

Say on Climate

South32 Ltd

5 October 2022

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South32 Say on Climate Agenda

1. ACCR's view of South32 CCAP using CA100+ Benchmark framework
2. South32's emissions profile
3. Climate targets and goals
4. Decarbonisation strategy
5. Scenario analysis
6. Climate policy engagement
7. Capital allocation
8. Accounts and audit
9. Governance
10. Recommendation

ACCR view of South32's CA100+ Net Zero Company Benchmark scores with CCAP

Indicator	ACCR's assessment
1. Net-zero GHG Emissions by 2050 (or sooner) ambition	Meets all criteria
2. Long-term (2036-2050) GHG reduction target(s)	Partial
3. Medium-term (2026-2035) GHG reduction target(s)	Partial
4. Short-term (up to 2025) GHG reduction target(s)	Does not meet any criteria
5. Decarbonisation strategy	Partial
6. Capital allocation alignment	Partial
7. Climate policy engagement	Partial
8. Climate Governance	Partial
9. Just Transition	NA
10. TCFD Disclosure	Meets all criteria

Lift in goal for net zero Scope 3 emissions by 2050 resulted in tick for Indicator 1

There is room for improvement for indicators 2-8

Active engagement is necessary to signal to South32 that investors want more vision and courage

South32 Say on Climate

Emissions profile and
climate commitments

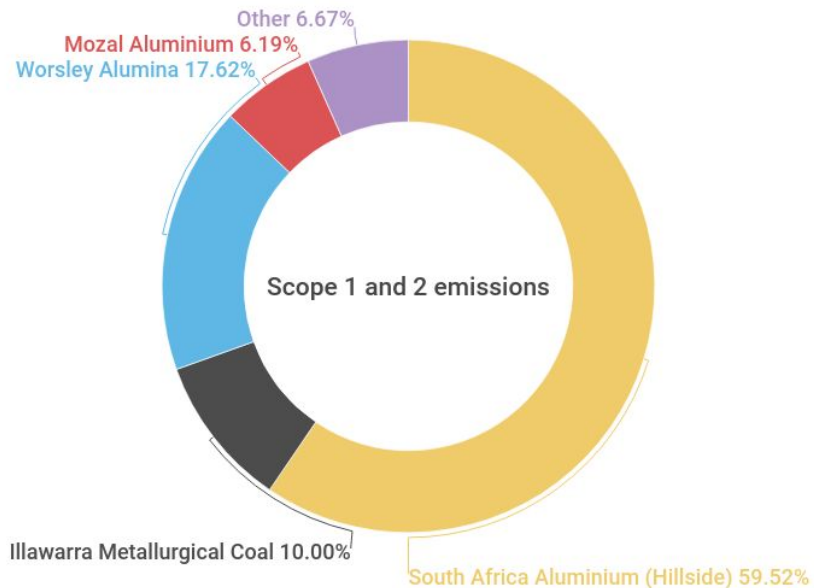
Alumina and aluminum are the most carbon intensive commodities in South32's portfolio

South32's emissions by commodity, FY22 (MtCO₂e)

	Scope 1	Scope 2	Scope 3	Total
Alumina and Aluminium	6.2	11.3	29.0	46.5
Metallurgical coal	1.8	0.3	18.9	21.0
Manganese ore	0.3	0.1	16.9	17.3
Other	0.8	0.2	2.7	3.7
Total	9.1	11.9	67.4	88.4

Note: "Other" includes Cannington and Cerro Matoso

Table: ACCR • Source: South32 • Created with Datawrapper



South32's climate targets and goals

South32's medium term target is to reduce absolute operational emissions by 50% by 2035, from a FY21 baseline. The company set this target in 2021 and the baseline has been adjusted for the following divestments:

- The divestment of South Africa Energy Coal, SAEC) in 2021; and
- The divestment of its 60% share in Tasmanian manganese alloy smelter (TEMCO) in 2020.

