

# Steel industry in Hamilton: Decarbonization update



**Environment  
Hamilton**

Feb 25, 2026

# Agenda

- (1) Context
- (2) Steel Industry Overview
- (3) What is Clean/Green Steel?
- (4) Ontario Air Quality Regulations
- (5) Environmental Compliance Approval

## Timeline of Events (2021-2026)

- **July 2021:** Government of Canada [announces](#) \$400M investment in a \$1.8B project agreement with ArcelorMittal Dofasco to convert its steel production facility and phase out coal-fired steelmaking by 2028.
  - Coke making and blast furnace facilities at the plant would be replaced with Direct Reduced Iron (DRI) and Electric Arc Furnace (EAF) technology.
  - The most hazardous air contaminants produced by the burning of coal, like benzene and benzo(a)pyrene, would be eliminated by this conversion, but fossil gas would still be used for the DRI step.
  - The company [promised](#) overall greenhouse gas emissions reductions of 60%.
- **February 2022:** Government of Ontario [announces](#) it will contribute \$500 million in loans and grants to the project.

## Timeline of Events

- **February 2023:** Representatives from ArcelorMittal Dofasco and Enbridge Gas present at [Hamilton City Council](#) to propose the installation of a new fossil gas pipeline to fuel the project.
  - Climate scientists were [urgently calling](#) for no new fossil fuel infrastructure (and continue to).
  - Residents voiced [concerns](#) as most fossil gas sourced in Ontario comes from fracking operations in the US. Fracking is an especially environmentally destructive gas extraction technique.
  - Residents suggested retrofitting homes so that gas could be redirected to Dofasco instead of through a new pipeline.
  - Two public consultations were held in March 2023 but no updates on the project since then.
- **March 2023:** Hamilton City Council passes a [motion](#) that directs the Mayor to contact the Ontario Minister of the Environment, Conservation and Parks (MECP) to articulate that the City of Hamilton is opposed to any extension or continued special permissions for contaminants above provincially regulated general air standards.
  - Site-specific standards for Dofasco and Stelco expired in June 2023. Since then, Dofasco and Stelco have been operating under a regulatory grey area “abatement plan.”

## Timeline of Events

- **July 2023:** MECP communicates at quarterly Community Liaison Committee (CLC) meetings for Dofasco and Stelco that it continues to work on an Integrated Steel Technical Standard (initially announced in January 2023)
- **September 2024:** CBC Hamilton [investigation](#) confirms that key project milestones were missed at Dofasco and that the original project manager quit.
- **November 2025:** Hamilton resident partners with EcoJustice to file an [investigation request](#) into Dofasco's emissions.
- **December 2025:** MECP [denies](#) the investigation request.
  - Reporting indicates that stricter sulphur dioxide pollution limits (which would require equipment upgrades) were forgiven due to the planned decarbonization project. Unclear what will happen with these regulations now that project is delayed.

## Timeline of Events

- **January 14, 2026:** [CBC investigates](#) an [amendment](#) to Dofasco's project agreement with the federal government.
  - Government representatives say they still expect a transition to EAFs to happen by 2028, but they do not expect the company to build a DRI facility in Hamilton as originally planned.
  - The DRI will be done in Montréal, where a facility already exists.
- **January 20, 2026:** ArcelorMittal Dofasco holds quarterly online CLC [meeting](#) attended by 57 people.
  - Company representatives communicate that the decarbonization project timeline has been drawn out but their intentions have not changed.
  - Cited tariff environment as a barrier to progress.
  - Did not answer questions when it was pointed out that the project stalled before tariffs were introduced.
  - Did not confirm federal government comments about DRI facility.
- **January 22, 2026:** Environmental Defense, Steelwatch, and Environment Hamilton post joint [press release](#) calling for ArcelorMittal Dofasco to give a clear project timeline update.

