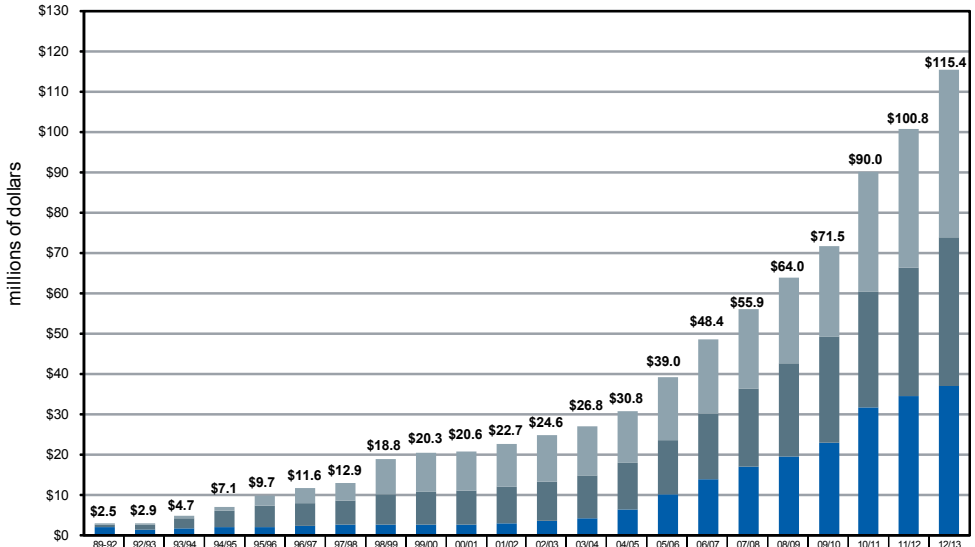
During 2012/13, there were nearly 50,000 participants in Power Smart DSM support programs and incentive-based programs. Excluding the Residential Compact Fluorescent Lighting Program, there have been approximately 472,000 participants cumulatively.

Participation of the Residential Compact Fluorescent Lighting Program has been excluded to provide a better indication of participation trends. The Residential Compact Fluorescent Lighting Program provided a low-cost option for achieving energy efficiency, and represents 44% of residential Power Smart participation and 42% of overall Power Smart participation.

Customer Bill Reductions

The annual bill reduction for participating customers due to annual and persisting results in 2012/13 of over $115 million is comprised of $88 million of savings on electric bills and $28 million on natural gas bills. Cumulatively, $801 million has been saved on electricity and natural gas bills.

Exhibit. E.12
Combined Electricity & Natural Gas Customer Bill Reduction (2012$)
Annual Reductions to Date by Sector
millions of dollars



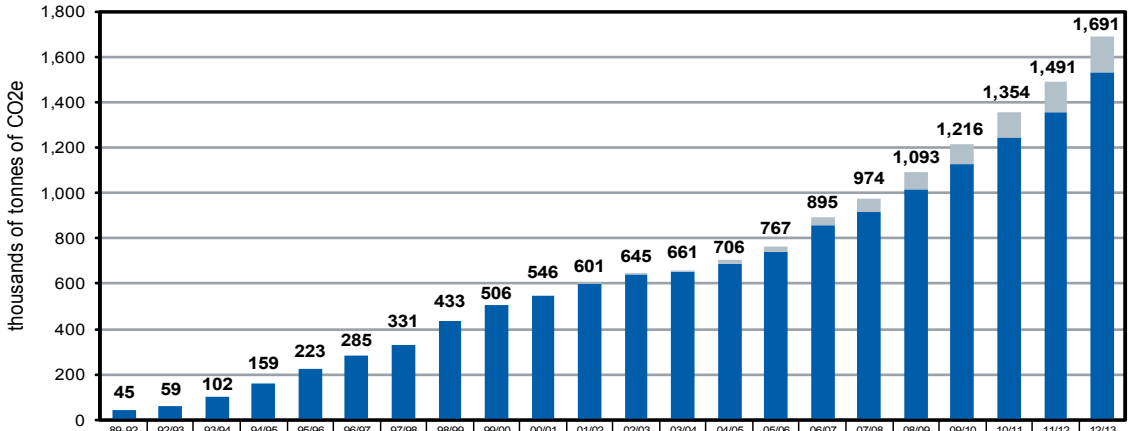
	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Industrial	$0.0	$0.3	$0.4	$1.1	$2.5	$3.7	$4.2	$8.8	$9.5	$9.5	$10.6	$11.5	$11.9	$12.9	$15.4	$18.4	$19.6	$21.4	$22.3	$29.6	$34.4	$41.5
Commercial	$0.5	$1.2	$2.6	$4.0	$5.1	$5.6	$6.1	$7.5	$8.3	$8.6	$9.1	$9.6	$10.6	$11.6	$13.4	$16.2	$19.4	$23.0	$26.2	$28.7	$32.0	$36.9
Residential	$2.0	$1.4	$1.7	$2.0	$2.1	$2.4	$2.6	$2.5	$2.5	$2.5	$3.0	$3.5	$4.3	$6.2	$10.2	$13.8	$16.9	$19.5	$23.0	$31.7	$34.4	$36.9
Total	$2.5	$2.9	$4.7	$7.1	$9.7	$11.6	$12.9	$18.8	$20.3	$20.6	$22.7	$24.6	$26.8	$30.8	$39.0	$48.4	$55.9	$64.0	$71.5	$90.0	$100.8	$115.4

Note: Includes electric and natural gas participants.
Bill reductions exclude savings due to codes & standards.
Demand savings resulting from the Curtailable Rates Program are excluded from this analysis.
Natural gas bill reduction includes primary and distribution rates only.
Figures may not add due to rounding.

Greenhouse Gas Reductions

The 2,269 GW.h savings from electric Power Smart programs and 84 million cubic metres of savings from natural gas Power Smart programs equate to a greenhouse gas emission reduction of approximately 1,691 thousand tonnes of carbon dioxide equivalent emissions. This is comparable to removing nearly 338 thousand vehicles from the road for one full year. The majority (91%) of the greenhouse gas emission reductions result from electric Power Smart program activity through indirect emission reductions from Manitoba Hydro export sales displacing coal and natural gas fuelled generation outside of Manitoba. The remaining (9%) emission reductions are direct reductions that occur as a result of lower natural gas consumption in Manitoba.

Exhibit E.13
Total Annual Greenhouse Gas Emission Reductions
Due to Electric & Natural Gas Savings
thousands of tonnes of CO2e



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Natural Gas											3	6	10	16	23	38	56	75	89	108	131	159
Electric	45	59	102	159	223	285	331	433	506	546	598	639	650	691	743	857	917	1,018	1,127	1,246	1,359	1,532
Total	45	59	102	159	223	285	331	433	506	546	601	645	661	706	767	895	974	1,093	1,216	1,354	1,491	1,691

Note: Figures may not add due to rounding.

The Affordable Energy Fund

The Affordable Energy Fund was established in 2006/07 through the Winter Heating Cost Control Act. The purpose of the fund is to provide support for programs and services that achieve specific objectives. The objectives include encouraging energy efficiency and conservation through programs and services for rural and northern Manitobans, lower income customers and seniors, and encouraging the use of alternative energy sources such as renewable energy.

Exhibit E.14 outlines the Affordable Energy Fund expenditures in 2012/13 and cumulatively.

Exhibit E.14

Summary of Affordable Energy Fund Expenditures

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative
	thousands of nominal dollars							
Affordable Energy Program	256	219	893	1,672	2,666	3,131	3,332	12,168
Geothermal Support								
Waverley West Demonstration Project*	619	252	5	0	-1	-1	-1	873
Earth Power Loan Subsidy	0	19	69	105	108	108	91	500
Province of Manitoba Cooperative Advertising	0	0	18	0	0	0	0	18
Geothermal Support Total	619	270	92	104	108	107	91	1,391
Community Support & Outreach	0	0	35	130	133	139	114	551
Oil & Propane Heated Homes	0	75	85	31	32	24	0	246
Special Projects								
Res. Energy Assessment Services (ecoENERGY Audits)	0	61	241	85	119	39	0	545
Oil & Propane Furnace Replacement	0	0	6	36	42	17	10	112
Res. Solar Water Heating Program	0	0	89	119	56	11	10	285
Power Smart Residential Loan	0	0	0	130	312	354	510	1,306
Oil & Propane Heated Homes - Additional Funding	0	0	0	0	0	10	26	37
Special Projects Total	0	61	336	371	529	431	556	2,284
Community Energy Development								
ecoENERGY Program Funding - Additional Funding	0	0	0	0	0	2,817	1,241	4,058
Community Energy Development Total	0	0	0	0	0	2,817	1,241	4,058
DSM INITIATIVES SUBTOTAL	875	625	1,441	2,308	3,468	6,649	5,334	20,700
Manitoba Electric Bus	0	0	0	0	0	700	75	775
Energy & Resource Fund	0	0	0	750	0	0	0	750
Fort Whyte EcoVillage	0	0	0	0	0	120	0	120
Diesel Community Green Pilot Demonstration	0	0	0	0	0	3	-3	0
TOTAL EXPENDITURES	875	625	1,441	3,058	3,468	7,472	5,406	22,345

* Negative costs represent loop lease payments from customer to Manitoba Hydro.
** Reversal of an incorrect charge that took place in 2011/12 is indicated by the negative cost.

Furnace Replacement Budget

The Furnace Replacement Budget was established in 2007/08 as a result of Public Utilities Board Order 99/07. The purpose of the budget is to establish and administer a Furnace Replacement Program for lower income customers. In 2012/13 alone, customers installed 630 furnaces and 9 boilers through the Furnace Replacement Program. Cumulatively to the end of 2012/13, 2,525 furnaces and 57 boilers have been installed to the end of 2012/13 as a result of the program. Exhibit E.15 outlines Lower Income natural gas furnace replacement expenditures to date.

Exhibit E.15

Summary of Furnace Replacement Expenditures

	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative
	thousands of nominal dollars					
Natural Gas Furnace Replacement	264	815	1,312	1,627	2,167	6,185
TOTAL EXPENDITURES	264	815	1,312	1,627	2,167	6,185

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1.0 Introduction

1.1 Background

In 1989, Manitoba Hydro launched the first of many Demand Side Management (DSM) programs, the Outdoor Timer Program. Soon after in 1991, Manitoba Hydro established Power Smart, the customer-oriented brand for all of Manitoba Hydro's DSM programs, initiatives and activities. DSM resource options are assessed and included in Manitoba Hydro's Integrated Resource Planning process. These resource options are developed to provide alternatives to traditional sources of power generation. Power Smart initiatives are justified based on their relative cost compared to traditional generation resource options and the customer service value realized by customers.

Since purchasing Centra Gas in 1999, Manitoba Hydro has integrated natural gas conservation into the Corporation's overall Power Smart initiative. This report provides an integrated approach to evaluating the results. Net energy savings reported are due to the combined electricity and natural gas energy conservation efforts. In this regard, any increased natural gas consumption resulting from electricity efficiency efforts (due to interactive effects) are captured and netted against natural gas conservation efforts. Interactive effects were not accounted for prior to the 2002/03 reporting period.

Energy conservation initiatives are designed to reduce customer energy requirements through energy efficient measures (i.e. using less energy to obtain comparable or superior services). Rate/Load management activities are put in place to reduce energy demands through programs offered to alter the timing of customer demand (i.e. Curtailable Rates Program). Customer self-generation programs are created to encourage customer on-site generation.

Manitoba Hydro's Power Smart strategy focuses on creating a sustainable market change where energy efficient technologies and practices become the market standard (market transformation). The approach used to create and maintain market transformation varies by product and market segment, and generally involves a combination of the following activities:

- DSM Support Programs & cost recovery programs;
- Incentive-based promotional programs, including:
    - Efficiency programs,
    - Customer self-generation programs and
    - Rate/Load management programs.
- Efforts to encourage and support implementation of energy efficiency into codes and standards.

The work in each of these different areas supports the overall Power Smart objective as well as other corporate goals, including: providing customers with exceptional value, protecting the environment and capturing additional electricity export sales.

The Power Smart DSM initiative is designed to encourage the efficient use of energy in the residential, commercial, agricultural, institutional and industrial customer sectors. More than thirty-five incentive-based programs and many other DSM support programs have been offered over the last twenty-four years, with impact evaluations of all incentive-based programs prepared annually.

By evaluating the incentive-based programs, Manitoba Hydro can determine its overall progress in achieving its corporate objectives, and can adjust individual program targets and strategies to reflect market reaction and market changes.

1.2 Power Smart Strategy

Manitoba Hydro's Power Smart strategy is to create a sustainable market change where energy efficient technologies and practices become the market standard (market transformation). To be effective in achieving the desired outcome, the corporation's strategy involves working along multiple tracks, including:

- Providing customers with information and services related to energy efficiency;
- Offering incentive-based Power Smart programs designed to create market awareness, knowledge and acceptance of energy efficient technologies and products;
- Making available cost recovery financing to help customers overcome the financial barriers to the adoption of energy efficient technologies;
- Working with industry and trade allies to gain support for the Corporation's Power Smart efforts;
- Working with other utilities and government agencies in joint efforts to incorporate energy efficiency in codes, standards and regulations;
- Undertaking communication and marketing efforts focused on promoting Power Smart programs and the Power Smart brand name;
- Leveraging the Power Smart brand through activities such as establishing "Power Smart Design Standards", and
- Making a sustainable and long-term commitment to the efficient use of energy.

1.3 Power Smart Brand & Perception

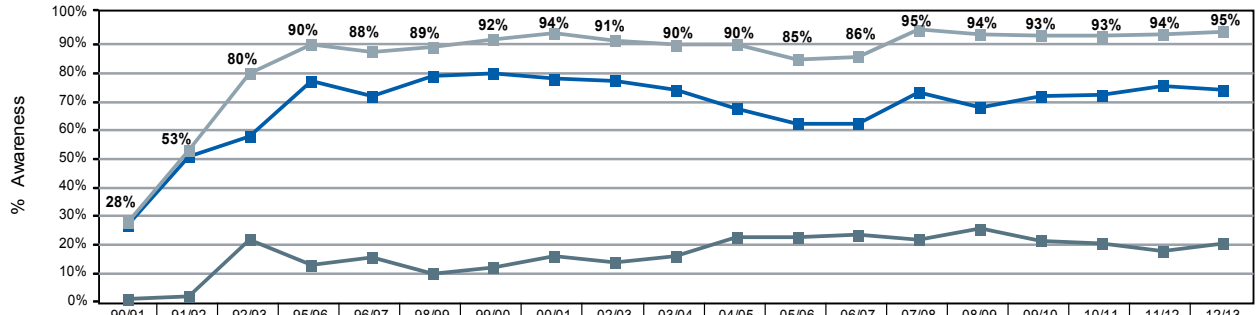
Power Smart is the brand name used by Manitoba Hydro since 1991 to promote its energy efficiency programs and services.

Manitoba Hydro continues to successfully maintain the Power Smart brand's profile with 95% of respondents currently indicating they recognize the brand name. This includes 21% of respondents who independently recall (unaided recall) the Power Smart brand name, and 72% of respondents who say they recognize the brand name when the Power Smart brand name is identified (aided recall).

The Power Smart campaign, being distinct from the marketing/promotional activities associated with specific Power Smart DSM programs, is a mass communications campaign undertaken to improve public awareness of the Power Smart brand and its association with energy efficiency, low electricity rates and environmental conservation.

Approximately one-third (32%) of respondents said they had participated in a Manitoba Hydro Power Smart program.

Exhibit 1.3
Power Smart Brand Awareness



	90/91	91/92	92/93	95/96	96/97	98/99	99/00	00/01	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Unaided Awareness	1%	2%	22%	13%	16%	10%	12%	16%	14%	16%	23%	23%	23%	22%	26%	22%	21%	18%	20%
Aided Awareness	27%	51%	58%	77%	72%	79%	80%	78%	78%	74%	68%	62%	63%	73%	68%	72%	72%	76%	74%
Total Awareness	28%	53%	80%	90%	88%	89%	92%	94%	91%	90%	90%	85%	86%	95%	94%	93%	93%	94%	95%

Note: Power Smart awareness was not measured in 93/94, 94/95, 97/98 or 01/02.
Figures may not add due to rounding.

Customers continue to strongly agree that the Power Smart brand and programs 'Encourage Customers to be more Energy Efficient' (83% answered 7 or higher on a 1-10 agreement scale), 'Help Customers Save Money on their Energy Bills' (75%), and 'Help Conserve the Environment' (75%). Respondents continue to report more moderate levels of agreement that the Power Smart brand and programs 'Ensure there will be Electricity Available for Manitobans in the Future' (67%) and 'Contribute to Manitobans paying among the Lowest Prices for electricity in Northern America' (56%).

The vast majority of customers report they are very satisfied with Manitoba Hydro's 'Efforts to Encourage Customers to be More Energy Efficient' with 82% reporting a satisfaction level of 7 or higher on a 1-10 satisfaction scale.

1.4 Purpose of Report

Power Smart is an important component of Manitoba Hydro's Integrated Power Resource Plan.

Manitoba Hydro's Power Smart DSM targets for electric energy and average winter demand savings at generation are 3,175 GW.h and 861 MW by 2026/27, as outlined under the 2012 Base DSM Forecast. These targets represent the expected impact of efficiency codes and standards, DSM support programs and incentive-based program activities. Manitoba Hydro's Power Smart program activity is expected to contribute the greatest portion of the savings, with projected energy and demand savings of 1,754 GW.h and 550 MW by 2026/27.

Manitoba Hydro's Power Smart DSM target for natural gas savings is 138 million cubic metres by 2026/27, as outlined in the 2012 Base DSM Forecast. This target represents the expected impact of incentive-based efficiency program activities, DSM support programs, interactive effects from electricity programs, as well as savings resulting from efficiency codes and standards. Manitoba Hydro's Power Smart program activity is expected to contribute the greatest portion of the savings, with projected savings of 86 million cubic metres by 2026/27.

While this report highlights all activities and results from the overall Power Smart portfolio, the emphasis will be on incentive-based programs. Annual results for 2012/13 will be measured against the planned savings specified in the 2012 Base DSM Forecast.

More specifically, this report will:

- Report the energy and demand savings achieved by incentive-based Power Smart programs;
- Report the utility costs associated with all Power Smart programs and initiatives;
- Report the cost-effectiveness of incentive-based Power Smart programs.

Refer to APPENDIX A - 'Sources of Evaluation and Planning Estimates' for details of the information considered when preparing program plan estimates and program evaluation results. Refer to APPENDIX B - 'Explanation of Benefit-Cost Ratios used in DSM Economic Metrics' for formulas used to assess cost-effectiveness.

2.0 Power Smart Portfolio Review

Manitoba Hydro's Power Smart efforts include DSM support programs, cost recovery programs, energy efficient codes and standards and incentive-based Power Smart programs. The following section includes a synopsis of the current Power Smart initiatives.

2.1 Power Smart DSM Support Programs & Cost Recovery Programs

One of the primary drivers in Manitoba Hydro's Power Smart activities is providing value-added customer service. This is achieved by offering customers information and advice, financing services, access to energy efficiency information and providing energy efficient solutions. Through these efforts, Manitoba residents and businesses are provided a number of benefits including:

- Enabling customers to improve the comfort and productivity of their work and home environments while reducing their energy bills;
- Lower electricity rates;
- Assisting businesses in becoming more competitive in national and international markets; and
- Creating employment opportunities within Manitoba for manufacturers, distributors, retailers, trade allies and installers of energy efficient products and services.

2.1.1 Launch Date of DSM Support Programs & Cost Recovery Programs

Exhibit 2.1.1-A identifies the launch dates of all current and discontinued DSM support programs and cost recovery programs.

Exhibit 2.1.1-A

Launch Date of DSM Support Programs & Cost Recovery Programs

INITIATIVE	LAUNCH DATE
RESIDENTIAL	
Power Smart Residential Loan	February, 2001
ecoENERGY Program^	March, 2001
Residential Earth Power Program	April, 2002
Power Smart Residential PAYS Program	November, 2012
COMMERCIAL	
Power Smart Recreation Facility Survey	May, 1998
Religious Buildings Initiative	May, 2001
DISCONTINUED/COMPLETED PROGRAMS	
Wisdom in Saving Energy (W.I.S.E.) Home Program	June, 2001
Power Smart Energy Manager - Pilot	September, 2001
Energy Saver Presentations^^	January, 2002
New Home Program Workshop	January, 2002
R-2000 Home Program component of the New Home Program*	February, 2002
Power Smart Design Standards**	September, 2002
Solar Hot Water Heating	November, 2008

^ Formerly called EnerGuide.
^^ Formerly called Home Energy Saver Workshops.
* In 2004/05, the R-2000 Home Program was grouped under the New Home Program.
** Power Smart Design Standards is now a component of the commercial incentive-based New Buildings Program.

Exhibit 2.1.1-B provides an overview of the annual and total number of participants for DSM support programs and cost recovery programs.

Refer to APPENDIX C - 'Total Power Smart Participation' for a detailed list of historical participation.

Exhibit 2.1.1-B

DSM Support Programs & Cost Recovery Program Participation

INITIATIVE	2012/13	Cumulative
	Number of Participants	
RESIDENTIAL		
Financing Programs		
Power Smart Residential Loan*	6,202	70,358
Power Smart Residential PAYS Program	52	52
Residential Earth Power Program		
Geothermal Loan	24	1,210
Solar Hot Water Heating	0	14
	6,278	71,634
Mail In/On-Line Energy Assessments	286	4,297
ecoENERGY Program^	1,186	54,272
	7,750	130,203
COMMERCIAL		
Religious Buildings Initiative	0	231
Power Smart Recreation Facility Survey	0	69
	0	300
DISCONTINUED/COMPLETED PROGRAMS		
Wisdom in Saving Energy (W.I.S.E.) Home Program	n/a	5,391
Energy Saver Presentations^^	n/a	3,956
New Home Program Workshop	n/a	854
Earth Power Consumer Workshops**	n/a	688
R-2000 Home Program component of the New Home Program ^^^	n/a	63
Power Smart Energy Manager - Pilot	n/a	38
Solar Hot Water Heating	n/a	36
	n/a	11,026
TOTAL	7,750	141,529

* Participation includes completed projects.
** Includes residential and commercial participants.
^ Formerly called EnerGuide. Participation includes 'D' & 'E' audits.
As Manitoba Hydro highly subsidized the evaluation cost of Amerispec and EnerGuy participants, they are included in the participation figures for 2011/12 and 2012/13.
^^ Formerly called Home Energy Saver Workshops.
^^^ In 2004/05, the R-2000 Home Program was grouped under the New Home Program.
Note: This table includes electric and natural gas Power Smart participants.
Customers may participate in more than one Power Smart program.
Participation is measured by completed projects, and excludes free drivers and market transformation.

2.1.2 DSM Support Programs & Cost Recovery Program Activity

DSM support programs and cost recovery programs provide numerous benefits to Manitobans. Depending on the nature of the program, savings resulting from specific programs will be quantified to the extent that these savings can be reasonably determined. Estimated savings are generally calculated using engineering estimates, as well as sales and market data provided by program coordinators. Regular assessments include a qualitative evaluation of the benefits, with service levels adjusted accordingly. The following outlines the Power Smart DSM support programs and cost recovery programs that were running in 2012/13.

Power Smart Residential Assistance

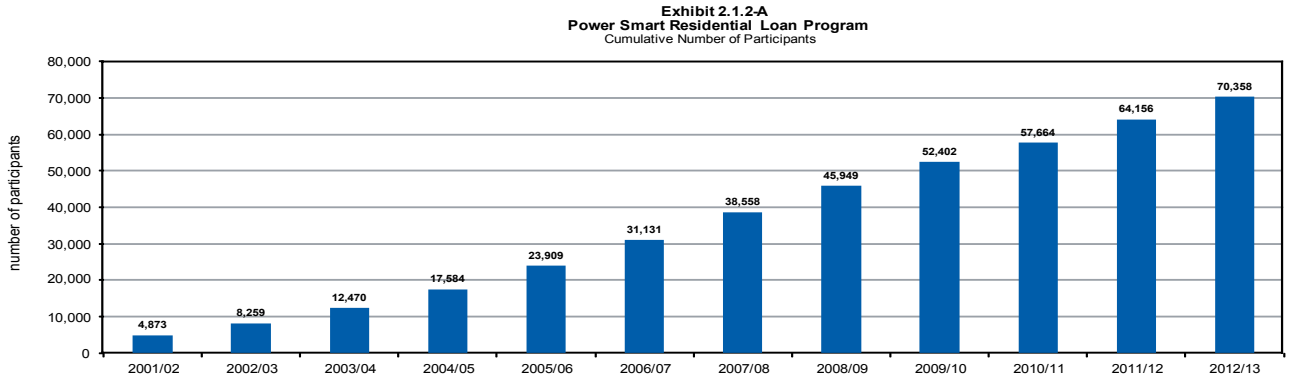
A number of tools are offered to residential customers to encourage and assist homeowners to make energy efficient renovations and energy use decisions that increase comfort and reduce home energy bills. The following services are offered under this initiative:

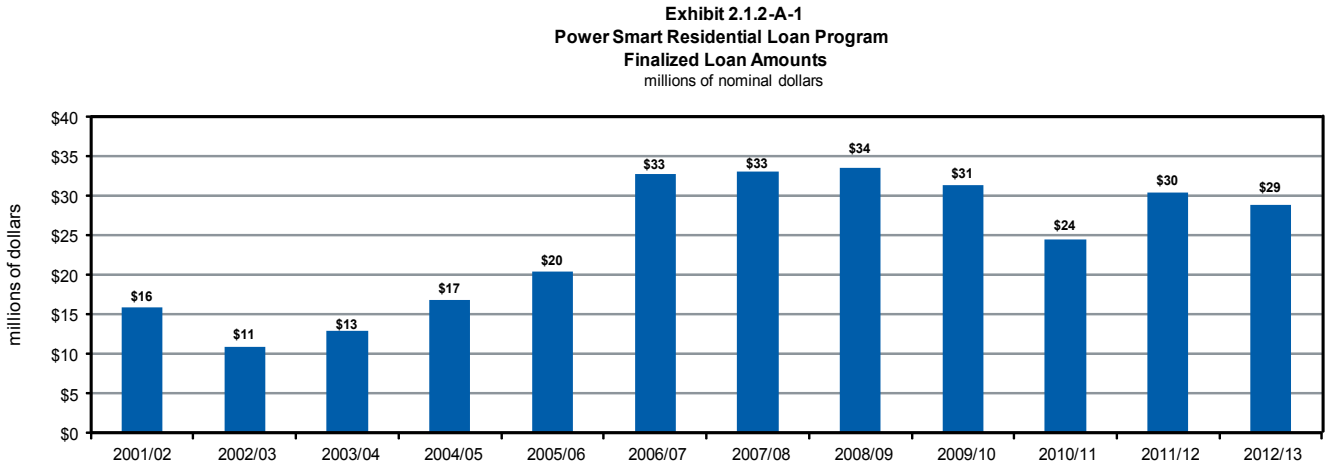
- Customers can complete a mail-in or online survey to evaluate the energy use in their home. Regardless of the method of participation, the customer receives a customized report that includes easy-to-read graphs summarizing overall energy usage, a breakdown of the house characteristics that contribute to heating costs, a list of recommended upgrades and a Power Smart target comparing the current energy consumption of their home to a home upgraded with the recommended Power Smart measures;
- Detailed brochures and renovation booklets providing information for selecting and installing Power Smart measures and tips for achieving low cost or no-cost energy savings in the home;
- Customers can email a Power Smart Energy Expert with energy conservation-related questions; and
- Convenient on-bill financing to complete energy efficient renovations as outlined below.

Power Smart Residential Loan

The Power Smart Residential Loan Program offers convenient on-bill financing to encourage homeowners to complete energy efficient renovations to increase comfort and reduce home heating bills.

Since its inception, the Power Smart Residential Loan Program has had more than 70,000 participants, borrowing more than $292 million in total. To date, $64 million in loans remain outstanding. Exhibit 2.1.2-A displays participation under the Power Smart Loan Program, and Exhibit 2.1.2-A-1 summarizes finalized loan amounts. Effective November 5, 2012, the interest rate was increased to 4.8% (from 3.9%).





Power Smart Residential PAYS Program

In June 2012, the Province of Manitoba passed Bill 24 - The Energy Savings Act. In response, Manitoba Hydro launched the Power Smart Residential PAYS Program on November 5, 2012.

The Power Smart Residential PAYS Program offers extended financing terms for energy efficient upgrades. Customers can use their estimated annual utility bill savings, from installing a particular efficient measure, to pay for that measure (or part thereof). Customers have the option to transfer the monthly payment to the next homeowner or tenant, who will also benefit from the upgrade.

In its first year, the Power Smart Residential PAYS Program had 52 participants, borrowing approximately $225,000.

Residential Earth Power Program

Manitoba continues to be a leader in the geothermal industry with close to 9,000 residential installations to date.

The Residential Earth Power Program's primary objective is to maximize the adoption of geothermal heat pump technology in order to offset the use of conventional electric heating systems.

To facilitate this objective, the Residential Earth Power Program has developed a comprehensive strategy to assist efforts of local stakeholders in developing a sustainable provincial geothermal industry. Since its launch in 2002, the program has focused efforts in mitigating three key market barriers which include:

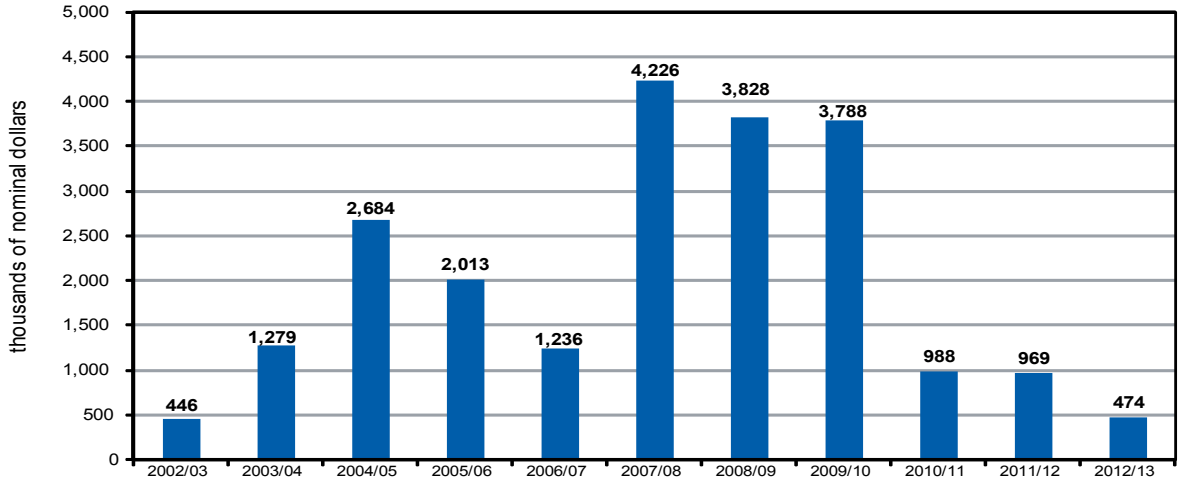
- Consumer awareness;
- Underdeveloped industry infrastructure; and
- High capital cost.

In 2002, the Residential Earth Power Program introduced convenient financing through the Residential Earth Power Loan, a vital component of the program.

The original terms of the loan offered financing up to $15,000 over a term up to fifteen years at a fixed interest rate of 6.5%. In April 2007, changes were made to the loan terms which increased the amount of financing available to $20,000 and lowered the interest rate to 4.9% for the first five years of a customer's loan. The interest rate on the balance of the loan term will be set up at prevailing interest rates. The lower initial term interest rate is subsidized by the Affordable Energy Fund.

Manitoba Hydro's Residential Earth Power Loan has continued to be an effective tool in facilitating residential geothermal installations. In 2012/13, a total of 22 customers financed their geothermal systems through the Residential Earth Power Loan. This brings the total number of geothermal loan participants to 1,208 since its inception in 2002/03, equivalent to $19.3 million in financing. As well, residential geothermal market activity has been strong due to the Provincial Green Energy Tax Credit and the $4,375 federal ecoENERGY grant. Since November 2008, the Residential Earth Power Loan has also offered financing for residential solar water heating systems. For a maximum term of 15 years at 4.0%, up to $7,500 can be borrowed. A total of 14 solar installations, equivalent to $92,700 thousand have been financed to date.

Exhibit 2.1.2-B
Residential Earth Power Loan
Annual Loan Amounts
thousands of nominal dollars



Residential geothermal installations in Manitoba have continued to decrease over the past three years. The recession experienced in 2009 has led to lower disposable income and increased customer reluctance to take on more debt. All of which have had a dramatic effect on geothermal installations throughout Canada. Other factors contributing to the decrease include falling natural gas prices due to increased supply through the emergence of shale gas exploration.

ecoENERGY Program (Formerly EnerGuide)

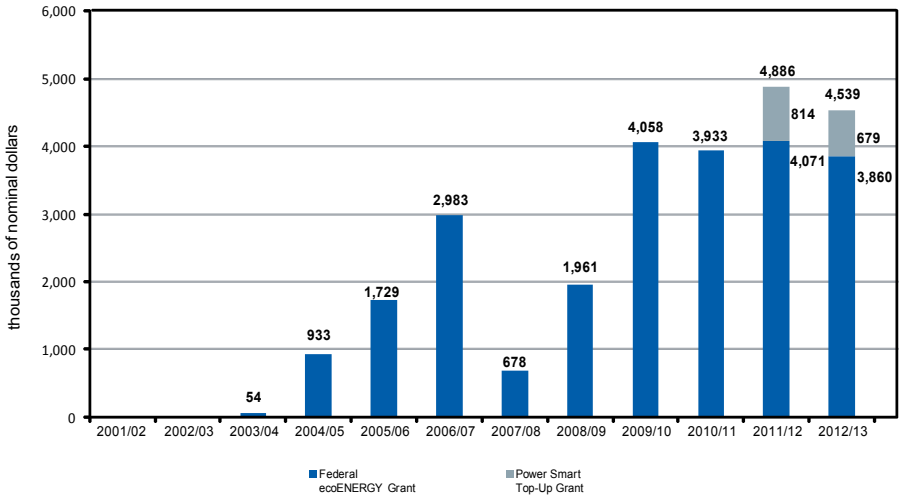
In July 2011, the Federal Government announced the re-instatement of the ecoENERGY Retrofit Grants Program. The reinstated program would run from June 6th, 2011 to March 31st, 2012. To qualify for a grant, homeowners were required to have a pre-retrofit energy evaluation on their home, implement the energy efficient upgrades and have a post-retrofit energy evaluation completed within this time frame. Manitoba Hydro immediately began offering the pre-retrofit energy evaluations required for homeowners to qualify for federal grants, at a subsidized price of $180. Funding for all subsidies was secured from the Affordable Energy Fund.

The grants were based on qualifying energy saving improvements, with a maximum total grant amount of $5,000 per residence (grants subject to availability).

On October 21st, 2011, The Province of Manitoba and Manitoba Hydro announced three initiatives to further encourage program participation:

- A reduction in price of the pre-retrofit evaluation to $45.
- A new Power Smart grant for ecoENERGY participants who qualified for federal grants, consisting of a top-up equating to 20% of the federal grant, in addition to the Home Insulation Program rebate.
- A reduction in the Power Smart Residential Loan interest rate from 4.9% to 3.9%.

Exhibit 2.1.2-C
ecoENERGY Program Grants Paid to Manitoba Hydro Customers
(thousands of nominal dollars)



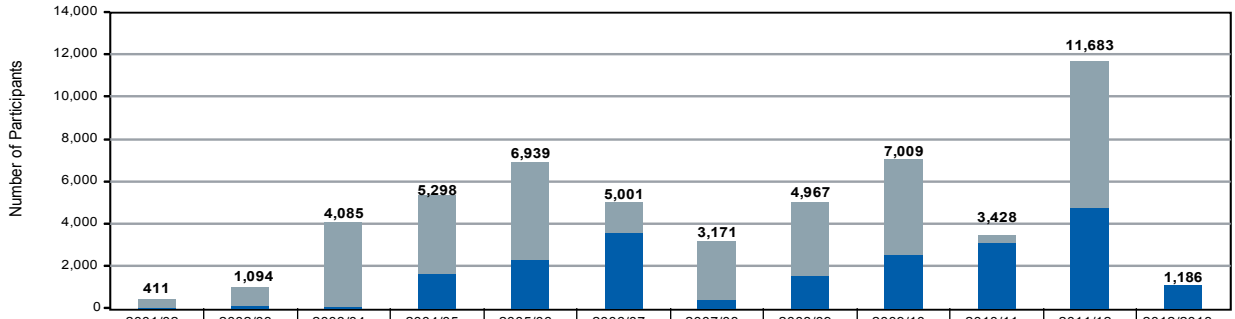
Note: Activity prior to 2007/08 was under the former EnerGuide Program.
As Manitoba Hydro highly subsidized the evaluation cost of Amerispec and EnerGuy participants, they are included in the participation figures for 2011/12 and 2012/13.

As seen above, federal grants paid to Manitobans more than doubled between 2008/09 and 2009/10. Since then, this amount has remained quite constant, peaking at over $4 million in 2011/2012 with the relaunch of the program.

In 2012/13, the average federal grant paid in Manitoba was $2,294 and the average Power Smart grant was $403. The most popular upgrades were furnaces, air sealing and attic insulation.

Additional support from Manitoba Hydro for the ecoENERGY program (the evaluation price reduction and Power Smart grant) were retroactive to June 6th, 2011 and applicable to all Manitoba service organizations. Funding for all three initiatives was allocated from the Affordable Energy Fund.

Exhibit 2.1.2-C-1
ecoENERGY Program
Number of D & E Participants



	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/2013
D Assessments	410	1,015	3,994	3,689	4,656	1,447	2,775	3,468	4,502	347	6,926	0
E Assessments	1	79	91	1,609	2,283	3,554	396	1,499	2,507	3,081	4,757	1,186
Total Assessments	411	1,094	4,085	5,298	6,939	5,001	3,171	4,967	7,009	3,428	11,683	1,186

Note: Activity prior to 2007/08 was under the former EnerGuide Program.
As Manitoba Hydro highly subsidized the evaluation cost of Amerispec and EnerGuy participants, they are included in the participation figures for 2011/12 and 2012/13.

In January 2012, the Federal Government closed the program to new participants, but maintained the March 31st, 2012 retrofit completion deadline for customers who had already booked their pre-retrofit evaluation. Due to the short duration of the re-instated program, the Federal Government succumbed to pressure received from all provinces nationwide, and allowed post-retrofit evaluations to be completed up until June 30th, 2012, with program paid top-up grants continuing until November 24, 2012. This relieved the pressure that was being experienced by the evaluator industry and allowed for more retrofits to be completed.

Power Smart Recreation Facilities Survey

The Power Smart Recreation Facilities Survey was created to help ice arenas and curling rinks reduce their operating costs by providing operators with an understanding of the energy use and potential energy saving measures within the facility. Technical staff at Manitoba Hydro review comprehensive surveys completed by facility operators and an evaluation report is prepared. The report compares the energy use of the facility with similar facilities in Manitoba and provides a list of possible energy saving opportunities. In October 2002, a guide called *Saving Money Through Energy Efficiency - Guidelines for Operators of Manitoba's Rinks and Arenas* was developed to assist rink operators to operate their facilities more efficiently, and to present practical ideas for saving money by reducing energy use. This guide has been updated and is now called *Energy Efficiency Guide for Ice Arenas and Curling Rinks*.

Religious Buildings Initiative

The Religious Buildings Initiative was designed to assist religious organizations in finding ways to make their buildings more energy efficient. The initiative offers a benchmark audit and a loan of 5.5% to assist religious facilities in carrying out efficiency improvements. The benchmark audit report outlines how energy is being used in the building and indicates potential energy saving measures. As part of the Religious Buildings Initiative, a guide called *Energy Efficiency Guide for Religious Buildings* was created. This energy and water efficiency guide assists people involved in the operation and maintenance of religious buildings to develop an action plan and take steps toward improving the efficiency of their buildings.

2.2 Energy Codes, Performance Standards & Energy Efficiency Regulations

Energy codes and performance standards are needed at every stage of market transformation, starting with initial evaluations of energy efficiency improvement opportunities, through to the design and implementation of incentive-based and non-incentive-based conservation programs intended to accelerate the adoption of energy efficient measures. And finally, as core ingredients for efficiency regulations aimed at removing laggard technologies from the market.

