

Electric Arc Furnace (EAF) Transformation Project



ABDX
ABDX1
BPL-93
BLT-2-15

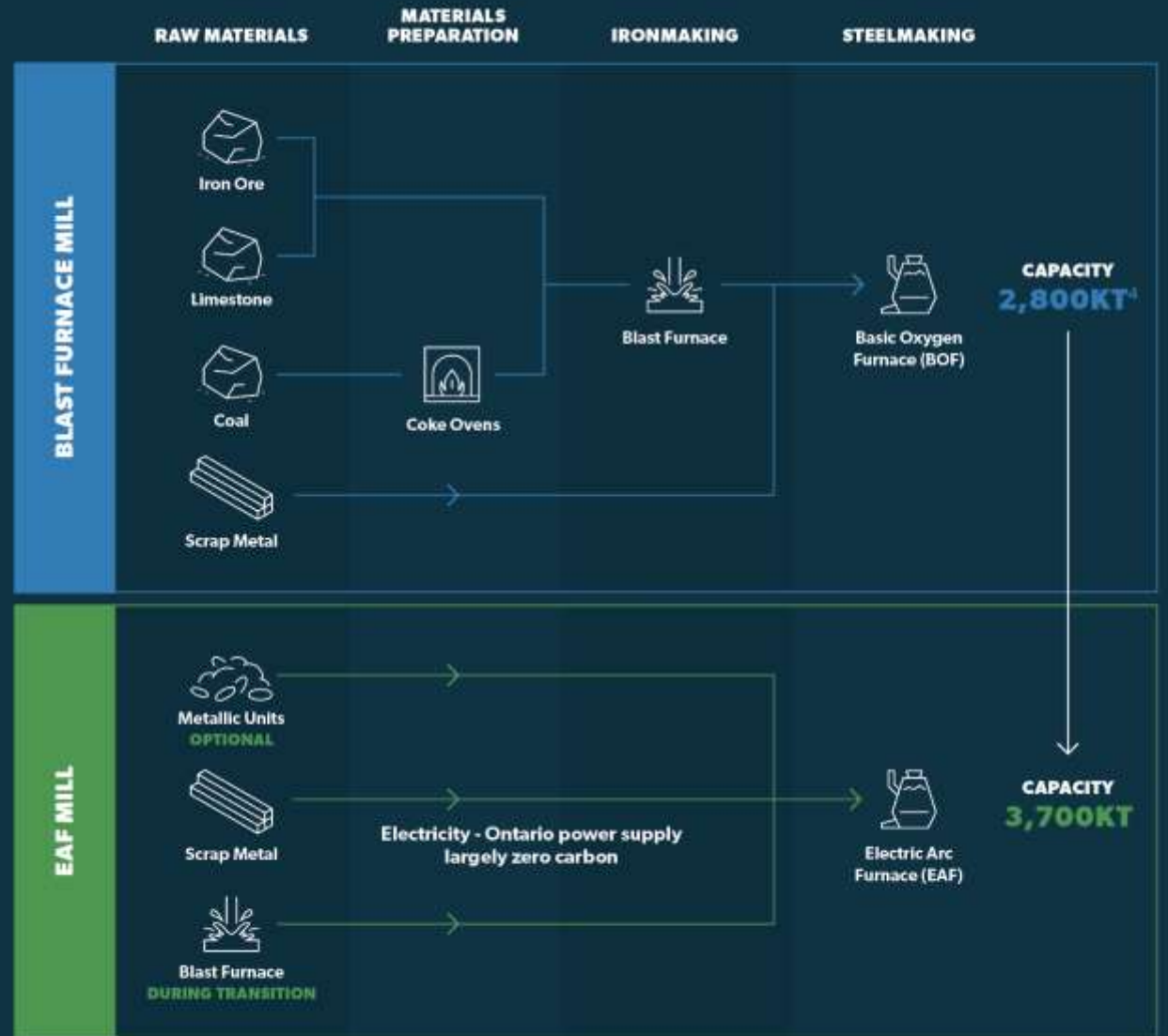
A Generational Investment Unlocking Significant Value

Expected Benefits

- Adds ~700kt of finished steel capacity aligning steelmaking capacity to rolling capacity.
- ~70% fewer total CO₂ emissions (annual reduction of 3 million tonnes of CO₂).
- More flexible operations capable of responding dynamically to market conditions.
- Reduced sustaining CapEx.
- Improves employee productivity (as measured in tons per employee).

Transforms Algoma Steel into a North American green steel producer.

(4) Excludes BF#6 which is currently idled.



EAF Local Economic Impact by the Numbers

51

Local Suppliers Engaged

500

Construction Jobs Created

\$870M

Total Project Budget

Project spend as of September 30, 2024

\$672M

\$202M

Community spend as of February 28, 2025



Dust system complete.



