



MINERAÇÃO
VALE VERDE

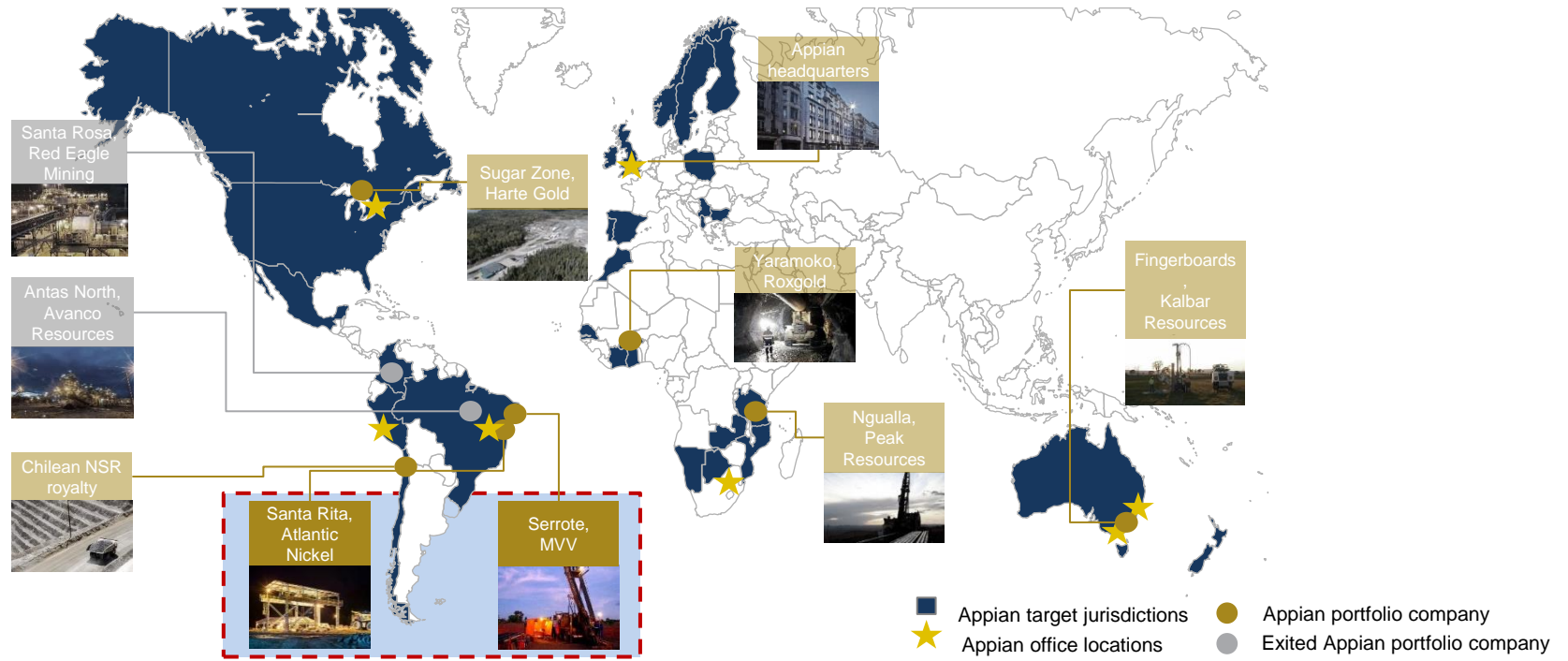


Who is Appian: A leading metals & mining long-term value investor

Appian Capital Brazil is 100% owned by Appian Capital Advisory private equity which is a leading and differentiated mining-sector investor with in-house deep technical expertise



