

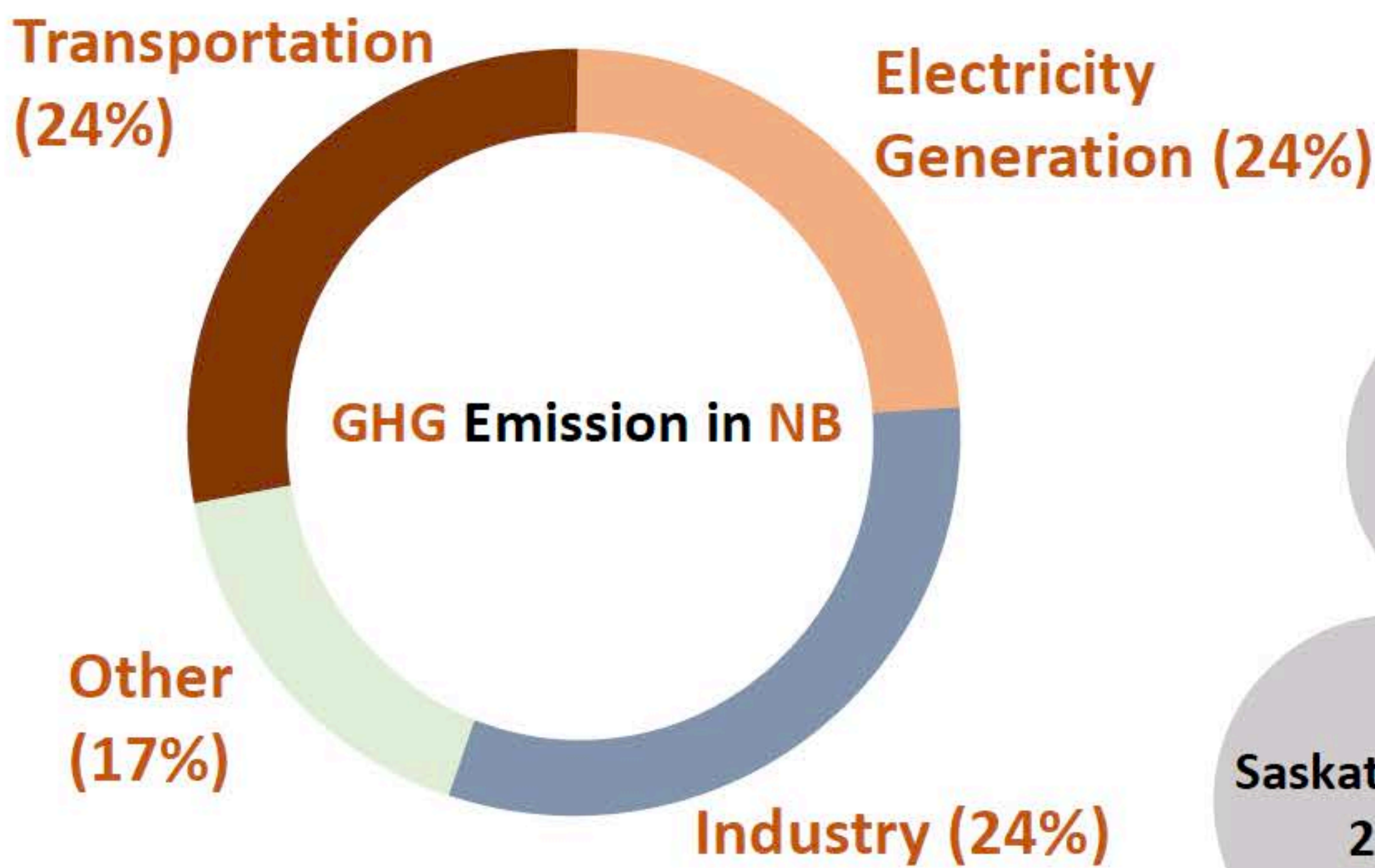
CLIMATE CHANGE HOAX OR A REALITY ?

2020 WAS THE HOTTEST YEAR GLOBALLY SINCE LATE 19TH CENTURY

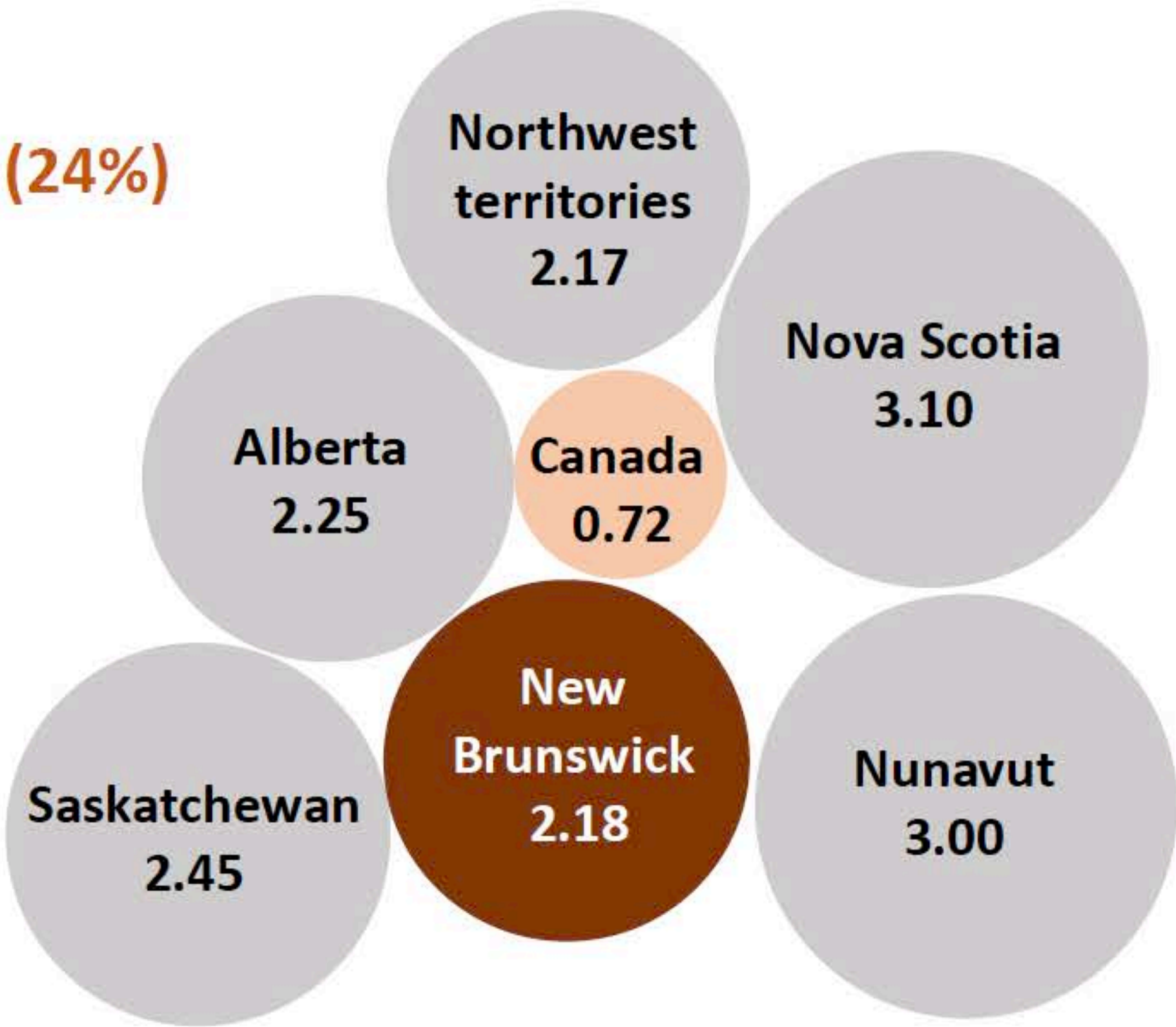


“... A man - made disaster of global scale ... Climate Change ”
David Attenborough

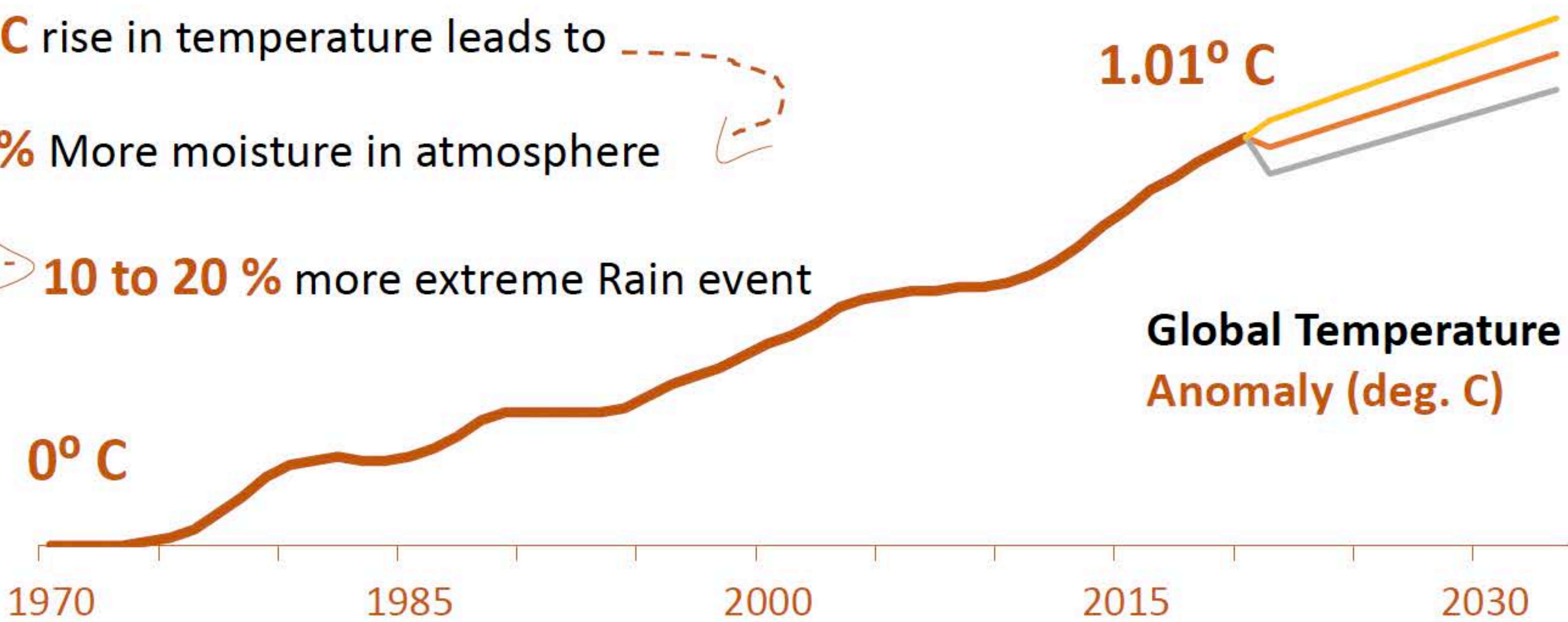
NB **Lost 21 %** forest area from 2001 to 2020



GHG emission per Capita



1° C rise in temperature leads to
7% More moisture in atmosphere
10 to 20 % more extreme Rain event



- Call to action**
- Need to introduce electric vehicle for **50 % NB's** Rural population
 - Need to explore newer renewable energy sources
 - Restoration of lost forest land

Our Goal : 47% Reduction in NB emission by 2030
Compared to 2005 levels



11 SUSTAINABLE CITIES AND COMMUNITIES



Key Findings

Costs of building units are rising.
Gap between demand and supply.
Less Vacancies for Buyers and Renters.
Issuing of Bill permits is consistent but not increasing substantially
Public transit issue.
Affordable housing is not enticing and full of roadblocks.
Difference between people's need and the availability in the market.

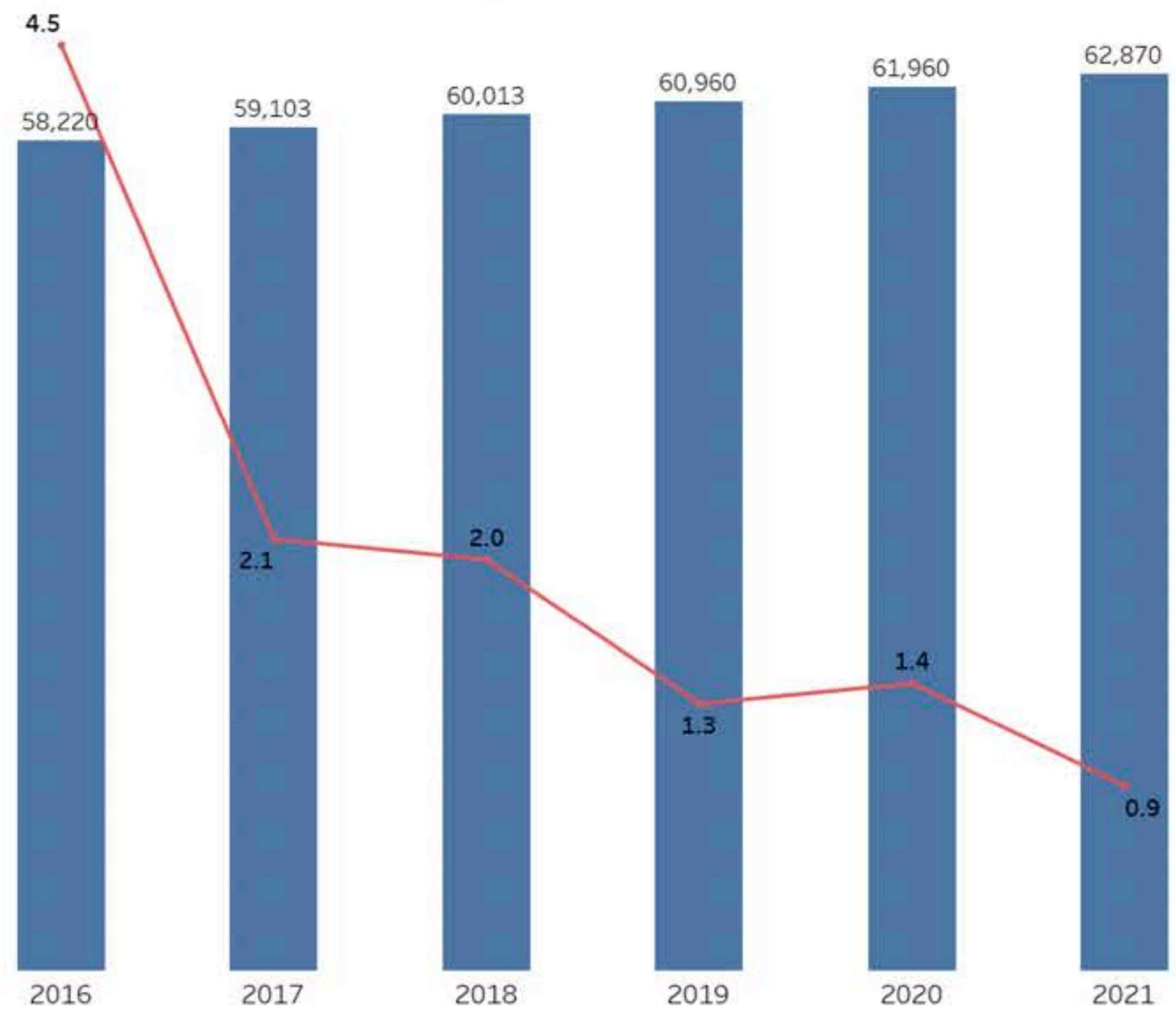
Call to Action

Lowering the tax and cost of the material.
Goal of 'One Call Solution' for the tenancy matters.
Public Transit infrastructure.
Invest in a business plan for a provincial non-profit rural workforce housing development corporation.
REVIEW AND REVISE THE NEW BRUNSWICK RESIDENTIAL TENANCIES ACT

Housing Crisis in Fredericton, NB

Team Build Together

Is the **Percentage of Vacancies** meeting the **Fredericton Population Demands**?



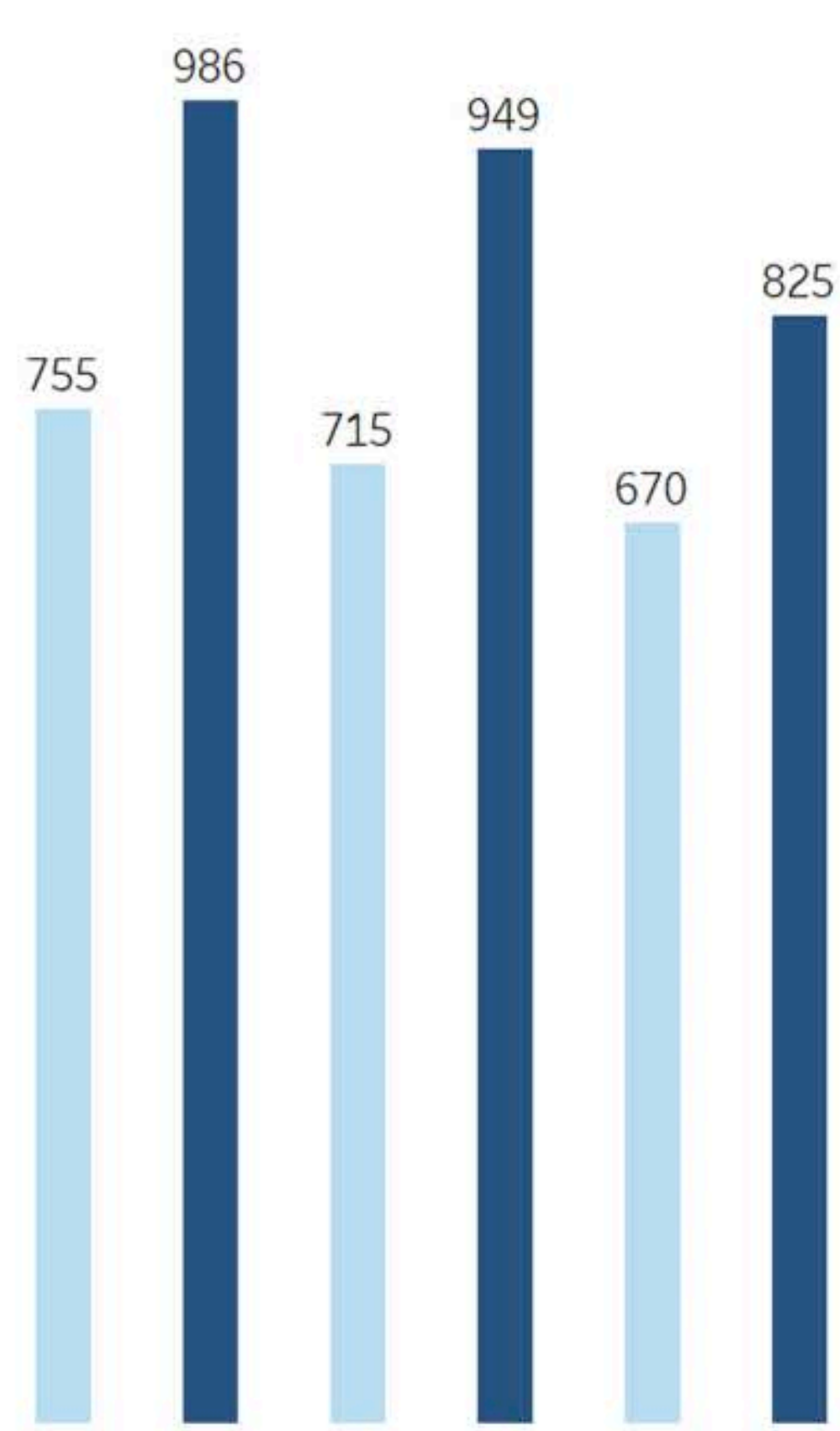
Vacancies down to **2%** in the province

Problem is only getting worse. Why?

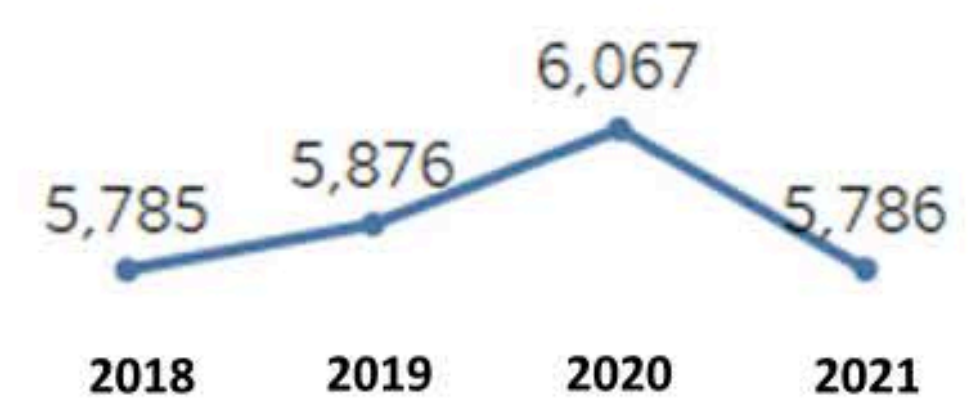
Around **10k** immigrants won't come to NB if crisis continues, reports CBC

Buyers' Market? Renters' Market? **Neither.**

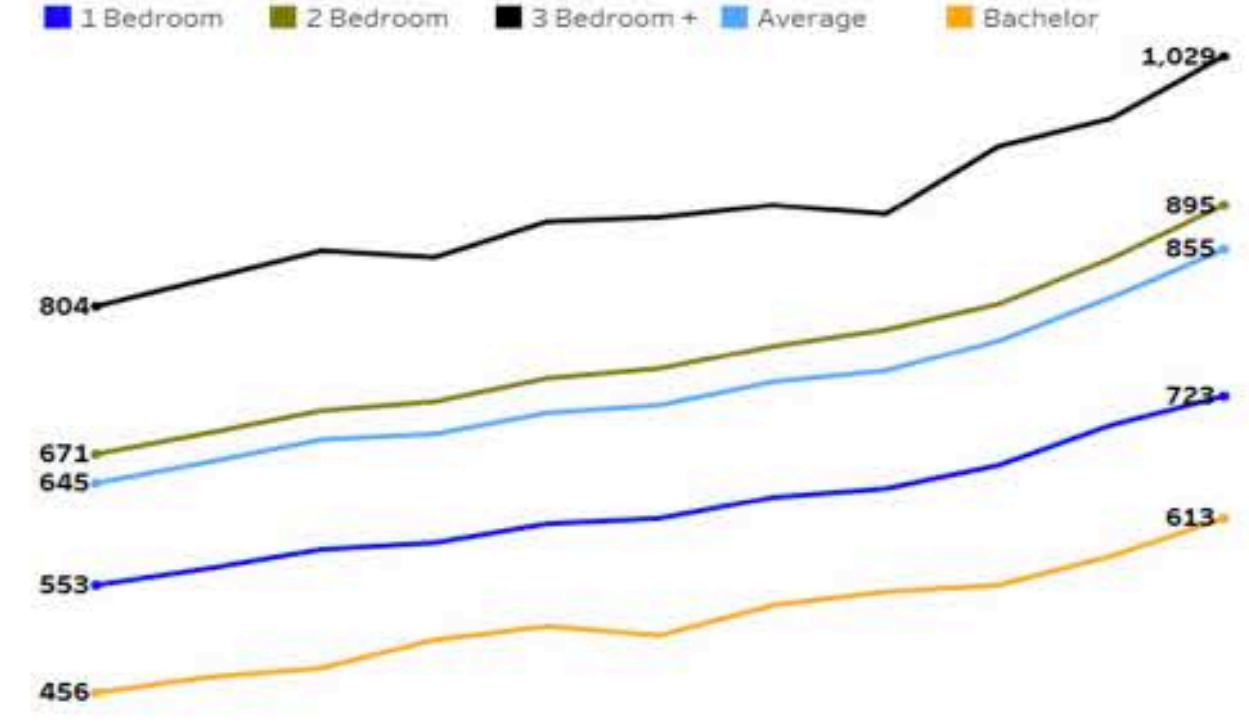
Rent Prices (2011 vs 2020)
Fredericton Moncton St. John



The number of Build Permits Issued in NB (Till August)



New Brunswick — Historical Average Rents by Bedroom Type



Why are Landlords **Reluctant** to Build in NB?



@Moe_Gams – @MohitKumar96 - @cvssasha_

Sources

- StatsCan
- SDGS.UN.org
- Canadian Indicator Framework for Sustainable Development Goals
- Review of the Rental Landscape NB
- 2019-2022 New Brunswick Action Plan
- The Canadian Real Estate Association Statistics



Bullying & Exclusion Effects on Mental Health

Short Term Effects*

- Anxiety
- Depression
- Low self-esteem
- Difficulty sleeping
- Self-harm
- Suicidal thoughts

Long Term Effects*

- Generalized anxiety
- Panic disorder
- Agoraphobia
- Depression
- Loneliness
- School avoidance

In 2019, 38,982 students responded to the NB Student Wellness Survey.

What's Happening in Our Schools?



Be part of the solution #DoBetter4Me

Data Sources
New Brunswick Health Council - Student Wellness Survey - <https://nbhc.ca/all-publications/nbsws-grades-6-12-2018-2019>
*JAMA Psychiatry: "Adult Psychiatric Outcomes of Bullying and Being Bullied by Peers in Childhood," "Association of Bullying Behavior at 8 Years of Age and Use of Specialized Services for Psychiatric Disorders by 28 Years of Age."
*Journal of Children and Family Studies: "Cumulative Bullying Experiences, Adolescent Behavioral and Mental Health, and Academic Achievement: An Integrative Model of Perpetration, Victimization, and Bystander Behavior."
*The Lancet: "Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries."
*National Institutes on Health: "The little known health effects of bullying."
*PACER's National Bullying Prevention Center: "Bullying statistics."
*StopBullying.gov: "Effects of Bullying on Mental Health," "How to Prevent Bullying," "What Is Bullying?"



Equal Access \neq Equal Pay

Women
Men



Global Gender Gap Index
Canada = 0.77

1. Where are We?

Economy = 0.74

Politics = 0.38



Education = 1.0?

Health = 0.96?

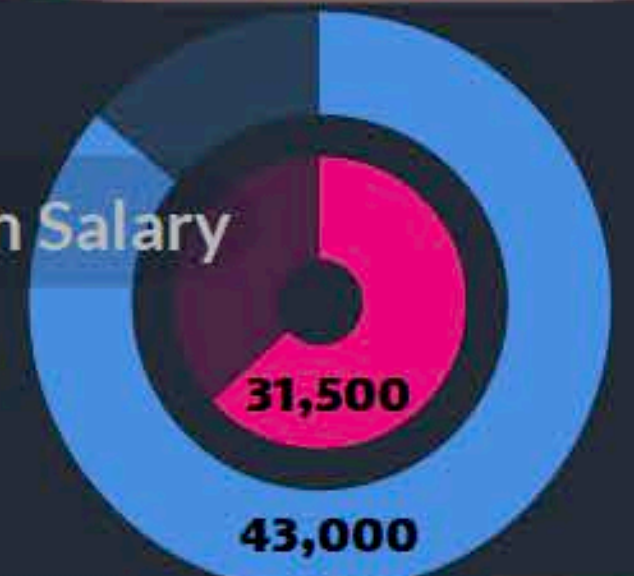
Canada Score
World average

2. Recent Trend

Median Gender Annual Income Ratio (GIR)



Yearly Median Salary

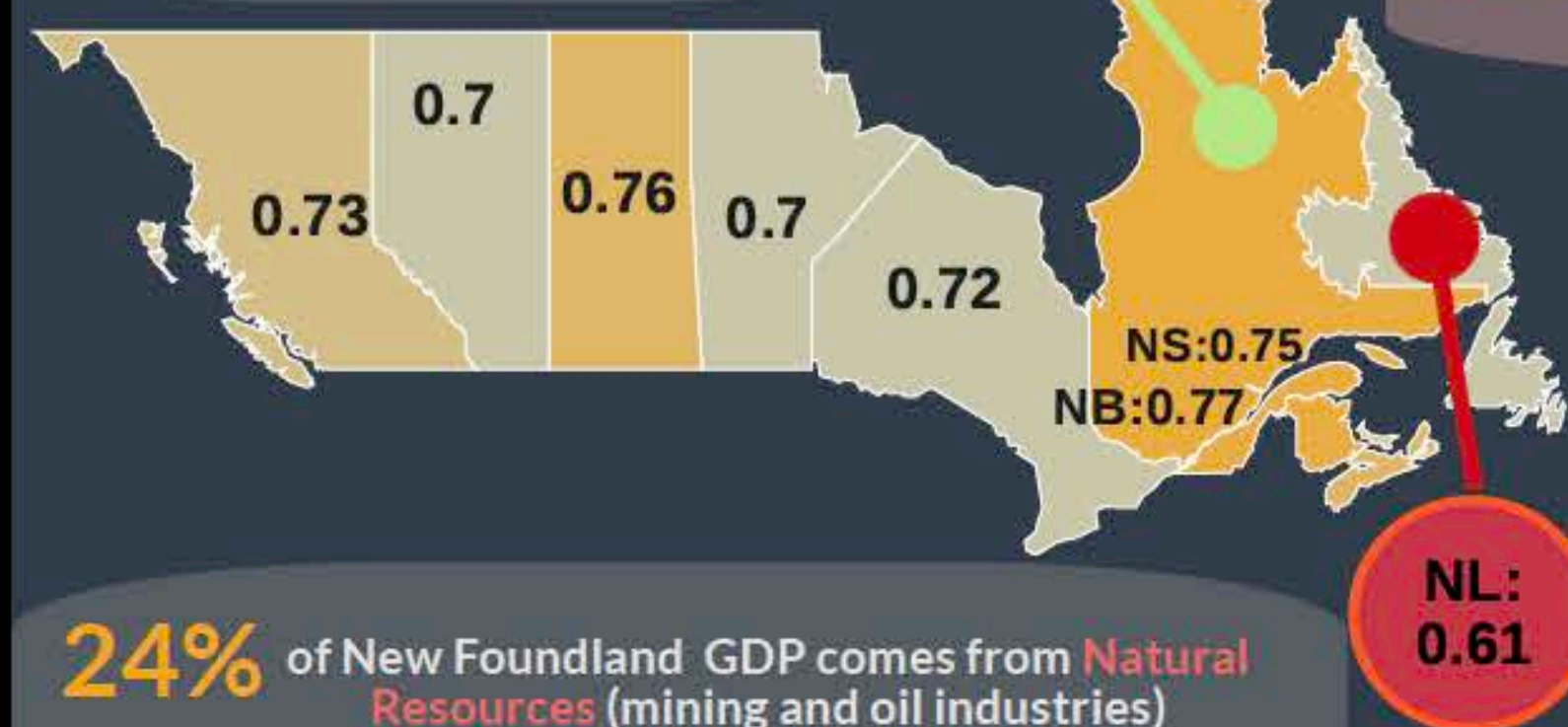


3. Where does it come from?

Business and Management contribute > 30% to Quebec and Ontario's GDP

Gender Ratio: GIR Across Provinces and Occupations

Resources driven << Management led provinces



0.53



0.54



0.58



0.7



0.71



0.71



0.77



0.79



0.86



1



Median Yearly Salary

\$62,000 \$47,900

Average Work Hours

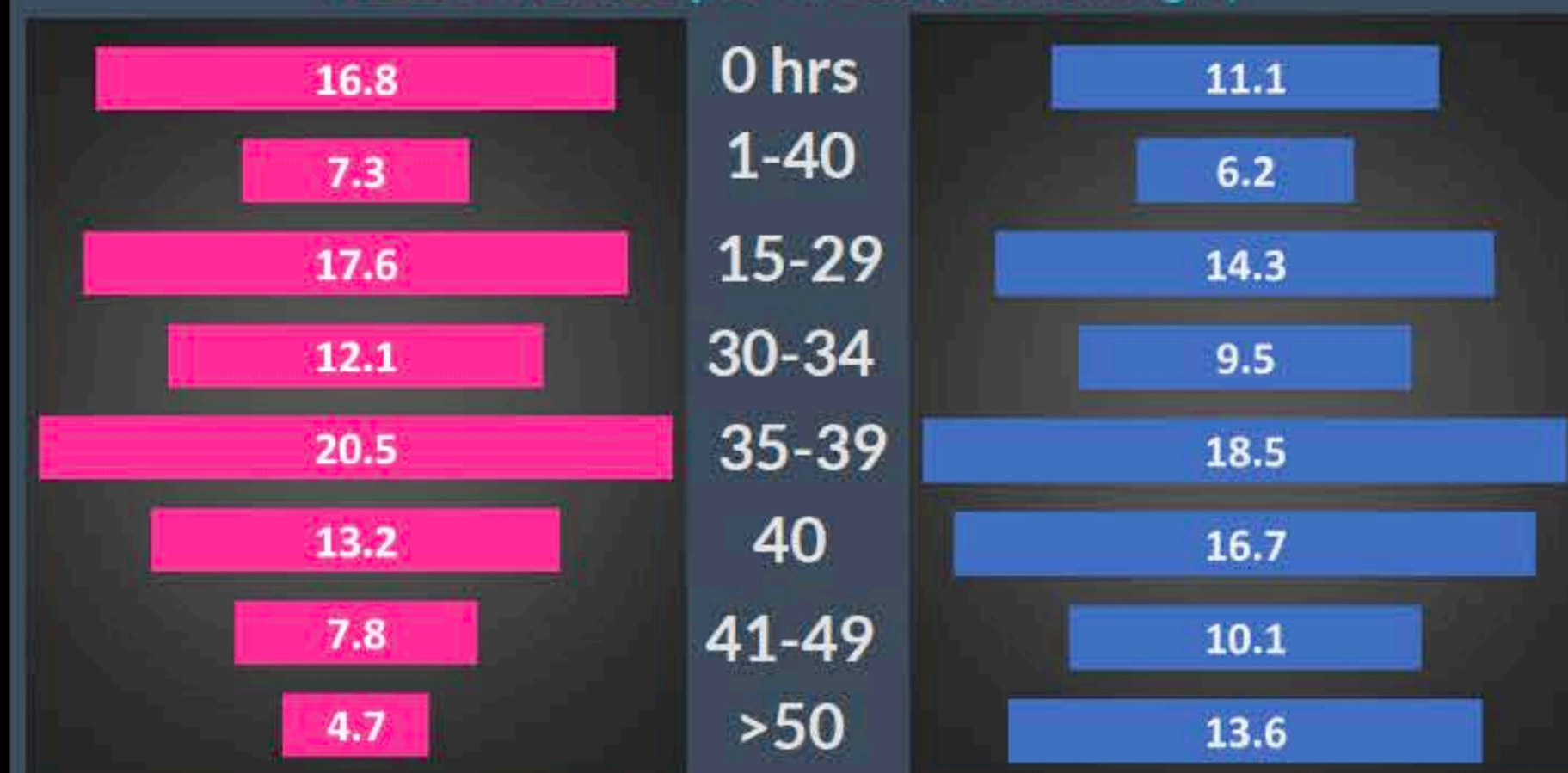
33 Hrs 27.4 Hrs



4. GGI Health 0.97
GIR Health 0.77

Men on average Worked more and earned higher salaries.

Hours Worked per Week (Percentage)



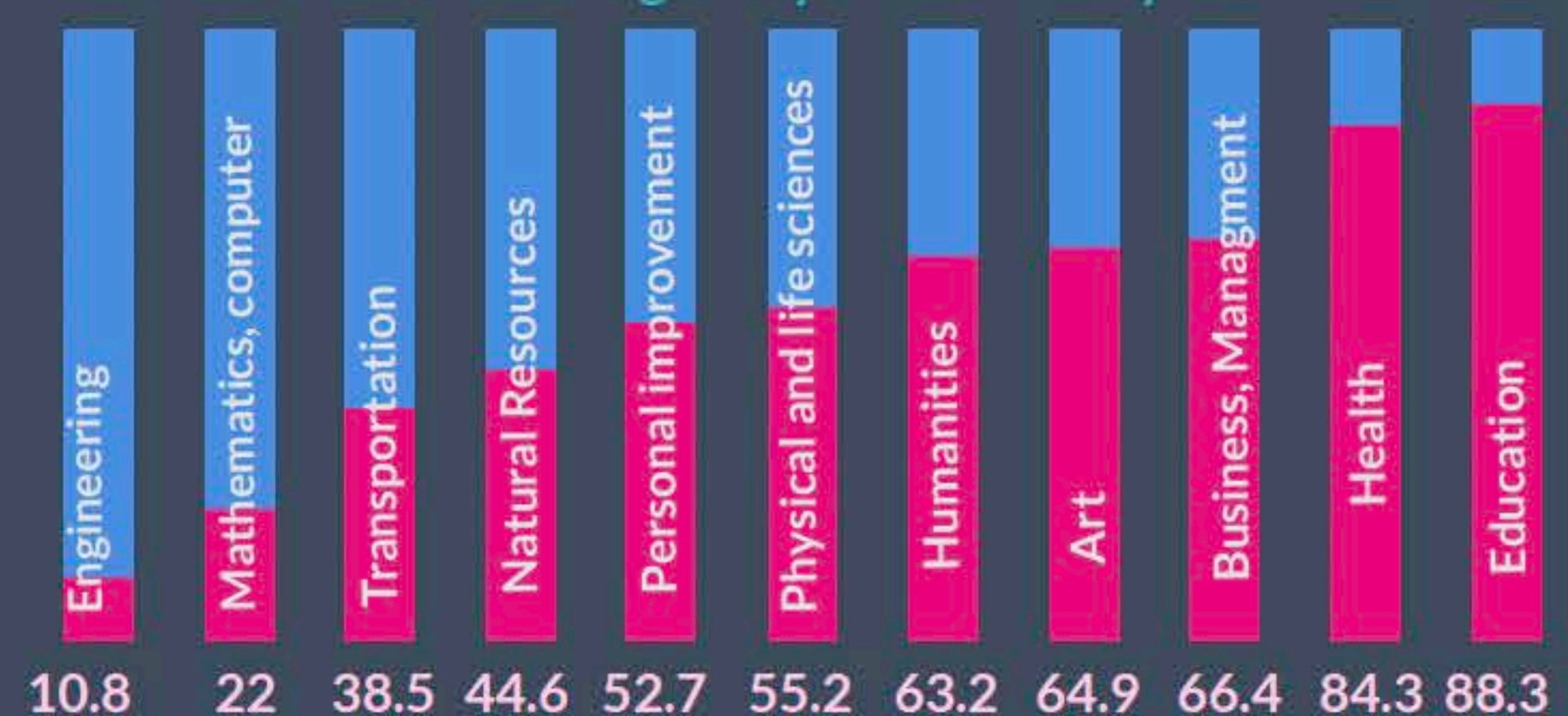
Total Doctoral Degrees



Gender Parity Reached

5. GGI Edu 1.00
GIR Edu 0.58

Doctoral Degree by Field of Study



Median Yearly Salary

\$69,900 \$45,000

Engineering

Education

Men Still Prefer Engineering and Women prefer Humanities Even though it pays less!

Total Income:

Pay Ratio matters more than Wage Ratio!

Education:

STEM disparity increases Gender Gap!

Health:

Work hours matter!

Equal Access

+ Equal Pay = Gender Parity

SCAN ME!

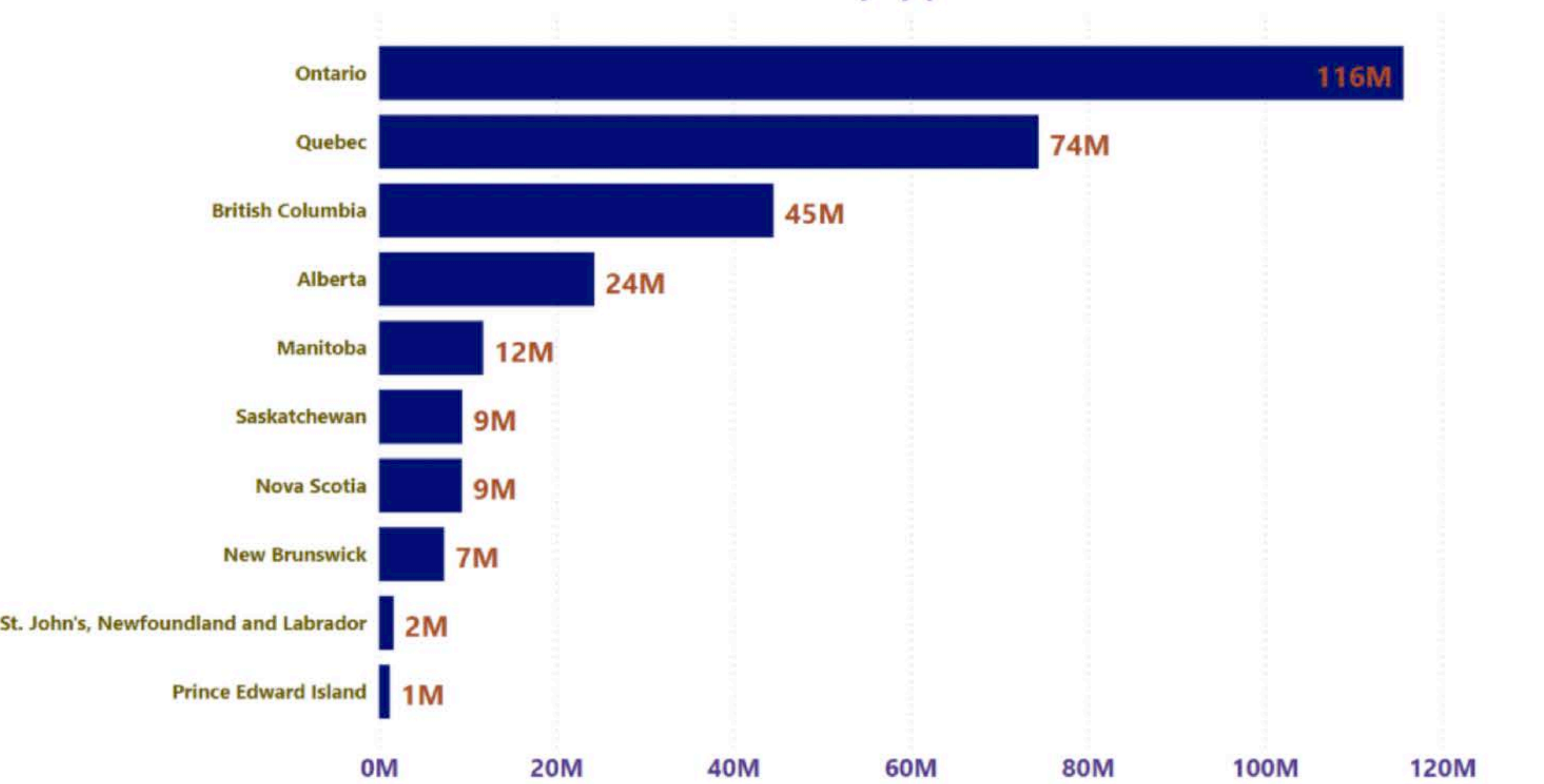


Sources:

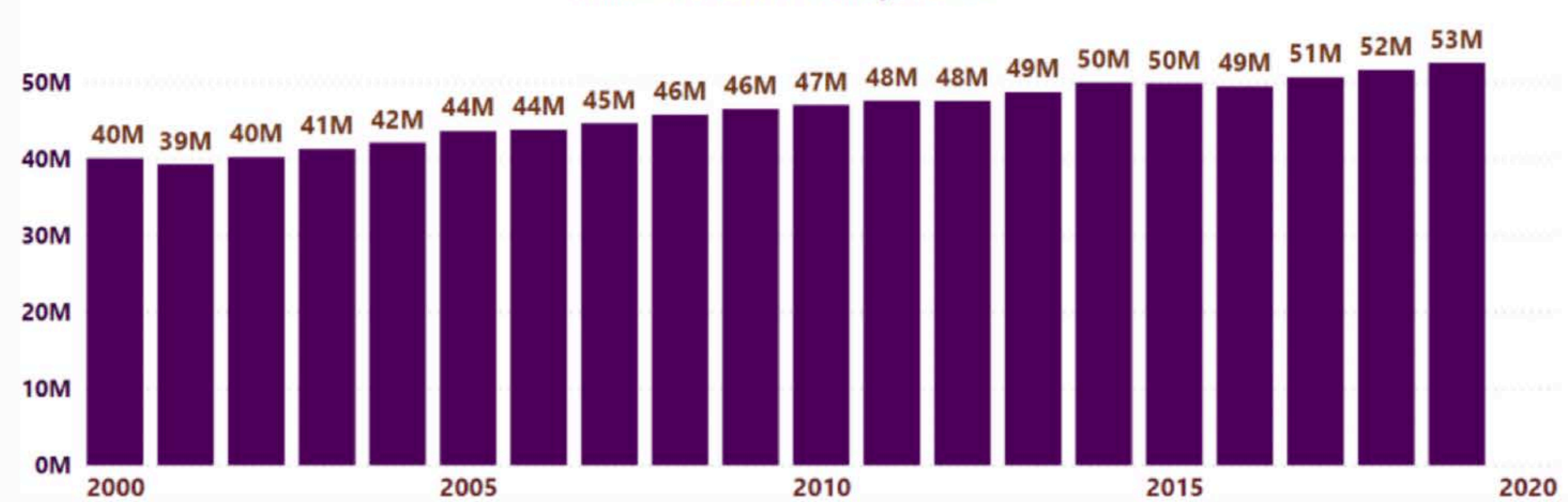
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=11100239016>
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410003201>
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110024001>

Group Name: Co-Exist

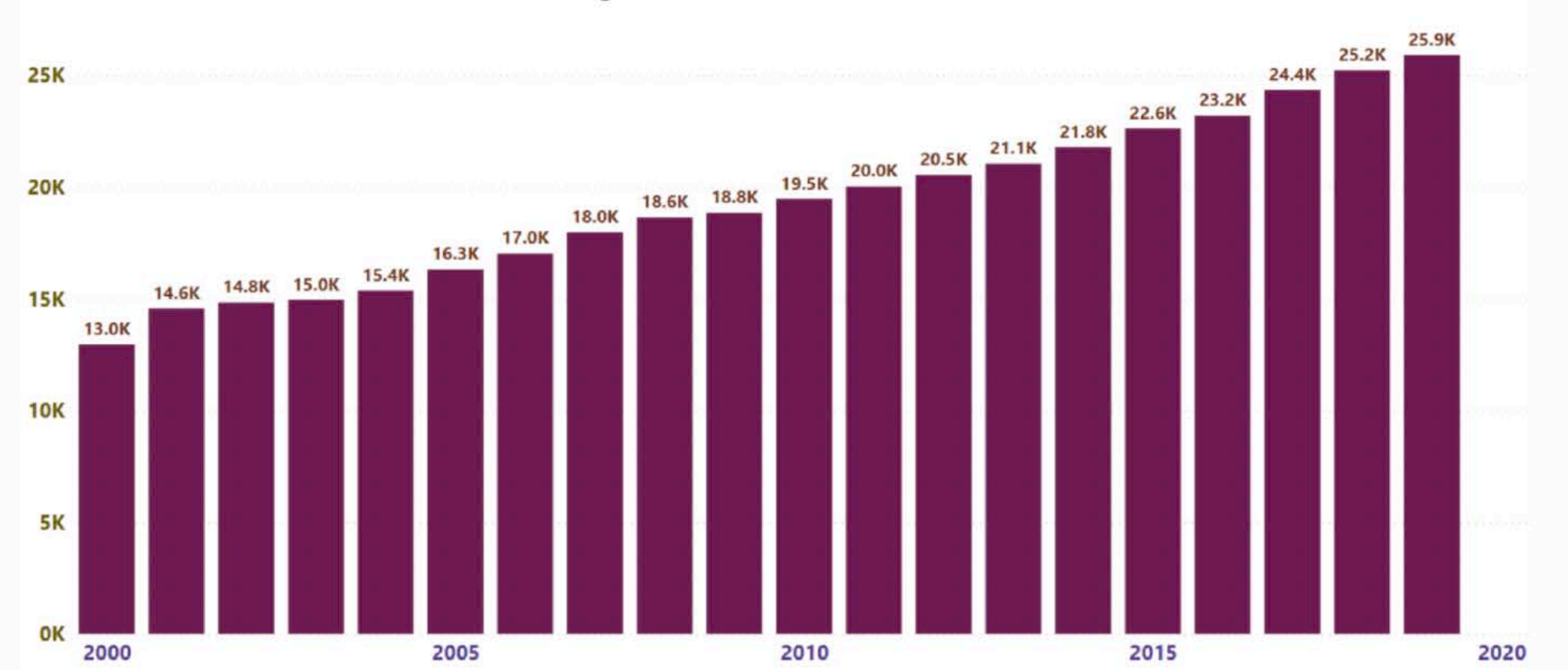
Number of Low Income family by provience



Number of Low-Income family Over time



Average After tax Low-Income Over time

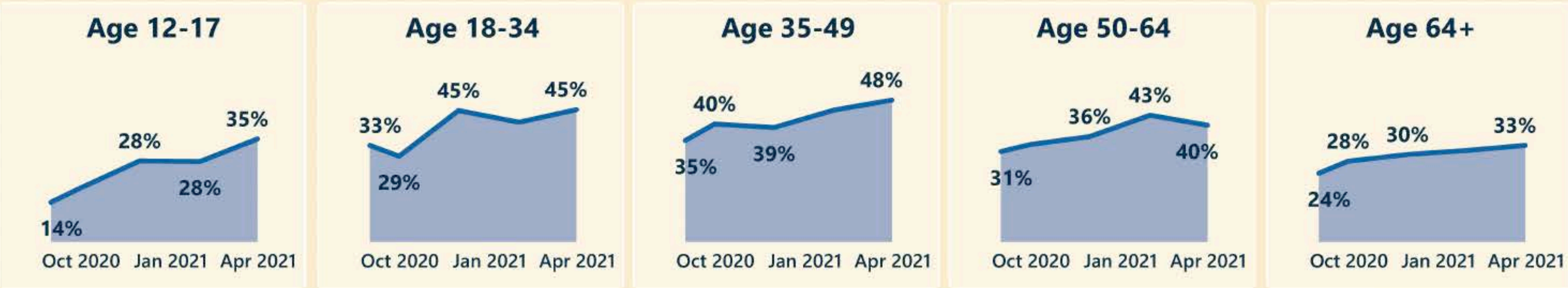


Mental Health Consequences of COVID-19 in Canada

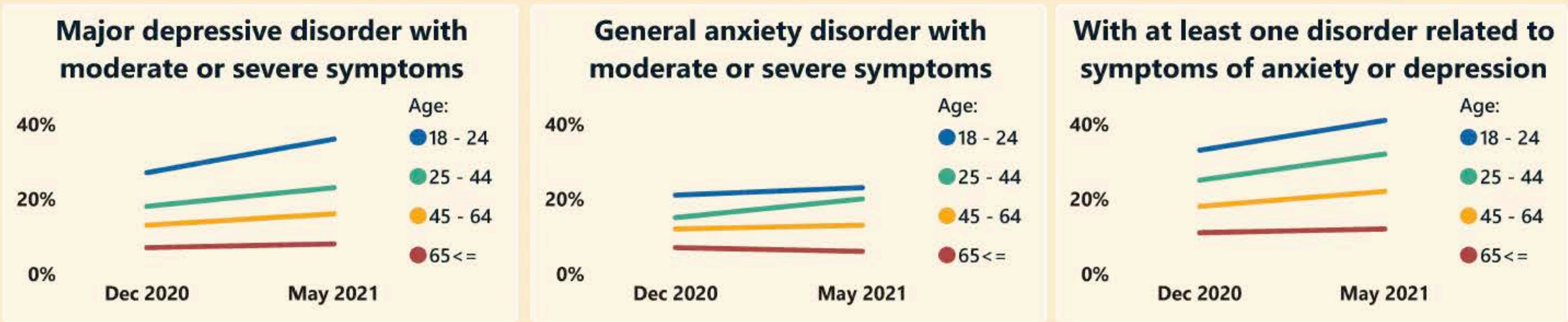
Which age group's mental health is most impacted during a pandemic?