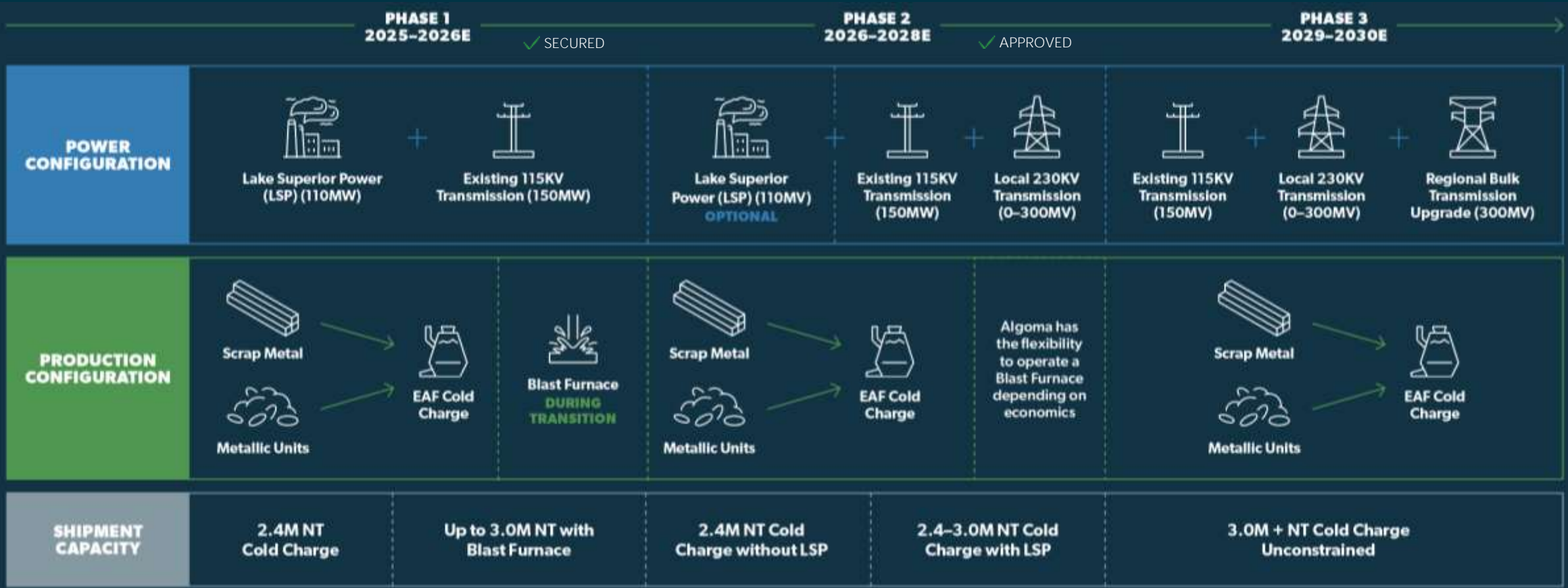
Axial Cyclone installation on Baghouse



EAF #2 ready for assembly and installation.

Photos taken February 2025

Powering Algoma's Planned Transformation





Benefits of the 230kV Line for all of Sault Ste. Marie

Enhanced Power Reliability

→ The new infrastructure will reduce the risk of outages and ensuring a stable power supply for both residential and industrial customers.

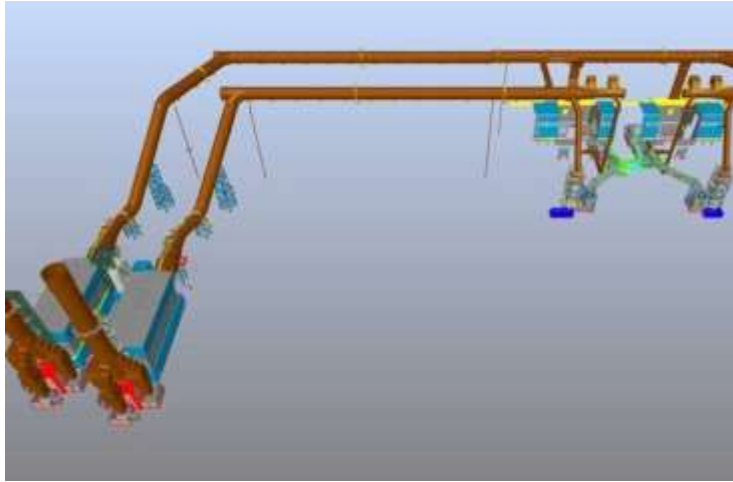
Growth Opportunities

→ This project is designed to ensure Sault Ste. Marie is prepared for its immediate and long term transmission needs.

Increased Transmission Capacity

→ Upgrading to a 230kV transmission system represents a significant modernization of the region's power infrastructure, ensuring Sault Ste. Marie can meet future power demands, adapt to technological advancements, and provide a necessary foundation to attract more industrial and other investments as the community grows.

Electric Arc Furnace Environmental Controls



Fume Treatment Plants

The fume treatment plants capture air and dust emissions from the process.