# 02: Steel Industry Overview

- Steel industry contributes 2% of national emissions
  - Eight mills
  - Four largest mills
    - ArcelorMittal Dofasco (4.1 Mtpa, ~4.2 million tonnes CO<sub>2</sub>e)
    - Algoma (3.2 Mtpa, ~4.2 million tonnes CO<sub>2</sub>e)
    - Stelco, Lake Erie (2.5 Mtpa, ~3.8 million tonnes CO<sub>2</sub>e)
    - ArcelorMittal Contrecoeur (2.4 Mtpa, ~1.1 million tonnes CO<sub>2</sub>e)
- Canada is a net exporter of iron. Greenhouse gas impact of steel produced by iron exports is the equivalent of 14% of our national emissions.
- Dofasco integrated steel mill:
  - Largest industrial source of emissions in Ontario (used to share title with Algoma)
  - 2023 (most recent reporting year) : 4,169,038 tonnes CO<sub>2</sub>e
  - 40% of City of Hamilton emissions
- Stelco coke plant:
  - 268,720 tonnes CO<sub>2</sub>e
  - 2.6% of City of Hamilton emissions

**Sources:**

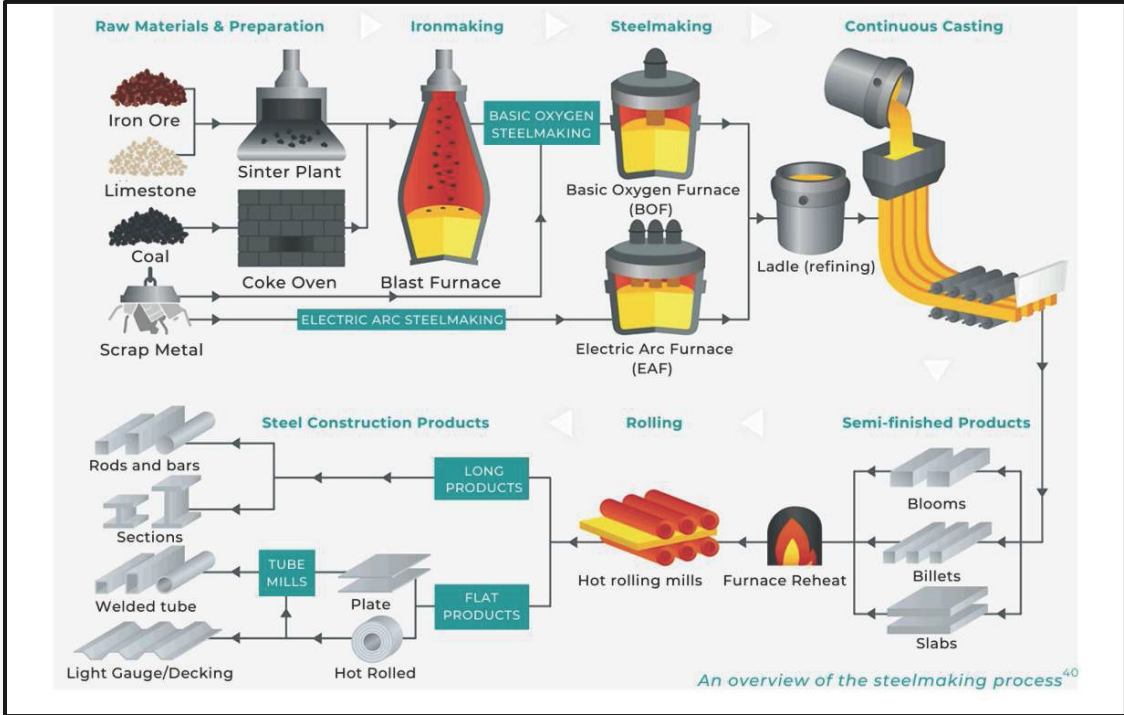
<https://data.ontario.ca/dataset/greenhouse-gas-emissions-reporting-by-facility>

<https://carbon.taf.ca/2024/regions/hamilton>

<https://portal.research.lu.se/en/publications/strategic-decarbonisation-of-the-canadian-iron-and-steel-industry/>