Lift in goal for net zero Scope 3 emissions by 2050

South32's emissions reduction targets, FY22

	2035	2050
Scope 1 & 2	Reduce absolute emissions by 50% by 2035 (FY21 baseline, adjusted for divestments)	Goal: Net zero operational emissions by 2050
Scope 3	-	Goal: Net zero emissions from supply chains by 2050

According to TPI, only alumina and aluminium intensity pathways are 1.5°C-aligned

TPI assessment of South32 target by commodity for CA100+ Net Zero Company Benchmark

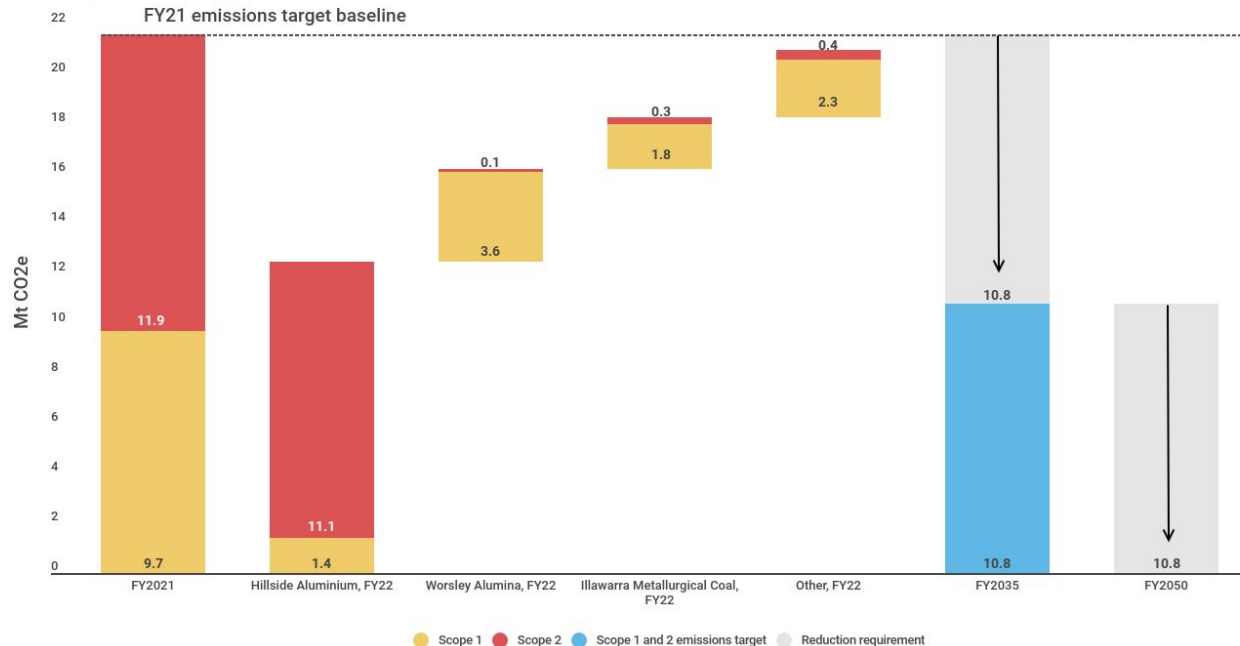
Commodity	Short-term alignment in 2025	Medium-term alignment in 2035	Long-term alignment in 2050	Indicative emissions Scope 1 and 2
Aluminium	Not aligned	Aligned: 1.5°C	Aligned: 1.5°C	84%
Alumina				
Metallurgical Coal	Not assessed	Not assessed	Not assessed	10%
Diversified Mining	Not aligned	Not aligned	Not aligned	7%

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Decarbonisation Strategy

South32 has not quantified key elements of its strategy, which is inconsistent with the expectations of the CA100+ benchmark

South32's decarbonisation task to 2035 and 2050



Largest sources of operational emissions:

- Hillside Aluminium (59.5%)
- Worsley Alumina (17.6%)
- Illawarra Metallurgical Coal (10%)
- Mozal Aluminium (6.2%)

South32 has not disclosed a **Marginal Abatement Cost Curve (MACC)** which would help investors identify decarbonisation projects that company is investigating, the **cost and scale of the carbon reduction opportunity** for each initiative.

