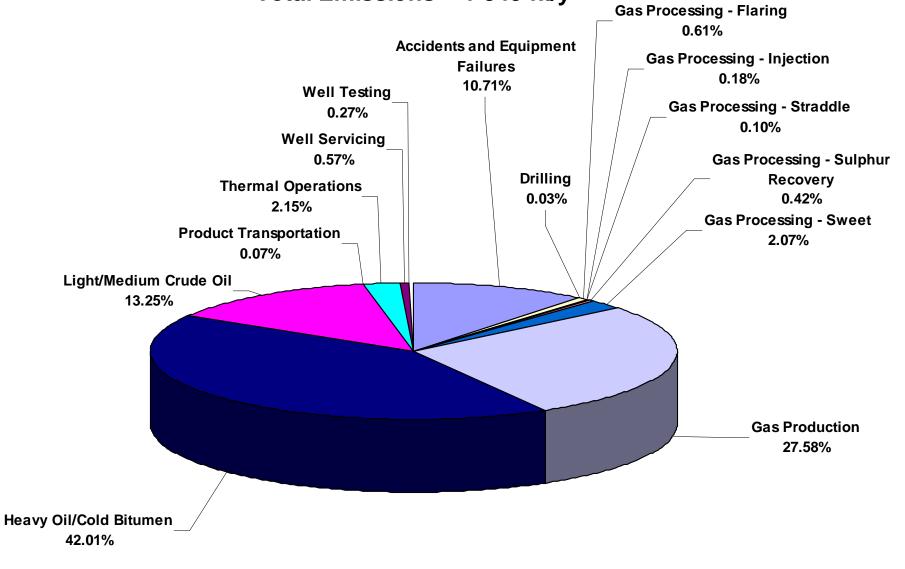
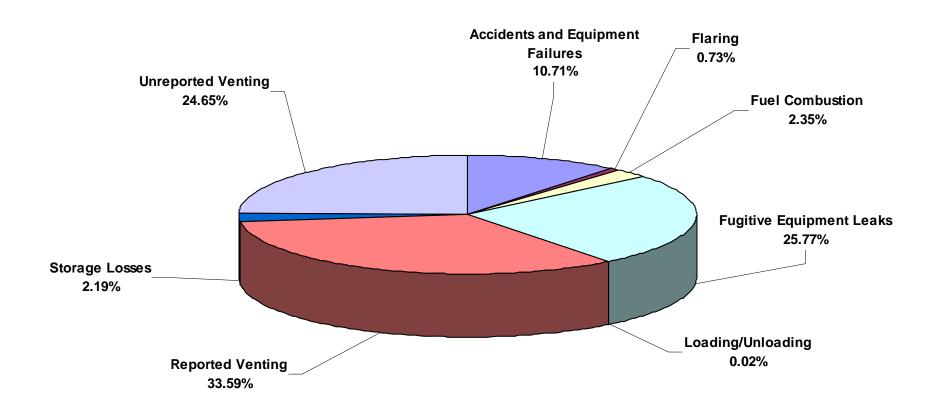
## Canada's CH4 & GHG Emissions by the UOG Industry

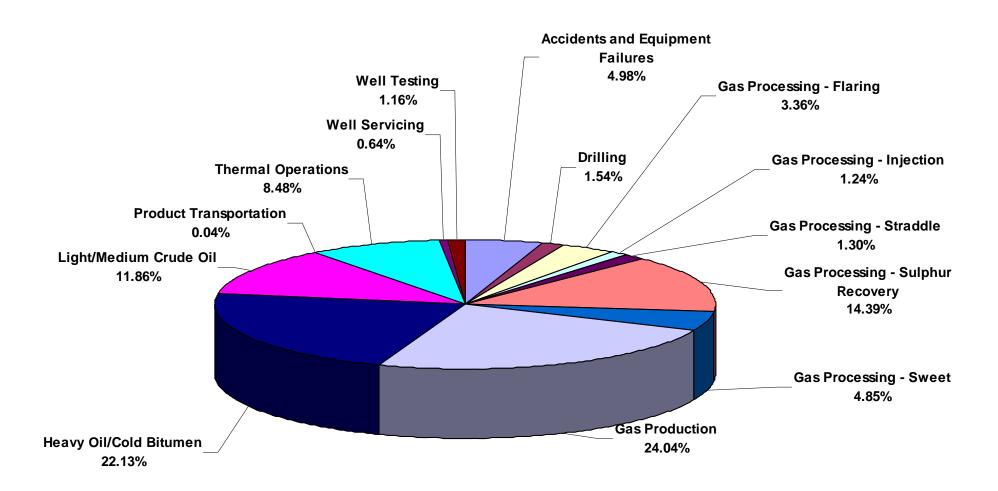
Methane Emissions Presented by Sector Total Emissions = 1 849 kt/y



