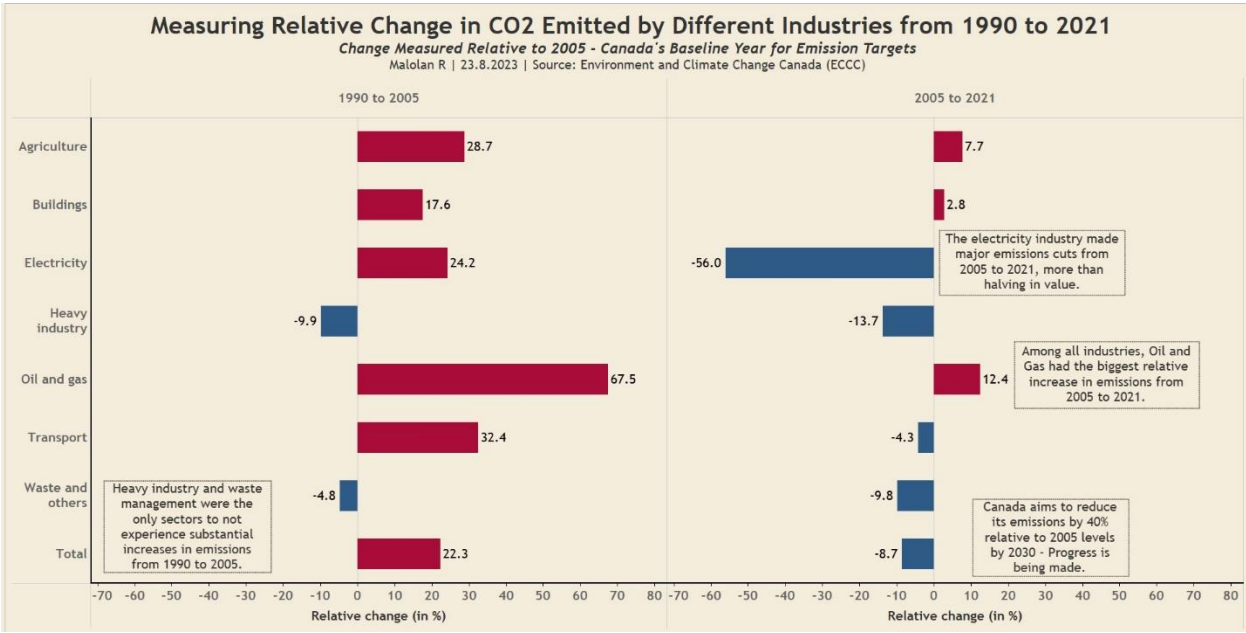
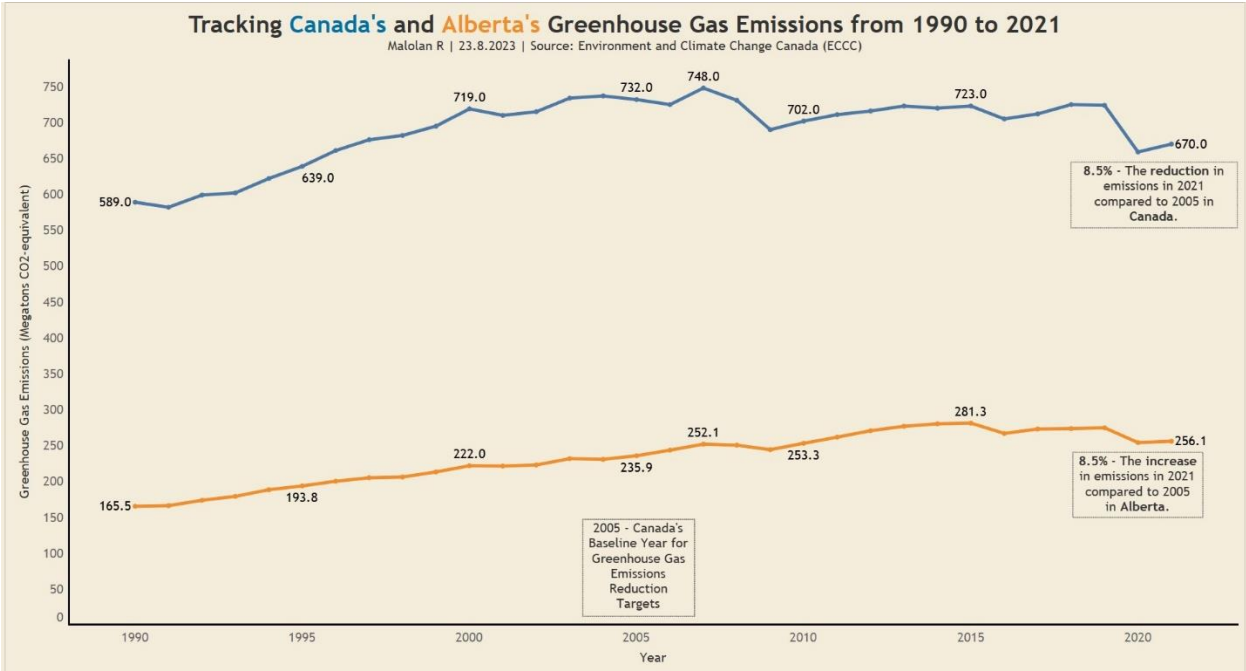


