

Environment Town Hall: Gas Plant Expansion

Summary Report

October 17, 2023

On October 17, 2023, MPP Bhutla Karpoche hosted an Environment Town Hall on the Gas Plant Expansion. She was joined by Peter Tabuns, MPP for Toronto—Danforth, Keith Brooks, Programs Director at Environmental Defence, Dr. Mili Roy, Ontario Regional Co-Chair of the Canadian Association of Physicians for the Environment (CAPE) and Co-Chair of the Ontario Climate Emergency Campaign (OCEC) and Rita Bijons, representative from Green 13 and Parkdale—High Park for Climate Action. Together, they provided attendees with an overview of the environmental and health implications of expanding gas plants in the province and its impacts on Ontario's climate targets. The following information summarizes key points discussed during the town hall and action items to help you get involved.

The state of with gas plants in Ontario:

- Amidst the climate crisis, at a time when we urgently need to shift towards clean, non-emitting, renewable energy, the provincial government is actively soliciting bids for additional gas-fired electricity generation, which means either new gas plants get built or existing gas plants get expanded.
- The Ontario government has announced three new gas plants and six upgrades over the past year.
- According to the Independent Electricity System Operator (IESO), in 2017, gas and oil-fired generation provided just 4% of Ontario's electricity supply. By 2022, that figure reached 10.4%. And, according to the IESO's forecast, in 2030, gas-fired electricity will be responsible for 19% of Ontario's total electricity generation, with numbers reaching 25% by 2040.
- If Canada is going to have a hope of reaching zero emissions by 2050, Ontario, the second largest emitting province needs to phase out dirty fossil gas - not burn more.

From the Panel:

- Ramping up gas plants wipes out all our savings from reducing emissions by cutting out coal, using green steel and transport innovation.
- The electricity distributors association, Toronto Hydro, Ottawa Public Utilities, Peterborough Public Utilities, does analysis of electricity demand and supply. Their analysis showed that by ramping up energy efficiency support for tenants and businesses, we can avoid billions of dollars of costs that setting up plants would incur.

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- As the government pushes ahead with plans for gas plant expansion, we need to be aware of the health impacts— “climate change is the biggest threat to health in the 21st century and our very survival is at stake.”
- The notion that a government would, in 2023, very deliberately create electricity in a way that is harmful to health and is ruining our future requires all of us to urge our elected representatives to not take that path, to take the path of renewable energy.

Q & A:

“How do you respond to the Ontario Energy Minister’s comments that the province needs gas plants to help meet an expected surge in demand for electricity and that it is the cheapest option?”

- This is not being driven by cost, there is a lot of analysis done by RBC, the federal government, Toronto atmospheric fund, the David Suzuki foundation, and they all found the lowest cost is to go with renewables. In fact, just last year, the International Energy Agency said the cost of new solar energy projects had fallen so far, solar panels are now the cheapest form of energy in history. After getting elected in 2018, the provincial government has canceled more than 700 renewable energy projects, and the province, which was once the Canadian leader in building wind and solar, hasn’t built any since. We need to invest in renewable energy now.

“Public pressure seems to have resulted in the cancellation of the Greenbelt development; do you think public pressure can have a similar outcome for cancellation of the Gas Plant expansion? In the same vein, can we pressure for more renewables?”

- Absolutely. 34 municipalities have already passed resolutions calling for the phaseout of gas power. In 2014, when Ontario became the first jurisdiction in the world to phase out coal-fired electricity, we know that the pressure to cut out coal came from the public because air pollution had become a public health issue. We must come at the expansion of gas plants with the same kind of energy and pressure it requires.

“What role does the federal government play in all of this –can they be brought in?”

- The federal government has promised to deliver 100% clean power across the country by 2035 but there's a loophole in its draft regulations: new gas plants are allowed to be built before 2025 and to continue operating and polluting beyond 2035. The provincial government is using the loophole to quickly push through new gas plants. We can urge the federal government to close this loophole and strengthen its Clean Electricity Regulations to prohibit the

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construction of new gas plants and require a complete phase-out of polluting gas-generated electricity by 2035.