Water Treatment Plant

The water treatment plant conserves water usage by recycling non-contact water from the process.



Engineered Furnace Enclosures

These enclosures feature large doors which seal shut before the arcing process begins, containing any sound, sparks or dust particles.

Algoma Steel's Shrinking Environmental Footprint: Long-Term Advantages of Electric Arc Steelmaking

GHG EMISSIONS	CO ₂	Reduction ¹	% Reduction
	CO ₂ /NT PRODUCTION	3.0mm tonnes	70%
SO _x EMISSIONS	1.33 tonnes	75%	
NO _x EMISSIONS	4,060 tonnes	82%	
STACK & FUGITIVE EMISSIONS	1,604 tonnes	52%	
STACK & FUGITIVE EMISSIONS		Complete elimination of Stack and Fugitive Emissions	100%

- Algoma expected to become one of the leading producers of green steel in North America.
- Improves competitiveness for government spending programs where ESG is a criteria.
- Improves profile with select customers who are similarly ESG focused.
- Improves employee engagement.
- Reduction of greenhouse gas emissions may provide for lower annual repayment on the SIF loan.



⁷ Greenwashing Disclaimer: The projected carbon emissions reductions presented in this document are based on calculations derived from legacy data. These projections utilize international standards and benchmarks for electric arc steelmaking (EAF) and related processes. While every effort has been made to ensure accuracy, these calculations may not fully reflect the latest technological advancements, operational changes, or real-time emissions data. Actual reductions in carbon emissions may vary based on site-specific factors, new innovations, and evolving industry practices. This information should not be interpreted as a definitive guarantee of future environmental performance or sustainability outcomes.

Transition to Electric Arc Furnace Steelmaking: Environmental Compliance Approvals

1 **Environmental Compliance Approval for air and noise** based on the facilities associated with the transition to electric arc furnace steelmaking. Application to include:

- Two new EAF exhaust treatment plants including baghouses
- A new cooling tower

[Click Here](#) to see the ERO posting.

2 Amendment to the existing **industrial sewage works Environmental Compliance Approval** that incorporates:

New recirculating non-contact cooling water system (with a small blowdown to the existing water treatment facility)

No new contaminant loading to the existing treatment facility

Over the course of the transition, contaminant loading to the water treatment facility will decrease. Up to five existing effluent discharges and up to seven existing noise sources will be eliminated.





Alternate Standard Requests

New Standards will govern the operating transition to electric arc steelmaking

- Algoma steel has prepared an Abatement Plan, which has been accepted by the MECP, to bridge the gap until an alternate standard is available under O.Reg. 419.
- The Abatement Plan is an evolving emissions management plan which aligns with industry best practices and future requirements of the ITS.
- A separate ERO posting will be issued for the alternative standard when available and an ECA amendment will be required to align with the alternative standard.

Shoreline Stabilization, Sawmill Bay Dredging, and Site Greening

Algoma's shoreline stabilization project consists of a four year plan to **install 4.1 km of shoreline protection** along the St. Mary's River to prevent future erosion. As of December 2024, the project is valued at \$4.07 million.

The project will resume this summer with the placement of the clean rip-rap and armour stone. Dredging work was undertaken in September and will resume in 2025 to improve vessel access to Sawmill Bay Dock.

Once the stone is installed, the Site Greening Initiative will proceed in parallel with the introduction of clean soils, creating seasonal surface water ponding areas, and vegetating with select native plants and tree species. This will be done in **collaboration with Sault College**.

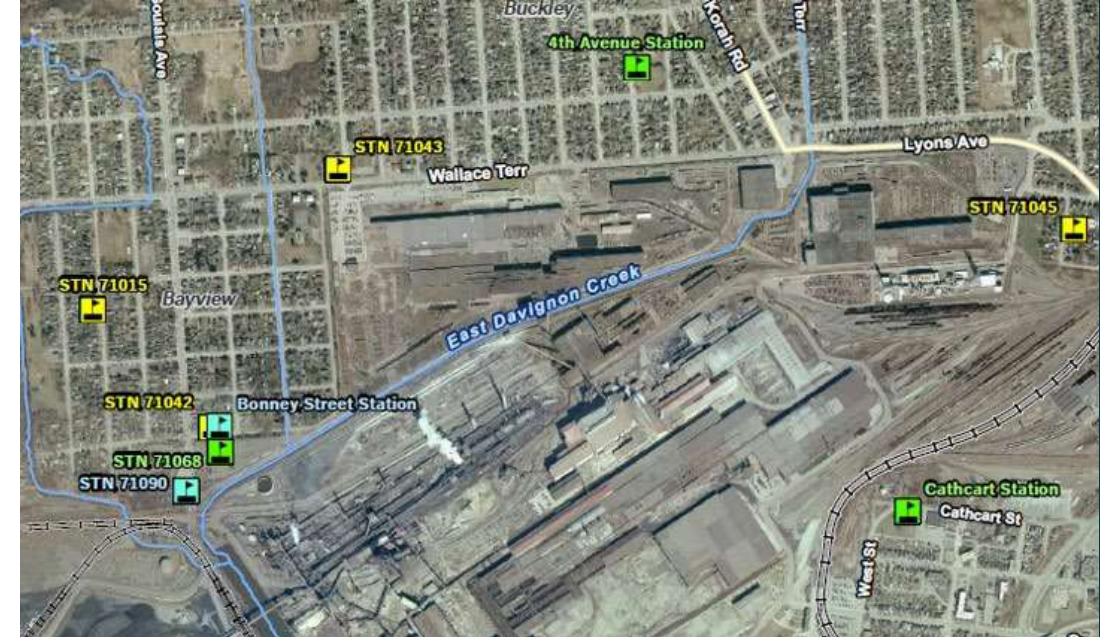
The site greening initiative involves the creation of **naturalized green buffer strips** along the perimeter of the site which will be protected from possible erosion.