Performance standards provide the fundamental basis on which to measure, report and compare energy performance. As such, they form a core building block for evaluating the performance of energy efficient measures and comparing performance between competing products and technologies. Energy codes establish the criteria for understanding, quantifying and managing the energy performance of buildings and energy-consuming equipment operating within them. Performance standards are generally a key ingredient of energy codes, providing the basis on which to measure energy performance. While energy codes establish the metrics for evaluating building design and performance. Together, these two mechanisms are used to develop programs that support the optimal or minimum use of energy in the marketplace, limited only by technical potential and economic constraints.

Energy efficiency regulations are typically implemented towards the end of the market transformation process as energy efficient technologies mature and become generally accepted within the industry. Regulations are designed to remove technologies from the market that lag behind an established performance baseline agreed to by industry and government regulators. While the level of efficiency achieved through energy efficiency regulations is typically less than the optimal or minimum level of energy consumption achieved through directed incentive-based and non-incentive-based programming, regulation continues to be an effective and permanent method for removing products from the market with lower than desired energy performance.

Manitoba Hydro has adopted a proactive strategy that supports the development and acceptance of industry-wide performance standards and energy codes, through active participation in standards organizations such as the Canadian Standards Association Strategic Steering Committee on Performance, Energy Efficiency and Renewables (SCOPEER) and work with energy code steering committees at both federal and provincial levels. In many instances, Manitoba Hydro representatives are leaders within these working groups, driving forward development and acceptance of new performance standards and energy codes. Further to this, Manitoba Hydro adopts the use of these standards and codes in the design and implementation of its conservation programs, enhancing the overall effectiveness and market acceptance of these efforts. Finally, Manitoba Hydro works closely with federal, provincial and municipal regulators to identify and remove technologies from the market that lag behind accepted performance thresholds, providing support for the development and adoption of energy efficiency regulations. These efforts prevent products and measures with poor energy performance from gaining a foothold in the market and compromising efforts to transform markets to a more energy efficient state.

2.3 Power Smart Incentive-Based Programs

Power Smart incentive-based programs are designed in consideration of specific market parameters and characteristics impacting market acceptance of the targeted energy efficient technology or product. Examples of such factors are industry/customer awareness and appetite for acceptance, availability of competing products, state of product life cycles, cost barriers, training barriers, state of existing codes and standards, etc.

2.3.1 Launch Date & Participation of Incentive-Based Power Smart Programs

Exhibit 2.3.1-A identifies the launch dates of current and past Power Smart incentive-based programs.

Exhibit 2.3.1-B provides an overview of the annual and total participation of each incentive-based program.

Refer to APPENDIX C - 'Total Power Smart Participation' for a detailed summary of historical participation.

For a description of current incentive-based Power Smart programs, see list in Section 2.3.2. APPENDIX D provides a synopsis of discontinued Power Smart programs.

Exhibit 2.3.1-A

Launch Date of Incentive-Based Programs

PROGRAM	YEAR LAUNCHED
RESIDENTIAL	
Home Insulation	May, 2004
Affordable Energy Program	December, 2007
Affordable Energy Fund - Propane & Oil Furnace/Boiler	May, 2009
Water & Energy Saver	September, 2010
Refrigerator Retirement	June, 2011
COMMERCIAL	
Commercial Lighting	April, 1992
Internal Retrofit	July, 1995
Commercial Custom Measures	December, 1995
Commercial Building Envelope	December, 1995
Commercial Earth Power	December, 1995
City of Winnipeg Power Smart Agreement	September, 2002
Commercial HVAC	September, 2003
Commercial Building Optimization	April, 2006
Commercial Refrigeration	April, 2006
Commercial Kitchen Appliances	January, 2008
Commercial Network Energy Management	May, 2008
Commercial Clothes Washers	July, 2008
Commercial New Buildings	April, 2009
Commercial C02 Sensors	April, 2009
INDUSTRIAL	
Performance Optimization	June, 1993
Natural Gas Optimization	September, 2006
CUSTOMER SELF-GENERATION	
Bioenergy Optimization	March, 2006
RATE/LOAD MANAGEMENT	
Curtailable Rates	November, 1993
DISCONTINUED/COMPLETED	
RESIDENTIAL DISCONTINUED/COMPLETED	
Outdoor Timer	October, 1989
Refrigerator/Freezer Buy-Back Pilot	1991/92
Residential Shower Head Pilot	1991/92
EE Water Savings Measures Component of the 'No Worry Plan'	November, 1996
EE Water Tank Measures Component of the 'No Worry Plan'	November, 1996
New Home	February, 2004
Compact Fluorescent Lighting	September, 2004
Seasonal LED Lighting	November, 2005
High Efficiency Furnace / Boiler	November, 2005
Residential Appliances	June, 2006
Programmable Thermostat Pilot	October, 2006
Energy Efficient Light Fixtures	October, 2006
Solar Hot Water Heating (Incentive Component)	November, 2008
COMMERCIAL DISCONTINUED/COMPLETED	
Roadway Lighting	April, 1991
Sentinel Lighting Conversion	April, 1991
Commercial Shower Head Pilot	1991/92
Infrared Heat Lamps	1991/92
Agricultural Demand Controller	July, 1992
Livestock Waterer	October, 1994
Commercial Construction - Air Barrier Component	December, 1995
Commercial Construction - Air Conditioning Component	December, 1995
Commercial Parking Lot Controllers	December, 1995
Agricultural Heat Pads	April, 1998
Commercial Rinse & Save	July, 2006
Power Smart Energy Manager*	November, 2008
Power Smart Shops*	February, 2009
INDUSTRIAL DISCONTINUED/COMPLETED	
High Efficiency Motor	September, 1991

* During 2012/13, this program was undergoing redesign.

Exhibit 2.3.1-B

Incentive-Based Power Smart Program Participation

PROGRAM	2012/13*	Cumulative
	Number of Participants	
RESIDENTIAL		
Water & Energy Saver	27,420	99,279
Refrigerator Retirement	8.,298	16,735
Home Insulation	2,867	31,512
Affordable Energy Program	1,653	6,615
	40,238	154,141
COMMERCIAL		
Commercial Lighting	748	12,357
Commercial Refrigeration	565	729
Commercial Building Envelope	337	2,160
Commercial HVAC/ C02 Sensors	93	695
Internal Retrofit	29	1,289
Commercial Custom Measures	27	69
Commercial Clothes Washers	17	244
Commercial New Buildings	15	22
Commercial Earth Power	10	119
Commercial Kitchen Appliances	6	81
Commercial Building Optimization	2	9
City of Winnipeg Power Smart Agreement	1	322
Commercial Network Energy Manager	0	8
	1,850	18,104
INDUSTRIAL		
Performance Optimization	71	677
Natural Gas Optimization	14	75
	85	752
DISCONTINUED/COMPLETED	46	500,728^
EFFICIENCY PROGRAMS SUBTOTAL	42,219	673,725
CUSTOMER SELF-GENERATION		
Bioenergy Optimization**	22	22
	22	22
RATE/LOAD MANAGEMENT		
Curtailable Rates**	3	5
	3	5
TOTAL	42,244	673,752

* Participation is defined as one household for residential programs, one project for commercial/industrial programs.

* * Participation represents the number of customers who participate each year. The cumulative number represents the actual number of unique customers who have participated.

^ This includes 343,381 participants of the Residential Compact Fluorescent Lighting Program.

Notes: This table includes electric and natural gas Power Smart participants.
Customers may participate in more than one Power Smart program and are counted multiple times, except for Bioenergy Optimization and Curtailable Rates.
Participation is measured by number of completed projects, and excludes free drivers and market transformation.

2.3.2 Residential Programs

The residential programs are established to serve residential customers throughout the province.

New Home Program

The New Home Program provided information and financial incentives for residential new construction, using measures such as lighting, insulation, ventilation, water technologies and improved building envelop.

In December 2010, the Manitoba Building code was modified to include water and energy efficiency minimum levels that were nearly equivalent to the New Home Program's Power Smart Gold Standard. As a result, the New Home Program closed to new registrants on February 28th, 2011 with a deadline to complete and certify a home by the program end date of February 28th, 2012. Although new homes were certified before the program end date, one was certified and rebated February 5th, 2013. As a result, the savings and incentives were allocated to the 2012/13 fiscal year. Manitoba Hydro continues to serve as the delivery agent for Natural Resources Canada's R-2000 Program.

Home Insulation Program

Information and financial incentives are offered to encourage owners of existing homes to upgrade their insulation to Power Smart levels.

Water & Energy Saver Program

The Water & Energy Saver Program offers free Water & Energy Saver kits to residential customers. Each kit contains a low-flow showerhead, low-flow faucet aerators, water heater pipe wrap and a refrigerator/freezer thermometer.

Affordable Energy Program

The Affordable Energy Program is designed to bring Power Smart and energy efficient measures to qualifying lower income households. The program leverages Manitoba Hydro Power Smart programs, the Affordable Energy Fund, the Federal Government ecoENERGY Program (until the program ended in March 2011), provincial government programs and existing community-based infrastructures. Energy efficiency measures include pre- and post- in-home energy evaluations, installation of basic energy efficiency items such as CFLs and low-flow showerheads, insulation upgrades and natural gas furnace upgrades.

Refrigerator Retirement Program

The Refrigerator Retirement Program provides residential customers with free in-home pick-up of their old, inefficient refrigerators and freezers, paying customers a $40 incentive for each appliance retired. This province-wide program is set run until March 2014.

First Nations Power Smart Program

Through the First Nations Power Smart Program, First Nations communities can improve the energy efficiency and comfort of their homes. The program provides each First Nations community a Manitoba Hydro energy efficiency specialist to recommend the installation of energy efficient measures. Participants are also provided insulation and basic energy efficiency upgrades. Community members are trained to conduct the upgrades and deliver the Power Smart program. And on request, energy saving seminars can be arranged for the community.

2.3.3 Commercial Programs

The commercial programs are established to serve commercial, institutional and industrial customers.

Commercial Lighting Program

The Commercial Lighting Program encourages commercial customers to install cost-effective energy efficient lighting systems. Manitoba Hydro also works with lighting distributors, installers, contractors and manufacturers to assist customers in saving electricity, and to ensure optimal lighting design based on use.

Commercial Building Optimization Program

The Commercial Building Optimization Program encourages commercial customers with existing buildings to use an investigation and adjustment process known as retro-commissioning to help return their buildings to their intended operating methods.

New Buildings Program

The New Buildings Program provides technical guidance and financial incentives for designing, constructing and operating new, energy efficient buildings in Manitoba.

Commercial Building Envelope Program

The Building Envelope Program encourages building owners to install window systems and/or insulation levels that meet Power Smart levels in their renovation or new building plans, and helps to reduce air leakage. Upgrading a building's envelope can reduce air leakage which will affect energy costs to heat and cool the building, while providing improved thermal comfort for occupants and improve indoor air quality.

Internal Retrofit Program

Energy efficiency in Manitoba Hydro buildings is encouraged by retrofitting existing and constructing new buildings to Power Smart levels.

Commercial HVAC Program

The Commercial HVAC Program encourages the use of high efficiency heating, ventilation and cooling systems, such as near-condensing and condensing boilers, CO2 sensors and energy efficient water-cooled chillers.

Commercial Earth Power Program

This program provides information and financial incentives to customers who install a geothermal heat pump system to offset a conventional electric heating system in commercial buildings.

Commercial Refrigeration Program

This program encourages grocery stores and restaurants to install energy efficient refrigeration equipment for their walk-ins, display cases and mechanical rooms to reduce energy consumption and create a more comfortable environment for their customers.

Commercial Kitchen Appliances Program

The Commercial Kitchen Appliances Program encourages customers to upgrade to ENERGY STAR® qualified steamers and fryers.

Commercial Clothes Washers Program

The Commercial Clothes Washers Program encourages customers to install energy efficient front-loading clothes washers at their business or facility.

Custom Measures Program

The Custom Measures Program encourages commercial customers who are renovating, undergoing plant expansion or building new facilities to improve system performance by installing or upgrading technologies such as direct digital controllers, variable frequency drives and heat recovery ventilation systems. The program is designed to serve customers undertaking energy efficient projects that are not specifically supported by the other existing Power Smart programs.

Network Energy Management Program

The Network Energy Management Program encourages the installation of network management software. The software shuts down PCs when they are inactive while still allowing network administrators to perform regular maintenance tasks, such as software upgrades and security patches.

City of Winnipeg Power Smart Agreement

The City of Winnipeg Power Smart Agreement was established as part of the Winnipeg Hydro purchase agreement to encourage and implement energy saving measures in city-owned facilities. The Power Smart Agreement encompasses electricity, natural gas and water saving measures for both new construction and renovation projects. The terms of the agreement ended in September 2012.

2.3.4 Industrial Programs

The industrial programs are established to serve the industrial customers throughout the province to encourage the optimization and efficiency of their processes.

Performance Optimization Program

The Performance Optimization Program encourages industrial and large commercial customers to study and implement energy efficiency measures in their electro-technology processes and motor-drive systems.

Natural Gas Optimization Program

This program provides industrial and large commercial customers with the technical support and financial incentives necessary to identify, investigate and implement systematic efficiency improvements in the natural gas-fired systems throughout their facilities.

2.3.5 Rate/Load Management Programs

Curtailable Rates Program

Large industrial customers are provided with monetary incentives by way of a monthly credit on their electricity bill in exchange for having electrical load available for curtailment if called upon by Manitoba Hydro.

2.3.6 Customer Self-Generation Programs

Bioenergy Optimization Program

This program encourages industrial customers to install, operate and maintain generation equipment at their site in order to displace their internal load.

3.0 Power Smart Success Stories

Power Smart Designation Awarded to Sturgeon Heights Community Centre

On April 16, 2012 Manitoba Hydro congratulated Sturgeon Heights Community Centre with a plaque, for achieving the Power Smart designation, resulting in energy performance of over 33% more efficient than a convention community centre.

Made possible in part due to technical and financial support from Manitoba Hydro, the energy efficient design of the community centre is estimated to achieve annual energy savings of nearly 60,000 kW.h of electricity and 30,000 cubic meters of natural gas. It is anticipated that the building will save approximately $10,000 annually in energy costs. Also achieved, a greenhouse gas emissions reduction of 100 tonnes of CO2e annually, which is equivalent to taking 20 cars off the road each year.

Energy efficient features of the building include a high efficiency condensing natural gas boiler, a ventilation heat recovery system, demand control ventilation, water-saving fixtures, energy efficient lighting and controls, and high levels of insulation in the roof, walls and floor slabs.

Makoonsag Intergenerational Children's Centre earns Power Smart Designation

In Spring 2012, Manitoba Hydro Power Smart helped celebrate the grand opening event for the newly constructed Makoonsag Intergenerational Children's Centre in Winnipeg. Manitoba Hydro delivered a Power Smart designation plaque to congratulate the customer for building to Power Smart Design Standards, resulting in energy performance of over 40% more efficient than a conventional building.

The 10,000 square foot complex is significantly more efficient than a standard day care facility. Energy efficient features of the building include a unique air-source heat pump for the building's heating and cooling, a ventilation heat-recovery system, water-saving fixtures, energy efficient lighting and controls coupled with strategic use of day lighting, and high levels of insulation in the roof, walls and floor slabs.

Services at the centre are directed to Aboriginal and new immigrant families, providing positive reinforcement and educational support that will help improve the future for children and families in Winnipeg. The child-care and intergenerational learning centre employs 12 child-care workers and two instructors in early childhood education.

Hutterite Colonies Making the Switch to Geothermal

The Province of Manitoba announced an Emissions Tax on coal as part of the Climate Change Action Plan in 2011. Rather than those colonies who are using coal switch to electric furnaces or baseboards, alternate heating sources were explored including bringing in natural gas lines, biomass and geothermal heat pumps. Concurrently, colonies using conventional electric heating sources were also looking to reduce their heating costs.

The Commercial Geothermal Program was able to assist 11 colonies across 25 projects by pre-approving over $420,000 in incentives for switching their conventional electric heating system or coal source to geothermal heat pumps.

Clearspring Middle School Builds to Power Smart Design Standards

The Hanover School Division officially opened the doors to its newest facility, Clearspring Middle School, on November 7th, 2012. At the opening, Manitoba Hydro presented a Power Smart plaque to the school.

Manitoba Hydro was included throughout the school's integrated design process and helped the Hanover School Division achieve its goal of building a school that, itself, serves as a learning tool for students. The school is designed with a systems approach regarding energy performance and its efficiencies are the result of many energy conservation features working together.

Energy conservation features include a site orientation that optimizes solar gain and day lighting strategies, a high performance building envelope, material selection that emphasizes durability and reduced environmental impact, in-floor heating with individual zone controls, a closed-loop geothermal ground source heat pump, economizers on the air handlers, carbon dioxide monitors and high-efficiency lighting systems with occupancy sensors. A measurement and verification plan is also in place to assist with ongoing energy management and optimization of building energy and water performance over time. Overall, the school is targeting 67% baseline energy consumption.

Power Smart for Business Customer Receives Environmental Leadership Award

The Assiniboine Credit Union's commitment to environmental leadership has been recognized with a Manitoba Excellence in Sustainability Award of Action on Climate Change, Air Quality and Energy Efficiency. The award was presented by the Manitoba Round Table for Sustainable Development, and celebrates sustainability leaders across the province.

Manitoba Hydro supported Assiniboine Credit Union's nomination, in part because of the credit union's extensive involvement with energy efficiency through the Power Smart for Business programs.

Assiniboine Credit Union built its new facilities to Manitoba Hydro's Power Smart Design Standards, making them at least 25% more efficient that a conventional building.

Assiniboine Credit Union's energy efficiency upgrades include insulation upgrades, energy efficient windows, and high-efficiency lighting and use of light-emitting diode lighting technology (LED) for interior light and exterior signage. These upgrades resulted in estimated annual savings of $20,000 and reduction of 300 tonnes of CO2e emissions, equivalent to taking 60 cars off the road per year.

Manitoba Hydro Places Second in the 2012 E Source Utility Ad Contest

Manitoba Hydro was awarded second place for the "Best Outdoor Ad" in the 2012 E Source Utility Ad Awards Contest. The ad contest was open to U.S. and Canadian electric and gas companies, receiving more than 600 advertisement submissions, a record number of entries.

Manitoba Hydro Place wins Global Award for Land Use

Manitoba Hydro Place was one of fourteen developments from around the world selected as winners of the 2012 Urban Land Institute (ULI) Global Awards for Excellence competition as announced on October 19, 2012 in Denver, Colorado.

The competition, now in its 34th year, works to promote best practices in all types of real estate development. Selected from nearly 200 entries throughout the world, Manitoba Hydro Place, along with other winning projects, was found to demonstrate ingenuity, innovation and long-term thinking that can be embraced in other scenarios. "This year's 14 ULI Global Award winners are from eight countries and represent a broad array of property types and uses," said competition jury chairman Randall Rowe. "They are dramatic examples of applying ULI best practices to real estate development and their enduring impact on diverse communities across the globe."

Manitoba Hydro Place to Contribute to Development of Healthy Society

Manitoba Hydro Place recently won a 2012 International Green Good Design Award which recognizes only those designs expected to contribute to the development of a healthy society.

Griffin Wheel's Compressed Air Optimization

Griffin Wheel has substantially improved their air system reliability and reduced their compressed air operating costs by following the recommendations of Manitoba Hydro. The company has reduced the electrical air system operating costs by 44% by replacing three of their four air compressors with high efficiency units, and implementing other compressed air related equipment improvements.

The old air compressors were consuming 4.1 GW.h annually with a 0.5 MW peak demand, costing $202,000 in annual electric operating costs. On recommendation from Manitoba Hydro, the company purchased three new efficient two-stage water cooled rotary screw air compressors including one with variable speed drive technology. The compressors were set up on a control system that coordinates the operation of the compressors by constantly choosing the best and most efficient compressors suited for the various compressed air flows occurring over the normal production schedule. Compressed air filters were upgraded to allow more efficient operation at lower pressures and to improve air quality. Cycling air dryers were also installed to use less energy than standard dryers. A large number of plant leaks were repaired to reduce the compressed air waste, including one very large leak caused by the failure of a dust collector. The project costs were $671,000 and were supported by a Performance Optimization Power Smart incentive of $250,000. The project has been completed and is expected to pay itself back in less than three years.

As a result of the changes, the compressed air system is now consuming 2.3 GW.h annually with a peak demand of 0.3 MW. Operating costs have fallen to $112,300 per year. This does not include the savings associated with the rental compressors that are no longer required. Additional benefits include more stable plant pressure, increased equipment reliability and reduced maintenance costs.

University of Manitoba's Parker Building Improves Vacuum System

In summer 2012, the University of Manitoba benefited from Manitoba Hydro's Performance Optimization Program by upgrading the inefficient vacuum system in the Parker Building.

The 50 hp vacuum at the Parker Building had been operating continuously even though the vacuum loading was variable. Associated electrical costs amounted to $14,881 per year. The system was a good candidate for a machine and controls upgrade, combined with a leak reduction campaign in the distribution system.

With incentives from Manitoba Hydro, the University upgraded to a new vacuum system consisting of three individual 30 hp units, operating in a staged manner according to vacuum demand.

The new electrical operating costs are calculated to be $8,106 per year, providing annual savings of $6,774. Energy and demand savings are 138,719 kW.h and 15.8 KW respectively.

Total project costs were $151,195, and a maximum incentive of $27,483 is scheduled for payment.

4.0 Market Results

In the past, the success of Manitoba Hydro's Power Smart initiative was evaluated based on DSM incentive-based program activity alone. However, the true impact of Power Smart also includes the impact of the programs on the market as a whole, or market transformation. Although, market transformation is more difficult to measure. Manitoba Hydro has made significant in-roads in developing program-specific methodologies for measuring Power Smart's impact. Wherever possible, Manitoba Hydro has attempted to obtain sales/technology-specific data to calculate a program's true impact. In some instances, qualitative information is used to determine a program's impact on the market. Manitoba Hydro plans on continuing to further quantify and report the influence of market transformation within the Manitoba marketplace.

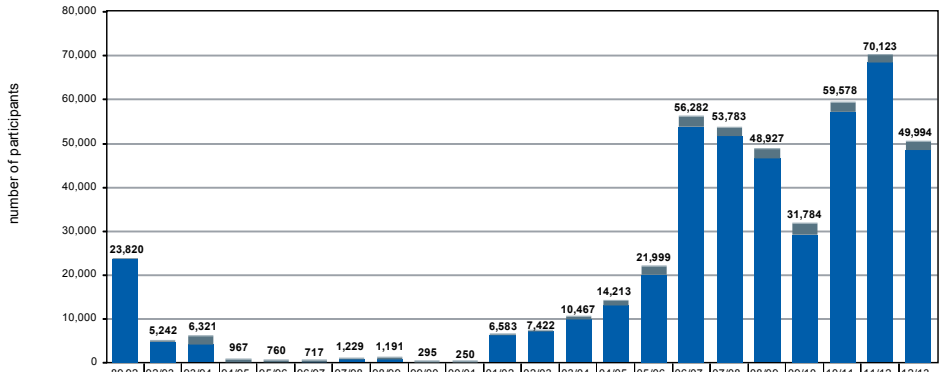
4.1 Power Smart Portfolio Results

The following sections provide an overview of Power Smart portfolio results to date.

4.1.1 Participation in Power Smart Programs

The following graph outlines total Power Smart participation in incentive-based programs, DSM support programs and cost-recovery programs with participation presented by sector (i.e. residential, commercial and industrial programs).

Exhibit 4.1.1
Power Smart Program Participation



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Industrial	24	157	202	229	185	182	195	8	4	9	17	25	32	48	50	49	81	99	116	90	73	110
Commercial	65	273	1,959	738	575	334	325	502	291	241	305	364	538	1,020	1,849	2,364	2,041	2,136	2,491	2,256	1,526	1,895
Residential (excluding CFLs)	23,731	4,812	4,160	0	0	201	709	681	0	0	6,261	7,033	9,897	13,145	20,100	53,869	51,661	46,692	29,177	57,232	68,524	47,989
Total Achieved (excluding CFLs)	23,820	5,242	6,321	967	760	717	1,229	1,191	295	250	6,583	7,422	10,467	14,213	21,999	56,282	53,783	48,927	31,784	59,578	70,123	49,994

Note: Includes electric and natural gas participants of DSM support programs, cost recovery and incentive-based programs.
Participation for codes and standards is excluded.
Curtailable Rates Program participation is included in the industrial sector.
Customers may participate in more than one Power Smart program.
The 343,381 sales under the Residential Compact Fluorescent Lighting Program during 2004/05-2010/11 are excluded.
Figures may not add due to rounding.

As displayed in the preceding graph, participation in Manitoba Hydro's Power Smart programs continues to be strong. During 2012/13, there were nearly 50,000 participants in Power Smart DSM support programs and incentive-based programs. Excluding the Residential Compact Fluorescent Lighting Program, there have been approximately 472,000 participants cumulatively.

Participation of the Residential Compact Fluorescent Program has been excluded to provide a better indication of participation trends. The Residential Compact Fluorescent Program provided a low-cost option for achieving energy efficiency, and represented 44% of residential Power Smart participation and 42% of overall Power Smart participation.

Refer to APPENDIX C for historical Power Smart participation.

4.1.2 Power Smart Portfolio - Impact of Electric Programs

The following tables outline the electricity savings achieved by the Power Smart portfolio during 2012/13 and provide a comparison between achieved results and planned targets, where applicable:

Exhibit 4.1.2-A

Annual GW.h Savings (at generation) - Power Smart Portfolio

	2012/13 Actual	2012/13 Plan^	Total*
INCENTIVE-BASED PROGRAMS	256	104	1,612
CODES & STANDARDS	75	66	628
DSM SUPPORT PROGRAMS	1	3	29
OVERALL IMPACT	332	173	2,269

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

Exhibit 4.1.2-B

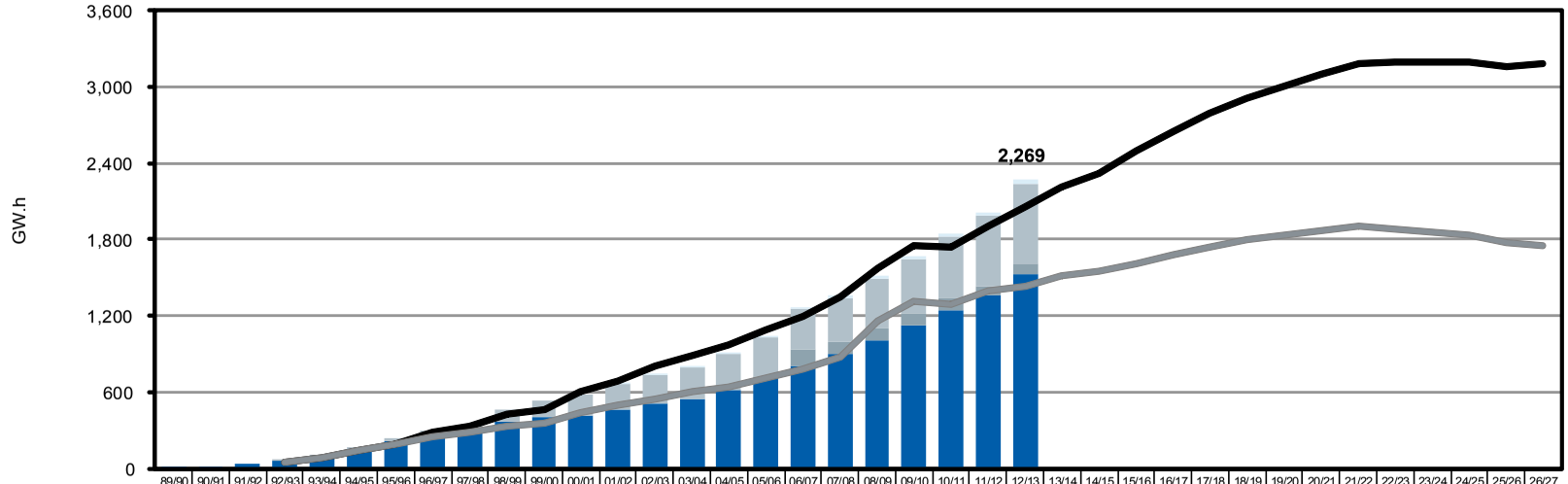
Annual Average Winter MW Savings (at generation) - Power Smart Portfolio

	2012/13 Actual	2012/13 Plan^	Total*
INCENTIVE-BASED PROGRAMS	201	184	477
CODES & STANDARDS	19	16	150
DSM SUPPORT PROGRAMS	1	1	10
OVERALL IMPACT	221	200	637

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: MW savings are based on the average of the winter AM & PM system peak savings.
For the Curtailable Rates Program, MW savings reported is expected curtailable load on system at the time a curtailment occurs.
Figures may not add due to rounding.

The following graphs present the electric energy and demand savings achieved to date by the Power Smart portfolio and the corresponding targets.

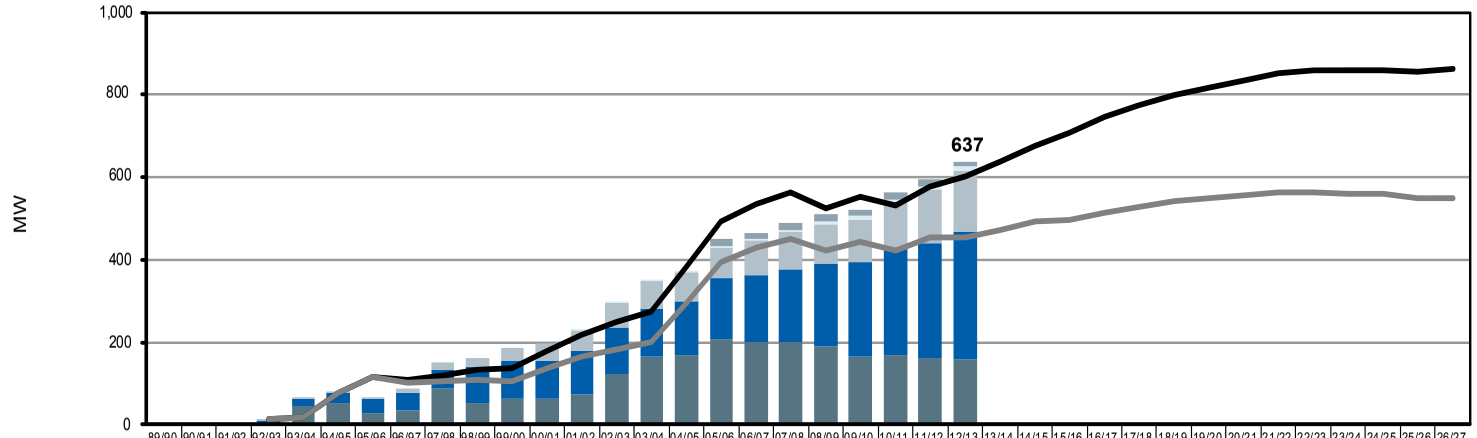
Exhibit 4.1.2-C
Electric Energy Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan
at generation



	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs													2	4	7	11	13	16	20	22	25	26	27	29														
Codes & Standards	-	-	-	2	8	16	25	40	63	93	125	156	189	228	248	274	298	323	352	382	430	481	553	628														
Incentive-Based - Customer Self Generation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	132	93	103	88	95	77	91														
Incentive-Based - Efficiency	6	10	31	59	99	151	209	259	285	363	407	419	467	511	546	620	715	799	895	1,002	1,126	1,243	1,356	1,521														
Plan	-			50	86	138	195	281	336	422	466	602	686	810	891	970	1,088	1,199	1,350	1,569	1,753	1,736	1,906	2063	2214	2323	2489	2654	2787	2906	3003	3096	3184	3195	3191	3186	3157	3175
Plan (Incentive-Based Programs only)	-			50	86	138	195	252	279	327	350	435	491	544	603	634	713	782	879	1,157	1,310	1,293	1391	1,427	1,509	1,551	1,608	1,675	1,737	1,796	1,835	1,871	1,902	1,881	1,858	1,832	1,771	1,754
Total Achieved	6	10	31	62	107	167	235	299	348	456	532	575	659	743	801	904	1,037	1,270	1,359	1,509	1,669	1,846	2,014	2,269														

Note: Targeted savings are unadjusted for programs not running or other revisions.
Figures may not add due to rounding.

Exhibit 4.1.2-D
Average Winter Demand Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan
at generation



	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs													1	1	2	3	3	4	6	6	8	9	9	10														
Codes & Standards	-	-	-	1	2	4	6	10	15	23	32	40	49	59	64	70	76	82	89	97	105	113	131	150														
Incentive-Based - Customer Self Generation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16	16	10														
Incentive-Based - Efficiency	0	1	4	10	17	26	34	42	46	86	91	93	105	113	119	131	146	162	179	200	229	254	276	308														
Incentive-Based - Rate/Load	-	-	-	-	45	51	27	36	88	53	64	63	75	121	163	169	208	202	199	190	164	170	162	159														
Plan				12	18	75	114	108	118	134	135	178	216	249	273	385	491	535	564	524	551	531	578	603	638	674	707	746	773	798	816	835	852	858	858	859	856	861
Plan (Incentive-Based Programs only)				12	18	75	114	101	104	110	105	136	166	183	200	296	394	429	449	421	442	421	454	454	472	492	498	513	527	540	548	556	563	563	561	559	550	550
Total	0	1	4	10	64	80	68	87	149	162	187	196	230	295	348	373	450	466	488	509	521	562	594	637														

Note: Targeted savings are unadjusted for programs not running or other revisions.
Figures may not add due to rounding.

Cumulatively, the entire Power Smart portfolio has saved 2,269 GW.h and 637 MW (at generation), 10% and 6% above their respective targets.

4.1.3 Power Smart Portfolio - Impact of Natural Gas Programs

The following table and graph present natural gas savings achieved by the Power Smart portfolio:

Exhibit 4.1.3 - A
Annual Natural Gas Savings

	2012/13 Actual	2012/13 Plan^	Total*
	millions of cubic metres		
PROGRAM & INITIATIVE			
Incentive-Based Programs	11.3	7.9	62.2
Codes & Standards	3.4	2.7	13.2
DSM Support Programs	0.6	0.5	20.3
	15.3	11.1	95.7
INTERACTIVE EFFECTS			
Incentive-Based Interactive Effects	(0.7)	(1.1)	(12.0)
NET IMPACT OVERALL	14.6	10.0	83.6

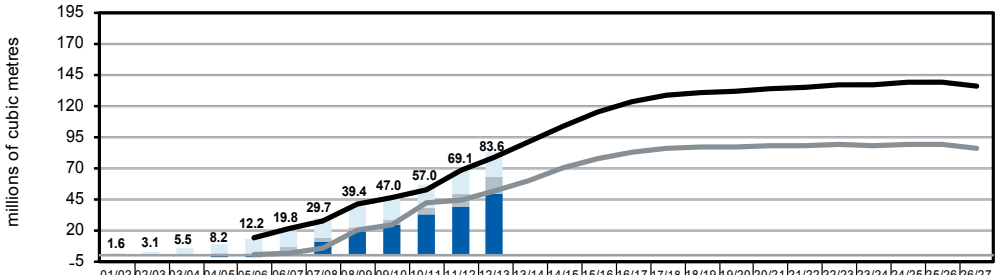
^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

The Power Smart portfolio provided natural gas savings of 15.3 million cubic metres in 2012/13, which was 38% more than planned.

Some electric Power Smart programs result in an increase or decrease in natural gas consumption (interactive effects). For example, a more energy efficient lighting system emits less heat, requiring more energy to heat the space. In cases where the heat is produced through electric heating sources, interactive effects are taken into account when calculating the anticipated electricity savings that will result from the program. In cases where the heat is produced through natural gas heating systems, the interactive effects are taken into account when determining the natural gas savings. These interactive effects represent the increase in natural gas consumption for gas-heated homes resulting from the installation of energy efficient lighting systems.

After interactive effects, the Power Smart portfolio achieved net natural gas savings of 14.6 million cubic metres in 2012/13, 46% more than planned.

Exhibit 4.1.3-B
Integrated Natural Gas Savings - Power Smart Portfolio
Total Savings Achieved vs. Plan



	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
DSM Support Programs	1.2	2.4	4.3	7.7	11.3	13.2	15.3	16.4	18.3	19.0	19.7	20.3														
Codes & Standards	0.3	0.7	1.1	1.6	2.0	2.4	2.7	3.0	3.5	4.4	9.9	13.2														
Incentive-Based Integrated	0.0	0.1	0.1	-1.0	-1.0	4.3	11.7	20.0	25.3	33.5	39.6	50.1														
Integrated Plan					14.8	21.5	27.9	41.4	46.3	52.8	68.6	79.6	91.8	105.1	116.1	124.6	128.8	131.0	132.7	134.5	136.0	137.6	138.0	139.8	140.2	137.5
Integrated Plan (Incentive-Based Programs only)					0.8	1.9	5.7	20.8	24.6	42.2	44.7	51.5	60.5	70.5	78.1	83.1	86.2	87.2	87.7	88.4	88.8	89.3	88.7	89.8	89.7	86.4
Total Achieved	1.6	3.1	5.5	8.2	12.2	19.8	29.7	39.4	47.0	57.0	69.1	83.6														

Note: Targeted savings are unadjusted for programs not running or other revisions.
Figures may not add due to rounding.

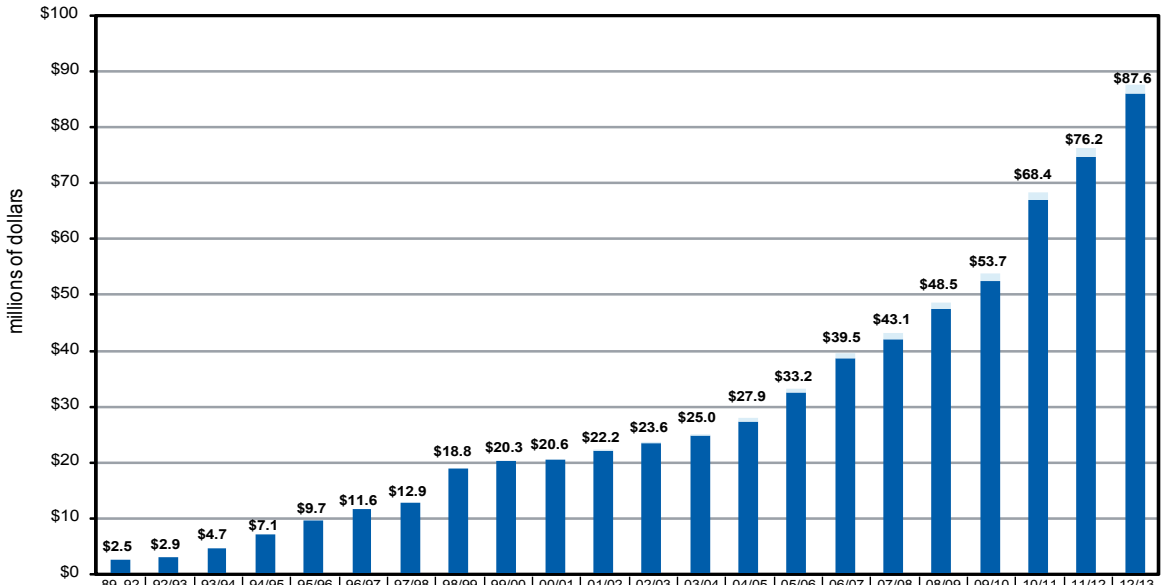
To date, after interactive effects, the Power Smart portfolio has saved nearly 84 million cubic metres of natural gas, 5% above target.

4.1.4 Customer Bill Reduction

Electricity Bill Reduction

When customers save electricity through Manitoba Hydro's Power Smart programs, it translates into lower electricity bills for participating customers. Displayed in Exhibit 4.1.4-A are the annual customer bill reductions resulting from DSM support programs and incentive-based Power Smart program electric savings to date.