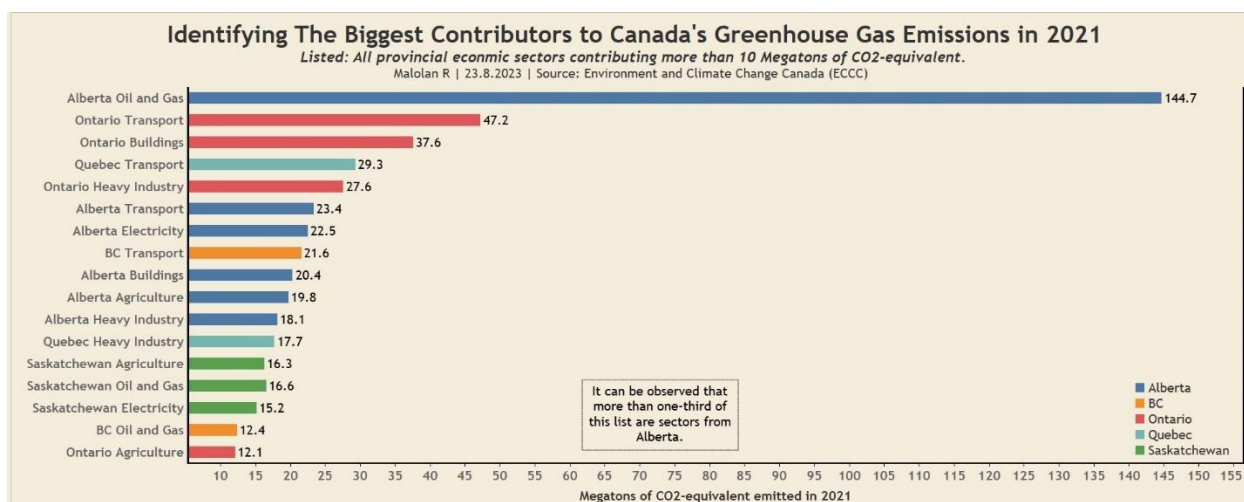
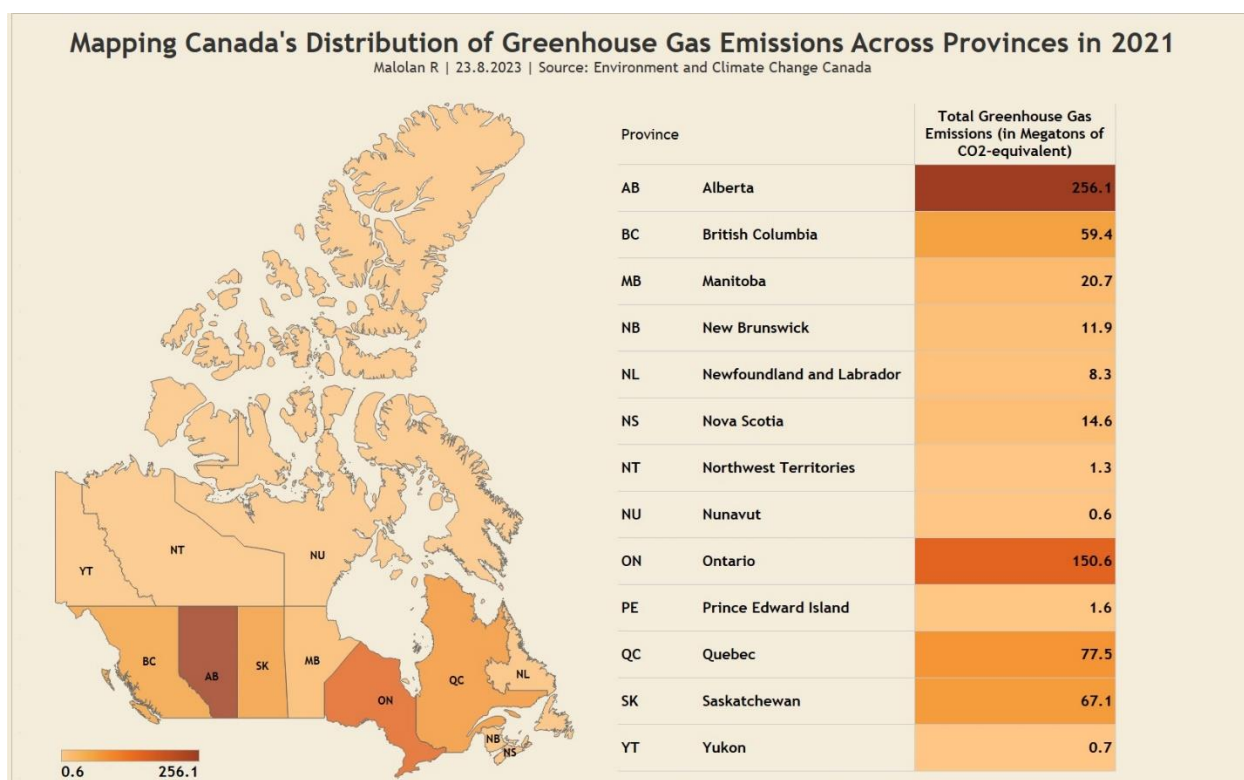
# The Role of Alberta's Oil and Gas Industry in Canada's Greenhouse Gas Emissions

