



Sudbury Operations Update

Learning together

Our Purpose

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

WHY do we exist?

Values

- **Life** matters most.
- Act with **integrity**.
- Value **the people who build our company**.
- Make it **happen**.
- Respect our **planet and communities**.

WHAT do we believe IN?

Key Behaviours

- **Obsession with Safety and Risk Management.**
- **Open and Transparent Dialogue.**
- **Empowerment with Accountability.**
- **Ownership for the Whole.**
- **Active Listening and Engagement with Society.**

HOW do we act?

Our Levers

- **Safety**
- **VPS**
- **People**
- **Innovation**
- **ESG**

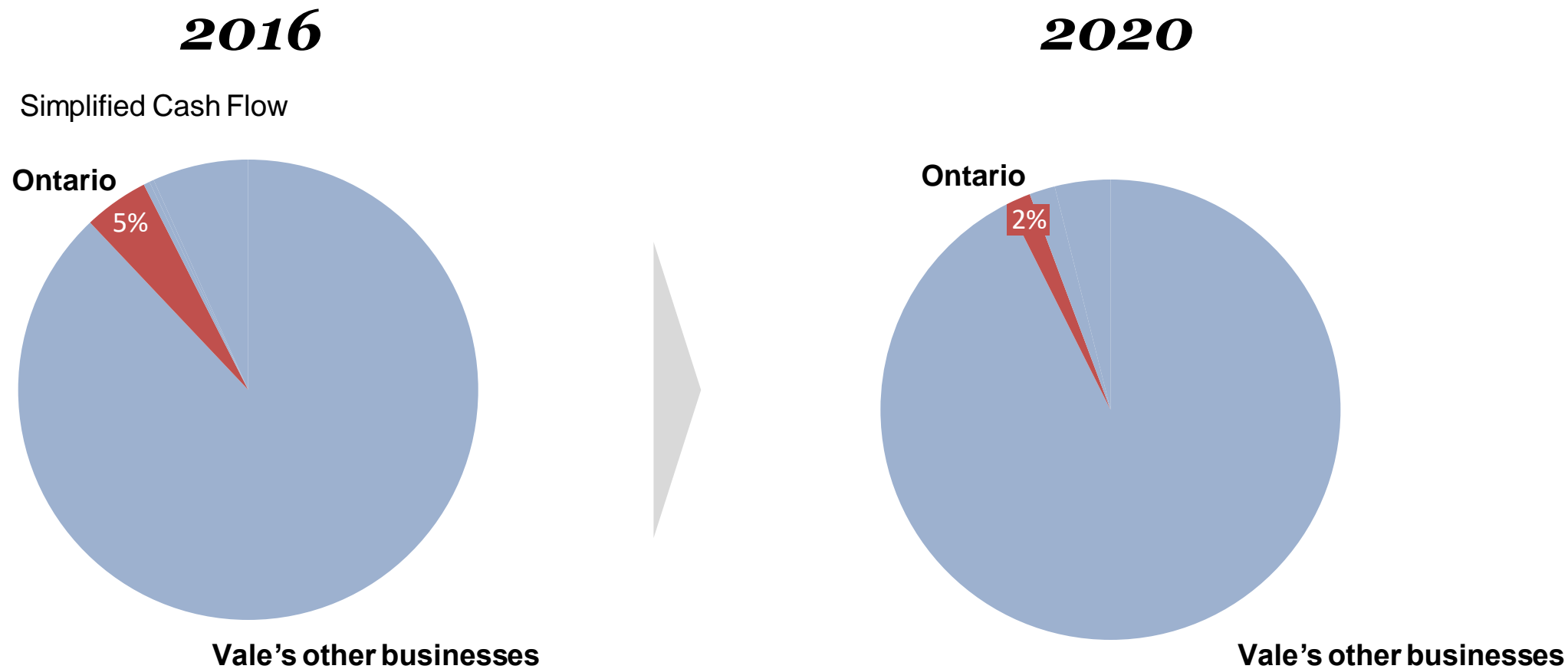
Our Ambitions

A great company recognized by society for being:

- Benchmark in **safety**.
- Best in class **reliable** operator.
- **Talent** driven organization.
- Leader in **low carbon** mining.
- Reference in **creating and sharing value**.