Exhibit 4.1.4-A
Customer Electricity Bill Reduction (2012$)
millions of dollars



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
DSM Support Program Savings	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.1	$0.2	$0.3	$0.5	$0.6	$0.8	$1.0	$1.1	$1.3	$1.4	$1.4	$1.5
Incentive-Based Savings	$2.5	$2.9	$4.7	$7.1	$9.7	$11.6	$12.9	$18.8	$20.3	$20.6	$22.1	$23.5	$24.7	$27.4	$32.6	$38.7	$42.1	$47.4	$52.4	$67.0	$74.8	$86.1
Total	$2.5	$2.9	$4.7	$7.1	$9.7	$11.6	$12.9	$18.8	$20.3	$20.6	$22.2	$23.6	$25.0	$27.9	$33.2	$39.5	$43.1	$48.5	$53.7	$68.4	$76.2	$87.6

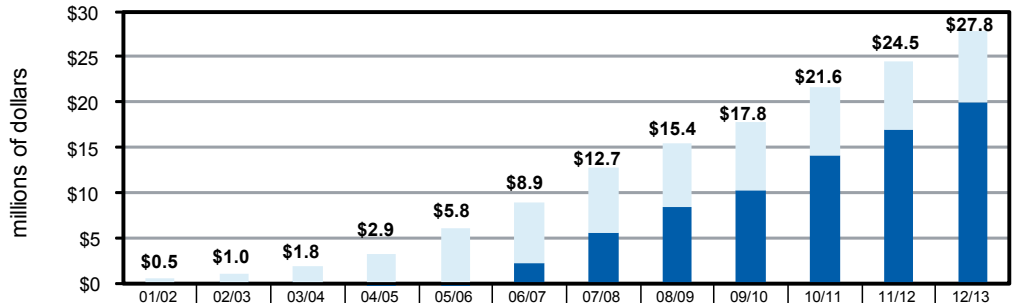
Note: Bill reductions exclude savings due to codes & standards.
Demand savings resulting from the Curtailable Rates Program are excluded from this analysis.
Figures may not add due to rounding.

Power Smart DSM support programs and incentive-based programs saved participating customers nearly $88 million in 2012/13 and over $660 million cumulatively on their electricity bills.

Natural Gas Bill Reduction

Customers also save on their natural gas bills when participating in certain Power Smart initiatives. Exhibit 4.1.4-B displays annual customer bill reductions resulting from Power Smart natural gas savings to date (net of interactive effects).

Exhibit 4.1.4-B
Customer Natural Gas Bill Reduction (2012$)
millions of dollars



	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
DSM Support Programs Savings	$0.5	$1.0	$1.8	$3.2	$6.1	$6.8	$7.2	$7.1	$7.6	$7.6	$7.7	$7.9
Incentive -Based Savings	$0.0	$0.0	$0.1	-$0.3	-$0.3	$2.1	$5.5	$8.4	$10.2	$14.0	$16.9	$19.9
Total	$0.5	$1.0	$1.8	$2.9	$5.8	$8.9	$12.7	$15.4	$17.8	$21.6	$24.5	$27.8

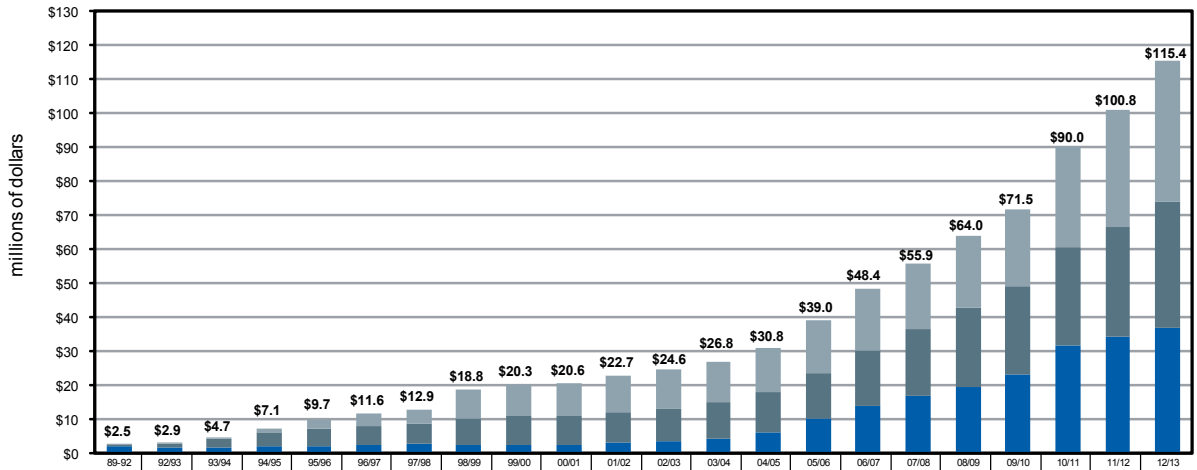
Note: Bill reduction excludes savings due to codes & standards.
Interactive effects in 2012/13 resulted in a $4.8 million increase in customer bills, which is captured within incentive-based savings.
Natural gas bill reduction includes primary and distribution rates only.
Figures may not add due to rounding.

As a result of Power Smart initiatives, participating customers saved nearly $28 million in 2012/13, and approximately $141 million cumulatively on their natural gas bills.

Combined Bill Reduction

The following graph presents the annual combined customer bill reduction for participants of Power Smart DSM support programs and incentive-based programs by sector. Savings include those from both electric and natural gas initiatives.

Exhibit 4.1.4-C
Combined Electricity & Natural Gas Customer Bill Reduction (2012$)
Total Annual Reductions by Sector
millions of dollars



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Industrial	$0.0	$0.3	$0.4	$1.1	$2.5	$3.7	$4.2	$8.8	$9.5	$9.5	$10.6	$11.5	$11.9	$12.9	$15.4	$18.4	$19.6	$21.4	$22.3	$29.6	$34.4	$41.5
Commercial	$0.5	$1.2	$2.6	$4.0	$5.1	$5.6	$6.1	$7.5	$8.3	$8.6	$9.1	$9.6	$10.6	$11.6	$13.4	$16.2	$19.4	$23.0	$26.2	$28.7	$32.0	$36.9
Residential	$2.0	$1.4	$1.7	$2.0	$2.1	$2.4	$2.6	$2.5	$2.5	$2.5	$3.0	$3.5	$4.3	$6.2	$10.2	$13.8	$16.9	$19.5	$23.0	$31.7	$34.4	$36.9
Total	$2.5	$2.9	$4.7	$7.1	$9.7	$11.6	$12.9	$18.8	$20.3	$20.6	$22.7	$24.6	$26.8	$30.8	$39.0	$48.4	$55.9	$64.0	$71.5	$90.0	$100.8	$115.4

Note: Bill reductions exclude savings due to codes & standards.
Demand savings resulting from the Curtailable Rates Program are excluded from this analysis.
Natural gas bill reduction includes primary and distribution rates only.
Figures may not add due to rounding.

Power Smart DSM support programs and incentive-based programs saved participating customers over $115 million in 2012/13 alone. These savings are distributed relatively evenly between industrial, commercial and residential customers.

Cumulatively, participating customers have saved over $801 million on electricity and natural gas bills. To date, industrial, commercial and residential customers have reduced their bills by 36%, 36% and 28% respectively.

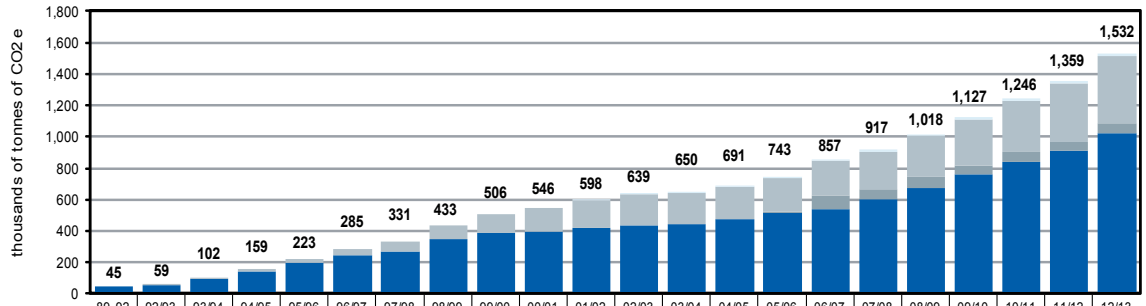
4.1.5 Power Smart Program Impact on Greenhouse Gas Emissions

The energy efficiency measures and improvements installed through Manitoba Hydro's Power Smart programs reduce the amount of greenhouse gas and other air polluting emissions indirectly from power generation, and directly from the transmission and distribution of natural gas, and will continue to do so over their product lives. Both electricity and natural gas consumption reductions have a positive impact on global greenhouse gas emissions.

Impact of Electricity Savings

As Manitobans conserve electric energy through Power Smart programs, more hydro electricity is available for export. These exports displace coal and natural gas fuelled generation outside of Manitoba, which results in significant global reductions of greenhouse gases and other emissions. Therefore, the impact of Power Smart programs on global greenhouse gas emissions is quantified based on estimates of reduced coal and natural gas fuelled generation outside the province, and is measured in carbon dioxide equivalent emissions. Because the emission reductions do not occur at the site of the participating customer, these reductions are referred to as *indirect* emission reductions. Exhibit 4.1.5-A shows the equivalent reduction in carbon dioxide emissions resulting from Power Smart electric program activity to date.

Exhibit 4.1.5-A
Total Annual Indirect Greenhouse Gas Emission Reductions due to Electric Savings
thousands of tonnes of CO2e



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
DSM Support Programs savings	-	-	-	-	-	-	-	-	-	-	2	3	6	8	10	11	13	15	17	18	18	20
Codes & Standards	-	2	7	15	24	38	60	88	119	149	172	196	201	209	213	218	237	258	290	325	373	424
Self Generation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	89	63	70	59	64	52	61
Incentive based savings	45	56	95	144	199	246	271	345	387	398	424	439	444	474	512	539	604	676	760	839	915	1,027
Total	45	59	102	159	223	285	331	433	506	546	598	639	650	691	743	857	917	1,018	1,127	1,246	1,359	1,532

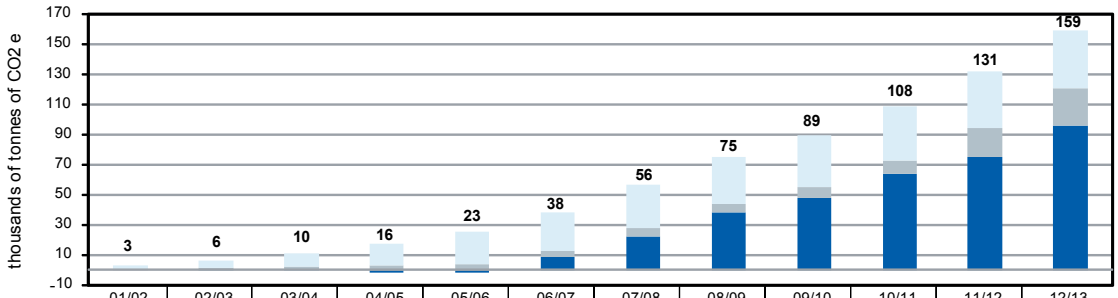
Note: Figures may not add due to rounding.

The 2,269 GW.h savings resulting from electric Power Smart program activity and codes and standards initiatives to date have displaced greenhouse gas emissions by nearly 1,532 thousand tonnes of carbon dioxide equivalent emissions. This is comparable to removing 306 thousand cars off the road for one full year.

Impact of Natural Gas Savings

Power Smart natural gas programs result in *direct* emission reductions at the location of the participating customer. The following chart displays direct greenhouse gas reductions resulting from lower natural gas consumption in Manitoba.

Exhibit 4.1.5-B
Total Annual Direct Greenhouse Gas Emission Reductions due to Natural Gas Savings
thousands of tonnes of CO2e



	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
DSM Support Programs savings	2	5	8	15	21	25	29	31	35	36	37	39
Codes & Standards	1	1	2	3	4	5	5	6	7	8	19	25
Incentive-based savings	0	0	0	-2	-2	8	22	38	48	64	75	95
Total	3	6	10	16	23	38	56	75	89	108	131	159

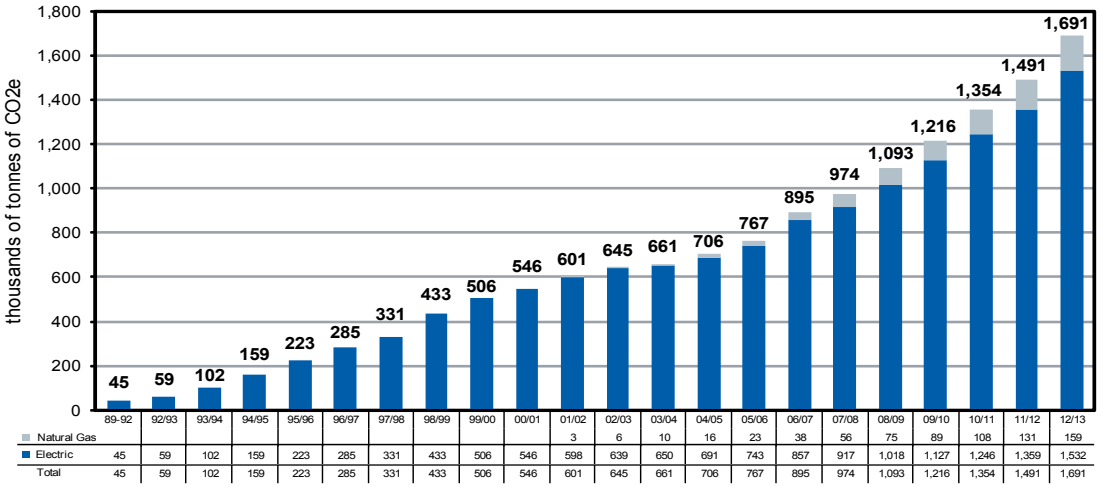
Note: Figures may not add due to rounding.

The 84 million cubic metres of reduced natural gas consumption (after interactive effects) from Power Smart programs to date has displaced approximately 159 thousand tonnes of greenhouse gas emissions. This is equivalent to removing 31 thousand vehicles off the road for one full year.

Combined Impact of Electricity and Natural Gas Savings

The following graph presents the greenhouse gas emission reductions that have resulted from all electric and natural gas Power Smart program activity to date.

Exhibit E.4.1.5-C
Total Annual Greenhouse Gas Emission Reductions
Due to Electric & Natural Gas Savings
thousands of tonnes of CO2e



	89-92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Natural Gas											3	6	10	16	23	38	56	75	89	108	131	159
Electric	45	59	102	159	223	285	331	433	506	546	598	639	650	691	743	857	917	1,018	1,127	1,246	1,359	1,532
Total	45	59	102	159	223	285	331	433	506	546	601	645	661	706	767	895	974	1,093	1,216	1,354	1,491	1,691

Note: Figures may not add due to rounding.

The 2,269 GW.h savings from electricity and 84 million cubic metres savings from natural gas Power Smart programs have resulted in greenhouse gas emission reductions of approximately 1,691 thousand tonnes of carbon dioxide equivalent emissions. This is comparable to removing nearly 338 thousand vehicles off the road for one full year.

4.2 DSM Support Programs & Cost-Recovery Programs

4.2.1 Annual Energy & Demand Savings from DSM Support Programs & Cost-Recovery Programs

Exhibits 4.2.1-A through 4.2.1-C provide an overview of the estimated electricity and natural gas savings achieved to 2012/13 through DSM support programs and cost-recovery programs, for those programs where energy savings can be reasonably measured or estimated using engineering calculations.

Exhibit 4.2.1 - A

Annual GW.h Savings - Electric DSM Support Programs & Cost-Recovery Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan^
RESIDENTIAL				
Power Smart Residential Loan	0.6	0.3	8.4	12.9
Residential Earth Power Loan	0.5	1.6	13.3	35.7
Power Smart Residential PAYS Program	0.0	0.5	0.0	9.1
ecoENERGY	-	-	0.8	0.8
	1.1	2.4	22.5	58.5
COMMERCIAL				
Power Smart for Business PAYS Program	-	-	-	2.1
	-	-	-	2.1
DISCONTINUED/COMPLETED PROGRAMS	-	0.0	3.0	2.4
	-	0.0	3.0	2.4
TOTAL (at customer meter)	1.1	2.5	25.5	63.0
TOTAL (at generation)	1.3	2.8	29.1	71.8

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

Exhibit 4.2.1 - B

Average Winter MW Savings - Electric DSM Support Programs & Cost-Recovery Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan^
RESIDENTIAL				
Power Smart Residential Loan	0.3	0.2	4.7	7.1
Residential Earth Power Loan	0.1	0.4	3.9	9.0
Power Smart Residential PAYS Program	0.0	0.2	0.0	4.6
ecoENERGY	-	-	-	-
	0.4	0.8	8.6	20.7
COMMERCIAL				
Power Smart for Business PAYS Program	-	0.0	-	0.6
	-	-	-	0.6
DISCONTINUED/COMPLETED PROGRAMS	-	-	0.2	0.2
	-	-	0.2	0.2
TOTAL (at customer meter)	0.4	0.8	8.8	21.5
TOTAL (at generation)	0.5	0.9	10.0	24.5

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

Exhibit 4.2.1 - C

Annual m^3 Savings - Natural Gas DSM Support Programs & Cost-Recovery Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan^
RESIDENTIAL				
Residential Earth Power Loan	0.3	0.1	2.7	4.0
Power Smart Residential Loan	0.3	0.3	14.9	19.7
Power Smart Residential PAYS Program	(0.0)	0.1	(0.0)	3.4
ecoENERGY	-	-	2.3	2.3
	0.6	0.5	19.9	29.4
COMMERCIAL				
Power Smart for Business PAYS Program	-	0.0	-	0.1
	-	0.0	-	0.1
DISCONTINUED/COMPLETED PROGRAMS	-	-	0.3	0.4
	-	-	0.3	0.4
TOTAL	0.6	0.5	20.3	29.9

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.

4.3 Energy Efficiency Codes & Standards

In addition to DSM activities, some utilities, including Manitoba Hydro, are actively involved in a number of provincial and national committees. These committees work with governments and equipment manufacturers to gain acceptance of higher efficiency levels for various technologies, and to encourage adoption of energy efficiency standards and regulations.

Manitoba Hydro prepares an annual forecast of the expected influence of codes and standards, and since 1995, this forecast has been used to adjust Manitoba Hydro's system load forecast.

In many cases, legislation and regulations are the most effective and permanent form of market transformation, as it ensures customers do not revert to less efficient technologies/practices once the incentives and/or promotional activities are discontinued. Traditionally, changing legislation can be complex when faced with lack of market acceptance. These changes impact building design and construction, as well as industry manufacturing processes, and therefore do not always receive strong industry support without preceding market intervention (i.e. legislation and regulations).

4.3.1 National Activities

Manitoba Hydro is a key player on the CSA Strategic Steering Committee on Performance, Energy Efficiency and Renewables (SCOPEER). This committee is responsible for changes to national performance standards and legislation which have resulted in the improvement of energy utilization of numerous appliances and technologies. For example, as a result of SCOPEER working with Canadian manufacturers, refrigerator manufacturers now market products which exceed the current minimum efficiency standards for inter-provincial exporting.

Beginning in September 2005, Manitoba Hydro chaired the newly-created Manitoba Energy Code Advisory Committee which was tasked to provide recommendations for the adoption, development and implementation of energy efficiency requirements for all new commercial construction (i.e. new buildings, additions to existing buildings and major renovations of existing buildings) in Manitoba. In the report *"Building Energy, Building Leadership"*, the Committee recommended Manitoba adopt the Model National Energy Code for Buildings (MNECB) in the following three stages: (1) Adopt the MNECB (1997) as a regulation under The Buildings and Mobile Homes Act, (2) Develop and adopt Manitoba Amendments to the MNECB by January 1st, 2009, and (3) Support and participate in a national initiative to update the MNECB.

The Committee recommended that Manitoba adopt the energy code as a regulation under The Buildings and Mobile Homes Act, rather than as a regulation under The Energy Act because The Buildings and Mobile Homes Act supersedes all other provincial legislation with respect to requirements for buildings.

Further supporting the development of energy codes for buildings, Manitoba Hydro is a former chair of the Building Energy Codes Collaborative (BECC). BECC is a federal/provincial/territorial committee supported by the Council of Energy Ministers, the Assistant Deputy Minister Steering Committee on Energy Efficiency (ASCEE) and Natural Resources Canada. It consists of representatives from both the code ministries and the energy ministries of provinces and territories working together to advance energy efficiency in building codes. In 2007, BECC was successful in securing the political and financial support necessary to convince the Canadian Commission on Building and Fire Codes to update the MNECB. In November 2011, after years of work with a nationally represented committee, the revised document entitled, *"2011 National Energy Code of Canada for Buildings"*, was published. Currently, Manitoba, Ontario, Quebec and British Columbia are recognized as the most active and have made the most progress with respect to implementing energy efficiency requirements in buildings.

4.3.2 Provincial Activities

Initially, a building code for residential homes was proposed by the Federal Government and was to be adopted by the Province of Manitoba in 1997. Due to a decline in new house starts and the perceived impact on building costs of a proposed Model National Energy Code for Houses (MNECH), it was anticipated that members of the new home construction industry would be reluctant to support the proposed MNECH. Recognizing this, Manitoba Hydro initiated and sponsored amendments to the insulation tables for new houses in the Manitoba building code as an interim measure to improve upon eroding insulation practices throughout Manitoba. The interim measures improved insulation practices in new housing north of the 53rd parallel. As anticipated, the MNECH was not adopted; however, Manitoba Hydro's amendments were introduced in Manitoba in November 1998 with the support of the new home construction industry.

In July 2006, the requirements under insulation tables for new houses in the Manitoba Building Code were simplified. Manitoba Hydro played a key role in ensuring that efficiency requirements were not significantly diluted. As a result, Manitoba's minimum requirements for insulation in new homes are the highest in Canada.

In September 2007, Manitoba Hydro presented research on the life cycle benefits of improved basement insulation to homeowners, and successfully convinced the Building Standards Board of Manitoba to request R20 in foundation walls for all homes in Manitoba.

As of January 1st, 2010, The Manitoba Energy Act regulations state that all natural gas furnaces sold in Manitoba must be at least 92% annual fuel utilization efficiency (AFUE). Meanwhile, federal regulations require a minimum efficiency of only 90%. As a result, Manitoba Hydro's Natural Gas Furnace Program has had a direct impact on market transformation in Manitoba. For this reason, the additional 2% in energy savings relative to the federal regulations have been claimed from all furnaces sold in Manitoba's residential and commercial market from January 1st, 2010 forward.

Manitoba Hydro's most recent involvement with provincial codes was with the Manitoba amendments made to Part 9 (Residential) of the Building Code that came into effect December 1st, 2010. The amendments stipulated minimum performance requirements for newly-constructed homes in the areas of insulation, windows, heating systems and plumbing fixtures. Manitoba Hydro played a key role in developing the recommendations through technical review of proposed efficiency levels, and perhaps even more critically, through preparing the industry for accepting the code recommendations by offering the Power Smart New Home Program. With the final approved efficiency levels consisting largely of the technologies which made up the Power Smart Gold standard, testament can be given to the importance of voluntary incentive-based programs in accelerating market acceptance and penetration of energy efficient technologies, thereby making the transition to building codes more seamless. With enforcement occurring for all building permits issued after December 1st, 2010, savings related to the code amendment have been realized since 2011/12.

4.3.3 Annual Energy & Demand Savings Resulting from Energy Efficiency Codes & Standards

The following section outlines the estimated energy and demand savings resulting from codes and standards improvements in the Manitoba marketplace.

Savings resulting from future codes and standards are included in targeted cost-effectiveness metrics. However, savings due to codes and standards are not included in the calculation of cost-effectiveness metrics based on actual activity (i.e. savings due to codes and standards are not included in the Power Smart Annual Review metrics).

Exhibit 4.3.3-A

Savings Resulting from Energy Efficiency Codes & Standards

CODE CATEGORY & COMPONENTS	CODE & MANITOBA HYDRO'S INFLUENCE	SAVINGS (AT METER) 2012/13		Cumulative	
Residential Insulation	-Manitoba Building Code Regulation 4/2008 (Oct. 2008) increased minimum required level of insulation from R12 to R20	3.5	GW.h	22.5	GW.h
		1.9	MW	10.4	MW
		339,114	m^3	1,403,731	m^3
Residential Appliances: Ranges, dishwashers, clothes washers, clothes dryers, refrigerators, freezers	-Member of Strategic Steering Committee on Performance, Energy Efficiency & Renewables (SCOPEER) -Savings based on Energy Star efficiency improvements	24.6	GW.h	337.3	GW.h
		3.7	MW	69.8	MW
		220,167	m^3	3,847,338	m^3
Other Residential Equipment: Central air conditioning, electric hot water tanks, furnaces, attic insulation, windows, HRVs, efficient shower heads	-CSA Standard C191-00 (July 2004) for electric hot water tanks -CSA Standard C656-05 (Nov. 2006) for central air conditioning -Mb Energy Act (Dec. 2009) states furnaces must be ≥92% AFUE (≥94% AFUE for new homes, 2010) -Manitoba Building Code Regulation 142/2010 (Dec. 2010) increased attic insulation from R40 to R50, and specified level of windows, HRVs and efficient shower heads -Manitoba Plumbing Code Regulation 32/2011 (March 2011)	22.3	GW.h	52.6	GW.h
		7.3	MW	14.1	MW
		2,676,690	m^3	7,580,523	m^3
Commercial Lighting: T12 lamps, LED exit signs, fluorescent ballasts	-Member of Strategic Lighting Initiative Committee (SLIC), etc. -National Energy Efficiency Act (1996): Increased min. efficiency requirement of T12 lamps from 40 to 34 watts -National Energy Efficiency Act (Nov. 2004): Min. efficiency requirements only met by LED exit signs -National Energy Efficiency Act (Nov. 2006): Increased min. efficiency requirement of fluorescent ballasts (new construction) -National Energy Efficiency Act (April 2010): Increased min. efficiency requirement of fluorescent ballasts (renovation)	15.2	GW.h	122.9	GW.h
		4.2	MW	34.4	MW
		-	m^3	-	m^3
Other Commercial Equipment: Furnaces	-MB Energy Act (Dec. 2009) states furnaces must be ≥92% AFUE -Text for spray valves to be added	-	GW.h	-	GW.h
		-	MW	-	MW
		123,018	m^3	397,578	m^3
Industrial Equipment: High Efficiency Motors	-Member of Coordinated Utilities Approach (CUA) -Oct. 1997 code change (min. efficiency increased to 82.5-95.0%) -Last year of claimed savings was 2006/07	-	GW.h	16.2	GW.h
		-	MW	2.8	MW
		-	m^3	-	m^3
TOTAL		65.6	GW.h	551.5	GW.h
		17.0	MW	131.6	MW
		3,358,989	m^3	13,229,170	m^3

In 2012/13 alone, as a result of efforts to achieve energy savings through energy efficient codes and standards, approximately 66 GW.h and 17 MW of electric savings (at meter), and 3 million cubic metres of natural gas savings were achieved. This resulted in nearly 57 thousand tonnes of greenhouse gas emission reductions. Cumulatively, it is estimated that 552 GW.h and 132 MW of electric savings (at meter), and 13 million cubic metres of natural gas savings were achieved as a result of energy efficient, resulting in 449 thousand tonnes of greenhouse gas emission reductions in 2012/13.

Exhibit 4.3.3 - B
Cumulative GW.h Savings Achieved
(at Meter)

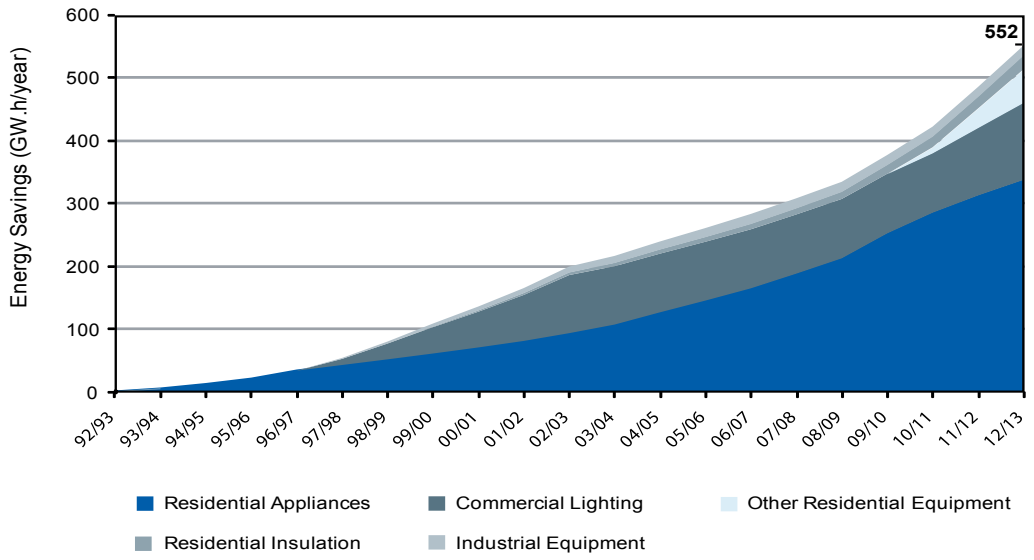


Exhibit 4.3.3- C
Cumulative MW Savings Achieved
(at Meter)

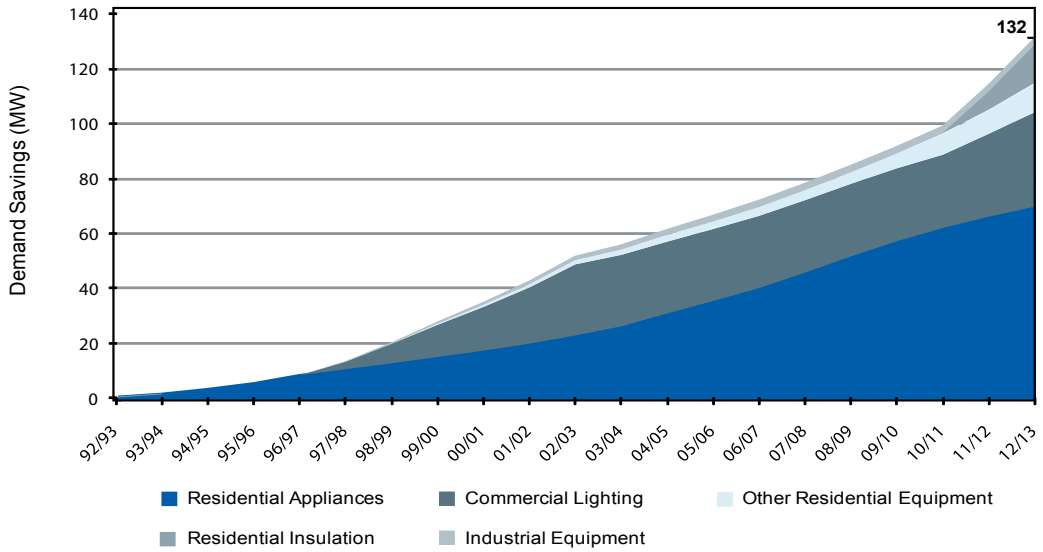
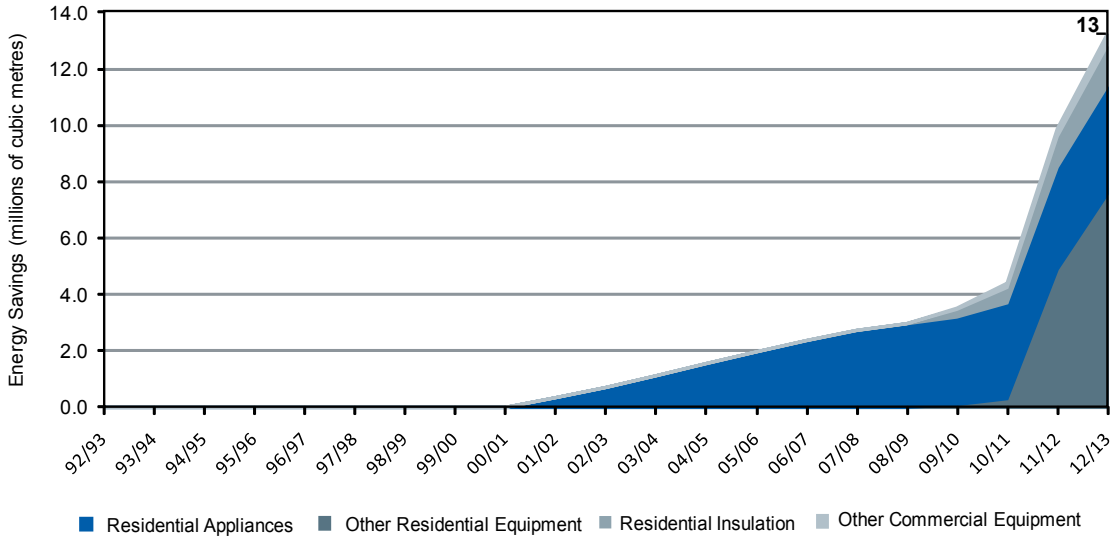


Exhibit 4.3.3 -D
Efficiency Codes & Standards
Cumulative Natural Gas Savings Achieved



Because there are many participants (utilities, governments, manufacturers, environmental groups, etc.) contributing to the formation of energy efficiency codes and standards, it is difficult to allocate specific credit for energy and demand savings among the various participants. For this reason, Manitoba Hydro only reports the estimated savings resulting from changes to energy efficiency codes and standards. In the Power Smart Annual Review, the estimated savings from codes and standards are not included in the calculation of cost effectiveness Power Smart metrics.

4.4 Incentive-Based Power Smart Programs

Power Smart incentive-based programs are designed to accelerate market awareness and acceptance of energy efficient technologies and practices.

4.4.1 Power Smart Electric Program Results

The following sections outline the Power Smart program results in terms of electric energy and demand savings and benefit/cost analyses.

4.4.1.1 Annual Energy Savings

Electric energy savings achieved by incentive-based Power Smart programs in 2012/13 is displayed by sector and program in Exhibits 4.4.1.1-A and B respectively.

Exhibit 4.4.1.1-B also provides cumulative electric energy savings achieved by incentive-based Power Smart programs.

Exhibit 4.4.1.1 -A
Percentage of Annual GW.h Savings
Electric Incentive-Based Programs

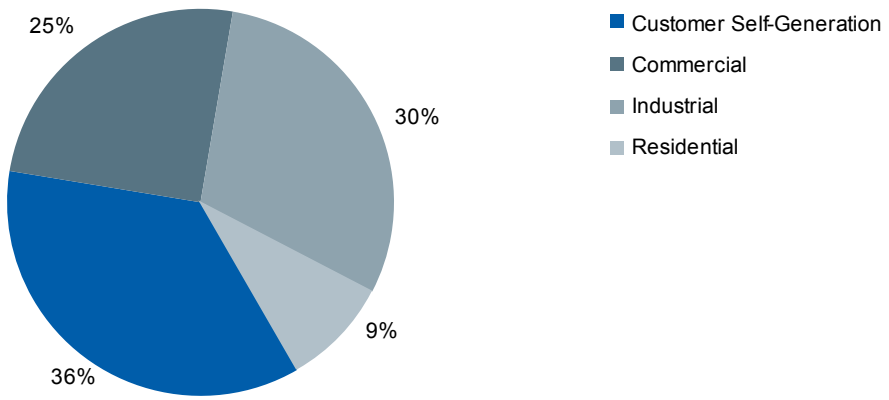


Exhibit 4.4.1.1 - B

Annual GW.h Savings - Electric Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan^
RESIDENTIAL				
Refrigerator Retirement	8.6	15.2	19.6	9.2
Home Insulation	6.2	3.4	44.9	52.6
Water & Energy Saver	3.1	2.9	12.6	19.3
Affordable Energy Program	2.8	2.5	9.3	13.7
Residential Discontinued/Completed Programs	-	-	157.2	151.9
	20.8	24.0	243.5	246.7
COMMERCIAL				
Commercial Lighting	27.8	23.2	309.0	472.7
Commercial Refrigeration	12.5	1.2	21.2	34.2
Commercial Building Envelope	5.2	4.1	29.5	50.9
Commercial New Buildings	4.1	7.0	6.4	90.4
Commercial Earth Power	2.1	1.6	29.9	52.9
Internal Retrofit	1.6	0.9	55.2	37.4
Commercial HVAC - Chillers & CO2 Sensors	1.2	1.2	9.5	16.6
Commercial Custom Measures	0.8	0.9	21.0	34.4
Commercial Clothes Washers	0.1	0.1	0.6	1.1
City of Winnipeg Power Smart Agreement	0.1	0.4	11.6	11.6
Commercial Building Optimization	0.1	1.0	1.0	20.3
Commercial Kitchen Appliances	0.0	0.1	0.7	1.3
Commercial Network Energy Management	-	1.0	0.2	0.2
Commercial Discontinued/Completed Programs	1.8	4.1	116.1	125.9
	57.6	46.8	611.9	949.8
INDUSTRIAL				
Performance Optimization	68.7	12.9	441.8	566.6
Emergency Preparedness	-	-	-	-
Industrial Discontinued/Completed Programs	-	-	54.5	54.5
	68.7	12.9	496.3	621.1
EFFICIENCY PROGRAMS SUBTOTAL	147.1	83.7	1,351.7	1,817.5
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	82.5	8.5	82.5	142.2
	82.5	8.5	82.5	142.2
TOTAL (at customer meter)	229.5	92.2	1,434.3	1,959.7
TOTAL (at generation)	255.6	104.3	1,611.9	2,203.6

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.
Free driver participation is included in the above figures.

In 2012/13 alone, Power Smart electric incentive-based programs, including both efficiency-based programs and customer self-generation, surpassed plan by 137.3 GW.h. Efficiency-based programs were 63.4 GW.h and customer self-generation was 73.9 GW.h greater than planned.

The variances within Power Smart electric incentive-based programs in 2012/13 are highlighted below:

Residential:

The residential sector, which accounted for 9% of total GW.h savings in 2012/13, contributed 20.8 GW.h, falling short of its planned savings by 3.3 GW.h.

- The Refrigerator Retirement Program achieved 8.6 GW.h of savings, below target by 6.5 GW.h or 43%. This negative variance is the result of less participation than anticipated. Targets were based on a $50 incentive, however, a $40 incentive was approved by management. The lower incentive amount likely decreased participation levels, resulting in lower overall savings.
- The Home Insulation Program saved 6.2 GW.h, 2.7 GW.h or 79% more than planned. The positive variance is the result of greater participation on the electric side of the program due to a deadline extension for ecoENERGY post-verifications. Also, the planned product mix did not include some of the higher-savings upgrades completed under the program.

Commercial:

The commercial sector, which accounted for 25% of savings in 2012/13, contributed 57.6 GW.h of savings, 10.8 GW.h more than planned.

- The Commercial Lighting Program achieved savings of 27.8 GW.h, or 20% more than anticipated despite slightly lower participation levels than planned. This is a result of differences between planned and actual product mixes and project sizes.
- The Commercial Refrigeration Program achieved savings of 12.5 GW.h, greatly exceeding planned savings of 1.2 GW.h. The positive variance was the result of an unanticipated increase in sales, largely due to a new entrant in the market.
- The Commercial New Building Program achieved savings of 4.1 GW.h, falling short of plan by 2.8 GW.h or 40%. The negative variance is mainly due to the program's assumption that buildings constructed in natural gas territory heat with natural gas. In actuality, these buildings heat with either natural gas or electricity. By using a natural gas base case, the program has over-claimed natural gas savings and under-claimed electric savings.

Industrial:

- The industrial sector account for 30% of total GW.h savings in 2012/13, with 68.7 GW.h resulting from the Performance Optimization Program. Energy savings for the Performance Optimization Program was 55.8 GW.h more than planned due to greater per project savings than anticipated. In particular, Canexus Ltd. who uses an energy-intensive process and claimed over 52 GW.h in savings.

Customer Self-Generation:

- The Bioenergy Optimization Program accounted for 36% of total GW.h savings in 2012/13. The program achieved 82.5 GW.h of savings, 73.9 GW.h above plan due to greater than expected savings resulting from Hutterite projects.

4.4.1.2 Average Winter Peak Demand Savings

Demand savings achieved by electric incentive-based Power Smart programs in 2012/13 is displayed by sector and program in Exhibits 4.4.1.2-A and B respectively. Exhibit 4.4.1.2-B also provides cumulative demand savings achieved by electric incentive-based Power Smart programs. The demand savings are presented as an average of the winter AM and PM system peak savings.