Dedicated mining-focused investors	Experienced and focused investment and technical team	In-house development, financing, and operational expertise	Long-term, collaborative, value maximizing investor
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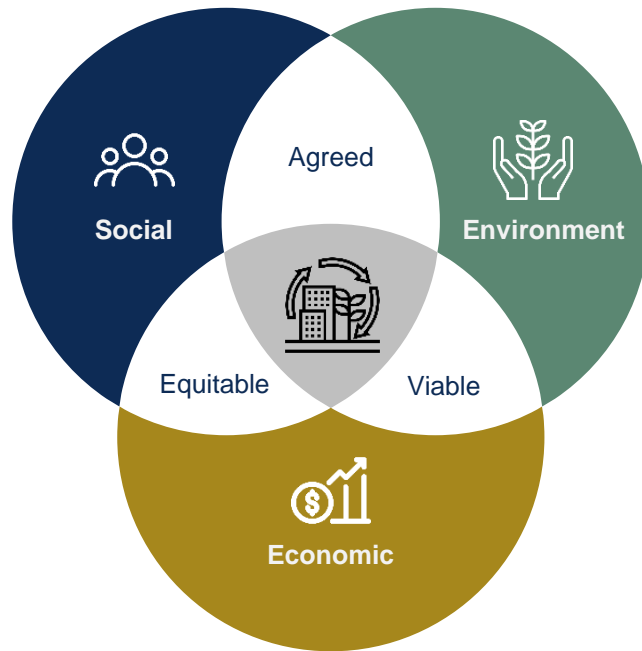


Source: Appian Capital Advisory LLP

Appian Standards

Building a truly sustainable business by applying our corporate values and leveraging 100+ years experience in the field of mining and mineral resources

A sustainable business based on the concept of Social Integration



- Being integrated means that we are part of the territory just like any other member of the community – like any other stakeholder
- If we are part of the territory, we engage, we debate, we seek alternatives, we share our learnings and are open about areas that can improve, like in any constructive social setting

Understanding what matters and applying best practice in the field, such as IFC Performance Standards



Snapshot of Appian Capital Brazil's assets

Strategic location of ACB's assets

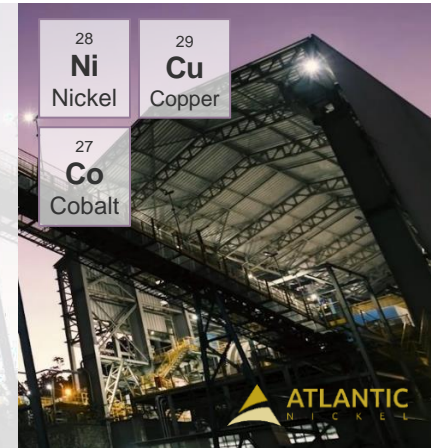


Atlantic Nickel: Santa Rita Mine

One of the very few nickel sulphide mines in operation

Deposit with significant resource potential beyond its 34 years' planned mine life

Safe, sustainable and low-cost operations



Mineração Vale Verde: Serrote Project

Attractive, well defined and scalable copper deposit

Sound execution program with first class project management

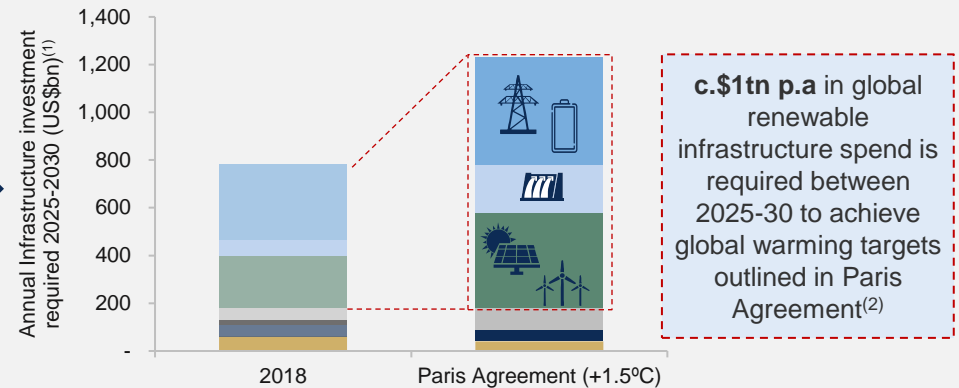
Efficient, low-cost operation progressing towards start-up in mid-2021