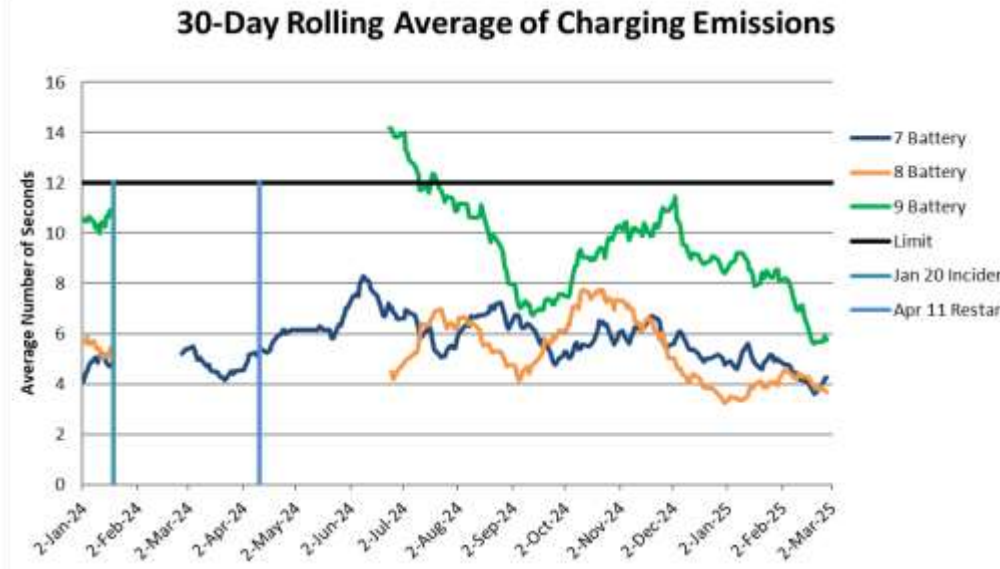
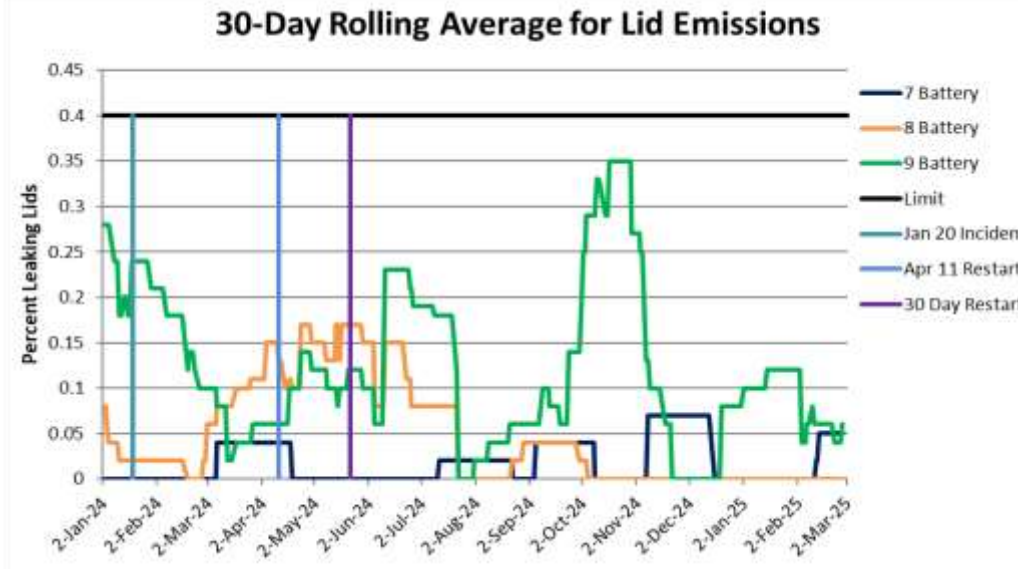