Exhibit 4.4.1.2-A
Percentage of Average Winter MW Savings
Electric Incentive-Based Programs

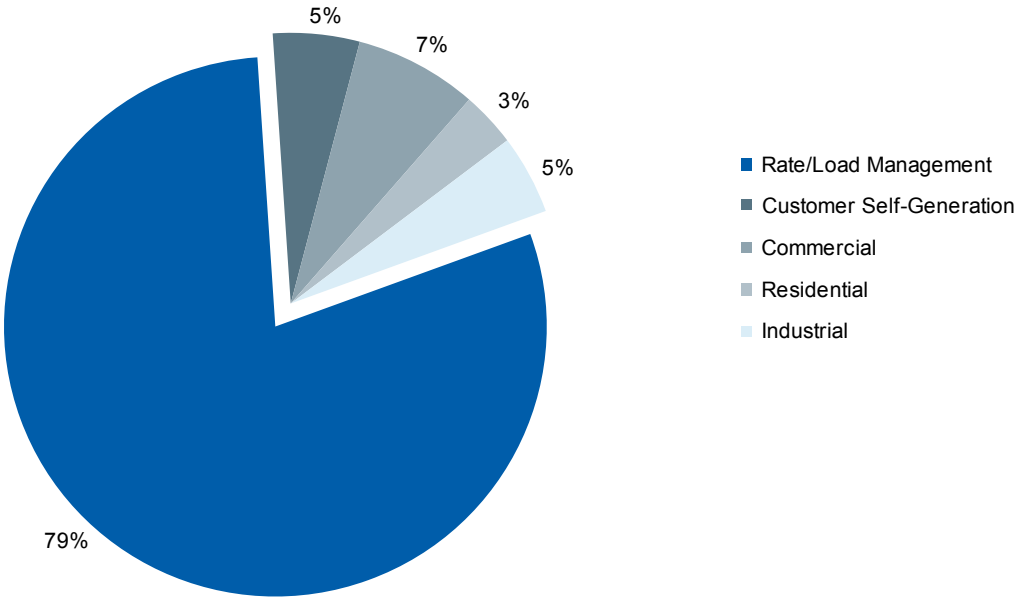


Exhibit 4.4.1.2 - B

Average Winter MW Savings - Electric Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan ^
RESIDENTIAL				
Home Insulation	3.3	1.8	22.1	26.4
Affordable Energy Program	1.1	1.0	4.1	5.6
Refrigerator Retirement	1.0	1.7	1.7	0.8
Water & Energy Saver	0.6	0.6	2.0	3.0
Residential Discontinued/Completed Programs	-	-	28.6	27.2
	6.0	5.1	58.4	62.9
COMMERCIAL				
Commercial Lighting	7.7	6.4	56.5	103.2
Commercial Building Envelope	2.0	1.6	13.1	21.4
Commercial Refrigeration	1.4	0.1	3.5	5.0
New Buildings Program	1.1	1.8	1.5	23.8
Commercial Earth Power	0.5	0.4	12.4	17.9
Internal Retrofit	0.2	0.1	11.9	8.4
Commercial Clothes Washers	0.1	0.1	0.4	0.7
City of Winnipeg Power Smart Agreement	0.0	0.1	2.6	2.6
Commercial HVAC - Chillers & CO2 Sensors	0.0	0.1	0.0	0.5
Commercial Building Optimization	0.0	0.2	0.0	3.9
Commercial Kitchen Appliances	0.0	0.0	0.2	0.4
Commercial Network Energy Management	0.0	0.4	0.0	0.0
Commercial Custom Measures	-	0.2	1.7	5.4
Commercial Discontinued/Completed Programs	0.2	0.2	15.4	16.0
	13.3	11.8	119.3	209.3
INDUSTRIAL				
Performance Optimization	8.6	2.0	87.6	109.1
Emergency Preparedness	-	-	-	-
Industrial Discontinued/Completed Programs	-	-	8.2	8.2
	8.6	2.0	95.7	117.3
EFFICIENCY PROGRAMS SUBTOTAL	28.0	18.9	273.4	389.5
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	9.4	1.0	9.4	22.5
	9.4	1.0	9.4	22.5
RATE/LOAD MANAGEMENT PROGRAMS				
Curtailable Rates	144.8	146.4	144.8	295.0
	144.8	146.4	144.8	295.0
TOTAL (at customer meter)	182.1	166.3	427.6	707.0
TOTAL (at generation)	201.1	183.6	477.5	788.6

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.
Free driver participation is included in the above figures.

In 2012/13 alone, Power Smart electric incentive-based programs, including both efficiency-based and customer self-generation programs, exceeded plan by 15.8 MW. By far, the greatest contributor of demand savings was the Curtailable Rates Program, which accounted for 79% of total MW savings.

The variances within Power Smart electric incentive-based programs in 2012/13 are highlighted below:

Residential:

The residential sector, which accounted for 3% of total demand savings in 2012/13, contributed 6.0 MW, exceeding its planned savings by 0.9 MW.

- The Home Insulation Program exceeded planned demand savings by 1.5 MW or 79%. The positive variance is the result of greater participation than anticipated, due to a deadline extension for ecoENERGY post-verification. Also, the planned product mix did not include some of the higher-savings upgrades completed under the program.
- The Refrigerator Retirement Program fell short of planned savings by 0.7 MW or 43%. This negative variance is the result of less participation than anticipated. Planned participation targets were based on a $50 incentive; however, the approved program offered a $40 incentive. The lower incentive amount likely led to decreased participation levels which resulted in lower overall demand savings.

Commercial:

The commercial sector, which accounted for 7% of total demand savings in 2012/13, contributed 13.3 MW of savings, 1.5 MW above target.

- The Commercial Lighting Program achieved 7.7 MW of demand savings, exceeding its planned demand savings of 6.4 MW despite slightly lower participation than anticipated. This is a result of differences between planned and actual product mixes and project sizes.
- The Commercial Refrigeration Program achieved savings of 1.4 MW, exceeding targets by 1.3 MW. The positive variance was the result of an unanticipated increase in sales, largely due to a new entrant in the market.

Industrial:

- The industrial sector accounted for 5% of total demand savings in 2012/13, with 8.6 MW resulting from the Performance Optimization Program. Demand savings for the Performance Optimization Program were 6.6 MW greater than planned due to greater per project savings than anticipated, largely due to Canexus Ltd.

Customer Self-Generation:

- The Bioenergy Optimization Program contributed 9.4 MW in total demand savings, surpassing plan by 8.4 MW. Due to higher than anticipated savings resulting from Hutterite projects, demand savings were greater than planned.

Rate/Load Management:

- The Curtailable Rates Program, which accounted for 79% of total demand savings in 2012/13, contributed 144.8 MW of savings, 1.7 MW less than planned. For further details, please see APPENDIX E - "Curtailable Rates Program Information & Methodology".

4.4.1.3 Electric Total Resource Cost - Benefit/Cost Analysis

Exhibits 4.4.1.3-A and B show the electric benefit/cost analysis results under the total resource cost (TRC) metric by program. The calculation of the benefit/cost ratio was based on a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness.

Exhibit 4.4.1.3-A
2012/13 TRC- Electric Incentive-Based Programs

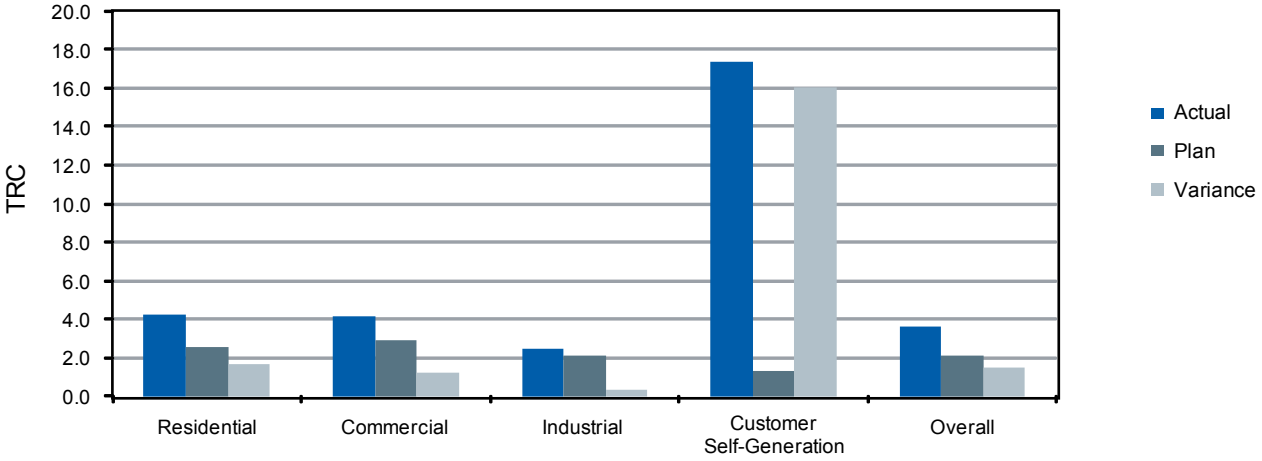


Exhibit 4.4.1.3 - B

Total Resource Cost Benefit/Cost Analysis - Electric Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^^	Total**	2026/27 Plan^^
		TRC		
RESIDENTIAL				
Water & Energy Saver †	18.1	4.8	18.8	4.6
Home Insulation	6.2	4.7	5.0	5.1
Affordable Energy Program* †	2.5	1.5	1.7	1.6
Refrigerator Retirement	1.5	1.8	2.1	1.9
	4.2	2.5	4.2	2.9
COMMERCIAL				
Commercial New Buildings	21.4	4.7	6.8	8.1
Commercial Building Envelope	5.9	4.7	4.9	4.0
City of Winnipeg Power Smart AgreementØ	5.8	10.3	1.2	10.3
Commercial Refrigeration	5.4	1.8	4.0	2.6
Commercial Lighting	3.7	2.5	2.6	2.6
Commercial Kitchen Appliances †	3.1	13.4	4.7	20.7
Commercial Earth Power	3.0	1.7	2.0	1.7
Commercial HVAC	3.0	3.8	2.0	4.5
Internal Retrofit	2.1	1.7	2.0	1.6
Commercial Clothes Washers †	1.1	1.8	1.4	3.7
Commercial Custom Measures	1.0	1.8	1.7	2.0
Commercial Building Optimization	0.5	3.7	0.6	5.1
Commercial Network Energy Management	-	1.6	0.2	2.0
	4.1	2.9	2.5	3.2
INDUSTRIAL				
Performance Optimization	2.5	2.1	3.3	2.7
	2.5	2.1	3.3	2.7
DISCONTINUED/COMPLETED PROGRAMS †	18.7	5.4	2.8	8.8
	18.7	5.4	2.8	8.8
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	17.4	1.3	2.2	1.6
	17.4	1.3	2.2	1.6
OVERALL: PROGRAM COSTS	4.0	2.5	2.8	2.9
OVERALL: PROGRAM COSTS + SUPPORT COSTS^	3.6	2.1	2.4	2.3

* Includes all Affordable Energy Fund expenditures and external funding.
** "Total" values represent the results of the program/portfolio since its inception.
Ø Includes the present value of projected future commitment payment receipts.
† Includes water savings benefits.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Free driver participation is included in the above figures.

4.4.1.4 Electric Rate Impact Measure- Benefit/Cost Analysis

Exhibits 4.4.1.4-A and B identify the electric benefit/cost ratios under the rate impact measure (RIM) metric by program. The calculation of the benefit/cost ratio is based on a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness.

Exhibit 4.4.1.4 - A
2012/13 RIM - Electric Incentive-Based Programs

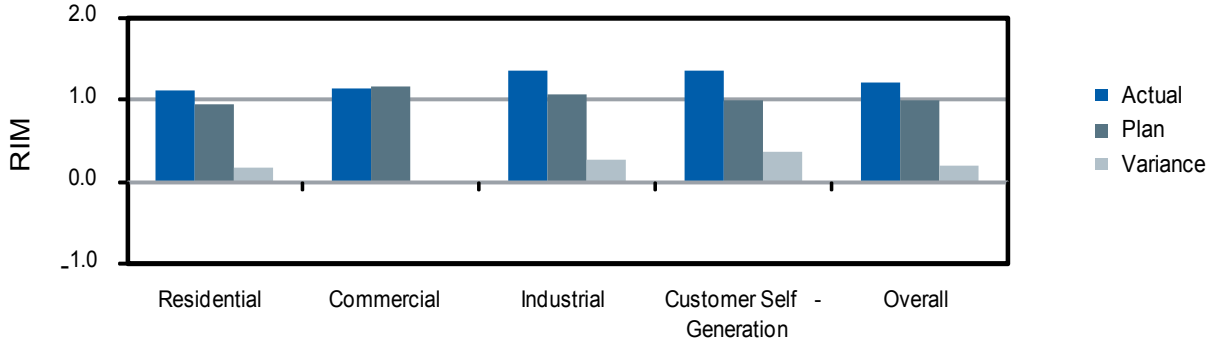


Exhibit 4.4.1.4 - B

Rate Impact Cost Benefit/Cost Analysis - Electric Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^^	Total*	2026/27 Plan^^
		RIM		
RESIDENTIAL				
Home Insulation	1.5	1.4	1.6	1.5
Affordable Energy Program**	1.1	1.0	0.9	1.1
Water & Energy Saver	0.9	0.8	1.0	0.9
Refrigerator Retirement	0.7	0.7	0.7	0.7
	1.1	0.9	1.3	1.1
COMMERCIAL				
Internal Retrofit	2.1	1.7	2.0	1.6
Commercial New Buildings	1.8	1.6	1.5	1.7
Commercial Earth Power	1.4	1.3	1.7	1.3
Commercial Building Envelope	1.4	1.4	1.5	1.3
Commercial Refrigeration	1.2	0.9	1.2	1.1
Commercial Custom Measures	1.1	1.3	1.3	1.4
City of Winnipeg Power Smart AgreementØ	1.0	1.2	0.7	1.2
Commercial Lighting	1.0	1.0	1.1	1.0
Commercial Clothes Washers	1.0	0.9	1.1	1.3
Commercial HVAC	0.9	0.9	1.0	0.9
Commercial Kitchen Appliances	0.7	0.9	1.0	1.6
Commercial Building Optimization	0.4	1.1	0.5	1.3
Commercial Network Energy Management	-	0.9	0.2	1.2
	1.1	1.2	1.2	1.2
INDUSTRIAL				
Performance Optimization	1.4	1.1	1.3	1.3
	1.4	1.1	1.3	1.3
DISCONTINUED/COMPLETED PROGRAMS	1.3	1.2	0.9	1.3
	1.3	1.2	0.9	1.3
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	1.4	1.0	1.3	1.2
	1.4	1.0	1.3	1.2
OVERALL PROGRAM COSTS	1.3	1.1	1.2	1.2
OVERALL PROGRAM COSTS + SUPPORT COSTS^	1.2	1.0	1.1	1.1

* "Total" values represent the results of the program/portfolio since its inception.
** Includes all Affordable Energy Fund expenditures, excluding external funding.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Ø Includes the present value of projected future commitment payment receipts.
Note: Benefit/Cost analysis is not calculated for rate/load management programs.
Free driver participation is included in the above figures.

4.4.1.5 Electric Average Levelized Utility Cost - ¢/kW.h Saved

Exhibits 4.4.1.5-A and B highlight the average levelized utility cost of 2012/13 electric incentive-based programs in ¢/kW.h saved. The calculation of ¢/kW.h saved is based upon current program kW.h savings at generation over a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness. The utility costs presented do not include costs associated with DSM support programs, standards activities or the customer costs of DSM measures.

Exhibit 4.4.1.5-A
2012/13 Average Levelized Utility Cost
Electric Incentive-Based Programs
at generation

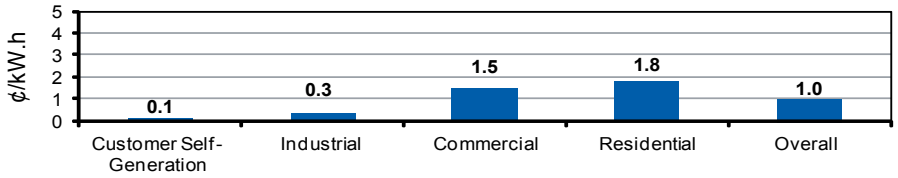


Exhibit 4.4.1.5 - B

Average Levelized Utility Cost at Generation - ¢/kW.h Saved by Power Smart Programs

	2012/13 Actual	2012/13 Total**	2026/27 Plan^^
		LUC (¢/kW.h)	
RESIDENTIAL			
Affordable Energy Program*	2.8	4.8	3.4
Refrigerator Retirement	2.0	1.6	1.6
Water & Energy Saver	1.5	1.1	2.4
Home Insulation	1.3	2.3	1.9
Discontinued/Completed Programs	8.6	1.4	-
	1.8	1.7	2.1
COMMERCIAL			
Commercial Building Optimization	10.8	5.4	1.1
Commercial Kitchen Appliances	5.3	3.6	1.3
Commercial Clothes Washer	4.3	7.6	1.6
Internal Retrofit	3.2	3.7	4.1
Commercial Lighting	2.3	1.6	2.5
City of Winnipeg Power Smart Agreement	2.0	8.4	0.7
Commercial Building Envelope	1.8	2.1	2.3
Commercial Earth Power	0.9	1.3	1.5
Commercial HVAC	0.8	1.4	1.1
Commercial Custom Measures	0.5	0.9	2.0
Commercial Refrigeration	0.4	1.0	1.5
Commercial New Buildings	0.2	1.2	0.5
Discontinued/Completed Programs	0.0	1.0	1.5
Commercial Network Energy Management	-	23.8	1.5
	1.5	1.8	1.7
INDUSTRIAL			
Performance Optimization	0.3	0.4	1.5
Discontinued/Completed Programs	-	1.3	-
	0.3	0.7	1.5
CUSTOMER SELF-GENERATION PROGRAMS			
Bioenergy Optimization	0.1	1.0	1.6
	0.1	1.0	1.6
OVERALL: PROGRAM COSTS	0.8	1.2	1.7
OVERALL: PROGRAM COSTS + SUPPORT COSTS^	1.0	1.7	2.4

* Includes all Affordable Energy Fund expenditures, excluding external funding.
** "Total" values represent the results of the program/portfolio since its inception.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Average levelized utility cost analysis is not provided for rate/load management programs.
Free driver participation is included in the above figures.

4.4.1.6 Electric Levelized Resource Cost- ¢/kW.h Saved

Exhibits 4.4.1.6-A and B highlight the average levelized resource cost of 2012/13 electric incentive-based programs in ¢/kW.h saved. The calculation of ¢/kW.h saved is based upon current program kW.h savings at generation over a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness. The resource costs presented do not include costs associated with DSM support programs or standards activities, however they do include DSM measures.

Exhibit 4.4.1.6-A
2012/13 Average Levelized Resource Cost at generation

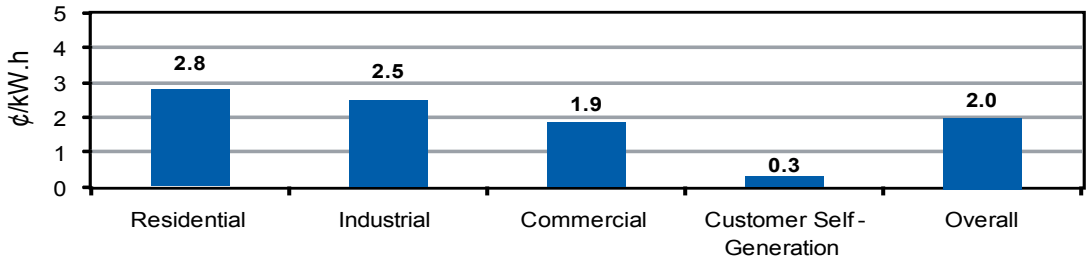


Exhibit 4.4.1.6 - B

Average Levelized Resource Cost at Generation - ¢/kW.h Saved by Power Smart Programs

	2012/13 Actual	2012/13 Total**	2026/27 Plan^^
		LRC(¢/kW.h)	
RESIDENTIAL			
Affordable Energy Program*	4.3	8.5	6.9
Refrigerator Retirement	3.7	2.8	3.1
Home Insulation	2.0	2.9	2.6
Water & Energy Saver	1.4	1.1	2.3
	2.8	3.2	3.4
COMMERCIAL			
Commercial Clothes Washers	20.7	23.7	4.5
Commercial Building Optimization	12.2	9.4	1.7
Commercial Kitchen Appliances	9.0	4.5	1.9
Commercial Custom Measures	5.4	3.4	4.9
Internal Retrofit	3.2	3.7	4.1
Commercial Earth Power	2.8	5.6	5.5
Commercial Lighting	2.3	2.5	3.6
Commercial Building Envelope	1.7	2.9	2.8
City of Winnipeg Power Smart Agreement	1.5	8.4	0.8
Commercial HVAC	1.4	2.6	1.4
Commercial Refrigeration	1.1	2.0	2.8
Commercial New Buildings	0.4	1.4	1.2
Commercial Network Energy Management	0.0	23.7	4.7
	1.9	3.0	3.0
INDUSTRIAL			
Performance Optimization	2.5	1.8	3.0
	2.5	1.8	3.0
CUSTOMER SELF-GENERATION PROGRAMS			
Bioenergy Optimization	0.3	3.1	4.2
	0.3	3.1	4.2
DISCONTINUED/COMPLETED PROGRAMS	0.3	2.2	0.7
OVERALL: PROGRAM COSTS	1.8	2.4	3.1
OVERALL: PROGRAM COSTS + SUPPORT COSTS^	2.0	2.9	3.8

* Includes all Affordable Energy Fund expenditures, excluding external funding.
** "Total" values represent the results of the program/portfolio since its inception.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Average levelized resource cost analysis is not provided for rate/load management programs.
Free driver participation is included in the above figures.

4.4.2 Power Smart Natural Gas Program Results

The following sections outline the Power Smart program results in terms of natural gas energy savings, and benefit/cost analyses.

4.4.2.1 Annual Natural Gas Energy Savings

Natural gas energy savings achieved by incentive-based Power Smart programs in 2012/13 is displayed by sector and program in Exhibits 4.4.2.1-A and B respectively.

Exhibit 4.4.2.1-B also provides cumulative natural gas energy savings achieved by incentive-based Power Smart programs.

Exhibit 4.4.2.1-A
Percentage of Annual Natural Gas Savings
Incentive Based Programs

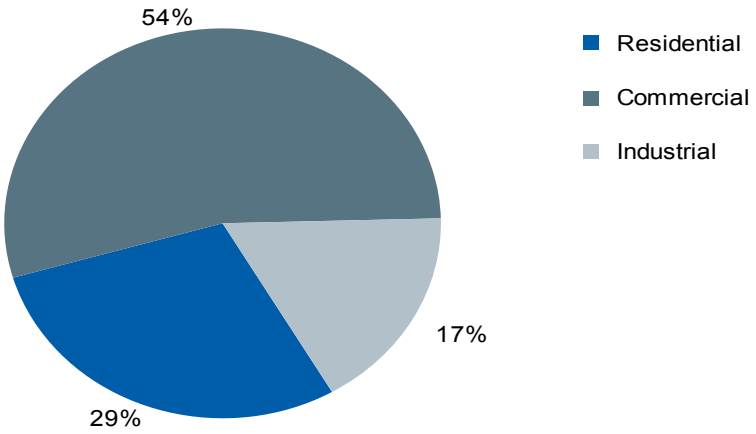


Exhibit 4.4.2.1 - B

Annual Natural Gas Savings - Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^	Total*	2026/27 Plan^
		millions of cubic metres		
RESIDENTIAL				
Affordable Energy Program	1.1	1.2	4.6	6.4
Home Insulation	1.1	1.0	11.3	15.0
Water & Energy Saver	1.0	0.8	2.8	4.3
Residential Discontinued/Completed Programs	0.0	0.0	7.7	7.7
	3.3	3.0	26.4	33.5
COMMERCIAL				
Commercial New Buildings	2.4	0.5	2.8	6.5
Commercial HVAC	1.3	1.0	8.4	12.7
Commercial Building Envelope	1.2	1.4	9.4	16.7
Commercial Custom Measures	1.1	0.1	1.4	2.3
Commercial Building Optimization	0.1	0.3	0.4	5.6
Commercial Kitchen Appliances	0.0	0.0	0.1	0.2
City of Winnipeg Power Smart Agreement	-	0.0	0.8	0.8
Commercial Discontinued/Completed Programs	-	0.0	0.0	2.4
	6.1	3.3	23.4	47.4
INDUSTRIAL				
Natural Gas Optimization	1.9	1.6	12.5	18.5
Industrial Discontinued/Completed	-	-	-	-
	1.9	1.6	12.5	18.5
EFFICIENCY PROGRAMS SUBTOTAL	11.3	7.9	62.2	99.4
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	-	0.0	-	1.5
	-	0.0	-	1.5
INTERACTIVE EFFECTS SUBTOTAL	(0.7)	(1.1)	(12.0)	(10.4)
NET IMPACT OVERALL	10.6	6.9	50.1	90.5

^ Plan estimates are from the 2012 Base DSM Forecast.
* Savings include actual + persisting results, up to and including 2012/13.
Note: Figures may not add due to rounding.
Free driver participation is included in the above figures.

In 2012/13 alone, Power Smart natural gas incentive-based programs, including both efficiency-based and customer self-generation programs, surpassed plan by 3.7 million cubic metres.

The variances within Power Smart natural gas incentive-based programs in 2012/13 are highlighted below:

Residential:

The residential sector, which contributed 3.3 million cubic metres in savings, accounted for 29% of total savings in 2012/13, surpassing planned savings by 0.2 million cubic metres.

- The Water & Energy Saver Program achieved 1.0 million cubic metres in savings, surpassing plan by 22%. The positive variance is due to more gas participants than anticipated and a slight increase in per unit energy savings.

Commercial:

The commercial sector, contributed 6.1 million cubic metres of savings. It accounted for 54% of total savings in 2012/13, surpassing planned savings by 2.8 million cubic metres.

- The Commercial New Buildings Program achieved savings of 2.4 million cubic metres, surpassing plan by 2.0 million cubic metres. The variance is mainly due to the program's assumption that buildings constructed in natural gas territory heat with natural gas. In actuality, these buildings heat with either natural gas or electricity. By using a natural gas base case, the program has over-claimed natural gas savings and under-claimed electric savings.
- The Commercial Custom Measures Program achieved 1.1 million cubic metres in savings, surpassing plan by 1.0 million cubic metres. This was primarily due to more projects with natural gas savings than planned. In addition, one project accounted for approximately 25% of the natural gas savings.

Industrial:

- The Natural Gas Optimization Program contributed 1.9 million cubic metres of natural gas savings, 21% more than planned. This positive variance can be attributed to greater than anticipated per project savings.

Customer Self-Generation:

- Although natural gas savings were planned for, none were realized by the Bioenergy Optimization Program in 2012/13.

Some electric Power Smart programs result in an increase or decrease in natural gas consumption, referred to as interactive effects. For example, a more energy efficient lighting system emits less heat, requiring more energy to heat the space. In cases where the heat is produced through electric heating sources, interactive effects are taken into account when calculating the anticipated electricity savings that will result from the program. In cases where the heat is produced through natural gas heating systems, the interactive effects are taken into account when determining the natural gas savings. These interactive effects represent the increase in natural gas consumption in natural gas-heated homes resulting from the installation of energy efficient lighting systems.

In 2012/13, interactive effects increased consumption by 0.7 million cubic metres, reducing incentive-based natural gas savings to 10.6 million cubic metres. Interactive effects were lower than planned by 0.4 million cubic metres.

4.4.2.2 Natural Gas Total Resource Cost - Benefit/Cost Analysis

Exhibits 4.4.2.2-A and B show the natural gas benefit/cost analysis results under the total resource cost (TRC) metric by program. The calculation of the benefit/cost ratio was based on a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios Used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness.

Exhibit 4.4.2.2-A
2012/13 TRC - Natural Gas Incentive-Based Programs

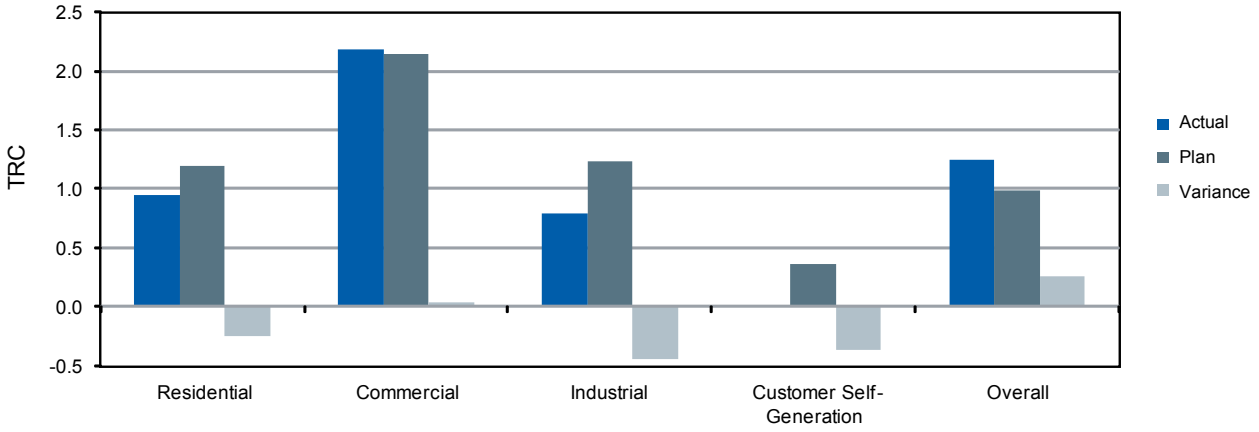


Exhibit 4.4.2.2 - B

Total Resource Cost Benefit/Cost Analysis - Natural Gas Incentive-Based Program

	2012/13 Actual	2012/13 Plan^^	Total**	2026/27 Plan^^
			TRC	
RESIDENTIAL				
Water & Energy Saver †	2.7	4.4	3.3	5.5
Home Insulation	1.4	1.4	1.7	1.5
Affordable Energy Program* †	0.0	0.5	0.0	0.6
	1.0	1.2	1.3	1.2
COMMERCIAL				
Commercial New Buildings	4.1	1.7	3.6	3.1
Commercial HVAC	2.0	2.5	3.1	2.2
Commercial Building Envelope	1.6	1.9	2.4	2.0
Commercial Building Optimization	1.5	1.3	0.9	1.7
Commercial Custom Measures	1.3	1.3	1.3	1.4
Commercial Kitchen Appliances †	0.7	23.1	1.4	7.8
	2.2	2.1	2.7	2.2
INDUSTRIAL				
Industrial Natural Gas Optimization	0.8	1.2	1.9	1.3
	0.8	1.2	1.9	1.3
DISCONTINUED/COMPLETED PROGRAMS †	-	124.8	1.5	125.7
	-	124.8	1.5	125.7
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	-	0.4	-	2.0
	-	0.4	-	2.0
OVERALL: PROGRAM COSTS	1.3	1.4	1.6	1.5
OVERALL: PROGRAM COSTS + SUPPORT COSTS^	1.2	1.0	1.4	1.1

* Includes all AEF & FRP expenditures and external funding.
** "Total" values represent the results of the program/portfolio since its inception.
† Includes water savings benefits.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Increased or decreased natural gas benefits resulting from electric incentive-based programs have been included in the overall calculation. Free driver participation is included in the above figures.

4.4.2.3 Natural Gas Rate Impact Measure - Benefit/Cost Analysis

Exhibits 4.4.2.3-A and B identify the benefit/cost ratios under the rate impact measure (RIM) metric. The calculation of the benefit/cost ratio is based on a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios Used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness.

Exhibit 4.4.2.3-A
2012/13 RIM - Natural Gas Incentive-Based Programs

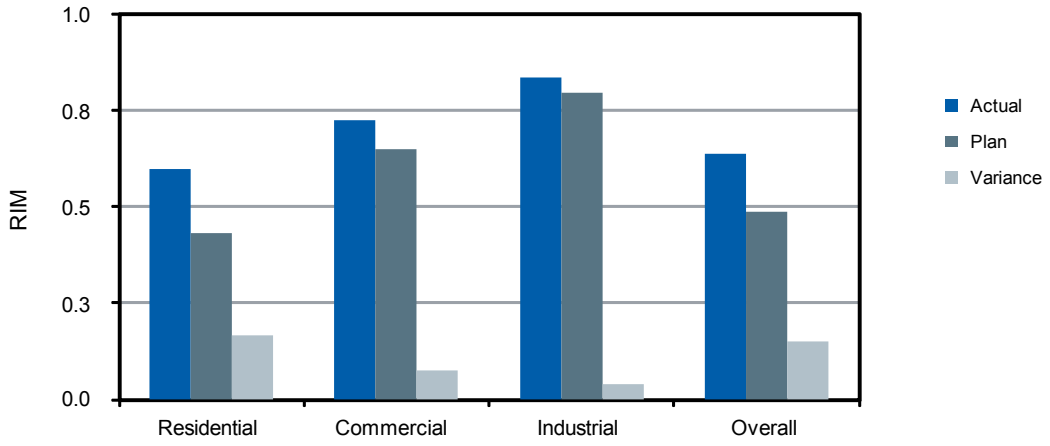


Exhibit 4.4.2.3 - B

Rate Impact Cost Benefit/Cost Analysis - Natural Gas Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^^	Total*	2026/27 Plan^^
		RIM		
RESIDENTIAL				
Water & Energy Saver	0.6	0.5	0.7	0.6
Home Insulation	0.6	0.6	0.7	0.6
Affordable Energy Program**	0.3	0.3	0.4	0.3
	0.6	0.4	0.7	0.5
COMMERCIAL				
Commercial New Buildings	0.8	0.7	0.8	0.7
Commercial Custom Measures	0.8	0.7	0.8	0.7
Commercial HVAC	0.7	0.7	0.8	0.8
Commercial Building Envelope	0.6	0.6	0.7	0.6
Commercial Building Optimization	0.6	0.6	0.4	0.6
Commercial Kitchen Appliances	0.3	0.4	0.5	0.7
Internal Retrofit	-	2.1	-	2.1
City of Winnipeg Power Smart Agreement†	-	-	1.0	-
	0.7	0.6	0.7	0.7
INDUSTRIAL				
Natural Gas Optimization	0.8	0.8	0.9	0.8
	0.8	0.8	0.9	0.8
DISCONTINUED/COMPLETED PROGRAMS	-	0.8	0.7	0.8
	-	0.8	0.7	0.8
CUSTOMER SELF-GENERATION				
Bioenergy Optimization	-	0.3	-	0.8
	-	0.3	-	0.8
OVERALL: PROGRAM COSTS	1.2	0.6	1.3	0.6
OVERALL: PROGRAM COSTS incl. INTERACTIVE EFFECTS	0.7	0.6	0.7	0.6
OVERALL: PROGRAM COSTS + SUPPORT COSTS incl. INTERACTIVE EFFECTS^	0.6	0.5	0.7	0.5

^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
* "Total" values represent the results of the program/portfolio since its inception.
** Includes all apportioned Affordable Energy Fund and Furnace Replacement Program expenditures, excluding external funding. AEP's 'Actual' RIM, including apportioned Affordable Energy Fund without the Furnace Replacement Program was 0.36. AEP's "Actual' RIM, with the Furnace Replacement Program only was 0.18.
† Includes only natural gas bill reduction costs. All other costs were accounted for within electric cost elements.
Note: Free driver participation is included in the above figures.

4.4.2.4 Natural Gas Average Levelized Utility Cost - ¢/m³ Saved

Exhibits 4.4.2.4-A and B highlight the average levelized utility cost of 2012/13 natural gas incentive-based programs in ¢/m³ saved. The calculation of ¢/m³ saved is based upon current program natural gas savings over a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness. The utility costs presented do not include costs associated with future Power Smart incentive-based programs, DSM support programs, standards activities or the customer costs of DSM measures.

Exhibit 4.4.2.4-A
2012/13 Average Levelized Utility Cost (¢/m³)
Natural Gas Incentive-Based Programs

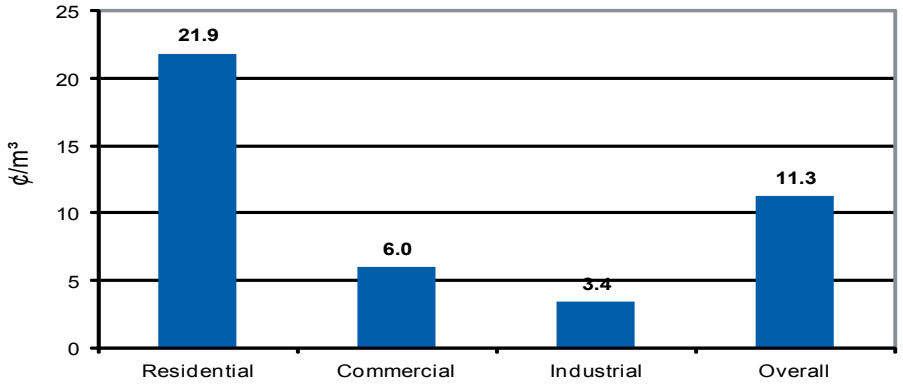


Exhibit 4.4.2.4 - B

Average Levelized Utility Cost - ¢/m^3 Saved by Power Smart Programs

	2012/13 Actual	2012/13 Total**	2026/27 Plan^^
		LUC(¢/m^3)	
RESIDENTIAL			
Affordable Energy Program*	52.1	43.4	54.0
Water & Energy Saver	10.7	10.0	10.1
Home Insulation	8.9	10.5	10.6
	21.9	16.4	23.7
COMMERCIAL			
Commercial Kitchen Appliances	42.9	24.8	6.5
Commercial Building Optimization	16.2	42.1	11.2
Commercial Building Envelope	12.0	10.7	11.8
Commercial HVAC	7.9	6.5	4.9
Commercial Custom Measures	3.5	5.7	9.1
Commercial New Buildings	3.1	4.6	5.4
Internal Retrofit Program	-	-	12.7
	6.0	8.0	8.5
INDUSTRIAL			
Natural Gas Optimization	3.4	2.6	5.1
	3.4	2.6	5.1
CUSTOMER SELF-GENERATION PROGRAMS			
Bioenergy Optimization	-	-	4.8
DISCONTINUED/COMPLETED PROGRAMS	-	9.1	0.7
OVERALL: PROGRAM COSTS	9.7	9.7	12.6
OVERALL: PROGRAM COSTS incl. INTERACTIVE EFFECTS†	10.2	10.9	13.2
OVERALL: PROGRAM COSTS + SUPPORT COSTS incl. INTERACTIVE EFFECTS^	11.3	13.7	22.1

* Includes all apportioned Affordable Energy Fund and Furnace Replacement Program expenditures, excluding external funding. AEP's 'Actual' levelized utility cost, including apportioned Affordable Energy Fund, without the Furnace Replacement Program was 39.1 ¢/m^3. AEP's 'Actual' levelized utility cost with the Furnace Replacement Program only was 104.9 ¢/m^3.

** "Total" values represent the results of the program/portfolio since its inception.

^ Support costs contain DSM support programs, basic information services and program support costs.

^^ Plan estimates are from the 2012 Base DSM Forecast.

† Increased or decreased natural gas benefits resulting from electric incentive-based programs have been included in the overall calculation.

Note: Free driver participation is included in the above figures.

4.4.2.5 Natural Gas Levelized Resource Cost- ¢/m³ Saved

Exhibits 4.4.2.5-A and B highlight the average levelized resource cost of 2012/13 natural gas incentive-based programs in ¢/m³. The calculation of ¢/m³ saved was based upon current program natural gas savings over a 30-year evaluation period. Refer to APPENDIX B - 'Explanation of Benefit/Cost Ratios used in DSM Economic Metrics' for formulas and criteria used to determine cost-effectiveness. The resource costs presented do not include costs associated with future Power Smart incentive-based programs, DSM support programs or standards activities, however they do include the customer costs of DSM measures.