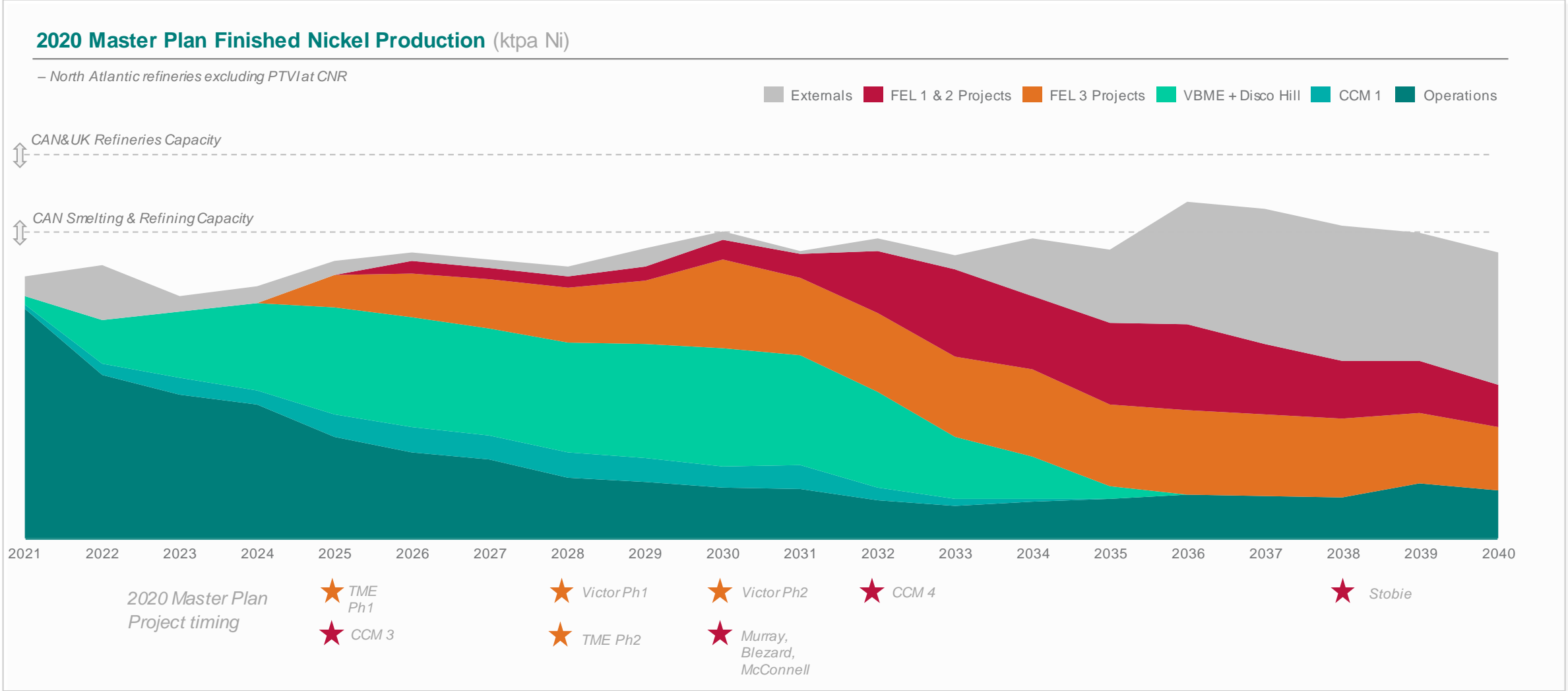
WHAT do we look for?

Our financial performance: In 2020, Ontario operations made up less than 2% of Vale’s global performance, having continued to decline since 2016



Source: Vale’s 20-F filings to the SEC, quarterly reports released to the market and internal sources (North Atlantic operations breakdown obtained from internal sources)