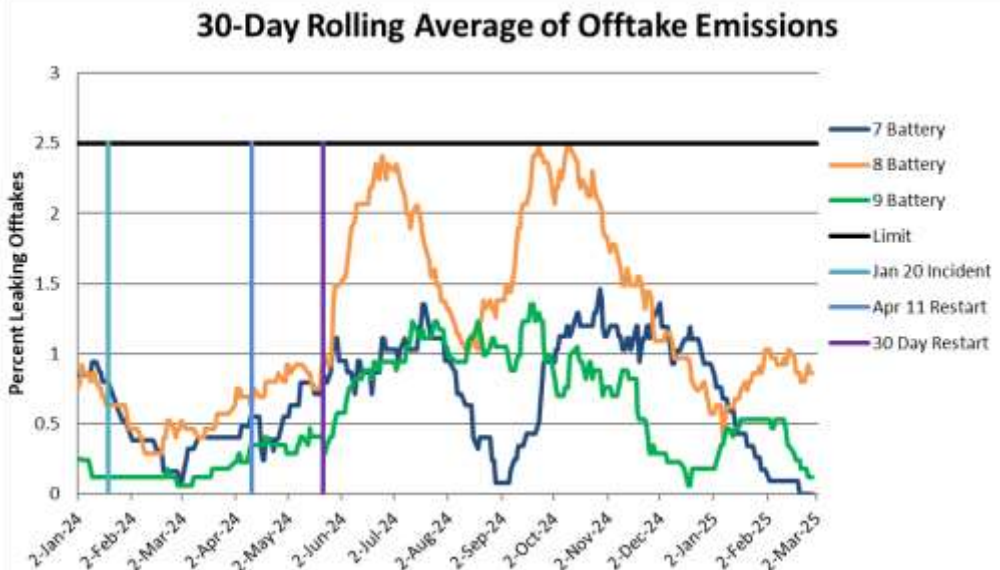
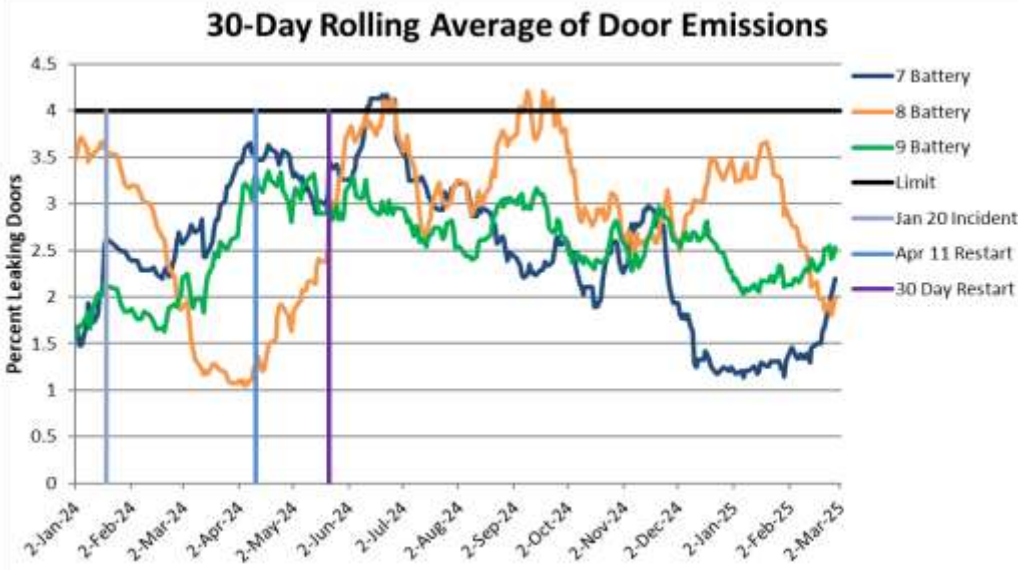
Community Air Monitoring