Producing materials critical to the energy transition

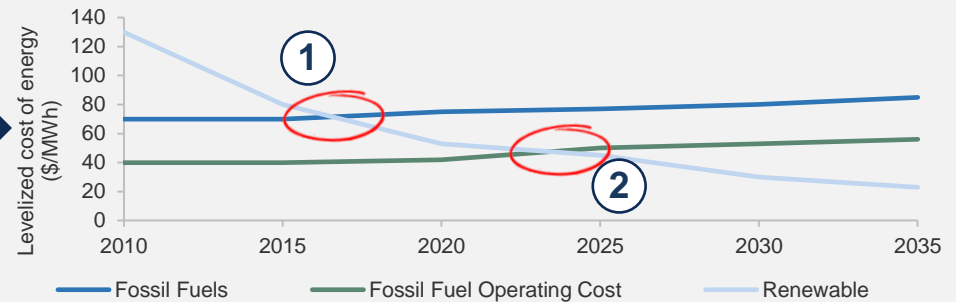
i The green infrastructure opportunity – rebuild sustainably

- ✓ Unprecedented infrastructure investment required to meet aggressive climate change targets
- ✓ Much of the investment in metal-intensive renewable power generation, energy storage and distribution



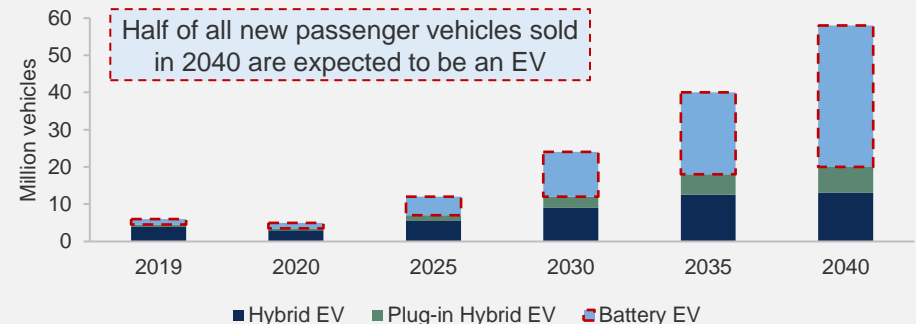
ii Increased technology adoption as costs reduce

- 1 Renewable sources of electricity are already cheaper than new-build fossil fuel plants
- 2 Cost of new renewable generation becomes cheaper than the cost of existing fossil generation



iii Exponential growth of electric vehicle penetration & charging infrastructure

- ✓ Key factors aligned for dramatic shift towards electric vehicles
 - ✓ Technology – fast charging; increased range and performance etc.
 - ✓ Falling costs
 - ✓ Regional, national & global emission regulations



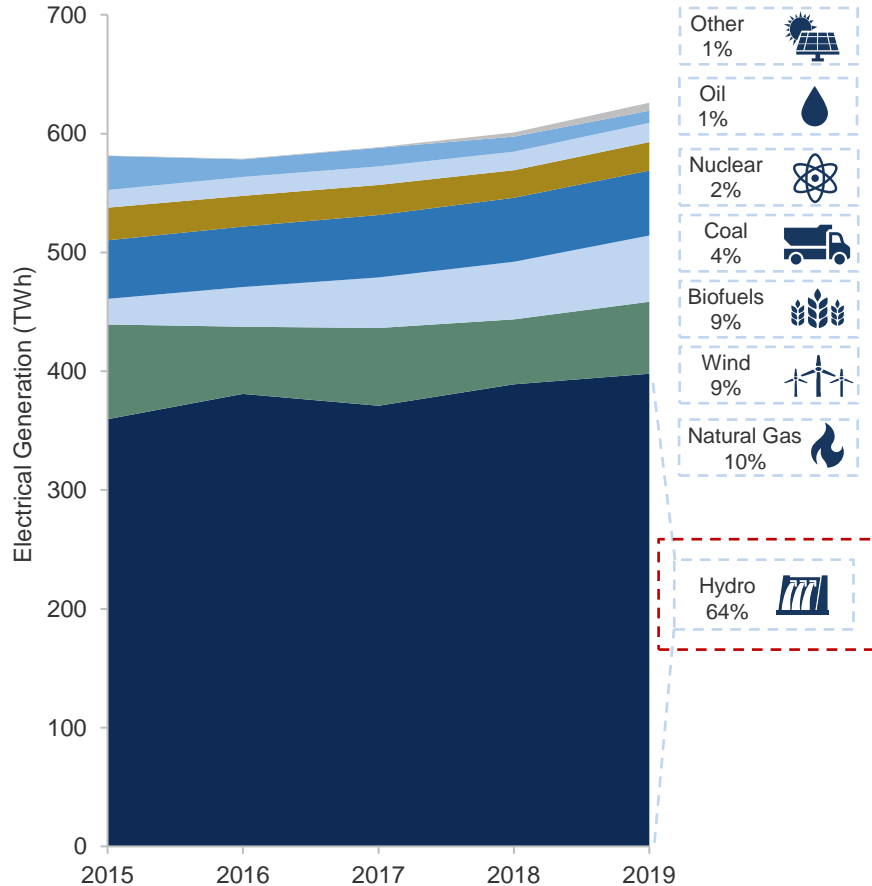
Sources: Wood Mackenzie, IEA – World Energy Investment 2019, KPMG, Carbon Tracker. Relevant notes:

1) IEA estimates – Average annual investment required per annum into the power sector between 2025-2030 2) Paris Agreement objective of “holding the increase in global average temperature to well below 2°C above pre-industrial levels, and pursuing efforts to limit the increase to 1.5°C”

Producing materials critical to the energy transition

85% of Brazil's energy mix is renewable or carbon neutral

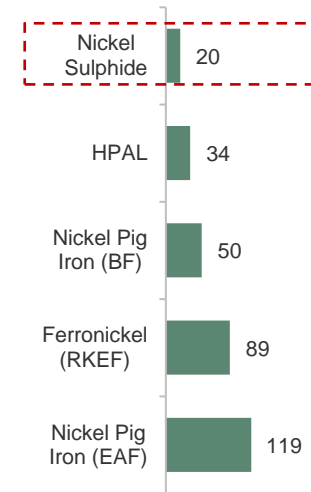
Brazil's access to cheap, renewable hydroelectric power makes it the perfect location for minimising the carbon footprint of producing battery metals



Sources: IEA Brazil data & statistics; Clean TeQ. Relevant note:
1) Electrical energy mix assumes FeNi and NPI production is in China, HPAL in Indonesia (using black coal) and NiS is in Australia. Note that the technology for conversion of FeNi or NPI to battery-grade sulfate has not been proven at industrial scale, may not be economically viable and may add further GHG emissions which have not been accounted for

Nickel sulphide: a carbon-efficient source for batteries

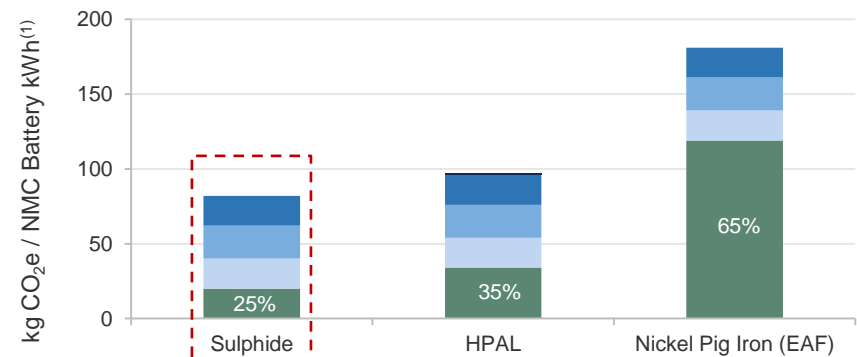
Nickel pathways: kg CO₂e emissions per kWh of NMC (811) battery capacity⁽¹⁾



- ✓ If electric vehicles are to be a net reducer of greenhouse gas emissions then battery design & components are a critical factor
- ✓ Raw materials (mining & processing) are the largest contributor to an electric vehicle's carbon footprint
- ✓ Nickel sulphide is the **least carbon intensive nickel raw material** for producing a battery pack
 - NiS is therefore in high demand from battery & car manufacturers

"Tesla will give you a giant contract for a long period of time if you mine nickel efficiently and in an environmentally sensitive way."

Elon Musk; July 2020



■ Raw Materials (Ni/Co) ■ Raw Materials (Li/Mn/C/Cu/Al)
■ Precursor / Active Materials ■ Cell Manufacturing
■ Pack Manufacturing