# 03: What is Green Steel?

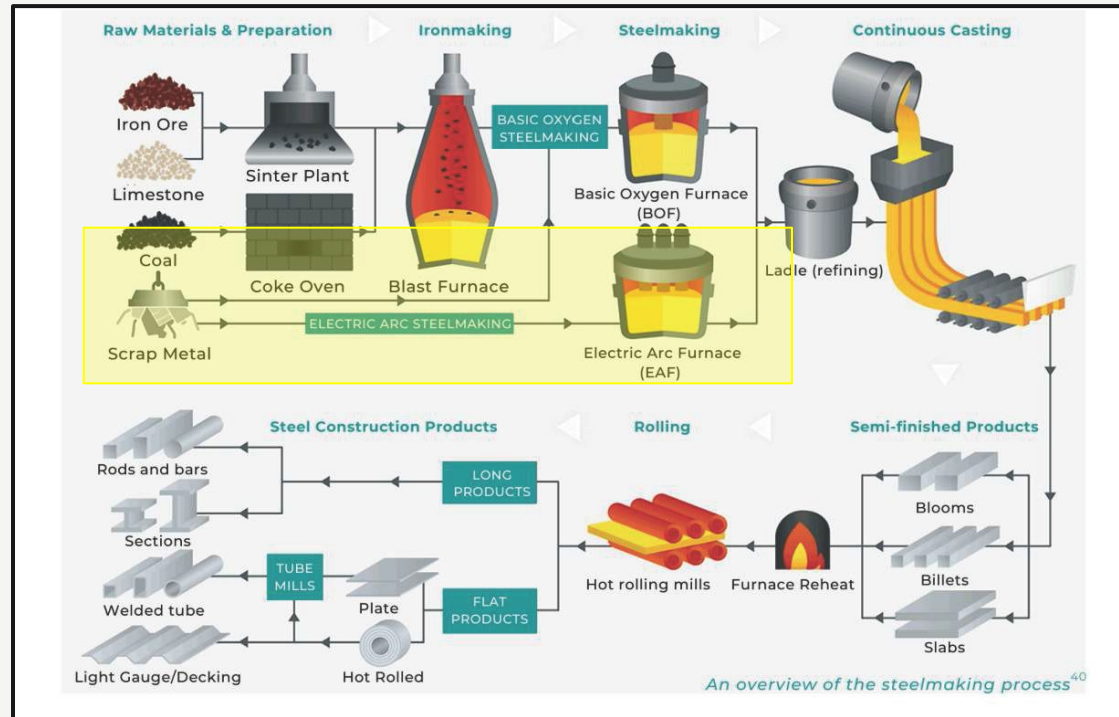
How is steel made?



Source: <https://www.newsteelconstruction.com/wp/an-introduction-to-steelmaking/>

# 03: What is Green Steel?

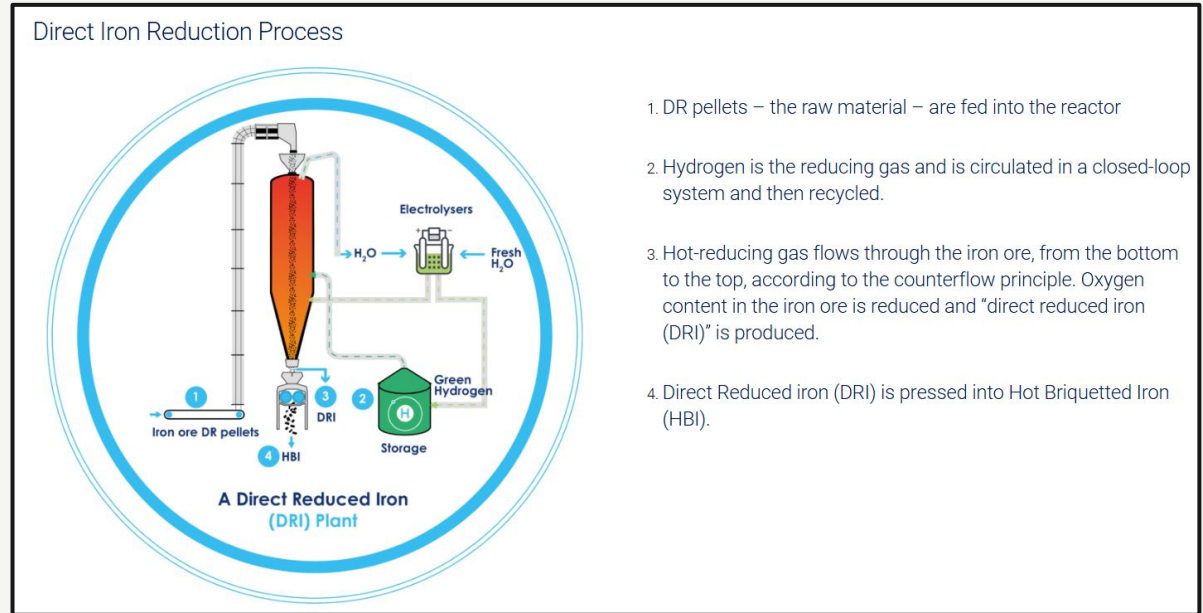
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# 03: What is Green Steel?