TAKE ACTION

- Write to Energy Minister Todd Smith, and Premier Doug Ford
- Add your name to MPP Bhutla Karpoche's digital petition on the issue: https://www.bhutilakarpoche.ca/no_more_gas_plant_expansion
- Write a letter to your MP: <https://www.ourcommons.ca/members/en/search> and get the Federal government involved.
- Visit Environmental Defence's website for the latest updates on their campaign: <http://nomoregasplants.ca/>
- Check out Ontario Clean Air Alliance's website for other actions you can take: <https://www.cleanairalliance.org/campaigns/gas/>
- Join your local green groups today and get organized!
 - Green 13 Toronto: <http://www.green13toronto.org/>
 - Parkdale—High Park 4 Climate Action: <https://www.php4climateaction.org/>
 - Roncy Reduces: <https://www.canadareduces.ca/roncy-reduces>



Environment Town Hall: Gas Plant Expansion

Tuesday, October 17 at 6:00pm · Swansea Town Hall

Dr Mili Roy
Faculty of Medicine, Univ. of Toronto
Co-chair, CAPE Ontario (Cdn Assn Of Physicians for the Environment)
Co-chair, OCEC (Ontario Climate Emergency Campaign)

Oct 17, 2023

HEALTH IMPACTS OF GAS PLANTS



CAPE
Canadian Association
of Physicians
for the Environment
Association canadienne
des médecins
pour l'environnement
ACME

Ontario Regional Committee



Ontario
Climate
Emergency
Campaign

GAS PLANTS BURN METHANE, A POTENT FOSSIL FUEL

FOSSIL FUELS ARE THE LARGEST DRIVER OF THE CLIMATE
EMERGENCY

**FOSSIL FUELS ARE ESCALATING HUMAN HEALTH
HARMS BOTH BY DRIVING CLIMATE CHANGE & BY
GENERATING TOXIC AIR POLLUTION**



HEALTH IMPACTS OF CLIMATE CHANGE

“Climate change is the biggest threat to health in the 21st century and our very survival is at stake”

- Dr Vanessa Kerry, WHO Director-General Special Envoy for Climate Change & Health, 2023

“The climate crisis is a health crisis. We need ... increased use of reliable, cheap and green electricity.”

- WHO Director-General, Dr Tedros Adhanom Ghebreyesus

IMPACTS ON AVAILABILITY OF TRADITIONAL FOODS² AND MENTAL HEALTH³ IN THE NORTH

Due to arctic warming (3x Global Rate)⁴.

CLIMATE CHANGE ITS IMPACT ON HEALTH IN CANADA

Climate change is the biggest global
health threat of the 21st century.

— Lancet¹

DISPLACEMENT

Climate change-
exacerbated drought and
famine was one factor in
Syrian refugee crisis.²⁴

RELOCATION & STRESS FROM COASTAL EROSION

P.E.I. homes at risk.²³

HEAT-RELATED ILLNESS²⁰

66 people died in
Montreal during 2018
heat wave.^{21,22}

TICK-BORNE DISEASE

2017: 3x higher rate
Lyme Disease in
Ontario than 2012-
2016 average.¹⁹

ALLERGIES

Increased severity &
duration of pollen
seasons.¹⁸

FLOOD-RELATED DEATHS AND DAMAGE

- 2013 Alberta flood¹¹:
 - 5 deaths¹²
 - Healthcare facilities
closed due to flooding.¹³

DROUGHTS^{14,15}

Uneven impact on crops.¹⁶
Socioeconomic stress.¹⁷

WILDFIRE-RELATED ASTHMA⁵ & EVACUATION


Healthcare facilities evacuated:

- Fort McMurray: 105 patients^{6,7}
 - Interior BC 2017: 880 patients^{8,9}
- Anxiety & PTSD following evacuation.¹⁰

1-Costello, The Lancet, 2009; 2-Rosol R, IJCH, 2016; 3-Cunsolo A, Ellis N, Nature CC 2018; 4-Canada's Changing Climate 2019; 5-Yao J et al, 2016; 6-Hampshire, G, CBC 2016; 7-Kirschmeier-Young M 2017; 8-BC Int Health 2017; 9-Kirschmeier-Young M et al, Am Geo Un, 2018; 10-Alberta Health, 2016; 11-Teufel B et al 2017; 12-CBC Alberta Flood 2013; 13-United Nurses of Alberta 2013; 14-Yusa A, et al, Int J Env Res P H, 2015; 15- Smoyer-Tomic KE, et al. Ecohealth 2004; 16- Agriculture and Agri-Food Canada, 2015; 17- Cryderman K, 2018; 18- Ziska LH, The Lancet PH 2019; 19- Nelder MP, 2018; 20-Howard, C et al. The Lancet Countdown Policy Brief for Canada 2018; 21-Montreal PH, 2019; 22- Vogel MM et al, Am Geo Union, 2019; 23-Fenech, A, 2014; 24-Kelley, C, et al, 2015



**The 2021 BC heat dome
was the single
deadliest weather event
in Canadian history
with over 600 deaths**



**Housing & food are social
determinants of health.
The climate crisis is
deepening housing and food
insecurity.**

CHANGING INFECTIOUS DISEASE PATTERNS IN CANADA

Arthropod vector transmission	Increased incidence of Lyme, West Nile & eastern equine encephalitis
Zoonotic infections	Changes in risks/patterns of rabies, brucellosis, possibly rodent-borne hantavirus
Inhalational infections	Increased incidence of cryptococcosis, outbreaks of legionellosis
Emerging infectious diseases	Increased risks & frequency of epidemics & pandemics eg COVID-19, SARS