Algoma's Ambient Air Quality Monitoring Program was expanded in 2022

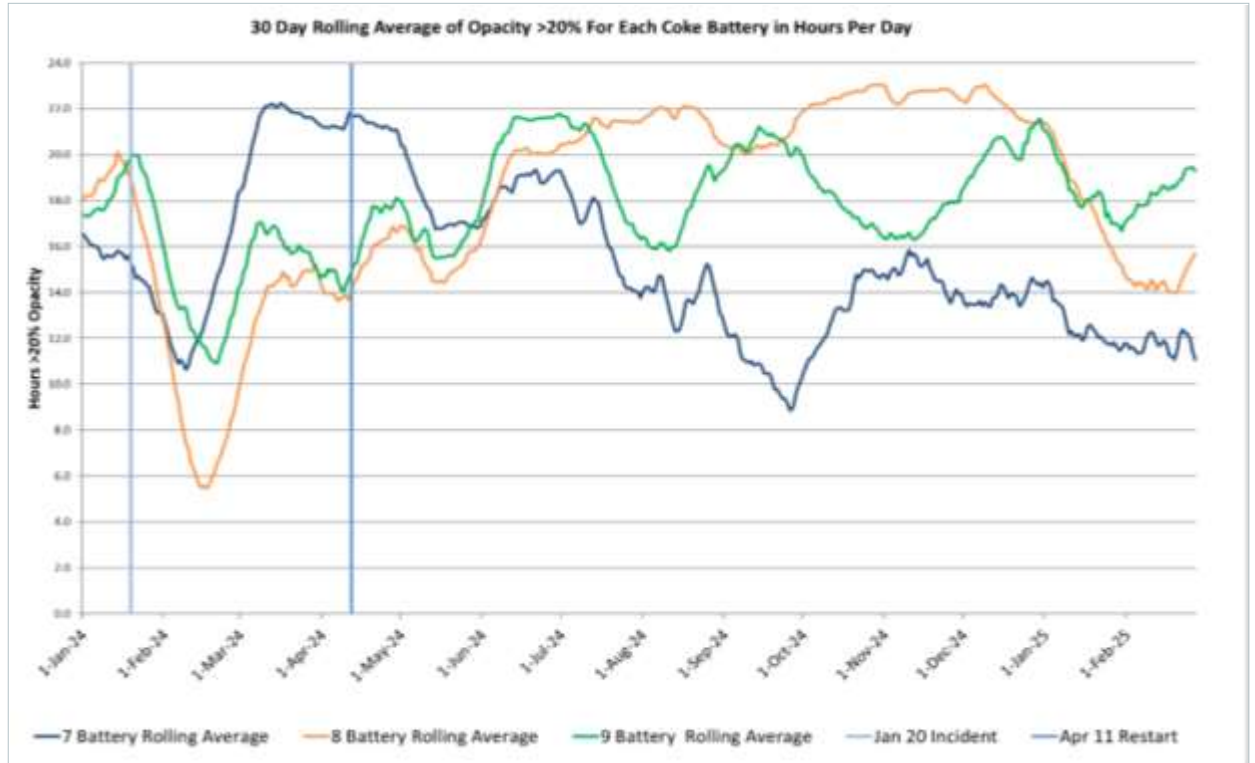
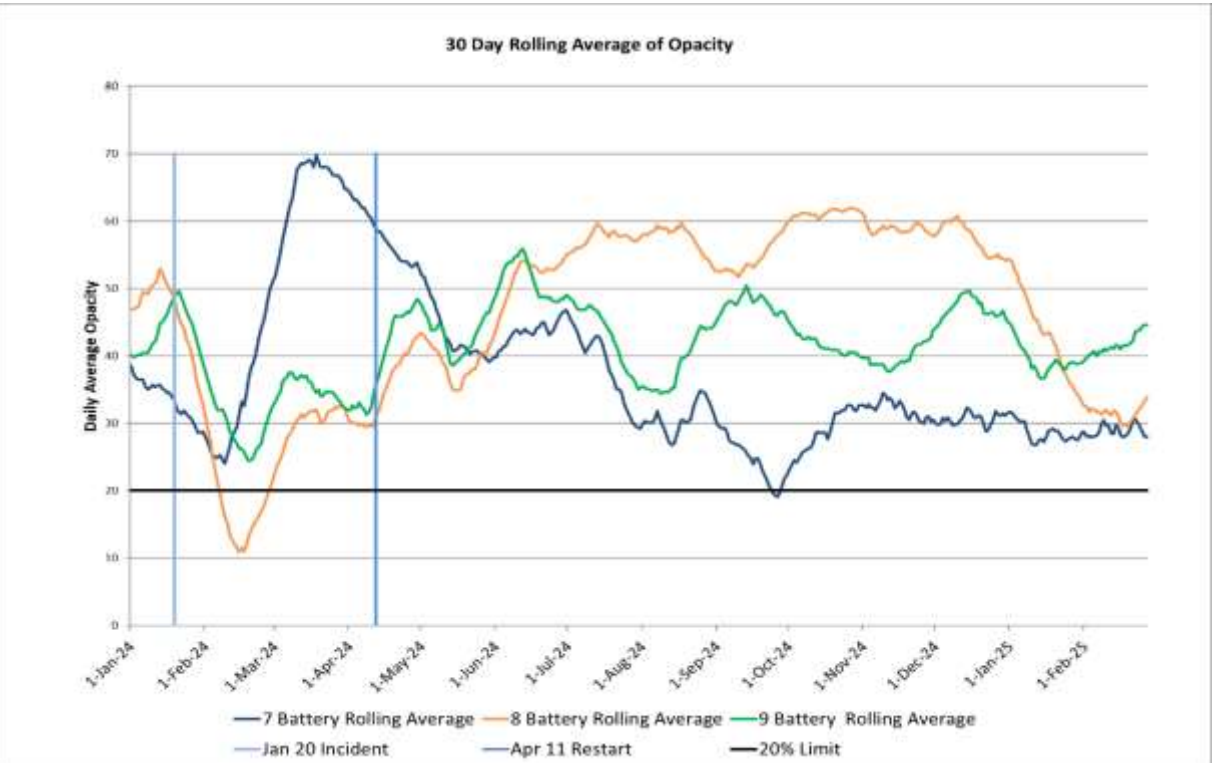
- Recently expanded AAQMP to include three new permanent community air monitoring stations installed with all new equipment and a new meteorological station which were operational since Dec. 2022.
- Stations are located at Bonney St., 4th Avenue and Cathcart St.
- Site selection based on Ministry of Environment, Conservation and Parks (MECP) air dispersion modelling, MECP criteria for air monitoring station siting and local land availability.
- Stations monitor for: TRS, SO₂, PM₁₀, PM_{2.5}, TSP, Metals, VOC's, PAH's.
- Real time monitoring data are published on Algoma's public website.