## Direct Reduced Iron

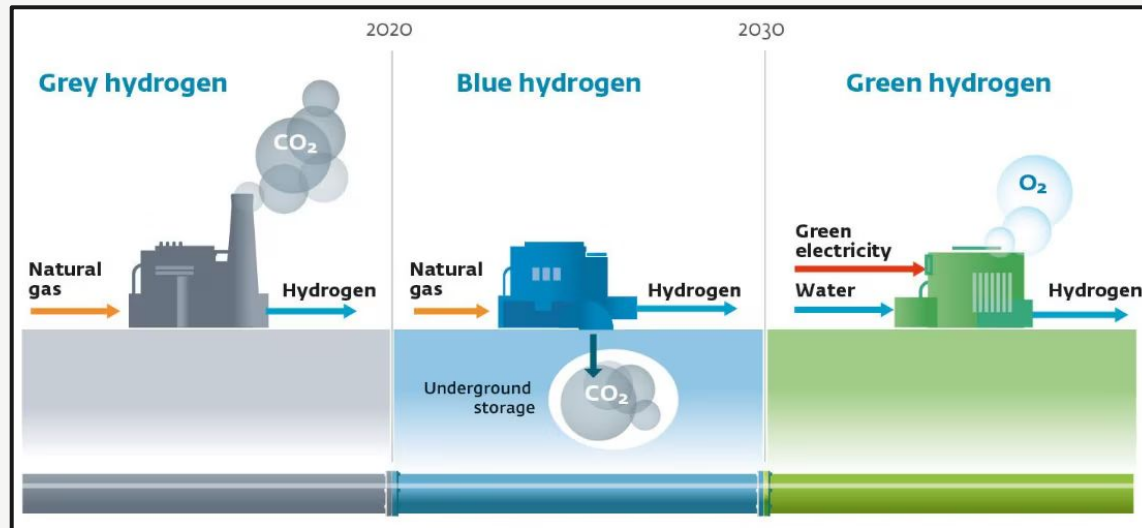
- Produced at Contrecoeur plant in Montréal with fossil gas.
- Can be produced with Hydrogen gas.
- If produced with green Hydrogen then we have net-zero steel process (~98% less emissions than traditional coke oven-blast furnace steelmaking).