Hillside Aluminium: South32 is at risk of not meeting medium-term target should the company not decarbonise Hillside's power supply by 2035

Emissions profile

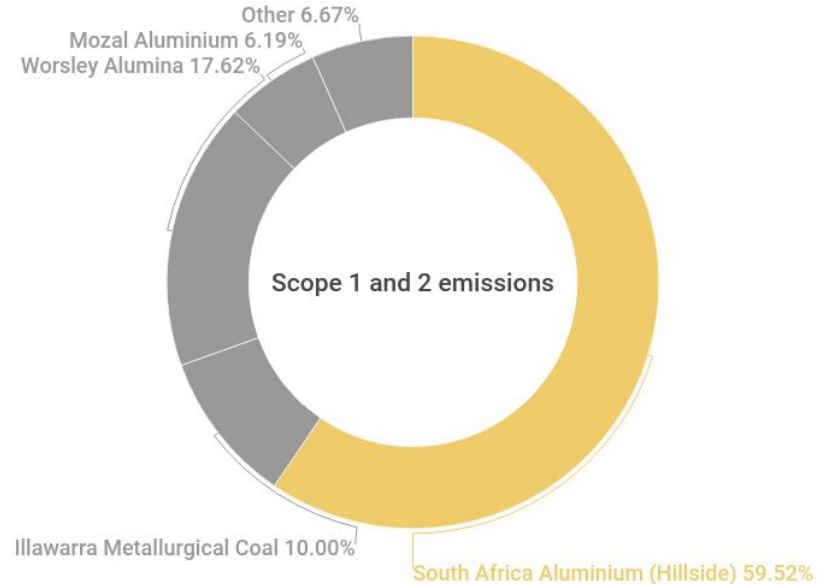
- 59.5% operational emissions
- Scope 2 is 89% emissions at Hillside
- South African coal-dominated grid, Eskom

Risks

- Eskom energy supply agreement to 2031
- Grid constraints
- Significant cost to decarbonise South African Grid - US\$250b
- Just Transition considerations

Opportunities

- South Africa's renewable energy opportunities and attractive economics
- South32 excellent counterparty for power purchase agreements



Mozal Aluminium: Renewal of hydropowered PPA critical continued low-carbon production

Emissions profile

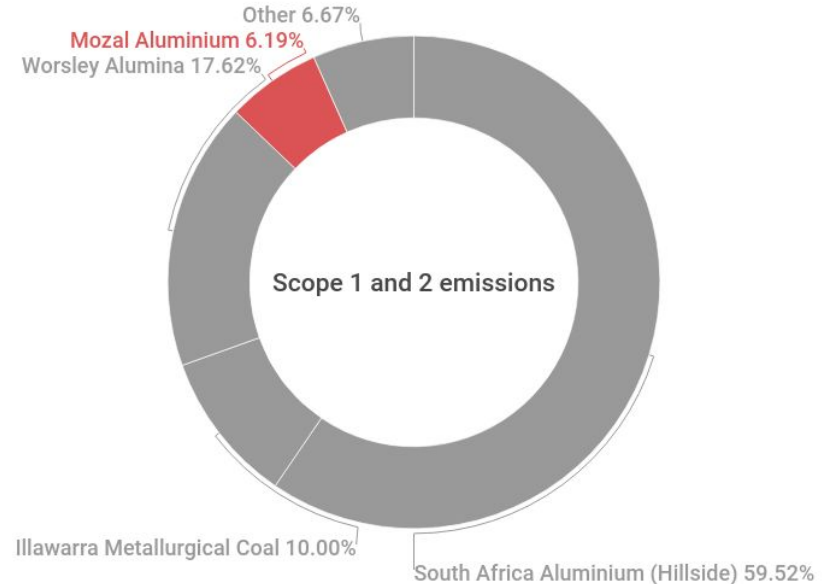
- 6.19% operational emissions
- Hydroelectric energy supply from Hidroeléctrica de Cahora Bassa (HCB)

Risks

- Energy PPA to expire 2026
- Electricity supply constraints, resulting in back up power from Eskom

ACCR recommends investors to

- Track matter closely and engage with the company regularly for updates on this agreement, given the carbon emissions risk should the agreement fall through