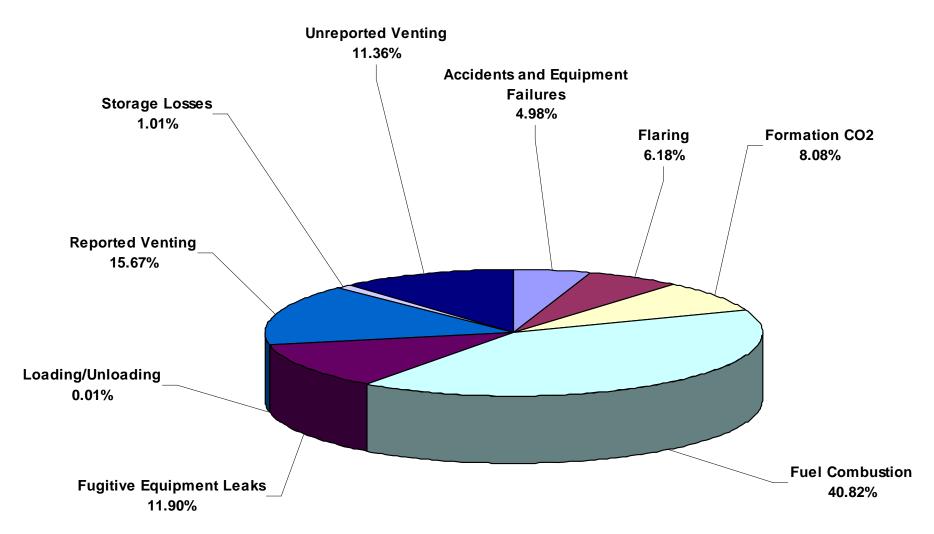
## Methane Emissions Presented by Source Category Total Emissions = 1 849 kt/y



## Carbon Dioxide Equivalent Emissions Presented by Sector Total Emissions = 84 355 kt/y



## Carbon Dioxide Equivalent Emissions Presented by Source Category Total Emissions = 84 355 kt/y



CANADA – GAS TRANSMISSION, STORAGE & DISTRIBUTION							
	CH <sub>4</sub> (tonnes)	onnes) $CO_2$ (tonnes) $N_2O$ (tonnes)		CO <sub>2</sub> eq (tonnes)			
TRANSMISSION							
Fugitive	81,161	147	_	1,704,529			
Vented	53,771	528	-	1,129,720			
Combustion	2,857	10,947,009	691	11,221,197			
TOTAL	137,790	10,947,684	691	14,055,445			
TRANS-STRGE							
Fugitive	3,082	15	-	64,736			
Vented	604	1	-	12,689			
Combustion	26	34,625	2	35,741			
TOTAL	3,712	34,641	2	113,166			
LNG FACILITIES							
Fugitive	311	1	-	6,522			
Vented	141	1	-	2,962			
Combustion	5	5,646	1	5,912			
TOTAL	457	5,648	1	15,396			
DISTRIBUTION							
Fugitive	46,931	2,384	-	987,930			
Vented	4,568	74	-	96,006			
Combustion	7	80,697	2	81,442			
TOTAL	51,506	83,156	2	1,165,379			

Activity	<b>Denominator Used</b>	Emission Intensity Factor (t/quantity)					
		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> E	CO <sub>2</sub> O	NMVOC
Well Drilling	Wells Drilled	61.1	0.023	0.0055	63.3	0.053	0.076
Well Servicing	Wells Drilled	15.0	0.51	0.0018	26.3		0.11
Well Testing	Wells Drilled	42.7	0.24		47.7	0.68	0.056
Light/Medium Crude Oil Production	Light/Medium Oil Produced (10 <sup>3</sup> m <sup>3</sup> )	86.3	4.41	0.0038	180.0	26.6	4.94
Heavy Crude Oil Cold Production	Primary/Secondary Heavy Oil + Cold Bitumen Produced (10 <sup>3</sup> m <sup>3</sup> )	75.0	25.1	0.0033	603.6	85.9	5.70
Heavy Crude Oil Thermal Production	Thermal Bitumen Produced (10 <sup>3</sup> m <sup>3</sup> )	594. 2	3.75	0.0090	675.8	13.5	1.15
Natural Gas Production	Natural Gas Produced (10 <sup>6</sup> m <sup>3</sup> )	42.7	2.34	0.0040	93.2	7.83	0.59
Natural Gas Processing	Natural Gas Produced (10 <sup>6</sup> m <sup>3</sup> )	90.4	0.29	0.0032	97.4	0.87	0.14
Petroleum Liquids Transportation	Light/Medium + Heavy + Bitumen Produced (10 <sup>3</sup> m <sup>3</sup> )	0.09	0.013		0.36	0.41	0.13
Accidents/Equipme nt Failures	All Natural Gas and Oil Produced (10 <sup>3</sup> m <sup>3</sup> OE)	0.12	0.63		13.5	3.24	0.48

Source	% of Total CO <sub>2</sub> E Uncertainty	% of Total THC Uncertainty		
Fugitive Equipment Leaks	61.2	82.2		
Fuel Combustion	23.4	0.0		
Reported Venting	13.9	16.5		
Formation CO <sub>2</sub>	0.8	0.0		
Flaring	0.5	0.0		
Unreported Venting	0.2	1.3		
TOTAL:	100.0	100.0		