Mental health worsened through the pandemic*



Symptoms of anxiety and depression**



Emergency department visits and hospitalizations due to substance abuse***

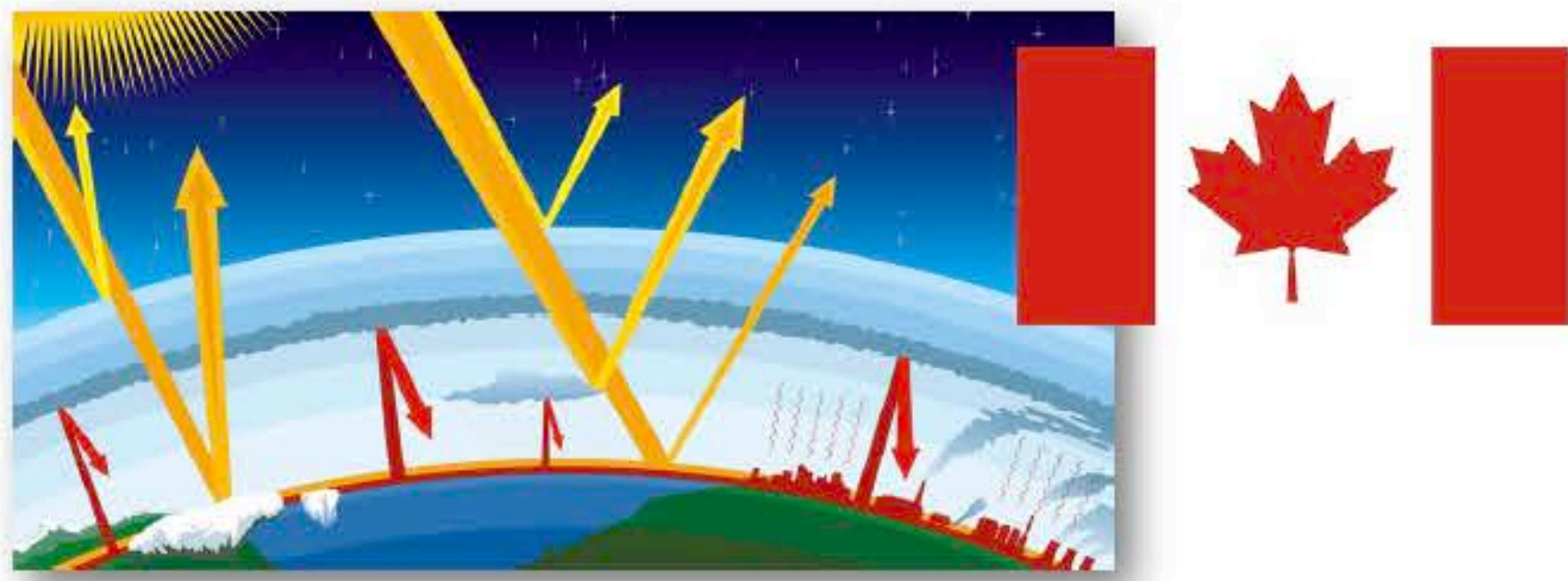


Based on data gathered prior to and over the course of the COVID-19 pandemic, the mental health of individuals aged 18 to 49 were most affected. In addition, individuals aged 30 to 39 had the highest increase in emergency visits and hospitalizations due to substance abuse. Findings reflect that the COVID-19 pandemic poses higher risk of mental health issues among young adults.

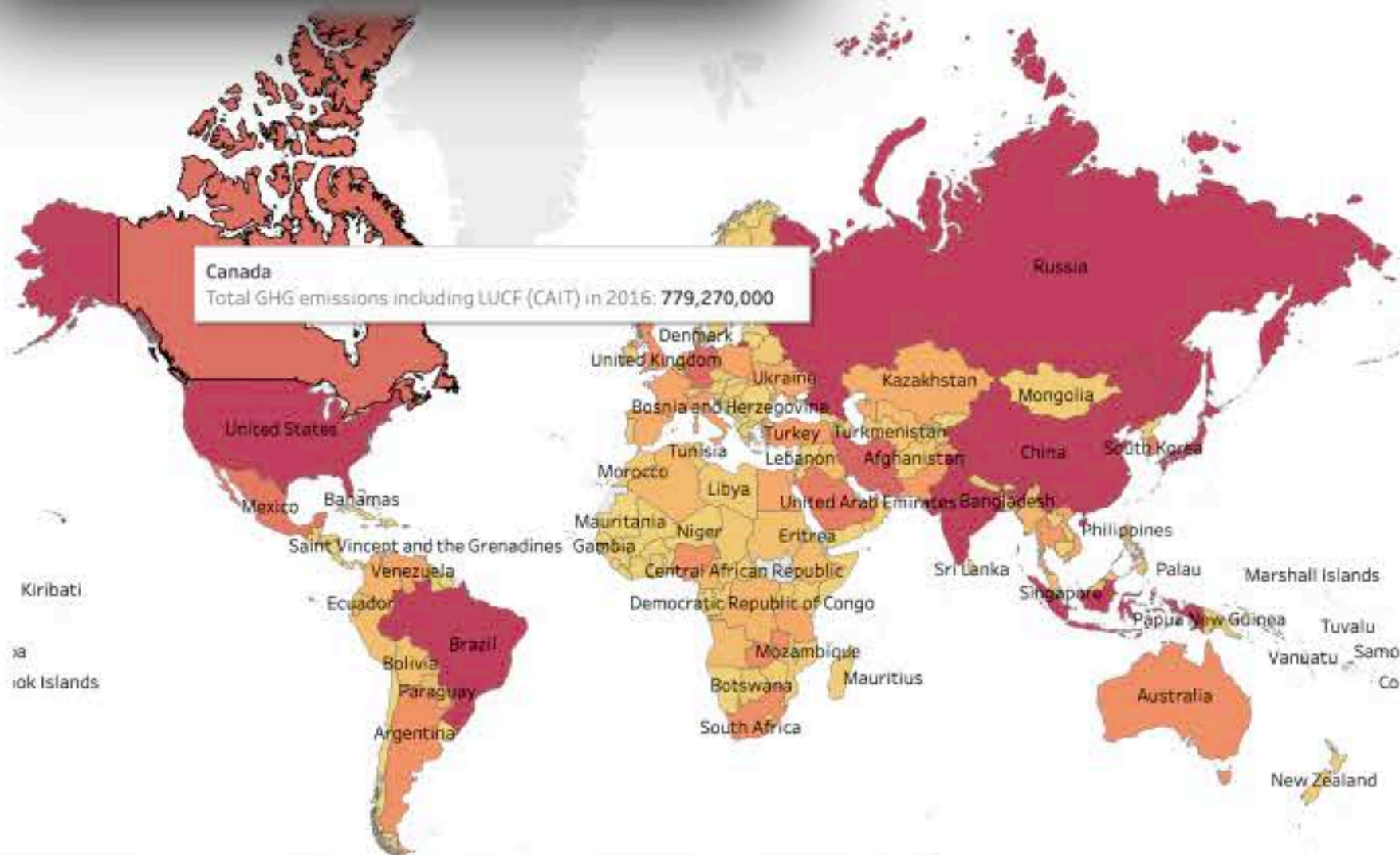
Recommendations: There should be structures in place to minimize the mental health consequences of a pandemic and to promote the general well-being of young adults. Public health restrictions should be tailored to balance the risks of physical and mental health among age groups. Mental health and substance use services should be made available and accessible to young adults during a pandemic.

* Based on data from Canadian Community Health Survey relating to perceptions of Canadians' mental health.
** The Survey on COVID-19 and Mental Health used symptom-based screening tools to determine if an individual is experiencing moderate to severe symptoms of anxiety and depression. The symptoms of depression include persistent sadness, lack of energy and agitation; the symptoms of anxiety include worry, fear and constant nervousness.
*** Abuse of substance that include alcohol, cannabis, cocaine, opioids, stimulants, and depressants. Substance use can be a coping mechanism during a crisis.
Sources:
1. Canadians' health and COVID-19, by age and gender - Open Government Portal (canada.ca)
2. Symptoms of anxiety and depression during the COVID-19 pandemic - Canada.ca
3. Unintended consequences of COVID-19: Impact on harms caused by substance use | CIHI
4. Photo credits: slidesgo.com

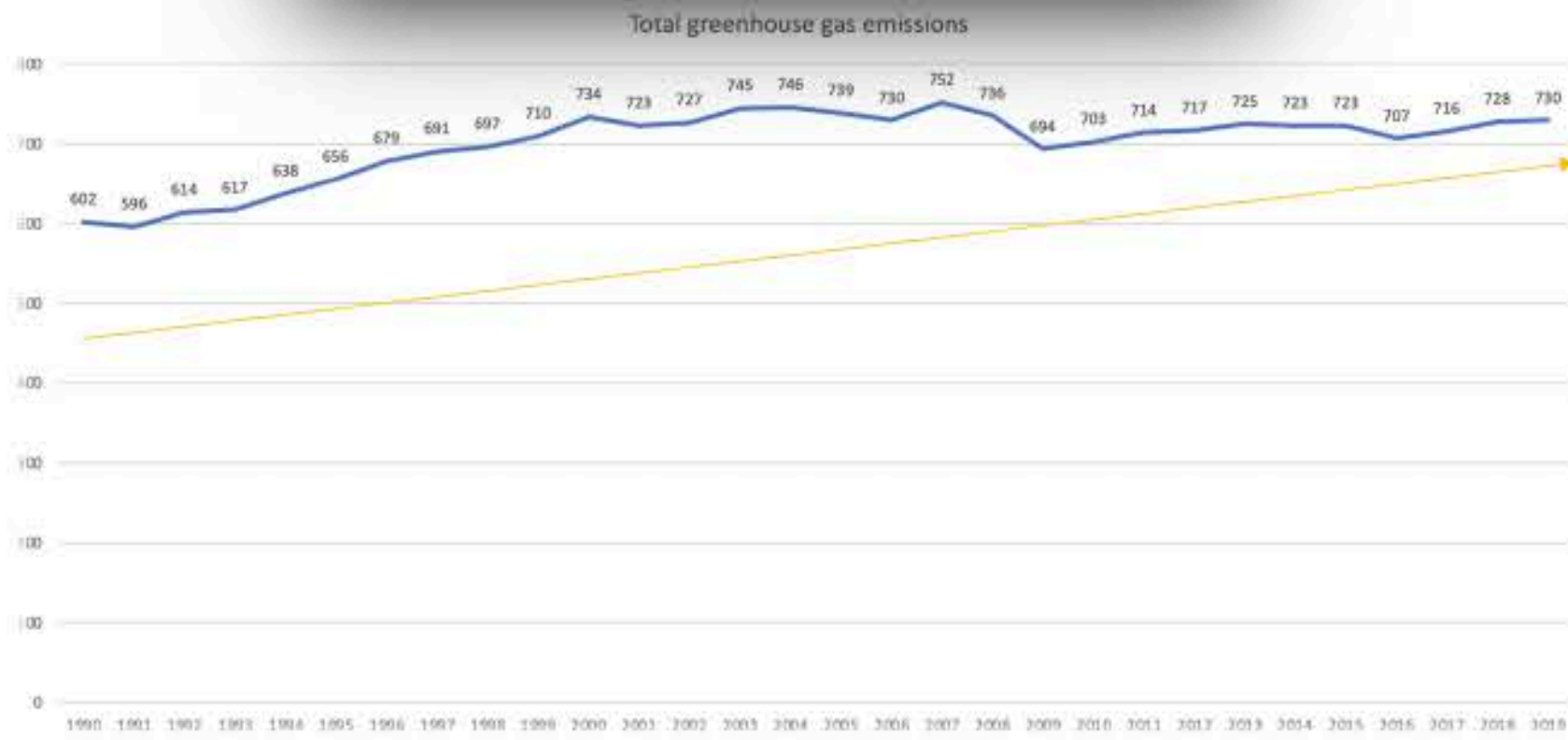
Greenhouse Gases Emission (GHGs) in Canada



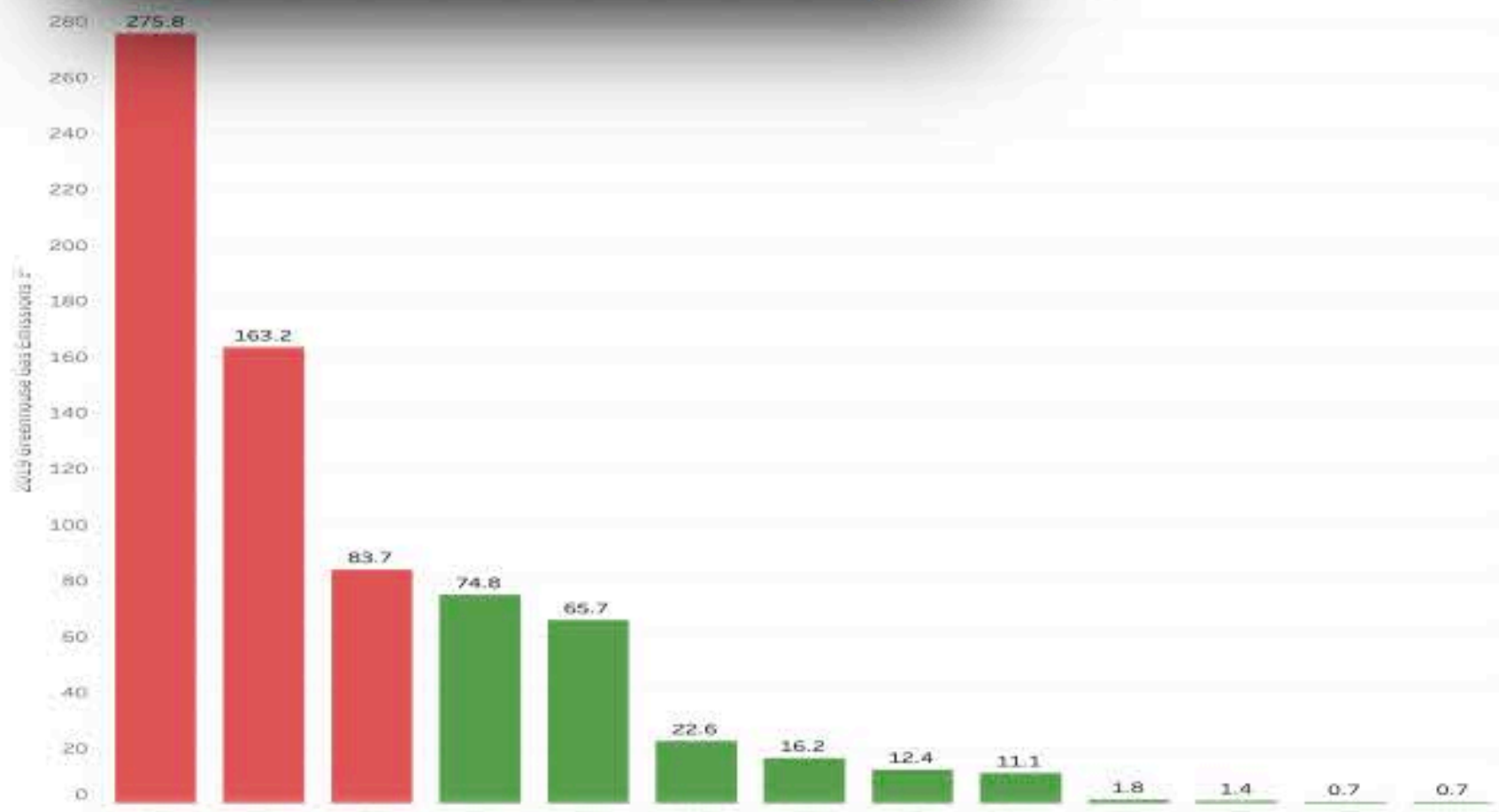
Global GHGs scenario



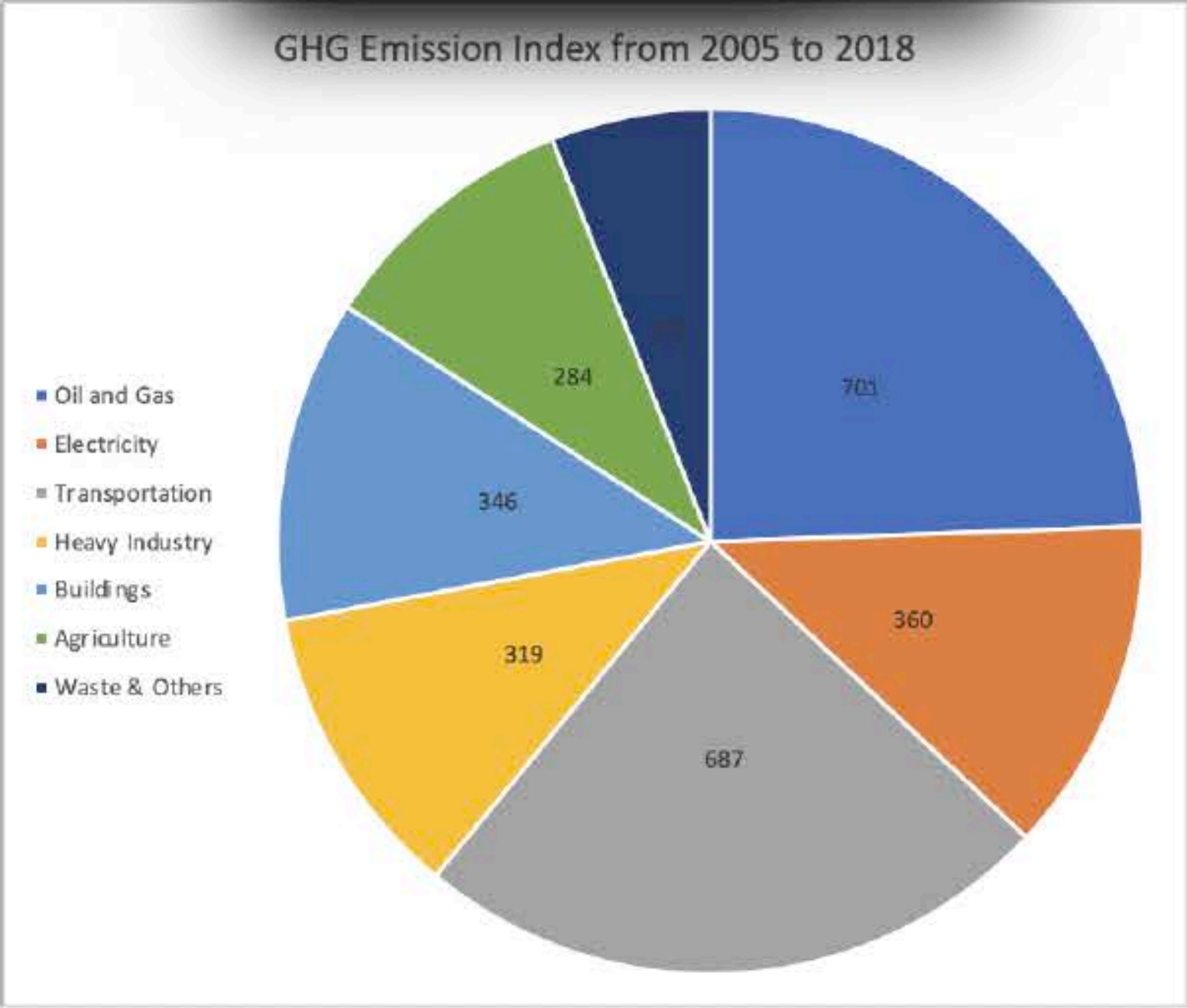
Nation-wide emissions



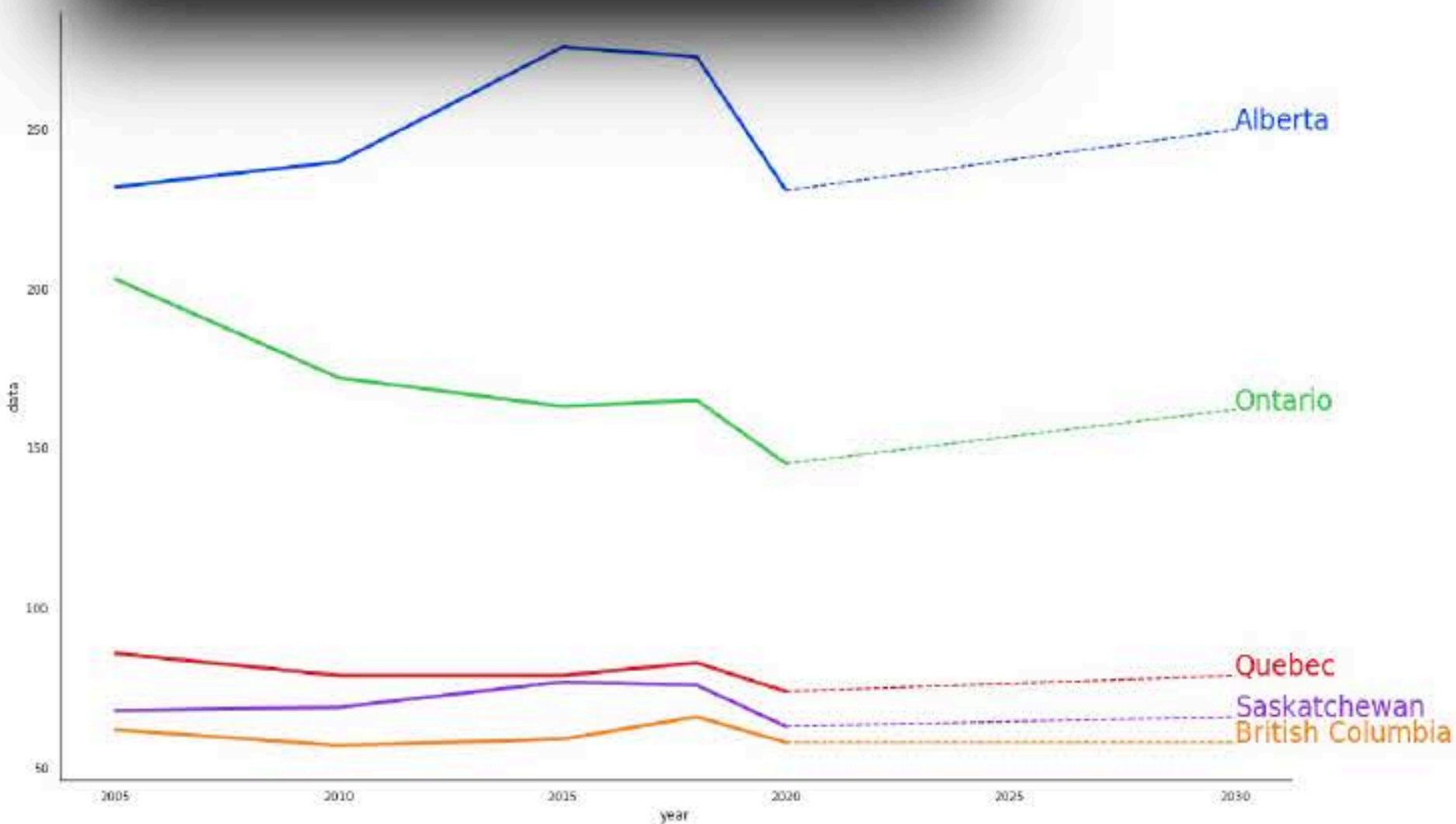
Region-wide emissions



Major factors



Current emissions & 2030 Projected Emissions



Recommendations

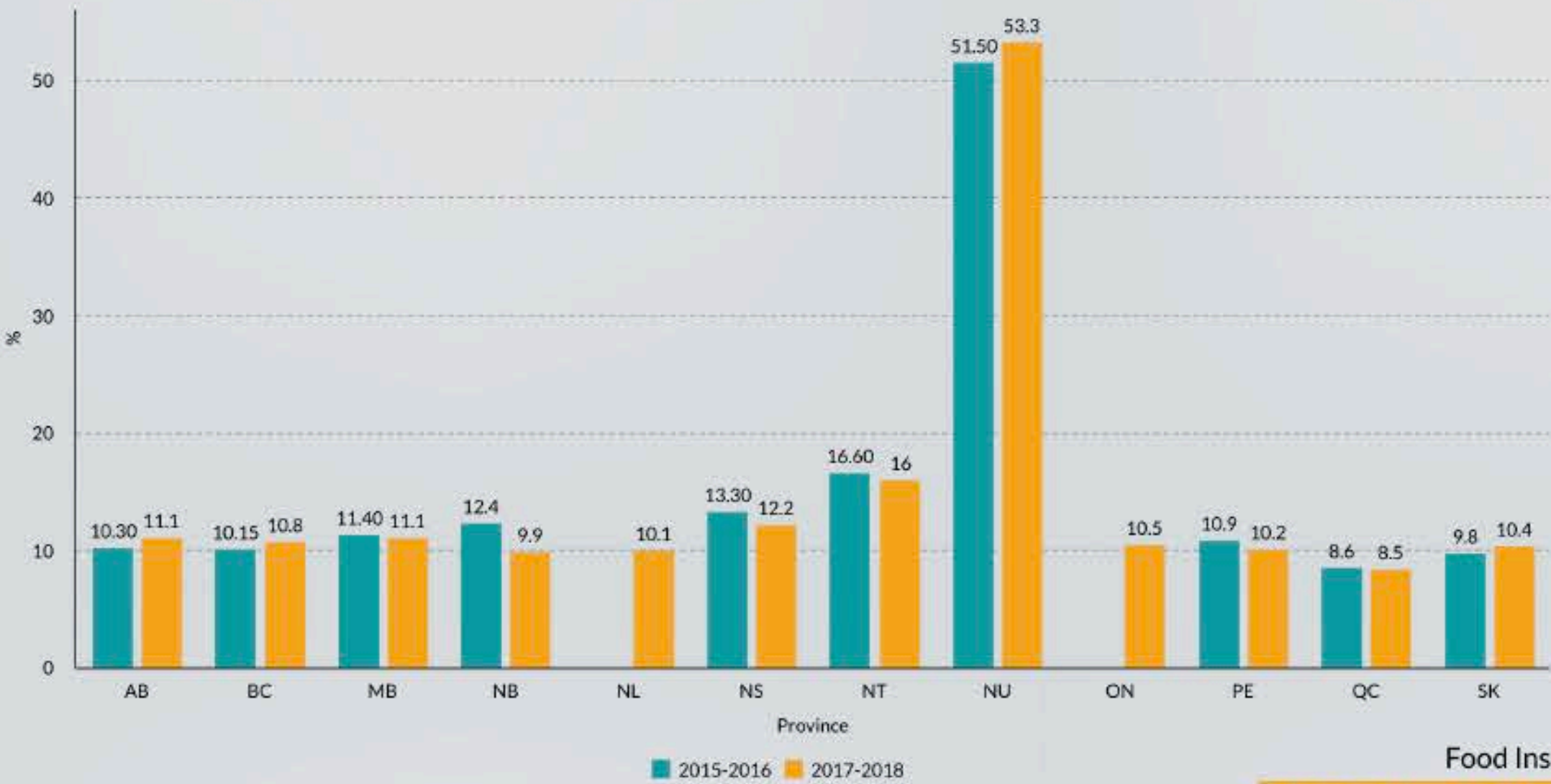
- ❑ The Govt. of Canada can focus on devising strategies to reduce GHGs emissions in Western Canada (Alberta) and Central Canada (Ontario).
- ❑ Since major sectors of GHGs emissions are Oil and Gas and Transportation, environment-friendly practices at industry-level and transportation-level should be strategized to combat the increase in projected emissions.

ZERO HUNGER?

Food Insecurity Issue in Nunavut

Team: Data Knows

Proportion of Household Living with Food Insecurity by Province (2015-2016 vs. 2017-2018)

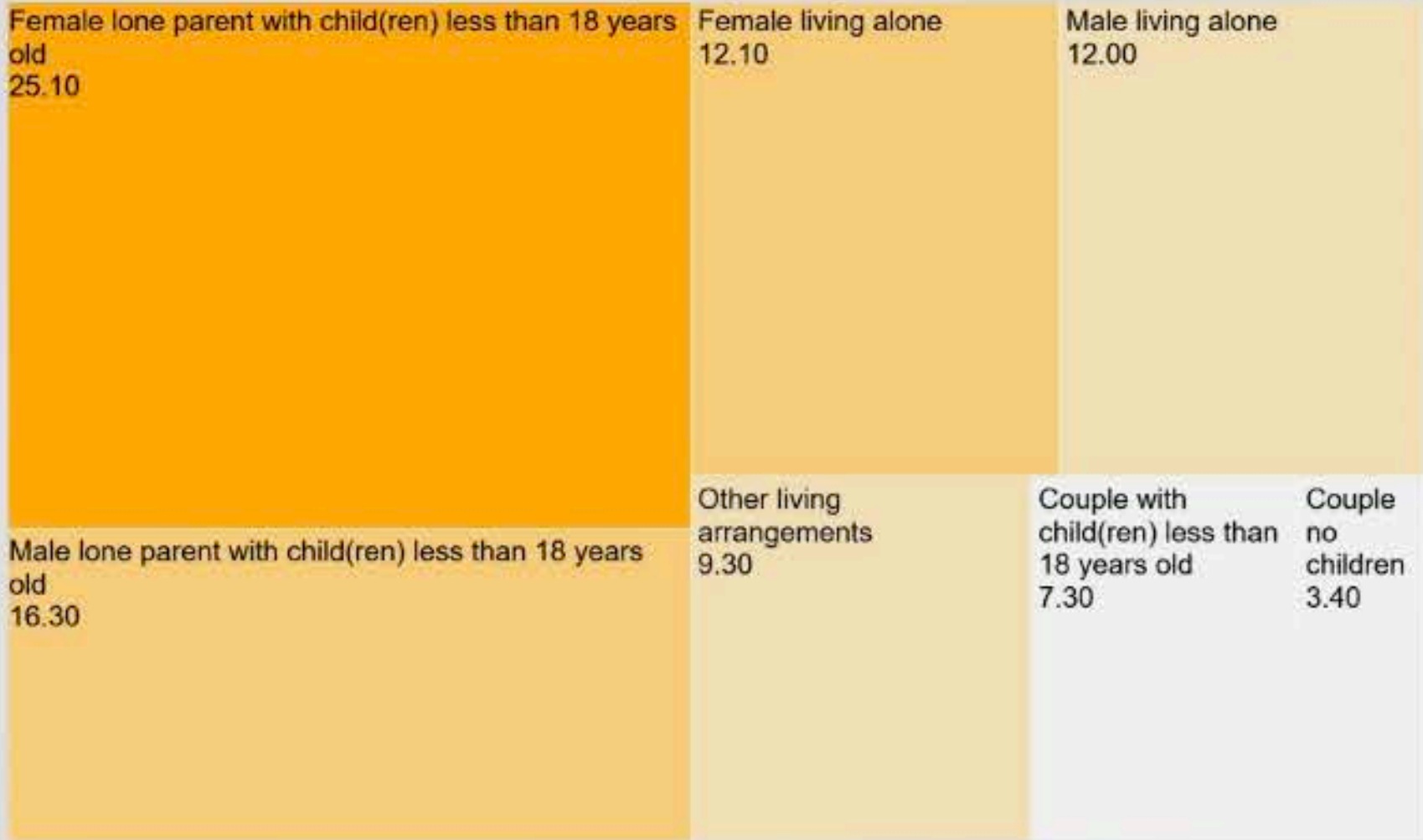


Did you know **more than 50%** of households in Nunavut are living with food insecurity?

In Canada, **25.1%** of single mothers and their child(ren) are suffering from food insecurity.



Food Insecurity in Canada by Living Arrangement (2017-2018, %)



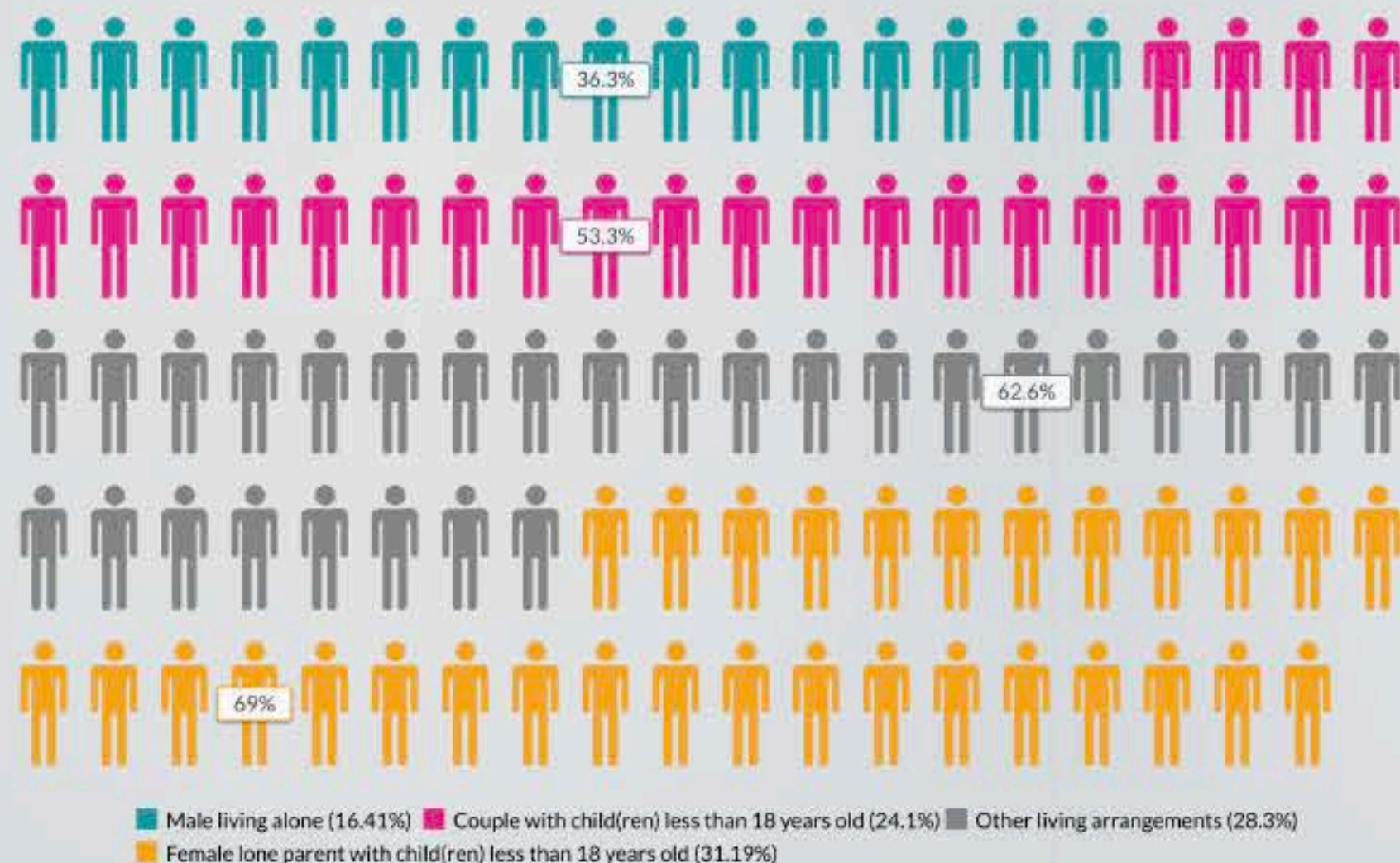
Food Insecurity in Nunavut by Living Arrangement (2015-2016)

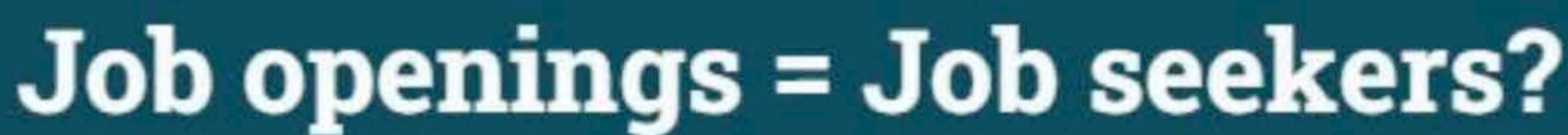


In Nunavut, although the status of single mothers had improved, still nearly **70%** of single mothers struggle to put food on the table.

Zero hunger, there is still a long way to go.

Food Insecurity in Nunavut by Living Arrangement (2017-2018)





— Data See Future

Unemployment Rate



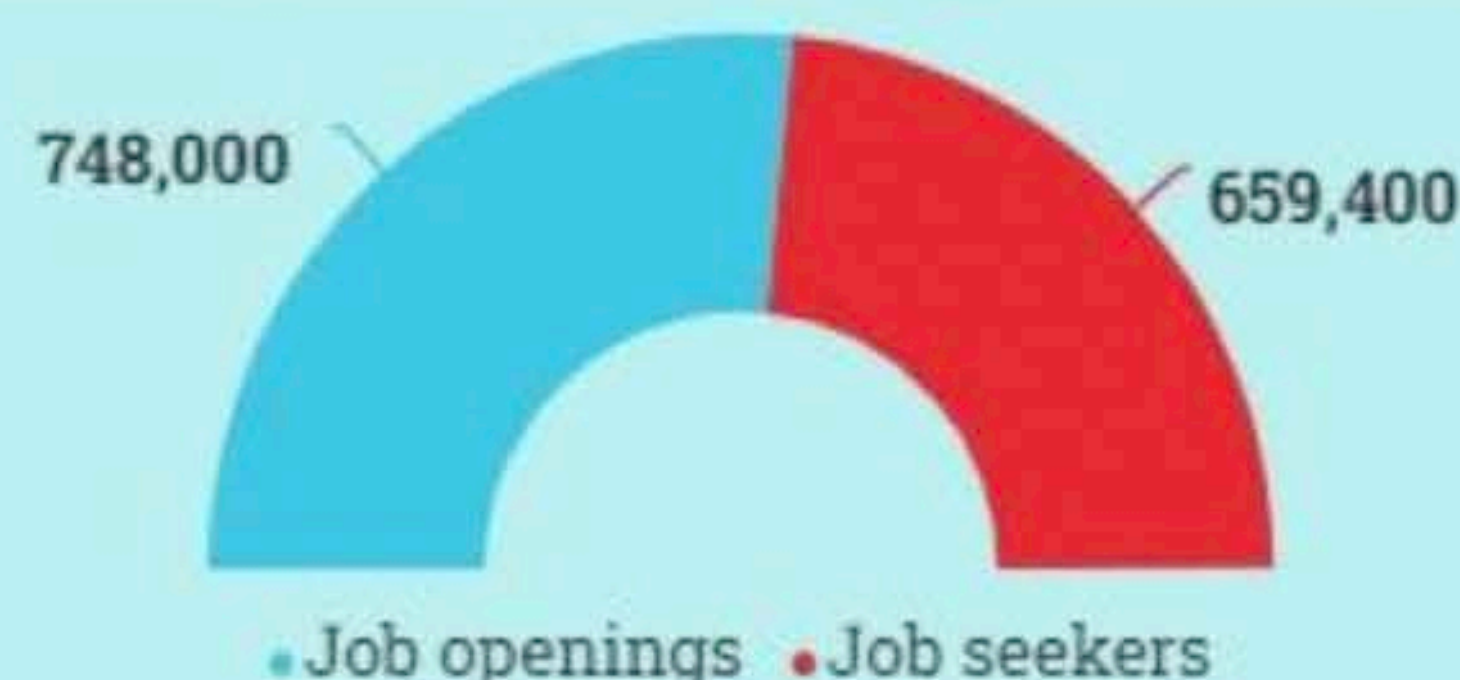
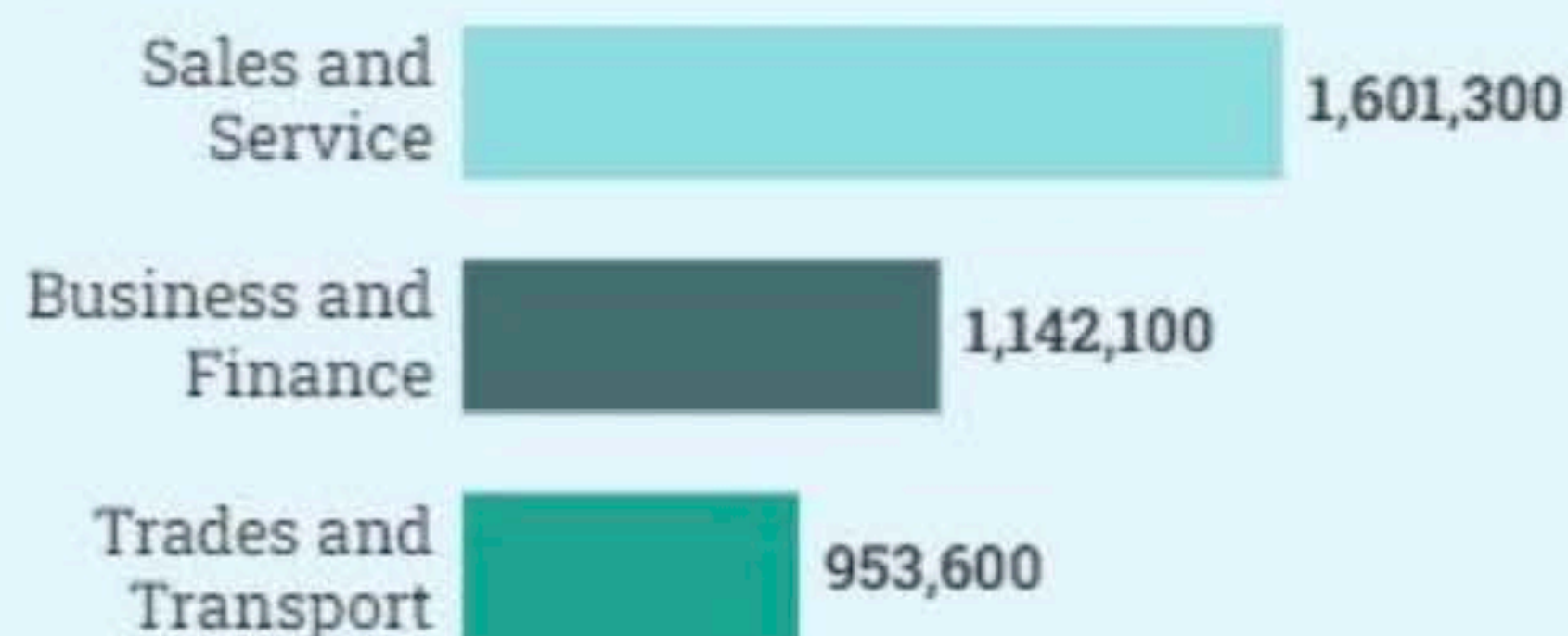
3 retired : 2 hired

People retired are **far more than** ones hired.