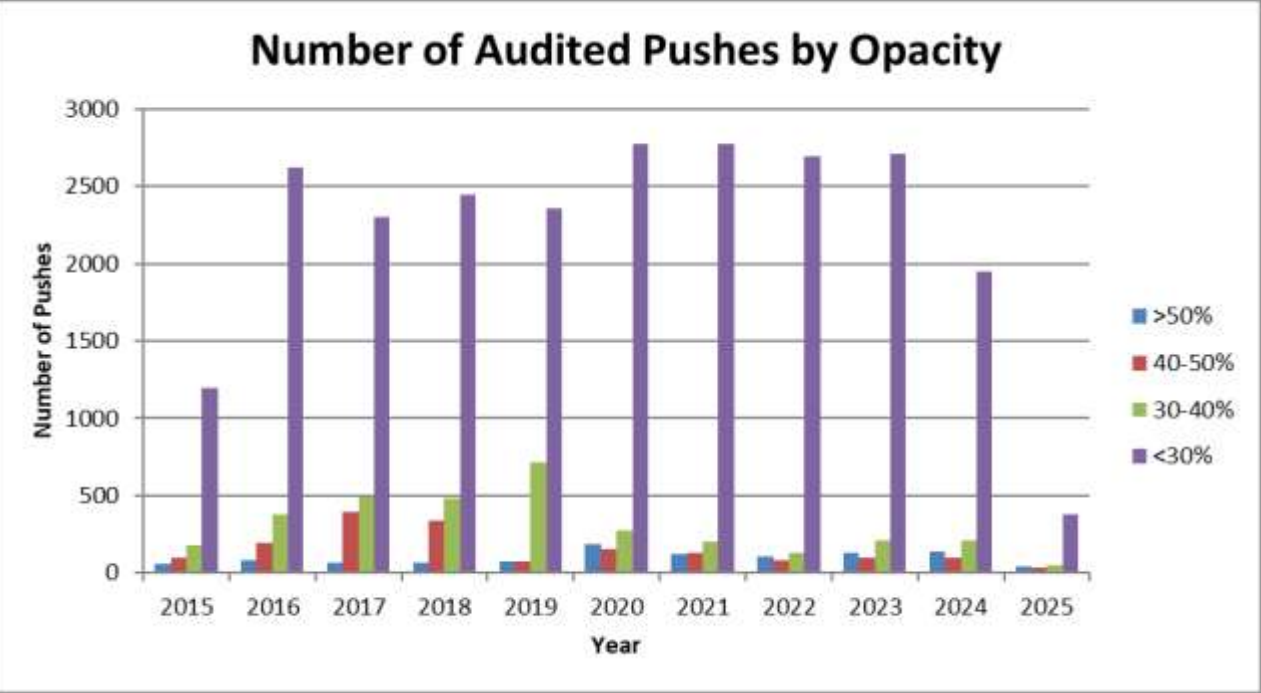
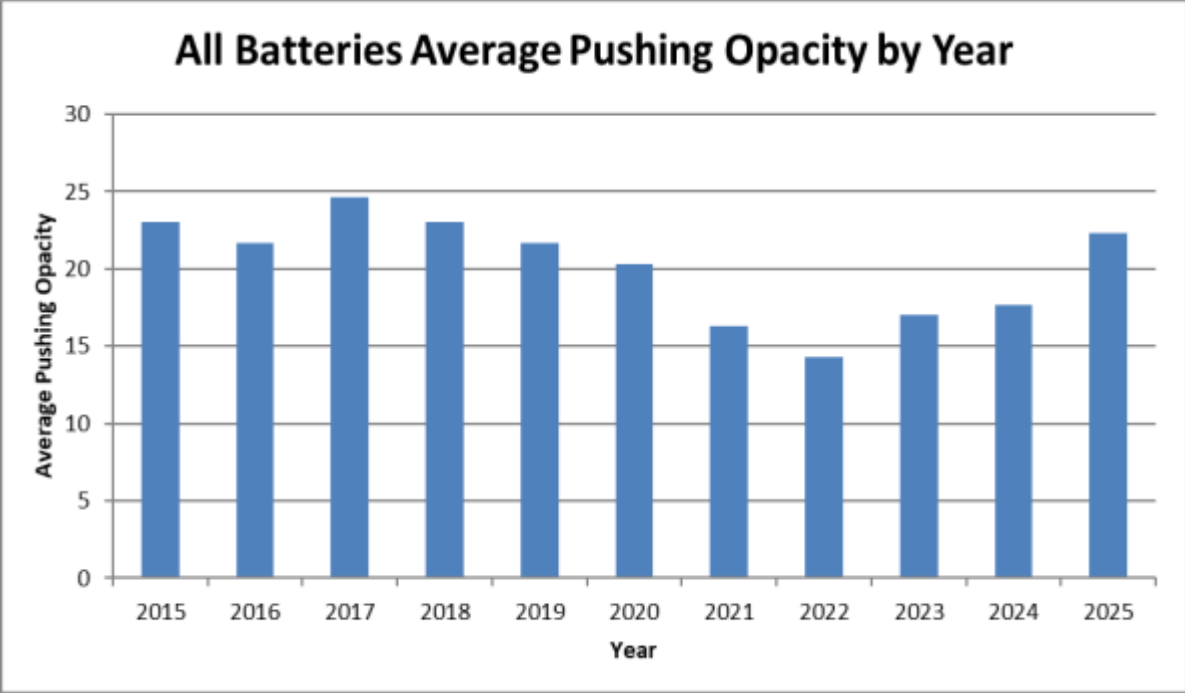
Cokemaking Emissions Performance