Exhibit 4.4.2.5-A
2012/13 Levelized Resource Cost (¢/m³)

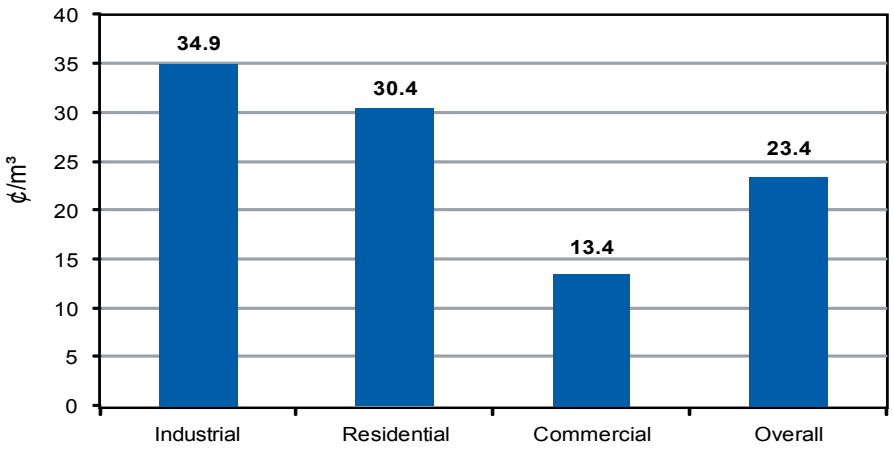


Exhibit 4.4.2.5 - B

Natural Gas Levelized Resource Cost - ¢/m^3 Saved by Power Smart Programs

	2012/13 Actual	2012/13 Total**	2026/27 Plan^^
		LRC (¢/m^3)	
RESIDENTIAL			
Affordable Energy Program*	63.5	56.0	54.8
Home Insulation	20.7	20.1	20.2
Water & Energy Saver	10.6	10.0	9.7
	30.4	25.5	29.2
COMMERCIAL			
Commercial Kitchen Appliances	40.4	25.1	11.1
Commercial Custom Measures	21.7	23.5	22.0
Commercial Building Optimization	18.4	41.7	18.2
Commercial Building Envelope	17.6	14.5	15.4
Commercial HVAC	14.6	10.9	14.0
Commercial New Buildings	7.2	8.5	10.0
Internal Retrofit Program	-	-	12.7
	13.4	12.5	14.4
INDUSTRIAL			
Natural Gas Optimization	34.9	17.1	22.1
	34.9	17.1	22.1
CUSTOMER SELF-GENERATION PROGRAMS			
Bioenergy Optimization	-	-	14.4
	-	-	14.4
DISCONTINUED/COMPLETED PROGRAMS	-	22.4	0.7
OVERALL: PROGRAM COSTS	21.3	18.6	20.0
OVERALL: PROGRAM COSTS incl. INTERACTIVE EFFECTS†	22.3	20.9	21.0
OVERALL: PROGRAM COSTS + SUPPORT COSTS incl. INTERACTIVE EFFECTS^	23.4	23.7	29.9

* Includes all Affordable Energy Fund & Furnace Replacement Program expenditures, excluding external funding.
** "Total" values represent the results of the program/portfolio since its inception.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Average levelized resource cost analysis is not provided for rate/load management programs.
Free driver participation is included in the above figures.

4.4.3 Power Smart Combined Electric & Natural Gas Program Results

Total Resource Cost - Benefit/Cost Analysis

Exhibits 4.4.3-A and B show the combined electricity and natural gas benefit/cost analysis results under the total resource cost (TRC) metric by program. The calculation of the benefit/cost ratio was based on a 30-year evaluation period.

Exhibit 4.4.3-A
2012/13 TRC - Combined Electric & Gas Incentive-Based Programs

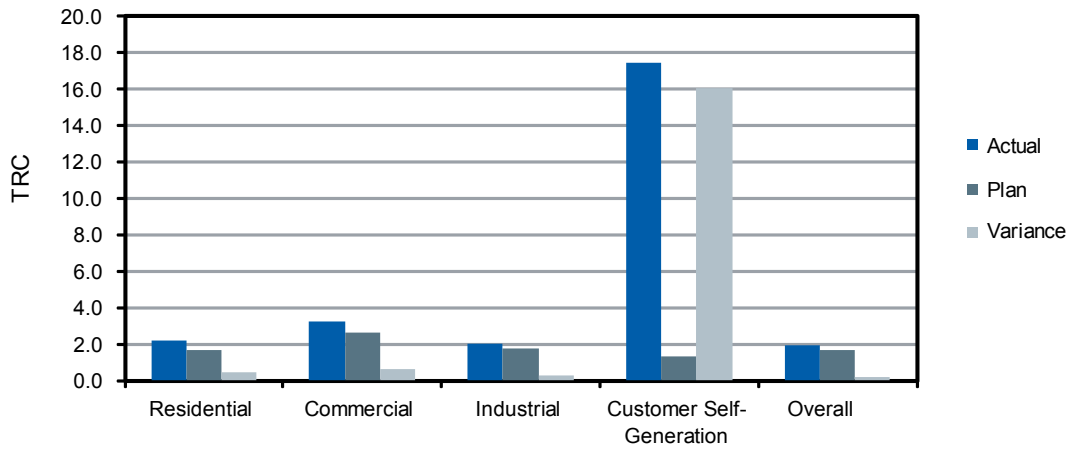


Exhibit 4.4.3 - B

Total Resource Cost Benefit Analysis - Combined Electric & Natural Gas Incentive-Based Programs

	2012/13 Actual	2012/13 Plan^^	Total**	2026/27 Plan^^
		TRC		
RESIDENTIAL				
Water & Energy Saver†	7.8	4.6	8.9	5.0
Home Insulation	3.2	2.6	2.9	2.5
Refrigerator Retirement	1.1	1.3	1.4	1.4
Affordable Energy Program*†	0.9	0.8	0.9	0.8
	2.2	1.7	2.2	1.7
COMMERCIAL				
Commercial New Buildings	5.8	3.6	4.6	6.4
City of Winnipeg Power Smart Agreement Ø	5.8	10.3	1.5	10.3
Commercial Refrigeration	5.5	2.0	4.3	2.8
Commercial Lighting	3.6	2.4	2.5	2.5
Commercial Earth Power	3.0	1.7	2.0	1.7
Commercial Building Envelope	3.0	2.8	3.4	2.7
Commercial HVAC	2.2	2.7	3.0	2.6
Internal Retrofit	2.1	1.8	2.0	1.6
Commercial Kitchen Appliances†	1.7	18.6	3.6	12.3
Commercial Custom Measures	1.3	1.7	1.6	1.8
Commercial Clothes Washers†	1.2	1.8	1.5	4.1
Commercial Building Optimization	1.0	2.1	0.8	2.7
Commercial Network Energy Management	-	1.6	0.2	1.9
	3.3	2.7	2.5	3.0
INDUSTRIAL				
Performance Optimization	2.5	2.1	3.3	2.7
Natural Gas Optimization	0.8	1.2	1.9	1.3
	2.0	1.7	3.0	2.4
DISCONTINUED/COMPLETED PROGRAMS†	18.2	5.4	2.4	8.9
	18.2	5.4	2.4	8.9
CUSTOMER SELF-GENERATION PROGRAMS				
Bioenergy Optimization	17.4	1.3	2.2	1.7
	17.4	1.3	2.2	1.7
OVERALL: PROGRAM COSTS	2.9	2.1	2.5	2.5
OVERALL: PROGRAM COSTS + SUPPORT COSTS^	2.7	1.7	2.2	1.9

* Includes all Affordable Energy Fund & Furnace Replacement Program expenditures and external funding.
** "Total" values represent the results of the program/portfolio since its inception.
Ø Includes the present value of projected future commitment payment receipts.
† Includes water savings benefits.
^ Support costs contain DSM support programs, basic information services and program support costs.
^^ Plan estimates are from the 2012 Base DSM Forecast.
Note: Increased or decreased natural gas benefits resulting from electric incentive-based programs have been included in the overall calculation.
Benefit/Cost analysis is not calculated for rate/load management programs.
Free driver participation is included in the above figures.

For 2012/13, the combined overall TRC benefit/cost ratio including support costs was 2.7, which surpassed the planned target. All evaluated Power Smart programs, with the exception of the Affordable Energy Program, Commercial Network Energy Management and Natural Gas Optimization Program, were cost-effective under the TRC metric in 2012/13.

A higher TRC benefit/cost metric was realized under the Bioenergy Optimization Program. This can be attributed to costs being 85% lower than planned and much high than expected Hutterite colony participation.

4.5 Fuel Choice

As part of the Provincial Government's climate change plan, in 2011 they announced an upcoming tax and ban on heating with coal. In July 2013, they formally announced phasing in North America's first coal heating ban effective January 1st, 2014, with a grace period up to July 1st, 2017 if an approved conversion plan was filed by June 30th, 2014.

To assist customers, Manitoba Hydro provided information on the fuel source options available to a number of Hutterite colonies. As a result of these efforts, nineteen colonies switched to biomass, with savings already included under the Bioenergy Optimization Program. In addition, twenty-three colonies switched to natural gas.

The following table outlines the impacts of the Hutterite colonies that switched to natural gas. It contains the avoided energy and demand impacts, as well as the increased natural gas consumption.

These impacts are included in the report for information purposes only and not have been included in the tabulation of overall Power Smart program savings or metrics.

Exhibit 4.5
Fuel Choice Savings

CONVERSION TO NATURAL GAS FROM:	Annual Energy Savings (GW.h savings at meter)		Annual Demand Savings (MW savings at meter)		Increased Natural Gas Consumption (millions of m^3)	
	2012/13	Total*	2012/13	Total*	2012/13	Total*
Lignite Coal	50.5	52.5	19.7	20.4	5.8	6.0
Sub-bituminous Coal	3.0	3.0	1.2	1.2	0.2	0.2
Biomass (Oat Pellets)	1.2	1.2	0.5	0.5	0.1	0.1
Propane	17.6	19.9	6.8	7.8	2.1	2.4
Total	72.3	76.6	28.1	29.8	8.3	8.8

Note: Figures may not add up due to rounding.
*Cumulative savings to the end of 2012/13.

5.0 Total Power Smart Utility Costs

Total Power Smart utility costs include all costs incurred by the utility in the planning, development, design, implementation and evaluation of the Power Smart programs.

Program costs are attributed to a specific program and include program administration costs and incentive costs, while support costs are associated with activities supporting Power Smart programs which cannot be assigned to any one specific program. These costs include activities such as Power Smart promotions (general branding), promoting sustainability and standards, and DSM administration (overall planning and evaluation). Support costs also include costs attributed to running DSM support programs and the basic information portion of the efficiency programs.

5.1 Summary of Total Power Smart Utility Costs

Exhibit 5.1 summarizes the utility costs of the Power Smart programs cumulative to the end of 2012/13. The reported utility costs are presented in nominal dollars and detail actual accounting expenditures to 2012/13 for all Power Smart initiatives and activities.

Exhibit 5.1
Summary of Utility Costs Cumulative to 2012/13

UTILITY COSTS	Cumulative
	millions of nominal dollars
TOTAL UTILITY COSTS	
Program Cost	370.5
Support Cost	83.5
	454.0
TOTAL UTILITY COSTS	454.0

Note: Support costs include both DSM support programs and support activity costs, but do not include Affordable Energy Fund or Furnace Replacement Program expenditures.
Figures may not add due to rounding.

As of March 31st, 2013, Manitoba Hydro had invested $454 million in the Power Smart initiative. The highest component of this expenditure was the program utility costs at $371 million, which makes up 82% of total expenditures cumulative to 2012/13.

5.2 Utility Costs by Program

Exhibits 5.2-A and B outline the costs to the utility for Power Smart initiatives implemented between April 1st, 1989 and March 31st, 2013.

Exhibit 5.2 - A
Utility Costs for Support, DSM Support Programs & Standards

	Actual 2012$		Cumulative nominal $	
	thousands of dollars			
DSM SUPPORT PROGRAMS				
DSM Support Programs & Standards Electric Cost	*376*		*2,834*	
DSM Support Programs & Standards Natural Gas Cost	*-133*		*2,268*	
		243		5,102
BASIC INFORMATION SERVICES				
Basic Information Services Electric Cost	*1,342*		*20,754*	
Basic Information Services Natural Gas Cost	*20*		*5,193*	
		1,362		25,946
Discontinued/Completed Basic Information Services				
Discontinued/Completed Basic Information Services Electric Cost	*0*		*2,885*	
Discontinued/Completed Basic Information Services Natural Gas Cost	*0*		*20*	
		0		2,905
SUPPORT COSTS				
Power Smart Communications				
Power Smart Communications Electric Cost	*666*		*15,571*	
Power Smart Communications Natural Gas Cost	*545*		*4,347*	
		1,210		19,918
Retrofit Demonstrations				
Retrofit Demonstrations Electric Cost	*0*		*9,548*	
Retrofit Demonstrations Natural Gas Cost	*0*		*80*	
		0		9,628
Integrated Plan/Targets				
Integrated Plan/Targets Electric Cost	127		3,655	
Integrated Plan/Targets Natural Gas Cost	104		897	
		230		4,551
DSM Administration				
DSM Administration Electric Cost	*178*		*4,103*	
DSM Administration Natural Gas Cost	*145*		*1,235*	
		323		5,338
DSM Tracking System				
DSM Tracking System Electric Cost	*86*		*620*	
DSM Tracking System Natural Gas Cost	*71*		*200*	
		157		819
DSM Market Potential Study				
DSM Market Potential Study Electric Cost	*96*		*243*	
DSM Market Potential Study Natural Gas Cost	*79*		*226*	
		175		469
Commercial Audits				
Commercial Audits Electric Cost	*14*		*149*	
Commercial Audits Natural Gas Cost	*14*		*66*	
		29		215
Energy Efficiency Screening Studies				
Energy Efficiency Screening Studies Electric Cost	*31*		*126*	
Energy Efficiency Screening Studies Natural Gas Cost	*37*		*113*	
		68		239
Power Smart Residential Support				
Power Smart Residential Support Electric Cost	*142*		*322*	
Power Smart Residential Support Natural Gas Cost	*262*		*482*	
		405		804
Sustainabilities & Standards				
Sustainabilities & Standards Electric Cost	*164*		*885*	
Sustainabilities & Standards Natural Gas Cost	*136*		*915*	
		299		1,801
Power Smart for Business				
Power Smart for Business Electric Cost	*115*		*1,719*	
Power Smart for Business Natural Gas Cost	*140*		*931*	
		255		2,650
Discontinued/Completed Support Costs				
Discontinued/Completed Support Costs Electric Cost	*0*		*3,157*	
Discontinued/Completed Support Costs Natural Gas Cost	*0*		*0*	
		0		3,157
Total Support Costs, DSM Support Programs & Standards Electric Cost	*3,336*		*66,572*	
Total Support Costs, DSM Support Programs & Standards Natural Gas Cost	*1,421*		*16,972*	
TOTAL SUPPORT, DSM SUPPORT PROGRAMS & STANDARDS COSTS		4,757		83,544

Exhibit 5.2 - B

Utility Costs for Incentive-Based Programs

	Actual 2012$	Cumulative nominal $
	thousands of dollars	
EFFICIENCY PROGRAMS		
RESIDENTIAL		
Home Insulation Program		
Home Insulation Program Electric Cost	*1,265*	*13,552*
Home Insulation Program Natural Gas Cost	*1,411*	*16,598*
	2,676	30,150
Affordable Energy Program		
First Nations Program	*185*	*449*
Affordable Energy Program Electric Cost	*113*	*936*
Affordable Energy Program Natural Gas Cost	*642*	*3,399*
	940	4,784
Water & Energy Saver Program		
Water & Energy Saver Program Electric Cost	*775*	*1,828*
Water & Energy Saver Program Natural Gas Cost	*775*	*2,526*
	1,550	4,353
Refrigerator Retirement Program	1,600	3,312
Residential Exploratory Programs		
Residential Exploratory Program Electric Cost	*28*	*54*
Residential Exploratory Program Natural Gas Cost	*0*	*15*
	28	69
Discontinued/Completed Residential Program Costs		
Discontinued/Completed Residential Program Electric Cost	*46*	*22,413*
Discontinued/Completed Residential Program Natural Gas Cost	*5*	*9,618*
	51	32,031
Total Residential Program Electric Cost	*4,012*	*42,543*
Total Residential Program Natural Gas Cost	*2,833*	*32,157*
RESIDENTIAL EFFICIENCY PROGRAM SUBTOTAL	6,845	74,700

Exhibit 5.2 - B (Continued)

Utility Costs for Incentive-Based Programs

	Actual 2012$	Cumulative nominal $
	thousands of dollars	
COMMERCIAL		
Commercial Custom Measures		
Commercial Custom Measures Electric Cost	56	2,742
Commercial Custom Measures Natural Gas Cost	505	1,048
	561	3,790
Commercial Insulation		
Commercial Insulation Electric Cost	451	2,153
Commercial Insulation Natural Gas Cost	1,108	8,116
	1,559	10,268
Commercial Windows		
Commercial Windows Electric Cost	925	5,736
Commercial Windows Natural Gas Cost	796	4,701
	1,721	10,438
Commercial Earth Power Program	265	4,485
Commercial HVAC		
Commercial HVAC Electric Cost	147	1,888
Commercial HVAC Natural Gas Cost	1,179	8,019
	1,325	9,907
CO2 Sensors		
CO2 Sensors Electric Cost	2	8
CO2 Sensors Natural Gas Cost	36	140
	39	148
Internal Retrofit	811	20,084
Commercial Lighting	7,757	75,641
City of Winnipeg Power Smart Agreement	-120	10,533
Commercial Refrigeration	613	2,256
Commercial Building Optimization Program		
Commercial Building Optimization Program Electric Cost	92	498
Commercial Building Optimization Program Natural Gas Cost	92	1,310
	184	1,807
New Buildings Program		
New Buildings Electric Cost	116	1,112
New Buildings Program Natural Gas Cost	1,043	1,750
	1,159	2,862
Commercial Clothes Washers	59	442
Commercial Kitchen Appliances		
Commercial Kitchen Appliances Electric Cost	12	259
Commercial Kitchen Appliances Natural Gas Cost	27	216
	39	475
Commercial Network Energy Management Program	6	202
Commercial Exploratory Programs		
Commercial Exploratory Program Electric Cost	0	1
Commercial Exploratory Program Natural Gas Cost	0	82
	0	83
Discontinued/Completed Commercial Programs		
Discontinued/Completed Commercial Program Electric Cost	11	17,185
Discontinued/Completed Commercial Program Natural Gas Cost	0	944
	12	18,129
Total Commercial Program Electric Cost	11,201	145,224
Total Commercial Program Natural Gas Cost	4,786	26,326
COMMERCIAL EFFICIENCY PROGRAM SUBTOTAL	15,987	171,550

Exhibit 5.2 - B (Continued)

Utility Cost for Incentive-Based Programs

	Actual 2012$	Cumulative nominal $
	thousands of dollars	
INDUSTRIAL		
Performance Optimization Program	2,741	31,654
Natural Gas Optimization Program	753	3,558
Emergency Preparedness	0	159
	3,494	35,371
Discontinued/Completed Industrial Programs		
Discontinued/Completed Industrial Program Electric Cost	*0*	*2,708*
Discontinued/Completed Industrial Program Natural Gas Cost	*0*	*0*
	0	2,708
Total Industrial Program Electric Cost	*2,741*	*34,521*
Total Industrial Program Natural Gas Cost	*753*	*3,558*
INDUSTRIAL EFFICIENCY PROGRAM SUBTOTAL	3,494	38,079
EFFICIENCY PROGRAMS COSTS		
Total Efficiency Program Electric Cost	*17,954*	*222,287*
Total Efficiency Program Natural Gas Cost	*8,372*	*62,041*
EFFICIENCY PROGRAM SUBTOTAL	26,326	284,328
CUSTOMER SELF GENERATION		
Bioenergy Optimization Program		
Bioenergy Optimization Program Electric Cost	*348*	*10,201*
Bioenergy Optimization Program Natural Gas Cost	*0*	*112*
	348	10,312
RATE/LOAD MANAGEMENT PROGRAMS		
Curtailable Rates	5,751	75,843
	5,751	75,843
TOTAL PROGRAM COSTS		
Total Program Electric Cost	*24,053*	*308,330*
Total Program Natural Gas Cost	*8,372*	*62,152*
TOTAL PROGRAM COSTS	32,425	370,483

Note: Figures may not add due to rounding.

5.3 Utility Costs by Energy Source

Exhibit 5.3 provides a summary of electric and natural gas utility costs. Total Power Smart electric initiatives represented 74% of total Power Smart Expenditures in 2012/13 and 83% of Power Smart expenditures to date.

Exhibit 5.3

Summary of Electricity & Natural Gas Utility Costs

	Actual 2012$	Cumulative nominal $
	millions of dollars	
ELECTRICITY		
Program Cost	24.1	308.3
Support Cost	3.3	66.6
	27.4	374.9
NATURAL GAS		
Program Cost	8.4	62.2
Support Cost	1.4	17.0
	9.8	79.1
TOTAL UTILITY COSTS (ELECTRICITY + NATURAL GAS)	37.2	454.0

Note: Support costs include both DSM support programs and support activity costs, but do not include Affordable Energy Fund or Furnace Replacement Program expenditures.
Figures may not add due to rounding.

5.4 The Affordable Energy Fund

The Affordable Energy Fund was established in 2006/07 through the Winter Heating Cost Control Act and it supports Manitoba Hydro's sustainable development initiatives. The purpose of the fund is to provide support for programs and services that achieve specific objectives including encouraging energy efficiency and conservation through programs and services for rural and northern Manitobans, lower income customers and seniors, and encouraging the use of alternative energy sources such as renewable energy.

Exhibit 5.4 provides a summary of Affordable Energy Fund expenditures.

Exhibit E.14

Summary of Affordable Energy Fund Expenditures

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative
	thousands of nominal dollars							
Affordable Energy Program	256	219	893	1,672	2,666	3,131	3,332	12,168
Geothermal Support								
Waverley West Demonstration Project*	619	252	5	0	-1	-1	-1	873
Earth Power Loan Subsidy	0	19	69	105	108	108	91	500
Province of Manitoba Cooperative Advertising	0	0	18	0	0	0	0	18
Geothermal Support Total	619	270	92	104	108	107	91	1,391
Community Support & Outreach	0	0	35	130	133	139	114	551
Oil & Propane Heated Homes	0	75	85	31	32	24	0	246
Special Projects								
Res. Energy Assessment Services (ecoENERGY Audits)	0	61	241	85	119	39	0	545
Oil & Propane Furnace Replacement	0	0	6	36	42	17	10	112
Res. Solar Water Heating Program	0	0	89	119	56	11	10	285
Power Smart Residential Loan	0	0	0	130	312	354	510	1,306
Oil & Propane Heated Homes - Additional Funding	0	0	0	0	0	10	26	37
Special Projects Total	0	61	336	371	529	431	556	2,284
Community Energy Development								
ecoENERGY Program Funding - Additional Funding	0	0	0	0	0	2,817	1,241	4,058
Community Energy Development Total	0	0	0	0	0	2,817	1,241	4,058
DSM INITIATIVES SUBTOTAL	875	625	1,441	2,308	3,468	6,649	5,334	20,700
Manitoba Electric Bus	0	0	0	0	0	700	75	775
Energy & Resource Fund	0	0	0	750	0	0	0	750
Fort Whyte EcoVillage	0	0	0	0	0	120	0	120
Diesel Community Green Pilot Demonstration	0	0	0	0	0	3	-3	0
TOTAL EXPENDITURES	875	625	1,441	3,058	3,468	7,472	5,406	22,345

* Negative costs represent loop lease payments from customer to Manitoba Hydro.
** Reversal of an incorrect charge that took place in 2011/12 is indicated by the negative cost.

5.5 Furnace Replacement Budget

The Furnace Replacement Budget was established in 2007/08 as a result of Public Utility Board Order 99/07. The purpose of the budget is to support the implementation of a natural gas Furnace Replacement Program for lower income customers.

In 2012/13 alone, customers installed 630 furnaces and 9 boilers through the Furnace Replacement Program. Cumulatively, 2,525 furnaces and 57 boilers have been installed to the end of 2012/13 as a result of the program.

Exhibit 5.5 outlines the Furnace Replacement Expenditures.

Exhibit 5.5
Summary of Furnace Replacement Expenditures

	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative
			thousands of nominal dollars			
Natural Gas Furnace Replacement	264	815	1,312	1,627	2,167	6,185
TOTAL EXPENDITURES	264	815	1,312	1,627	2,167	6,185

Appendix A

Sources of Evaluation & Planning Estimates

Many sources are used to estimate load savings and utility costs resulting from the Power Smart programs. These include:

Evaluation Estimate Sources

Impact Evaluation Reports:

Impact evaluation reports are prepared annually for the Power Smart programs to identify net program load savings and costs, as well as the cost-effectiveness of these savings. Net savings and costs differ from gross savings and costs as they take into consideration factors such as free riders, free drivers, heating/cooling interactive effects and persistence.

A number of variables potentially affect the cost-effectiveness of Power Smart programs. These variables include energy, demand and natural gas reduction; hours of operation; measure persistence; average measure life; measure reinvestment and changes in marginal cost values.

Life-to-Date Expenditure Report:

The utility costs cumulative to 2012/13 are tracked annually from the Annual DSM Expenditure Report.

Engineering Estimates:

Engineering expertise is used to quantify usage and savings data. Computer simulation and modeling may also be utilized.

Sales & Market Data:

In-depth market knowledge, product specifications and ratings, sales and replacement data, etc. are used to determine market acceptance and uptake.

Planning Estimate Sources

2012/13 Planning Estimates:

The 2012/13 electric and natural gas planning estimates were taken from the 2012 Base DSM Forecast.

In all cases, the 2012 Base DSM Forecast estimates were used regardless of delays in program launches or modifications. Consistent usage of the same plan helps reduce the probability of errors and provides a verifiable public target to compare against. Utilizing the same source information also helps ensure that a realistic and objective evaluation of the programs/portfolio is conducted, and improves the reliability and verifiability of the Power Smart Annual Review.

2026/27 Planning Estimates:

The 2026/27 electric planning targets for energy and demand savings are from the 2012 Base DSM Forecast which includes forecasts for 2012/13 through 2026/27. The 1992/93 through 2011/12 planning estimates for energy and demand savings are from the respective Power Smart Resource Options reports or Power Smart Plan. Electric long range planning targets did not exist prior to 1992/93.

The 2026/27 natural gas planning targets are from the 2012 Base DSM Forecast which includes forecasts for 2012/13 through 2026/27. Natural gas long range planning targets did not exist prior to 2005/06.

The 2012/13 through 2026/27 planning estimates for utility costs are included in the Integrated Financial Forecast report current during the evaluation year (IFF12).

The planning estimates for the years 1990/91 through 2011/12 are included in the following Integrated Financial Forecast reports: IFF90-4, IFF91-4, IFF92-4, IFF93-3, IFF94-2, IFF95-1, IFF96-1, IFF97-1, IFF98-1, IFF99-1, IFF00-1, IFF01-1, IFF02-1, IFF03-1, IFF04-1, IFF05-1, IFF06-1, IFF07-1, IFF08-1, IFF09-1, IFF10-1 and IFF11-2.

Appendix B

Explanation of Benefit/Cost Ratios Used in DSM Metrics

Total Resource Cost (TRC) Metric

The Total Resource Cost (TRC) metric is used to assess the benefits of an energy efficiency program irrespective of who realizes the benefits and who pays the costs. Any economic transfers between Manitoba Hydro and the participating customer are excluded from the calculation.

The TRC is calculated based on the following formula:

$$TRC = \frac{PV\ (Marginal\ Benefit)}{PV\ (Total\ Program\ Administration + Incremental\ Product\ Cost)}$$

Where:

- For electricity, the marginal benefit includes the revenue realized by Manitoba Hydro from conserved electricity being sold in the export market, the avoided cost of new infrastructure (i.e. electric transmission facilities) and measurable non-energy benefits (i.e. water savings).
- For natural gas, the marginal benefit includes Manitoba Hydro's avoided cost of purchasing natural gas, avoided transportation costs, the value of reduced greenhouse gas emissions and measurable non-energy benefits (i.e. water savings).
- Total program administration costs include the administrative costs involved in program planning, design, marketing, implementation and evaluation. It includes all costs associated with offering the Power Smart program except for customer incentive costs.
    - Note: The City of Winnipeg Power Smart Agreement evaluation treats commitment payments paid by Manitoba Hydro as administration costs. Projected future commitment payment cash inflows to Manitoba Hydro are netted against commitment payments made to the City of Winnipeg.
- Incremental product costs include the total incremental costs associated with implementing a Power Smart measure. It is the difference in costs between the energy efficient technology and the standard technology that would have been installed in the absence of the energy efficient technology.

Levelized Utility Cost (LUC) / Rate Impact Measure (RIM) Ratio

The Levelized Utility Cost (LUC) is used to provide an economic cost value for the energy saved by an energy efficiency program. The LUC provides the total cost of the conserved energy based upon the utility's investment on behalf of the ratepayer on a per unit basis levelized over a fixed time period. The cost value allows for a comparison to other supply options and other DSM programs occurring over different time frames.

The Rate Impact Measure (RIM) metric is used in conjunction with the LUC to provide an indication of the long term impact of an energy efficient program on energy rates. This metric is especially valuable in interpreting the LUC of electric energy efficiency programs due to the varying summer/winter values of Manitoba Hydro's marginal cost. This metric is a benefit/cost ratio that represents the economic impact of a program from the ratepayer's perspective. All program-related savings and costs incurred by the utility, including revenue loss and incentive payments, are taken into account in this assessment.

The LUC and RIM are calculated based on the following formulas:

$$\text{LUC} = \frac{\text{PV (Utility Program Administration Costs + Incentives)}}{\text{PV (Energy)}}$$

$$\text{RIM} = \frac{\text{PV (Utility Marginal Benefit)}}{\text{PV (Revenue Loss + Utility Program Administration Costs + Incentives)}}$$

Where:

- Utility program administration costs include the costs to Manitoba Hydro associated with program planning, design, marketing, implementation and evaluation. It includes all costs associated with offering the Power Smart program except for customer incentive costs.
- Incentives include the funds transferred from Manitoba Hydro to the participant associated with implementing the Power Smart measure.
- Energy includes the annual energy savings associated with the energy efficiency measure.
- For electricity, the utility marginal benefit includes the revenue realized by Manitoba Hydro from conserved electricity being sold in the export market and the avoided cost of new infrastructure (i.e. electric transmission facilities).
- For natural gas, the utility marginal benefit includes Manitoba Hydro's avoided cost of purchasing natural gas, avoided transportation costs and the value of reduced greenhouse gas emissions.
- Revenue loss includes Manitoba Hydro's lost revenue associated with the participants' reduced energy consumption (i.e. customer bill reductions)
- Incentives include the funds transferred from Manitoba Hydro to the participant associated with implementing the Power Smart measure.

Levelized Resource Cost (LRC)

The Levelized Resource Cost (LRC) is used to provide an economic cost value for the energy saved through an energy efficiency program. The LRC provides the total resource cost of the conserved energy on a per unit basis levelized over a fixed time period. The cost value allows for a comparison to other supply options and other DSM programs occurring over different time frames.

The LRC is calculated based on the following formula:

$$LRC = \frac{PV\ (\text{Total Program Administration} + \text{Incremental Product Cost})}{PV\ (\text{Energy})}$$

Where:

- Total program administration costs include the administrative costs involved in program planning, design, marketing, implementation and evaluation. It includes all costs associated with offering the Power Smart program except for customer incentive costs.
- Incremental product cost is the difference in cost between the energy efficient technology and the standard technology that would have been installed in the absence of the energy efficient technology.
- Energy includes the annual energy savings associated with the energy efficiency measure.

Appendix C

Total Power Smart Participation

Power Smart Participants Annual Increments*†	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	**2012/13**	***Cumulative***
Residential																									
Residential DSM Support Programs																									
Financing Programs																									
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	-	4,873	3,386	4,211	5,114	6,325	7,222	7,427	7,391	6,453	5,262	6,492	6,202	70,358
Power Smart Residential PAYS Program	-	-	-	-	-	-	-	-	-	-	-	-												52	52
Residential Earth Power Loan																									
Geothermal Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	35	92	185	139	85	224	207	114	53	52	24	1,210
Solar Hot Water Heating Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	-	-	14
Financing Programs Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	4,873	3,421	4,303	5,299	6,464	7,307	7,651	7,598	6,574	5,322	6,544	6,278	71,634
ecoENERGY[f]	-	-	-	-	-	-	-	-	-	-	-	-	411	1,094	4,085	5,298	6,939	5,001	3,171	4,967	7,009	3,428	11,683	1,186	54,272
Mail-In/On-Line Energy Assessments	-	-	-	-	-	-	-	-	-	-	-	-	570	532	338	378	234	455	421	251	153	263	416	286	4,297
Residential DSM Support Programs SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	-	5,854	5,047	8,726	10,975	13,637	12,763	11,243	12,816	13,736	9,013	18,643	7,750	130,203
Residential DSM Support Porgrams Discontinued/Completed Programs																									
WISE Home	-	-	-	-	-	-	-	-	-	-	-	-	297	506	570	900	859	612	312	425	450	460	-	-	5,391
Energy Saver Presentations	-	-	-	-	-	-	-	-	-	-	-	-	58	1,156	453	467	337	610	392	291	192	-	-	-	3,956
New Home Workshops	-	-	-	-	-	-	-	-	-	-	-	-	40	305	116	158	119	116	-	-	-	-	-	-	854
R-2000 Component of the 'New Home Program'[d]	-	-	-	-	-	-	-	-	-	-	-	-	12	19	32	-	-	-	-	-	-	-	-	-	63
Solar Water Heating (Incentive Component)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	18	-	-	36
Residential Earth Power																								-	
Earth Power Consumer Workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	475	63	-	-	-	-	-	-	688
Residential DSM Support Programs Discontinued/Completed Programs	-	-	-	-	-	-	-	-	-	-	-	-	407	1,986	1,171	1,675	1,790	1,401	704	716	660	478	-	-	10,988
RESIDENTIAL DSM Support Pograms TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	6,261	7,033	9,897	12,650	15,427	14,164	11,947	13,532	14,396	9,491	18,643	7,750	141,191
Residential Incentive-Based Programs																									
Home Insulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	1,419	5,211	4,551	4,578	5,093	3,656	3,678	2,867	31,512
Refrigerator Retirement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,437	8,298	16,735
Water & Energy Saver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38,448	33,411	27,420	99,279
Affordable Energy Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139	143	716	2,056	1,908	1,653	6,615
Residential Incentive-Based Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	1,419	5,211	4,690	4,721	5,809	44,160	47,434	40,238	154,141
Residential Incentive-Based Discontinued/Completed Programs																									
Compact Fluorescent Lighting[y]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,663	26,623	17,296	28,933	73,228	99,817	75,821	-	-	343,381
Programmable Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,948	2,230	-	-	-	-	-	7,178
Outdoor Timer	6,169	8,954	8,134	4,812	4,160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,229
Refrigerator/Freezer Buy-Back Pilot	-	-	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	474
EE Water Tank/ Water Savings Measures of the 'No Worry Plan'	-	-	-	-	-	-	-	201	709	681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,591
Energy Efficient Light Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,047	2,380	2,691	1,126	3,351	2,305	-	12,900
New Home	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	126	217	204	220	205	230	142	1	1,381
Seasonal LEDs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,900	10,880	8,144	4,956	-	-	-		25,880
Energy Efficient Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,374	15,436	13,277	2,451	-	-		41,538
High Efficiency Furnace/Boiler Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,228	7,028	6,630	7,295	5,190	-	-		27,371
Residential Incentive-Based Discontinued/Completed Programs	6,169	8,954	8,608	4,812	4,160	-	-	201	709	681	-	-	-	-	-	21,699	29,877	51,790	63,957	101,667	108,789	79,402	2,447	1	493,923
Residential Incentive-Based TOTAL	6,169	8,954	8,608	4,812	4,160	-	-	201	709	681	-	-	-	-	-	22,158	31,296	57,001	68,647	106,388	114,598	123,562	49,881	40,239	648,064
Residential TOTAL	6,169	8,954	8,608	4,812	4,160	-	-	201	709	681	-	-	6,261	7,033	9,897	34,808	46,723	71,165	80,594	119,920	128,994	133,053	68,524	47,989	789,255
Commercial																									
Commercial DSM Support Programs																									
Religious Buildings Initiative	-	-	-	-	-	-	-	-	-	-	-	-	14	6	25	13	34	63	40	19	9	5	3	-	231
Power Smart Recreation Facility Survey	-	-	-	-	-	-	-	-	-	-	-	-	30	5	6	5	4	5	6	4	1	2	1	-	69
Commercial DSM Support Programs SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	-	44	11	31	18	38	68	46	23	10	7	4	-	300
Commercial DSM Support Programs Discontinued/Completed Programs																									
Power Smart Energy Manager[ee]	-	-	-	-	-	-	-	-	-	-	-	18	-	20	-	-	-	-	-	-	-	-	-	-	38
Commercial DSM Support Programs Discontinued/Completed Programs	-	-	-	-	-	-	-	-	-	-	-	18	-	20	-	-	-	-	-	-	-	-	-	-	38
Commercial DSM Support Programs TOTAL	-	-	-	-	-	-	-	-	-	-	-	18	44	31	31	18	38	68	46	23	10	7	4	-	338

Power Smart Participants Annual Increments*†	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative
Commercial Incentive-Based Programs																									
Custom Measures**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	1	13	8	13	27	69
Building Envelope	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	172	179	244	371	453	404	337	2,160
Commercial HVAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99	112	131	107	89	64	93	695
Internal Retrofit	-	-	-	8	15	21	30	24	49	60	37	52	42	55	31	135	425	59	32	68	42	39	36	29	1,289
Commercial Lighting	-	-	-	129	634	556	488	264	235	384	178	122	152	184	373	742	871	999	1,116	1,292	1,111	991	788	748	12,357
Commercial Building Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	4	0	2	9
Commercial Earth Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	15	11	23	19	13	10	119
Commercial Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	27	17	41	36	31	565	729
City of Winnipeg Power Smart Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	11	274	9	7	1	4	2	4	1	322
Commercial Kitchen Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	27	16	11	6	81
Commercial Clothes Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	160	37	21	17	244
New Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	15	22
Network Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	-	-	8
Commercial Incentive-Based Programs SUBTOTAL	-	-	-	137	649	577	518	288	284	444	215	174	194	243	409	888	1,570	1,382	1,491	1,796	1,907	1,696	1,392	1,850	18,104
Commercial Incentive-Based Discontinued/Completed Programs																									
Sentinel Lighting	-	-	65	63	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199
Roadway Lighting	-	-	-	73	71	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199
Commercial Construction & Renovation	-	-	-	-	-	-	-	46	41	40	54	42	56	76	88	102	232	-	-	-	-	-	-	-	777
Livestock Waterer	-	-	-	-	129	96	57											-	-	-	-	-	-	-	282
Agricultural Demand Controller	-	-	-	-	24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
Infrared Heat Lamps	-	-	-	-	1,016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,016
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	656	202	224	97	-	-	-	1,179
Parking Lot Controllers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	253	296	89	137	168	82	10	1,035
Agricultural Heat Pads	-	-	-	-	-	-	-	-	-	18	22	7	11	14	10	12	9	5	6	4	10	7	48	35	218
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	378	-	-	708
Commercial Incentive-Based Discontinued/Completed Programs SUBTOTAL	-	-	65	136	1,310	161	57	46	41	58	76	49	67	90	98	114	241	914	504	317	574	553	130	45	5,647
Commercial Incentive-Based TOTAL	-	-	65	273	1,959	738	575	334	325	502	291	223	261	333	507	1,002	1,811	2,296	1,995	2,113	2,481	2,249	1,522	1,895	23,751
Commercial TOTAL	-	-	65	273	1,959	738	575	334	325	502	291	241	305	364	538	1,020	1,849	2,364	2,041	2,136	2,491	2,256	1,526	1,895	24,089
Industrial																									
Industrial Incentive-Based Programs																									
Performance Optimization	-	-	-	-	3	1	4	4	4	8	2	7	15	22	28	44	46	44	66	84	97	72	55	71	677
Natural Gas Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	14	14	13	14	75
Industrial Incentive-Based Programs	-	-	-	-	3	1	4	4	4	8	2	7	15	22	28	44	46	44	76	94	111	86	68	85	752
Industrial Incentive-Based Discontinued/Completed Programs																									
High Efficiency Motors	-	-	24	157	199	228	181	178	191	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,158
Industrial Incentive-Based Discontinued/Completed Programs	-	-	24	157	199	228	181	178	191	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,158
Customer Self-Generation Programs																									
Bioenergy Optimization Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	2	22	22
Customer Self-Generation Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	2	22	22
Rate/Load Management Programs																									
Curtailable Rates[iv]	-	-	-	-	-	-	-	-	-	-	2	2	2	3	4	4	4	4	4	4	4	3	3	3	5
Rate/Load Management Programs	-	-	-	-	-	-	-	-	-	-	2	2	2	3	4	4	4	4	4	4	4	3	3	3	5
Industrial TOTAL	-	-	24	157	202	229	185	182	195	8	4	9	17	25	32	48	50	49	81	99	116	90	73	110	1,937
DSM SUPPORT PROGRAMS ACTIVE & DISCONTINUED/COMPLETED SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	18	6,305	7,064	9,928	12,668	15,465	14,232	11,993	13,555	14,406	9,498	18,647	7,750	141,529
INCENTIVE-BASED PROGRAMS ACTIVE & DISCONTINUED/COMPLETED SUBTOTAL	6,169	8,954	8,697	5,242	6,321	967	760	717	1,229	1,191	295	232	278	358	539	23,208	33,157	59,346	70,723	108,600	117,195	125,901	51,476	42,244	673,752
ALL PROGRAMS ACTIVE & DISCONTINUED/COMPLETED TOTAL	**6,169**	**8,954**	**8,697**	**5,242**	**6,321**	**967**	**760**	**717**	**1,229**	**1,191**	**295**	**250**	**6,583**	**7,422**	**10,467**	**35,876**	**48,622**	**73,578**	**82,716**	**122,155**	**131,601**	**135,399**	**70,123**	**49,994**	**815,281**

† Customers may participate in more than one Power Smart Program.