Worsley Alumina: Gas risks delaying renewable energy uptake

Emissions profile

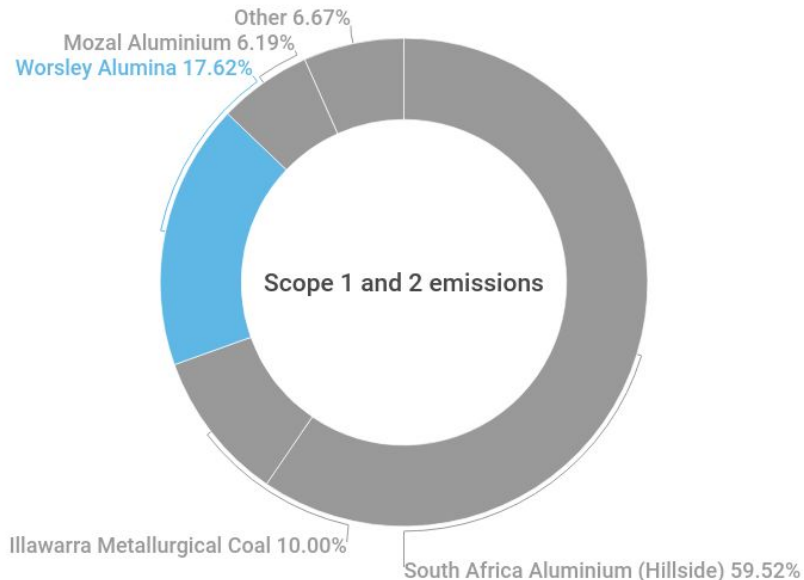
- 17.6% operational emissions
- Primary source of emissions for Worsley is the combustion of thermal coal (69% total) and gas to generate high pressure steam for process
- Fourth largest carbon polluter in WA

Risks

- Supply chain risks - Griffin Coal in administration
- Use of gas as intermediary fuel risks delaying renewable energy uptake
- Gas only decreases site emissions by 15-20%
- Just Transition considerations

Opportunities

- Hybrid model
- Engagement with government to proactively explore funding and support to expedite shift to highest possible share of renewable energy at site



Illawarra Metallurgical Coal: ACCR welcomes South32's decision to not proceed with an investment in the Dendrobium Next Domain project

Emissions profile

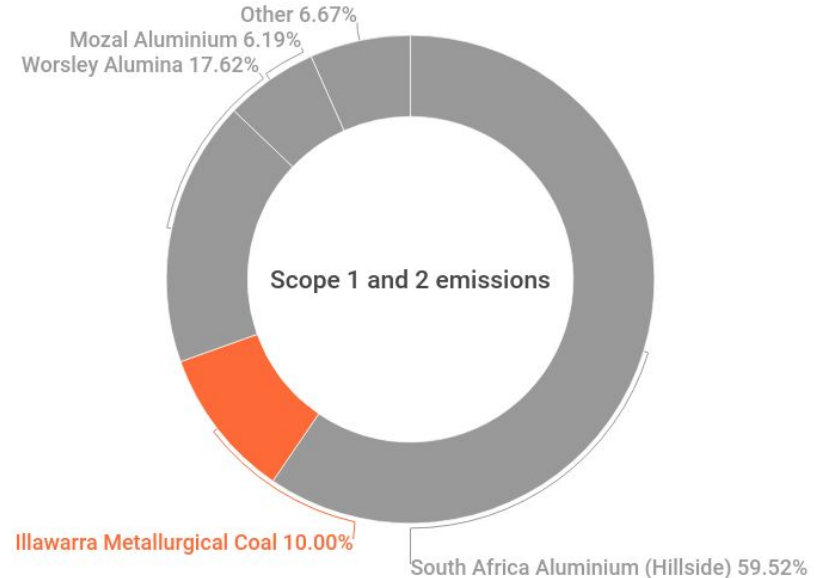
- 10% operational emissions
- Scope 1 emissions predominantly from fugitive methane
- Appin is gassiest mine in NSW and most carbon intensive mine in Australia
- ACCR welcomes news about DND project; no new greenfield