Cokemaking Emissions Performance and Stack Opacity



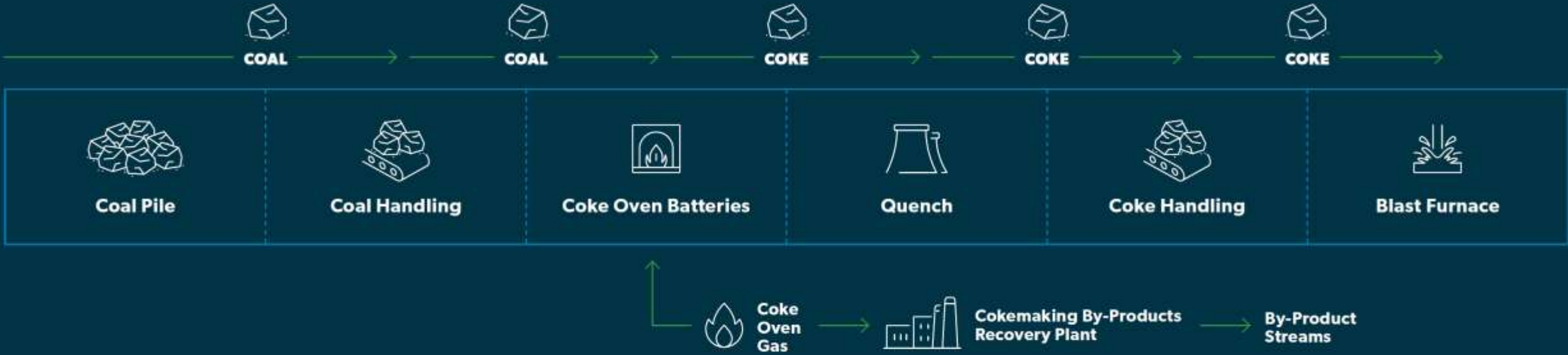
Cokemaking Emissions Performance and Stack Opacity



Notes:

- 2015 data begins on July 2nd when the standard came into force
- 2025 data includes Jan 1st, 2025 to Feb 26th, 2025
- Number of audits per year vary based on changing operating conditions

Cokemaking Process Flow



Thank you to our CLC Committee Members

- Algoma Public Health
- Batchewana First Nation
- Chippewa County Health Department
- City of Sault Ste. Marie
- Garden River First Nation
- Ministry of Environment,
Conservation & Parks
- SSM Tribe of Chippewa Indians
- St. Mary's River RAP Coordinator
- United Steel Workers Local 2251

We are proud to share we have been recognized with the **Environmental Initiatives Award** at the 2025 Business Sustainability Awards!



Community Engagement

Algoma Steel is committed to being a good neighbor.

- Quarterly Community Liaison Committee meetings.
- Donated \$10,000 to Save Our Young Adults (SOYA) to support their relocation and renovation costs.
- Sponsored and participated in the Gathering at the Rapids Pow Wow.
- Welcomed students from Sault College Manufacturing Processes class for an informative session about opportunities at Algoma Steel, followed by a guided tour of our DSPC facility.
- Donated \$12,000 to the 20th Annual Bring Home a Doctor Hockey Tournament in support of academic bursaries for the Northern Ontario School of Medicine.

