

Port
Colborne
Operations
Update
2020 - 2021



Purpose + Values

Our Purpose

We exist to improve life and transform the future. Together.

We believe mining is essential to the world's development. We only serve society when we generate prosperity to all and take care of the planet.

Our Values

Life matters most

We believe that life is more important than material results and goods, and we incorporate this vision in our business decisions.

Act with Integrity

We build relationships of trust and we promote open and transparent communication, acting with respect and integrity.

Value the people who build our Company

We trust people and together we build a work environment admired by all. We seek lifelong learning and personal growth.

Make it happen

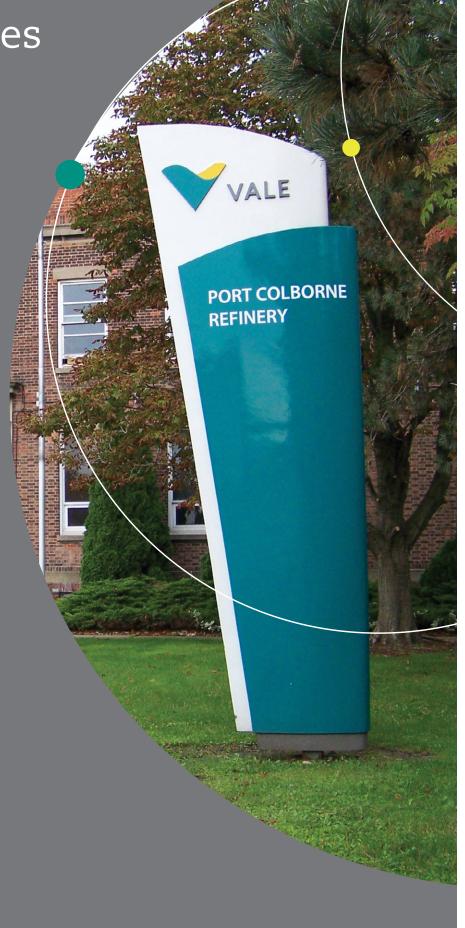
We are engaged, responsible and disciplined about generating results and overcoming challenges. We act in pursuit of the excellence, being sustainable and reliable.

Respect our planet and communities

We are committed to economic, social and environmental development in our business decisions.

On the cover:

Rich Shaver — supervisor, cleaning a process filter press



A message from Dino Otranto

A year ago, in this Community Report, I spoke of managing risks in our Base Metals business. At that time, I made a pledge to work tirelessly to understand them, and to put key controls in place to mitigate risks.

As part of this commitment, we have undertaken a new safety project called the Hazard Identification and Risk Assessment (HIRA), which delivers a detailed assessment of what needs to be improved within our operations and defines the critical controls.

While COVID-19 has caused delays in completing HIRA across all sites, we are back on track and will have the balance completed by the end of Q3 2021.

In addition to tackling existing risks in our operations, our commitment to health and safety has carried us through the throes of a pandemic as we continued to operate as an essential service across the North Atlantic.

I am proud that Vale's response to COVID-19 was immediate, aggressive and laser-focused on the safety of our employees and local communities.

Onsite, we implemented strict safety protocols aligned with public health guidelines. In addition, our employees developed innovative solutions, such as foot pedals to open doors hands-free and personnel separators in cages to ensure we could continue to safely transport groups underground.

The pandemic also presented opportunities to give back to our communities. At our North Atlantic operations, we donated a total of 400,000 N95 masks and \$135,000 to food banks and hospitals and other service providers in April 2020. Globally, Vale launched the US\$1 million COVID-19 Challenge to propel innovative solutions into the worldwide marketplace. Thousands of entries later, 11 were selected, including two from Northern Ontario.

With respect to delivering safe production, I saw the hard work that our surface plant employees were doing, and thanks to them, we met our finished nickel target in 2020. Despite mine production being lower than planned due to the impacts of COVID-19, we are focused on driving key improvements in this area as we continue to invest in digital transformation and other innovative ideas to enhance our efficiency.

