

**FOSSIL FUEL-FIRED ELECTRICITY**

**Data Source:**

- all production and emissions data for 2000, 2004, 2005, 2010, 2015, 2020 come from NRCan's CEO 2006

**Assumptions**

- Years 2006 production and emissions are approximately equivalent to year 2005
- Years 2011-2014 production and emissions are approximately equivalent to year 2010
- Years 2016-2019 production and emissions are approximately equivalent to year 2015
- New production from coal was assumed to be: Genesee 3 in 2005, Keephills 3 and a new coal unit for SaskPower in 2010, some capital stock turnover of unspecified units in 2020
- New coal units were assumed to operate at a constant emission intensity of 900 t/GWh, 85% load
- New production from gas was assumed to be 20 TWh in 2015 and 55 TWh in 2020, 85% load
- New gas units were assumed to operate at a constant emission intensity of 360 t/GWh, 85% load

	Total fossil fuel-fired electricity
	Facilities in operation before 2004
	Facilities coming into operation in 2004 or later
	Estimate outside of CEO 2006 projections

Sectors	Production (TWh-FF)															GHG Emissions (Mt)										
	2000	2004	2005	2006	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000	2004	2005	2006	2010	2011	2012	2013			
<b>Electricity</b>	<b>147</b>	<b>137</b>	<b>121</b>	<b>121</b>	<b>140</b>	<b>140</b>	<b>140</b>	<b>140</b>	<b>140</b>	<b>152</b>	<b>152</b>	<b>152</b>	<b>152</b>	<b>152</b>	<b>171</b>	<b>131</b>	<b>130</b>	<b>115</b>	<b>115</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>			
- Existing Coal	110	95	89	89	99	99	99	99	99	86	86	86	86	86	50	110	103	93	93	102	102	102	102			
- Existing Oil	12	19	10	10	11	11	11	11	11	12	12	12	12	12	12	9	15	9	9	10	10	10	10			
- Existing Gas	25	23	19	19	20	20	20	20	20	25	25	25	25	25	25	13	13	10	10	11	11	11	11			
<b>Total Existing</b>	<b>147</b>	<b>137</b>	<b>118</b>	<b>118</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>87</b>	<b>131</b>	<b>130</b>	<b>112</b>	<b>112</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>123</b>			
- New Coal	0	0	3	3	9	9	9	9	9	9	9	9	9	9	29			3	3	8	8	8	8			
- New Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0		0	0	0			
- New Gas	0	0	0	0	0	0	0	0	0	20	20	20	20	20	55				0		0	0	0			
<b>Total New</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>84</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>			
Overall EI-FF																894	949	950	950	938						

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<b>2014</b>
<b>131</b>
102
10
11
123
8
0
0
8

						Estimated Reductions After Regulation								
2015	2016	2017	2018	2019	2020	Reductions From 2010 Emission Levels in 2010 (Mt)	Reductions From 2015 Emission Levels in 2015 (Mt)	Reductions From 2020 Emission Levels in 2020 (Mt)	Notional EI Target (t/GWh) 2010*	Notional EI Target (t/GWh) 2015*	Notional EI Target (t/GWh) 2020*	% Reduction from 2006 Emission Intensity in 2010	% Reduction from 2006 Emission Intensity in 2015	% Reduction from 2006 Emission Intensity in 2020
<b>127</b>	<b>127</b>	<b>127</b>	<b>127</b>	<b>127</b>	<b>125</b>	<b>21</b>	<b>28</b>	<b>30</b>	<b>788</b>	<b>653</b>	<b>557</b>	<b>17%</b>	<b>31%</b>	<b>41%</b>
88	88	88	88	88	53	17	22	18	859	776	702			
11	11	11	11	11	10	2	3	3	718	649	587			
13	13	13	13	13	16	2	3	7	447	404	365			
112	112	112	112	112	79	21	27	28	782	689	589	18%	28%	38%
8	8	8	8	8	26	0	1	1	880	817	850	7%	14%	11%
	0	0	0	0										
7	7	7	7	7	20		0	0		360	352		62%	63%
15	15	15	15	15	46	0	1	2	880	501	524	7%	47%	45%
838					732									