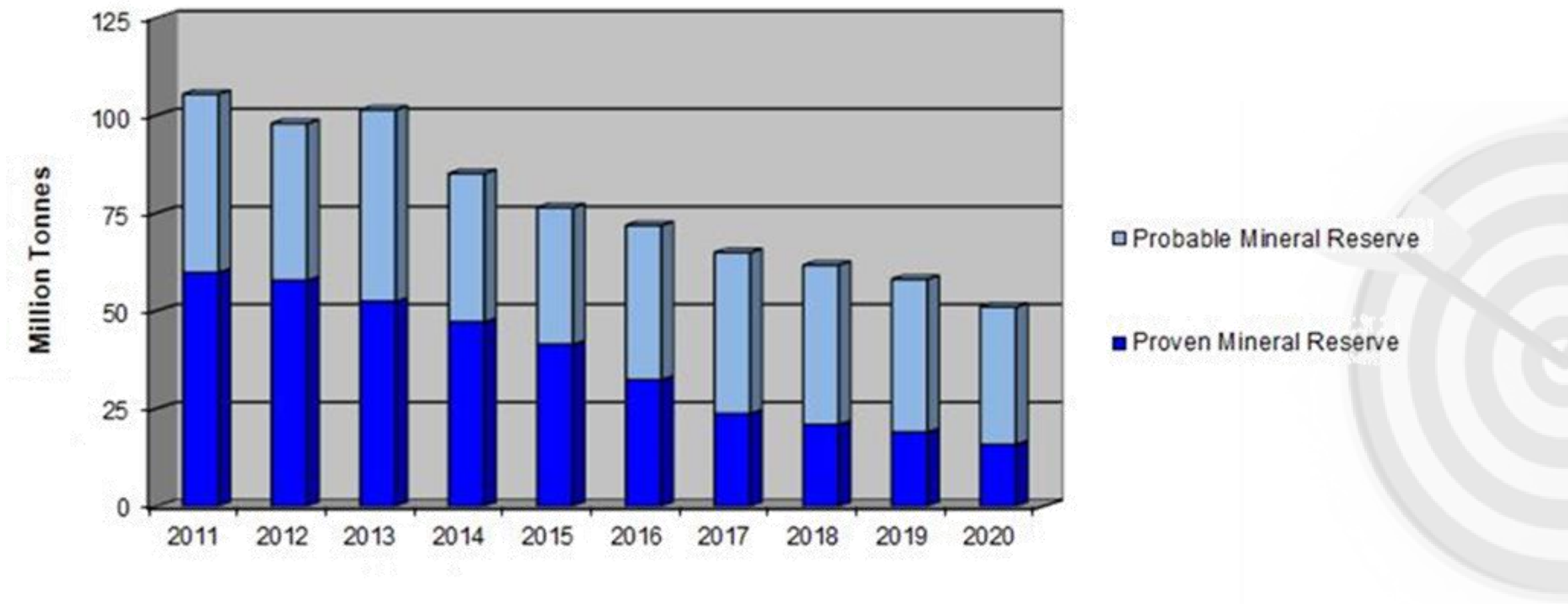
Our forward production: Within the next 10 years, current operations represent less than 15% of total production, requiring material investment for reserves replacement



Source: Master Plan 2020

Our reserves: Our mineral reserves are depleting, we need to secure investments to open up new sources of ore

Proven and Probable mineral reserves – Sudbury



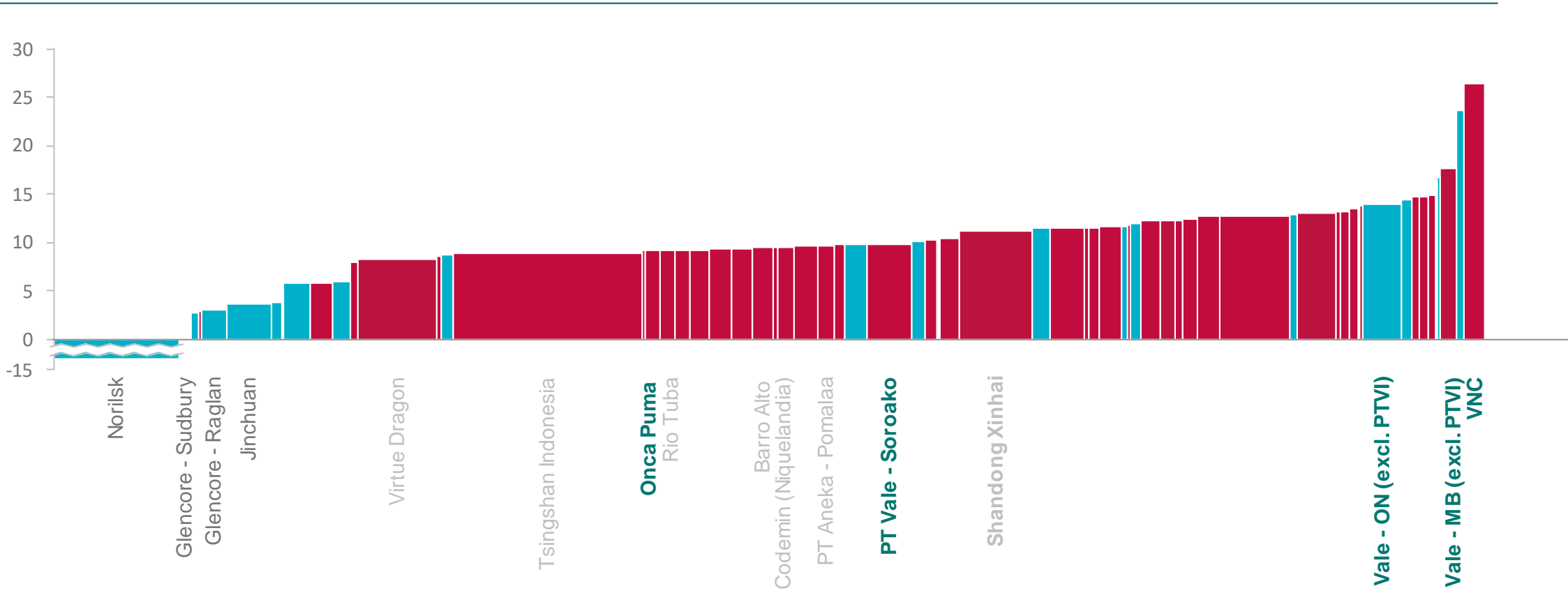
Source: Vale’s 20-F (2021)