Rounding out this year's efforts is a reinvigorated commitment to make Vale a diverse and inclusive organization. I am a strong believer in the value that can be achieved by promoting diversity of thought and experience throughout our operations and ensuring it better reflects the diverse communities that we live and work in. While there is more work to do in this area, we are making good progress in driving change.



Dino Otranto, Chief Operating Officer, North Atlantic Operations and Asian Refineries

Despite the challenges presented by the COVID-19 pandemic, I am proud of all that we've accomplished over the past year as we continuously improve to become a more sustainable company. We are all in this together, and together, we will architect new and better solutions for our future.

Dino Otranto

Chief Operating Officer, North Atlantic Operations and Asian Refineries

Life matters most

It has been an unprecedented year at Vale's Port Colborne Operations as we, along with the rest of the world, grappled with the implications of the COVID-19 pandemic. The health and safety of our employees and our community is at the forefront of everything we do and the pandemic strengthened our commitment to our most important company value, **Life Matters Most**.

When mining was deemed an essential service by the Province of Ontario, our employees sprang into action to create a safe working environment including screening stations, physical distancing, wearing face masks and working from home when possible. In addition, we used technology to help us, with all onsite employees wearing electronic contact tracing badges that alert individuals who are less than two metres apart, and provide contact tracing data for positive COVID-19 cases.



In the community, Vale's global purchasing power was swiftly put into action. We provided N95 masks to frontline healthcare workers at the Niagara Health Foundation and donated \$25,000 to Port Cares to support critical community services that have been in high demand during the pandemic.

Globally, Vale launched an international COVID-19 Challenge, which offered up to \$1 million in financial support to propel innovative pandemic solutions into the marketplace. More than 1,800 entries were received, including 300





Jimmy Penunuri, Manager of Vale's Port Colborne Refinery, delivering masks to the Niagara Health Foundation

from Canada. Eleven submissions were selected to receive support, including two from Northern Ontario: Flonsonics Medical and First Team 1305.

With the funding provided, Flosonics Medical, which develops wearable sensors that improve the clinical management of critically ill patients, will be able to scale up production from 100 to 1,000 devices per week. The wearable sensors will be donated directly to hospitals across Canada.



First Team 1305's UV Sterilizer box

Operations update

Without safety there is no production

Vale is very committed to the health and safety of communities where we operate and live. As part of that commitment, we recently conducted a hazard investigation risk analysis, which, in applying its core values, a Vale team identified an unacceptable safety risk in the use of liquid chlorine in rail cars. Our team quickly found that bleach

was a safer alternative, and created a temporary storage solution for it while a permanent solution is being built and will be installed later in 2021. This change in our refining process supports our core values of Life Matters Most and Make It Happen by totally eliminating a potential risk to our employees and the surrounding community.



Employees in front of liquid chlorine rail car — source Vale News

Community Based Action Plan

Vale launched the Port Colborne Community-Based Action Plan in 2020. This plan addresses the findings of the Community Based Risk Assessment, a series of studies carried out to better understand potential impacts from historical refinery operations in our community. The plan includes working towards filling in data gaps and promoting development in the area.

The Action Plan includes working with residents who live near to our Port Colborne Refinery to enhance conditions on their properties. In the fall of 2020, Vale worked with eight property owners, removing soils and restoring ground cover in driveways,

Vale Community
Concerns Line:

The Vale Community Concerns Line **289-478-VALE** (**8253**) is a 24/7 single point of contact for concerned residents to reach the company and receive a timely response. Or you can email us at PortColborne. Ouestions@vale.com.

In 2020 we received seven calls on our Community Concern Line on a variety of topics. Each concern was assigned to the appropriate Vale subject matter expert, who responded to the concerned citizen and addressed the concern within one business day.

Vale appreciates the time concerned residents take to call the Community Concerns Line, which we view as a vital communication channel between our company and the community.

and we will continue this work with the remaining identified land owners in 2021 (if feasible, given pandemic restrictions that may be in place).

The Action Plan also includes the establishment of a Community Improvement Fund in partnership with the City of Port Colborne. With this fund, Vale will contribute \$1.25 million over the next five years to support community enrichment and beautification programs in the community.

For more information visit Vale.com/CBRA.