*Participation is measured by completed projects, and excludes free drivers and market transformation.

** A summation of annual participation columns will not necessarily correspond with the total participation to date. This is a result of the Curtailable Rates Program participation (see footnote iv).

[i] The program offering in-home energy assessments prior to 2007/08 was known as the EnerGuide for Houses program. As Manitoba Hydro highly subsidized the evaluation cost of Amerispec and EnerGuy participants, they are included in the participation figures for 2011/12 and 2012/13.

[ii] Starting in 2004/05, the R-2000 Program was grouped into the Power Smart New Home Program.

[iii] Power Smart Energy Manager Program participation is measured by schools. Schools that joined the program in 2000/01 participated for 4 years, and schools that joined in 2002/03 participated for 2 years.

[iv] Annual participation represents the number of customers who participate each year. Since most customers participate year after year, the cumulative number represents the actual number of customers who have participated to date.

[v] Participation in the CFL Program is defined as 1 household.

Appendix D

Synopsis of Discontinued Power Smart Incentive-Based Programs

Residential Programs

Outdoor Timer Program

This program encouraged the use of outdoor timers to control block heaters and interior car warmers at existing homes.

Refrigerator/Freezer Buy-Back Pilot

This pilot program encouraged the removal of older, inefficient second refrigerators and freezers in existing homes.

Residential Shower Head Pilot

This pilot program encouraged the installation of energy efficient shower heads in existing homes.

Energy Efficient Water Saving Measures Component of the "No Worry Plan"

This program encouraged participants of the "No Worry Plan" hot water tank program to install energy saving devices (faucet aerators, heat traps, energy efficient shower heads and pipe wrap) as part of a bonus package when installing new hot water tanks.

Energy Efficient Water Tank Component of the "No Worry Plan"

This program encouraged residential customers with electric hot water heaters to purchase, finance or lease the most energy efficient water heater available when replacing or installing new electric water heaters.

New Home Program

This program provided customers in the residential new construction market with prescriptive Power Smart standards and incentives to implement energy saving features and construction techniques into the construction of new homes.

Compact Fluorescent Lighting Program

This program encouraged residential customers and property managers of multi-unit residential buildings to install energy efficient compact fluorescent light bulbs.

Seasonal LED Lighting Program

This program encouraged customers to replace their existing incandescent seasonal light strings with energy efficient LED light strings.

High Efficiency Furnace/Boiler Program

This program encouraged residential customers to replace their existing natural gas furnaces or boilers with ENERGY STAR-qualified high efficiency natural gas furnaces or boilers.

Residential Appliances Program

This program encouraged residential customers to purchase ENERGY STAR-qualified clothes washers and chest freezers.

Programmable Thermostat Pilot

This pilot program encouraged customers to replace non-programmable thermostats with ENERGY STAR programmable models.

Energy Efficient Light Fixtures Program

The Energy Efficient Light Fixtures Program provided financial incentives to residential customers and property managers of multi-unit residential buildings to encourage the installation of ENERGY STAR® qualified light fixtures, dimmer switches and LED night lights.

Incentive Component of the "Solar Water Heating Program"

In partnership with Natural Resources Canada, this program encouraged homeowners to purchase solar water heating systems.

Commercial Programs

Roadway Lighting Program

This program converted existing incandescent and mercury vapor street lighting to more energy efficient, high pressure sodium lighting.

Sentinel Lighting Program

This program encourages the conversion of yard lighting and sentinel lighting from mercury vapor and incandescent lighting to the more energy efficient, high pressure sodium lighting.

Commercial Shower Head Pilot

This pilot program encouraged commercial operations to retrofit shower facilities with energy efficient shower heads.

Infrared Heat Lamps

This program encouraged swine farrowing operations to use energy efficient heat lamps in place of standard heat lamps.

Agricultural Demand Controller

This program encouraged large agricultural operations to install demand controllers to reduce peak demand consumption.

Livestock Waterer

This program encouraged dairy and cattle operations to install energy efficient waterers to reduce energy and demand consumption.

Air Barrier Component of the "Commercial Construction Program"

This program encouraged commercial customers to install greater efficiency air barriers when retrofitting their building's envelope.

Air Conditioning Component of the "Commercial Construction Program"

This program encouraged commercial customers to replace their existing air conditioning system with a more energy efficient system.

Commercial Parking Lot Controllers

This program encouraged customers to implement parking lot controller technology to effectively manage electricity usage in their parking lots.

Agricultural Heat Pads

This program encouraged owners of swine barns to replace the traditional heat lamps in their hog farrowing crates with energy efficient heat pads.

Commercial Rinse & Save

The program offered operators of restaurants or food services businesses the free installation of a low-flow pre-rinse spray valve.

Power Smart Energy Manger

This program provided information, training and support for Manitoba school divisions to hire dedicated energy managers. During 2012/13, this program was undergoing redesign.

Power Smart Shops

This program encouraged small independent commercial customers to fully convert their buildings to a Power Smart Shop level of efficiency. During 2012/13, this program was undergoing redesign.

Industrial Programs

High Efficiency Motors

This program encouraged the installation of high efficiency motors in industrial and commercial operations.

Appendix E

Curtailable Rates Program Information & Methodology

- The Curtailable Rates Program provides incentives to large industrial customers who curtail their electrical load when called upon by Manitoba Hydro. Incentives are provided by way of a credit on the customer's monthly energy bill.
- 2012/13 reported demand savings for the Curtailable Rates Program are based on a methodology where curtailments throughout the year are analyzed to determine the amount of curtailable load that can be expected to be on the system at the time a curtailment is called. This methodology has been in place since 2000/01. For previous methodology details, refer to the appropriate Power Smart Annual Review.
- Curtailable Rates Program targets are from the 2012 Base DSM Forecast.
- Curtailable Rate Program targets and savings are adjusted for efficiency. This adjustment is made to equate load available for curtailment to that of an actual generator. Curtailments are not as efficient since there is potential risk customers may not curtail at all or may not curtail in time for Manitoba Hydro's system peak. The efficiency factor is based on the curtailment option selected by the customer.
- Savings resulting from the Curtailable Rates Program are available as long as the service offering continues, whether or not actual curtailments are made at the time of system peak or at any other time. Curtailments may be made to:
    - Re-establish contingency reserves;
    - Maintain planning reserve obligations;
    - To protect firm load when reserves are insufficient to avoid curtailing firm load; and to
    - Meet Manitoba Hydro's non-spinning reserves to the extent necessary.
- The expected availability of this load and not the timing of its dispatch determine the future benefits of demand savings for this program.
- Under the 2012/13 Power Smart Annual Review, the Curtailable Rates Program has been treated as an incentive-based program. This is consistent with treatment in the 2012 Base DSM Forecast. As a rate/load management program, cost-effectiveness metrics are not reported.

Appendix F

Energy Savings -Incentive-Based Programs

2012/13 Annual Energy Savings - GW.h
Electric Incentive Based Programs

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																	
Refrigerator Retirement Program	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	-	-	-	-	9.9	-
Home Insulation	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	7.0	7.0
Water & Energy Saver	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.5	3.5
Affordable Energy Program	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.2	3.2
	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	12.1	12.1	12.1	12.1	23.7	13.8
DISCONTINUED/COMPLETED																	
New Homes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Compact Fluorescent Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Outdoor Timer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Res Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Heater Rental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy Efficient Light Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retrofit/Demonstration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RESIDENTIAL TOTAL	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	12.1	12.1	12.1	12.1	23.7	13.9
COMMERCIAL																	
Commercial Lighting	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	31.6	31.6
Commercial Refrigeration	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	14.3	14.3
New Buildings	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.7	4.7
Commercial Insulation*	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.6	3.6
Commercial Windows*	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.4
Commercial Earth Power	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.4
Internal Retrofit	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.8	1.8
HVAC - Chillers	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3
Custom	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Commercial Clothes Washers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
City of Winnipeg Agreement	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Commercial Building Optimization	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						0.1	-
HVAC - CO2 Sensors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Commercial Kitchen Appliances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Network Energy Manager	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.7	55.7	55.7	55.7	55.7	63.6	63.5
DISCONTINUED/COMPLETED																	
Agricultural Heat Pads	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
Parking Lot Controllers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Showerhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrared Heat Lamp	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livestock Waterer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roadway Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sentinel Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Barrier	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Smart Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
COMMERCIAL TOTAL	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.5	57.5	57.5	57.5	57.5	65.6	65.5
INDUSTRIAL																	
Performance Optimization	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	75.6	75.6
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	75.6	75.6
DISCONTINUED/COMPLETED																	
Industrial (Basic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retrofit/Demonstration GSL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High Efficiency Motors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INDUSTRIAL TOTAL	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	75.6	75.6
EFFICIENCY PROGRAMS SUBTOTAL	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.0	138.4	138.4	138.4	138.4	164.9	155.0
CUSTOMER SELF-GENERATION PROGRAMS																	
BioEnergy Optimization Program	82.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	90.7	55.7
	82.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	90.7	55.7
RATE/LOAD MANAGEMENT PROGRAMS																	
Curtailable Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	229.6	197.7	197.7	197.7	197.7	197.7	197.7	197.7	197.7	197.7	197.6	189.0	189.0	189.0	189.0	N/A	N/A
GW.h IMPACTS (at generation)	255.7	220.6	220.6	220.6	220.6	220.6	220.6	220.6	220.6	220.6	220.5	210.6	210.6	210.6	210.6	255.7	210.6

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Persisting Energy Savings - GW.h
Electric Incentive Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	4.2	10.7	16.5	22.1	28.4	33.8	38.7	38.7	44.1	44.1
Refrigerator Retirement Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.9	10.9	12.4	-
Water & Energy Saver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.5	9.5	10.8	10.8
Affordable Energy Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.1	2.0	4.2	6.4	6.4	7.3	7.3
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	4.2	10.7	17.0	23.2	30.4	38.0	65.6	65.6	74.8	62.3
DISCONTINUED/COMPLETED																										
Compact Fluorescent Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.1	15.4	20.6	28.1	49.9	77.7	92.1	92.1	92.1	105.0	102.5
Outdoor Timer	5.0	8.9	15.3	20.6	24.8	29.2	30.9	34.7	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	41.6	41.6
Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	7.6	12.1	12.7	12.7	12.7	12.7	14.5	14.5
New Homes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.6	1.9	2.9	3.7	4.3	5.0	5.5	5.5	6.3	6.3
Energy Efficient Light Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	1.0	2.1	2.6	3.7	4.5	4.5	5.1	5.1
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	1.3	2.3	3.1	3.2	3.2	3.2	3.2	3.7	3.7
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	1.3	1.3	1.3	1.4	1.4
Res Hot Water	-	-	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Water Heater Rental	-	-	-	-	-	-	-	0.1	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Retrofit/Demonstration	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RBB	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.0	8.9	15.7	21.0	25.1	29.6	31.3	35.1	37.2	37.5	37.6	37.6	37.6	37.6	37.6	45.8	53.7	65.4	79.8	108.8	139.8	156.0	157.2	157.2	179.2	176.7
RESIDENTIAL TOTAL	5.0	8.9	15.7	21.0	25.1	29.6	31.3	35.1	37.2	37.5	37.6	37.6	37.6	37.6	37.6	47.5	57.9	76.1	96.9	132.0	170.2	193.9	222.8	222.8	253.9	239.0
COMMERCIAL																										
Commercial Lighting	-	-	-	2.9	17.0	35.9	55.0	61.2	67.4	85.4	90.8	94.9	100.2	105.6	116.2	132.6	153.1	175.8	193.9	218.9	239.5	258.7	281.2	281.2	320.6	320.6
Internal Retrofit	-	-	-	0.2	1.2	2.7	3.3	3.8	4.3	4.9	5.4	5.9	6.1	6.9	9.4	12.2	14.4	17.0	18.0	19.8	29.5	41.4	53.6	53.6	61.1	61.1
Commercial Earth Power	-	-	-	-	-	-	-	0.3	1.1	1.8	2.9	3.2	4.0	5.1	7.8	8.8	11.1	15.3	18.6	20.2	23.6	26.0	27.8	27.8	31.7	31.7
Custom	-	-	-	-	-	-	-	0.4	0.4	2.6	10.0	10.8	11.7	12.2	12.8	12.8	12.9	13.1	15.4	15.9	17.4	18.8	20.2	20.2	23.0	23.0
Commercial Insulation*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.9	4.1	6.6	9.7	12.5	12.5	14.2	14.2
Commercial Windows*	-	-	-	-	-	-	-	0.1	0.4	0.6	0.7	0.9	1.0	1.4	1.8	2.3	3.2	3.9	4.5	5.2	7.3	9.7	11.7	11.7	13.4	13.4
City of Winnipeg Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.6	1.2	7.6	9.6	10.1	10.3	10.8	11.1	11.5	11.5	13.1	13.1
Commercial Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	3.0	4.3	5.5	7.0	8.7	8.7	9.9	9.9
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	3.7	4.1	4.3	4.8	5.3	7.1	8.2	8.2	9.3	9.3
New Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	2.3	2.6	2.6
Commercial Building Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.6	0.9	0.9	0.9	1.0	-
Commercial Kitchen Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.5	0.6	0.7	0.7	0.8	0.8
Commercial Clothes Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.3	0.4	0.5	0.5	0.5	0.5
Network Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.2	0.2	0.2	0.2
HVAC - CO2 Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.1	0.1	0.1	0.1
	-	-	-	3.1	18.2	38.6	58.3	65.8	73.6	95.3	109.7	115.6	123.1	131.1	148.5	172.2	206.0	240.7	269.7	304.3	347.0	391.6	440.0	440.0	501.6	500.6
DISCONTINUED/COMPLETED																										
Parking Lot Controllers	-	-	-	-	-	-	-	0.8	1.6	3.7	4.1	4.4	5.9	6.8	8.8	11.5	20.0	27.9	30.5	32.4	34.9	38.1	39.4	39.4	44.9	44.9
Agricultural Heat Pads	-	-	-	-	-	-	-	-	-	3.5	5.5	6.7	9.2	11.6	12.9	15.4	16.4	17.0	21.8	24.3	25.4	28.4	30.2	30.2	34.5	34.5
Roadway Lighting	-	-	3.9	13.5	23.2	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	34.0	34.0
Sentinel Lighting	-	-	2.3	4.7	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	8.5	8.5
Infrared Heat Lamp	-	-	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.2	4.2
Commercial Showerhead	-	-	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6
Commercial Air Barrier	-	-	-	-	-	-	-	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.7	0.7	0.7	0.8	0.8
Livestock Waterer	-	-	-	-	-	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-
Commercial Air Conditioning	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Smart Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	2.9	4.8	5.2	5.2	-	-	-	-
	-	-	11.3	23.4	35.8	42.7	42.8	43.8	44.7	50.3	52.8	54.4	58.6	62.1	65.5	70.8	80.3	90.8	99.1	105.6	109.8	116.4	114.3	114.3	130.3	129.9
COMMERCIAL TOTAL	-	-	11.3	26.5	54.0	81.3	101.1	109.6	118.3	145.5	162.5	170.0	181.7	193.2	214.0	243.1	286.3	331.5	368.9	409.8	456.7	508.0	554.3	554.3	631.9	630.5
INDUSTRIAL																										
Performance Optimization	-	-	-	-	-	2.4	7.2	35.1	43.5	85.9	107.7	110.8	142.9	170.5	181.5	207.6	238.6	249.3	276.4	294.9	319.6	347.9	373.1	373.1	410.4	410.4
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	2.4	7.2	35.1	43.5	85.9	107.7	110.8	142.9	170.5	181.5	207.6	238.6	249.3	276.4	294.9	319.6	347.9	373.1	373.1	410.4	410.4
DISCONTINUED/COMPLETED																										
Retrofit/Demonstration GSL	-	-	-	0.1	0.7	9.7	32.7	32.7	32.7	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.0	33.0	33.0	33.0	33.0	33.0	36.3	36.3
High Efficiency Motors	-	-	0.4	4.8	7.7	10.3	13.3	17.9	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	23.6	23.6
Industrial (Basic)	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	0.4	4.9	8.3	20.0	46.0	50.6	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.5	54.5	54.5	54.5	54.5	54.5	59.9	59.9
INDUSTRIAL TOTAL	-	-	0.4	4.9	8.3	22.4	53.2	85.7	97.7	140.4	162.3	165.4	197.5	225.1	236.0	262.2	293.1	303.9	330.9	349.3	374.1	402.4	427.6	427.6	470.3	470.3
EFFICIENCY PROGRAMS SUBTOTAL	5.0	8.9	27.4	52.3	87.5	133.3	185.6	230.5	253.2	323.5	362.4	373.0	416.8	455.9	487.6	552.7	637.4	711.6	796.6	891.1	1,001.0	1,104.3	1,204.7	1,204.6	1,356.2	1,339.8
CUSTOMER SELF-GENERATION PROGRAMS																										
BioEnergy Optimization Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	120.1	84.2	94.0	80.1	86.6	70.3	0.1	0.1	0.1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	120.1	84.2	94.0	80.1	86.6	70.3	0.1	0.1	0.1
RATE/LOAD MANAGEMENT PROGRAMS																										
Curtailable Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	5.0	8.9	27.4	52.3	87.5	133.3	185.6	230.5	253.2	323.5	362.4	373.0	416.8	455.9	487.6	552.7	647.6	831.6	880.8	985.1	1,081.1	1,190.8	1,274.9	1,204.7	N/A	N/A
GW.h IMPACTS (at generation)	5.7	10.2	31.2	59.4	99.4	151.1	209.5	259.3	284.7	363.1	406.6	418.6	467.2	510.7	546.5	619.6	726.2	931.1	987.5	1,105.3	1,214.2	1,338.0	1,433.5	1,356.2	1,356.2	1,339.9

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Persisting Energy Savings - GW.h
Electric Incentive Based Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Home Insulation	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
Refrigerator Retirement Program	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water & Energy Saver	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Affordable Energy Program	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
DISCONTINUED/COMPLETED																											
Compact Fluorescent Lighting	92.1	65.7	65.7	45.9	18.9	89.4	89.4	89.4	89.4	89.4	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
Outdoor Timer	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
Appliances	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
New Homes	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Energy Efficient Light Fixtures	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Seasonal LED Lighting	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
High Efficiency Furnace & Boiler	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Res Hot Water	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Water Heater Rental	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thermostat	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Retrofit/Demonstration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	157.2	130.8	130.8	111.0	84.0	154.5	154.5	154.5	154.5	154.5	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0
RESIDENTIAL TOTAL	222.8	196.4	196.4	176.6	149.6	220.1	220.1	220.1	220.1	209.2	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7	209.7
COMMERCIAL																											
Commercial Lighting	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2	281.2
Internal Retrofit	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
Commercial Earth Power	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
Custom	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
Commercial Insulation*	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Commercial Windows*	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
City of Winnipeg Agreement	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Commercial Refrigeration	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
HVAC - Chillers	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
New Buildings	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Commercial Building Optimization	0.9	0.9	0.9	0.9	0.9	0.9	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Kitchen Appliances	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Commercial Clothes Washers	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Network Energy Manager	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
HVAC - CO2 Sensors	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	440.0	440.0	440.0	440.0	440.0	440.0	440.0	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1	439.1
DISCONTINUED/COMPLETED																											
Parking Lot Controllers	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
Agricultural Heat Pads	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2
Roadway Lighting	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Sentinel Lighting	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Infrared Heat Lamp	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Commercial Showerhead	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Commercial Air Barrier	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Power Smart Shops	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Livestock Waterer	0.4	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Smart Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	114.3	114.2	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0
COMMERCIAL TOTAL	554.3	554.1	554.0	553.9	553.9	553.9	553.9	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1	553.1
INDUSTRIAL																											
Performance Optimization	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1	373.1
DISCONTINUED/COMPLETED																											
Retrofit/Demonstration GSL	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
High Efficiency Motors	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Industrial (Basic)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
INDUSTRIAL TOTAL	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5	427.5
EFFICIENCY PROGRAMS SUBTOTAL	1,204.6	1,178.0	1,177.9	1,158.0	1,131.1	1,201.6	1,201.6	1,200.7	1,200.7	1,189.8	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3
CUSTOMER SELF-GENERATION PROGRAMS																											
BioEnergy Optimization Program	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RATE/LOAD MANAGEMENT PROGRAMS																											
Curtailable Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	1,204.7	1,178.1	1,178.0	1,158.1	1,131.2	1,201.7	1,201.7	1,200.8	1,200.8	1,189.9	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3	1,190.3
GW.h IMPACTS (at generation)	1,356.2	1,325.9	1,325.8	1,303.1	1,272.4	1,352.8	1,352.8	1,351.8	1,351.8	1,339.4	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9	1,339.9

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Total Annual Energy Savings - GW.h
Electric Incentive Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	4.2	10.7	16.5	22.1	28.4	33.8	38.7	44.9	51.2	51.2
Refrigerator Retirement Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.9	19.6	22.3	-
Water & Energy Saver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.5	12.6	14.4	14.4
Affordable Energy Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.1	2.0	4.2	6.4	9.3	10.6	10.6
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	4.2	10.7	17.0	23.2	30.4	38.0	65.6	86.3	98.4	76.1
DISCONTINUED/COMPLETED																										
Compact Fluorescent Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.1	15.4	20.6	28.1	49.9	77.7	92.1	92.1	92.1	105.0	102.5
Outdoor Timer	5.0	8.9	15.3	20.6	24.8	29.2	30.9	34.7	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	41.6	41.6
Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	7.6	12.1	12.7	12.7	12.7	12.7	14.5	14.5
New Homes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.6	1.9	2.9	3.7	4.3	5.0	5.5	5.5	6.3	6.3
Energy Efficient Light Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	1.0	2.1	2.6	3.7	4.5	4.5	5.1	5.1
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	1.3	2.3	3.1	3.2	3.2	3.2	3.2	3.7	3.7
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	1.3	1.3	1.3	1.4	1.4
Res Hot Water	-	-	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Water Heater Rental	-	-	-	-	-	-	-	0.1	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Retrofit/Demonstration	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RBB	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.0	8.9	15.7	21.0	25.1	29.6	31.3	35.1	37.2	37.5	37.6	37.6	37.6	37.6	37.6	45.8	53.7	65.4	79.8	108.8	139.8	156.0	157.2	157.2	179.2	176.7
RESIDENTIAL TOTAL	5.0	8.9	15.7	21.0	25.1	29.6	31.3	35.1	37.2	37.5	37.6	37.6	37.6	37.6	37.6	47.5	57.9	76.1	96.9	132.0	170.2	193.9	222.8	243.5	277.6	252.9
COMMERCIAL																										
Commercial Lighting	-	-	-	2.9	17.0	35.9	55.0	61.2	67.4	85.4	90.8	94.9	100.2	105.6	116.2	132.6	153.1	175.8	193.9	218.9	239.5	258.7	281.2	309.0	352.2	352.2
Internal Retrofit	-	-	-	0.2	1.2	2.7	3.3	3.8	4.3	4.9	5.4	5.9	6.1	6.9	9.4	12.2	14.4	17.0	18.0	19.8	29.5	41.4	53.6	55.2	62.9	62.9
Commercial Earth Power	-	-	-	-	-	-	-	0.3	1.1	1.8	2.9	3.2	4.0	5.1	7.8	8.8	11.1	15.3	18.6	20.2	23.6	26.0	27.8	29.9	34.0	34.0
Commercial Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	3.0	4.3	5.5	7.0	8.7	21.2	24.2	24.2
Custom	-	-	-	-	-	-	-	0.4	0.4	2.6	10.0	10.8	11.7	12.2	12.8	12.8	12.9	13.1	15.4	15.9	17.4	18.8	20.2	21.0	23.9	23.9
Commercial Insulation*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.9	4.1	6.6	9.7	12.5	15.6	17.8	17.8
Commercial Windows*	-	-	-	-	-	-	-	0.1	0.4	0.6	0.7	0.9	1.0	1.4	1.8	2.3	3.2	3.9	4.5	5.2	7.3	9.7	11.7	13.9	15.8	15.8
City of Winnipeg Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.6	1.2	7.6	9.6	10.1	10.3	10.8	11.1	11.5	11.6	13.2	13.2
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	3.7	4.1	4.3	4.8	5.3	7.1	8.2	9.4	10.7	10.7
New Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	6.4	7.3	7.3
Commercial Building Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.6	0.9	0.9	1.0	1.1	-
Commercial Kitchen Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.5	0.6	0.7	0.7	0.8	0.8
Commercial Clothes Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.3	0.4	0.5	0.6	0.7	0.7
Network Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.2	0.2	0.2	0.2
HVAC - CO2 Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.1	0.1	0.2	0.2
	-	-	-	3.1	18.2	38.6	58.3	65.8	73.6	95.3	109.7	115.6	123.1	131.1	148.5	172.2	206.0	240.7	269.7	304.3	347.0	391.6	440.0	495.8	565.2	564.1
DISCONTINUED/COMPLETED																										
Parking Lot Controllers	-	-	-	-	-	-	-	0.8	1.6	3.7	4.1	4.4	5.9	6.8	8.8	11.5	20.0	27.9	30.5	32.4	34.9	38.1	39.4	39.4	44.9	44.9
Agricultural Heat Pads	-	-	-	-	-	-	-	-	-	3.5	5.5	6.7	9.2	11.6	12.9	15.4	16.4	17.0	21.8	24.3	25.4	28.4	30.2	32.0	36.5	36.5
Roadway Lighting	-	-	3.9	13.5	23.2	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	34.0	34.0
Sentinel Lighting	-	-	2.3	4.7	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	8.5	8.5
Infrared Heat Lamp	-	-	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.2	4.2
Commercial Showerhead	-	-	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6
Commercial Air Barrier	-	-	-	-	-	-	-	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.7	0.7	0.7	0.8	0.8
Livestock Waterer	-	-	-	-	-	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-
Commercial Air Conditioning	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	2.9	4.8	5.2	5.2	-	-	-	-
Power Smart Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	11.3	23.4	35.8	42.7	42.8	43.8	44.7	50.3	52.8	54.4	58.6	62.1	65.5	70.8	80.3	90.8	99.1	105.6	109.8	116.4	114.3	116.1	132.4	132.0
COMMERCIAL TOTAL	-	-	11.3	26.5	54.0	81.3	101.1	109.6	118.3	145.5	162.5	170.0	181.7	193.2	214.0	243.1	286.3	331.5	368.9	409.8	456.7	508.0	554.3	611.9	697.6	696.0
INDUSTRIAL																										
Performance Optimization	-	-	-	-	-	2.4	7.2	35.1	43.5	85.9	107.7	110.8	142.9	170.5	181.5	207.6	238.6	249.3	276.4	294.9	319.6	347.9	373.1	441.8	486.0	486.0
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	2.4	7.2	35.1	43.5	85.9	107.7	110.8	142.9	170.5	181.5	207.6	238.6	249.3	276.4	294.9	319.6	347.9	373.1	441.8	486.0	486.0
DISCONTINUED/COMPLETED																										
Retrofit/Demonstration GSL	-	-	-	0.1	0.7	9.7	32.7	32.7	32.7	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.0	33.0	33.0	33.0	33.0	33.0	36.3	36.3
High Efficiency Motors	-	-	0.4	4.8	7.7	10.3	13.3	17.9	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	23.6	23.6
Industrial (Basic)	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	0.4	4.9	8.3	20.0	46.0	50.6	54.2	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.5	54.5	54.5	54.5	54.5	54.5	59.9	59.9
INDUSTRIAL TOTAL	-	-	0.4	4.9	8.3	22.4	53.2	85.7	97.7	140.4	162.3	165.4	197.5	225.1	236.0	262.2	293.1	303.9	330.9	349.3	374.1	402.4	427.6	496.3	545.9	545.9
EFFICIENCY PROGRAMS SUBTOTAL	5.0	8.9	27.4	52.3	87.5	133.3	185.6	230.5	253.2	323.5	362.4	373.0	416.8	455.9	487.6	552.7	637.4	711.6	796.6	891.1	1,001.0	1,104.3	1,204.7	1,351.7	1,521.1	1,494.8
CUSTOMER SELF-GENERATION PROGRAMS																										
Bioenergy Optimization Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	120.1	84.2	94.0	80.1	86.6	70.3	82.5	90.8	55.7
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	120.1	84.2	94.0	80.1	86.6	70.3	82.5	80.1	57.8
RATE/LOAD MANAGEMENT PROGRAMS																										
Curtailable Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	5.0	8.9	27.4	52.3	87.5	133.3	185.6	230.5	253.2	323.5	362.4	373.0	416.8	455.9	487.6	552.7	647.6	831.6	880.8	985.1	1,081.1	1,190.8	1,274.9	1,434.3	N/A	N/A
GW.h IMPACTS (at generation)	5.7	10.2	31.2	59.4	99.4	151.1	209.5	259.3	284.7	363.1	406.6	418.6	467.2	510.7	546.5	619.6	726.2	931.1	987.5	1,105.3	1,214.2	1,338.0	1,433.5	1,611.9	1,611.9	1,550.5

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Total Annual Energy Savings - GW.h
Electric Incentive Based Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Home Insulation	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9
Refrigerator Retirement Program	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water & Energy Saver	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Affordable Energy Program	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	75.4	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
DISCONTINUED/COMPLETED																											
Compact Fluorescent Lighting	92.1	65.7	65.7	45.9	18.9	89.4	89.4	89.4	89.4	89.4	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
Outdoor Timer	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
Appliances	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
New Homes	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Energy Efficient Light Fixtures	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Seasonal LED Lighting	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
High Efficiency Furnace & Boiler	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Res Hot Water	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Water Heater Rental	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thermostat	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Retrofit/Demonstration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	157.2	130.8	130.8	111.0	84.1	154.6	154.6	154.6	154.6	154.6	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0
RESIDENTIAL TOTAL	243.5	217.1	217.1	197.3	170.4	240.9	240.9	240.9	240.9	230.0	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8
COMMERCIAL																											
Commercial Lighting	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0	309.0
Internal Retrofit	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
Commercial Earth Power	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Commercial Refrigeration	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
Custom	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Commercial Insulation*	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
Commercial Windows*	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
City of Winnipeg Agreement	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
HVAC - Chillers	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
New Buildings	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Commercial Building Optimization	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Kitchen Appliances	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Commercial Clothes Washers	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Network Energy Manager	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
HVAC - CO2 Sensors	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	495.8	495.8	495.8	495.8	495.8	495.8	495.8	494.9	494.9	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8
DISCONTINUED/COMPLETED																											
Parking Lot Controllers	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
Agricultural Heat Pads	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
Roadway Lighting	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Sentinel Lighting	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Infrared Heat Lamp	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Commercial Showerhead	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Commercial Air Barrier	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Power Smart Shops	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Livestock Waterer	0.4	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spray Valves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Smart Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116.1	116.0	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8	115.8
COMMERCIAL TOTAL	611.9	611.7	611.6	611.5	611.5	611.5	611.5	610.6	610.6	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5	610.5
INDUSTRIAL																											
Performance Optimization	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8	441.8
DISCONTINUED/COMPLETED																											
Retrofit/Demonstration GSL	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
High Efficiency Motors	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Industrial (Basic)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
INDUSTRIAL TOTAL	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3	496.3
EFFICIENCY PROGRAMS SUBTOTAL	1,351.7	1,325.1	1,325.0	1,305.1	1,278.2	1,348.7	1,348.7	1,347.8	1,347.8	1,336.8	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6	1,328.6
CUSTOMER SELF-GENERATION PROGRAMS																											
Bioenergy Optimization Program	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
RATE/LOAD MANAGEMENT PROGRAMS																											
Curtailable Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	1,402.4	1,375.8	1,375.7	1,355.8	1,328.9	1,399.4	1,399.4	1,398.5	1,398.5	1,387.5	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3	1,379.3
GW.h IMPACTS (at generation)	1,576.9	1,546.6	1,546.4	1,523.8	1,493.0	1,573.4	1,573.4	1,572.4	1,572.4	1,559.9	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5	1,550.5

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Appendix G

Average Winter Demand Savings - Incentive-Based Programs

2012/13 Average Winter MW
Electric Incentive Based Programs

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																	
Home Insulation	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.8	3.8
Affordable Energy Program	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Refrigerator Retirement Program	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	1.1	-
WESP	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	6.8	5.7
DISCONTINUED/COMPLETED																	
New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CFL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Outdoor Timer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Res Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Heater Rental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EELF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retrofit/Demonstration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RESIDENTIAL TOTAL	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	6.8	5.7
COMMERCIAL																	
Commercial Lighting Program	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	8.7	8.7
Commercial Refrigeration	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6
Commercial Insulation*	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.4	1.4
Commercial New Buildings	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2
Commercial Windows*	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	1.0
Commercial Earth Power	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Internal Retrofit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Commercial Washers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
City of Winnipeg Agreement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HVAC - CO2 Sensors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CBOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0	-
Commercial Kitchen Appliances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Network Energy Manager	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Custom Measures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	15.0	14.9
DISCONTINUED/COMPLETED																	
Agricultural Heat Pads	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Showerhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrared Heat Lamp	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livestock Waterer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roadway Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sentinel Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Barrier	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural Demand Controller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
COMMERCIAL TOTAL	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	15.2	15.2
INDUSTRIAL																	
Performance Optimization	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	9.5	9.5
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	9.5	9.5
DISCONTINUED/COMPLETED																	
Industrial (Basic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retrofit/Demonstration GSL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High Efficiency Motors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INDUSTRIAL TOTAL	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	9.5	9.5
EFFICIENCY PROGRAMS SUBTOTAL	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	27.0	27.0	27.0	27.0	31.5	30.4
CUSTOMER SELF-GENERATION PROGRAMS																	
Bioenergy	9.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	10.3	6.3
	9.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	10.3	6.3
RATE/LOAD MANAGEMENT PROGRAMS																	
Industrial Curtailable Rate	144.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159.2	-
	144.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159.2	-
MW IMPACTS (at meter)	182.1	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	32.8	32.8	32.8	32.8	N/A	N/A
MW IMPACTS (at generation)	201.1	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	36.8	36.8	36.8	36.8	201.1	36.8

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Persisting Average Winter MW
Electric Incentive Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	2.0	5.2	8.0	10.7	13.8	16.4	18.8	18.8	21.4	21.4
Affordable Energy Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.4	0.7	1.5	3.0	3.0	3.5	3.5
WESP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	1.3	1.3	1.5	1.5
Refrigerator Retirement Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	0.7	0.8	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	2.0	5.2	8.1	11.0	14.5	18.6	23.9	23.9	27.2	26.4
DISCONTINUED/COMPLETED																										
CFL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	3.1	4.2	5.7	10.2	17.7	21.3	21.3	21.3	24.3	23.9
Outdoor Timer	0.3	0.5	0.9	1.2	1.5	1.9	2.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.7	2.7
Residential Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.0	1.6	1.7	1.7	1.7	1.7	1.9	1.9
New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.4	0.7	1.0	1.2	1.5	1.6	1.6	1.8	1.8
EELF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.4	0.4	0.5	0.5
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Res Hot Water	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water Heater Rental	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retrofit/Demonstration	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermostat	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.3	0.5	1.0	1.3	1.6	1.9	2.1	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.5	4.2	5.9	7.8	10.3	15.8	24.2	28.2	28.6	28.6	32.6	32.1
RESIDENTIAL TOTAL	0.3	0.5	1.0	1.3	1.6	1.9	2.1	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.5	5.0	7.9	12.9	18.4	26.8	38.7	46.9	52.4	52.4	59.8	58.6
COMMERCIAL																										
Commercial Lighting Program	-	-	-	0.5	2.6	5.7	9.2	10.8	11.6	15.1	16.4	17.4	18.5	19.7	21.7	24.2	27.7	31.1	34.1	38.5	42.3	45.7	48.8	48.8	55.6	55.6
Commercial Earth Power	-	-	-	-	-	-	-	0.1	0.8	1.1	1.5	1.7	2.0	2.4	3.8	4.2	5.4	7.4	8.7	9.3	10.3	11.2	11.9	11.9	13.6	13.6
Internal Retrofit	-	-	-	0.0	0.3	0.6	0.6	0.7	0.9	1.0	1.1	1.2	1.3	1.4	1.7	2.2	2.4	2.8	3.0	3.2	5.4	8.3	11.7	11.7	13.3	13.3
Commercial Insulation*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.7	1.8	3.2	4.8	6.2	6.2	7.1	7.1
Commercial Windows*	-	-	-	-	-	-	-	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.8	1.1	1.5	1.7	1.8	2.1	3.0	4.0	4.8	4.8	5.5	5.5
City of Winnipeg Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.1	0.3	1.6	2.0	2.1	2.2	2.4	2.5	2.6	2.6	2.9	2.9
Commercial Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.8	1.3	1.6	1.9	2.1	2.1	2.4	2.4
Commercial Custom Measures	-	-	-	-	-	-	-	0.0	0.0	0.1	0.4	0.5	0.5	0.5	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.4	1.7	1.7	1.9	1.9
Commercial New Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.5	0.5
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.3	0.4	0.4	0.4	0.4
Commercial Kitchen Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	0.1	0.1	0.2	0.2	0.2	0.2
CBOP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	-
Network Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
HVAC - CO2 Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	0.5	2.9	6.3	9.8	11.8	13.5	17.6	19.7	21.1	22.7	24.6	29.0	32.8	39.4	46.3	52.4	59.8	69.7	80.4	90.8	90.8	103.5	103.5
DISCONTINUED/COMPLETED																										
Roadway Lighting	-	-	0.9	3.1	5.4	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.9	7.9
Agricultural Heat Pads	-	-	-	-	-	-	-	-	-	0.7	1.0	1.2	1.6	2.0	2.2	2.6	2.7	2.8	3.2	3.5	3.6	3.9	4.1	4.1	4.6	4.6
Sentinel Lighting	-	-	0.5	1.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
Agricultural Demand Controller	-	-	-	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1
Infrared Heat Lamp	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Commercial Air Barrier	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Showerhead	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2
Livestock Waterer	-	-	-	-	-	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
PS Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.3	0.3	-	-	-	-
	-	-	2.2	5.7	9.0	10.6	10.7	10.8	10.8	11.4	11.8	12.0	12.5	12.9	13.2	13.6	13.7	13.7	14.2	14.7	14.9	15.2	15.1	15.1	17.3	17.2
COMMERCIAL TOTAL	-	-	2.2	6.3	11.9	16.9	20.5	22.5	24.2	29.1	31.5	33.2	35.2	37.5	42.1	46.4	53.1	60.1	66.6	74.5	84.6	95.6	105.9	105.9	120.8	120.6
INDUSTRIAL																										
Performance Optimization	-	-	-	-	-	0.3	1.1	4.6	5.8	37.4	39.1	39.5	48.4	52.9	54.1	57.6	61.7	63.2	66.2	68.7	72.0	75.5	78.9	78.9	86.8	86.8
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	0.3	1.1	4.6	5.8	37.4	39.1	39.5	48.4	52.9	54.1	57.6	61.7	63.2	66.2	68.7	72.0	75.5	78.9	78.9	86.8	86.8
DISCONTINUED/COMPLETED																										
Retrofit/Demonstration GSL	-	-	-	0.3	0.4	1.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.8	4.8
High Efficiency Motors	-	-	0.1	0.7	1.3	1.8	2.3	3.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.2	4.2
Industrial (Basic)	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	0.1	1.0	1.7	3.4	6.6	7.4	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	9.0	9.0
INDUSTRIAL TOTAL	-	-	0.1	1.0	1.7	3.7	7.7	12.0	13.9	45.5	47.3	47.6	56.6	61.1	62.2	65.8	69.8	71.3	74.4	76.9	80.2	83.7	87.1	87.1	95.8	95.8
EFFICIENCY PROGRAMS SUBTOTAL	0.3	0.5	3.3	8.6	15.2	22.6	30.3	36.9	40.6	77.1	81.4	83.4	94.4	101.2	106.9	117.2	130.9	144.3	159.4	178.1	203.4	226.1	245.5	245.5	276.3	275.0
CUSTOMER SELF-GENERATION PROGRAMS																										
Bioenergy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3	14.3	14.3	14.3	14.3	14.3	14.4	0.0	0.1	0.1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3	14.3	14.3	14.3	14.3	14.3	14.4	0.0	0.1	0.1
RATE/LOAD MANAGEMENT PROGRAMS																										
Industrial Curtailable Rate	-	-	-	-	40.7	46.4	24.7	32.7	80.0	48.2	58.0	57.1	68.0	110.3	148.5	153.8	189.1	183.3	180.6	172.8	149.2	154.5	147.2	-	-	-
	-	-	-	-	40.7	46.4	24.7	32.7	80.0	48.2	58.0	57.1	68.0	110.3	148.5	153.8	189.1	183.3	180.6	172.8	149.2	154.5	147.2	-	-	-
MW IMPACTS (at meter)	0.3	0.5	3.3	8.6	55.9	69.0	55.0	69.6	120.6	125.3	139.4	140.5	162.4	211.4	255.4	270.9	334.2	341.9	354.3	365.2	366.9	395.0	407.1	245.5	N/A	N/A
MW IMPACTS (at generation)	0.3	0.6	3.7	9.8	62.1	76.6	61.4	77.5	133.8	139.1	154.6	155.9	180.1	234.2	282.7	300.1	370.1	379.1	393.2	405.8	408.5	440.2	454.1	276.4	276.4	275.0