Ref: Health Canada. Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action . 2022

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CLIMATE CHANGE & INFECTIOUS DISEASES

- CPHA warns Ontario may be at risk for malaria, yellow fever, Zika & more in future
- Climate change may aggravate nearly 60% of all human pathogenic diseases
- Planetary heating increases the risk of pandemics
- Climate change is increasing antibiotic resistance

YOUTH MENTAL HEALTH IMPACTS OF CLIMATE CHANGE

- Depression, addictions, suicide (Cdn study post Ft McMurray fires)

Global Study of 10,000 Youth:

- Climate anxiety affects daily life & functioning ~45%
- Hesitant to have children ~40%
- **Governments betray current & future generations ~60%**



HEALTH IMPACTS OF AIR POLLUTION

AIR POLLUTION & HEALTH

***“ 99% of the world’s population
(live) in places where the WHO
air quality guidelines levels (are)
not met “***

Ref: WHO 2019 stats



AIR POLLUTION: GLOBAL DEATHS & HEALTH COSTS

**Total premature deaths globally due to air pollution:
6.7 million / year**

Ref: WHO 2022

**Estimated global health-related costs of air pollution:
over US\$ 5 trillion
(2013)**

Ref: Int'l J Public Health 2022

AIR POLLUTION RELATED DEATHS IN CANADA & ONTARIO

- ▶ **15 300 premature Canadian deaths annually (economic impact \$114 billion)**
- ▶ **6600 premature Ontarian deaths annually (economic impact \$49 billion)**
Ref: Govt of Canada 2022 (2016 stats)
- ▶ **Several hundred to several thousand premature Canadian deaths annually due to wildfire smoke**



The health harms of air pollution



Skin ageing



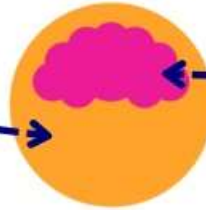
Lung diseases
Asthma
Lung cancer
Lung development
Pneumonia



Insulin resistance
and diabetes



Blood clots



Stroke
Brain development
Mental health
Dementia



Heart disease
High blood pressure



Premature birth
Low birthweight
Decreased sperm quality
Illness during pregnancy



CleanAirDay

AIR POLLUTION HARMS PREGNANT WOMEN & BABIES

- Low birth weight
- Premature birth
- Still births
- Birth defects



AIR POLLUTION CAUSES CANCER

- Lung
- Leukemia
- Breast



AIR POLLUTION HARMS MENTAL HEALTH

- Anxiety
- Depression
- Stress
- Suicide

Review > [Environ Sci Pollut Res Int.](#) 2021 Feb;28(8):9029-9049.

doi: 10.1007/s11356-021-12357-3. Epub 2021 Jan 22.

Association between particulate matter air pollution and risk of depression and suicide: a systematic review and meta-analysis

[Qisijing Liu](#) ^{# 1}, [Wanzhou Wang](#) ^{# 1}, [Xuelin Gu](#) ^{# 1}, [Furong Deng](#) ¹, [Xueqin Wang](#) ²,



FOSSIL FUEL HEALTH IMPACTS: SOLUTIONS

**GET OFF FOSSIL FUELS – GAS PLANTS ARE
NOT THE ANSWER!**

***“ IN ADDRESSING CLIMATE CHANGE BY
REDUCING EMISSIONS, WE ARE PREVENTING
THE WORSENING OF HEALTH CONDITIONS
AROUND THE WORLD ”***

- UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

CANADIAN PUBLIC HEALTH ASSN STATEMENT ON CLIMATE CHANGE AND HUMAN HEALTH 2019

- “We are running out of time...We are the last generation that has the opportunity to make the changes needed to avoid catastrophic climate change. Climate change must be treated like the public health emergency that it is.”
- **Our response to climate change can also be “the greatest health opportunity of this century”**

“SO WHAT CAN I DO?” - LEVELS OF ADVOCACY



ADVOCACY IDEAS

- Education: be aware & educated on the issues
- Sign: Petitions, Action letters, Open letters, others
- Write: Op eds, Letters to Editor, articles, petitions, reports/submissions
- Social Media activism: posts, (re)tweets, blogs
- Have dialogue: active listening & balanced conversations
“outside your bubble”

ADVOCACY IDEAS

- Give Talks: pass on your knowledge & passion to amplify
- Civic Engagement: call, email & meet with elected officials
- Participate: Rallies, Marches & demonstrations
- Volunteer/Donate: time/financial support to groups doing good work
- Join a Group: amplify impact by networking & cooperating
- **Use your Vote!** : prioritize pro-climate policy at election times