Ontario has the highest average annual employment of **7.2million**, followed by **Quebec** with **4.2 million**

Top 3 occupations with largest job openings by 2028



88,600 shortage in the health occupation
in labor market by 2028.

College or vocational education

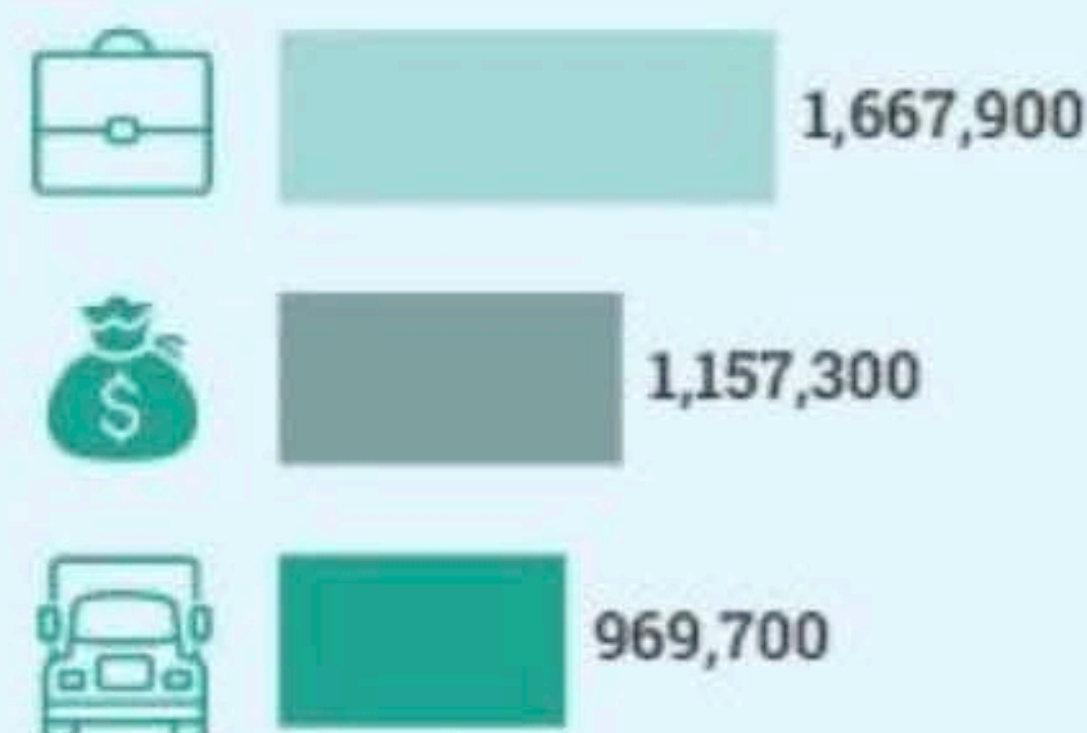


In 2028, employees who have **University education** are still the most popular one.

By 2028

**Sales & Service,
Business &
Finance and Trade
& Transport still**

have most job seekers!

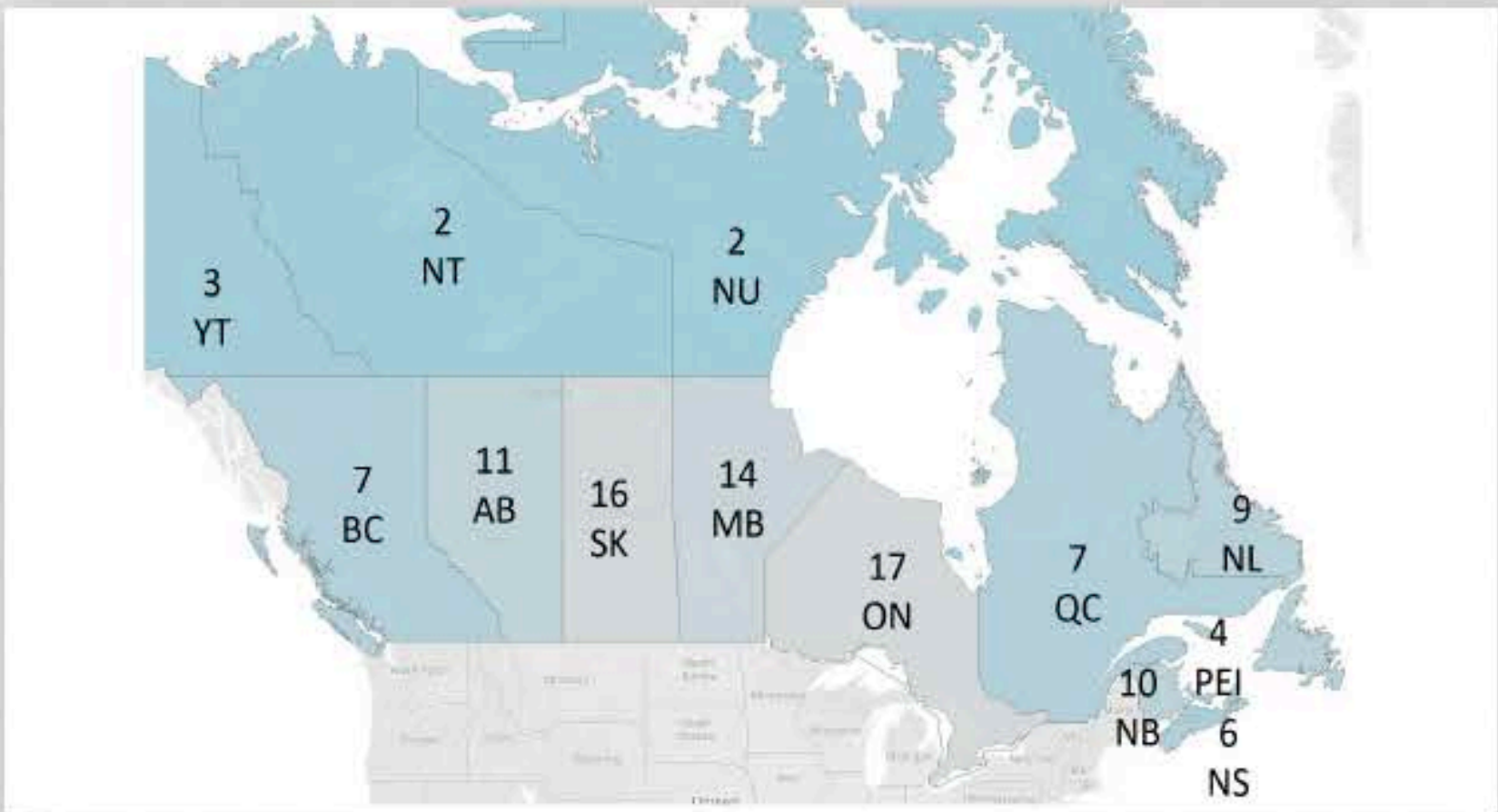


The shortage of jobs in the future labor market will focus on keywords about **Technologists, Designers, Medical, Therapists** and **Engineers**.

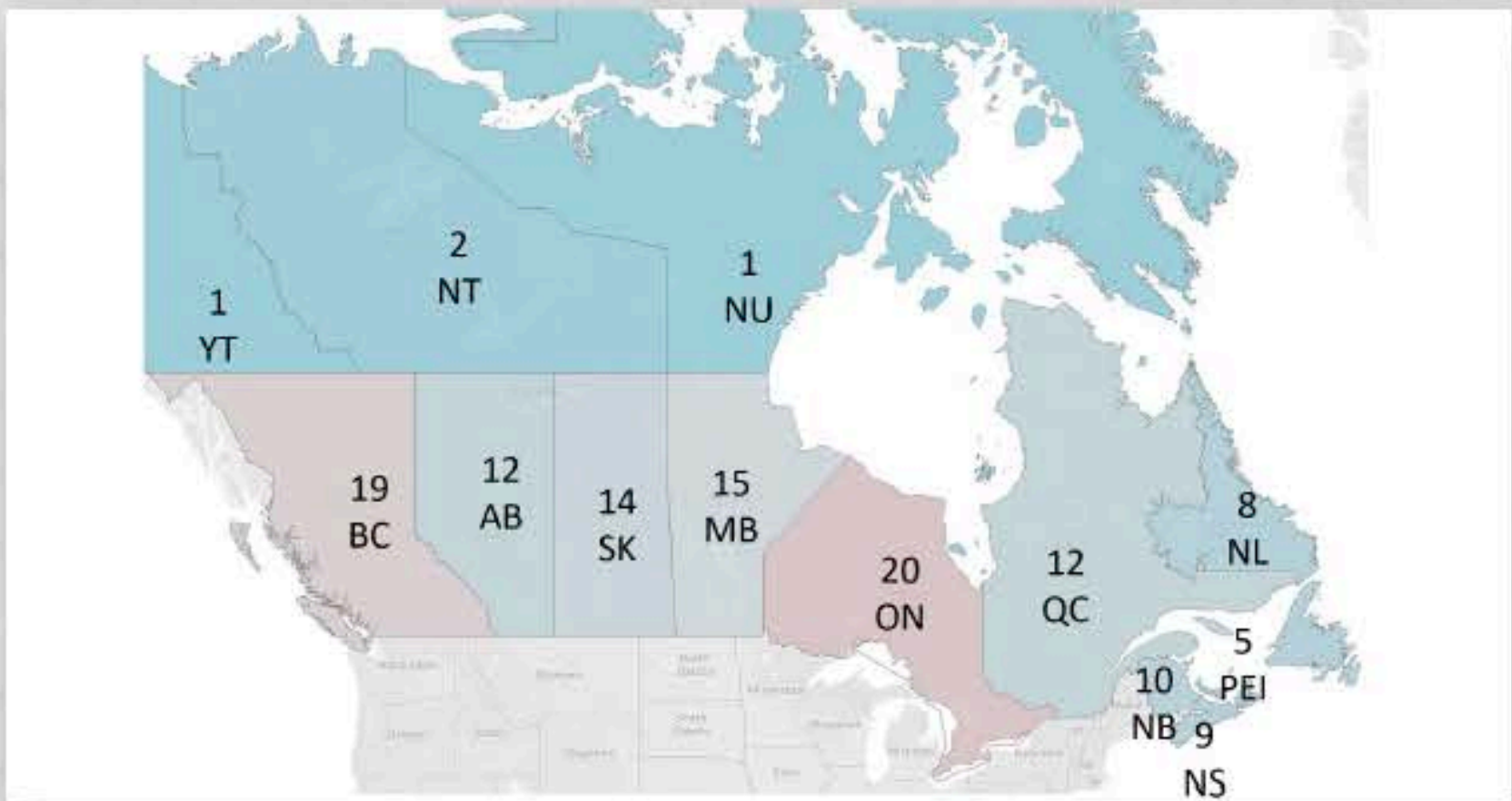


Climate Change: How Is Our Climate Changing?

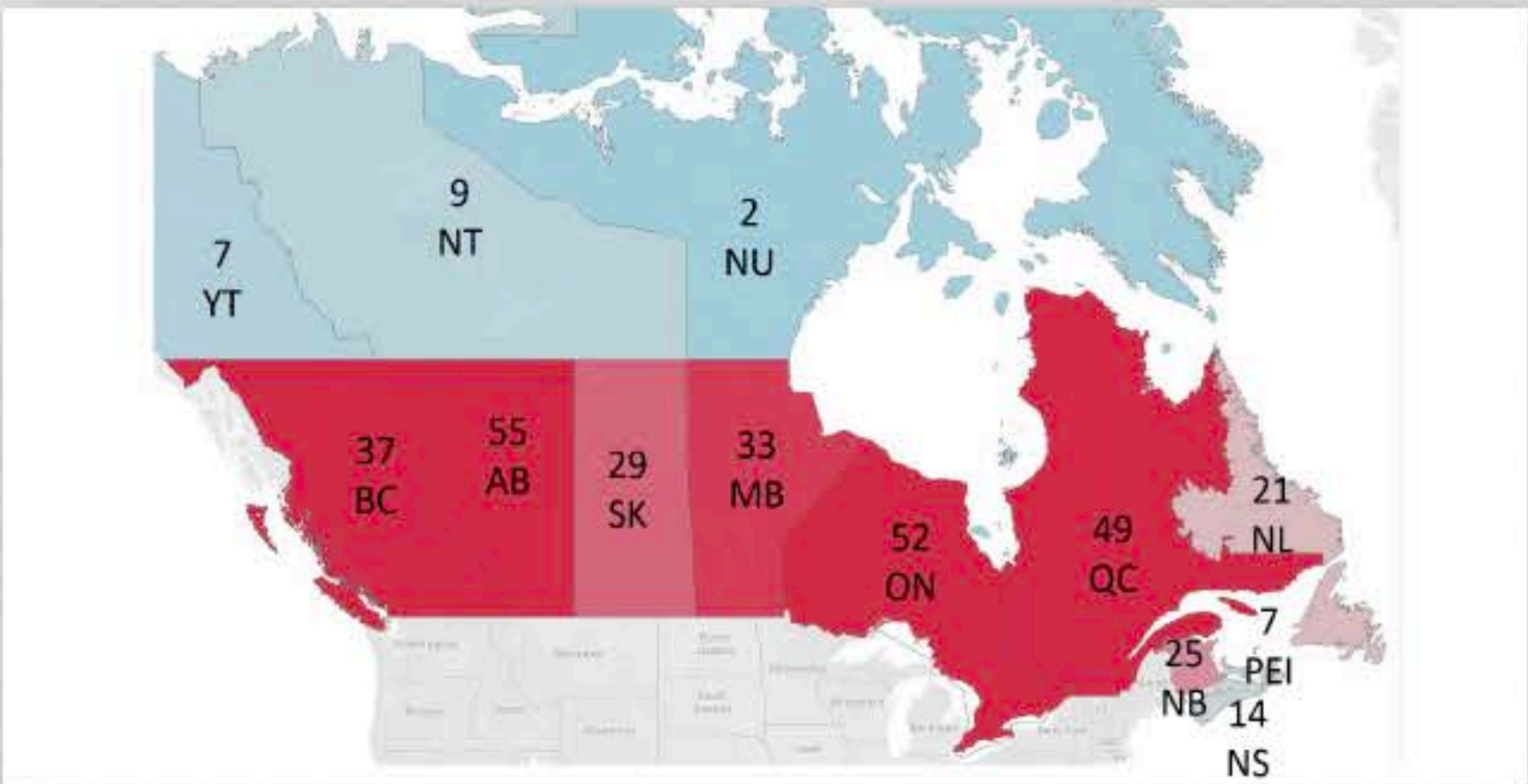
498%: number of Natural Disasters in Canada increased over 100 years



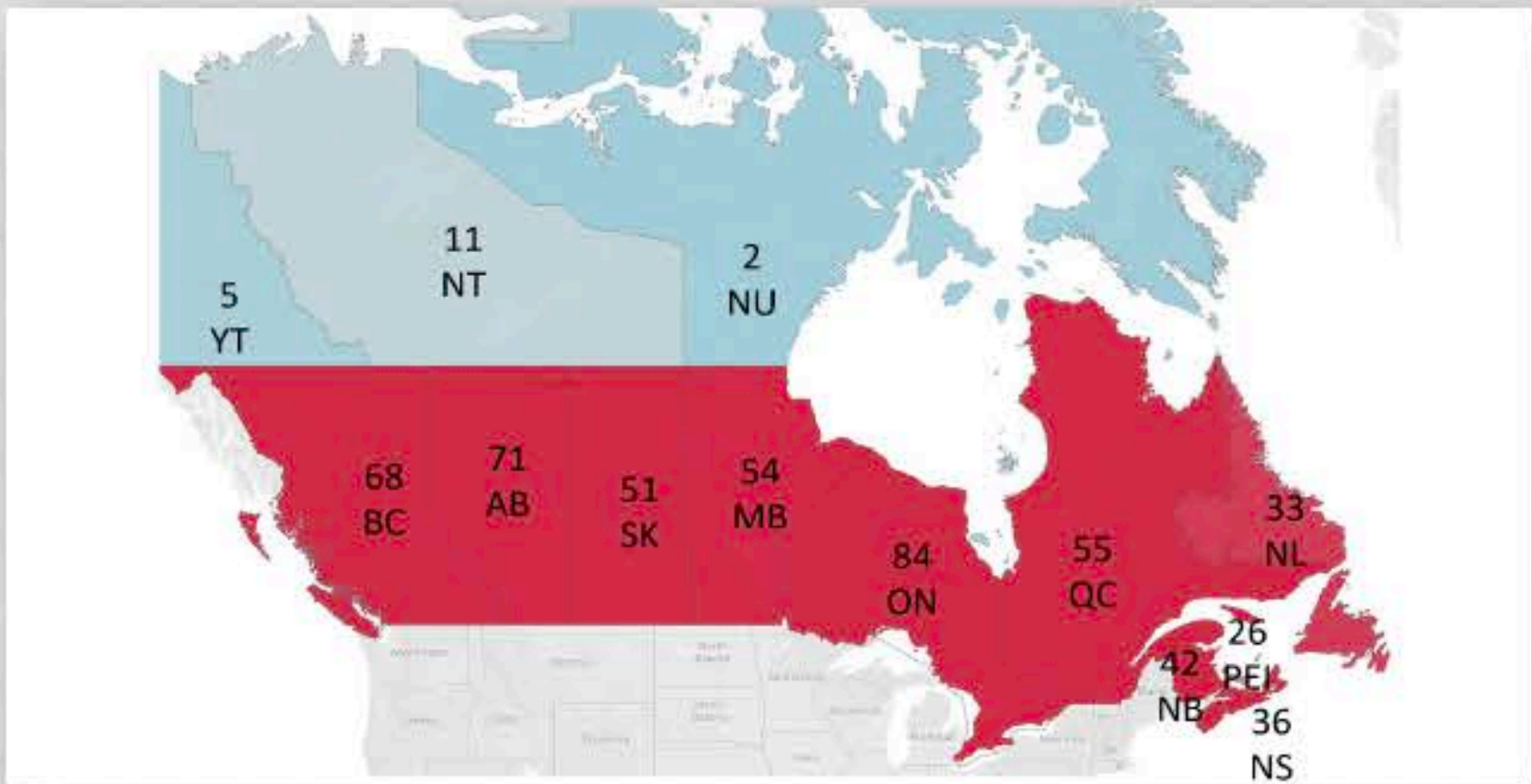
1917 - 1941



1942 - 1966

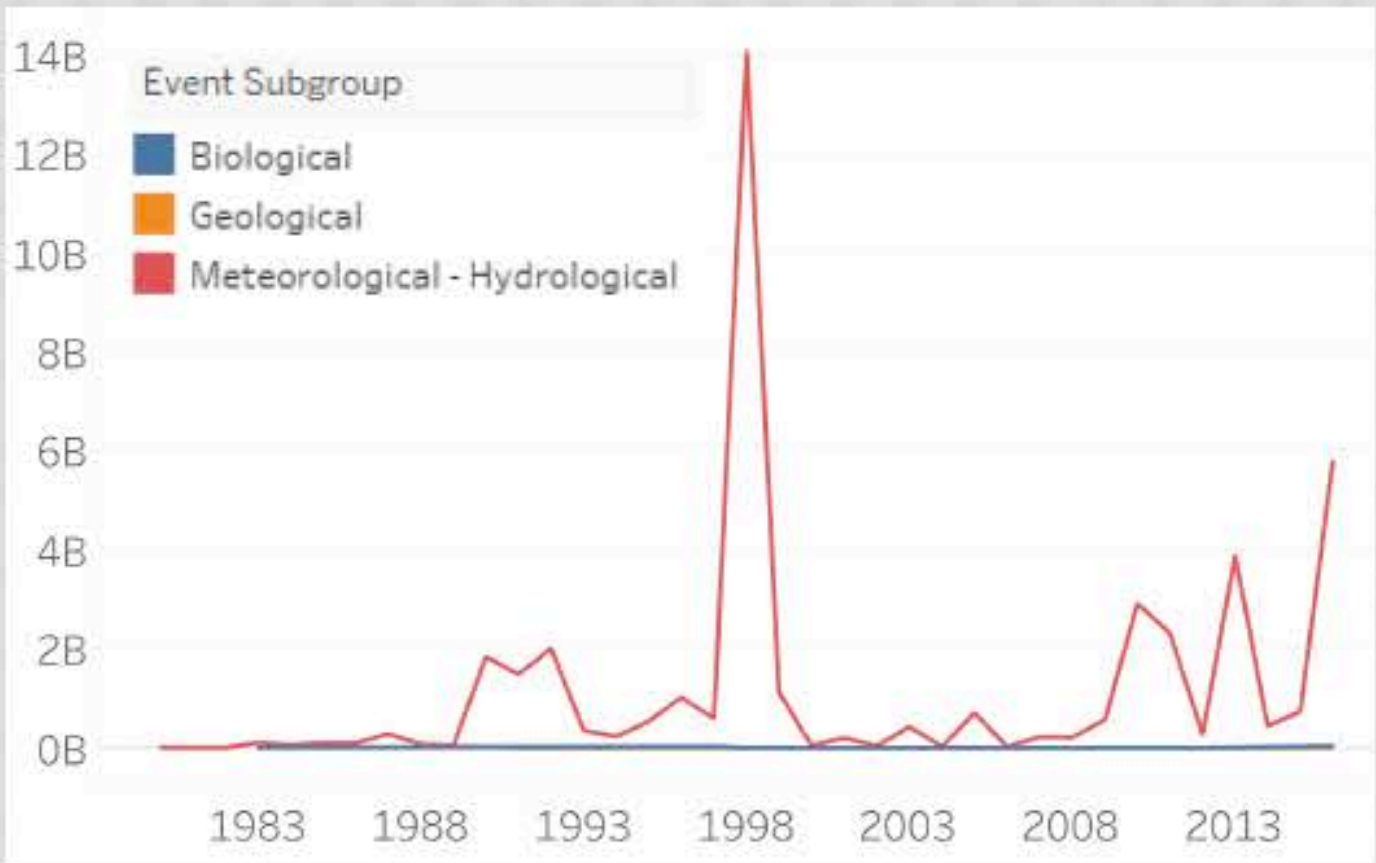


1967 - 1991

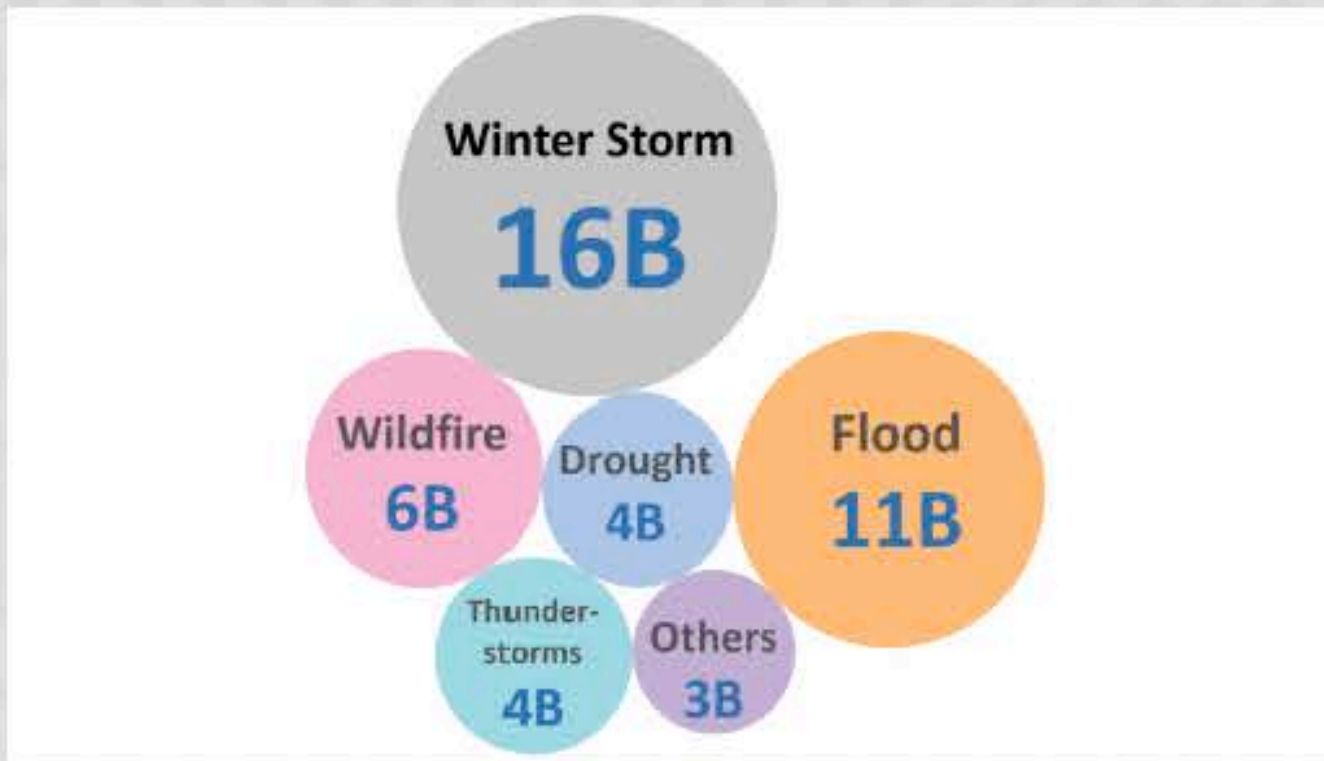


1992 - 2016

Estimated Total Cost (dollars)



Estimated Total Cost of Meteorological – Hydrological (dollars)



New Brunswick Temperature Average (°C)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
1951-1980	-9.5	-8.7	-3.2	3.1	9.7	15.1	18.3	17.3	12.7	7.2	1.4	-6.6	4.8
1981-2010	-10.1	-8.6	-3.2	3.5	10.1	15.3	18.4	17.8	13.1	7.0	1.1	-6.0	4.9

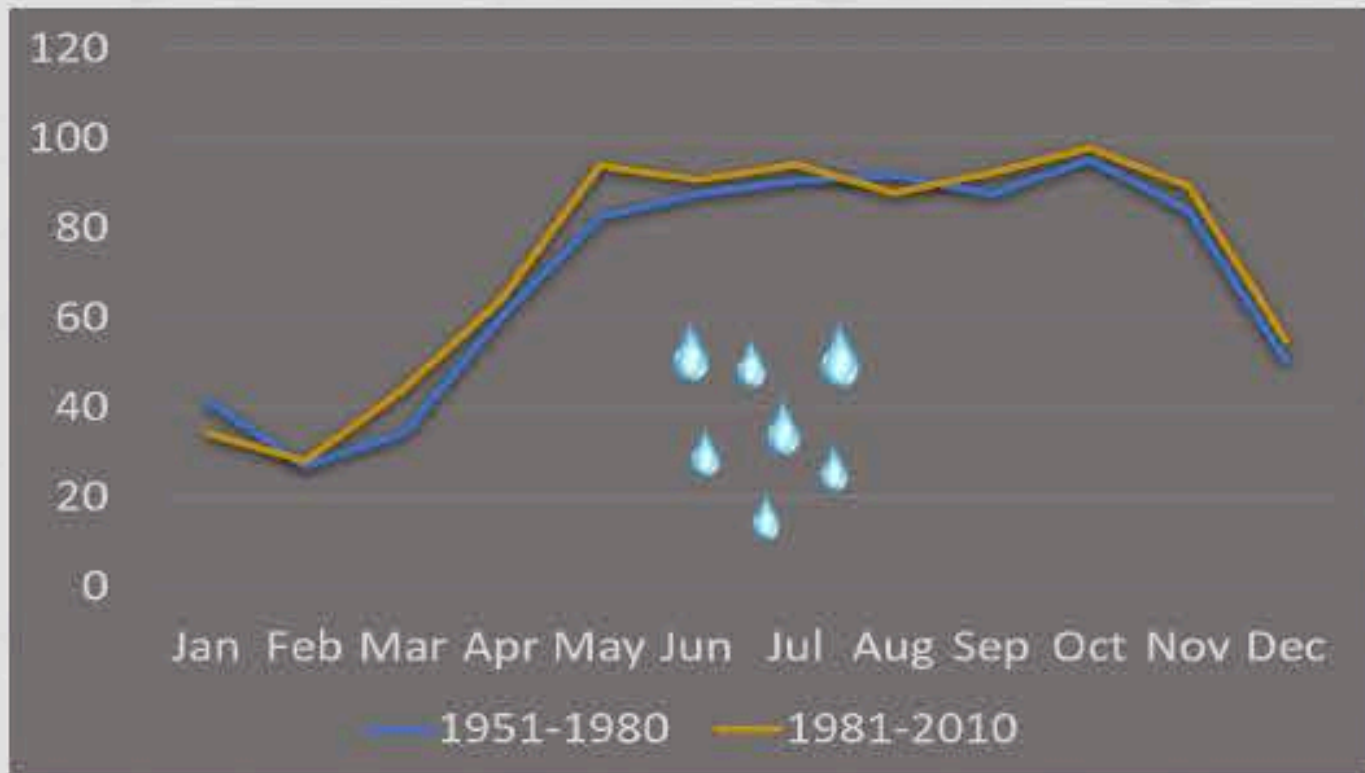


- From 1951-2010, the average temperature in New Brunswick is hotter. Snowfall has decreased, and rainfall has slightly increased over this time period.
- Over the last several years, Fredericton has had increased yearly average temperatures.

New Brunswick Snowfall Average (cm)



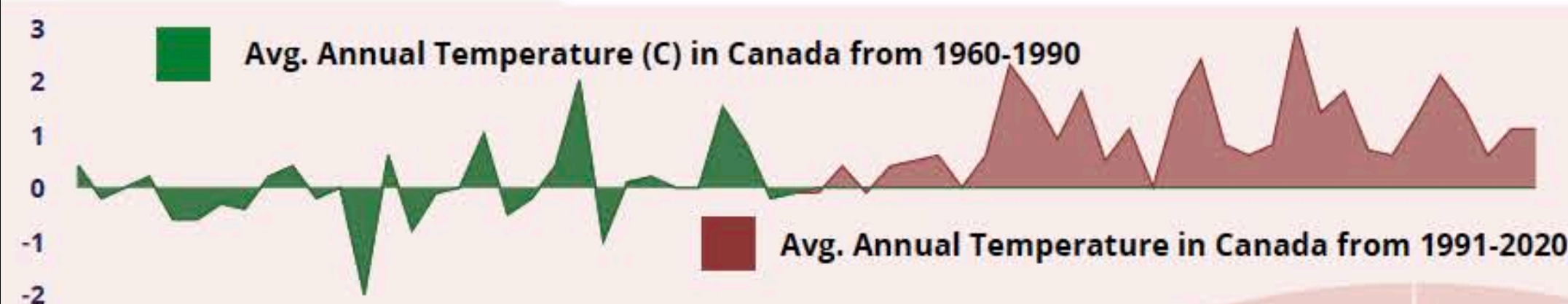
New Brunswick Rainfall Average (mm)



Fredericton Mean Temperature Average (°C)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	-8.2	-7.5	-10.0	-8.8	-11.3	-6.5	-6.5	-8.7	-9.5	-6.9
February	-9.7	-7.4	-6.5	-8.6	-14.7	-5.2	-7.0	-5.5	-9.1	-7.6
March	-2.6	0.5	0.3	-6.3	-4.6	-2.2	-4.8	-0.9	-3.8	-1.6
April	4.4	6.0	4.5	4.4	3.3	3.7	5.3	2.4	4.2	3.5
May	11.0	12.1	12.2	10.5	12.5	11.8	10.4	11.3	8.8	10.5
June	15.5	16.1	15.8	17.1	14.5	15.9	15.9	14.5	15.7	17.5
July	19.5	20.4	20.3	20.9	18.9	19.7	18.9	21.1	20.0	20.4
August	18.8	20.3	18.3	18.9	20.9	19.3	17.4	20.1	18.2	19.2
September	15.2	14.2	14.3	13.9	16.8	14.9	16.8	13.8	12.7	13.9
October	8.8	8.9	8.0	9.5	6.3	8.4	10.6	5.8	8.2	7.5
November	3.4	1.3	0.7	0.1	2.8	3.6	1.6	-1.0	-0.6	3.6
December	-3.1	-3.9	-8.3	-2.7	-0.8	-6.5	-8.6	-6.4	-4.1	-1.1
Yearly Average	6.1	6.8	5.8	5.7	5.4	6.4	5.8	5.5	5.1	6.6

CLIMATE CHANGE IN CANADA

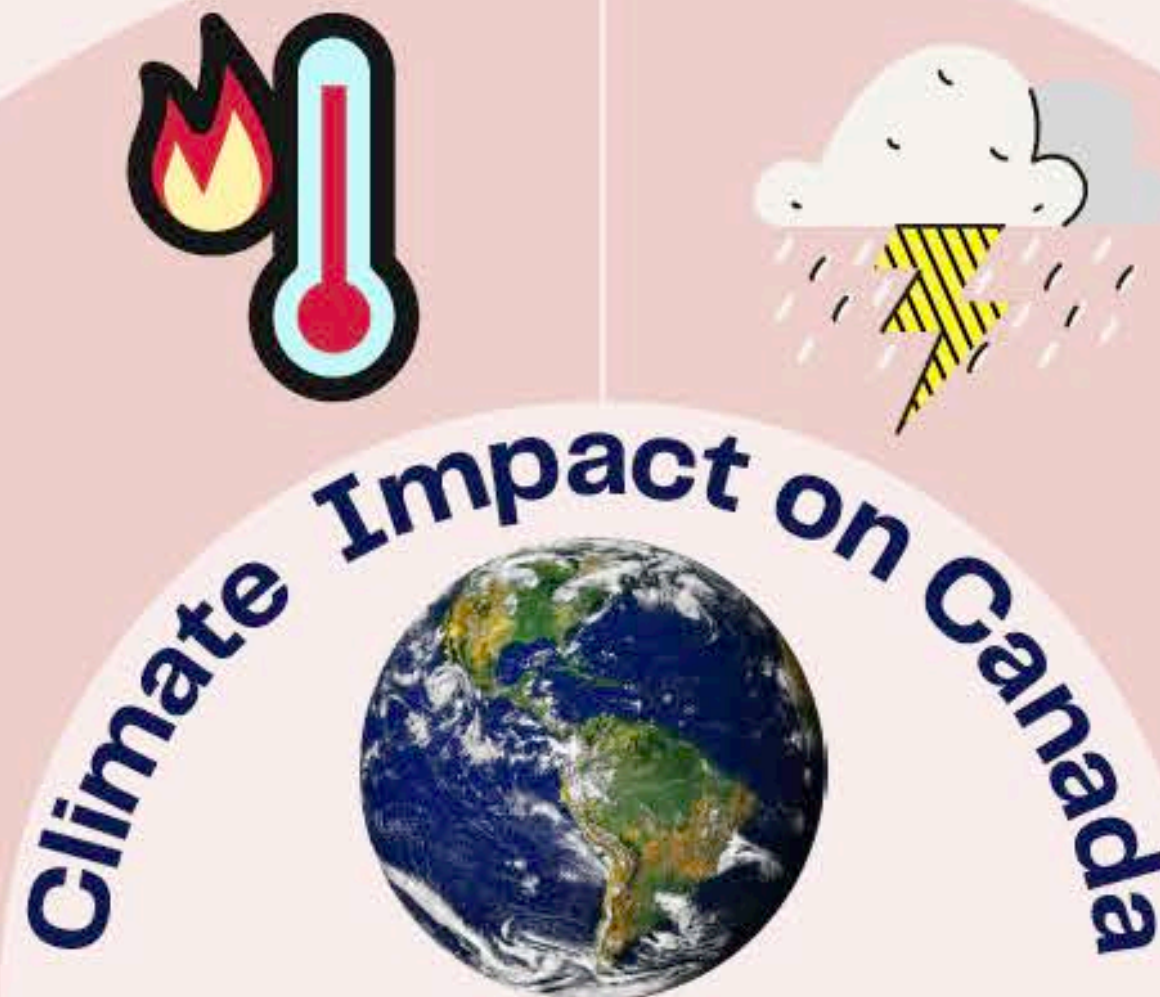


1.7 Deg C
Rise in average temperature in Canada in last 60 years



Increase in casualties in BC over the normal years due to heat wave **195%**

Increase in the forest burn area in Alberta against the 10-year average **4x**



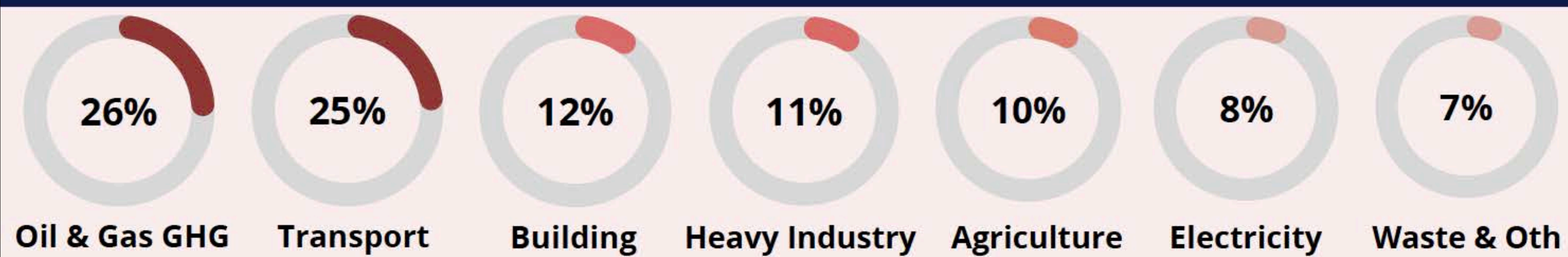
1400% Increase in annual Canadian disaster cost since 1970

50 m Reduction in the thickness of canadian ice caps since 1980

GREENHOUSE GAS (GHG) EMISSION

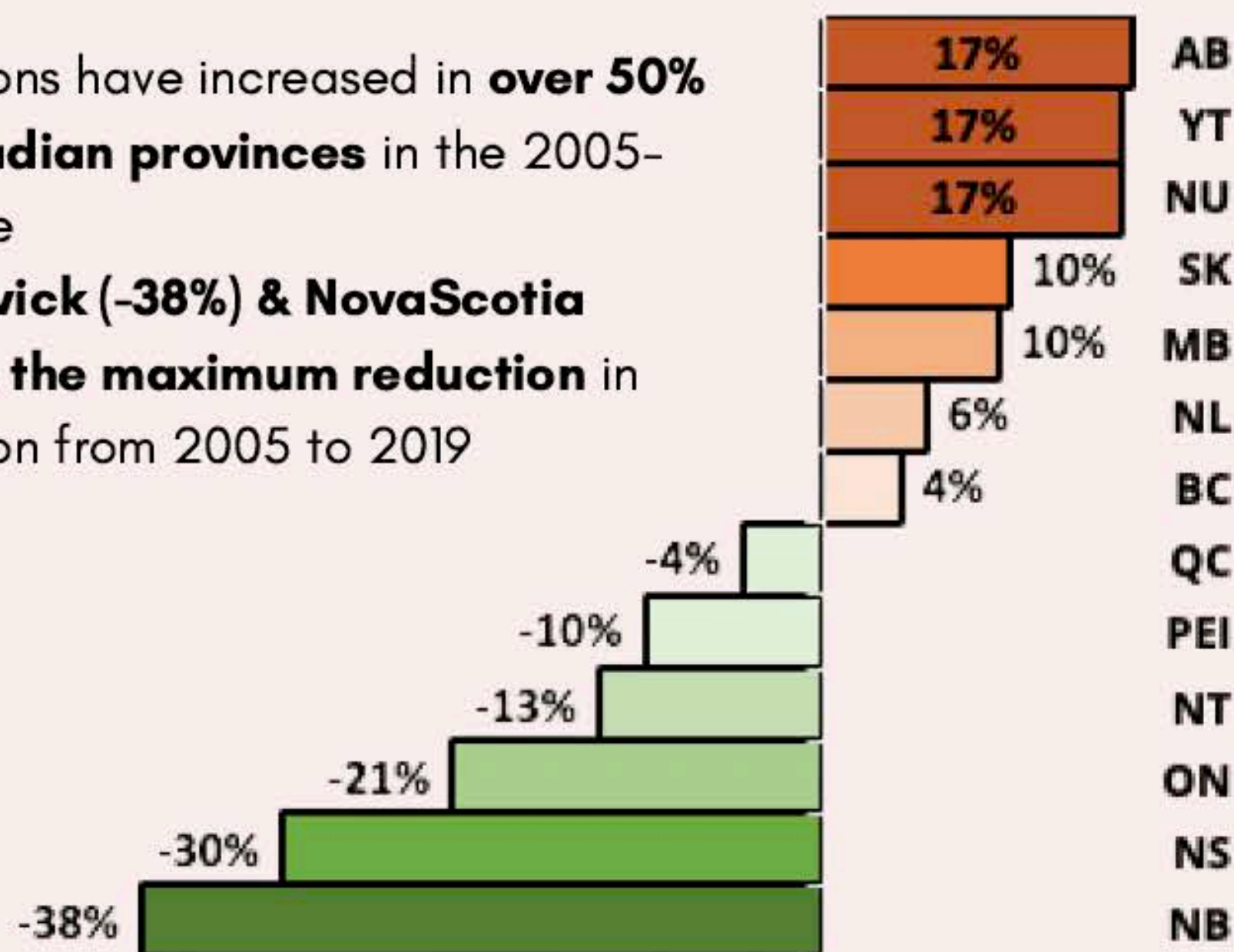
Biggest contributor to Canadian Climate Change

Economic Sector Wise GHG Emission in Canada (2019)

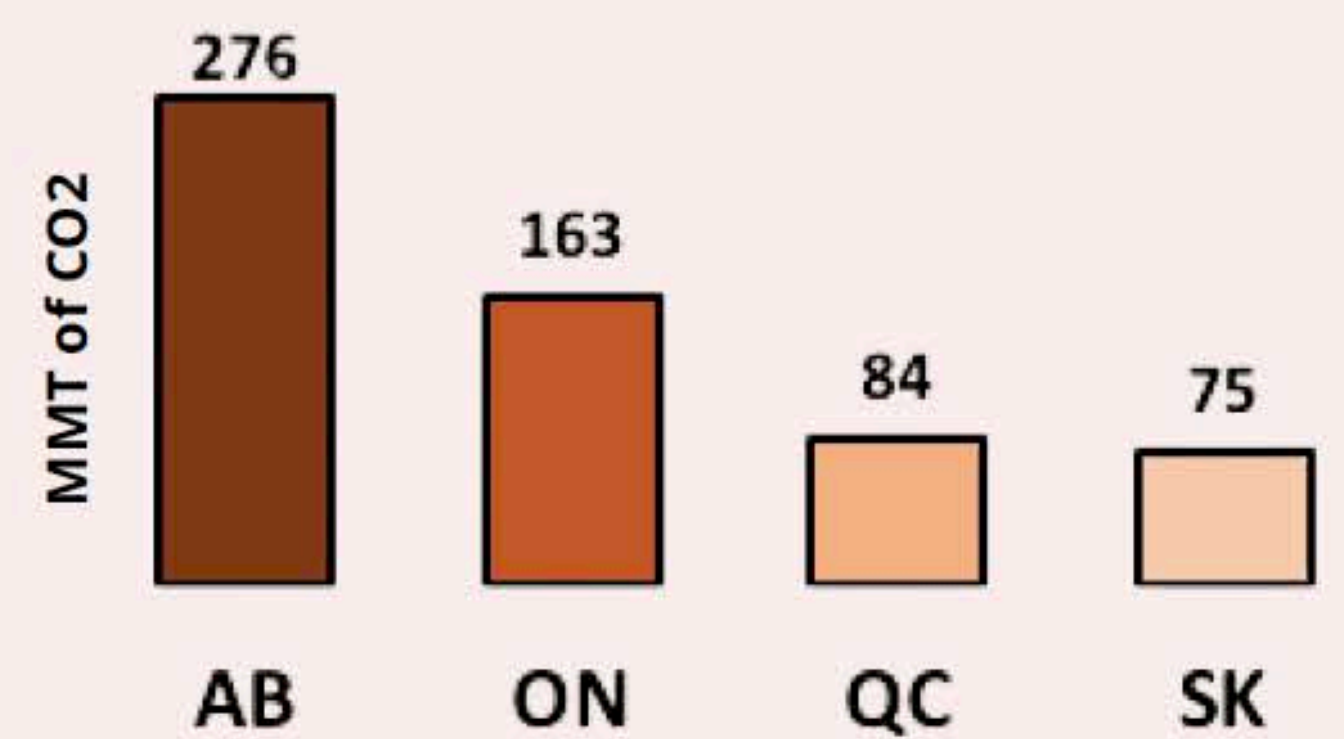


Province Wise % change in GHG Emission in Canada (2005-2019)