Our Costs: are amongst the highest of the industry, this is not sustainable

Industry C1 (net of by products) + Sustaining (\$/t Ni)

Legend: Laterite (Red), Sulphide (Blue)

Databases 2019 WoodMac, 2020 Vale Finance

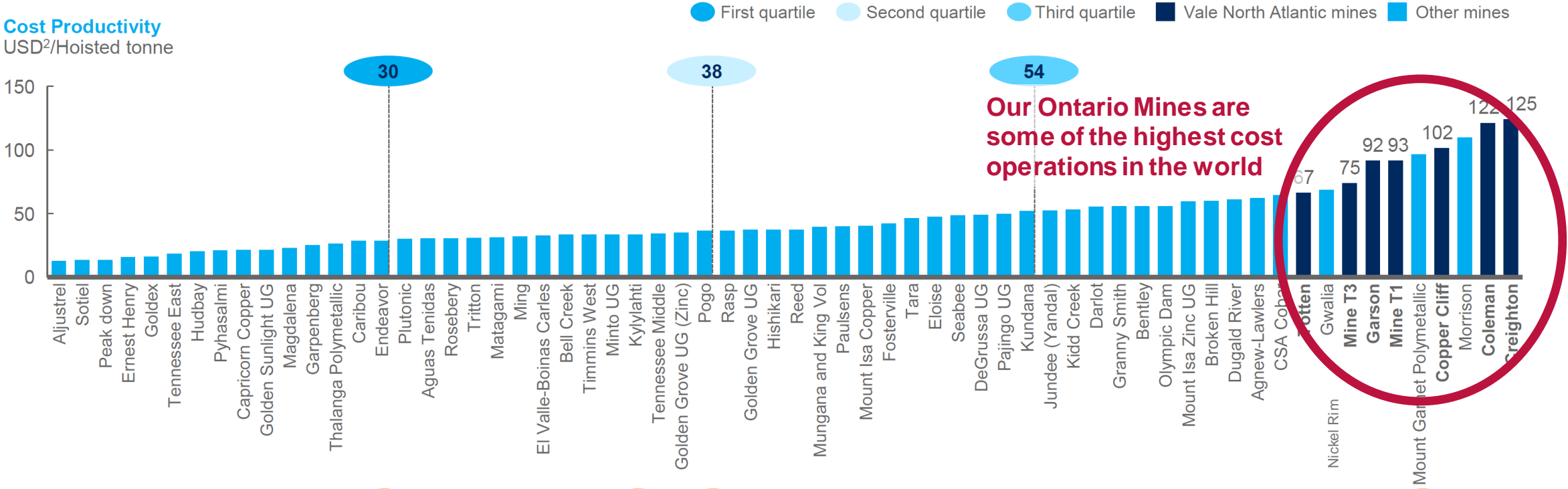


1 PTVI C1+Sustaining includes weighted average conversion costs from Matsuzaka and Clydach
2 Vale ON + MB excludes PVI production in Clydach (CNR)
3 CCM1 and VBME included as sustaining capital
Source: 1. Vale UCC+ sustaining cost: Finance dashboards 2020 2. Vale Production: Base Metals Strategy and Planning 2020 Preliminary Plan 3.C1 cash cost + sustaining competitors: WoodMac