Environmental Data Project | Malolan Rajagopal | Alberta, Canada | August 2023

## 1. An Overview of Historical Emission Trends:



## 2. Provincial and Sector-wise Distribution of Emissions in 2021:



## Identifying The Environmental Impact of Canada's Provincial Economic Sectors in 2021

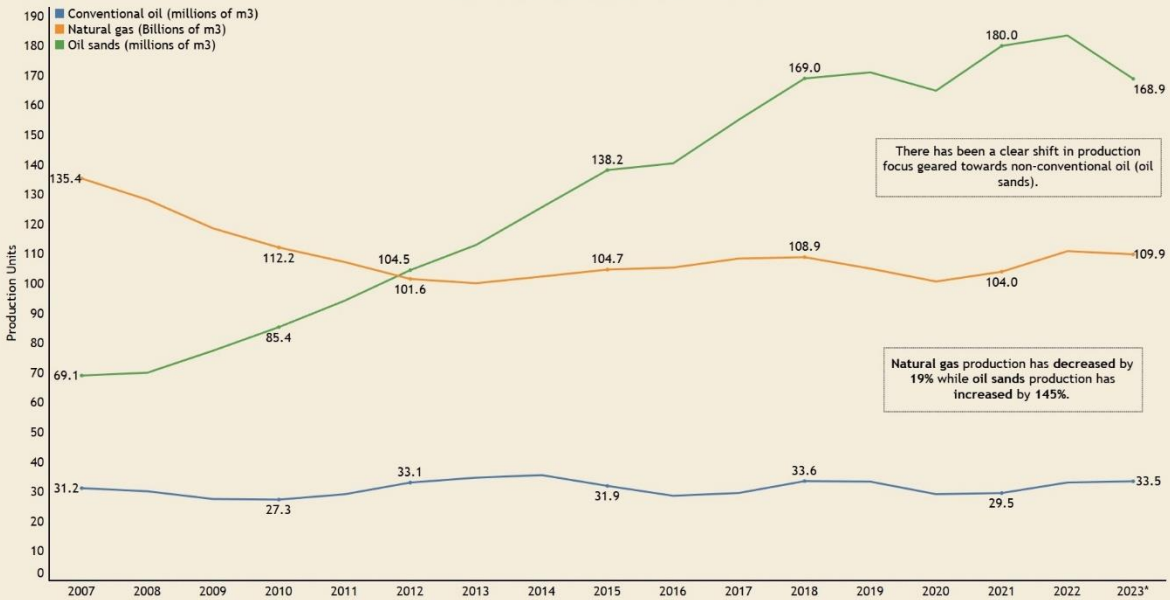
*Text in cells indicates the megatons of CO<sub>2</sub>-equivalent emitted by the provincial economic sector in 2021.*  
 Malolan R | 23.8.2023 | Source: Environment and Climate Change Canada (ECCC)