# 03: What is Green Steel?

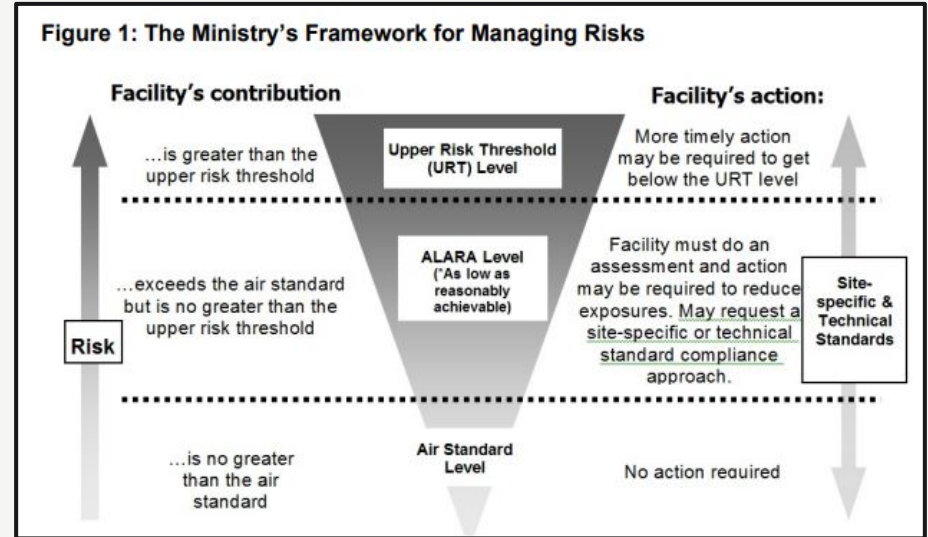
## Types of Hydrogen

- Best place to produce green hydrogen to produce direct reduced iron is likely in northern Quebec close to existing iron mines.



# 04: Ontario Air Quality Regulations

- **Site-specific Standards**
  - An “exemption” given to companies to pollute above the Ontario Air Quality standard due to economic considerations.
- **Technical Standards**
  - Technical standards may create industry standards for all sources of pollution from a particular industry or create equipment standards for one contaminant within one or more sectors.
  - Standards have been implemented for foundries, forest products, pulp and paper, metal finishers, petroleum refining, petrochemical, mining sites and asphalt mix.
  - Technical standards are outlined in Ontario’s main air pollution regulation, O. Reg. 419/05, under sections 38-44.



**Sources:**

<https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=361950>  
<https://cela.ca/fact-sheets-air-quality-standards/>

# 04: Ontario Air Quality Regulations

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- Worst contaminants emitted:
  - Benzene
    - 13.9 higher than the regular limit allowed under the site-specific standard for ArcelorMittal Dofasco
  - Benzo(a)pyrene
    - 990 times higher than the regular limit allowed under the site-specific standard for ArcelorMittal Dofasco
- Study completed in 2023 found concentrations are worst closest to industry, but still elevated throughout Hamilton

## Sources:


<https://www.cbc.ca/news/canada/hamilton/air-quality-hamilton-1.6904964>



<https://www.environmenthamilton.org/air-quality-monitoring>


Hamilton

## Breathing the air in parts of Hamilton is like smoking a cigarette a day, researcher says

A two-year air quality study found high levels of carcinogen benzo(a)pyrene throughout the urban area

 Saira Peesker · CBC News · Posted: Jul 13, 2023 2:58 PM EDT | Last Updated: July 14, 2023

  Listen to this article ⓘ  
Estimated 5 minutes



Dark smoke rises out of the stacks at ArcelorMittal Dofasco in a 2020 file photo. The company is one of several industrial emitters that has an exemption to provincial pollution limits. (Environment Hamilton/Twitter)

# 05: Environmental Compliance Approval

- Industries submit an environmental compliance approval to operate their facility
- Site-specific and/or technical standards can be part of the Environmental Compliance Approval
- Dofasco's ECA includes a "limited operational flexibility" condition that regulates *construction, alterations, extensions, or replacements* of the facility.
  - This condition has an expiry date.
  - Dofasco's expired in 2023. They are reapplying now
- We are preparing a comment submission
- We will share a comment submission outline that you can add to and submit

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## ArcelorMittal Canada MP Inc. and ArcelorMittal Canada Inc., operating as ArcelorMittal Dofasco G.P.

Instrument type: [Environmental Compliance Approval \(air\)](#)

ERQ number	026-0039
Ministry reference number	1000384592
Notice type	Instrument
Act	Environmental Protection Act, R.S.O. 1990
Posted by	Ministry of the Environment, Conservation and Parks
Notice stage	<span>Proposal</span> <span>Updated</span>
Proposal posted	January 26, 2026
Comment period	January 26, 2026 - March 12, 2026 (45 days) <span>Open</span>
Last updated	January 26, 2026

This notice was originally posted on January 12, 2026, with a 45-day public comment period. The ministry updated its proposal on January 26, 2026, to provide a detailed list of contaminants emitted from the facility. The comment period has been extended for another 45 days.

Our info page for this project: [environmenthamilton.org/steel](https://environmenthamilton.org/steel)

Sign up for project updates: [environmenthamilton.org/take-action-steel](https://environmenthamilton.org/take-action-steel)

# QUESTIONS AND DISCUSSION

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