- GHG Emissions have increased in **over 50% of the Canadian provinces** in the 2005-2019 timeline
- New Brunswick (-38%) & Nova Scotia (-30%) have the maximum reduction** in GHG emission from 2005 to 2019

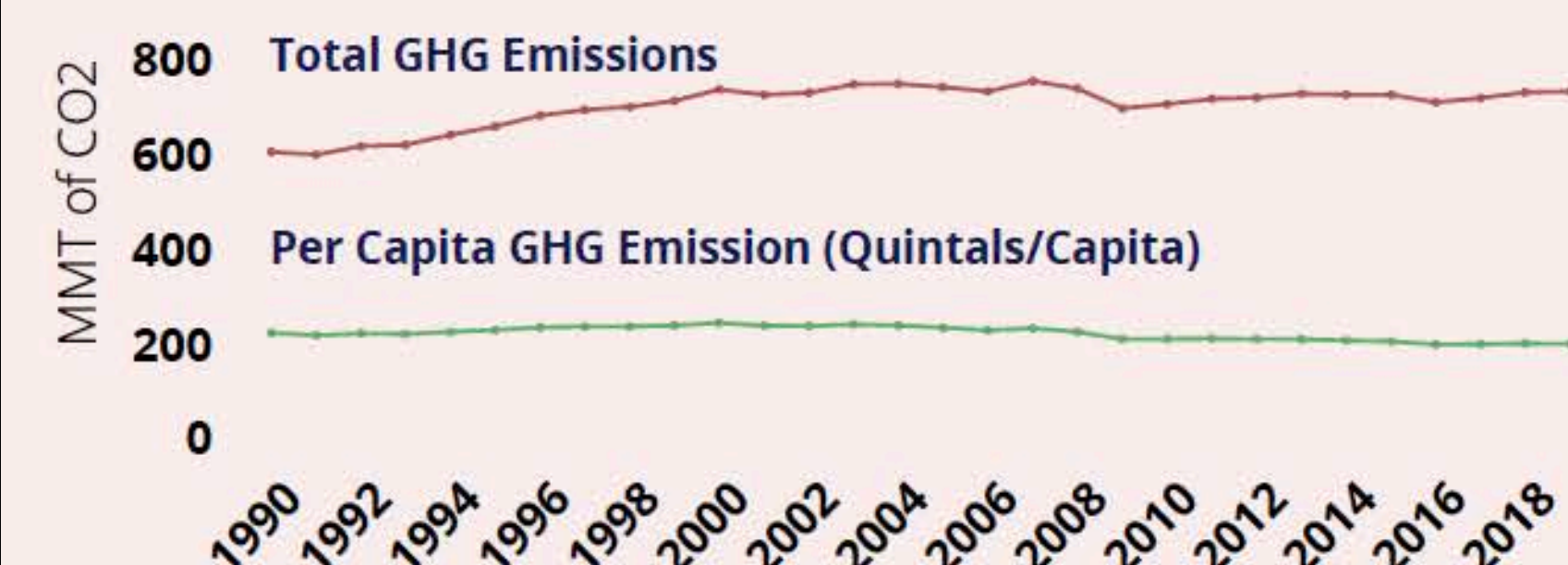


Province Wise GHG Emission in Canada (2019)



- Alberta was the **largest contributor** to the GHG Emission in 2019
- About **1/2 of the total GHG emissions in Canada** were generated by **Ontario, Quebec & Saskatchewan**

Per Capita GHG Emission Comparison in Canada (1990 - 2019)

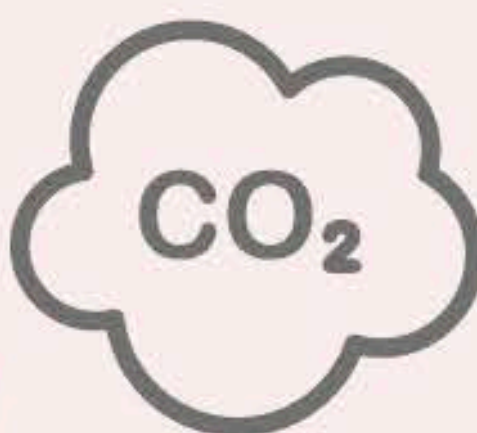


2019
Per Capita GHG Emissions

1990
Per Capita GHG Emissions

21%

Increase in the GHG emission between 1990-2019 in Canada



References

- https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/Climate-change/pdf/CCCR_FULLREPORT-EN-FINAL.pdf
- <https://www.canada.ca/en/environment-climate-change/services/climate-change/causes.html>
- <https://www.imua.org/Files/reports/Natural%20Disasters%20-%20Country%20Profile%20Series%20-%20Canada.html>
- <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html>
- <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/Climate-change/pdf/CCCR-Chapter5-ChangesInSnowIcePermafrostAcrossCanada.pdf>

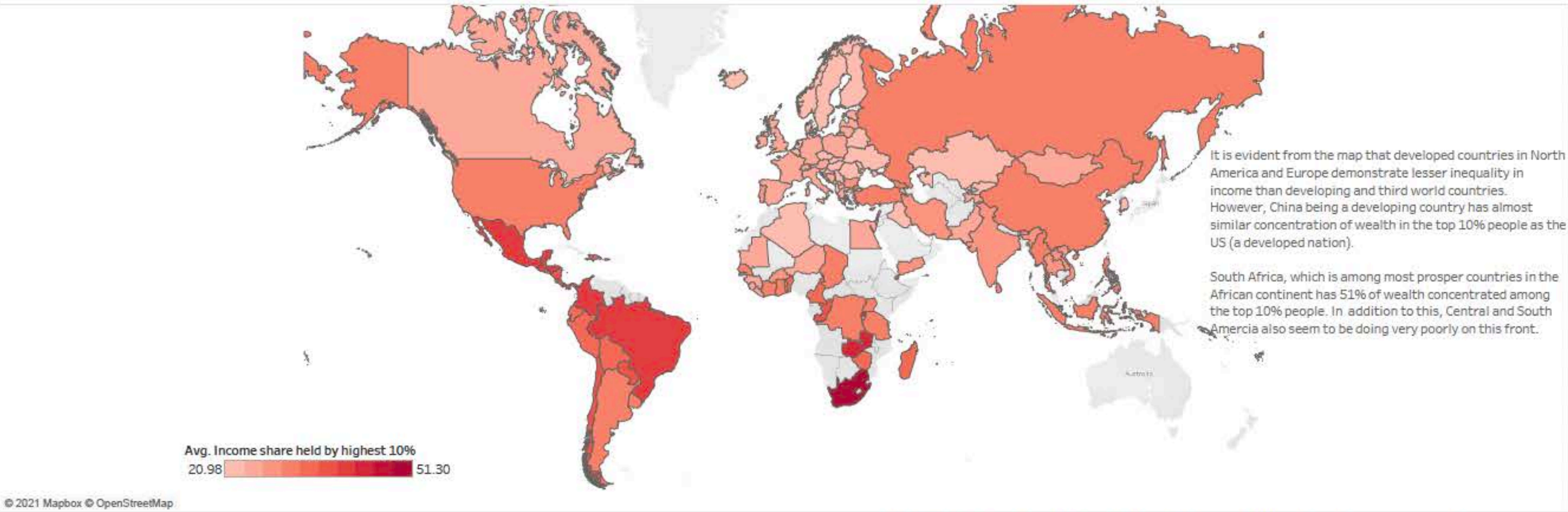
Team
Data Wizards

Reducing Inequalities by 2030

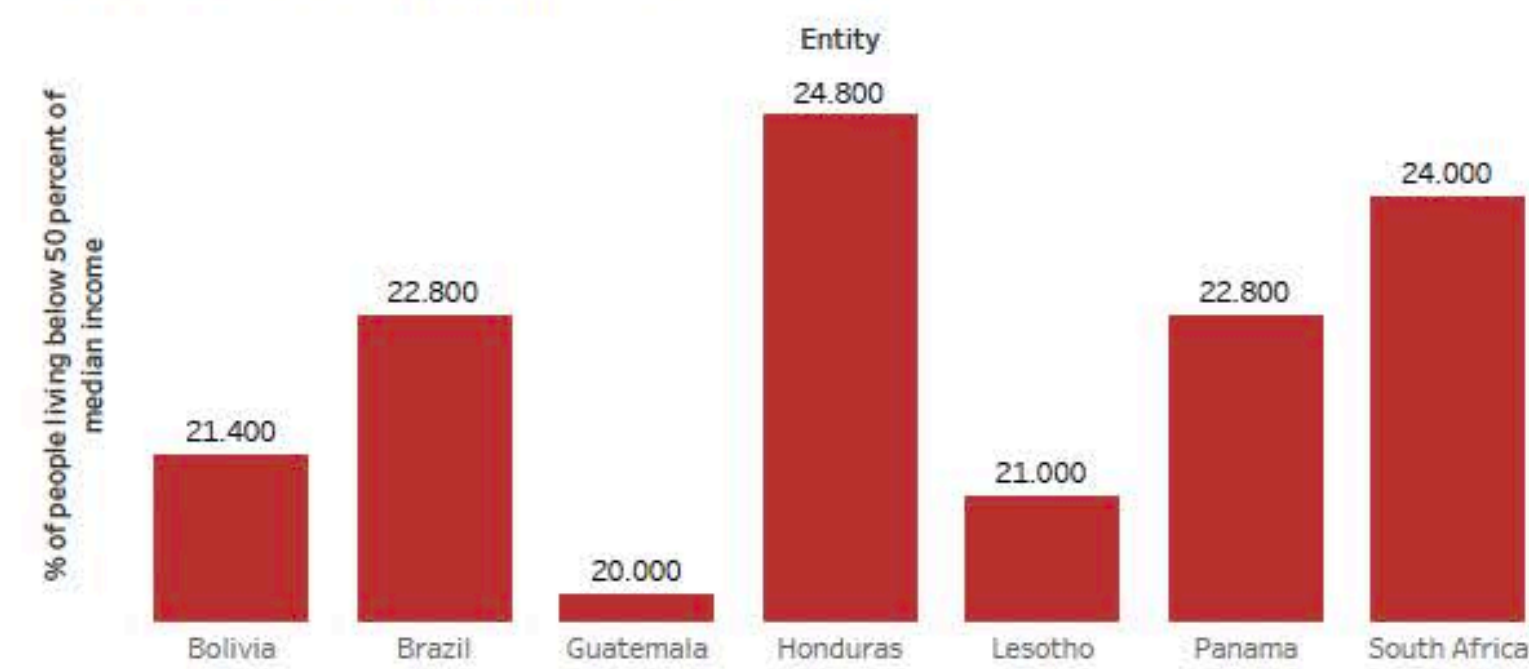


Average Income share held by the richest 10% across the globe (2011 to 2015)

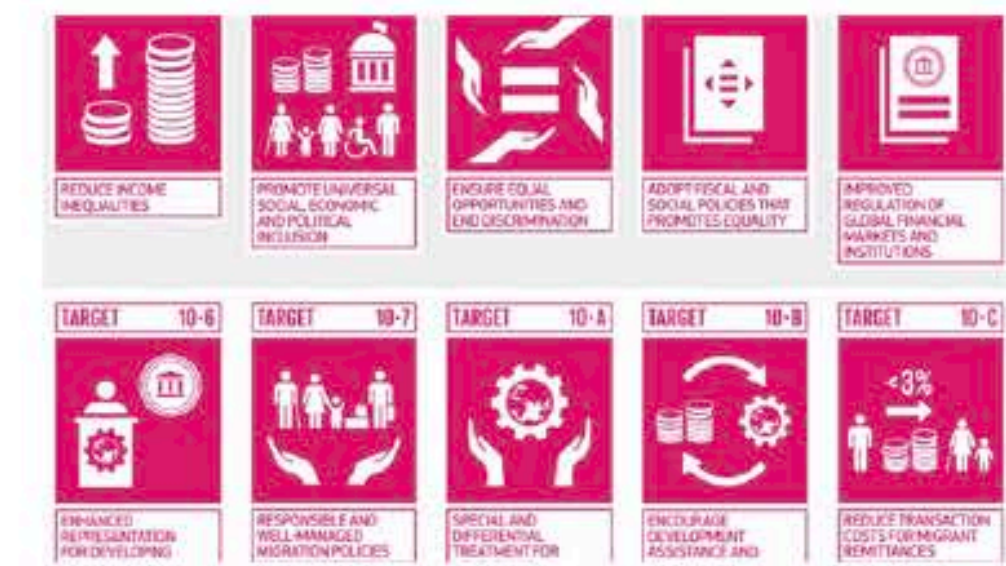
Darker color in the map indicates higher concentration of wealth among the top 10% richest people



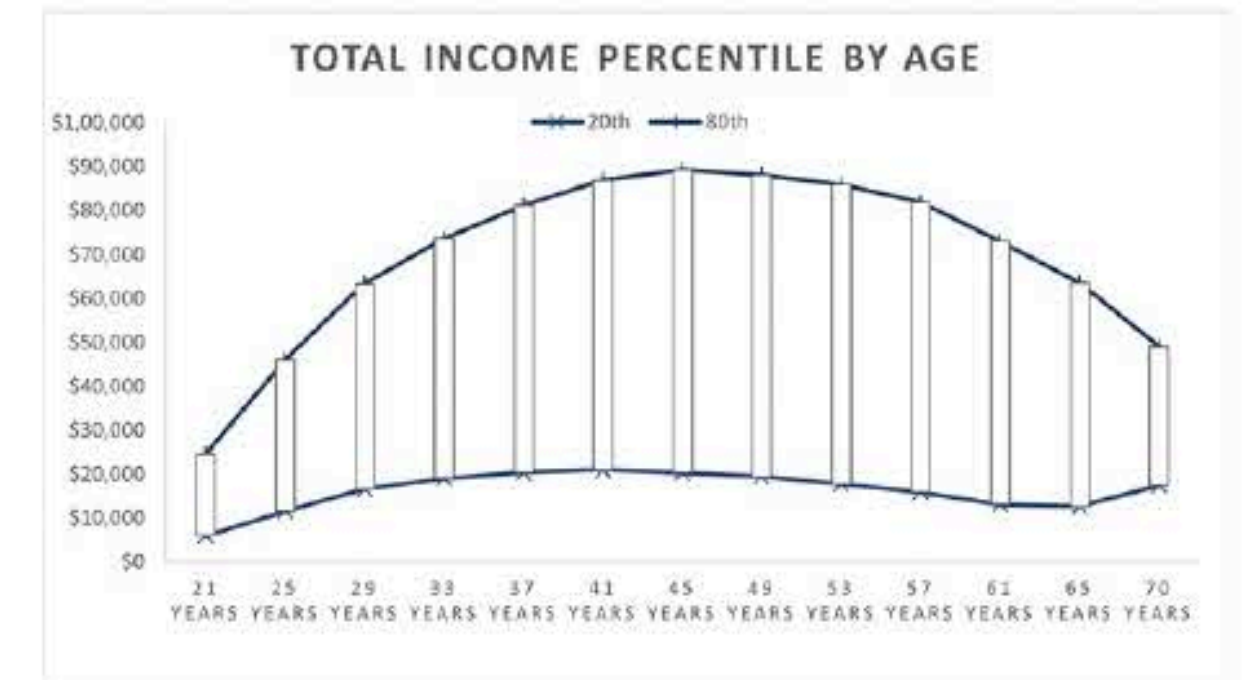
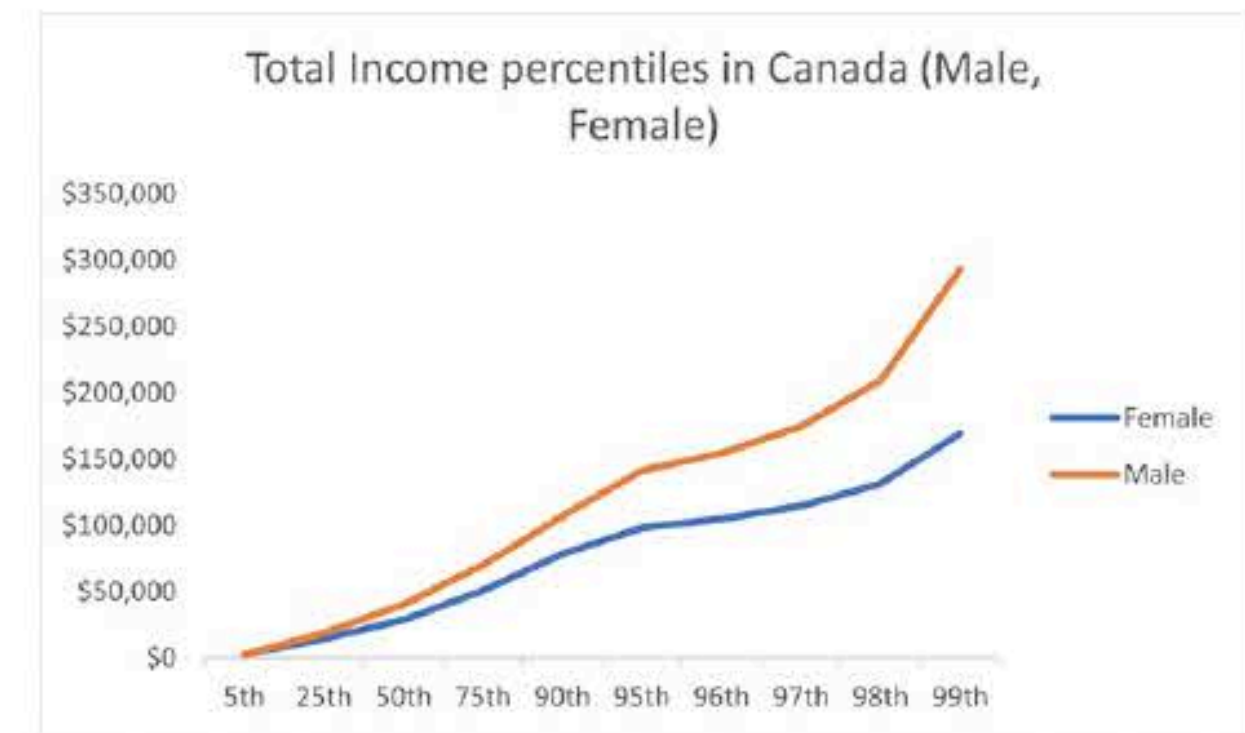
Countries that have the highest no. of people living below less than half the median National Income (2014-18)



Another indicator demonstrating high level of income inequality amongst developing and third world nations. Notably, 5/7 countries in the list are from South America.

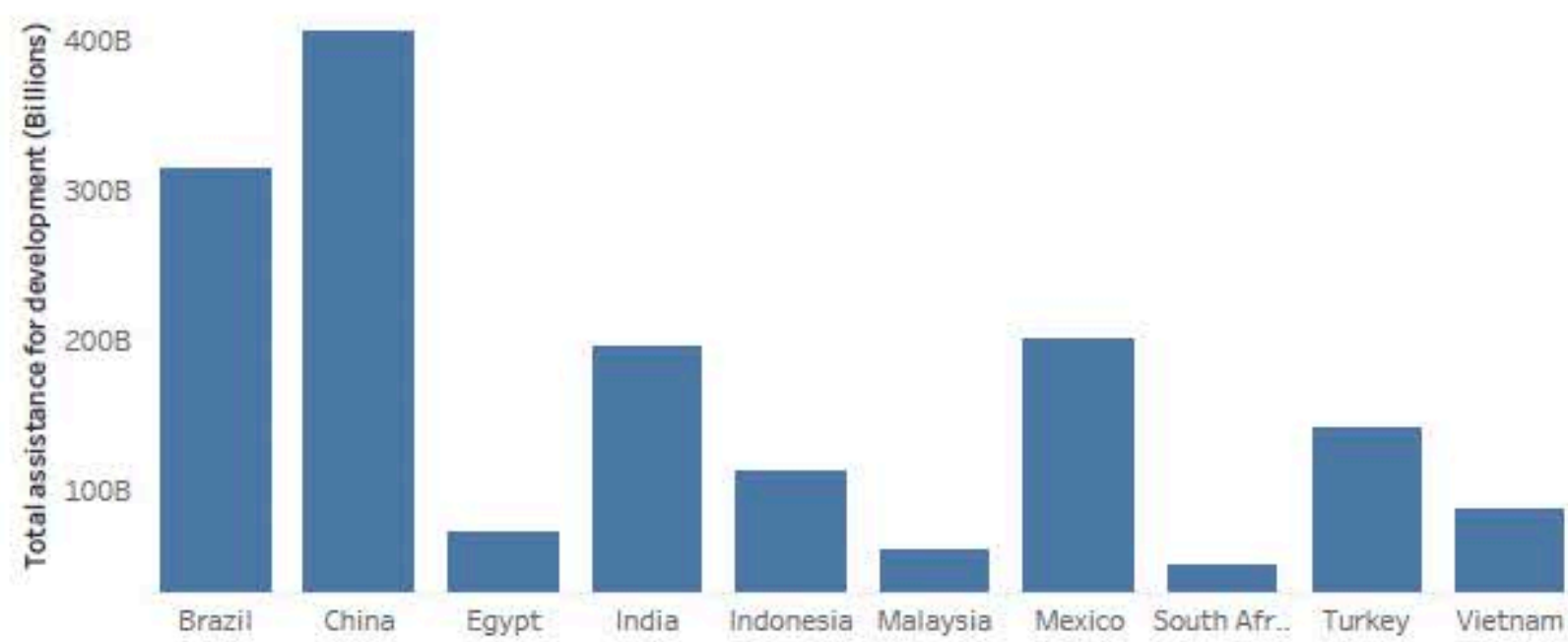


HOW DOES CANADA FAIR IN ACHIEVING THE GOAL OF REDUCING INEQUALITY?



References:
<https://ourworldindata.org/grapher/income-share-held-by-richest-10?time=2013>
<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dv-vd/inc-rev/index-eng.cfm#chrt-dt-tbl>

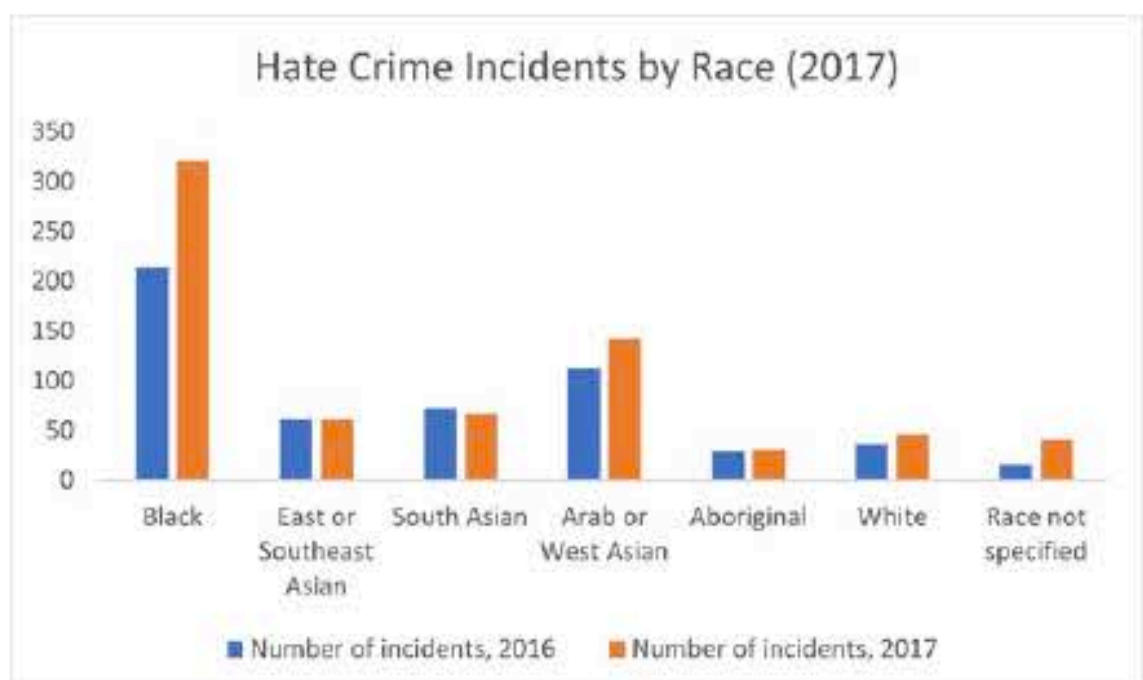
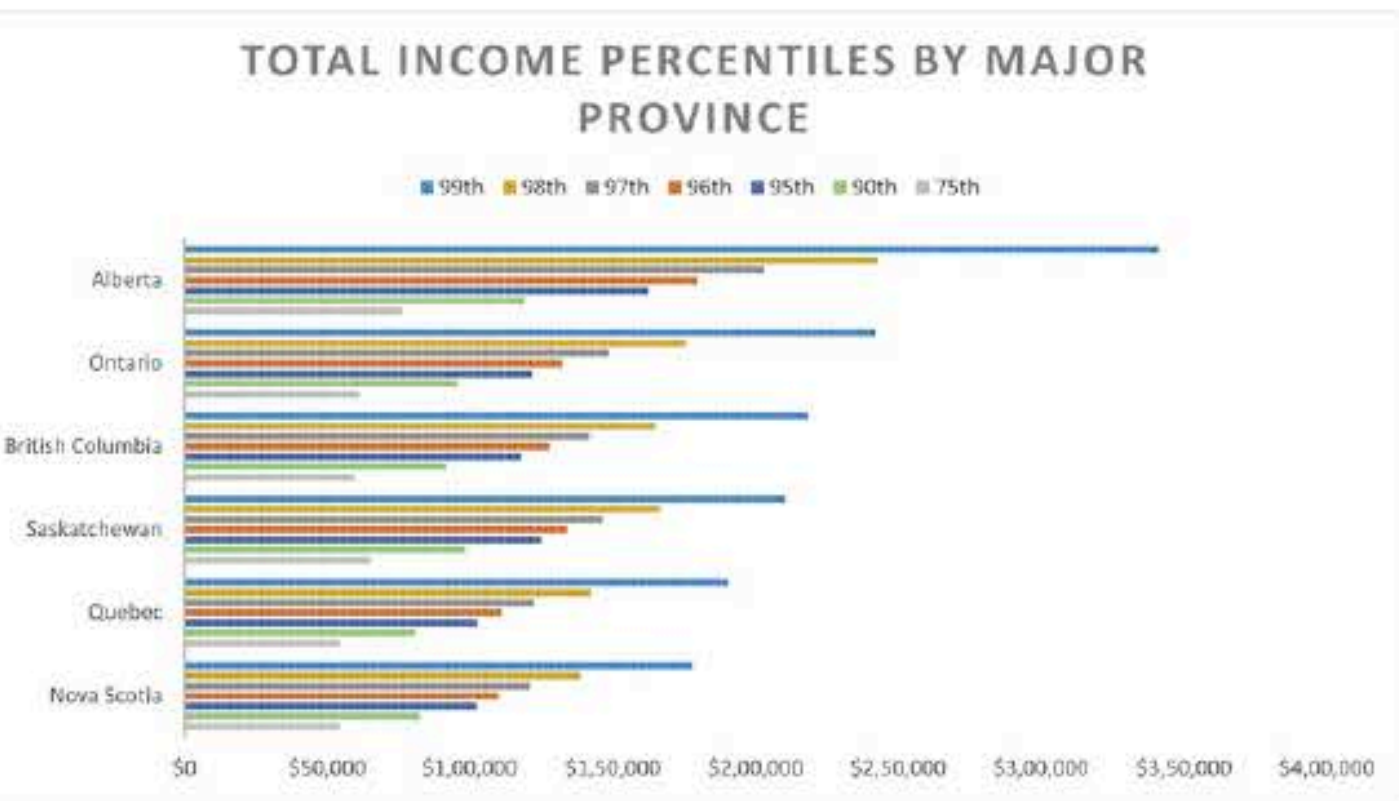
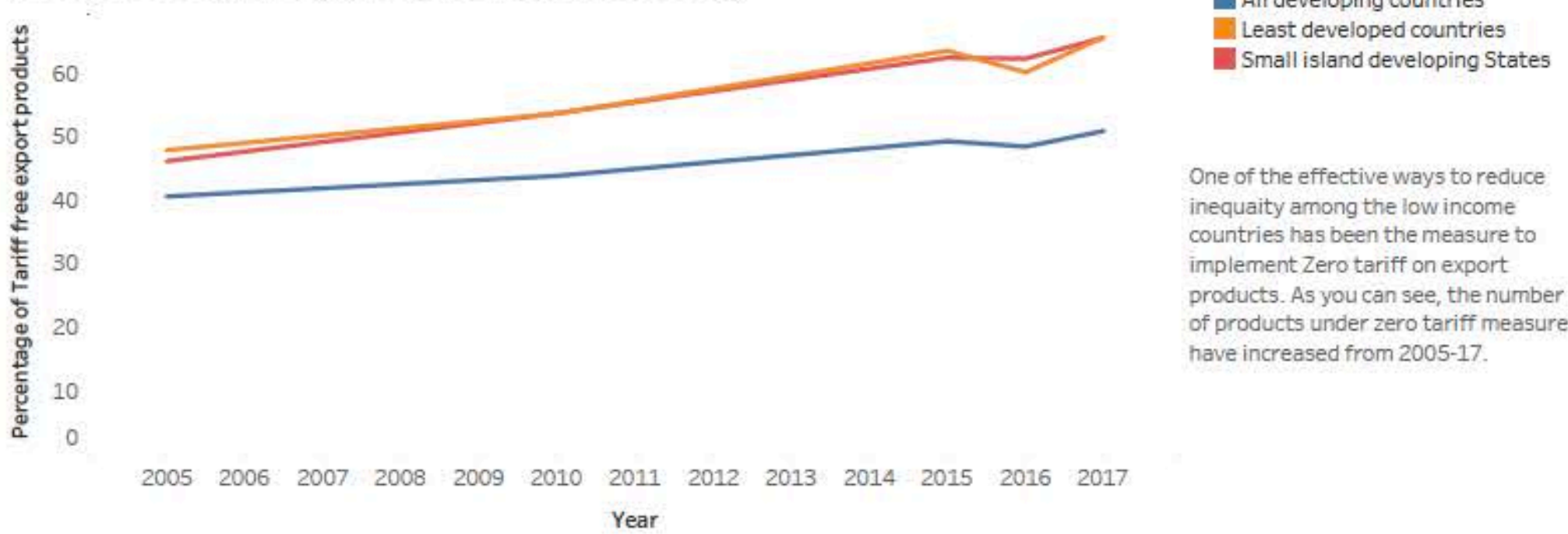
Countries that have received the highest assistance for development between 2010-2019



Out of 7 countries which have the highest inequality rate, only South Africa and Brazil appear in the list of top 10 countries that have received the highest amount of financial assistance in the years 2010-19.

China, despite having a low income inequality has received the highest amount of assistance. Such inequality in granting assistance may further lead to higher income inequality.

Tariff free export (%) of products (2005-17)

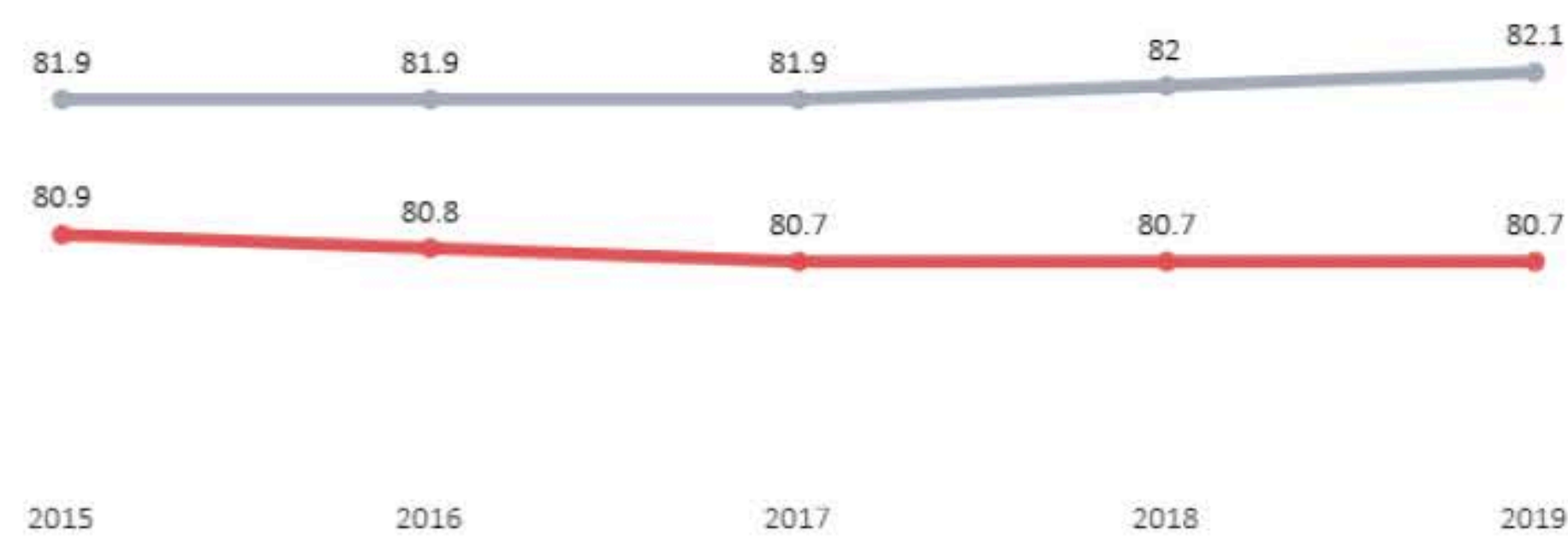


In 2017, 43% of all police-reported hate crime was motivated by race/ethnicity Whereas 50% increase seen in police reported hate crime motivated by black race

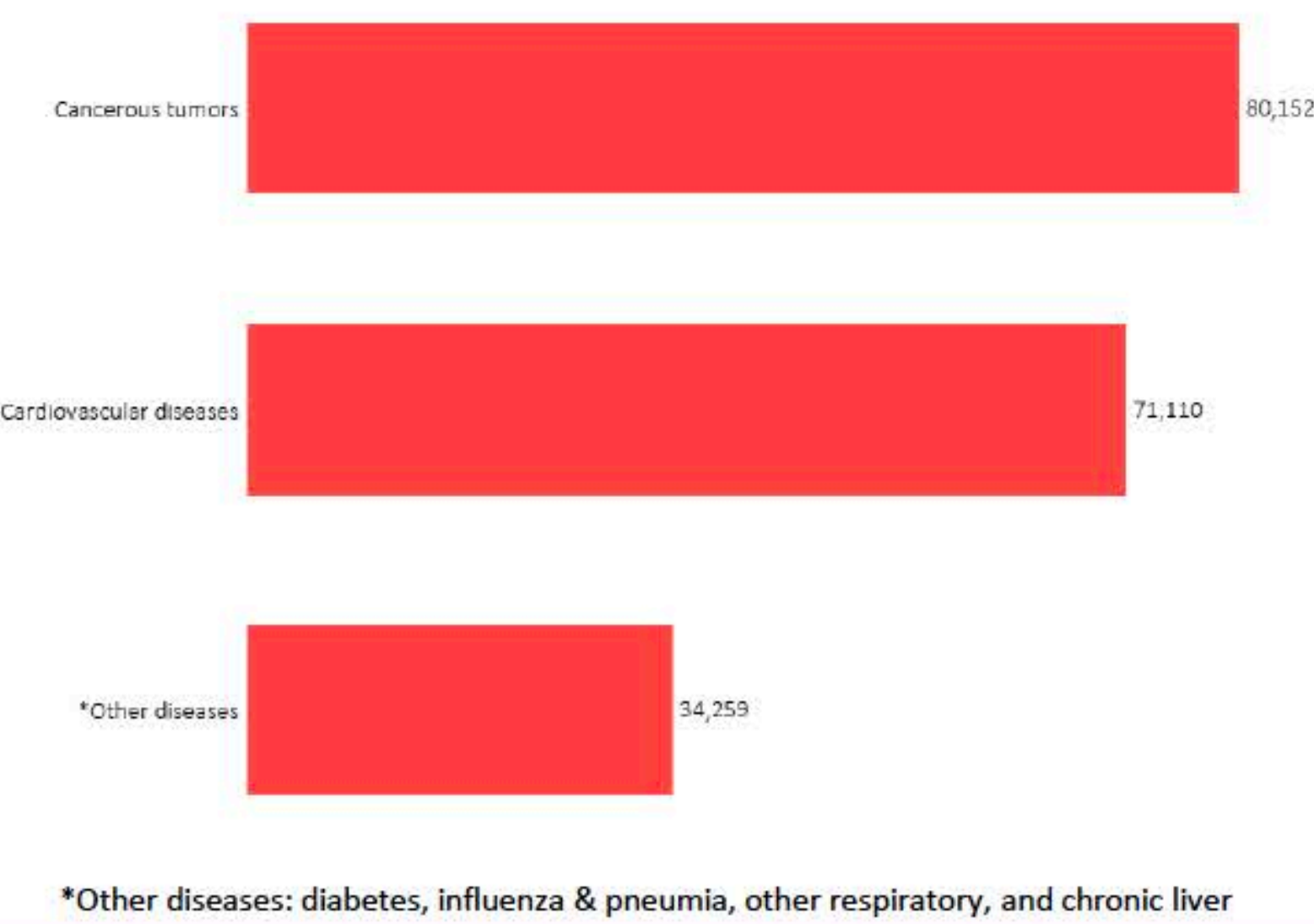
Submitted By: Team Datvision
Abhay Punia
Rohan Gupta

How to Make **New Brunswickers** Healthier ?

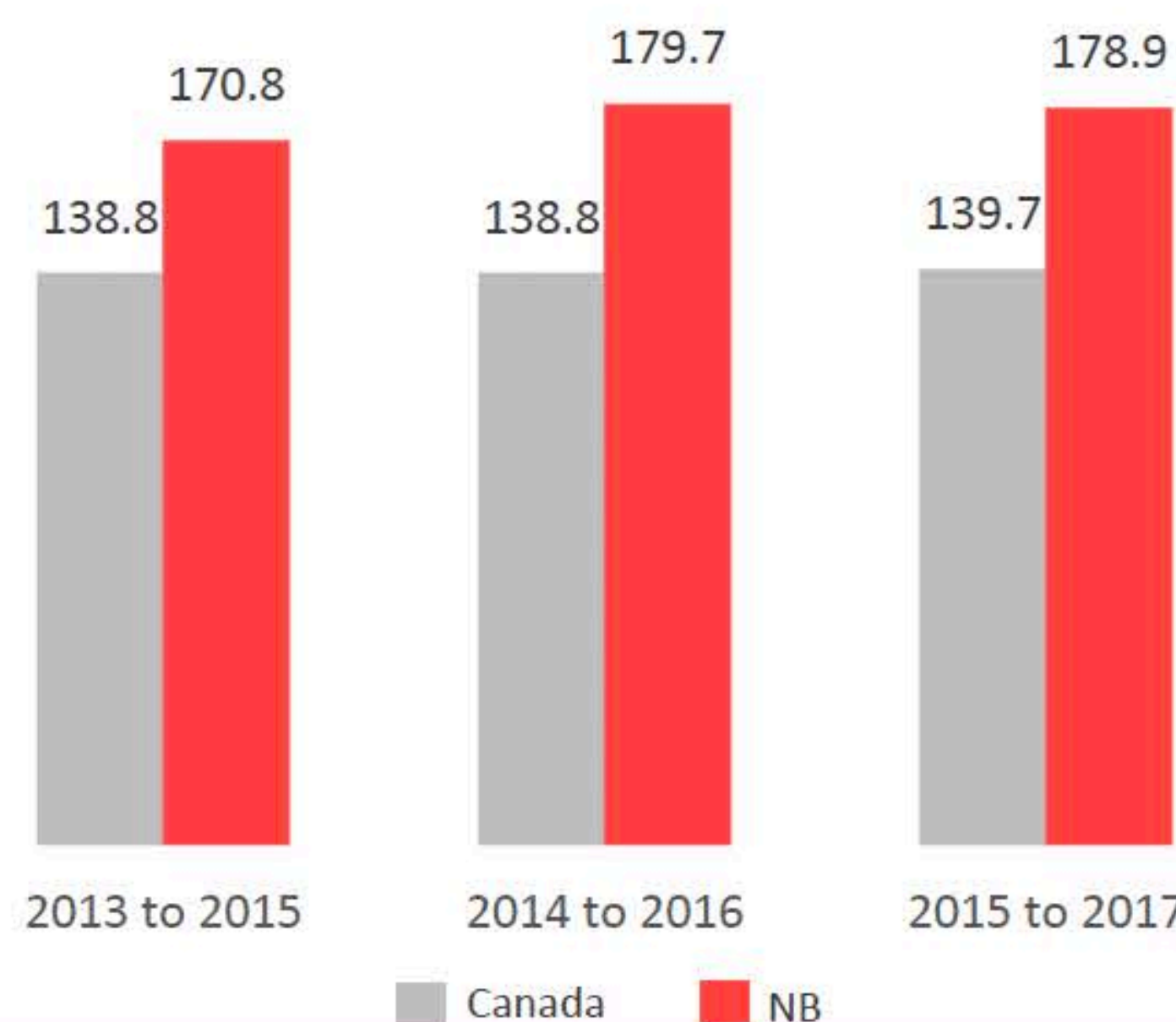
New Brunswickers live approx. **1 year and 4 months** shorter than the average Canadian



Leading Causes of Death in Canada in 2019



Preventable mortality rate per 10,000 people



49% Have **NO** regular physical activity

80% Eat fruits and vegetables **less than** 5 times per day

\$7,082 Health expenditure per capita

Recommendations

- Educate & promote healthy eating at a younger age
- Better access & pricing to healthier food products
- More affordable facilities
- Raise awareness through social media



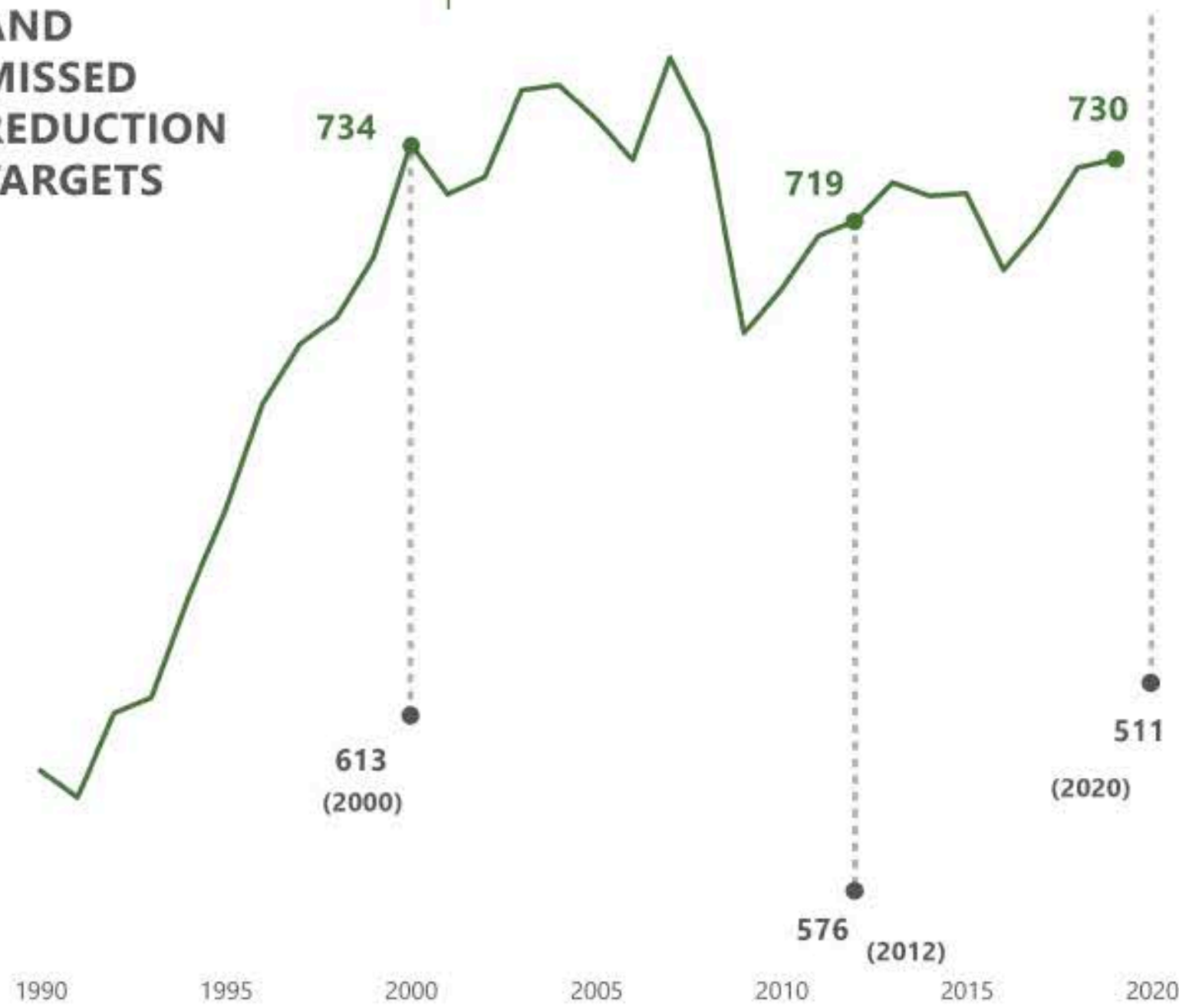
ALBERTA OIL SANDS

OUR BIGGEST ECONOMY DRIVER, BUT AT WHAT COST?