Productivity: Low mine productivity and low cost management maturity has resulted in the highest underground mining costs across equivalent underground operations

Global Cost Curve : Underground stoping mines in high-income countries (2017)

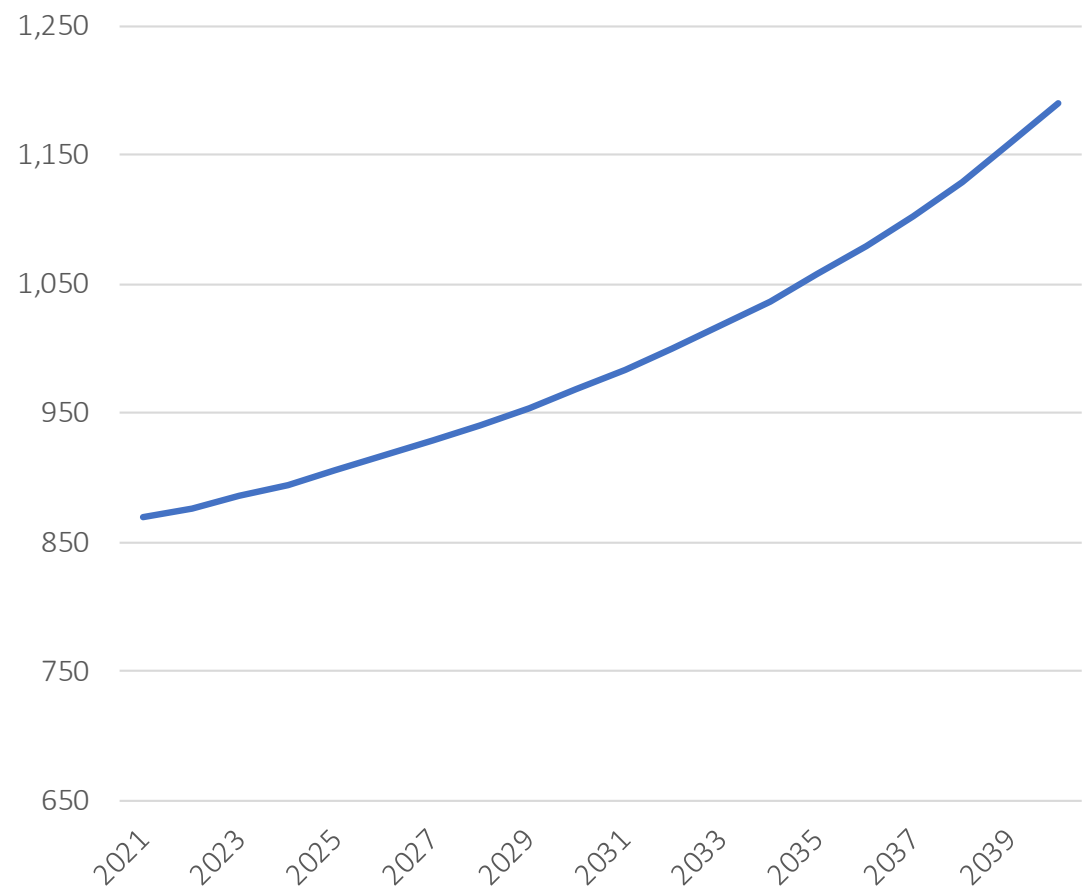
Based out of publicly available cost data from January – December 2017¹



Source: McKinsey & Co MineLens Benchmarking Ontario and Manitoba Operations (2017) and includes operational, maintenance and support cash costs, while excluding overhead costs, cost comparisons are based on publicly available information and expert inputs

Post Retirement Benefits Liability

Ontario Bargaining Obligation, \$ millions



Obligation of \$868 MIL is as of January 1, 2021, and based on assumptions in place at that time. Projections above start in 2021 and are based on a discount rate of 2.60%

In the absence of making any changes to the plan, the obligation for the Ontario Bargaining group is expected to grow to nearly \$1.2 billion in 2040

This projection is based on a number of actuarial assumptions, such as the discount rate, assumed life span of members, healthcare costs and trends, as well as a constant active population.