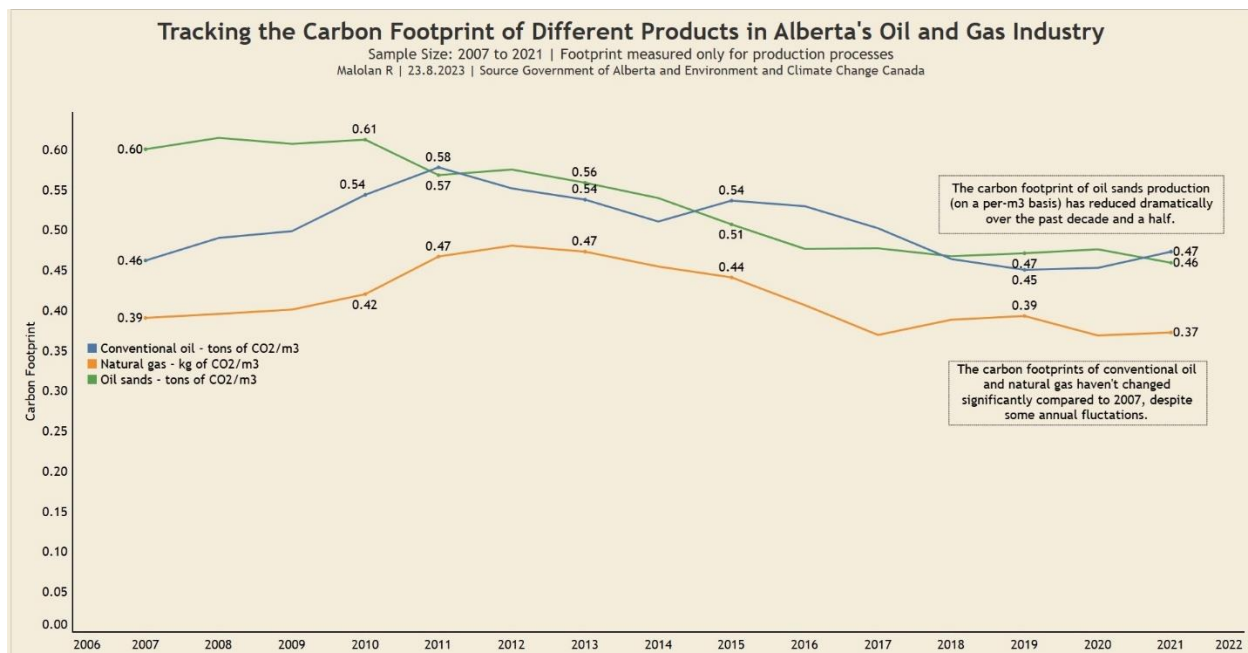
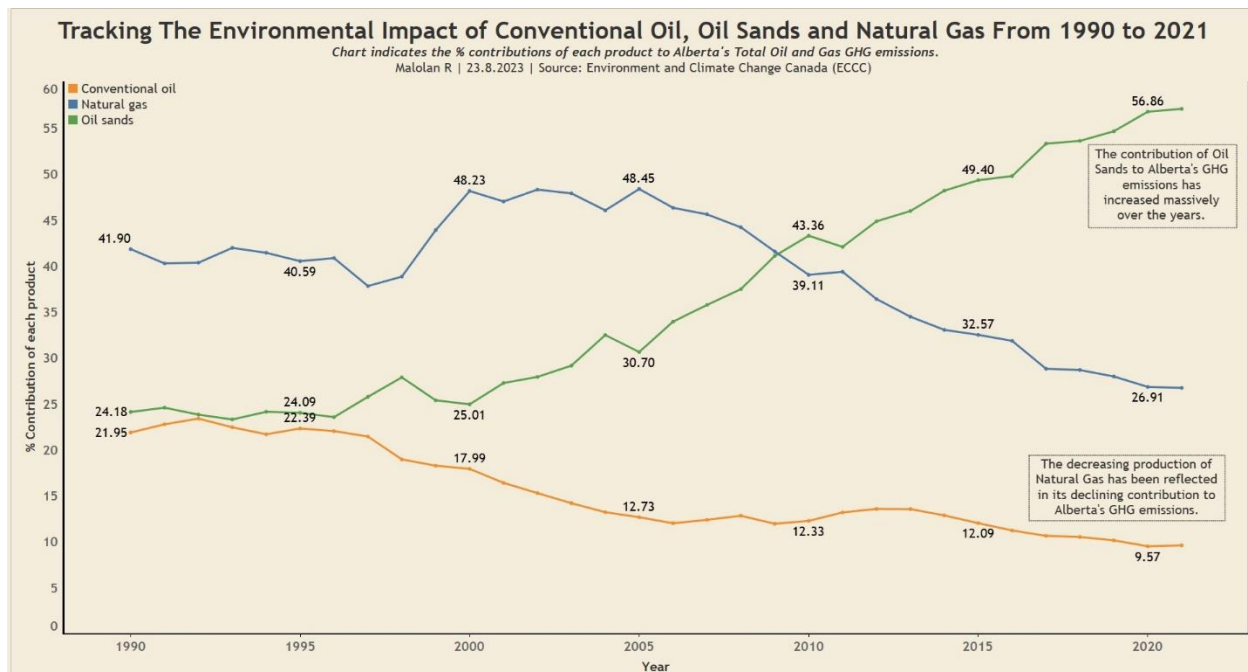
	Agriculture	Buildings	Coal Production	Electricity	Heavy Industry	Light Manufacturing, Construction and Forest Resources	Oil and Gas	Transport	Waste
Alberta	19.8	20.4	0.2	22.5	18.1	2.9	144.7	23.4	4.2
British Columbia	2.9	9.1	2.3	0.4	5.3	3.3	12.4	21.6	2.0
Manitoba	7.3	2.9	0.0	0.1	1.3	1.0	0.9	6.1	1.2
New Brunswick	0.5	0.9	0.0	2.8	0.6	0.4	3.1	3.1	0.5
Newfoundland and Labrador	0.1	0.7	0.0	0.6	1.1	0.3	1.4	3.5	0.6
Northwest Territories	0.0	0.1	0.0	0.0	0.4	0.0	0.1	0.6	0.0
Nova Scotia	0.4	1.9	0.0	6.1	0.3	0.4	0.0	4.9	0.5
Nunavut	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0
Ontario	12.1	37.6	0.0	3.4	27.6	8.8	7.7	47.2	6.1
Prince Edward Island	0.4	0.3	0.0	0.0	0.0	0.2	0.0	0.7	0.1
Quebec	8.8	9.4	0.0	0.3	17.7	5.1	2.3	29.3	4.5
Saskatchewan	16.3	3.9	0.0	15.2	4.1	0.7	16.6	9.1	1.3
Yukon	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0

### 3. A Deeper Look at Alberta's Oil and Gas Industry:

#### Measuring the Changing Production Patterns in Alberta's Oil and Gas Industry

*Sample Size: 2007 to 2023 (Data for 2023 pro-rated to 12 months)*  
 Malolan R | 23.8.2023 | Source: Government of Alberta





#### 4. Key Takeaways:

1. Canada's emissions in most sectors and provinces have reduced compared to 2005 standards.
2. However, more work is required in Alberta, especially in its Oil and Gas sector which is responsible for over 20% of the country's total emissions.
3. Recent tightening of regulations has led to a decrease in carbon footprints, especially for oil sands productions.

4. The standards need to be made even more stringent going forward, along with efforts from companies such as Envirosoft, in order to meet Canada's goal of reducing its GHG emissions by 40% by 2030, compared to its 2005 standards.