CANADA HAS MISSED EVERY REDUCTION TARGET
(STARTING FROM 1992 RIO SUMMIT)

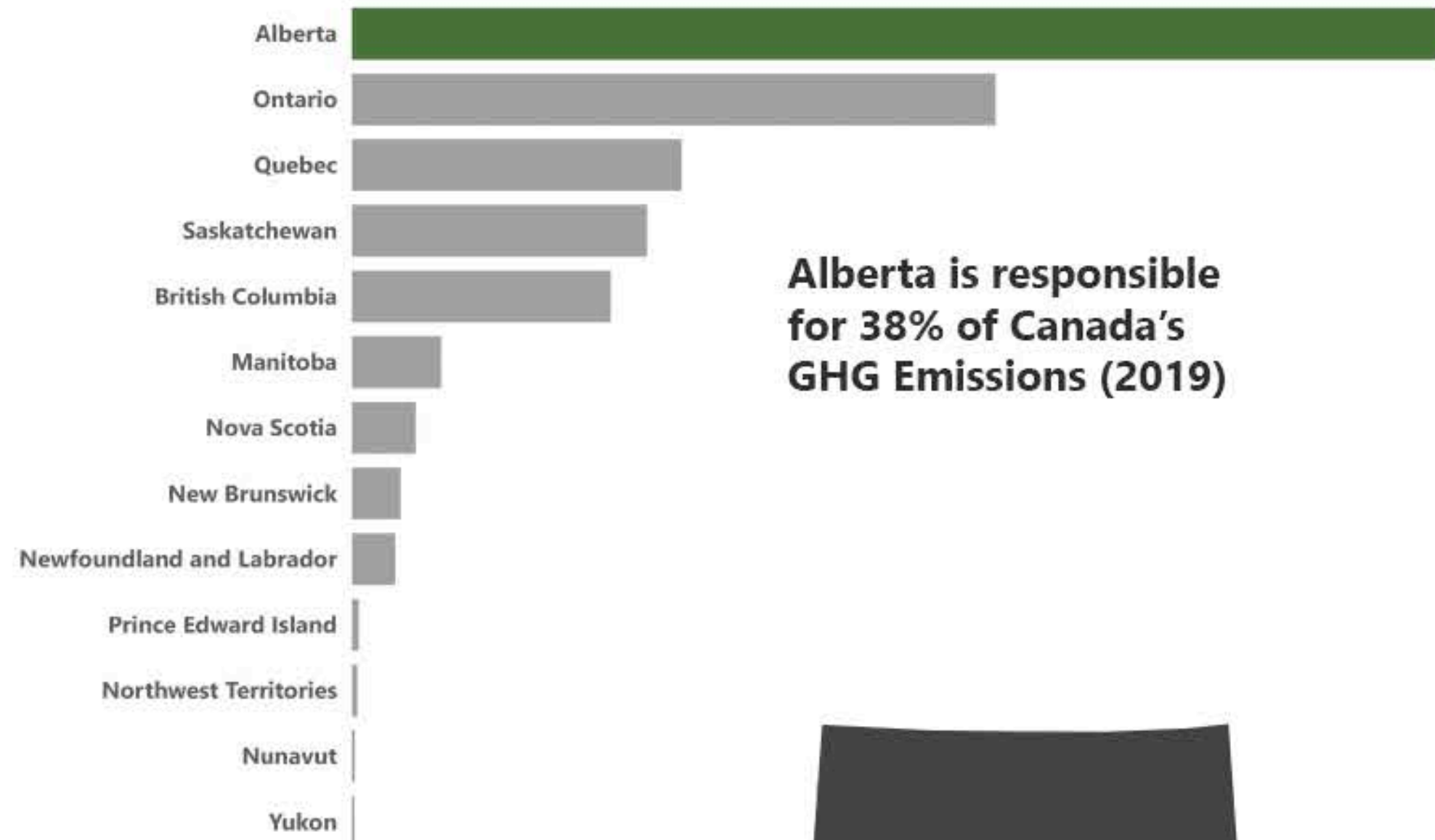
CANADA
GHG
EMISSIONS
AND
MISSED
REDUCTION
TARGETS

● Actual GHG Emission (in Megatons)
● Target GHG Emission (in Megatons)



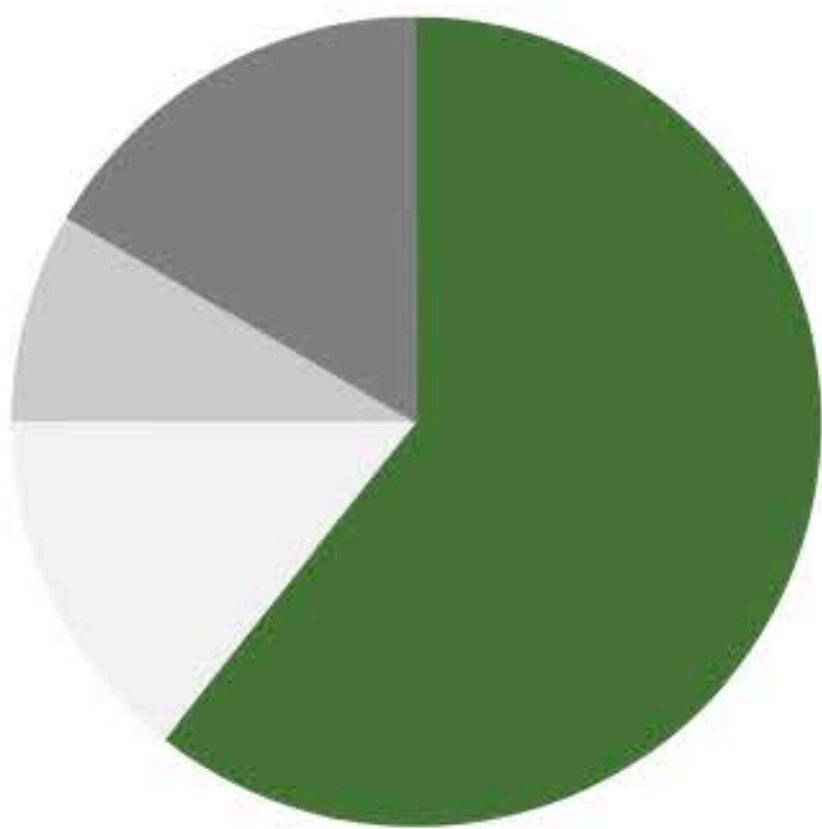
13 CLIMATE
ACTION

MAJOR CHALLENGES REMAIN
FOR CLIMATE ACTION SDG AND CANADA IS
STAGNATING OR INCREASING AT LESS
THAN 50% OF REQUIRED RATE



Alberta is responsible
for 38% of Canada's
GHG Emissions (2019)

ALBERTA GHG EMISSION SOURCES



● Oil Sands
● Natural Gas
● Conventional Oil
● Other Sources

Oil Sands are the
biggest source of
Alberta's GHG emissions
and line beneath
142,200 sq km



About 23,000 Indigenous people live in the oil
sands region in Northeast Alberta

Over the past 12 years, there has been an increase of 30% in cancer rates.
in Fort Chipewyan (north of Fort McMurray - centre of Oil Sands)

Other SDGs affected:



Industrial processes like tar sand mining
creates toxic tailings lakes which poisons
our Canadian rivers and lakes.
This also creates a negative impact on
the species within the water bodies.

RECOMMENDATIONS:

- Investment in future leading technologies that are outlined by Provincial Energy Strategy to help slower the growth rate of the oil sands.
- Establish a conservation offset program to protect areas in the oil sands region to help maintain and support provincial biodiversity and wetlands.
- Collaborate with First Nations such as the Metis Settlement's in the oil sands region to obtain data on how the oil sands can impact Settlement land. Consult Aboriginal communities who are protected under section 35 to insure they are not impacted by the development of oil sands.

References:

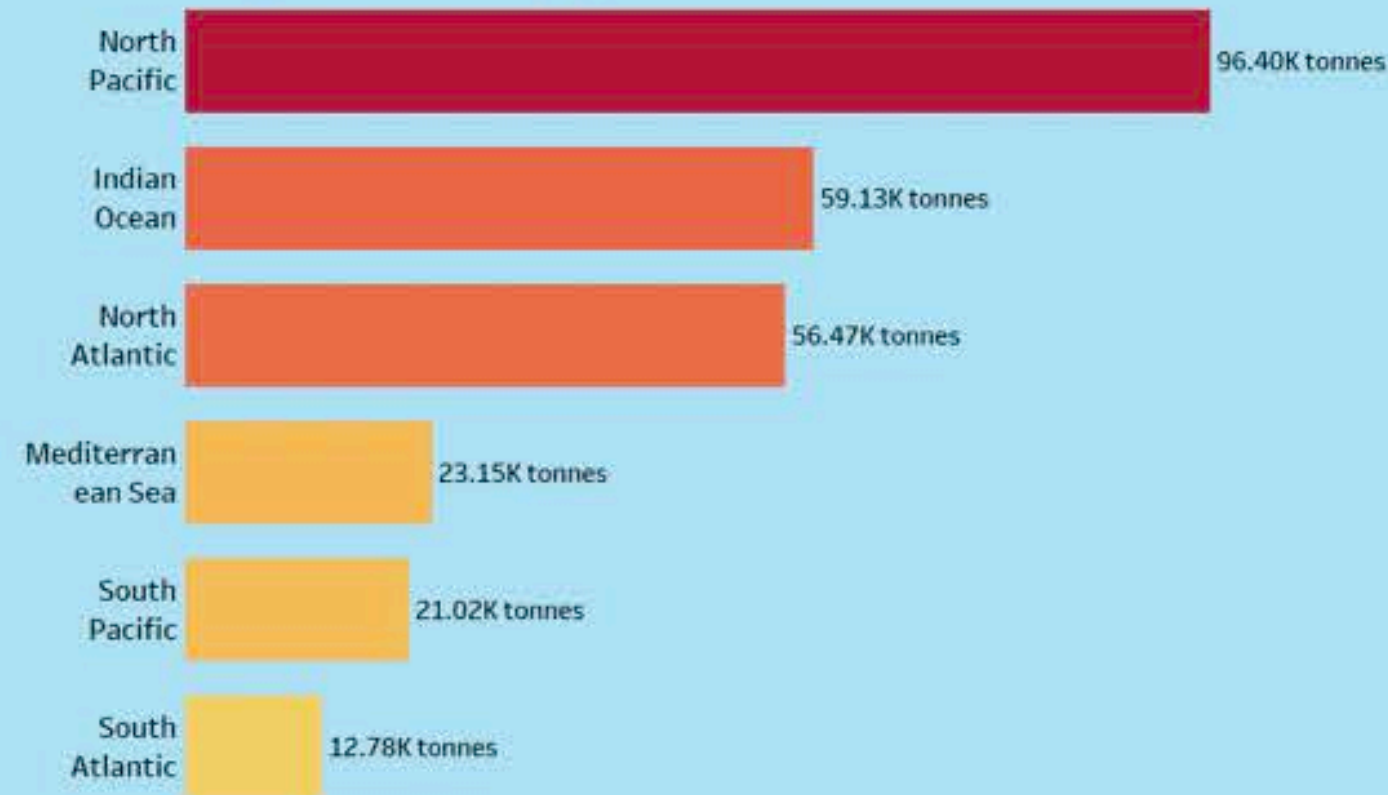
<https://open.alberta.ca/dataset/41a564e-9b36-4065-94ba-df6c942784c6/resource/4974c0fe-5b0f-4400-9951-4a81ac4740/download/4284520-2009-00a-responsible-actions-plan-alberta-oil-sands-2009-02.pdf>
<https://www.pembina.org/reports/briefing-note-on-alberta-oil-sands-2010.pdf>
https://climateactionnetwork.ca/wp-content/uploads/2014/02/Violent-Tar-Sand-Report_FINAL.pdf
<https://dashboards.algindex.org/pw/100/canada>
<https://www.sciencemag.org/perspectives/PM3000177>
<https://www.ec.gc.ca/nature/nr/eng/1970e-4e-vary-real-dec>
<https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>
<https://climateactionnetwork.org/country/canada/>
https://commons.wikimedia.org/wiki/Category:Alberta_oil_sands

Our Efforts Towards Plastic Reduction ARE THEY ENOUGH?

@Eco-Minions

Drowning In Plastic?

Ocean pollution by plastics



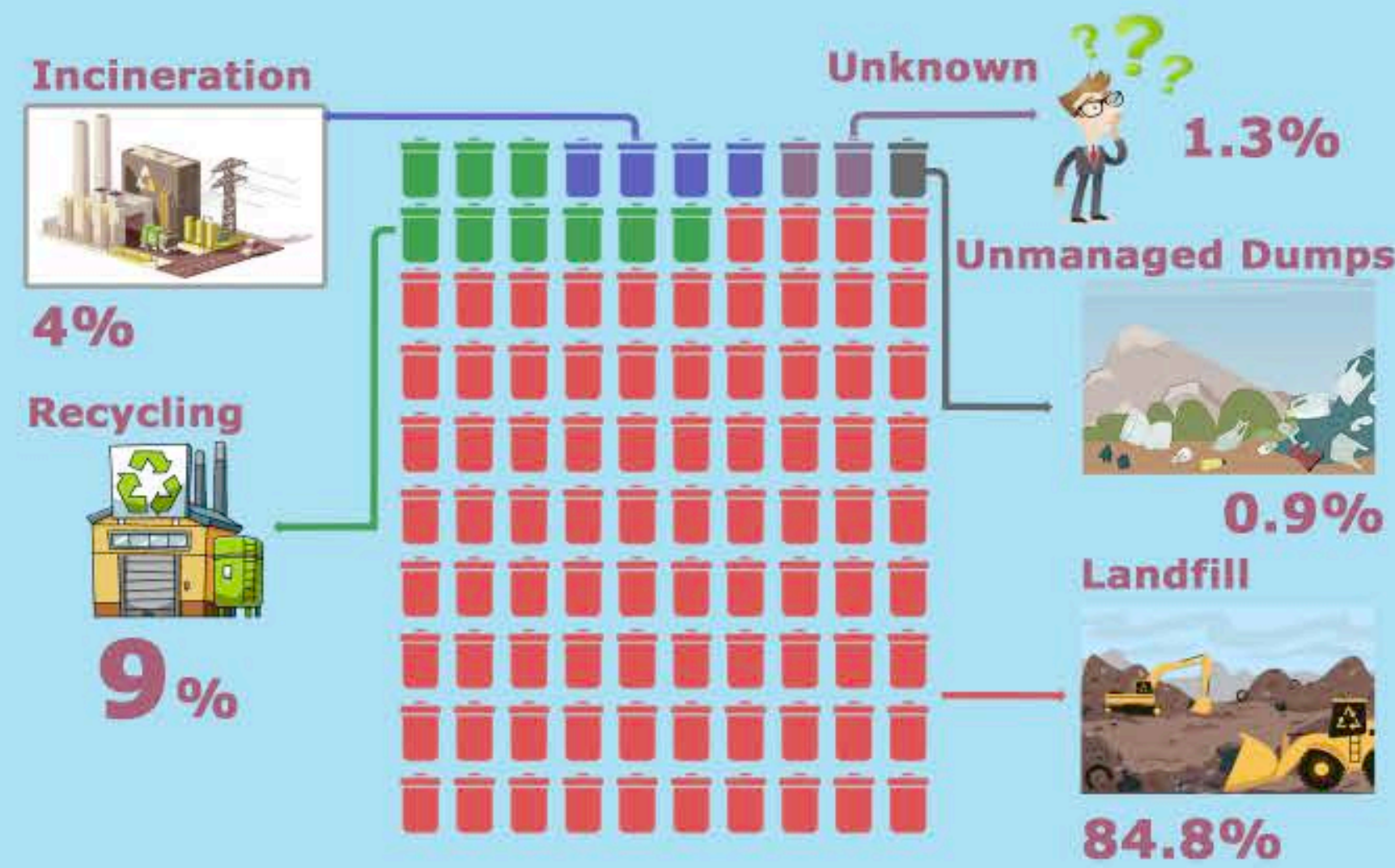
80% of Marine Pollutants is Plastic

02 Most Polluted Oceans Surround Canada



*Based on reports for the year 2016

Where Canada's plastic waste went?



New Brunswick lagged behind other provinces in Plastic Waste Recycling efforts

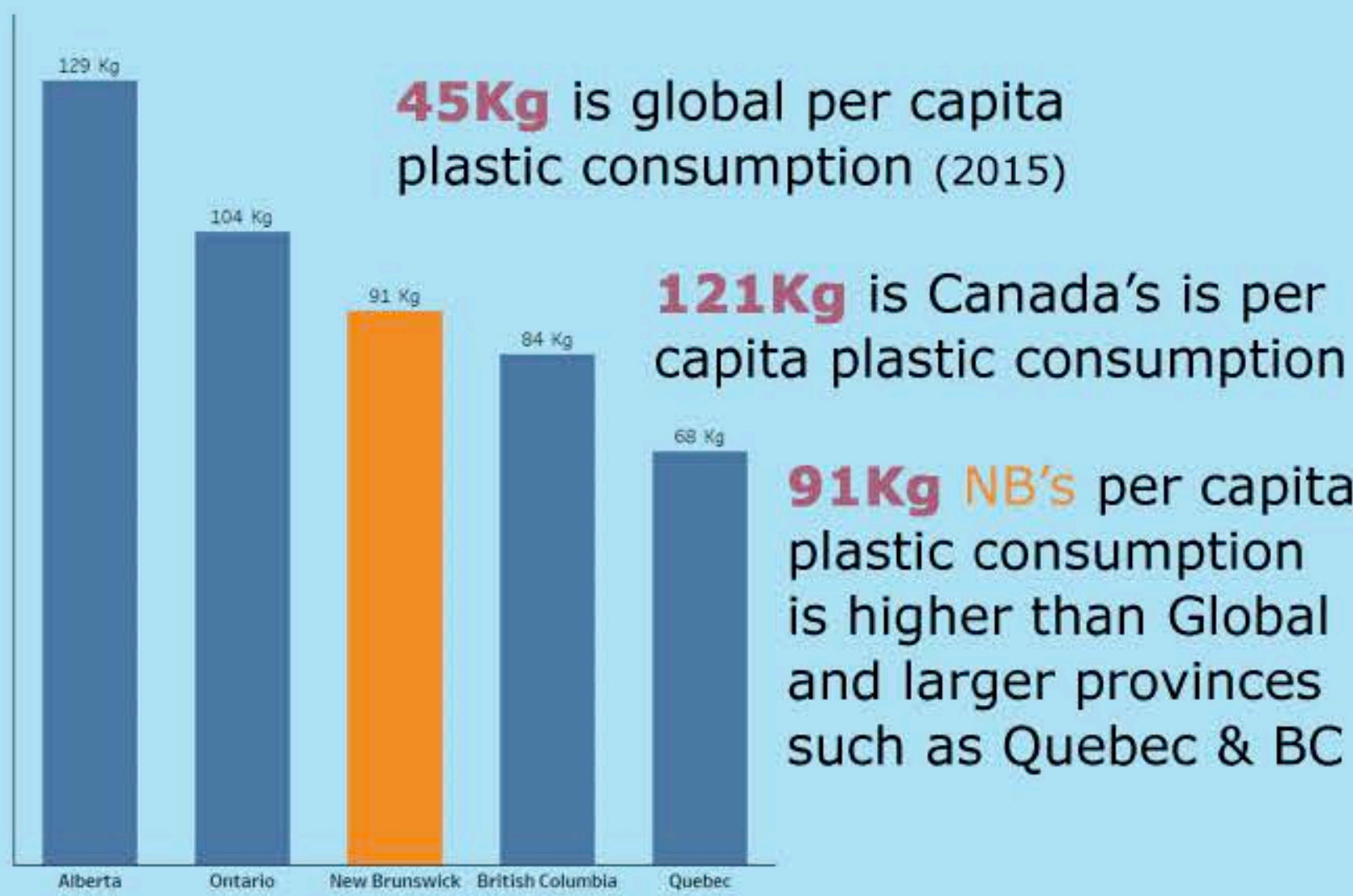


9% of Plastic Waste Recycled in Canada

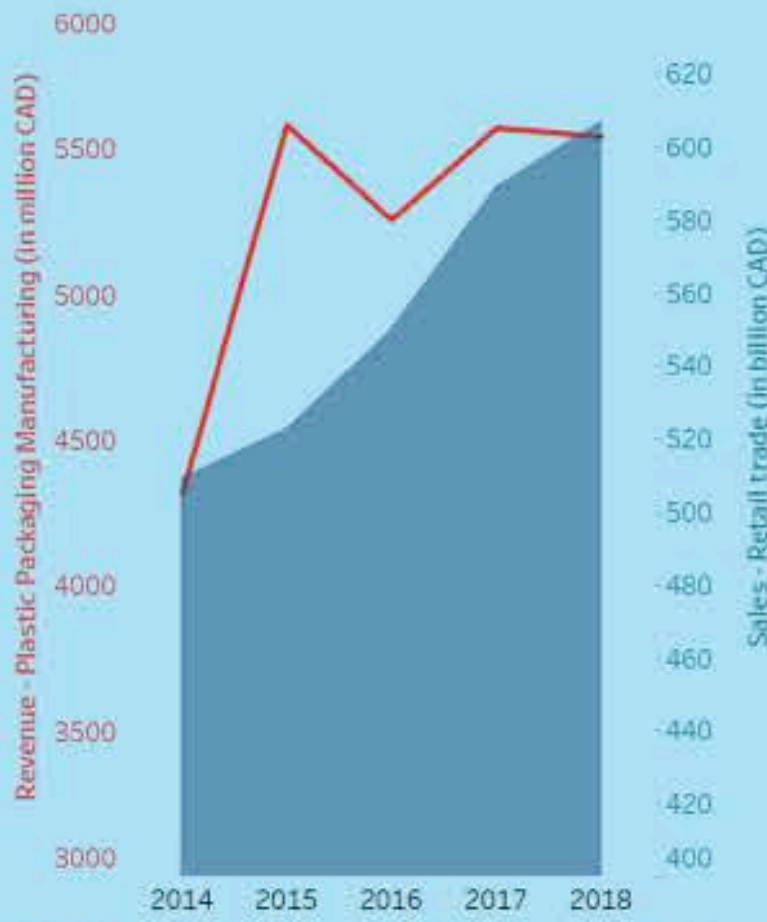
2% of Plastic Waste Recycled in NB

*Based on reports for the year 2016

New Brunswick became the third highest plastic consumer per capita in Canada



What is driving the increase in plastic consumption in Canada?



Retail Sales are increasing consumption of plastics

*Based on reports for the year 2016

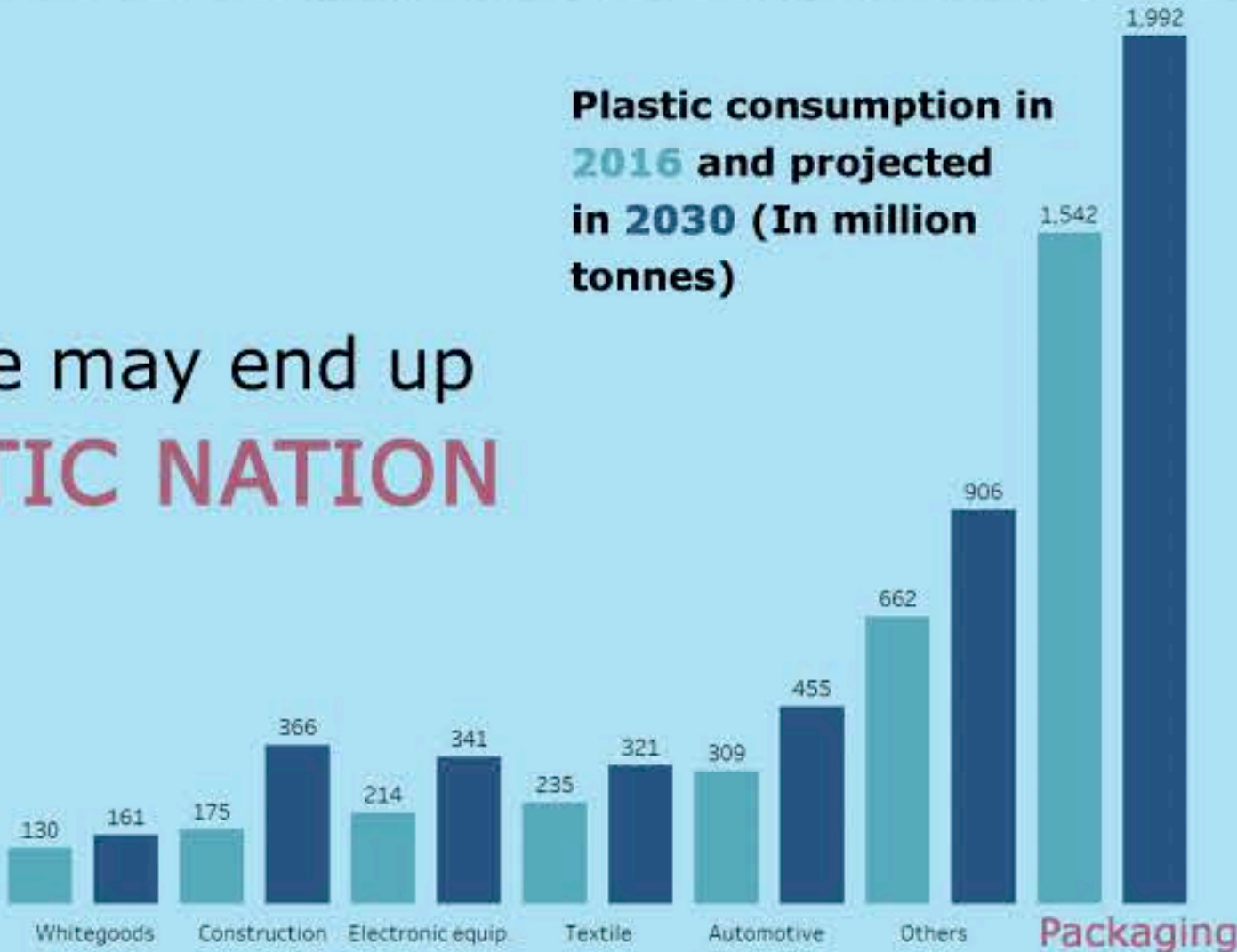
Everyone needs to-

- Refuse** : Single-use plastics
- Reduce** : Provide plastic-free options
- Reuse** : Increase recycling and reuse plastics
- Rethink** : Promote reduction-based solution



By **2030**, we may end up as a **PLASTIC NATION**

Plastic consumption in 2016 and projected in 2030 (In million tonnes)



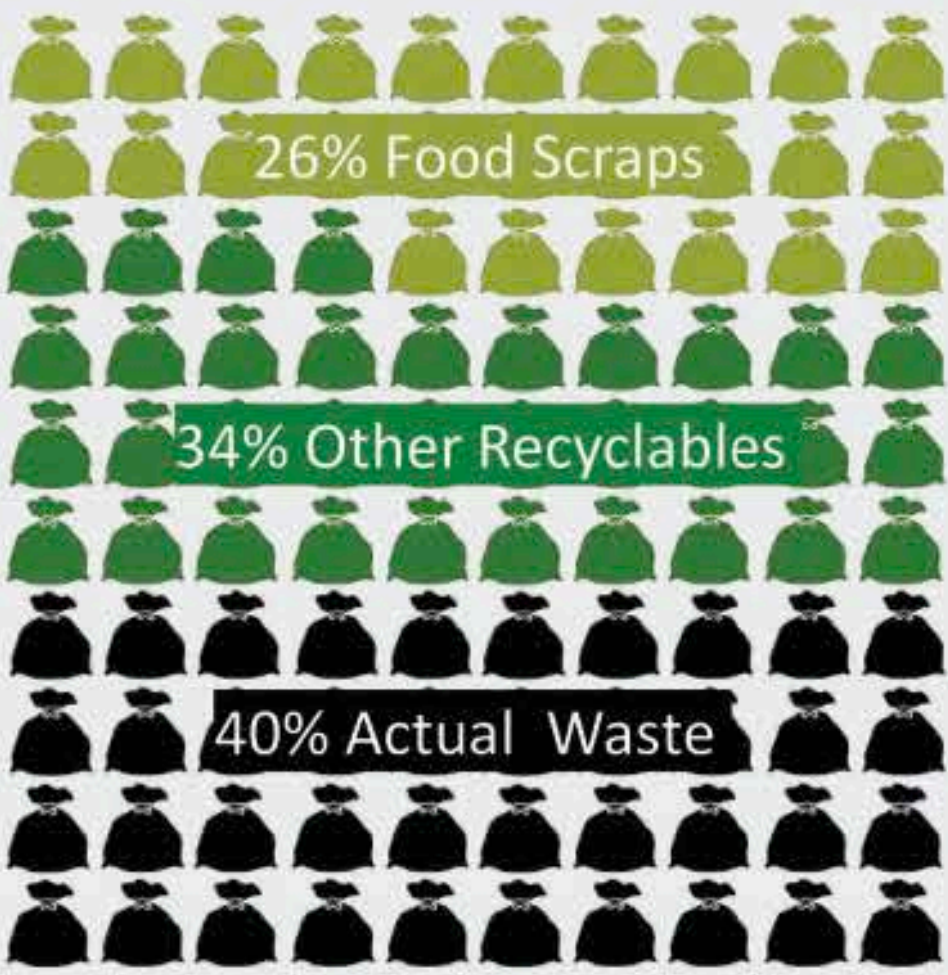
FREDERICTON: DE-COMPOSING A SUSTAINABLE FUTURE

Presented by: The Fredericton Composting Consultants
Abhisarika Alagala, Alex Dandridge, Jason Currie, and Subomi Ishola-Iemomu



12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

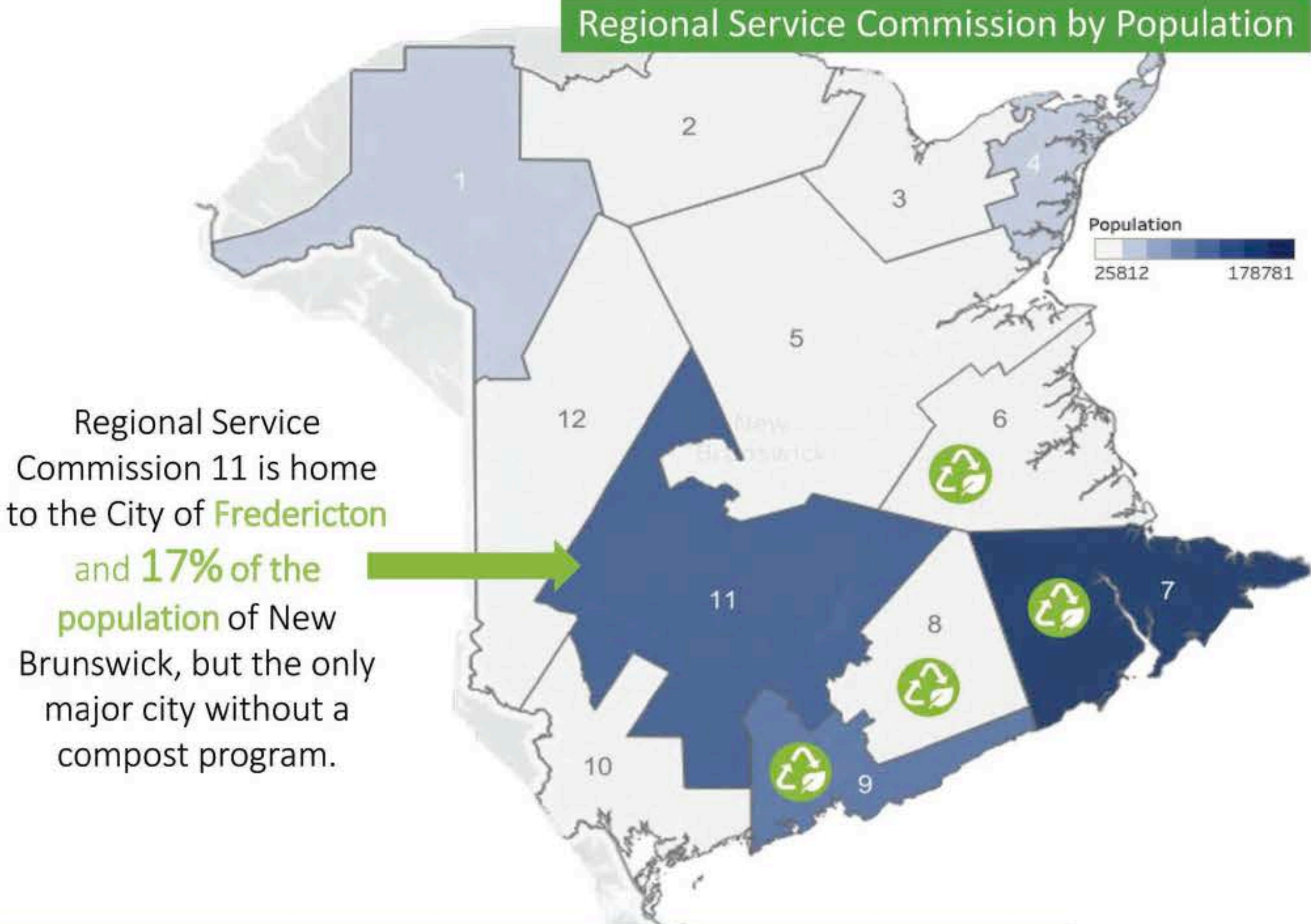
What's In The Landfill?



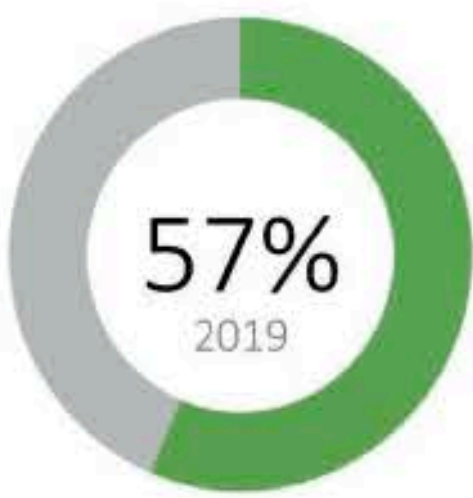
26% of landfill waste is food scraps that could be composted

The Benefits of Curbside Compost

- Extend Landfill Life by 10 Years
- Reduce Use of Harmful Fertilizers
- Profit From the Sale of Processed Compost Product



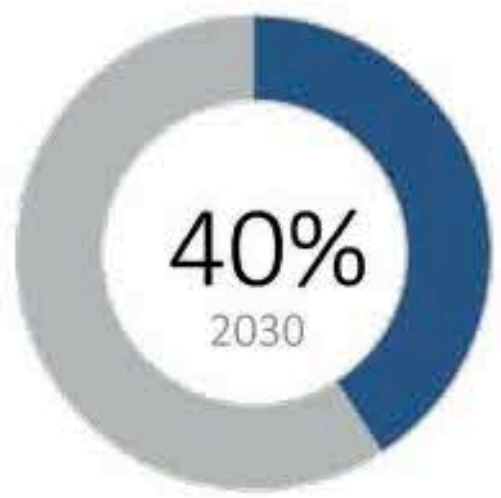
A Local Case Study: If Halifax Can Do It, Why Not Fredericton?



Halifax diverted 57% of residential waste from the landfill through curbside recycling and compost.



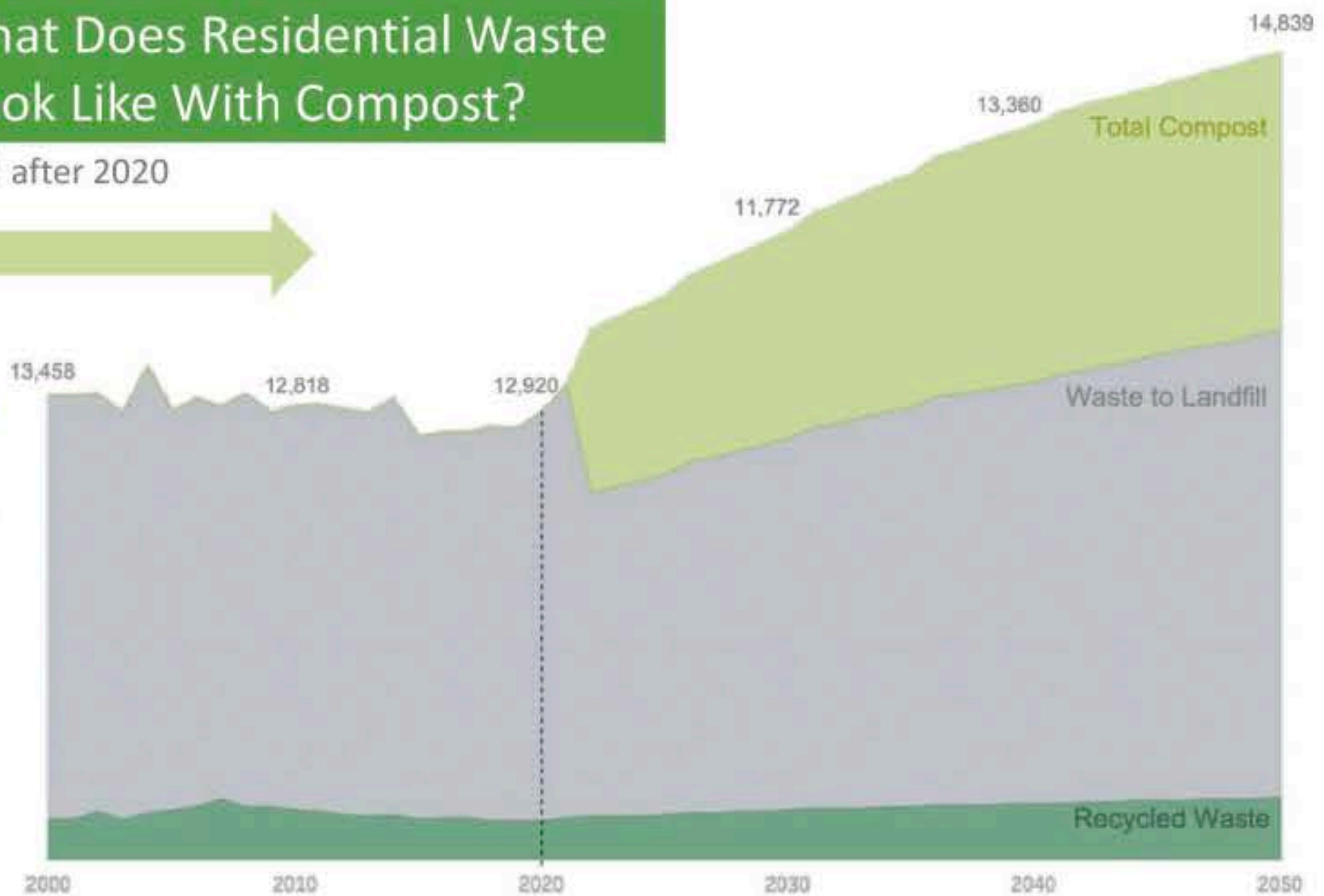
Fredericton can divert at least 40% from the landfill with a curbside compost program.



Opportunity: What Does Residential Waste Collection Look Like With Compost?

In metric tonnes, forecasted after 2020

Diverting food scraps from the landfill is an equivalent of 215,000 tonnes diverted over 30 years.



Private companies can work with municipalities to convert food scraps and other organics into compost that can be resold



CALL TO ACTION: The City of Fredericton should implement a curbside compost program, modelled off similar programs in the Atlantic Region, to reduce waste generation and recycle and reuse organic waste.

Sources: City of Fredericton, DivertNS, GeoNB, StatsCan, Open Data Fredericton

Face Masks: New Fashion? New Pollution!

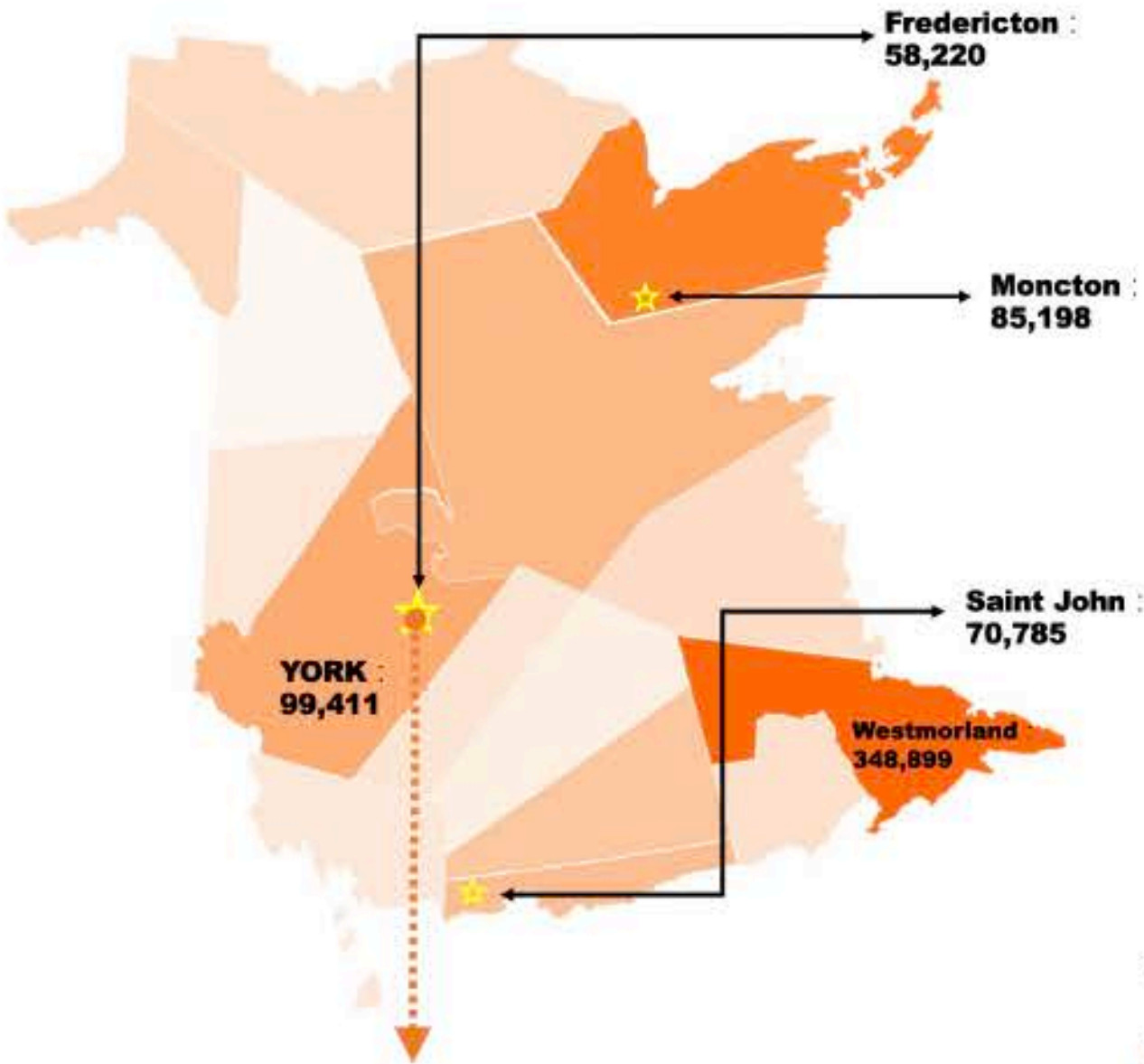
Made by Group LAXA



Est. **3,000,000**
Disposable masks are being used **1 minute** globally

How Many Masks Do New Brunswickers Use Per Week ?

Population of New Brunswick



More Mask Consumption



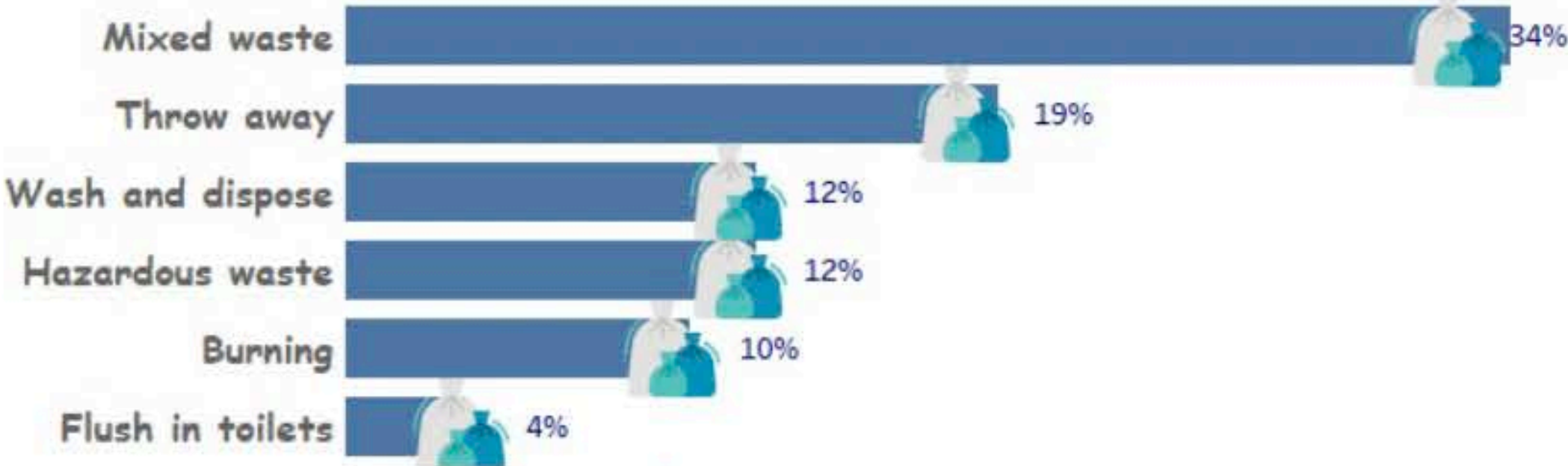
Less recycle efforts

*There is no official guidelines or regulations towards masks disposing or recycling in NB

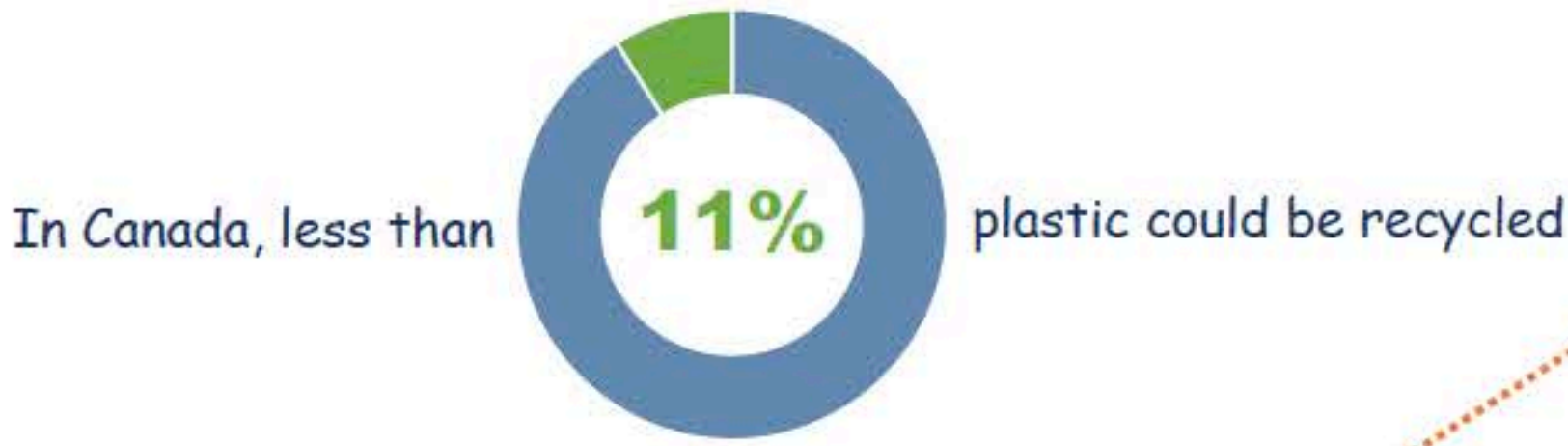
In one week, Fredericton woman collects nearly 600 masks littering city



How are the masks disposed ?