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Persisting Average Winter MW
Electric Incentive Based Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Home Insulation	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
Affordable Energy Program	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
WESP	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Refrigerator Retirement Program	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
DISCONTINUED/COMPLETED																											
CFL	21.3	16.9	16.9	13.5	9.0	20.9	20.9	20.9	20.9	20.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Outdoor Timer	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Residential Appliances	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
New Home Program	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
EELF	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
High Efficiency Furnace & Boiler	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Seasonal LED Lighting	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Res Hot Water	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water Heater Rental	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retrofit/Demonstration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28.6	24.1	24.1	20.7	16.2	28.1	28.1	28.1	28.1	28.1	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
RESIDENTIAL TOTAL	52.4	48.0	48.0	44.6	40.1	52.0	52.0	52.0	52.0	51.3	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
COMMERCIAL																											
Commercial Lighting Program	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
Commercial Earth Power	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Internal Retrofit	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Commercial Insulation*	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Commercial Windows*	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
City of Winnipeg Agreement	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Commercial Refrigeration	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Commercial Custom Measures	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Commercial New Buildings	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Commercial Washers	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Commercial Kitchen Appliances	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CBOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Network Energy Manager	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HVAC - CO2 Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
DISCONTINUED/COMPLETED																											
Roadway Lighting	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Agricultural Heat Pads	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Sentinel Lighting	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Agricultural Demand Controller	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Infrared Heat Lamp	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Commercial Air Barrier	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Showerhead	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Power Smart Shops	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Livestock Waterer	0.1	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15.1	15.1	15.1	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
COMMERCIAL TOTAL	105.9	105.9	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8
INDUSTRIAL																											
Performance Optimization	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
DISCONTINUED/COMPLETED																											
Retrofit/Demonstration GSL	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
High Efficiency Motors	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Industrial (Basic)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
INDUSTRIAL TOTAL	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
EFFICIENCY PROGRAMS SUBTOTAL	245.5	240.9	240.9	237.5	233.0	244.9	244.9	244.9	244.9	244.2	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3
CUSTOMER SELF-GENERATION PROGRAMS																											
Bioenergy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RATE/LOAD MANAGEMENT PROGRAMS																											
Industrial Curtailable Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW IMPACTS (at meter)	245.5	241.0	241.0	237.6	233.0	245.0	245.0	244.9	244.9	244.2	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3	244.3
MW IMPACTS (at generation)	276.4	271.2	271.2	267.4	262.2	275.8	275.8	275.7	275.7	274.9	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Total Average Winter MW
Electric Incentive Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	2.0	5.2	8.0	10.7	13.8	16.4	18.8	22.1	25.2	25.2
Affordable Energy Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.4	0.7	1.5	3.0	4.1	4.7	4.7
WESP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	1.3	2.0	2.2	2.2
Refrigerator Retirement Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	1.7	1.9	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	2.0	5.2	8.1	11.0	14.5	18.6	23.9	29.9	34.0	32.1
DISCONTINUED/COMPLETED																										
CFL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	3.1	4.2	5.7	10.2	17.7	21.3	21.3	21.3	24.3	23.9
Outdoor Timer	0.3	0.5	0.9	1.2	1.5	1.9	2.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.7	2.7
Residential Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.0	1.6	1.7	1.7	1.7	1.7	1.9	1.9
New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.4	0.7	1.0	1.2	1.5	1.6	1.6	1.9	1.9
EELF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8
High Efficiency Furnace & Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.4	0.4	0.5	0.5
Seasonal LED Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Res Hot Water	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water Heater Rental	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retrofit/Demonstration	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermostat	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.3	0.5	1.0	1.3	1.6	1.9	2.1	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.5	4.2	5.9	7.8	10.3	15.8	24.2	28.2	28.6	28.6	32.6	32.1
RESIDENTIAL TOTAL	0.3	0.5	1.0	1.3	1.6	1.9	2.1	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.5	5.0	7.9	12.9	18.4	26.8	38.7	46.9	52.4	58.4	66.6	64.3
COMMERCIAL																										
Commercial Lighting Program	-	-	-	0.5	2.6	5.7	9.2	10.8	11.6	15.1	16.4	17.4	18.5	19.7	21.7	24.2	27.7	31.1	34.1	38.5	42.3	45.7	48.8	56.5	64.4	64.4
Commercial Earth Power	-	-	-	-	-	-	-	0.1	0.8	1.1	1.5	1.7	2.0	2.4	3.8	4.2	5.4	7.4	8.7	9.3	10.3	11.2	11.9	12.4	14.2	14.2
Internal Retrofit	-	-	-	0.0	0.3	0.6	0.6	0.7	0.9	1.0	1.1	1.2	1.3	1.4	1.7	2.2	2.4	2.8	3.0	3.2	5.4	8.3	11.7	11.9	13.6	13.6
Commercial Insulation*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.7	1.8	3.2	4.8	6.2	7.4	8.5	8.5
Commercial Windows*	-	-	-	-	-	-	-	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.8	1.1	1.5	1.7	1.8	2.1	3.0	4.0	4.8	5.6	6.4	6.4
Commercial Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.8	1.3	1.6	1.9	2.1	3.5	4.0	4.0
City of Winnipeg Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.1	0.3	1.6	2.0	2.1	2.2	2.4	2.5	2.6	2.6	3.0	3.0
Commercial Custom Measures	-	-	-	-	-	-	-	0.0	0.0	0.1	0.4	0.5	0.5	0.5	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.4	1.7	1.7	1.9	1.9
Commercial New Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	1.5	1.7	1.7
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.2	0.3	0.4	0.4	0.5	0.5
Commercial Kitchen Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	0.1	0.1	0.2	0.2	0.2	0.2
CBOP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	-
HVAC - CO2 Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0
Network Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	0.5	2.9	6.3	9.8	11.8	13.5	17.6	19.7	21.1	22.7	24.6	29.0	32.8	39.4	46.3	52.4	59.8	69.7	80.4	90.8	103.9	118.4	118.4
DISCONTINUED/COMPLETED																										
Roadway Lighting	-	-	0.9	3.1	5.4	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.9	7.9
Agricultural Heat Pads	-	-	-	-	-	-	-	-	-	0.7	1.0	1.2	1.6	2.0	2.2	2.6	2.7	2.8	3.2	3.5	3.6	3.9	4.1	4.3	4.9	4.9
Sentinel Lighting	-	-	0.5	1.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
Agricultural Demand Controller	-	-	-	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1
Infrared Heat Lamp	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Commercial Air Barrier	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Showerhead	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2
Livestock Waterer	-	-	-	-	-	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
PS Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.3	0.3	-	-	-	-
	-	-	2.2	5.7	9.0	10.6	10.7	10.8	10.8	11.4	11.8	12.0	12.5	12.9	13.2	13.6	13.7	13.7	14.2	14.7	14.9	15.2	15.1	15.4	17.5	17.4
COMMERCIAL TOTAL	-	-	2.2	6.3	11.9	16.9	20.5	22.5	24.2	29.1	31.5	33.2	35.2	37.5	42.1	46.4	53.1	60.1	66.6	74.5	84.6	95.6	105.9	119.3	136.0	135.8
INDUSTRIAL																										
Performance Optimization	-	-	-	-	-	0.3	1.1	4.6	5.8	37.4	39.1	39.5	48.4	52.9	54.1	57.6	61.7	63.2	66.2	68.7	72.0	75.5	78.9	87.6	96.3	96.3
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	0.3	1.1	4.6	5.8	37.4	39.1	39.5	48.4	52.9	54.1	57.6	61.7	63.2	66.2	68.7	72.0	75.5	78.9	87.6	96.3	96.3
DISCONTINUED/COMPLETED																										
Retrofit/Demonstration GSL	-	-	-	0.3	0.4	1.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.8	4.8
High Efficiency Motors	-	-	0.1	0.7	1.3	1.8	2.3	3.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.2	4.2
Industrial (Basic)	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	0.1	1.0	1.7	3.4	6.6	7.4	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	9.0	9.0
INDUSTRIAL TOTAL	-	-	0.1	1.0	1.7	3.7	7.7	12.0	13.9	45.5	47.3	47.6	56.6	61.1	62.2	65.8	69.8	71.3	74.4	76.9	80.2	83.7	87.1	95.7	105.3	105.3
EFFICIENCY PROGRAMS SUBTOTAL	0.3	0.5	3.3	8.6	15.2	22.6	30.3	36.9	40.6	77.1	81.4	83.4	94.4	101.2	106.9	117.2	130.9	144.3	159.4	178.1	203.4	226.1	245.5	273.4	307.9	305.4
CUSTOMER SELF-GENERATION PROGRAMS																										
Bioenergy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3	14.3	14.3	14.3	14.3	14.3	14.4	9.4	10.4	6.4
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3	14.3	14.3	14.3	14.3	14.3	14.4	9.4	10.4	6.4
RATE/LOAD MANAGEMENT PROGRAMS																										
Industrial Curtailable Rate	-	-	-	-	40.7	46.4	24.7	32.7	80.0	48.2	58.0	57.1	68.0	110.3	148.5	153.8	189.1	183.3	180.6	172.8	149.2	154.5	147.2	144.8	159.2	-
	-	-	-	-	40.7	46.4	24.7	32.7	80.0	48.2	58.0	57.1	68.0	110.3	148.5	153.8	189.1	183.3	180.6	172.8	149.2	154.5	147.2	144.8	159.2	-
MW IMPACTS (at meter)	0.3	0.5	3.3	8.6	55.9	69.0	55.0	69.6	120.6	125.3	139.4	140.5	162.4	211.4	255.4	270.9	334.2	341.9	354.3	365.2	366.9	395.0	407.1	427.6	N/A	N/A
MW IMPACTS (at generation)	0.3	0.6	3.7	9.8	62.1	76.6	61.4	77.5	133.8	139.1	154.6	155.9	180.1	234.2	282.7	300.1	370.1	379.1	393.2	405.8	408.5	440.2	454.1	477.5	477.5	311.8

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Total Average Winter MW
Electric Incentive Based Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Home Insulation	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
Affordable Energy Program	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
WESP	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Refrigerator Retirement Program	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
DISCONTINUED/COMPLETED																											
CFL	21.3	16.9	16.9	13.5	9.0	20.9	20.9	20.9	20.9	20.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Outdoor Timer	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Residential Appliances	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
New Home Program	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
EELF	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
High Efficiency Furnace & Boiler	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Seasonal LED Lighting	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Res Hot Water	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water Heater Rental	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retrofit/Demonstration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28.6	24.1	24.1	20.8	16.2	28.1	28.1	28.1	28.1	28.1	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
RESIDENTIAL TOTAL	58.4	54.0	54.0	50.6	46.0	58.0	58.0	58.0	58.0	57.3	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4
COMMERCIAL																											
Commercial Lighting Program	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
Commercial Earth Power	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
Internal Retrofit	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Commercial Insulation*	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Commercial Windows*	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Commercial Refrigeration	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
City of Winnipeg Agreement	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Commercial Custom Measures	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Commercial New Buildings	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Commercial Washers	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Commercial Kitchen Appliances	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CBOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC - CO2 Sensors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Network Energy Manager	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HVAC - Chillers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9
DISCONTINUED/COMPLETED																											
Roadway Lighting	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Agricultural Heat Pads	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Sentinel Lighting	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Agricultural Demand Controller	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Infrared Heat Lamp	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Commercial Air Barrier	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Showerhead	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Power Smart Shops	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Livestock Waterer	0.1	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS Energy Manager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Air Conditioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aboriginal Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15.4	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
COMMERCIAL TOTAL	119.3	119.2	119.2	119.2	119.2	119.2	119.2	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1
INDUSTRIAL																											
Performance Optimization	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
Emergency Preparedness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
DISCONTINUED/COMPLETED																											
Retrofit/Demonstration GSL	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
High Efficiency Motors	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Industrial (Basic)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Efficient Motors (QMR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
INDUSTRIAL TOTAL	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
EFFICIENCY PROGRAMS SUBTOTAL	273.4	268.9	268.9	265.5	261.0	272.9	272.9	272.8	272.8	272.1	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3	271.3
CUSTOMER SELF-GENERATION PROGRAMS																											
Bioenergy	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
RATE/LOAD MANAGEMENT PROGRAMS																											
Industrial Curtailable Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW IMPACTS (at meter)	279.2	274.7	274.7	271.3	266.8	278.7	278.7	278.7	278.7	278.0	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1
MW IMPACTS (at generation)	314.3	309.1	309.1	305.3	300.1	313.7	313.7	313.6	313.6	312.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8

Note: Subtotals may not be exact due to rounding.
* Programs comprise the Commercial Building Envelope Program.

Appendix H

Natural Gas Savings (m^3) - Incentive-Based Programs

2012/13 Annual Gas Savings - million m^3
Natural Gas Incentive Based Programs

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																												
Home Insulation	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Affordable Energy Program	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Water & Energy Saver	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
DISCONTINUED/COMPLETED																												
New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Res HE Gas Furnace - Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermostat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RESIDENTIAL TOTAL	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
COMMERCIAL																												
Commercial New Buildings	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Commercial Custom Measures	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Commercial Insulation*	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Commercial Windows*	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
CBOP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Commercial Kitchen Appliances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City of Winnipg Agreement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
DISCONTINUED/COMPLETED																												
Power Smart Shops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMMERCIAL TOTAL	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
INDUSTRIAL																												
Industrial Natural Gas Optimization	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
INDUSTRIAL TOTAL	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
EFFICIENCY PROGRAMS SUBTOTAL	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
CUSTOMER SELF-GENERATION																												
Bioenergy Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LESS: INTERACTIVE EFFECTS	(0.7)	(0.8)	(0.8)	(0.9)	(0.8)	(0.8)	(0.9)	(0.9)	(1.0)	(1.0)	(1.0)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
NET IMPACT: OVERALL	10.6	10.5	10.5	10.5	10.5	10.6	10.4	10.4	10.4	10.4	10.3	11.0	11.0	11.0	11.1	11.1	11.1	11.0	11.0	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9	10.9

Note: Subtotals may not be exact due to rounding.
* Programs comprise Commercial Building Envelope Program.

Persisting Gas Savings - million m3
Natural Gas Incentive Based Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	0.3	2.2	3.9	5.6	7.6	9.0	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Affordable Energy Program	-	-	-	-	-	-	0.0	0.1	0.7	2.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Water & Energy Saver	-	-	-	-	-	-	-	-	-	0.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	-	-	-	-	0.3	2.2	3.9	5.6	8.3	12.2	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
DISCONTINUED/COMPLETED																										
Res HE Gas Furnace - Boiler	-	-	-	-	0.6	2.6	4.0	5.8	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
New Home Program	-	-	-	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Thermostat	-	-	-	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	-	-	-	0.0	0.7	2.9	4.4	6.3	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
RESIDENTIAL TOTAL	-	-	-	0.0	1.0	5.0	8.3	11.9	15.8	19.8	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
COMMERCIAL																										
HVAC	-	-	-	-	-	0.4	2.5	4.8	6.2	6.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Commercial Insulation*	-	-	-	-	-	0.3	1.1	2.1	3.2	5.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Commercial Windows*	-	-	-	-	-	0.0	0.1	0.2	0.5	0.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
City of Winnipg Agreement	-	0.1	0.1	0.2	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CBOP	-	-	-	-	-	-	-	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-	-	-	-	-	-	-
Commercial New Buildings	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Commercial Custom Measures	-	-	-	-	-	-	-	-	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Kitchen Appliances	-	-	-	-	-	-	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	0.1	0.1	0.2	0.6	1.4	4.4	8.0	11.0	13.8	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	16.8	16.8	16.8	16.8	16.8	16.8	16.8
DISCONTINUED/COMPLETED																										
Power Smart Shops	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Rinse and Save	-	-	-	-	-	0.8	1.1	2.1	2.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	0.8	1.1	2.1	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMMERCIAL TOTAL	-	0.1	0.1	0.2	0.6	2.2	5.5	10.1	13.4	16.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	16.9	16.9	16.9	16.9	16.9	16.9	16.9
INDUSTRIAL																										
Industrial Natural Gas Optimization	-	-	-	-	-	-	1.7	3.8	4.9	8.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
INDUSTRIAL TOTAL	-	-	-	-	-	-	1.7	3.8	4.9	8.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
EFFICIENCY PROGRAMS SUBTOTAL	-	0.1	0.1	0.2	1.6	7.3	15.5	25.9	34.1	44.0	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.5	50.5	50.5	50.5	50.5	50.5	50.5
CUSTOMER SELF-GENERATION																										
Bioenergy Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LESS: INTERACTIVE EFFECTS	-	(0.0)	(0.0)	(1.2)	(2.6)	(3.0)	(3.8)	(5.9)	(8.9)	(10.5)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)
NET IMPACT: OVERALL	-	0.1	0.1	(1.0)	(1.0)	4.3	11.7	20.0	25.3	33.5	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.2	39.2	39.2	39.2	39.2	39.2	39.2

Note: Subtotals may not be exact due to rounding.
* Programs comprise Commercial Building Envelope Program.

Persisting Gas Savings - million m3
Natural Gas Incentive Based Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL													
Home Insulation	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Affordable Energy Program	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Water & Energy Saver	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
DISCONTINUED/COMPLETED													
Res HE Gas Furnace - Boiler	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
New Home Program	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Thermostat	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
RESIDENTIAL TOTAL	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
COMMERCIAL													
HVAC	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Commercial Insulation*	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Commercial Windows*	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
City of Winnipg Agreement	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CBOP	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial New Buildings	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Commercial Custom Measures	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial Kitchen Appliances	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-
	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
DISCONTINUED/COMPLETED													
Power Smart Shops	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMMERCIAL TOTAL	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
INDUSTRIAL													
Industrial Natural Gas Optimization	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
INDUSTRIAL TOTAL	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
EFFICIENCY PROGRAMS SUBTOTAL	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
CUSTOMER SELF-GENERATION													
Bioenergy Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
LESS: INTERACTIVE EFFECTS	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)	(11.3)
NET IMPACT: OVERALL	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2

Note: Subtotals may not be exact due to rounding.
* Programs comprise Commercial Building Envelope Program.

Total Annual Gas Savings - million m^3
Natural Gas Incentive Based Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL																										
Home Insulation	-	-	-	-	0.3	2.2	3.9	5.6	7.6	9.0	10.2	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
Affordable Energy Program	-	-	-	-	-	-	0.0	0.1	0.7	2.3	3.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Water & Energy Saver	-	-	-	-	-	-	-	-	-	0.8	1.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	-	-	-	-	0.3	2.2	3.9	5.6	8.3	12.2	15.4	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
DISCONTINUED/COMPLETED																										
Res HE Gas Furnace - Boiler	-	-	-	-	0.6	2.6	4.0	5.8	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
New Home Program	-	-	-	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Thermostat	-	-	-	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	-	-	-	0.0	0.7	2.9	4.4	6.3	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
RESIDENTIAL TOTAL	-	-	-	0.0	1.0	5.0	8.3	11.9	15.8	19.8	23.1	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
COMMERCIAL																										
HVAC	-	-	-	-	-	0.4	2.5	4.8	6.2	6.2	7.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Commercial Insulation*	-	-	-	-	-	0.3	1.1	2.1	3.2	5.4	6.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Commercial New Buildings	-	-	-	-	-	-	-	-	-	-	0.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Commercial Windows*	-	-	-	-	-	0.0	0.1	0.2	0.5	0.8	1.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Commercial Custom Measures	-	-	-	-	-	-	-	-	0.1	0.2	0.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
City of Winnipg Agreement	-	0.1	0.1	0.2	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CBOP	-	-	-	-	-	-	-	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.1	0.1	-	-	-	-	-
Commercial Kitchen Appliances	-	-	-	-	-	-	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	0.1	0.1	0.2	0.6	1.4	4.4	8.0	11.0	13.8	17.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.0	23.0	22.9	22.9	22.9	22.9	22.9
DISCONTINUED/COMPLETED																										
Power Smart Shops	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Rinse and Save	-	-	-	-	-	0.8	1.1	2.1	2.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	0.8	1.1	2.1	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMMERCIAL TOTAL	-	0.1	0.1	0.2	0.6	2.2	5.5	10.1	13.4	16.2	17.2	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.0	23.0	22.9	22.9	22.9	22.9	22.9
INDUSTRIAL																										
Industrial Natural Gas Optimization	-	-	-	-	-	-	1.7	3.8	4.9	8.0	10.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
INDUSTRIAL TOTAL	-	-	-	-	-	-	1.7	3.8	4.9	8.0	10.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
EFFICIENCY PROGRAMS SUBTOTAL	-	0.1	0.1	0.2	1.6	7.3	15.5	25.9	34.1	44.0	50.9	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	61.8	61.8	61.8	61.8	61.8	61.8	61.8
CUSTOMER SELF-GENERATION																										
Bioenergy Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LESS: INTERACTIVE EFFECTS	-	(0.0)	(0.0)	(1.2)	(2.6)	(3.0)	(3.8)	(5.9)	(8.9)	(10.5)	(11.3)	(12.0)	(12.1)	(12.1)	(12.2)	(12.1)	(12.1)	(12.2)	(12.2)	(12.3)	(12.3)	(12.3)	(11.5)	(11.5)	(11.5)	(11.5)
NET IMPACT: OVERALL	-	0.1	0.1	(1.0)	(1.0)	4.3	11.7	20.0	25.3	33.5	39.6	50.1	50.1	50.1	50.0	50.1	50.1	50.0	50.0	49.6	49.6	49.5	50.3	50.2	50.2	50.3

Note: Subtotals may not be exact due to rounding.
* Programs comprise Commercial Building Envelope Program.

Total Annual Gas Savings - million m^3
Natural Gas Incentive Based Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL													
Home Insulation	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
Affordable Energy Program	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Water & Energy Saver	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
DISCONTINUED/COMPLETED													
Res HE Gas Furnace - Boiler	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
New Home Program	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Thermostat	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
RESIDENTIAL TOTAL	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
COMMERCIAL													
HVAC	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Commercial Insulation*	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Commercial New Buildings	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Commercial Windows*	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Commercial Custom Measures	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
City of Winnipg Agreement	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CBOP	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Kitchen Appliances	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Commercial Washers	-	-	-	-	-	-	-	-	-	-	-	-	-
	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
DISCONTINUED/COMPLETED													
Power Smart Shops	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Rinse and Save	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMMERCIAL TOTAL	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
INDUSTRIAL													
Industrial Natural Gas Optimization	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
INDUSTRIAL TOTAL	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
EFFICIENCY PROGRAMS SUBTOTAL	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
CUSTOMER SELF-GENERATION													
Bioenergy Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
LESS: INTERACTIVE EFFECTS	(11.5)	(11.5)	(11.5)	(11.5)	(11.5)	(11.5)	(11.5)	(11.6)	(11.6)	(11.6)	(11.6)	(11.6)	(11.6)
NET IMPACT: OVERALL	50.3	50.3	50.2	50.2	50.2	50.2	50.2	50.1	50.1	50.1	50.1	50.1	50.1

Note: Subtotals may not be exact due to rounding.
* Programs comprise Commercial Building Envelope Program.

Appendix I

Energy Savings - DSM Support Programs

2012/13 Annual Energy Savings - GW.h
Electric DSM Support Programs

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL															
Power Smart Residential Loan	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Residential Earth Power Loan	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
Residential PAYS	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
COMMERCIAL															
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED															
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
GW.h IMPACTS (at generation)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30

Note: Subtotals may not be exact due to rounding.

2012/13 Annual Energy Savings - GW.h
Electric DSM Support Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL															
Power Smart Residential Loan	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.69	0.69
Residential Earth Power Loan	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.56	0.56
Residential PAYS	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.30	1.30
COMMERCIAL															
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED															
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	N/A	N/A
GW.h IMPACTS (at generation)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30

Note: Subtotals may not be exact due to rounding.

Persisting Energy Savings - GW.h
Electric DSM Support Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	1.0	2.8	4.8	6.1	8.8	10.2	11.2	11.8	12.8	12.8	14.6	14.6
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	-	0.9	1.6	2.2	2.7	3.2	3.9	4.6	5.2	6.9	7.4	7.8	7.8	8.8	8.8
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.9	2.0	3.4	6.3	8.7	10.8	14.2	16.1	18.9	20.0	21.3	21.3	24.3	24.3
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.2	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.2	3.2
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1
	-	-	-	-	-	-	-	-	-	-	-	-	0.7	1.4	2.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.5
GW.h IMPACTS (at meter)	-	-	-	-	-	-	-	-	-	-	-	-	1.6	3.4	6.0	9.3	11.7	13.8	17.2	19.1	21.9	23.0	24.4	24.4	N/A	N/A
GW.h IMPACTS (at generation)	-	-	-	-	-	-	-	-	-	-	-	-	1.9	3.9	6.8	10.6	13.4	15.7	19.6	21.8	24.9	26.2	27.8	27.8	27.8	27.8

Note: Subtotals may not be exact due to rounding.

Persisting Energy Savings - GW.h
Electric DSM Support Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Residential Earth Power Loan	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Power Smart Residential Loan	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
ecoENERGY	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
COMMERCIAL																											
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																											
PSEM	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
R-2000 Component of the New Home Program	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Solar Hot Water Heating	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
GW.h IMPACTS (at meter)	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
GW.h IMPACTS (at generation)	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8

Note: Subtotals may not be exact due to rounding.

2012/13 Annual Energy Savings - GW.h
Electric DSM Support Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	1.0	2.8	4.8	6.1	8.8	10.2	11.2	11.8	12.8	13.4	15.3	15.3
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	-	0.9	1.6	2.2	2.7	3.2	3.9	4.6	5.2	6.9	7.4	7.8	8.2	9.4	9.4
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.9	2.0	3.4	6.3	8.7	10.8	14.2	16.1	18.9	20.0	21.3	22.5	25.6	25.6
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.2	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.2	3.2
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1
	-	-	-	-	-	-	-	-	-	-	-	-	0.7	1.4	2.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.5
GW.h IMPACTS (at meter)	-	-	-	-	-	-	-	-	-	-	-	-	1.6	3.4	6.0	9.3	11.7	13.8	17.2	19.1	21.9	23.0	24.4	25.5	N/A	N/A
GW.h IMPACTS (at generation)	-	-	-	-	-	-	-	-	-	-	-	-	1.9	3.9	6.8	10.6	13.4	15.7	19.6	21.8	24.9	26.2	27.8	29.1	29.1	29.1

Note: Subtotals may not be exact due to rounding.

2012/13 Annual Energy Savings - GW.h
Electric DSM Support Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Residential Earth Power Loan	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
Power Smart Residential Loan	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
ecoENERGY	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
COMMERCIAL																											
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																											
PSEM	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
R-2000 Component of the New Home Program	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Solar Hot Water Heating	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
GW.h IMPACTS (at meter)	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
GW.h IMPACTS (at generation)	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1

Note: Subtotals may not be exact due to rounding.

Appendix J

Average Winter Savings - DSM Support Programs

2012/13 Average Winter MW
Electric DSM Support Programs

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL															
Power Smart Residential Loan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Residential Earth Power Loan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Residential PAYS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
COMMERCIAL															
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED															
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
GW.h IMPACTS (at generation)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Note: Subtotals may not be exact due to rounding.

2012/13 Average Winter MW
Electric DSM Support Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL															
Power Smart Residential Loan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Residential Earth Power Loan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Residential PAYS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
COMMERCIAL															
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED															
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW.h IMPACTS (at meter)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	N/A	N/A
GW.h IMPACTS (at generation)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Note: Subtotals may not be exact due to rounding.

Persisting Average Winter MW
Electric DSM Support Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.8	1.1	1.4	1.6	2.0	2.7	3.0	3.9	4.2	4.4	4.4	5.0	5.0
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.6	1.1	1.4	2.1	2.5	3.0	3.3	3.8	3.8	4.3	4.3
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.9	1.3	2.0	2.7	3.4	4.8	5.5	6.9	7.5	8.2	8.2	9.3	9.3
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MW IMPACTS (at meter)	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.0	1.5	2.2	2.9	3.6	5.0	5.7	7.1	7.7	8.4	8.4	N/A	N/A
MW IMPACTS (at generation)	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.2	1.7	2.5	3.3	4.1	5.7	6.5	8.1	8.8	9.5	9.5	9.5	9.5

Note: Subtotals may not be exact due to rounding.

Persisting Average Winter MW
Electric DSM Support Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Power Smart Residential Loan	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Residential Earth Power Loan	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
COMMERCIAL																											
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																											
PSEM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MW IMPACTS (at meter)	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
MW IMPACTS (at generation)	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5

Note: Subtotals may not be exact due to rounding.

Total Average Winter MW
Electric DSM Support Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	At Generation 2012/13	At Generation 2026/27
RESIDENTIAL																										
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.8	1.1	1.4	1.6	2.0	2.7	3.0	3.9	4.2	4.4	4.7	5.4	5.4
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.6	1.1	1.4	2.1	2.5	3.0	3.3	3.8	3.9	4.4	4.4
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.9	1.3	2.0	2.7	3.4	4.8	5.5	6.9	7.5	8.2	8.6	9.8	9.8
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MW IMPACTS (at meter)	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.0	1.5	2.2	2.9	3.6	5.0	5.7	7.1	7.7	8.4	8.8	N/A	N/A
MW IMPACTS (at generation)	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.2	1.7	2.5	3.3	4.1	5.7	6.5	8.1	8.8	9.5	10.0	10.0	10.0

Note: Subtotals may not be exact due to rounding.

Total Average Winter MW
Electric DSM Support Programs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL																											
Power Smart Residential Loan	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Residential Earth Power Loan	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Residential PAYS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
COMMERCIAL																											
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																											
PSEM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MW IMPACTS (at meter)	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
MW IMPACTS (at generation)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Note: Subtotals may not be exact due to rounding.

Appendix K

Natural Gas Savings (m^3) - DSM Support Programs

2012/13 Natural Gas Savings - million m3
Natural Gas DSM Support Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL																										
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Power Smart Residential Loan	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
	-	-	-	-	-	-	-	-	-	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Note: Subtotals may not be exact due to rounding.

2012/13 Natural Gas Savings - million m3
Natural Gas DSM Support Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL													
Residential Earth Power Loan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Power Smart Residential Loan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
ecoENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential PAYS	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
COMMERCIAL													
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED													
PSEM	-	-	-	-	-	-	-	-	-	-	-	-	-
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar Hot Water Heating	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Note: Subtotals may not be exact due to rounding.

Persisting Natural Gas Savings - million m3
Natural Gas DSM Suport Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL																										
Power Smart Residential Loan	1.2	2.1	3.5	5.6	7.8	9.6	11.3	12.3	13.9	14.3	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Residential Earth Power Loan	-	0.1	0.1	0.5	0.8	1.0	1.3	1.4	1.7	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
ecoENERGY	-	0.1	0.4	1.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.2	2.3	4.0	7.3	10.9	12.8	14.9	16.1	17.9	18.7	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	(0.0)	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(0.0)	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
TOTAL	1.2	2.4	4.3	7.7	11.3	13.2	15.3	16.4	18.3	19.0	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7

Note: Subtotals may not be exact due to rounding.

Persisting Natural Gas Savings - million m3
Natural Gas DSM Suport Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL													
Power Smart Residential Loan	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Residential Earth Power Loan	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
ecoENERGY	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-
	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
COMMERCIAL													
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED													
PSEM	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
TOTAL	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7

Note: Subtotals may not be exact due to rounding.

Total Annual Natural Gas Savings - million m3
Natural Gas DSM Support Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
RESIDENTIAL																										
Power Smart Residential Loan	1.2	2.1	3.5	5.6	7.8	9.6	11.3	12.3	13.9	14.3	14.6	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
Residential Earth Power Loan	-	0.1	0.1	0.5	0.8	1.0	1.3	1.4	1.7	2.1	2.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
ecoENERGY	-	0.1	0.4	1.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Residential PAYS	-	-	-	-	-	-	-	-	-	-	-	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
	1.2	2.3	4.0	7.3	10.9	12.8	14.9	16.1	17.9	18.7	19.3	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
COMMERCIAL																										
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED																										
PSEM	(0.0)	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(0.0)	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
TOTAL	1.2	2.4	4.3	7.7	11.3	13.2	15.3	16.4	18.3	19.0	19.7	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3

Note: Subtotals may not be exact due to rounding.

Total Annual Natural Gas Savings - million m3
Natural Gas DSM Support Programs

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
RESIDENTIAL													
Power Smart Residential Loan	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
Residential Earth Power Loan	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
ecoENERGY	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Residential PAYS	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
COMMERCIAL													
Commercial PAYS	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
DISCONTINUED/COMPLETED													
PSEM	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
R-2000 Component of the New Home Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water Heating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
TOTAL	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3

Note: Subtotals may not be exact due to rounding.

Appendix L

Annual Energy Savings - Codes & Standards (GW.h, MW & m^3)

Annual Energy Savings - GW.h
Codes & Standards

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Residential Appliances:																					
Ranges	0.4	-0.2	-0.1	0.1	-0.3	-0.1	-0.1	-0.1	-0.3	0.2	0.2	0.0	0.0	0.1	-0.2	-0.2	-0.2	3.4	3.2	1.4	1.2
Dishwashers	0.0	0.1	0.2	0.4	0.7	0.8	0.7	0.7	0.7	0.8	0.8	1.3	2.0	2.0	2.5	3.4	3.5	0.2	0.2	0.1	0.1
Clothes Washers	-0.3	-0.3	0.1	0.1	0.1	0.2	0.6	0.8	0.8	0.8	0.7	0.9	3.0	3.1	3.9	3.6	3.8	0.2	0.2	0.1	0.0
Clothes Dryers	0.1	0.1	0.4	0.4	4.6	0.5	0.1	0.1	0.1	0.2	0.2	0.2	1.0	1.0	1.0	0.9	0.9	13.9	15.8	9.0	8.0
Refrigerators	2.0	4.7	6.1	7.1	7.0	7.2	7.1	7.2	7.8	7.8	10.1	11.0	12.9	13.2	12.8	16.2	17.1	18.7	10.9	10.2	9.1
Freezers	-0.3	0.3	0.4	0.5	0.7	0.4	0.5	0.5	0.5	0.5	0.3	0.3	0.5	-0.8	-0.5	-0.7	-0.8	3.1	2.6	6.5	6.2
Residential Insulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	1.0	1.1	1.2	1.5	0.8	1.2	1.3	1.5	2.8	2.9	1.7	3.5
Other Residential Equipment[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	21.3	22.3
Commercial Lighting	0.0	0.0	0.0	0.0	0.0	9.7	15.4	16.5	14.9	16.3	19.2	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.4	12.8	15.2
Other Commercial Equipment[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrial Equipment - High Efficiency Motors	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	1.9	4.6	7.1	8.6	12.8	20.3	26.0	28.6	27.2	29.2	34.2	16.9	22.9	21.4	22.5	24.8	26.1	42.5	45.1	63.1	65.6
GW.h IMPACTS (at meter)	1.9	4.6	7.1	8.6	12.8	20.3	26.0	28.6	27.2	29.2	34.2	16.9	22.9	21.4	22.5	24.8	26.1	42.5	45.1	63.1	65.6
GW.h IMPACTS (at generation)	2.2	5.3	8.1	9.8	14.6	23.1	29.6	32.5	30.9	33.3	39.0	19.2	26.1	24.3	25.6	28.3	29.8	48.5	51.4	71.9	74.8

Note: Subtotals may not be exact due to rounding.
[1]Category includes: central air conditioning, electric hot water tank, furnace, attic insulation, windows, heat recovery ventilator (HRV), efficient showerheads and electronic fireplace ignition.
[2]Category includes: commercial spray valves.

Annual Energy Savings - MW
Codes & Standards

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Residential Appliances:																					
Ranges	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	1.3	1.2	0.3	0.2
Dishwashers	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.8	0.9	0.0	0.0	0.0	0.0
Clothes Washers	-0.1	-0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.8	1.0	0.9	0.9	0.0	0.0	0.0	0.0
Clothes Dryers	0.0	0.0	0.1	0.1	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	1.8	2.1	1.8	1.6
Refrigerators	0.5	1.1	1.5	1.7	1.7	1.8	1.7	1.8	1.9	1.9	2.5	2.7	3.1	3.2	3.1	4.0	4.2	2.1	1.2	1.3	1.1
Freezers	-0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.2	-0.1	-0.2	-0.2	0.3	0.3	0.8	0.7
Residential Insulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.4	0.5	0.5	1.2	2.2	0.9	1.9
Other Residential Equipment[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	6.6	7.3
Commercial Lighting	0.0	0.0	0.0	0.0	0.0	2.7	4.3	4.7	4.2	4.6	5.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.5	4.2
Other Commercial Equipment[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrial Equipment - High Efficiency Motors	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	0.5	1.1	1.7	2.1	3.0	5.2	6.8	7.6	7.2	7.8	9.1	4.1	5.6	5.2	5.5	6.2	6.5	6.9	7.5	15.1	17.0
MW IMPACTS (at meter)	0.5	1.1	1.7	2.1	3.0	5.2	6.8	7.6	7.2	7.8	9.1	4.1	5.6	5.2	5.5	6.2	6.5	6.9	7.5	15.1	17.0
MW IMPACTS (at generation)	0.5	1.3	2.0	2.4	3.4	5.9	7.7	8.7	8.2	8.8	10.3	4.7	6.4	5.9	6.2	7.0	7.4	7.8	8.5	17.2	19.4

Note: Subtotals may not be exact due to rounding.
[1]Category includes: central air conditioning, electric hot water tank, furnace, attic insulation, windows, heat recovery ventilator (HRV), efficient showerheads and electronic fireplace ignition
[2]Category includes: commercial spray valves.

Annual Energy Savings - millions m^3
Codes & Standards

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Residential Appliances:																					
Dishwashers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Clothes Washers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.2	0.1	0.1
Furnaces:																					
Residential - Federal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Residential - Provincial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Commercial - Federal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Residential - Provincial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residential Insulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.5	0.3
Other Residential Equipment[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	2.5
Other Commercial Equipment[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Millions m^3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.5	0.9	5.5	3.4

Note: Subtotals may not be exact due to rounding.

[1]Category includes: furnace, attic insulation, windows, heat recovery ventilator (HRV) and electronic fireplace ignition.

[2]Category includes: commercial spray valves.