Where Do All Masks Go ?



Approximately **63,000 tonnes** of COVID-19 related PPE could end up as waste

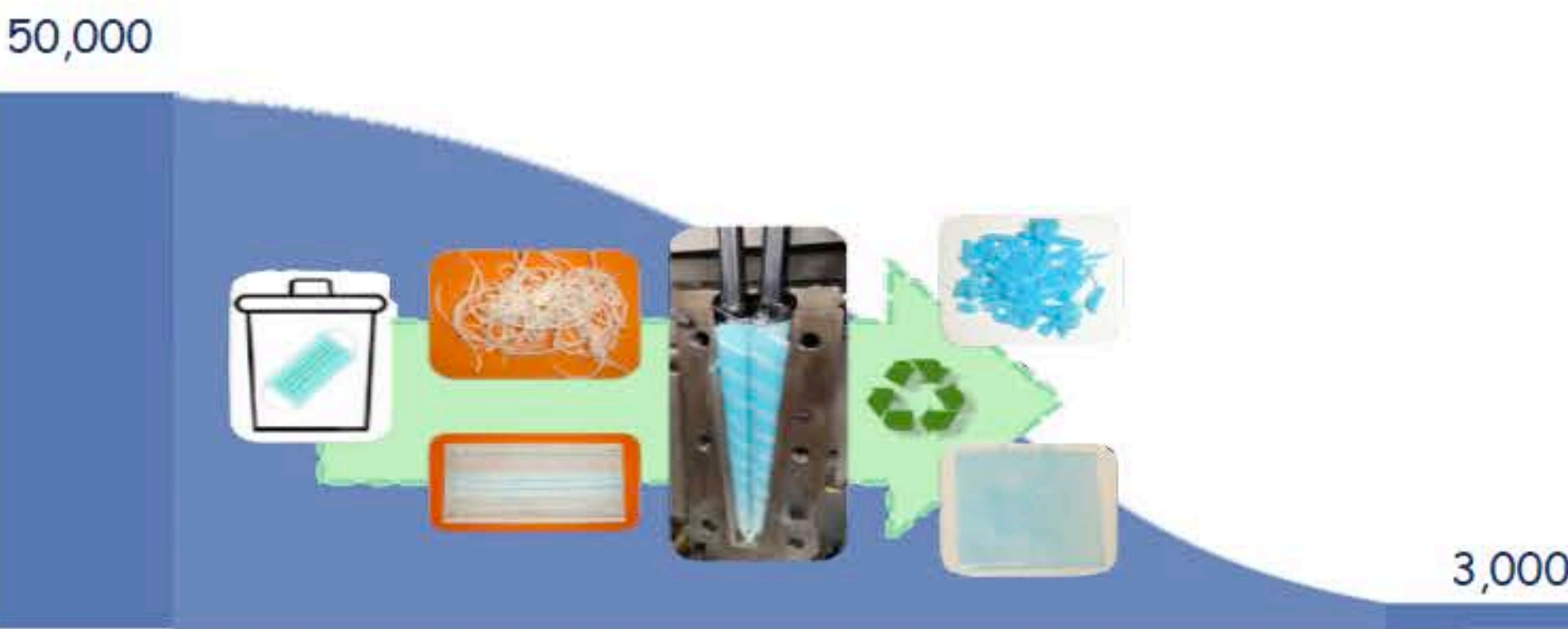
More than **1.56 billion** face masks could end up polluting oceans

What Can We Do ?

Properly Dispose & Recycle Our Masks

Plaxtil, a French company, has been recycling more than 50,000 face masks and produced up to 3,000 recycled items

Strict Waste Management & More Financial Support



Source: StatCan.gc.ca
Source: <https://www.ctvnews.ca/sci-tech/more-than-1-56-billion-face-masks-could-end-up-polluting-oceans-report-1.5221239>
Source: <https://globalnews.ca/news/7818074/disposable-covid-masks-quebec-recycling/>
Source: <https://www.sciencedaily.com/releases/2021/03/210310122431.htm>

Source: <https://doi.org/10.1016/j.envc.2021.100039>
Source: <https://www.france24.com/en/20200827-face-mask-recycling-french-firm-finds-way-to-re-use-covid-waste>
Source: <https://www.surreynews.com/news/surrey-now-leader-launches-mask-recycling-program>
Source: <https://doi.org/10.1016/j.envc.2021.100039>

Image credits: <https://www.cbc.ca/news/canada/new-brunswick/disposable-masks-litter-fredericton-1.5980976>
Image credits: <https://www.express.co.uk/news/nature/1311898/RSPCA-coronavirus-mask-seagull-rspsa-south-essex-wildlife-hospital>
Image credits: <https://www.ecowatch.com/ppe-wildlife-2652766542.html#toggle-gdpr>
Image credits: <https://twitter.com/jamesmelville/status/1443661496543577088>
Image credits: <https://www.mdpi.com/2073-4360/12/11/2726>

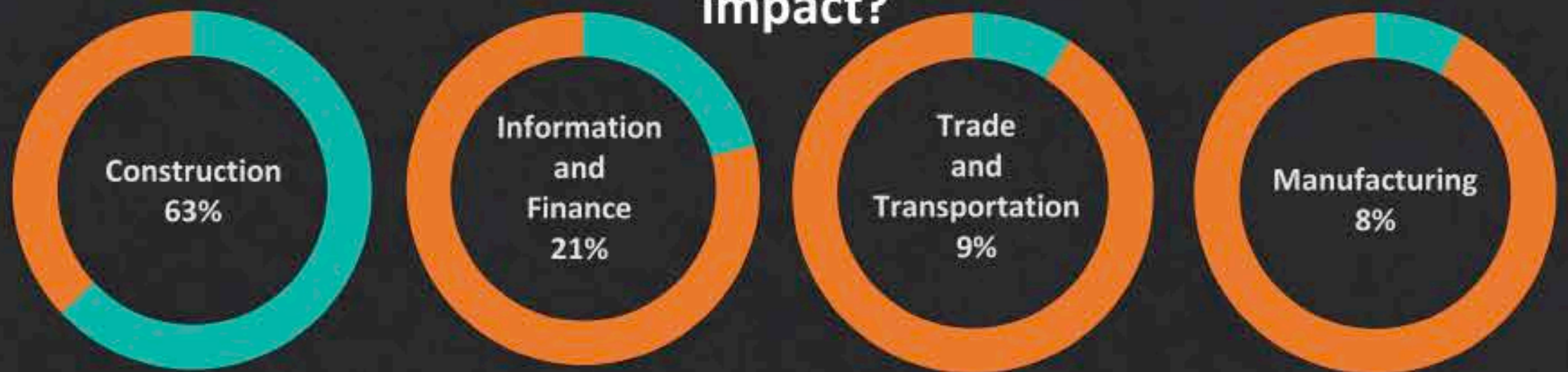
Impact of Investment in Industrialization in New Brunswick



Total Change observed in total investment. Why?

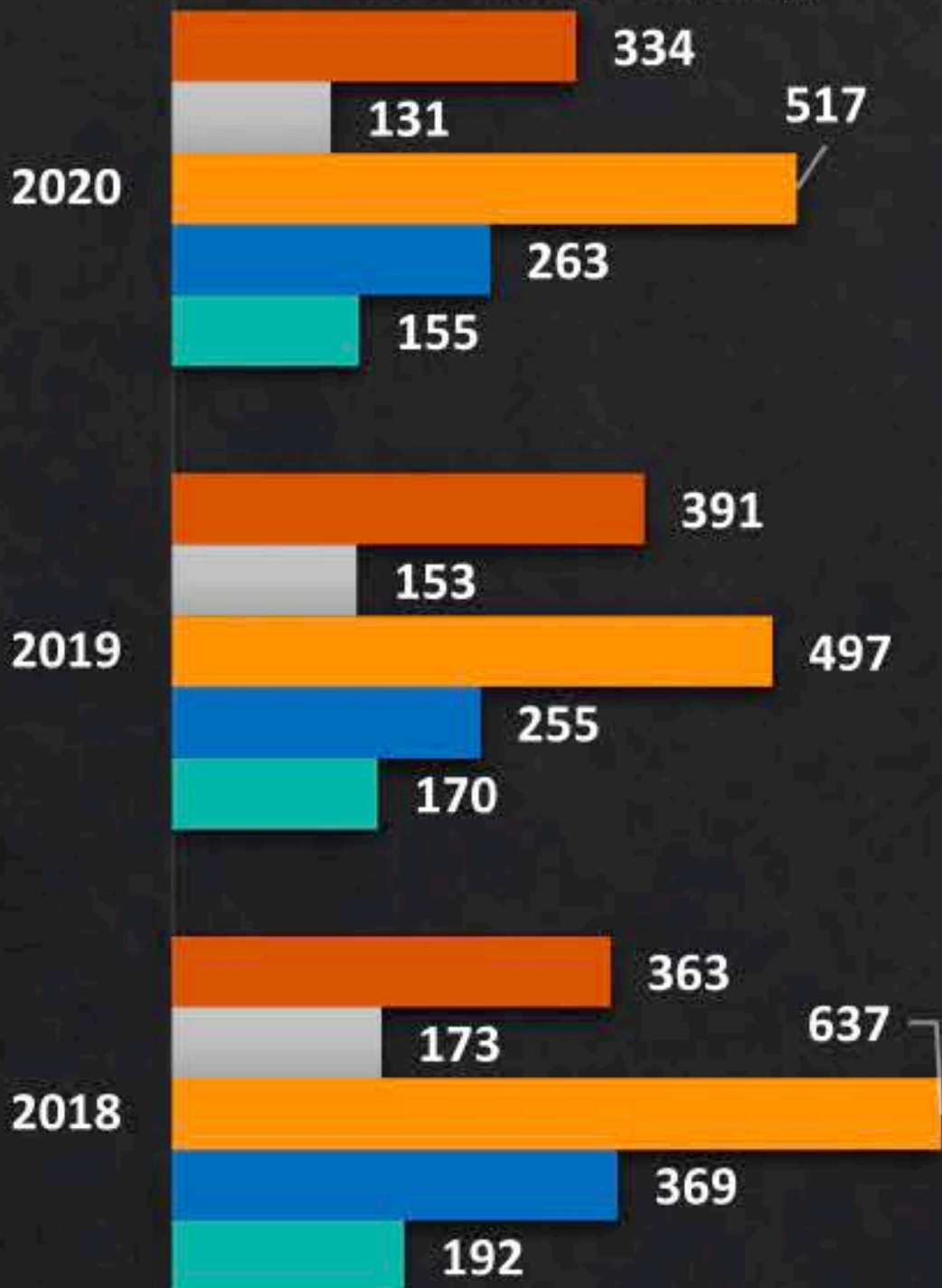


What was the major industries' contribution in 2020's economic impact?



How much invested? (in \$ million)

- Electric Power Infrastructure
- Communication Networks
- Transportation Engineering
- Institutional Buildings
- Commercial Buildings



Transportation investment increased in 2020 by \$20 million to keep the province functioning and connected at the time of crisis

12148 New Jobs in 2020

154% Startup's revenue growth in 2020

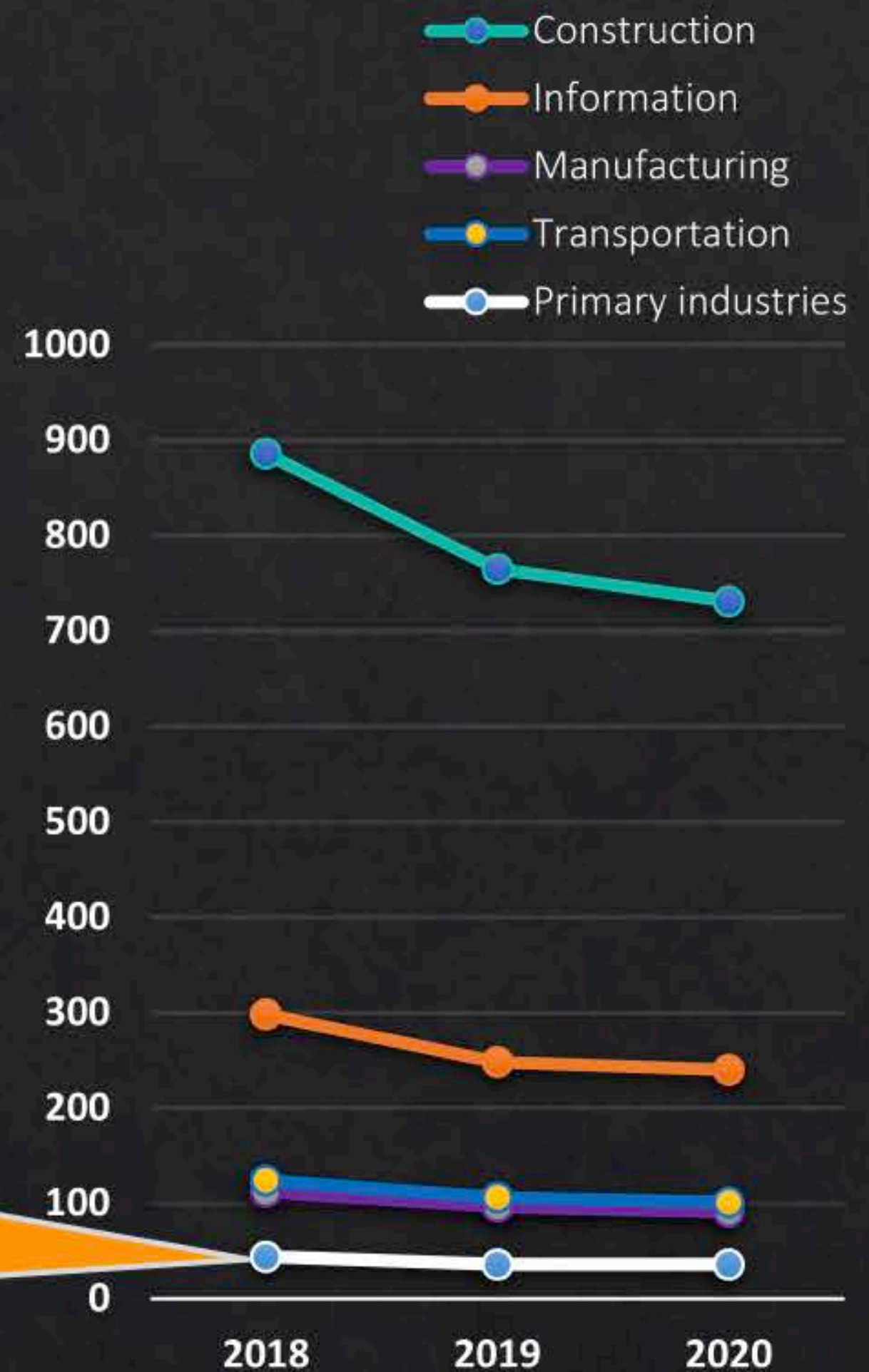
Key Insights

Shutdown of Manufacturing industry imbalanced the Supply and Demand chain in 2020.

In 2020 the total impact of infrastructure investment was \$1245 million.

Primary Industries' contribution of \$36 million remains unaffected by COVID-19 due to their pivot towards the digital market.

How much industrial push in economy? (In M\$)



Call to action

Support and recognise start-ups to promote local business.

Increase industrial and infrastructural investment to create more jobs and boost the economy after the pandemic.

Emphasize more on Research & Sustainable Development

THE SILENT EPIDEMIC in Nunavut



Team Nimmy

World's **Highest**
Suicide Rate in 2019



if Nunavut were
to be an
independent
country at

78.1 / 100,000

Suicide Age



Below 40



Below 30

4th Leading Cause of Death

- 1 Cancer
- 2 Circulatory Disease
- 3 Respiratory Disease
- 4 Suicides

Suicide Trend

1.7x



times increase
from 2018 to 2019

Per capita **Health Expenditure** in government sector

The Irony!!!

It has been consistently high in the last
few years, compared to other
provinces/territories in the rest of Canada

About

3x

more than the average
in Canada



Elements that multiply the risk of suicide

Low Education

No Diploma or
Degree or
Certificate



50.7 %

Family Violence

Canada

Nunavut

308

1913

Child Victims Per 100,000

Food Insecurity



3 in 5

households are
food insecure



79% of children are
food insecure

Violent Crime Rate



8x more than Canada

Sexual Assault

Victims Per 100,000

9x higher

than that of Canada

Housing Insecurity



5 in 10

live in social
housing



38% live in
overcrowded
conditions

National **Highest**
Unemployment

Nunavut **14%**

Canada **9.5%**



National **Lowest** Median
Annual Family Income

87,930

Canada



Nunavut

76,900

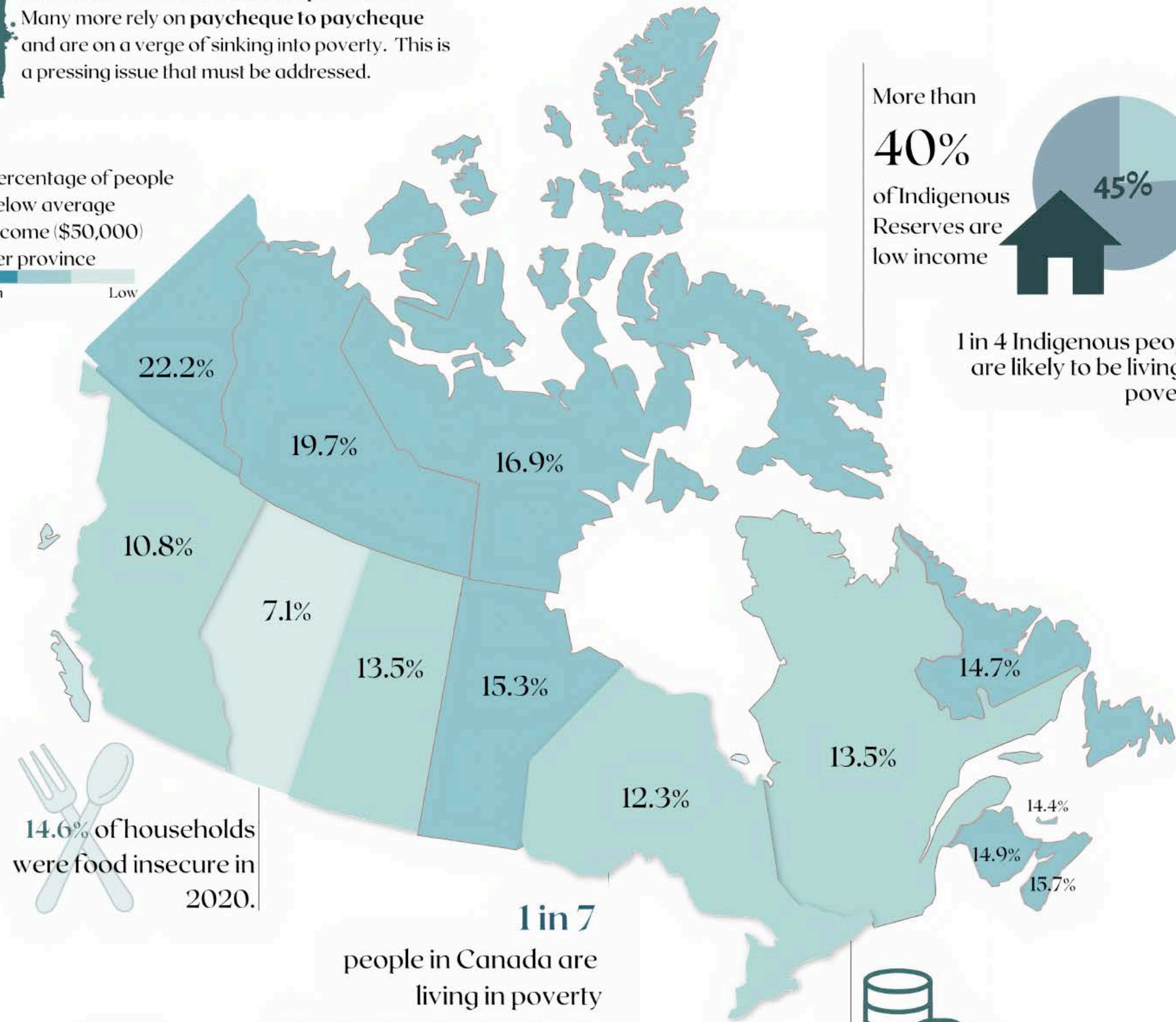


THE UNCOMFORTABLE TRUTH

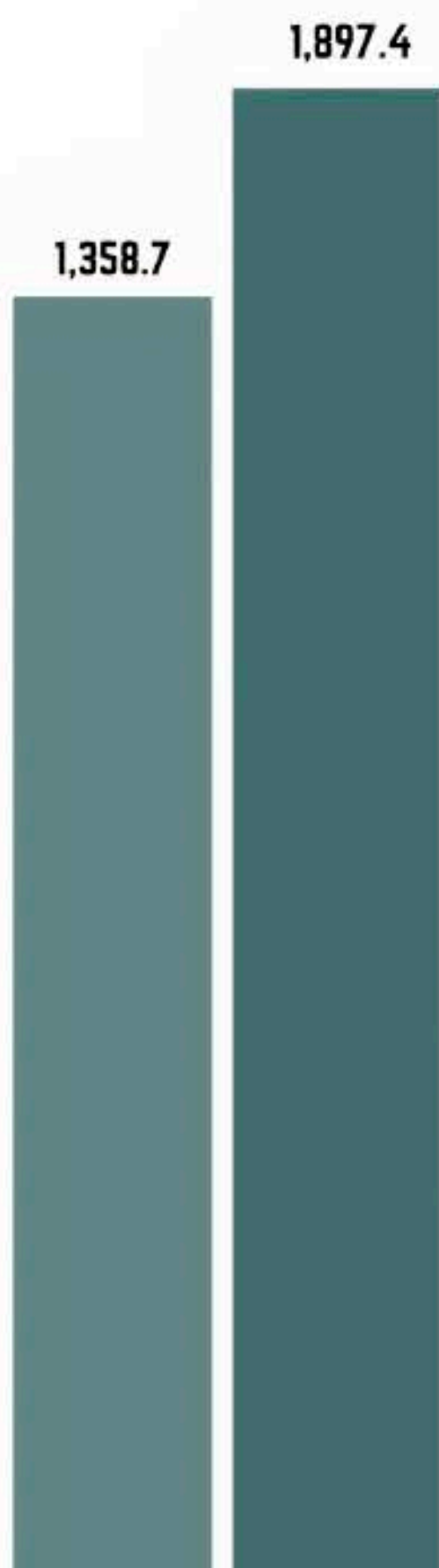
The truth cannot be denied. In light of Canada's richness and resources, a disproportionate amount of Canadians remain impoverished. Many more rely on paycheque to paycheque and are on a verge of sinking into poverty. This is a pressing issue that must be addressed.

Percentage of people below average income (\$50,000) per province

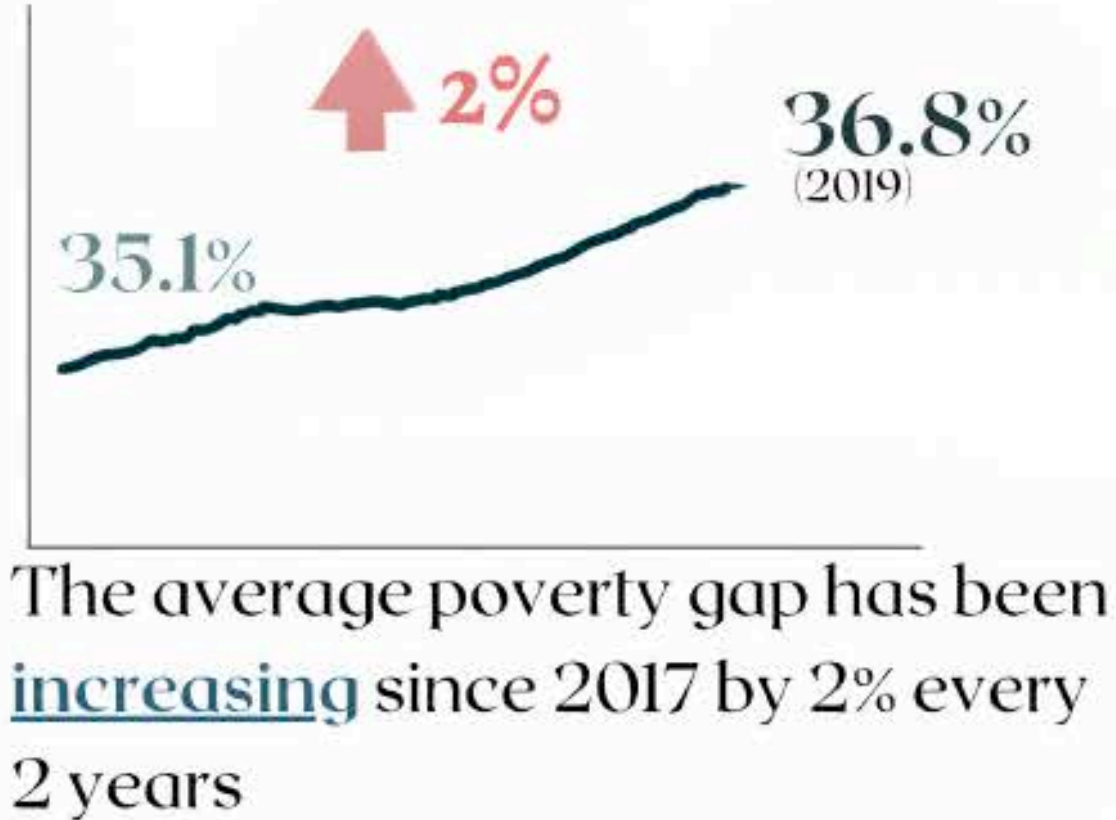
High Low



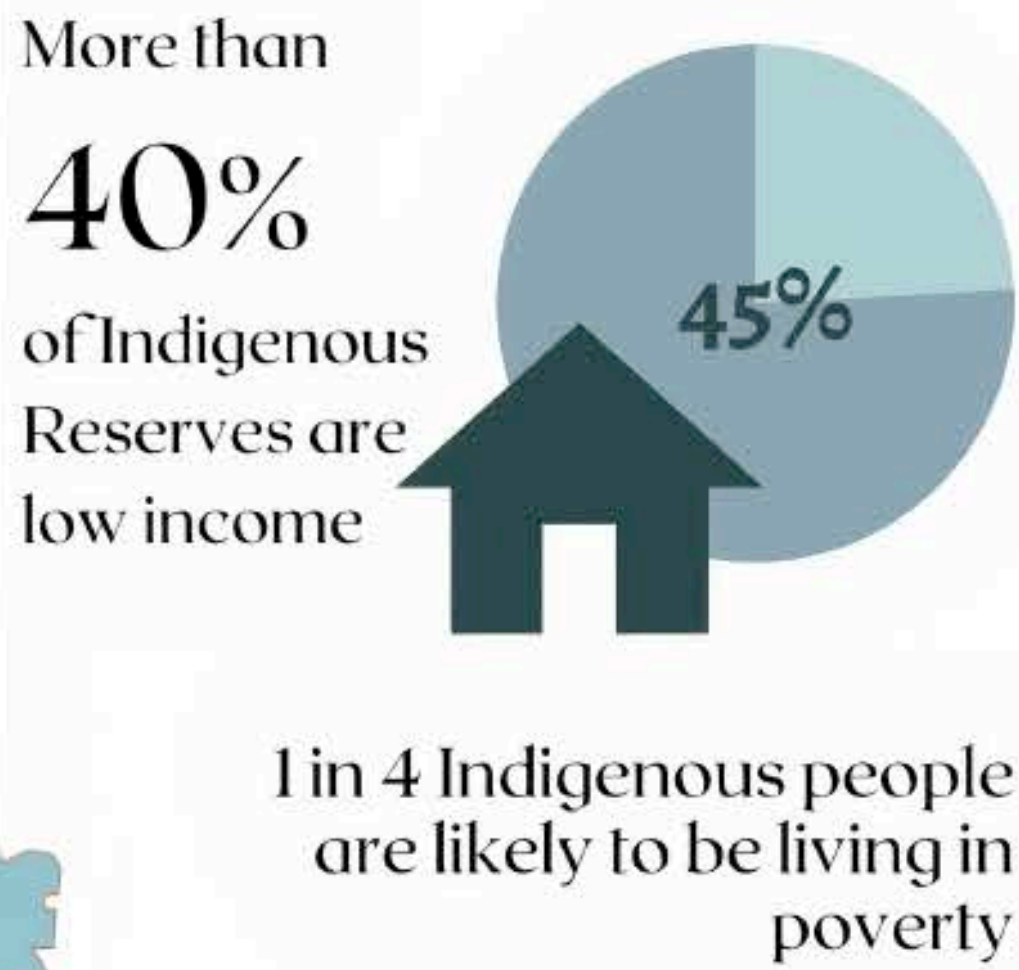
14.6% of households were food insecure in 2020.



Unemployment Increased by 39.7% over 5 years.

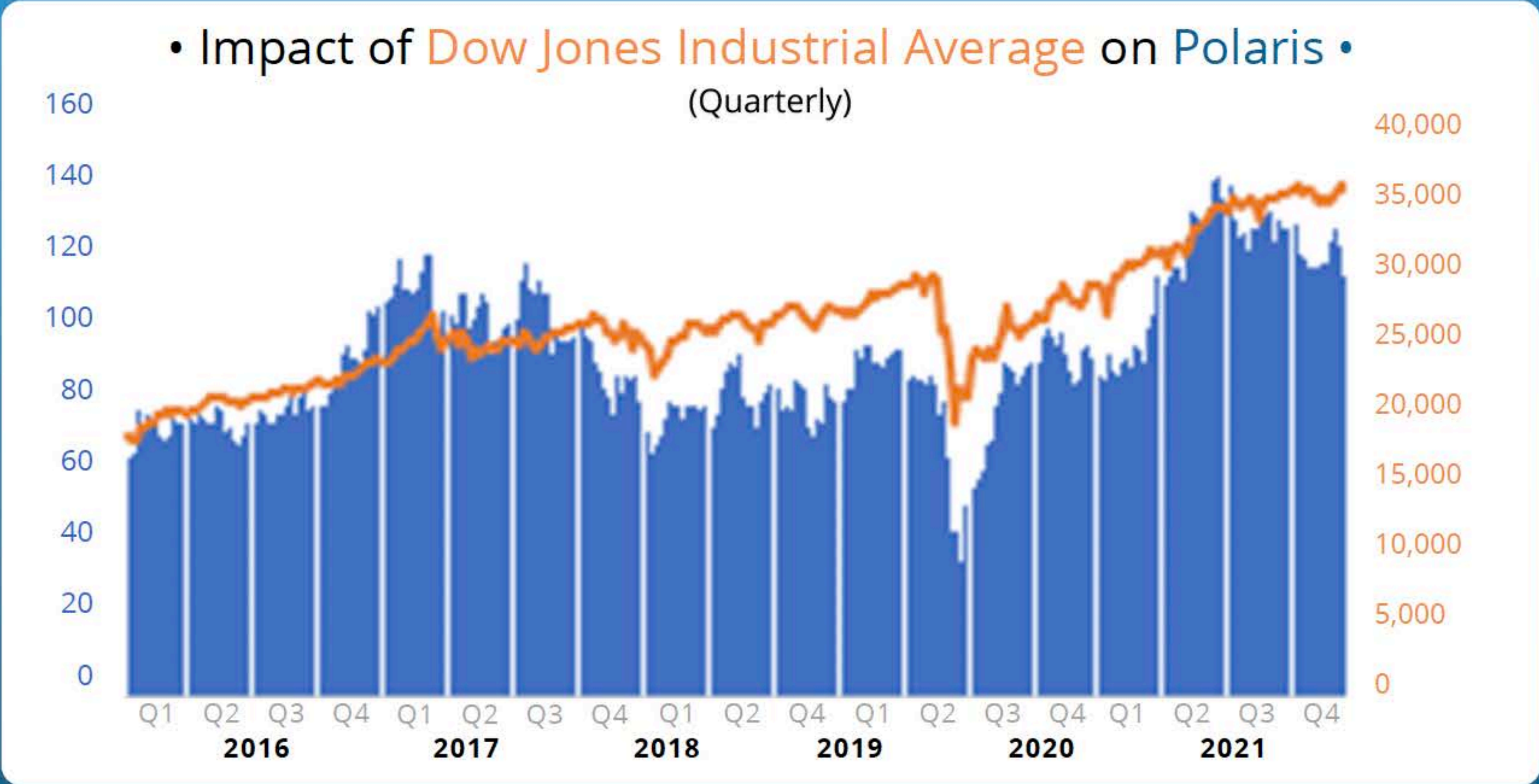
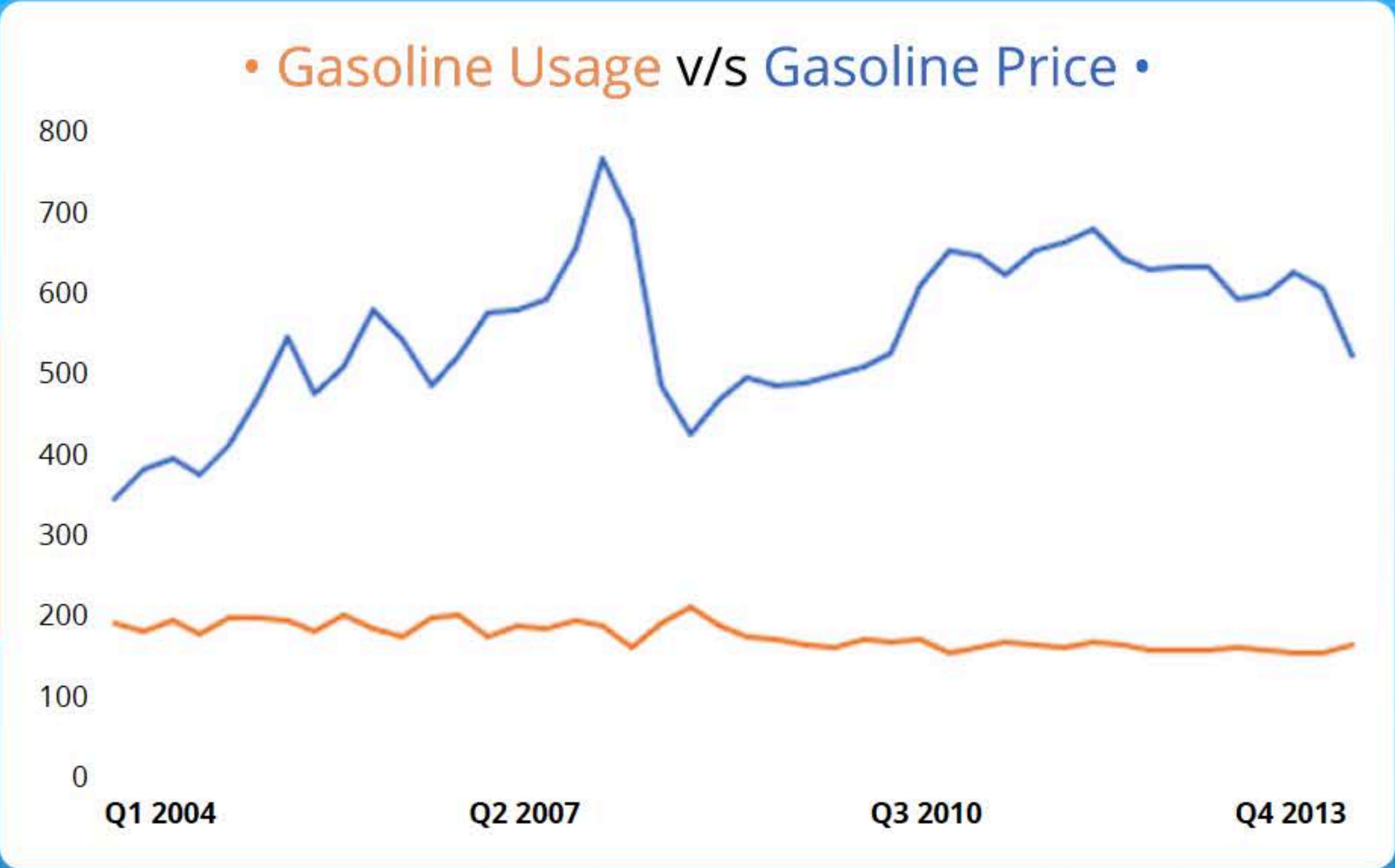


POVERTY IS NOT AN ACCIDENT.
TOGETHER WE CAN PUT AN END TO IT.



A Call-to-Action Pathway to a Sustainable Environment

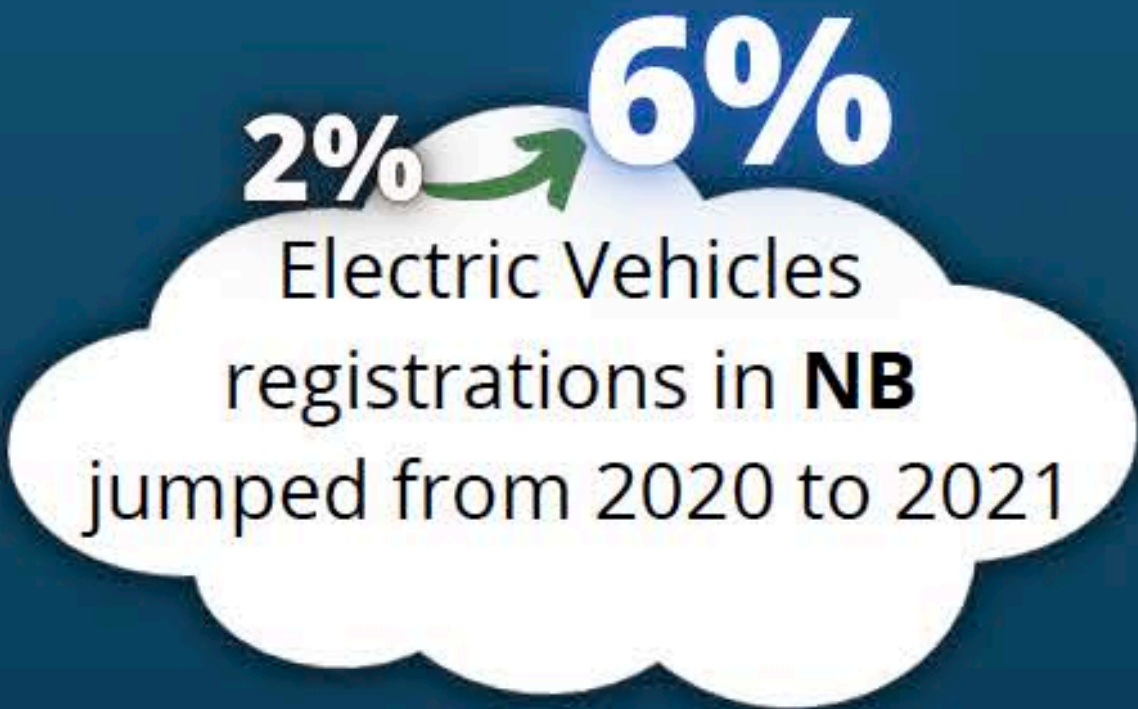
Our call-to-action is to create awareness about ending fossil fuel subsidies. Creating green tech & clean tech more accessible for all in NB



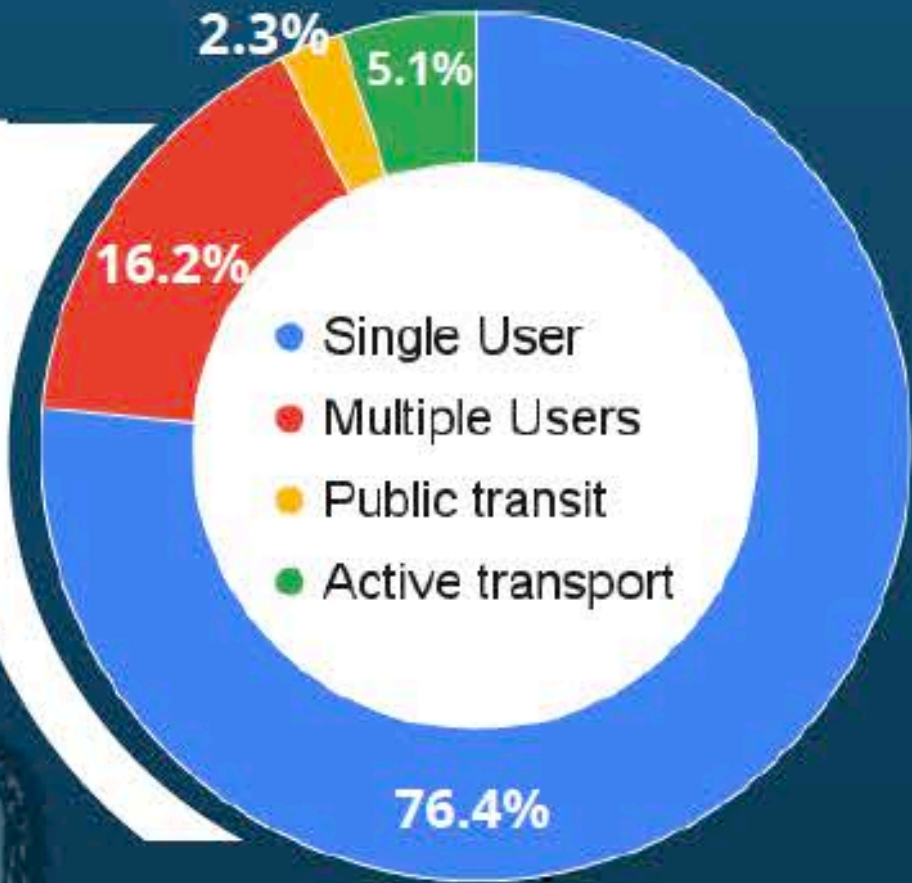
Fossil Fuel subsidies need to be discontinued and clean & green tech start-ups need to be empowered with those subsidies. E-Vehicles need to be subsidized. An ecosystem needs to be set up in New Brunswick for a successful harboring of E-Vehicles & electric transit system.



• 2020 Fossil fuel subsidies v/s Average of Previous Years v/s Green Energy Subsidies •



Total Population of NB: 747,100
2.3% depend on a public transit system that currently runs on fossil fuels. If this transit system goes green, approx 17000 people's carbon footprint will reduce. An average Canadian produces 14.2 tonnes of CO2.



- Call-to-Action for NB •
- Reduce Fossil Fuel Subsidies
 - Subsidize Sustainable & Green Tech more
 - Make Electric & Clean Transport Accessible.
 - Mandate: Right to repair, Safe discarding off Li-ion batteries, Lower Maintenance Cost.

DESIGNED BY:
TEAM MAJESTIC

GLOBAL WARMING

WHAT IS IT?

The rapid increase in Earth's average surface **temperature** over the past century, primarily due to the **Greenhouse Gases (GHG)** released by **burning fossil fuels**.

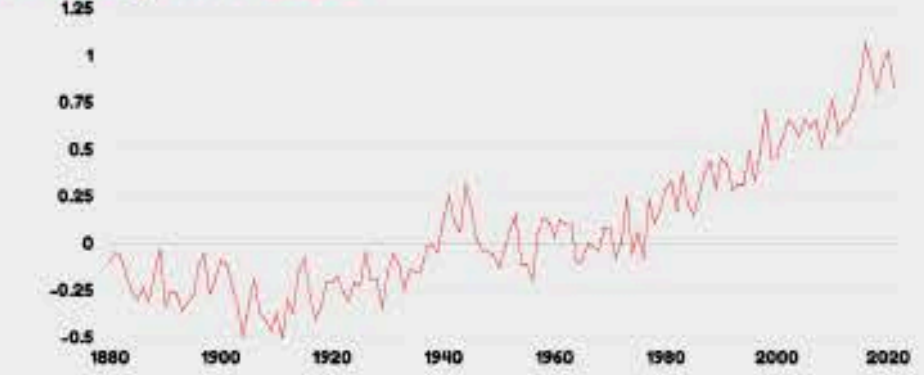
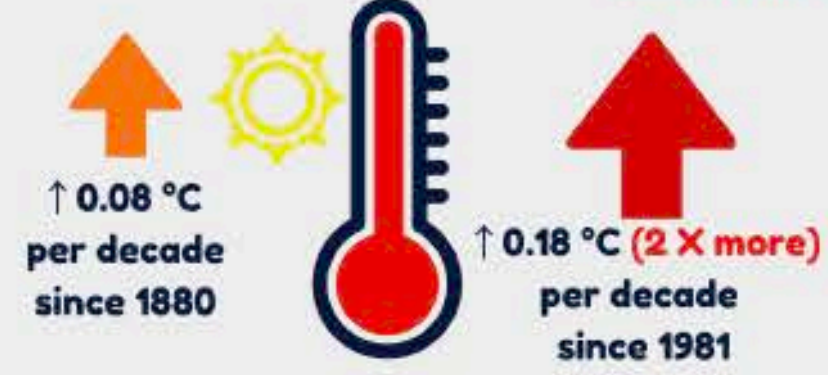


The earth's surface temperature in 2020 was around 0.98 °C **warmer** than the 20th century average.



WHY A CONCERN?

Global land and ocean temperature, 1880 - 2020



The global atmospheric carbon dioxide (CO₂) in 2020 was 412.5 ppm, setting a **new high** despite economic slowdown due to the Covid-19 pandemic.



In 2020, approximately **84%** of the world's energy consumption needs were met through fossil fuels.

CANADA

WHERE DO WE STAND?

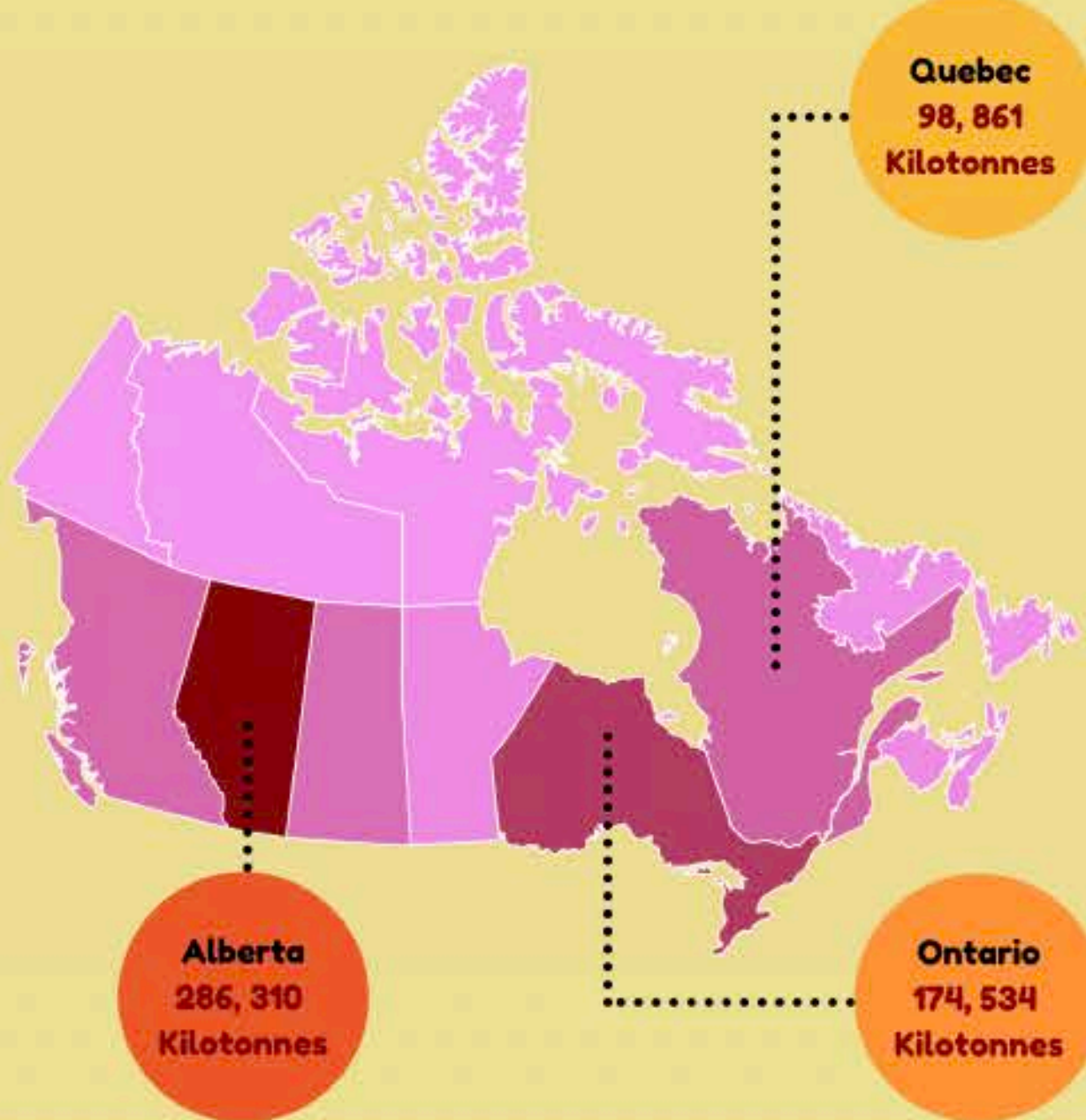


Average energy use per person in 2019
105,540 kWh
≈ **5 X**
of the world average usage per person

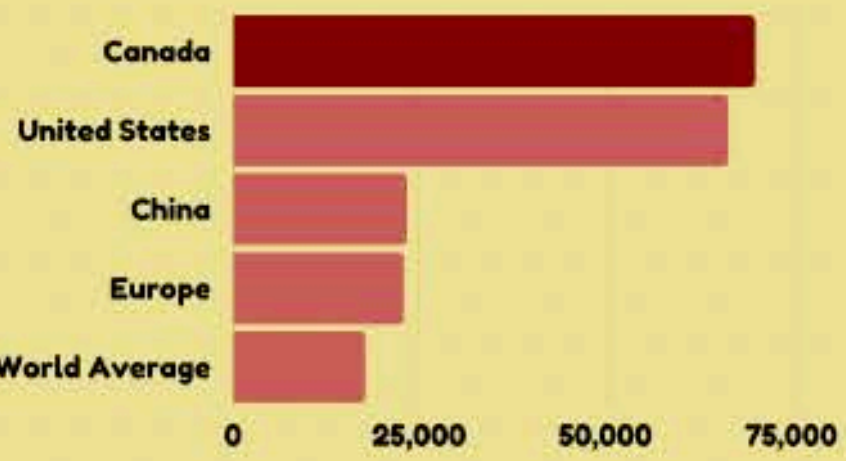


1.5% | TOP 10
of world's total GHG emission, 2018

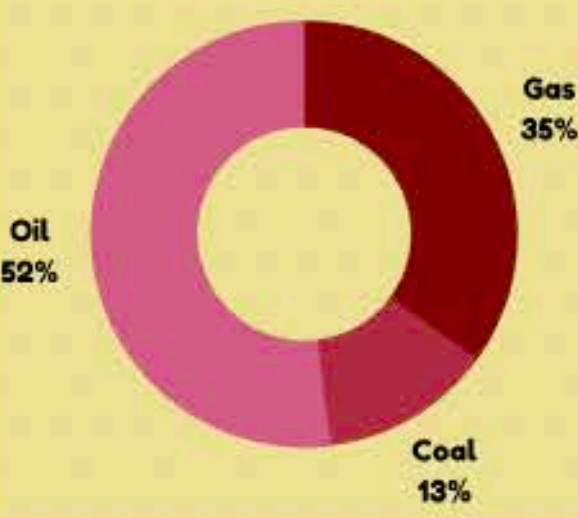
GHG emission by State, 2018



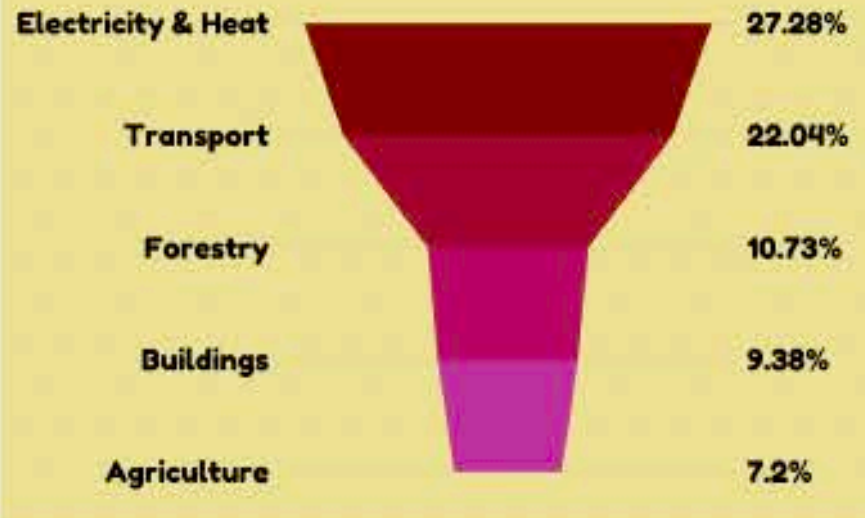
Fossil Fuel Consumption per Capita (kWh), 2019



Fossil Fuel Consumption by Type, 2019



Top 5 GHG emission by Sector, 2016

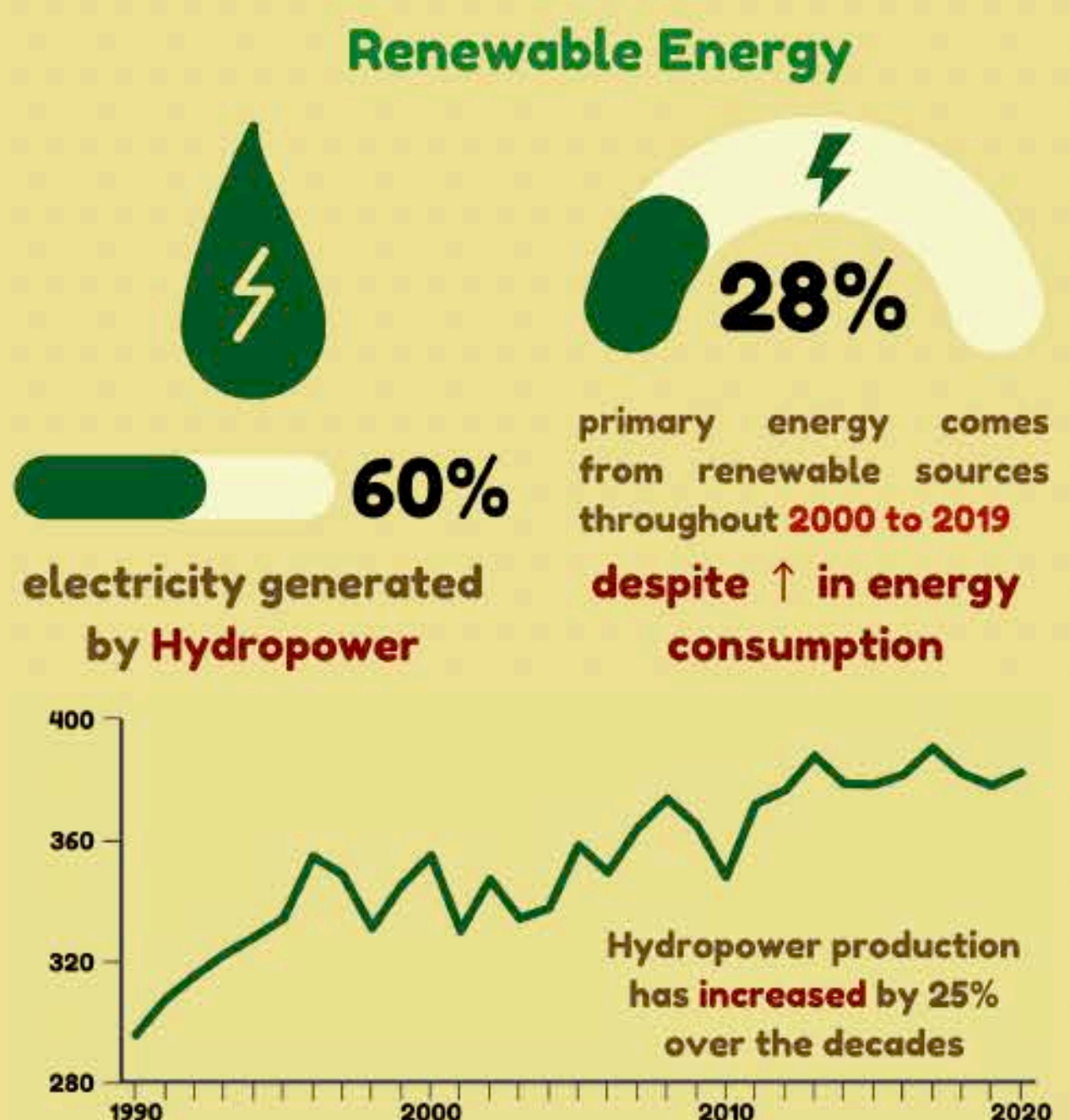
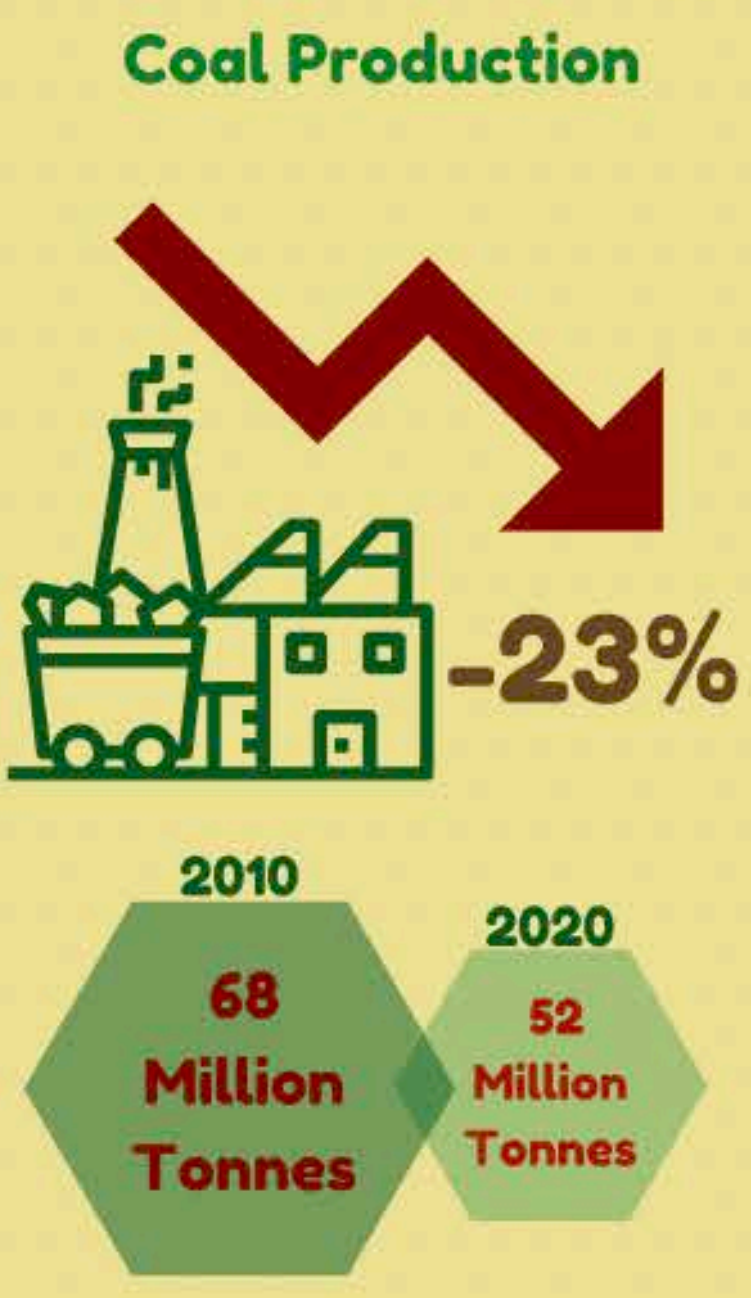


BARRIERS

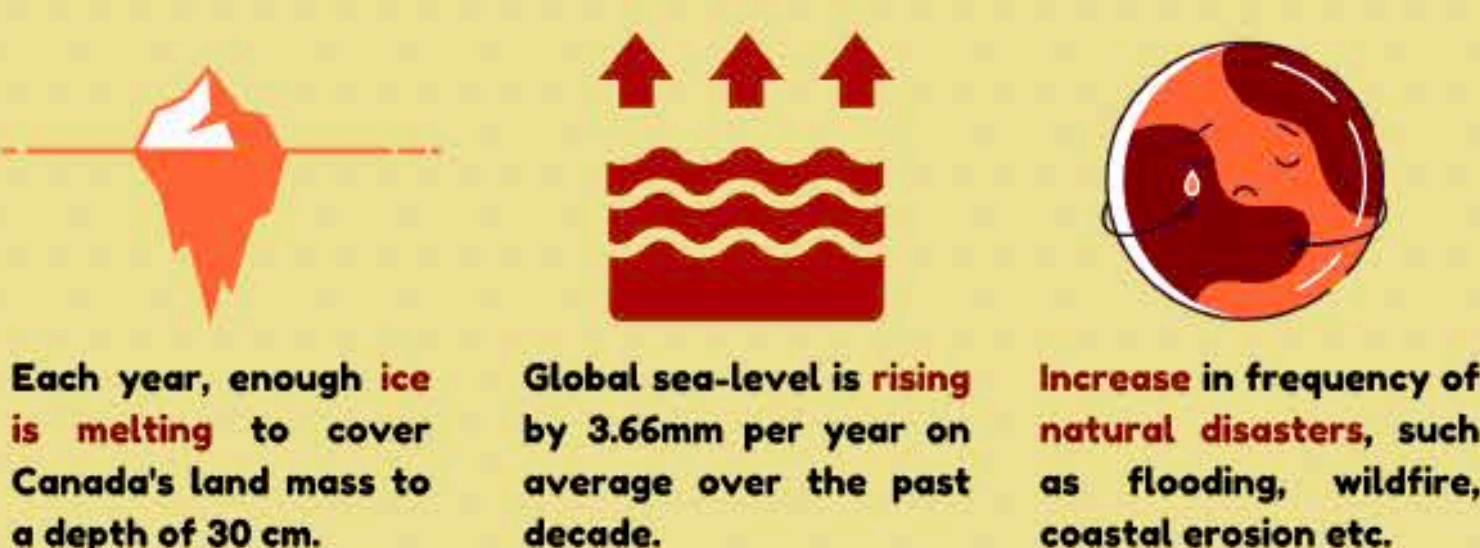


7 out of 10 Canadians **did not** engage in activities aimed at conservation or protection of the environment without pay

PROGRESS



RISKS



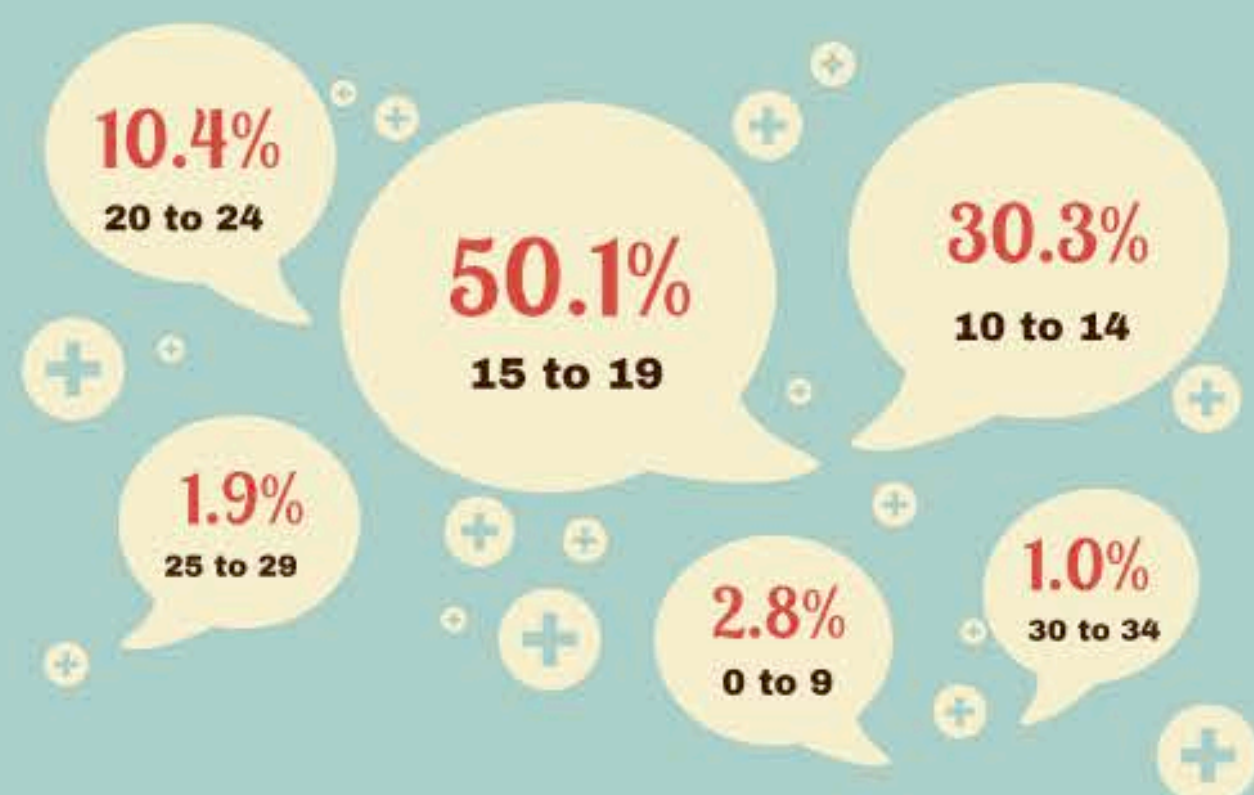
PROPOSITION



Tobacco control in Canada —

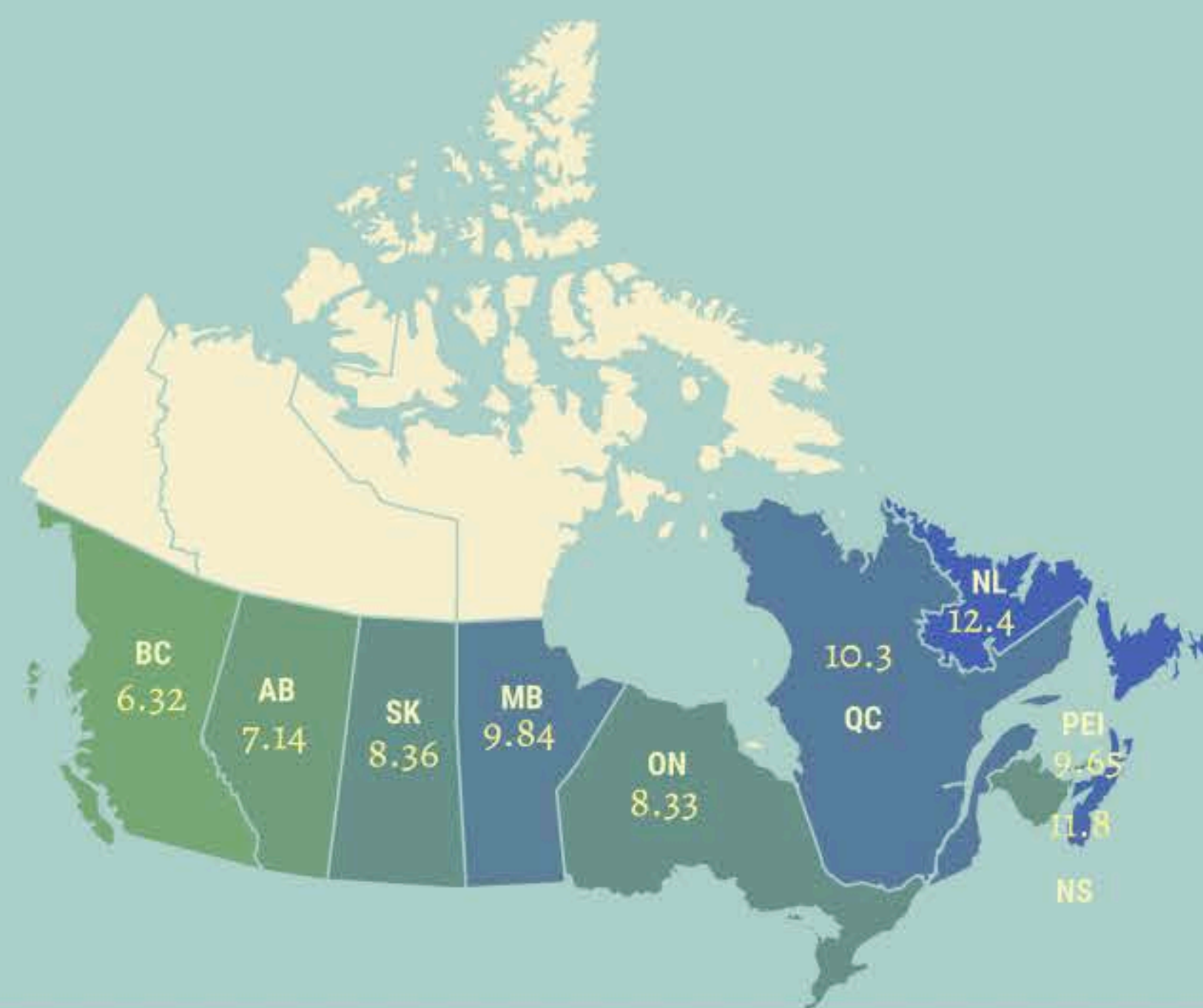
Starting from reducing tobacco exposure in teenage groups

87% Started Smoking / Vaping from 19 or Younger 

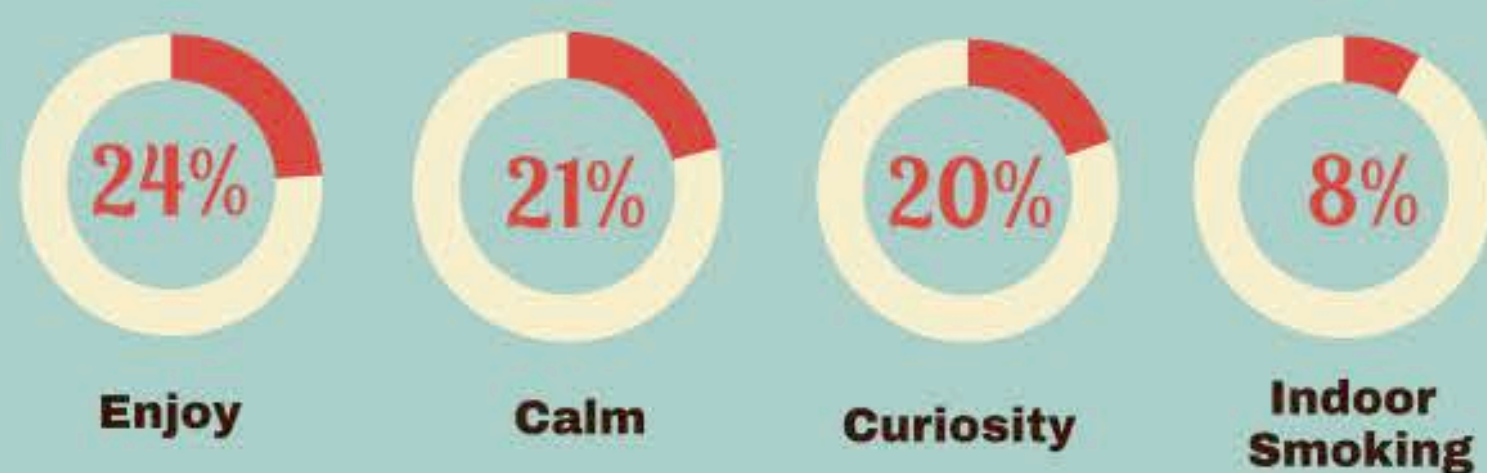


Age Distribution of First-time Smoker

Smoking Population Proportion by Province(%)



Teenagers: Major Reasons for Vaping



Where do they obtain vaping device?

Most of vaping device come from...



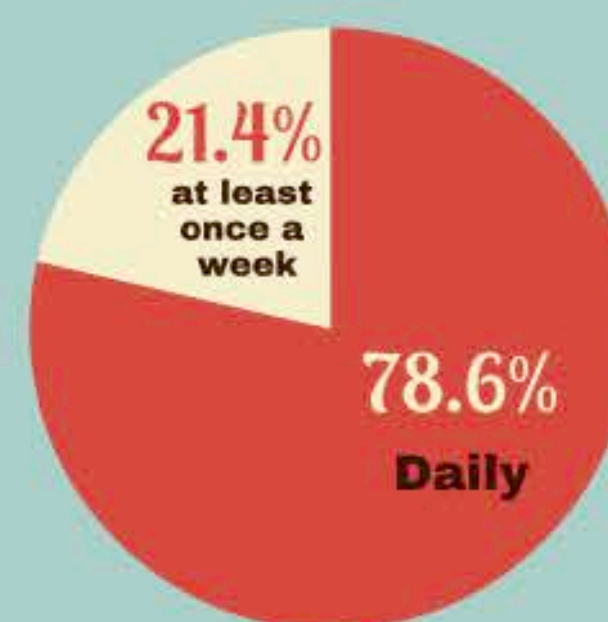
Attitudes towards vaping vs smoking?



Potential Ways to Quit Smoking



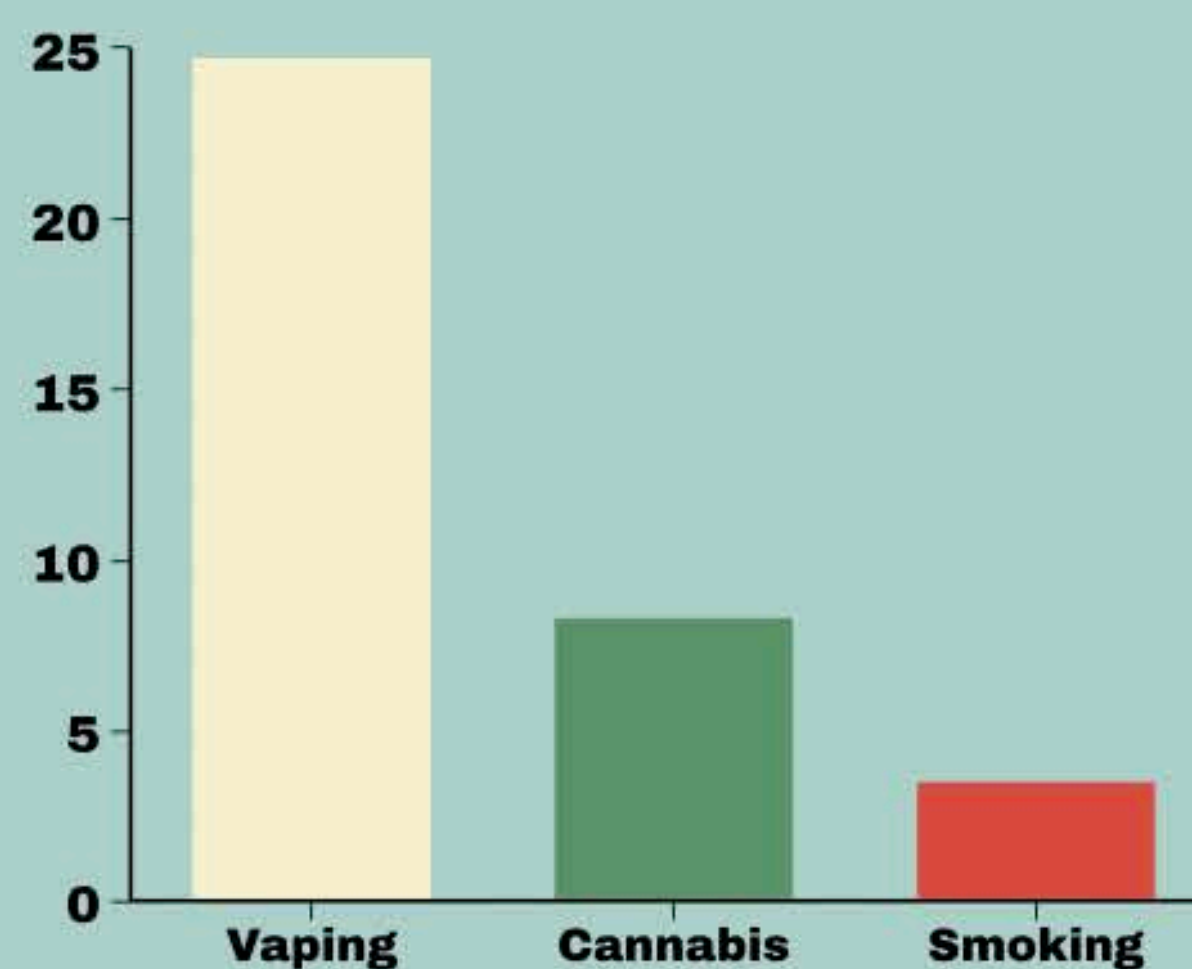
Smoking HABITS



Majority of people

Smoke Everyday

First Tobacco Products Tried by Teenagers



01

CONTROL VAPING ADVERTISING & SALES PROTOCOL

Vaping has become the main trigger for teenagers to smoke; 25% of teenagers tried vaping as their first tobacco product and 42% **directly** obtain vaping devices from shops.

02

EDUCATING PARENTS & TEENAGERS ON TOBACCO'S DAMAGE

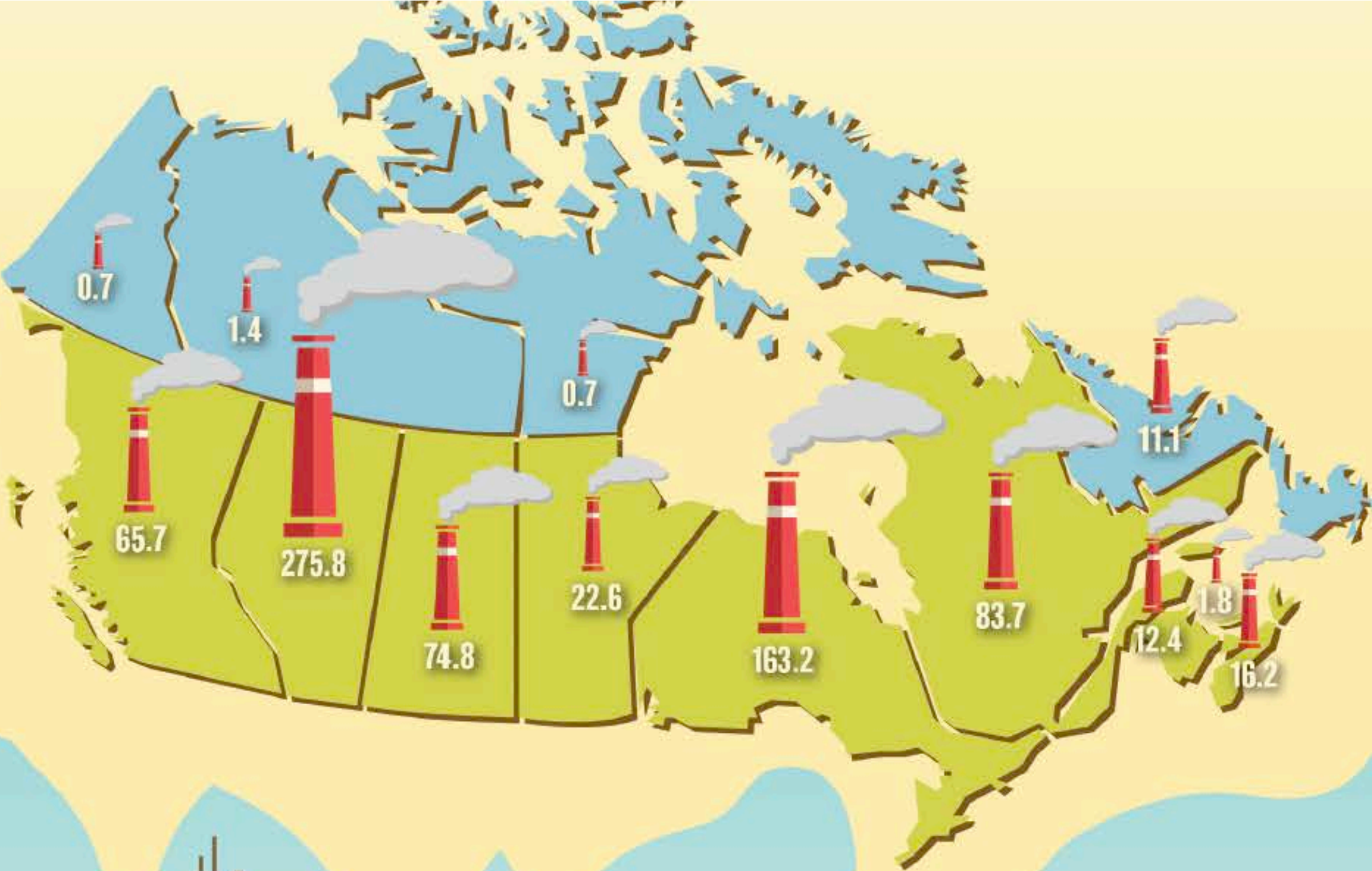
37% of teenagers tried vaping from family and friends' vaping devices, and 43% of teenagers think vaping is less harmful than smoking.

03

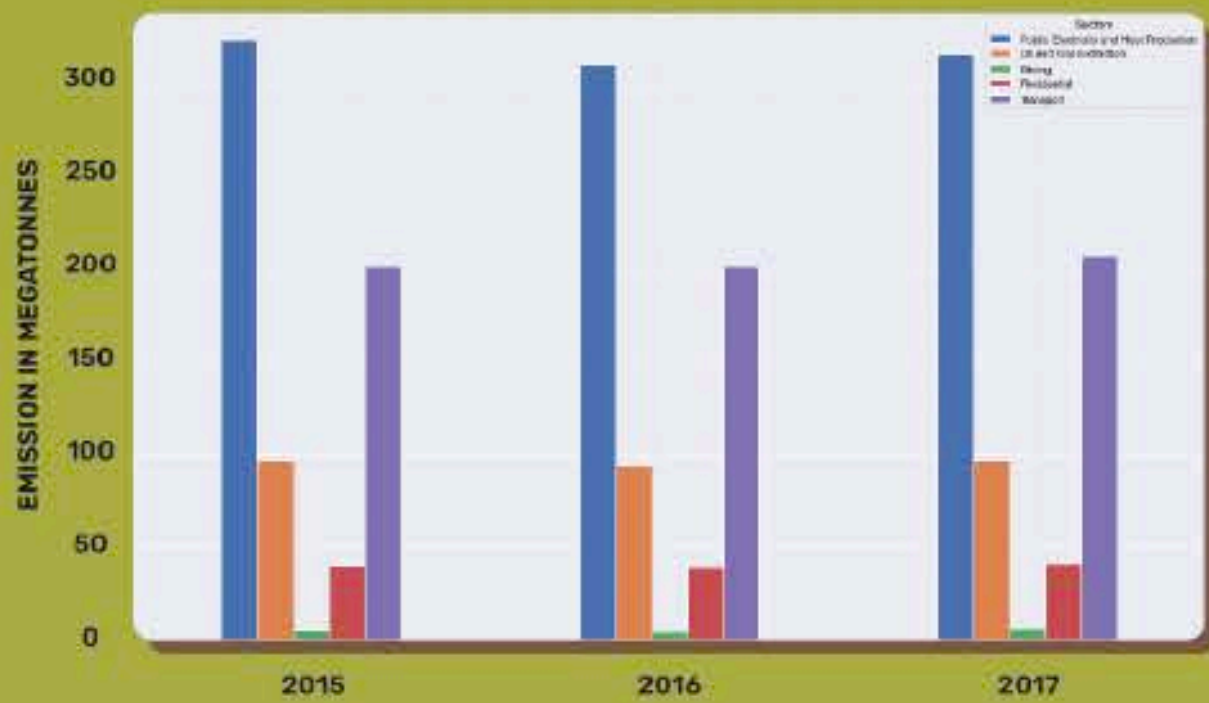
INITIATE SMOKING CESSATION PROGRAM & DECREASE TOBACCO PRODUCTS EXPOSURE ON SOCIAL MEDIA

CANADA GREENHOUSE GAS EMISSION STUDY

(EMISSION IN MEGATONNES)

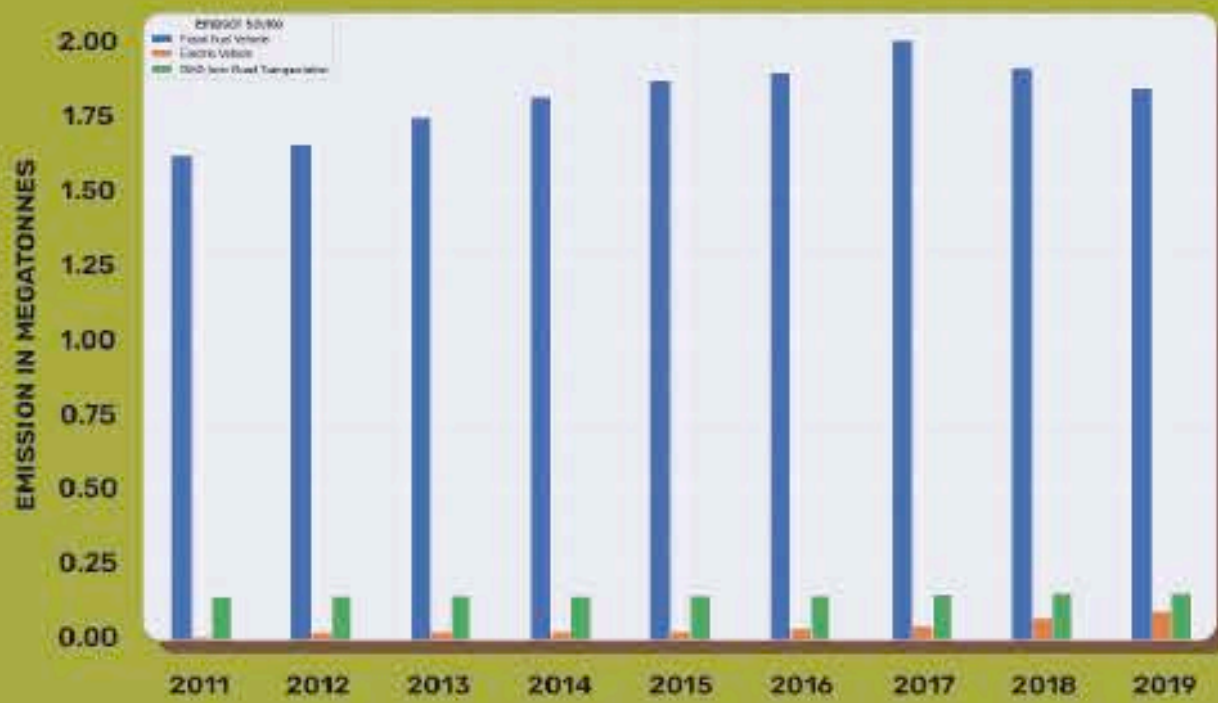


2015-2017 GHG EMISSION BY SECTORS



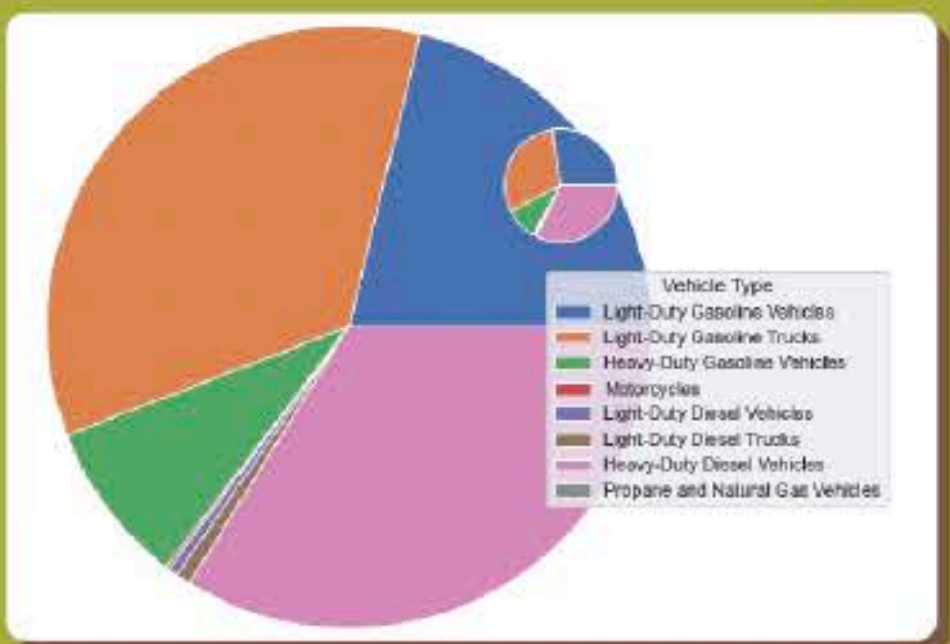
In general, public electricity and heat production and transportation count as the largest portions for GHG emission in Canada.

2011-2019 GHG EMISSION BY SOURCE



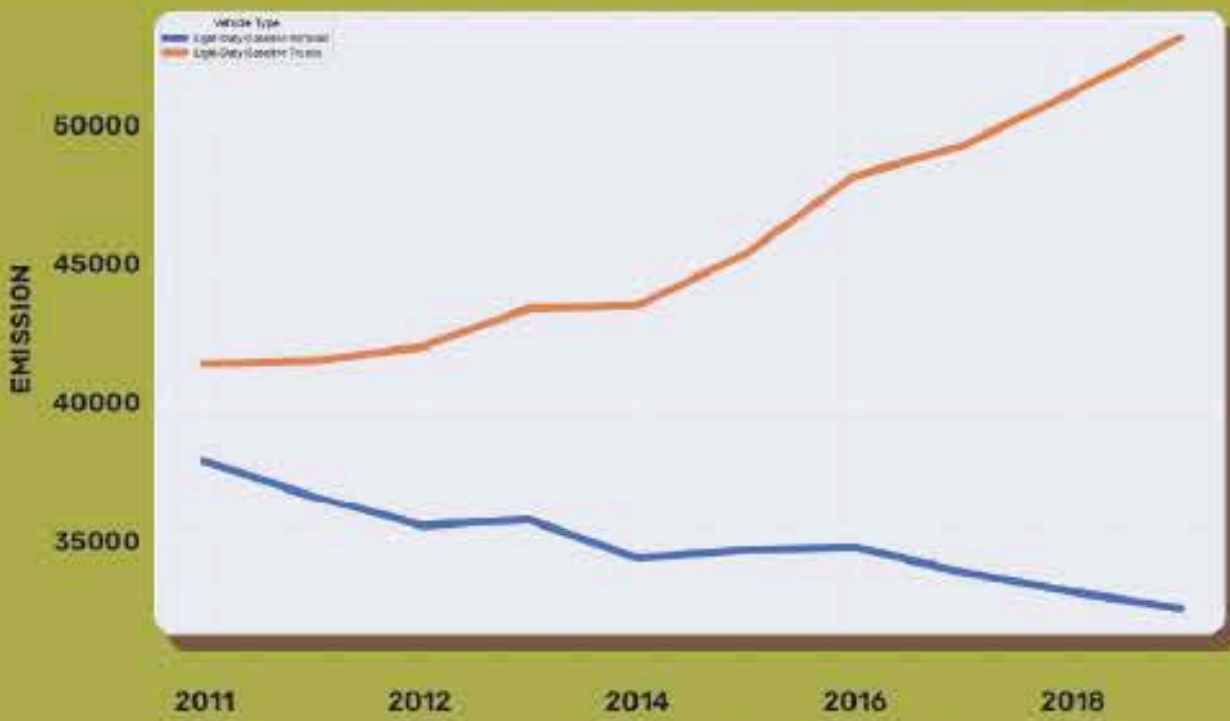
While emission from EV has been increasing year by year possibly due to the incentives, the emission from fossil fuel vehicle has only been decreasing since 2017.