Appendix M

Electric Incentive-Based Utility, Administration & Incentive Costs

Total Power Smart Utility Costs - Including Affordable Energy Costs (1000s in 2012$)
Electric Incentive-Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL																									
Refrigerator Retirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	83	1,503	1,600	3,197
Home Insulation	0	0	0	0	259	395	247	230	415	46	5	46	73	72	141	779	1,160	1,978	1,595	1,763	1,752	1,413	1,275	1,265	14,910
Affordable Energy Program*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	106	220	1,198	2,000	699	813	927	6,009
Water & Energy Saver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	19	0	0	83	52	473	446	775	1,848
Affordable Energy First Nations Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	14	2	6	40	59	145	185	457
	0	0	0	0	259	395	247	230	415	46	5	46	73	72	142	779	1,229	2,098	1,817	3,050	3,855	2,727	4,182	4,752	26,421
DISCONTINUED/COMPLETED																									
New Home	0	0	0	40	155	98	222	126	64	34	1	19	136	300	229	313	628	938	673	668	601	217	253	45	5,761
Residential Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	21	14	11	99	1,601	2,036	1,810	415	12	1	1	6,022
Compact Fluorescent Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	820	1,061	848	972	1,338	1,651	1,039	2	0	7,751
Programmable Thermostats	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4	8	73	36	10	0	0	0	0	141
Seasonal LED Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	405	377	357	24	0	0	0	1,252
Residential Hot Water	0	0	179	0	0	0	2	63	26	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	289
Outdoor Timer	202	295	252	197	96	56	20	3	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,134
Retrofit/Demonstration	0	66	27	124	0	0	4	0	0	0	0	0	0	0	0	14	48	0	0	0	0	0	0	0	284
Refrigerator/Freezer Buy-Back	0	0	54	12	0	0	0	0	0	0	0	0	0	17	29	5	68	25	0	0	0	0	0	0	211
Water Heater Rental	0	0	0	0	0	0	19	407	403	77	5	0	0	0	0	0	0	0	0	0	0	0	0	0	911
High Efficiency Furnace/Boiler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Energy Efficiency Light Fixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161	517	400	193	252	315	0	1,839
Aboriginal Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0	0	0	0	0	0	20
	202	361	512	373	251	154	267	599	503	130	11	19	136	338	303	1,167	2,008	4,068	4,612	4,585	2,884	1,520	572	46	25,619
RESIDENTIAL EXPLORATORY PROGRAMS																									
New Home Program (Re-design)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27
LED Light Fixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Residential Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
Set Top Boxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	22
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	3	2	28	53
RESIDENTIAL TOTAL	202	361	512	373	510	549	513	829	918	176	15	65	209	410	445	1,946	3,237	6,166	6,429	7,635	6,760	4,250	4,756	4,826	52,093
COMMERCIAL																									
Commercial Lighting	0	0	111	1,183	2,537	2,993	2,937	1,220	1,038	2,054	917	671	1,041	1,233	2,784	5,486	6,616	7,586	7,839	8,132	7,584	6,884	6,437	7,757	85,043
Commercial Windows**	0	0	0	0	8	27	43	131	173	63	45	77	69	159	123	249	330	410	400	464	1,054	1,261	1,001	925	7,013
Internal Retrofit	0	0	120	284	475	572	166	215	178	234	116	298	141	289	636	726	618	5,025	4,603	2,763	2,232	1,931	756	811	23,188
Commercial Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	244	323	309	183	191	176	340	613	2,379
Commercial Insulation**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	224	268	250	239	276	236	451	1,943
Commercial Earth Power	0	0	0	0	15	50	80	67	229	119	137	112	172	293	659	283	530	656	370	233	400	308	295	265	5,272
Commercial HVAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	212	75	223	168	324	213	149	1,546
Commercial New Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	146	100	169	300	302	116	1,136
Commercial Building Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189	61	42	29	27	37	40	92	517
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	45	143	66	64	59	434
Commercial Custom	0	0	0	0	20	68	109	81	0	223	540	135	151	83	161	12	8	124	197	251	219	239	241	56	2,917
Commercial Kitchen Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	86	37	32	12	262
Commercial Network Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	21	71	86	24	6	210
City of Winnipeg Power Smart Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2,941	2,016	4,820	1,907	210	66	47	82	-45	-120	11,927
	0	0	231	1,467	3,054	3,709	3,335	1,714	1,617	2,694	1,754	1,294	1,574	2,062	7,304	8,771	13,538	16,529	14,520	12,856	12,631	12,008	9,934	11,190	143,786
DISCONTINUED/COMPLETED																									
Commercial Parking Lot Controllers	0	0	0	0	40	135	218	115	104	195	21	53	209	114	296	373	1,108	957	614	397	532	548	286	9	6,323
Commercial Air Conditioners	0	0	0	0	1	2	3	82	77	0	0	0	7	55	0	141	11	0	0	0	0	0	0	1	380
Agricultural Heat Pads	0	0	0	0	0	0	3	69	36	92	92	49	62	70	62	133	76	69	63	45	120	102	8	1	1,152
Power Smart Shops	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63	252	147	47	0	511
Power Smart Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	83	122	90	113	22	0	431
Commercial Rinse & Save	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	29	23	9	5	0	0	107
Commercial Air Barriers	0	0	0	0	8	28	46	100	79	3	11	34	22	18	19	7	4	0	6	0	0	0	0	0	386
Livestock Waterer	0	0	0	0	0	157	136	95	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	416
Roadway Lighting	0	115	1,523	2,149	1,963	1,491	18	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,307
Sentinel Lighting	0	32	1,343	1,125	1,154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,655
Agricultural Demand Controller	0	0	33	642	218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	893
Commercial Showerheads	0	66	122	36	4	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	351
Infrared Heat Lamps	0	18	293	33	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350
Aboriginal Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	232	3,315	3,985	3,393	1,936	423	462	368	294	124	136	300	256	377	654	1,199	1,066	797	650	1,004	915	363	11	22,262
COMMERCIAL EXPLORATORY PROGRAMS																									
Heat Recovery Ventilation Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
COMMERCIAL TOTAL	0	232	3,546	5,452	6,447	5,645	3,758	2,175	1,985	2,988	1,878	1,430	1,874	2,319	7,681	9,425	14,737	17,595	15,317	13,507	13,635	12,924	10,298	11,201	166,049
INDUSTRIAL																									
Performance Optimization	0	0	89	191	245	504	510	459	669	406	269	416	1,052	3,323	1,249	1,693	1,765	1,132	3,385	2,637	3,043	2,866	2,979	2,741	31,623
Emergency Preparedness	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	73	7	1	0	167
	0	0	89	191	245	504	510	459	669	406	269	416	1,052	3,323	1,249	1,693	1,765	1,132	3,385	2,722	3,116	2,873	2,980	2,741	31,789
DISCONTINUED/COMPLETED																									
High Efficiency Motors	0	23	317	770	616	490	449	486	655	47	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3,856
Industrial Retrofit/Demonstration	0	0	64	326	349	627	1,077	365	335	86	11	5	0	0	0	0	0	39	0	0	0	0	0	0	3,283
Efficient Motors (QMR)	0	0	0	23	53	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
	0	23	381	1,118	1,018	1,137	1,530	851	990	134	14	5	0	0	0	0	0	39	0	0	0	0	0	0	7,240
INDUSTRIAL TOTAL	0	23	471	1,310	1,263	1,640	2,040	1,310	1,659	540	284	421	1,052	3,323	1,249	1,693	1,765	1,171	3,385	2,722	3,116	2,873	2,980	2,741	39,029
EFFICIENCY PROGRAMS SUBTOTAL	202	616	4,528	7,135	8,220	7,835	6,311	4,315	4,563	3,704	2,177	1,916	3,135	6,051	9,375	13,064	19,738	24,933	25,130	23,864	23,511	20,047	18,033	18,768	257,171
												1,897													
CUSTOMER SELF-GENERATION PROGRAMS																									
Bioenergy Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	1,783	1,723	1,810	1,556	1,661	1,749	348	10,784
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	1,783	1,723	1,810	1,556	1,661	1,749	348	10,784
RATE/LOAD MANAGEMENT PROGRAMS																									
Curtailable Rates	0	0	0	88	649	1,592	1,433	1,404	1,215	1,553	1,920	2,462	3,244	4,892	6,406	6,423	7,160	7,005	6,945	6,720	6,031	5,944	5,880	5,751	84,717
	0	0	0	88	649	1,592	1,433	1,404	1,215	1,553	1,920	2,462	3,244	4,892	6,406	6,423	7,160	7,005	6,945	6,720	6,031	5,944	5,880	5,751	84,717
Support Costs***	0	366	3,520	4,230	3,006	1,672	1,986	1,596	1,270	1,648	2,345	3,215	2,891	3,658	3,737	4,170	4,432	7,198	7,178	6,341	5,509	4,109	7,165	5,225	86,466
UTILITY COST OF PROGRAMS	202	982	8,048	11,453	11,874	11,100	9,730	7,315	7,048	6,904	6,442	7,593	9,270	14,601	19,518	23,657	31,485	40,919	40,976	38,734	36,606	31,761	32,827	30,091	439,137

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund expenditures.
** Programs comprise the Commercial Building Envelope Program.
*** Support Costs include Affordable Energy Fund spending.

Administration Cost (1000s in 2012$)
Electric Incentive-Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL																									
Refrigerator Retirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	83	1,179	1,239	2,513
Affordable Energy Program*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	178	884	1,215	82	749	839	3,991
Home Insulation	0	0	0	0	259	395	247	230	415	46	5	46	73	72	141	282	444	298	222	222	196	221	245	440	4,500
Water & Energy Saver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	19	0	0	83	52	87	259	359	858
Affordable Energy First Nations Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	14	2	6	40	59	145	185	457
	0	0	0	0	259	395	247	230	415	46	5	46	73	72	142	282	513	312	402	1,195	1,514	532	2,576	3,063	12,320
DISCONTINUED/COMPLETED																									
New Home	0	0	0	40	155	98	222	126	64	34	1	19	136	300	229	302	558	806	556	562	483	93	207	33	5,024
Residential Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	21	14	11	99	584	635	426	112	12	1	0	1,915
Compact Fluorescent Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	657	787	608	709	657	534	421	2	0	4,395
Programmable Thermostats	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4	8	50	25	5	0	0	0	0	102
Seasonal LED Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	241	260	287	2	0	0	0	845
Residential Hot Water	0	0	170	0	0	0	2	63	26	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	280
Outdoor Timer	152	226	191	161	66	56	20	3	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	889
Retrofit/Demonstration	0	66	27	124	0	0	0	0	0	0	0	0	0	0	0	14	48	0	0	0	0	0	0	0	280
Refrigerator/Freezer Buy-Back	0	0	27	12	0	0	0	0	0	0	0	0	0	17	29	5	68	0	0	0	0	0	0	0	160
Water Heater Rental	0	0	0	0	0	0	19	407	403	77	5	0	0	0	0	0	0	0	0	0	0	0	0	0	911
Energy Efficiency Light Fixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	409	327	128	98	185	0	1,211
High Efficiency Furnace/Boiler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
	152	292	416	337	222	154	262	599	503	130	11	19	136	338	303	993	1,628	2,353	2,593	2,264	1,259	623	395	33	16,015
RESIDENTIAL EXPLORATORY PROGRAMS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21
RESIDENTIAL TOTAL	152	292	416	337	481	549	509	829	918	176	15	65	209	410	445	1,275	2,141	2,666	2,995	3,459	2,794	1,155	2,972	3,096	28,356
												65													
COMMERCIAL																									
Commercial Lighting	0	0	111	872	971	805	650	445	577	431	318	340	416	843	1,150	1,948	1,897	2,245	2,138	1,925	1,978	1,928	1,872	1,764	25,625
Internal Retrofit	0	0	120	284	475	572	166	215	178	234	116	298	141	289	636	726	618	5,025	4,603	2,763	2,232	1,931	756	811	23,188
Commercial Windows**	0	0	0	0	8	27	43	81	77	8	1	25	13	43	32	62	55	161	168	105	120	122	118	168	1,438
Commercial Insulation**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	148	45	46	33	31	147	598
Commercial Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	244	226	202	98	100	87	136	120	1,213
Commercial Earth Power	0	0	0	0	15	50	80	37	77	28	13	40	82	147	294	151	209	209	222	137	126	101	123	82	2,223
Commercial Building Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189	61	42	21	18	28	27	68	453
Commercial New Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	169	186	190	37	683
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	40	42	35	29	183
Commercial Custom	0	0	0	0	20	68	109	50	0	92	90	81	98	61	65	9	1	81	35	216	90	92	140	10	1,411
Commercial HVAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	22	14	13	18	17	18	10	185
Commercial Kitchen Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	36	13	18	8	125
City of Winnipeg Power Smart Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2,132	1,049	1,007	451	57	66	47	-81	-118	7	4,621
Commercial Network Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	67	73	24	6	190
HVAC - CO2 Sensors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
	0	0	231	1,156	1,488	1,521	1,048	827	910	794	538	784	750	1,389	4,310	3,946	4,293	8,628	7,629	5,596	5,087	4,574	3,369	3,268	62,138
DISCONTINUED/COMPLETED																									
Commercial Parking Lot Controllers	0	0	0	0	40	135	218	81	77	70	5	33	159	90	222	293	512	186	122	149	151	82	32	1	2,657
Agricultural Heat Pads	0	0	0	0	0	0	3	69	36	42	30	21	24	33	28	83	45	44	29	19	33	28	8	1	575
Commercial Rinse & Save	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	16	5	6	1	0	0	42
Power Smart Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	119	90	113	22	0	345
Power Smart Shops	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63	250	144	47	0	505
Commercial Air Conditioners	0	0	0	0	1	2	3	81	77	0	0	0	3	20	0	12	2	0	0	0	0	0	0	0	200
Commercial Air Barriers	0	0	0	0	8	28	46	81	77	1	1	17	11	10	9	4	1	0	1	0	0	0	0	0	297
Livestock Waterer	0	0	0	0	0	136	118	83	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	366
Roadway Lighting	0	115	1,523	2,149	1,963	1,491	18	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,306
Sentinel Lighting	0	32	1,343	1,125	1,154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,655
Agricultural Demand Controller	0	0	33	462	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	652
Commercial Showerheads	0	66	92	36	4	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	321
Infrared Heat Lamps	0	18	158	33	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215
	0	232	3,150	3,805	3,332	1,916	405	395	339	116	36	71	197	153	259	392	561	244	168	356	531	367	109	1	17,136
COMMERCIAL TOTAL	0	232	3,381	4,961	4,820	3,437	1,453	1,222	1,249	911	575	856	947	1,541	4,570	4,338	4,854	8,872	7,797	5,952	5,618	4,941	3,478	3,269	79,273
INDUSTRIAL																									
Performance Optimization	0	0	89	191	245	354	260	305	275	211	226	212	298	2,005	414	198	350	412	520	609	462	412	415	356	8,820
Emergency Preparedness	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	73	7	1	0	167
	0	0	89	191	245	354	260	305	275	211	226	212	298	2,005	414	198	350	412	520	694	534	419	416	356	8,987
DISCONTINUED/COMPLETED																									
High Efficiency Motors	0	23	279	352	273	239	256	278	351	47	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,103
Industrial Retrofit/Demonstration	0	0	64	288	293	216	403	365	335	47	11	5	0	0	0	0	0	39	0	0	0	0	0	0	2,067
Efficient Motors (QMR)	0	0	0	23	53	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
	0	23	343	664	620	475	663	642	686	95	14	5	0	0	0	0	0	39	0	0	0	0	0	0	4,270
INDUSTRIAL TOTAL	0	23	433	855	864	830	924	947	961	306	241	217	298	2,005	414	198	350	451	520	695	534	419	416	356	13,256
EFFICIENCY PROGRAMS SUBTOTAL	152	547	4,229	6,153	6,165	4,816	2,886	2,998	3,128	1,393	831	1,138	1,454	3,957	5,429	5,810	7,345	11,989	11,313	10,105	8,946	6,516	6,865	6,721	120,886
												1,127													
CUSTOMER SELF-GENERATION PROGRAMS																									
Bioenergy Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	300	317	1,749	348	2,791
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	300	317	1,749	348	2,791
RATE/LOAD MANAGEMENT PROGRAMS																									
Curtailable Rates	0	0	0	88	125	221	76	52	49	35	35	34	10	10	14	17	10	8	10	5	7	7	9	5	828
	0	0	0	88	125	221	76	52	49	35	35	34	10	10	14	17	10	8	10	5	7	7	9	5	828
Support Costs***	0	366	3,520	4,230	3,006	1,672	1,986	1,596	1,270	1,648	2,345	3,215	2,891	3,658	3,737	4,170	4,432	7,198	7,178	6,341	5,509	4,109	7,165	5,225	86,466
ADMINISTRATION COSTS OF PROGRAMS	152	913	7,749	10,472	9,296	6,709	4,948	4,646	4,447	3,075	3,211	4,387	4,355	7,624	9,180	9,997	11,786	19,195	18,501	16,529	14,761	10,949	15,788	12,299	210,970

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund expenditures.
** Programs comprise the Commercial Building Envelope Program.
*** Support Costs include Affordable Energy Fund spending.

Incentive Cost (1000s in 2012$)
Electric Incentive-Based Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL																									
Home Insulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	497	715	1,680	1,373	1,541	1,556	1,192	1,030	825	10,410
Water & Energy Saver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	386	187	417	990
Refrigerator Retirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	324	360	684
Affordable Energy Program*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	42	314	785	617	65	88	2,017
Affordable Energy First Nations Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	497	715	1,786	1,415	1,855	2,341	2,195	1,606	1,689	14,100
DISCONTINUED/COMPLETED																									
New Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	69	133	117	106	118	125	47	12	737
Residential Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,017	1,401	1,384	303	0	0	1	4,107
Compact Fluorescent Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	273	240	263	681	1,117	618	0	0	3,356
Programmable Thermostats	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	11	6	0	0	0	0	39
Seasonal LED Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	164	118	70	22	0	0	0	406
Residential Hot Water	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Outdoor Timer	50	69	61	36	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	246
Retrofit/Demonstration	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Refrigerator/Freezer Buy-Back	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	52
Water Heater Rental	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Efficiency Light Fixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	108	73	65	154	130	0	628
High Efficiency Furnace/Boiler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50	69	96	36	30	0	4	0	0	0	0	0	0	0	0	174	375	1,700	2,018	2,321	1,625	897	176	13	9,584
RESIDENTIAL TOTAL	50	69	96	36	30	0	4	0	0	0	0	0	0	0	0	671	1,090	3,486	3,434	4,176	3,966	3,092	1,782	1,702	23,685
COMMERCIAL																									
Commercial Lighting	0	0	0	311	1,565	2,188	2,287	775	461	1,623	599	331	625	391	1,634	3,538	4,719	5,341	5,702	6,207	5,606	4,956	4,566	5,993	59,418
Commercial Windows**	0	0	0	0	0	0	0	50	96	55	43	53	56	116	91	186	276	250	232	359	934	1,139	883	757	5,575
Commercial Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	106	85	91	89	204	493	1,165
Commercial Insulation**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	120	205	193	243	205	304	1,345
Commercial Earth Power	0	0	0	0	0	0	0	30	151	91	124	72	91	145	364	132	321	447	148	96	275	207	172	183	3,049
Commercial HVAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	190	61	209	150	307	195	140	1,361
Commercial New Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	146	0	0	114	113	79	453
Commercial Custom	0	0	0	0	0	0	0	30	0	130	450	53	52	22	96	3	7	43	162	35	129	146	101	46	1,506
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	9	103	24	28	30	252
Commercial Building Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	9	9	13	24	63
Commercial Kitchen Appliances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	50	24	14	3	137
Internal Retrofit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Network Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5	12	0	0	19
City of Winnipeg Power Smart Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	809	966	3,812	1,456	154	0	0	163	72	-127	7,306
	0	0	0	311	1,565	2,188	2,287	886	708	1,899	1,215	509	824	674	2,994	4,825	9,245	7,901	6,890	7,261	7,544	7,434	6,566	7,923	81,649
DISCONTINUED/COMPLETED																									
Commercial Parking Lot Controllers	0	0	0	0	0	0	0	35	27	125	16	21	50	24	73	80	596	771	492	248	381	466	254	9	3,666
Commercial Air Conditioners	0	0	0	0	0	0	0	1	0	0	0	0	4	35	0	129	9	0	0	0	0	0	0	1	179
Power Smart Shops	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	6
Power Smart Energy Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	3	0	0	0	0	86
Commercial Rinse & Save	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	14	18	3	5	0	0	65
Agricultural Heat Pads	0	0	0	0	0	0	0	0	0	51	62	28	38	37	35	50	31	25	34	25	87	74	0	0	577
Commercial Air Barriers	0	0	0	0	0	0	0	19	2	3	10	17	11	8	10	3	3	0	5	0	0	0	0	0	90
Livestock Waterer	0	0	0	0	0	21	18	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Roadway Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sentinel Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural Demand Controller	0	0	0	179	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241
Commercial Showerheads	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Infrared Heat Lamps	0	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135
	0	0	165	180	61	21	18	67	29	178	88	65	103	103	117	262	638	822	629	294	473	548	254	10	5,125
COMMERCIAL TOTAL	0	0	165	491	1,627	2,209	2,305	953	736	2,077	1,303	575	927	777	3,112	5,088	9,883	8,723	7,519	7,555	8,017	7,982	6,819	7,933	86,775
INDUSTRIAL																									
Performance Optimization	0	0	0	0	0	150	250	154	394	195	43	204	754	1,317	834	1,495	1,415	720	2,864	2,027	2,581	2,454	2,564	2,385	22,803
Emergency Preparedness	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	150	250	154	394	195	43	204	754	1,317	834	1,495	1,415	720	2,864	2,027	2,581	2,454	2,564	2,385	22,803
DISCONTINUED/COMPLETED																									
High Efficiency Motors	0	0	38	417	343	250	193	209	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,754
Industrial Retrofit/Demonstration	0	0	0	38	55	411	674	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,216
Efficient Motors (QMR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	38	455	398	661	866	209	304	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,970
INDUSTRIAL TOTAL	0	0	38	455	398	811	1,116	363	698	234	43	204	754	1,317	834	1,495	1,415	720	2,864	2,027	2,581	2,454	2,564	2,385	25,773
EFFICIENCY PROGRAMS SUBTOTAL	50	69	299	981	2,055	3,019	3,425	1,316	1,435	2,311	1,347	778	1,681	2,095	3,946	7,254	12,388	12,929	13,817	13,758	14,564	13,528	11,165	12,020	136,232
CUSTOMER SELF-GENERATION PROGRAMS																									
Bioenergy Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	1,783	1,723	1,732	1,256	1,344	0	0	7,993
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	1,783	1,723	1,732	1,256	1,344	0	0	7,993
RATE/LOAD MANAGEMENT PROGRAMS																									
Curtailable Rates	0	0	0	0	524	1,372	1,357	1,352	1,166	1,518	1,884	2,427	3,234	4,882	6,392	6,405	7,150	6,997	6,935	6,715	6,024	5,936	5,871	5,746	83,889
	0	0	0	0	524	1,372	1,357	1,352	1,166	1,518	1,884	2,427	3,234	4,882	6,392	6,405	7,150	6,997	6,935	6,715	6,024	5,936	5,871	5,746	83,889
Support Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Program Incentive Budgets	50	69	299	981	2,578	4,391	4,782	2,669	2,601	3,829	3,231	3,206	4,915	6,977	10,338	13,659	19,693	21,710	22,475	22,206	21,844	20,809	17,037	17,766	228,114

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund expenditures.
** Programs comprise the Commercial Building Envelope Program.

Appendix N

Natural Gas Incentive-Based Utility, Administration and Incentive Costs

Total Power Smart Utility Costs - Including Affordable Energy Costs (1000s in 2012$)
Natural Gas Incentive-Based Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL													
Affordable Energy Program*	0	0	0	0	84	0	173	494	1,624	4,611	5,096	5,441	17,521
Home Insulation	0	0	0	0	402	1,958	3,138	2,896	3,080	2,309	2,138	1,411	17,331
Water & Energy Saver	0	0	0	0	0	0	0	0	42	710	1,041	775	2,568
	0	0	0	0	485	1,958	3,311	3,390	4,746	7,630	8,274	7,627	37,420
DISCONTINUED/COMPLETED													
New Homes	0	13	80	98	65	99	146	0	91	112	65	5	774
Thermostats	0	0	0	0	0	205	138	40	1	0	0	0	384
HE Gas Furnace	0	0	0	0	620	1,404	2,235	3,333	1,601	32	0	0	9,225
	0	13	80	98	686	1,708	2,519	3,374	1,693	144	65	5	10,384
RESIDENTIAL EXPLORATORY PROGRAMS													
Residential Solar	0	0	0	0	0	0	0	0	0	8	8	0	16
RESIDENTIAL TOTAL	0	13	80	98	1,171	3,667	5,830	6,764	6,438	7,781	8,347	7,632	47,820
COMMERCIAL													
HVAC	0	0	0	0	111	644	1,745	1,452	1,171	1,270	930	1,215	8,538
Commercial Insulation**	0	0	0	0	0	446	869	1,064	1,299	2,283	1,780	1,108	8,849
New Buildings	0	0	0	0	0	0	0	150	113	200	202	1,043	1,708
Commercial Windows**	0	0	0	0	0	136	296	486	815	1,032	1,110	796	4,672
Commercial Custom	0	0	0	0	0	0	0	0	146	159	161	505	971
Commercial Building Optimization	0	0	0	0	81	243	166	166	245	212	120	92	1,325
Commercial Kitchen Appliances	0	0	0	0	0	0	0	17	57	30	48	27	180
City of Winnipeg Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	192	1,470	3,077	3,335	3,846	5,186	4,350	4,785	26,242
DISCONTINUED/COMPLETED													
Power Smart Energy Manager	0	0	0	0	0	0	125	99	74	0	52	0	351
Spray Valves	0	0	0	0	0	136	58	128	28	21	1	0	374
Commercial Hot Water	0	0	0	0	0	0	0	0	23	32	14	0	70
Power Smart Shops	0	0	0	0	0	0	1	16	84	98	12	0	211
	0	0	0	0	0	136	184	243	209	151	80	1	1,005
COMMERCIAL EXPLORATORY PROGRAMS													
Heat Recovery Ventilation Program	0	0	0	0	0	0	0	0	0	4	11	0	15
	0	0	0	0	0	0	0	0	0	4	11	0	15
COMMERCIAL TOTAL	0	0	0	0	192	1,606	3,261	3,579	4,055	5,342	4,441	4,786	27,262
INDUSTRIAL													
Industrial Natural Gas Optimization	0	0	0	0	109	39	305	351	625	725	718	753	3,625
INDUSTRIAL TOTAL	0	0	0	0	109	39	305	351	625	725	718	753	3,625
EFFICIENCY PROGRAMS SUBTOTAL	0	13	80	98	1,472	5,312	9,396	10,694	11,118	13,848	13,506	13,171	78,706
CUSTOMER SELF-GENERATION													
Bioenergy Optimization	0	0	0	0	0	0	14	8	0	0	0	0	22
	0	0	0	0	0	0	14	8	0	0	0	0	22
PROGRAMS SUBTOTAL	0	13	80	98	1,472	5,312	9,410	10,702	11,118	13,848	13,506	13,171	78,729
Support Costs***	1,044	712	656	953	1,395	2,700	2,139	2,047	2,087	1,428	1,835	1,421	18,416
UTILITY COST OF PROGRAMS	1,044	725	736	1,051	2,866	8,012	11,549	12,749	13,205	15,276	15,341	14,591	97,145

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund and Lower Income Furnace Replacement expenditures.
** Programs comprise the Commercial Building Envelope Program.
*** Support Costs include Affordable Energy Fund spending.

Administration Cost (1000s in 2012$)
Natural Gas Incentive-Based Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL													
Affordable Energy Program*	0	0	0	0	84	0	149	136	192	4,269	4,564	5,025	14,418
Water & Energy Saver	0	0	0	0	0	0	0	0	42	131	604	728	1,505
Home Insulation	0	0	0	0	182	560	805	628	493	516	527	184	3,895
	0	0	0	0	266	560	953	764	727	4,916	5,695	5,937	19,817
DISCONTINUED/COMPLETED													
New Homes	0	13	80	80	22	33	52	0	16	0	17	1	314
HE Gas Furnace	0	0	0	0	280	307	473	374	204	17	0	0	1,656
Thermostats	0	0	0	0	0	117	100	19	1	0	0	0	236
	0	13	80	80	302	457	625	393	221	17	17	1	2,206
RESIDENTIAL EXPLORATORY PROGRAMS													
Residential Solar	0	0	0	0	0	0	0	0	0	8	8	0	16
RESIDENTIAL TOTAL	0	13	80	80	568	1,018	1,578	1,157	947	4,941	5,720	5,938	22,040
COMMERCIAL													
New Buildings	0	0	0	0	0	0	0	150	113	124	127	336	850
HVAC	0	0	0	0	111	301	313	264	363	270	292	326	2,240
Commercial Insulation**	0	0	0	0	0	79	80	182	184	227	274	114	1,140
Commercial Windows**	0	0	0	0	0	87	90	128	147	174	176	98	901
Commercial Custom	0	0	0	0	0	0	0	0	60	62	93	94	309
Commercial Building Optimization	0	0	0	0	81	243	166	122	161	158	81	68	1,081
Commercial Kitchen Appliances	0	0	0	0	0	0	0	8	24	11	28	19	91
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Winnipeg Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	192	710	649	855	1,052	1,026	1,071	1,057	6,612
DISCONTINUED/COMPLETED													
Power Smart Energy Manager	0	0	0	0	0	0	125	97	74	0	52	0	348
Power Smart Shops	0	0	0	0	0	0	1	16	83	96	12	0	208
Spray Valves	0	0	0	0	0	56	32	27	18	3	1	0	137
Commercial Hot Water	0	0	0	0	0	0	0	0	23	32	14	0	69
	0	0	0	0	0	56	159	140	199	130	80	0	763
COMMERCIAL EXPLORATORY PROGRAMS													
Heat Recovery Ventilation Program	0	0	0	0	0	0	0	0	0	0	11	0	11
	0	0	0	0	0	0	0	0	0	0	11	0	11
COMMERCIAL TOTAL	0	0	0	0	192	766	808	995	1,250	1,156	1,162	1,057	7,385
INDUSTRIAL													
Industrial Natural Gas Optimization	0	0	0	0	109	39	97	92	173	122	175	244	1,050
	0	0	0	0	109	39	97	92	173	122	175	244	1,050
EFFICIENCY PROGRAMS SUBTOTAL	0	13	80	80	869	1,823	2,484	2,243	2,370	6,218	7,057	7,239	30,475
CUSTOMER SELF-GENERATION													
Bioenergy Optimization	0	0	0	0	0	0	14	8	0	0	0	0	22
	0	0	0	0	0	0	14	8	0	0	0	0	22
PROGRAMS SUBTOTAL	0	13	80	80	869	1,823	2,498	2,251	2,370	6,218	7,057	7,239	30,497
Support Costs***	1,044	712	656	953	1,395	2,700	2,139	2,047	2,087	1,428	1,835	1,421	18,416
ADMINISTRATION COSTS OF PROGRAMS	1,044	725	736	1,034	2,263	4,522	4,637	4,298	4,457	7,646	8,892	8,659	48,913

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund and Lower Income Furnace Replacement expenditures.
** Programs comprise the Commercial Building Envelope Program.
*** Support Costs include Affordable Energy Fund spending.

Incentive Costs (1000s in 2012$)
Natural Gas Incentive-Based Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL													
Home Insulation	0	0	0	0	219	1,398	2,334	2,269	2,587	1,793	1,611	1,226	13,436
Affordable Energy Program*	0	0	0	0	0	0	24	358	1,432	342	532	416	3,104
Water & Energy Saver	0	0	0	0	0	0	0	0	0	579	436	311	1,326
	0	0	0	0	219	1,398	2,358	2,627	4,019	2,714	2,579	1,953	17,866
DISCONTINUED/COMPLETED													
New Homes	0	0	0	18	43	67	94	0	75	112	48	4	460
HE Gas Furnace	0	0	0	0	340	1,096	1,761	2,959	1,397	14	0	0	7,569
Thermostats	0	0	0	0	0	88	38	21	0	0	0	0	148
	0	0	0	18	384	1,251	1,894	2,980	1,472	127	48	4	8,177
RESIDENTIAL EXPLORATORY PROGRAMS													
Residential Solar	0	0	0	0	0	0	0	0	0	0	0	0	0
RESIDENTIAL TOTAL	0	0	0	18	603	2,649	4,251	5,607	5,491	2,841	2,627	1,957	26,044
COMMERCIAL													
Commercial Insulation**	0	0	0	0	0	367	790	882	1,116	2,056	1,506	993	7,709
HVAC	0	0	0	0	0	343	1,432	1,188	808	1,000	638	889	6,299
New Buildings	0	0	0	0	0	0	0	0	0	76	75	707	858
Commercial Windows**	0	0	0	0	0	50	206	358	668	858	934	701	3,774
Commercial Custom	0	0	0	0	0	0	0	0	86	98	67	410	661
Commercial Building Optimization	0	0	0	0	0	0	0	44	83	54	39	24	243
Commercial Kitchen Appliances	0	0	0	0	0	0	0	8	33	19	20	8	89
City of Winnipeg Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Clothes Washers	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	760	2,428	2,480	2,794	4,160	3,279	3,733	19,634
DISCONTINUED/COMPLETED													
Spray Valves	0	0	0	0	0	81	26	101	10	19	0	0	236
Power Smart Shops	0	0	0	0	0	0	0	0	1	2	0	0	3
Power Smart Energy Manager	0	0	0	0	0	0	0	2	0	0	0	0	2
Commercial Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	81	26	104	11	21	0	0	242
COMMERCIAL EXPLORATORY PROGRAMS													
Heat Recovery Ventilation Program	0	0	0	0	0	0	0	0	0	4	0	0	4
	0	0	0	0	0	0	0	0	0	4	0	0	4
COMMERCIAL TOTAL	0	0	0	0	0	840	2,453	2,584	2,805	4,186	3,279	3,733	19,880
INDUSTRIAL													
Industrial Natural Gas Optimization	0	0	0	0	0	0	208	260	452	603	543	509	2,575
	0	0	0	0	0	0	208	260	452	603	543	509	2,575
EFFICIENCY PROGRAMS SUBTOTAL	0	0	0	18	603	3,489	6,912	8,451	8,748	7,630	6,449	6,199	48,499
CUSTOMER SELF-GENERATION													
Bioenergy Optimization	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
PROGRAMS SUBTOTAL	0	0	0	18	603	3,489	6,912	8,451	8,748	7,630	6,449	6,199	48,499
Support Costs	0	0	0	0	0	0	0	0	0	0	0	0	0
ADMINISTRATION COSTS OF PROGRAMS	0	0	0	18	603	3,489	6,912	8,451	8,748	7,630	6,449	6,199	48,499

Note: Subtotals may not be exact due to rounding.
* Includes Affordable Energy Fund and Lower Income Furnace Replacement expenditures.
** Programs comprise the Commercial Building Envelope Program.

Appendix O

Electric DSM Support Programs - Utility Costs

Utility Costs (1000s in 2012$)
Electric DSM Support Programs

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL														
Residential Pays	-	-	-	-	-	-	-	-	-	-	-	27	229	256
Power Smart Residential Loan	47	80	21	9	(0)	1	10	(1)	(6)	(76)	(38)	(29)	125	141
Solar Hot Water Heating	-	-	-	-	-	-	-	-	0	7	-	-	-	7
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ecoENERGY	-	-	-	-	(11)	(44)	74	171	(20)	148	104	114	(29)	507
Residential Earth Power Loan	-	2	49	101	359	912	(96)	74	216	168	106	86	(72)	1,905
COMMERICAL														
Commercial Pays	-	-	-	-	-	-	-	-	-	-	-	-	123	123
DSM SUPPORT PROGRAMS SUBTOTAL	47	82	69	110	348	869	(12)	243	190	246	172	199	376	2,939

Note: Subtotals may not be exact due to rounding.

Utility Costs for Support, Basic Information Services, DSM Support Programs & Standards (1000s in 2012$)
Electric DSM Support Programs

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
DSM SUPPORT PROGRAMS																									
DSM Support Programs & Standards	-	-	-	-	-	-	-	-	-	-	-	47	82	69	110	348	869	(12)	243	190	246	172	199	376	2,939
BASIC INFORMATION SERVICES																									
Basic Information Services	-	-	14	6	96	57	11	13	164	495	584	1,350	1,373	1,365	1,743	1,655	1,671	1,359	1,356	1,773	1,761	1,422	1,476	1,342	21,087
Discontinued/Completed Basic Information Services	-	-	-	-	5	23	166	146	1	77	262	323	420	309	392	449	405	11	(4)	-	-	1	0	-	2,987
SUPPORT COSTS																									
Power Smart Communications	-	9	730	1,562	1,112	544	718	677	592	512	727	651	181	530	484	939	644	615	643	1,174	897	822	791	666	16,220
DSM Administration	-	216	220	186	136	99	121	193	75	41	105	136	194	317	217	247	217	218	166	258	215	227	290	178	4,272
Sustainability & Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	87	50	58	198	172	134	164	913
Power Smart Residential Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	55	67	141	292
Integrated Plans/Targets	-	20	496	245	223	215	218	66	33	85	168	100	37	376	279	73	24	97	95	180	266	172	213	127	3,808
Power Smart for Business	-	-	-	146	144	91	52	0	-	-	-	-	-	-	-	-	88	162	221	207	205	164	191	115	1,785
DSM Market Potential Study	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	149	96	246
DSM Tracking System	-	-	-	14	23	149	155	13	1	1	3	-	-	-	-	-	-	3	7	1	20	83	81	86	641
Energy Efficient Screening Studies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	36	50	31	129
Commercial Audits	-	-	-	-	-	-	-	-	-	-	-	-	17	23	21	31	40	5	2	-	0	0	1	14	155
Alternative Geothermal Financing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	1	26
Residential Earth Power Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	0	9
Residential Retrofit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	45	35	130	76	86	53	61	0	499
Retrofit Demonstrations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	5	2	1	-	-	-	50
Discontinued/Completed Support Costs	-	-	988	835	440	53	56	124	133	101	62	78	160	203	46	14	8	0	-	-	-	-	-	-	3,301
	-	245	2,433	2,988	2,078	1,151	1,320	1,074	834	741	1,065	965	589	1,449	1,047	1,317	1,159	1,223	1,319	1,954	1,931	1,790	2,056	1,618	32,346
TOTAL SUPPORT/DSM SUPPORT PROGRAMS/STANDARDS	-	245	2,447	2,995	2,179	1,231	1,498	1,233	998	1,313	1,911	2,685	2,464	3,192	3,292	3,770	4,104	2,580	2,913	3,918	3,938	3,385	3,731	3,336	59,358

Note: Subtotals may not be exact due to rounding.

Appendix P

Natural Gas DSM Support Programs - Utility Costs

Utility Costs (1000s in 2012$)
Natural Gas DSM Support Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
RESIDENTIAL													
Residential Pays	-	-	-	-	-	-	-	-	-	-	18	425	443
Residential Earth Power Loan	-	-	-	-	-	-	-	-	-	-	37	53	90
Solar Hot Water Heating	-	-	-	-	-	-	-	0	2	-	-	-	2
R-2000 Component of the New Home Program	-	-	-	-	-	-	-	-	-	-	-	-	-
ecoENERGY	259	300	302	362	(10)	666	512	(113)	591	395	477	(116)	3,626
Power Smart Residential Loan	451	117	52	(5)	16	187	(23)	(113)	(685)	(726)	(554)	(646)	(1,930)
COMMERCIAL													
Commercial Pays	-	-	-	-	-	-	-	-	-	-	-	151	151
DSM SUPPORT PROGRAMS SUBTOTAL	710	416	355	357	5	854	488	(226)	(92)	(331)	(22)	(133)	2,382

Note: Subtotals may not be exact due to rounding.

Utility Costs for Support, Basic Information Services, DSM Support Programs & Standards (1000s in 2012$)
Natural Gas DSM Support Programs

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Cumulative Total 2012/13
DSM Support Programs													
DSM Support Programs & Standards	710	416	355	357	5	854	488	(226)	(92)	(331)	(22)	(133)	2,382
	710	416	355	357	5	854	488	(226)	(92)	(331)	(22)	(133)	2,382
BASIC INFORMATION SERVICES													
Basic Information Services	181	205	224	506	535	696	480	536	505	376	323	20	4,587
	181	205	224	506	535	696	480	536	505	376	323	20	4,587
Discontinued/Completed Basic Information Services	-	-	-	-	4	27	(10)	-	-	-	-	-	21
	-	-	-	-	4	27	(10)	-	-	-	-	-	21
SUPPORT COSTS													
Power Smart Communications	-	-	-	-	347	410	429	960	734	548	527	545	4,500
Power Smart Residential Support	-	-	-	-	-	-	-	-	44	82	100	262	488
DSM Administration	-	-	-	-	145	145	111	211	176	152	193	145	1,278
Power Smart for Business	-	-	-	-	-	108	147	138	136	164	128	140	961
Sustainability & Standards	-	-	-	-	86	160	93	107	162	115	89	136	947
Integrated Plans/Targets	-	-	-	-	75	65	63	147	217	115	142	104	928
DSM Market Potential Study	-	-	-	-	-	-	-	-	-	-	149	79	228
DSM Tracking System	-	-	-	-	-	2	4	1	16	55	54	71	203
Energy Efficient Screening Studies	-	-	-	-	-	-	-	-	9	36	33	37	115
Commercial Audits	-	-	-	-	17	20	10	-	1	1	4	14	68
Residential Retrofit	-	-	-	-	-	65	241	142	160	99	113	0	819
Retrofit Demonstrations	-	-	-	-	78	-	5	-	-	-	-	-	83
Discontinued/Completed Support Costs	-	-	-	-	-	0	-	-	-	-	-	-	0
	-	-	-	-	748	976	1,103	1,705	1,656	1,366	1,533	1,533	10,620
TOTAL SUPPORT COSTS & DSM SUPPORT PROGRAMS & STANDARDS	892	622	579	863	1,293	2,552	2,060	2,015	2,069	1,410	1,835	1,421	17,609

Note: Subtotals may not be exact due to rounding.