OAD TRANSPORTATION GHG EMISSION BY VEHICLE TYPE 2010 V.S. 2019



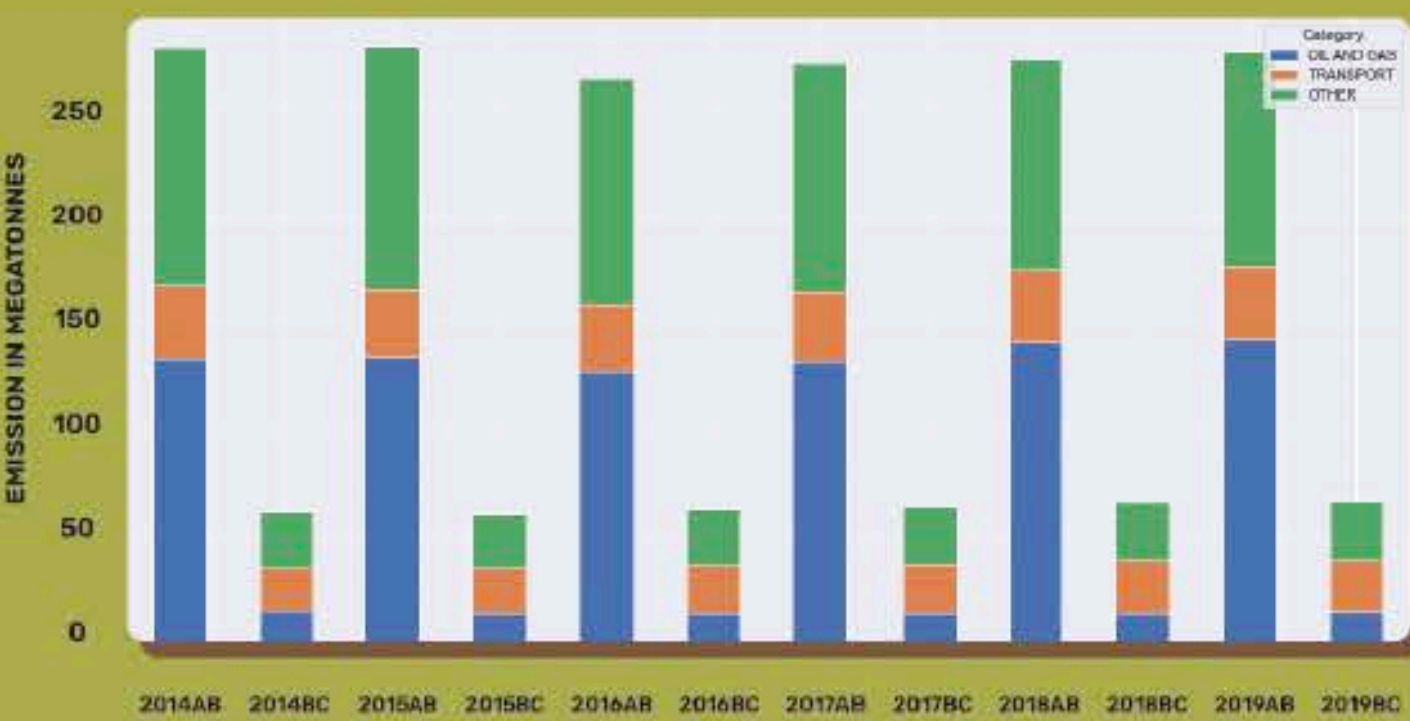
There has been a shift in the emission by vehicle type from 2010 to 2019: light-duty gas vehicles decreased from 28% to 21% while light-duty gas trucks increased from 30% to 35%.

2011-2019 GHG EMISSION LIGHT-DUTY GASOLINE VEHICLES VS LIGHT-DUTY GASOLINE TRUCKS



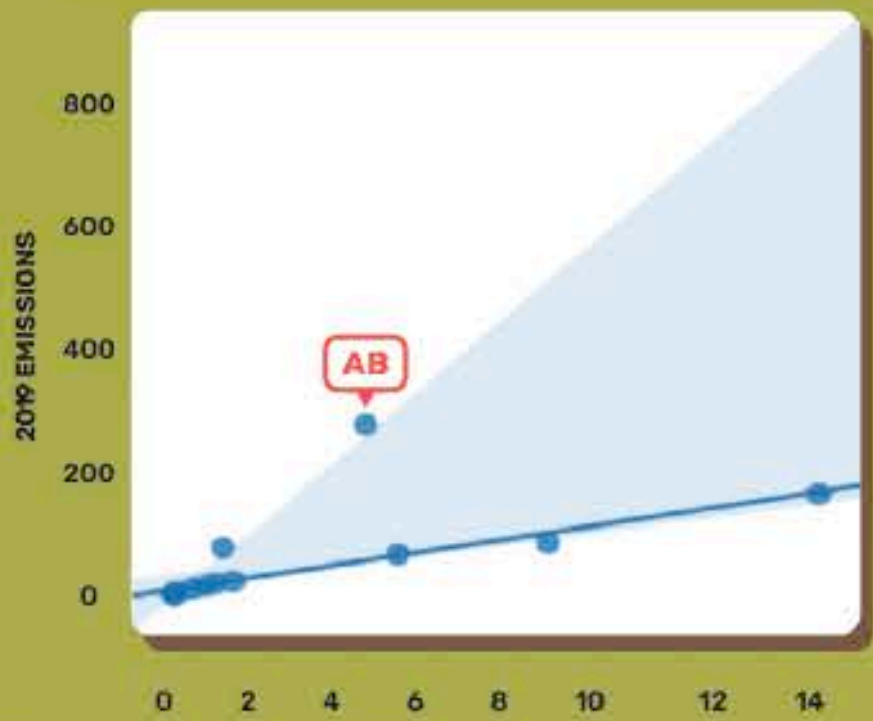
Despite the decrease of emission from gas vehicles, the emission from gas trucks has been increasing drastically through the years.

EMISSION BY CATEGORY 2014-2019 IN BC & AB



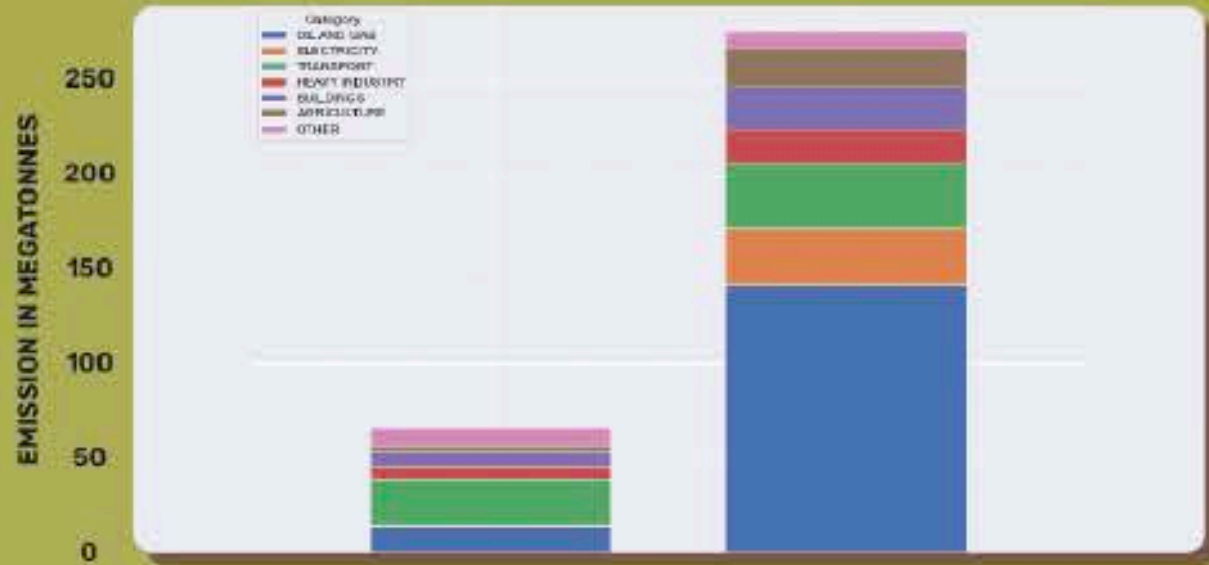
Even though AB and BC have similar population, the greenhouse emission levels are significantly different.

2019 CANADA POPULATION BY PROVINCES V.S. EMISSIONS BY PROVINCES



Linear regression model of population v.s. emission by provinces indicating Alberta as the only outlier despite the assumption that the population and emission are positively correlated. Possible explanation could be the dominance of oil and gas industry in Alberta.

2019 GHG EMISSION BY CATEGORY BC VS AB



While the emission by category in BC is nearly evenly distributed with emission from transportation being the largest, a significant portion of emission in AB is from oil and gas. This can be justified since AB is known as the oil and gas province in Canada.

DATA SOURCES:

Government of Canada. (2021). Greenhouse gas sources and sinks: executive summary 2021. Government of Canada.

Environment and Climate Change Canada. (2021). National Inventory Report 1990 - 2019: Greenhouse Gas Sources and Sinks in Canada. Government of Canada, Environment Canada, Greenhouse Gas Division.

Team Rocket:
Adrian Peng, Winston Peng, Eva ma, Jack Hong

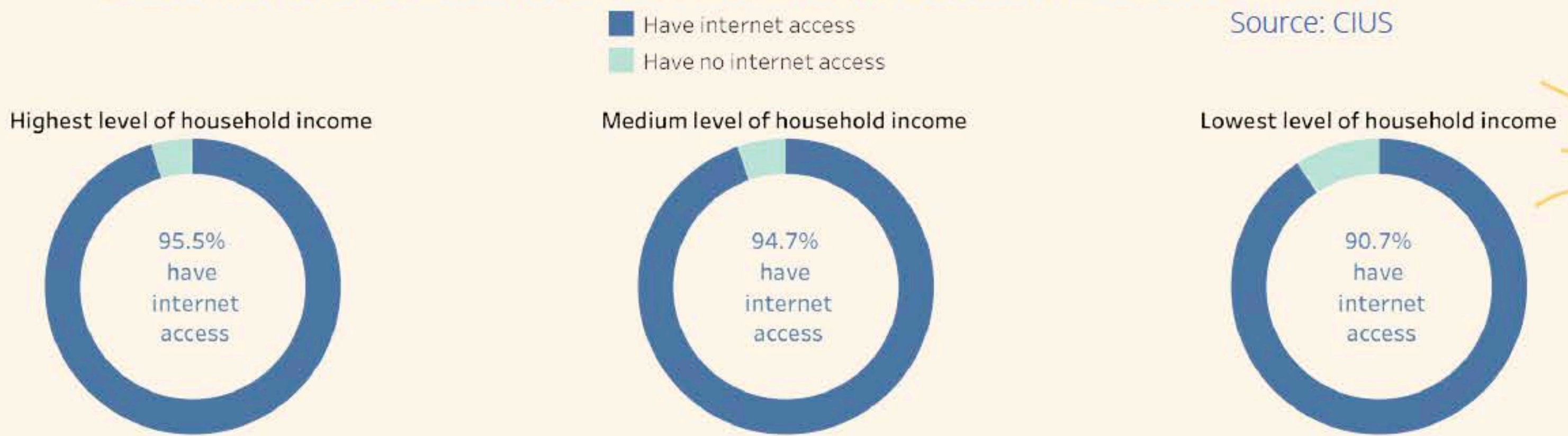


How is internet access affecting remote learning in NB?

By: The Visionaries

Does the level of income affect the internet access in Canada in 2018?

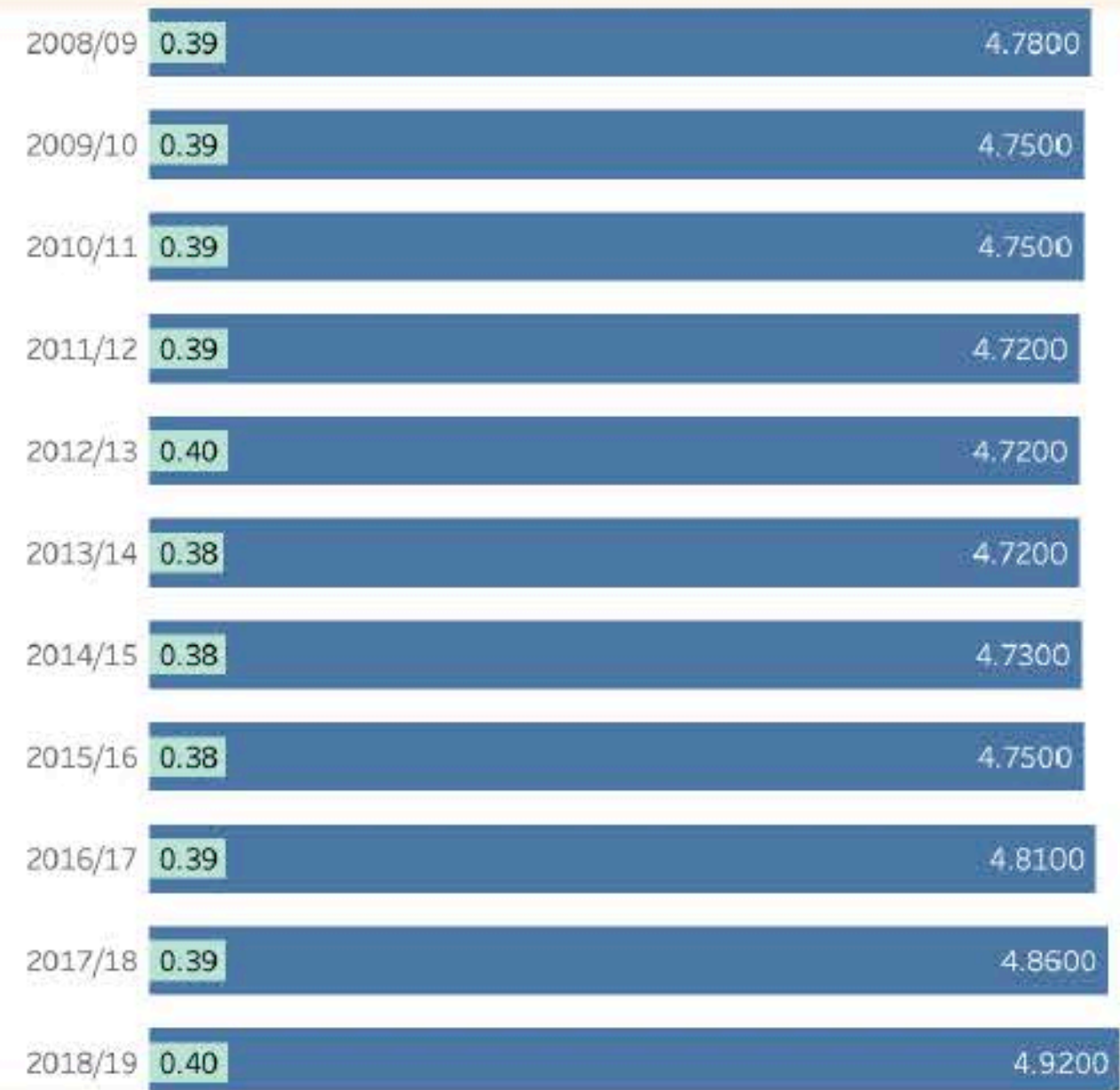
Source: CIUS



Is it sufficient enough to have approximately the same number of teachers for the increasing trend of student enrollment in public elementary and secondary school in Canada for better Quality of Education? Students and teachers are in Millions.

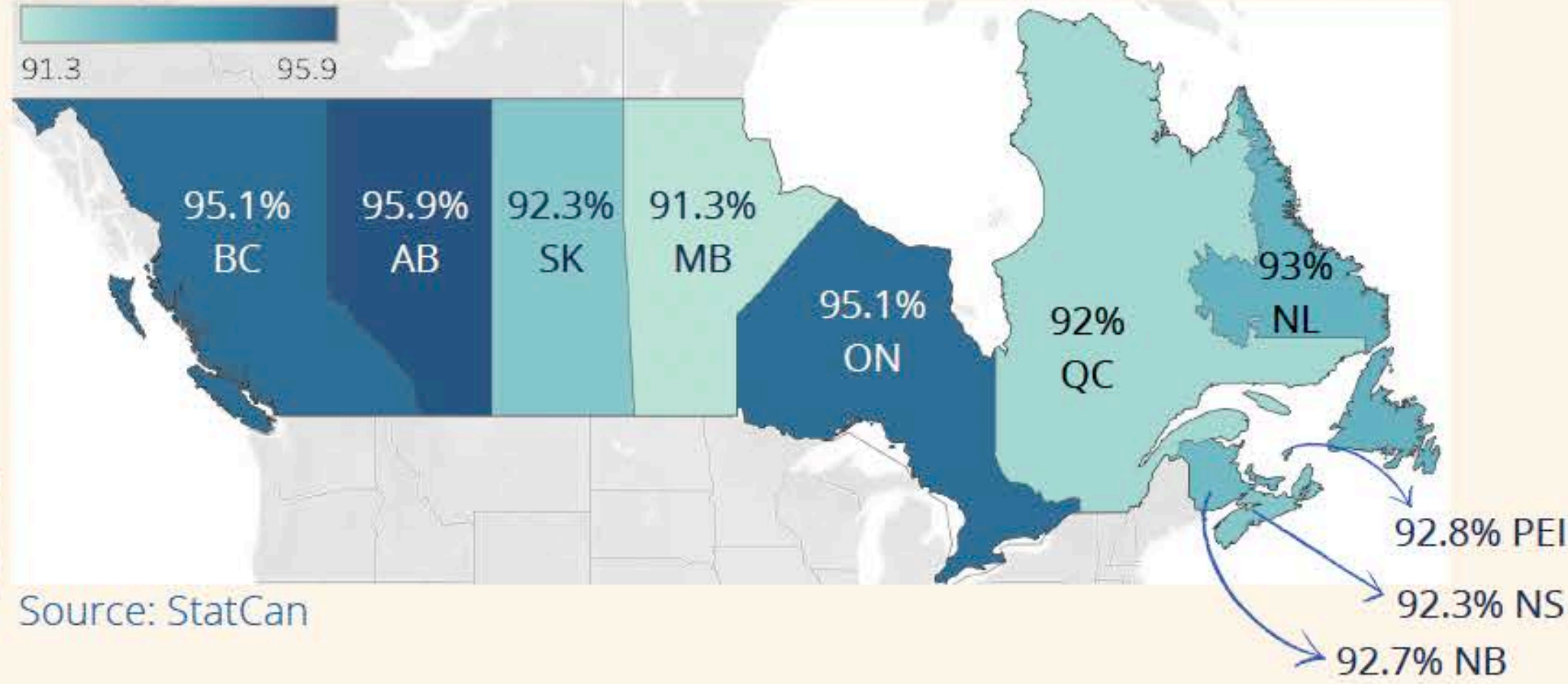
Source: Statista

■ STUDENTS
■ TEACHERS



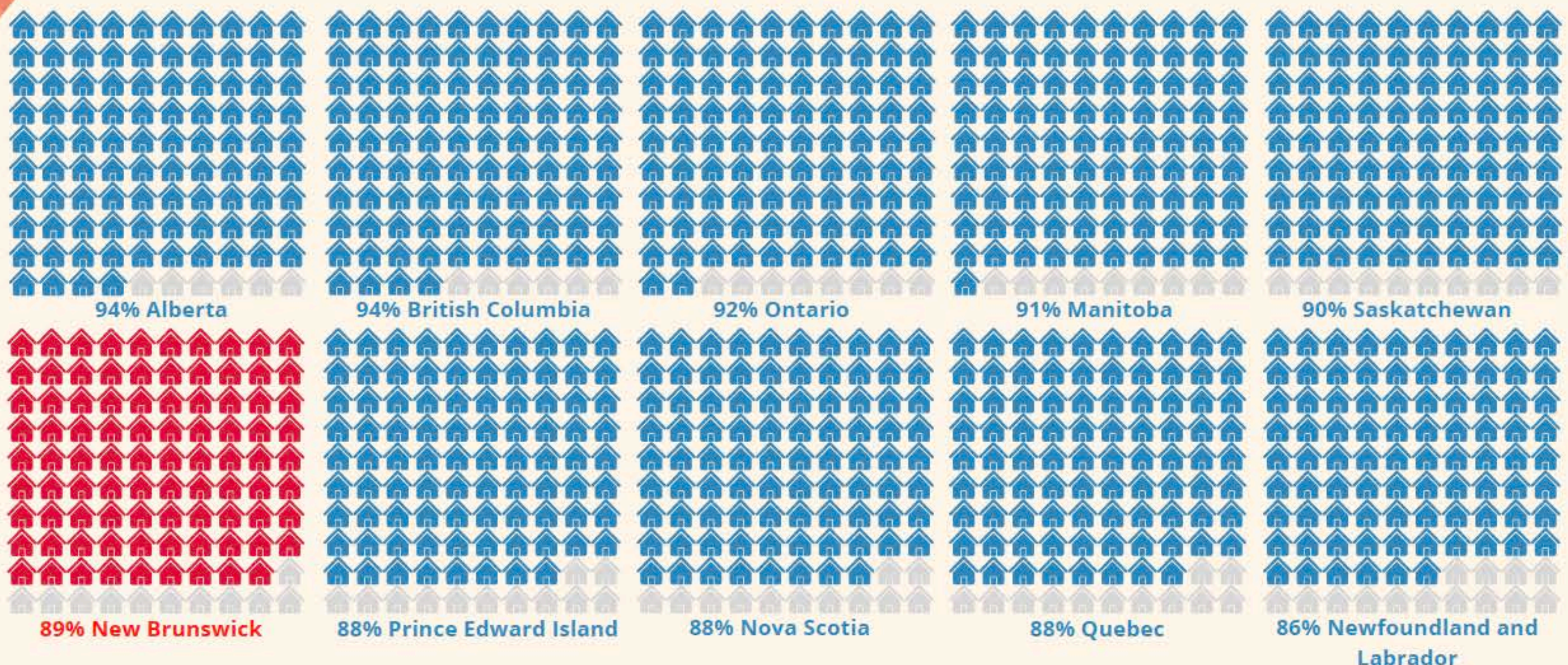
Is the poor network coverage a reason for New Brunswickers to have less access to the internet at home in Canada compared to other provinces in 2020?

Percentages



Based on internet usage by province, **New Brunswick** is at bottom five (2018)

Source: StatCan

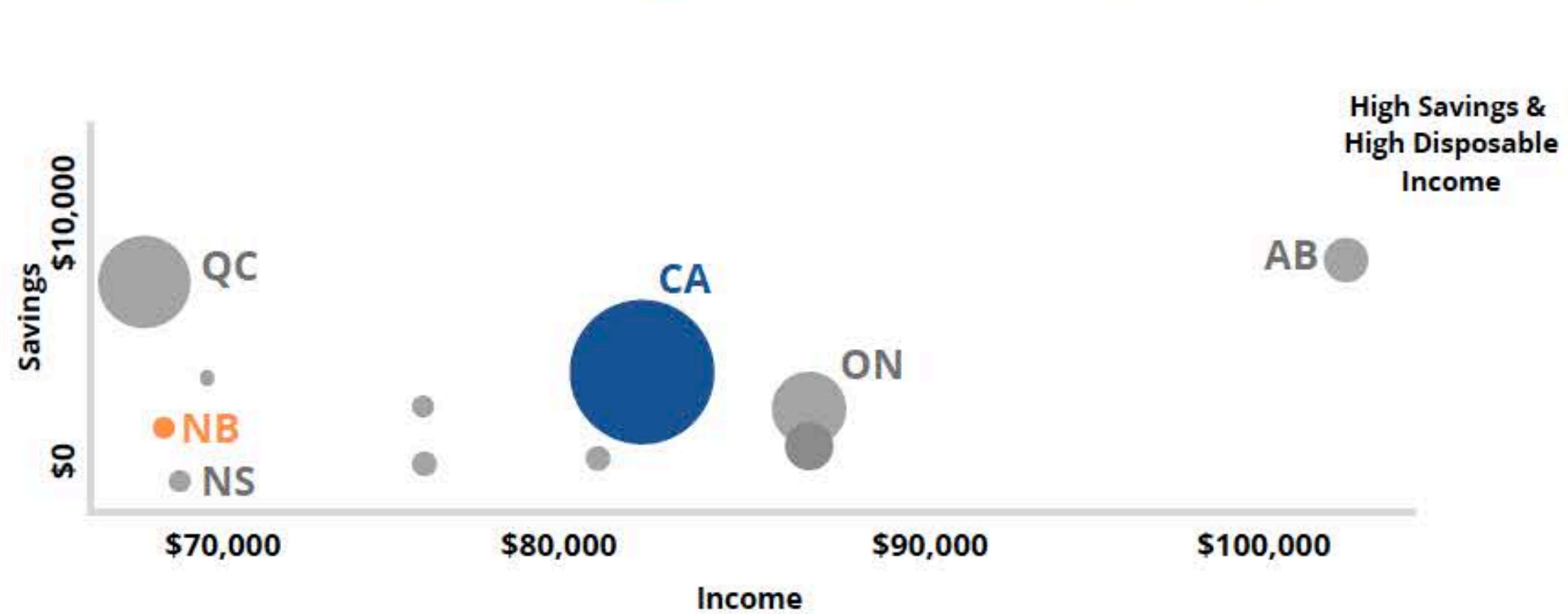


NB : Stuck in Loop?

Minimum Wage

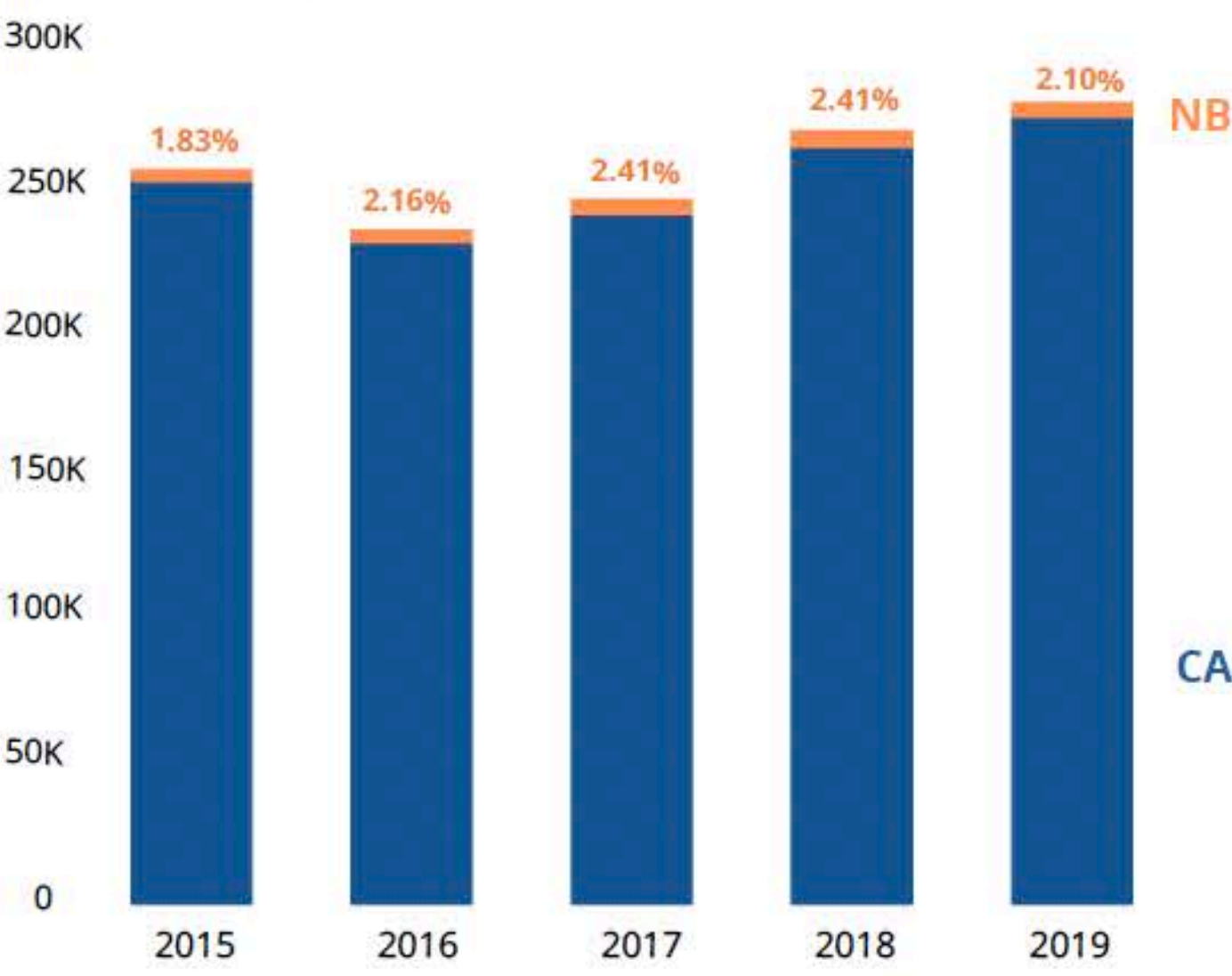


Income vs Savings : Households (2019)

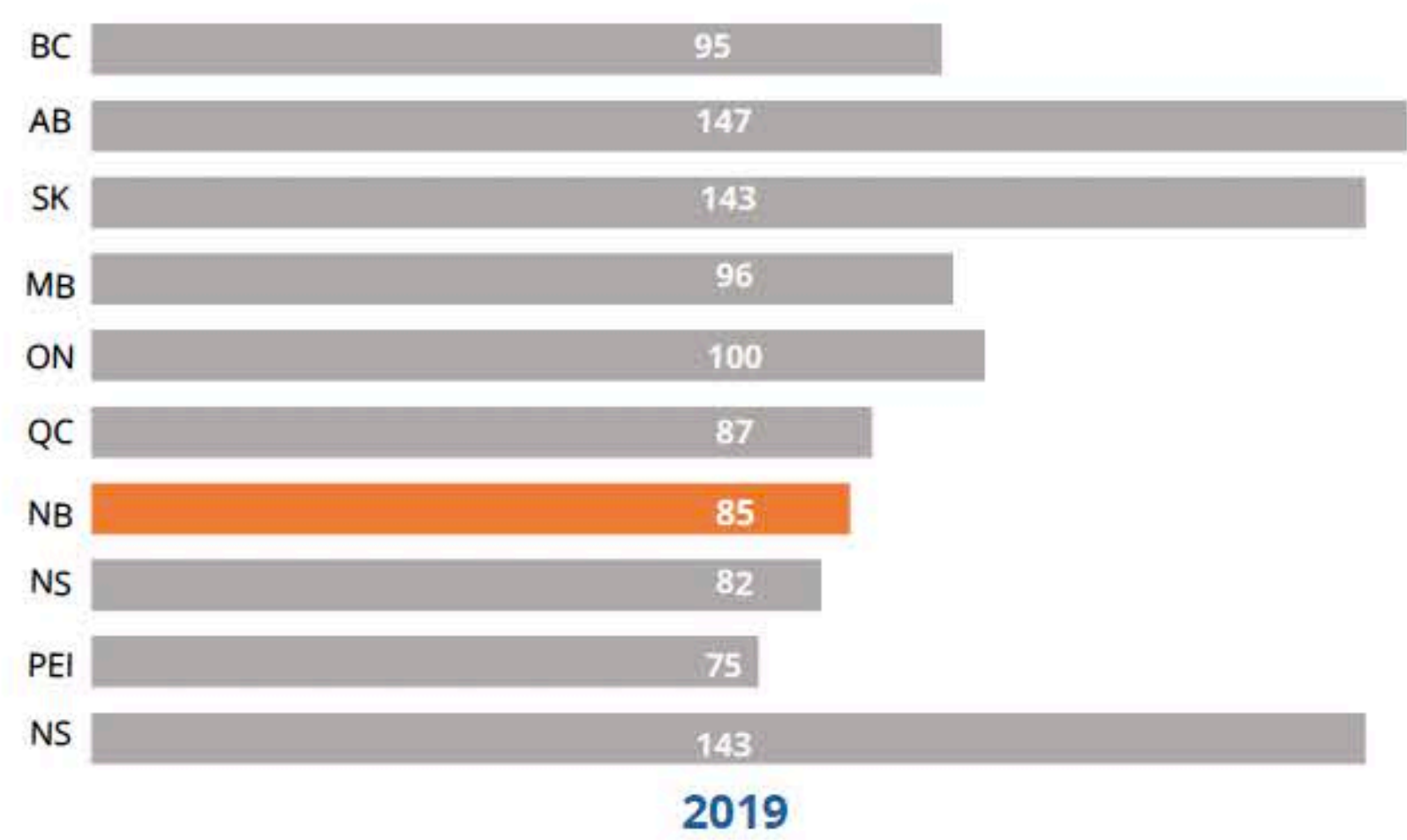


NB has the lowest minimum wages in Canada. As a result, one of the lowest earnings & savings!

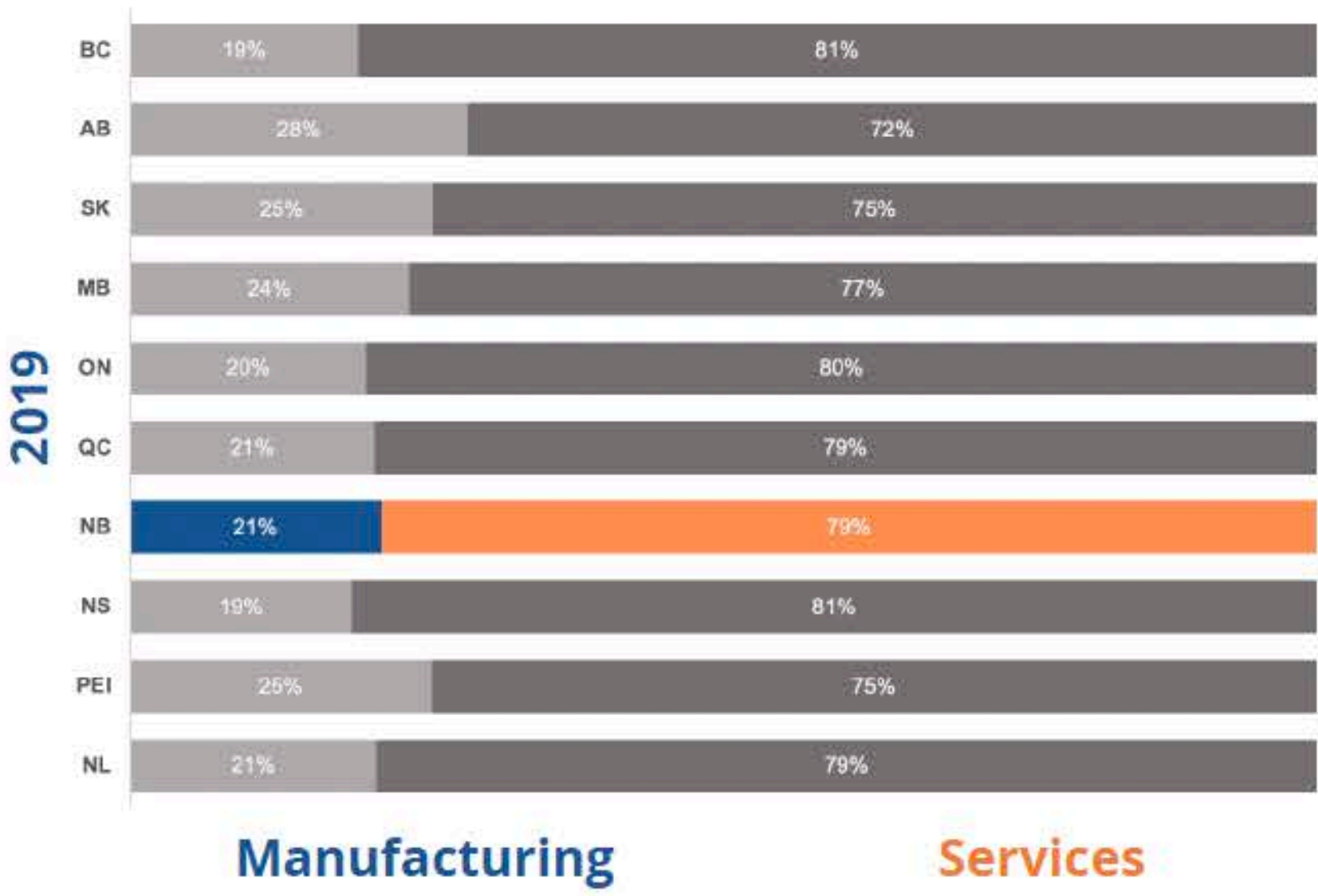
Low CapEx due to poor Savings



GDP by Employed persons (X1000)



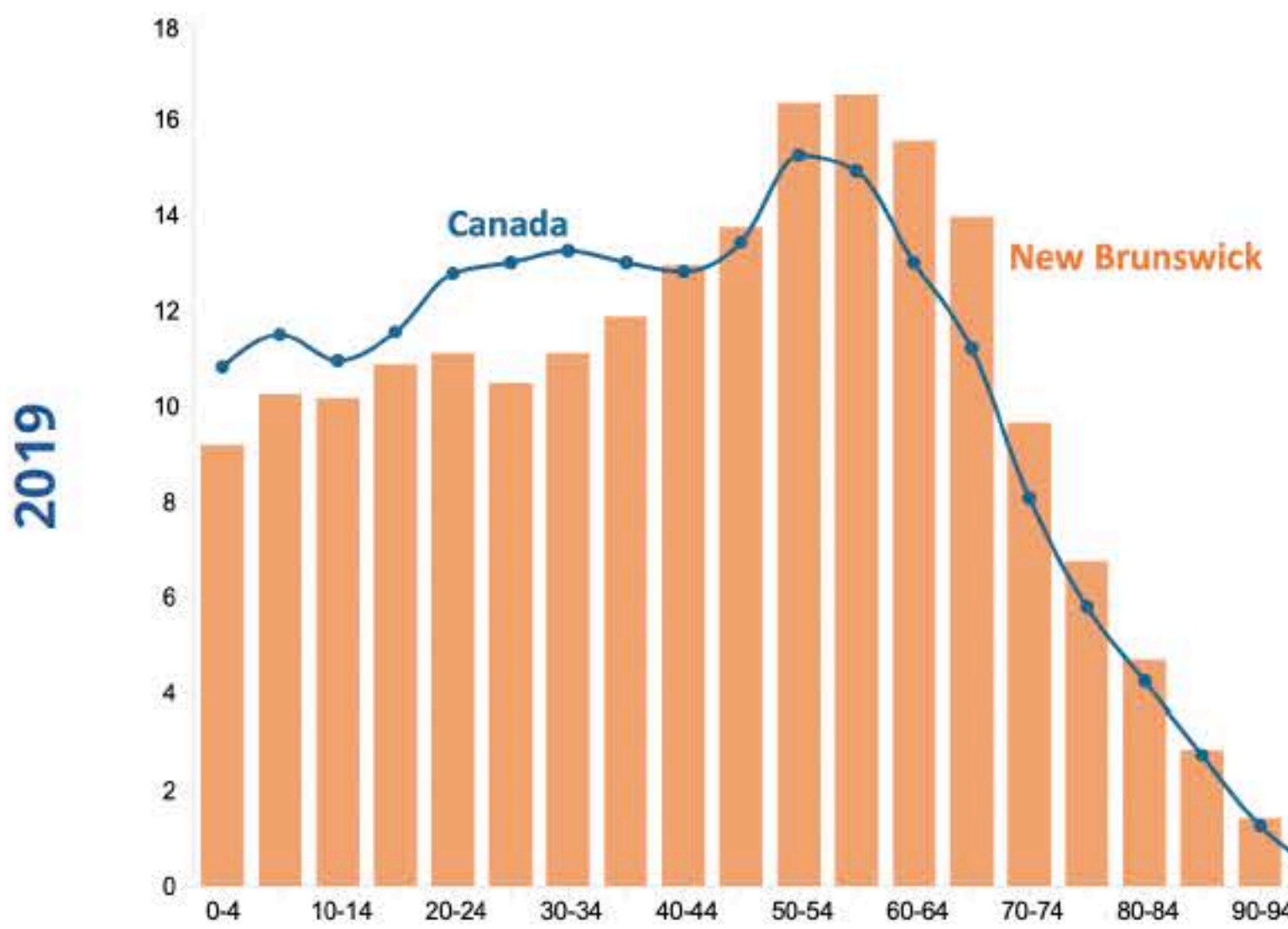
Industry Classification by Employment



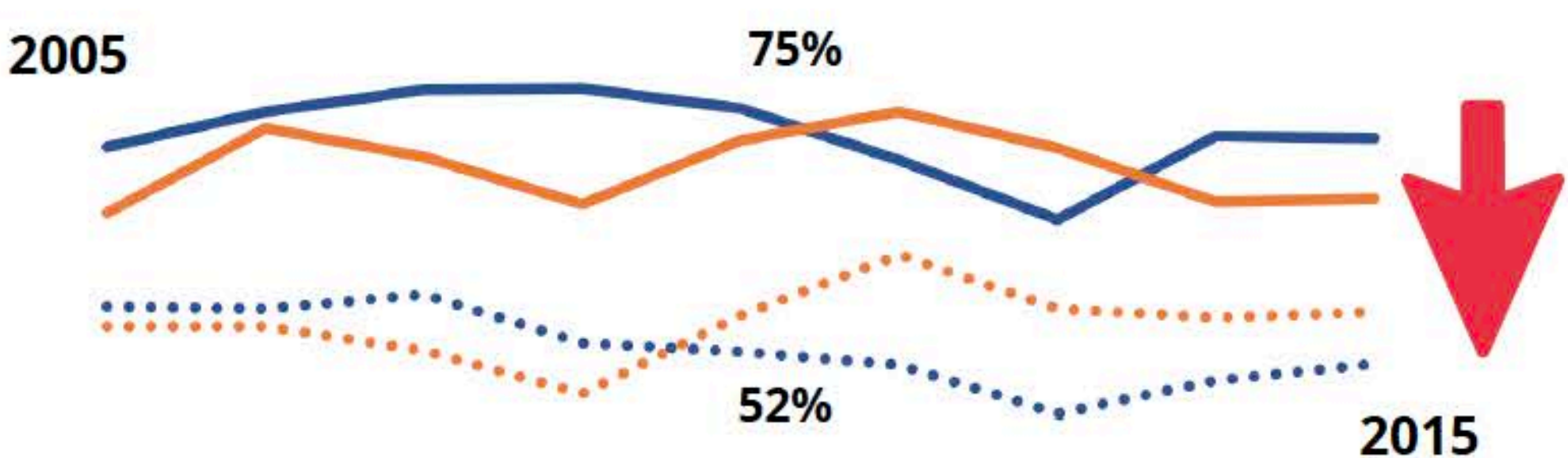
Due to low investment in NB, there is low diversification of industries and low GDP/Employee (SDG 8.2).

One of the primary reasons for low investment is an old population and NB's inability to retain migrants due to less opportunities.

Population Pyramid



Migrant Retention



~20% Reduction in Migrant Retention in 5 year periods for business & skilled PNPs.

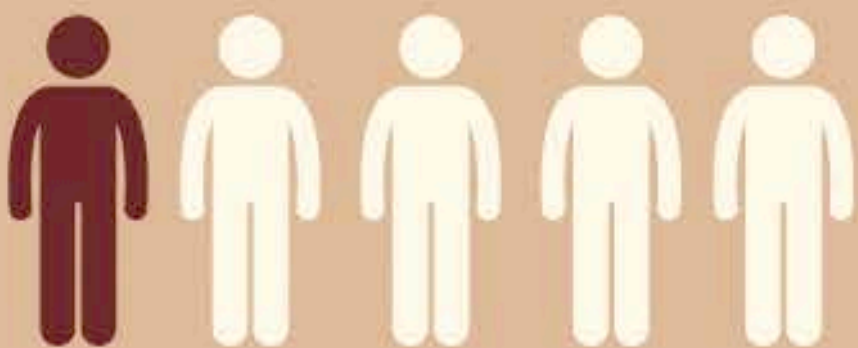
Airbnb

A Business Perspective

by Viztory

All it took was a simple air mattress to spark a rise of this Unicorn start-up to a Travel Giant! Actively spanning 100k cities, 5.6 mil listings, 150 mil users, and 800 mil past visits in the global vacation rental market, this real data is perfect for management decision-making.

1 in 5



HOSTS ARE SUPERHOST

the strict criteria giving higher quality of stays, and in turn better ratings.

2 in 5



LISTINGS ALLOW INSTANT BOOKINGS

a pioneer in smart instant book filters and many periods filled with reinventions

4.756 out of 5



AVERAGE USER RATINGS

in overall score, accuracy, cleanliness, check-in, communication, location, and value,

The journey to bear the mark of a great host is far from easy. Airbnb spent much time ironing out rulings and finding its place on the global map. With new and changing host rulings to improve scores, and thus changing global regulatory responses that eventually converged to **moderately strict regulations**. Immediate and obvious progress was seen right the next year! Airbnb is on the right track to greatness by focusing efforts to engage hosts and improve score ratings through continuous support and feedback. Keeping these close to heart, Airbnb can soon **normalise** the notion that **anyone can belong anywhere!**



After ironing out new host rulings to Moderately Strict Regulations

THE WORLD'S MOST POPULAR TRAVEL DESTINATIONS WITHIN AIRBNB'S 12 HISTORICAL YEARS