Risks

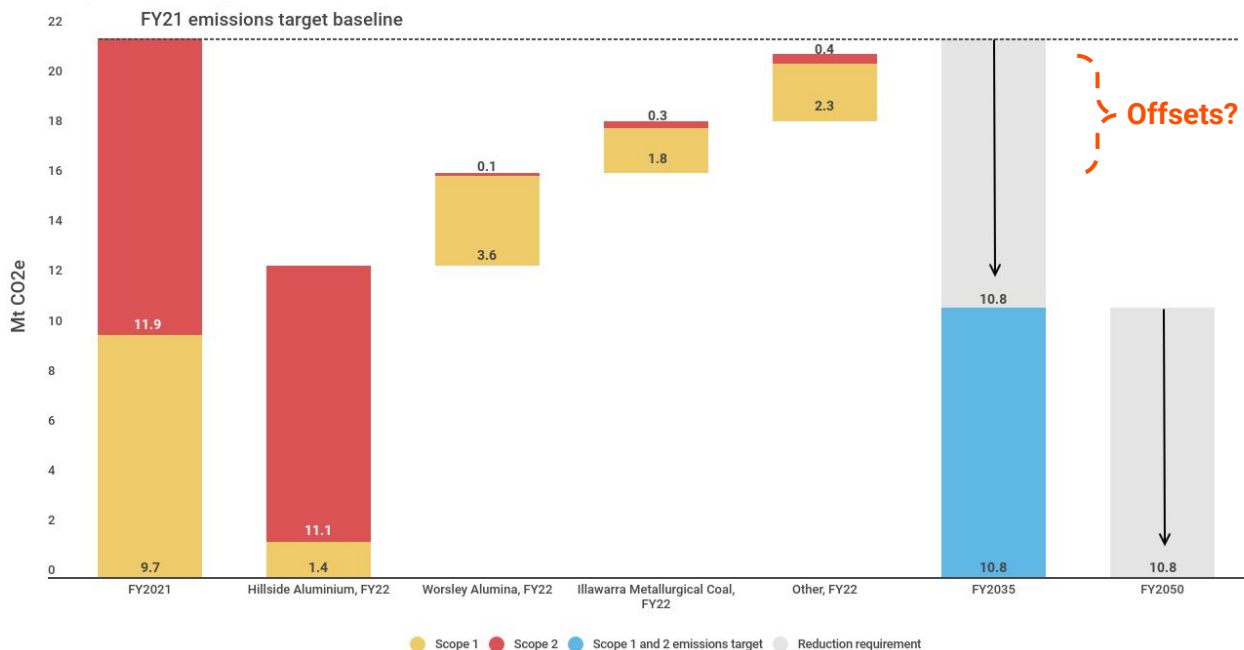
- Methane traps 28 (100 yr GWP) and 84 (20 yr GWP) times more heat than CO₂
- South32 is not accelerating methane abatement technologies rapidly enough

Opportunities

- Given record underlying revenue increase of 208% from IMC in FY22, ACCR expects South32 to accelerate its roll-out of methane reducing technology



South32 has an appropriate emissions mitigation hierarchy, however no cap on offset use



Mitigation Hierarchy

"Prioritises avoidance of emissions, and where avoidance is not possible, we mitigate GHG emissions through efficiency initiatives or transition to low-carbon energy. We intend only to use voluntary carbon offsets after these options have been fully explored. Carbon credits may be used to comply with regulatory requirements in South Africa and Australia."

Offsets?

South32, CCAP, p.80

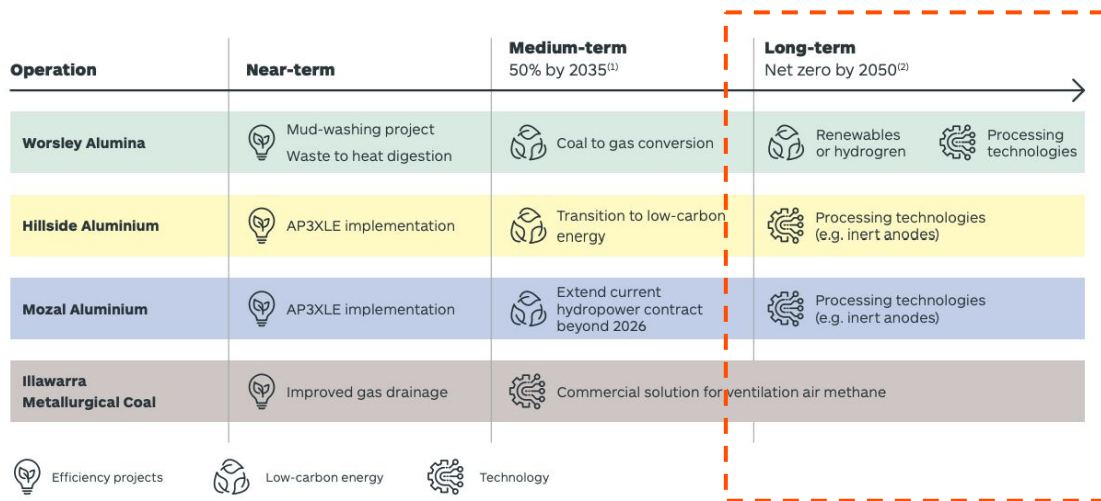
South32's long-term decarbonisation pathway relies on technological solutions and pathways which the company could accelerate

South32's long-term decarbonisation plan post 2035 is **vague** and **intangible**.

Technology solutions form the majority of projects planned in the long-term to reduce emissions.

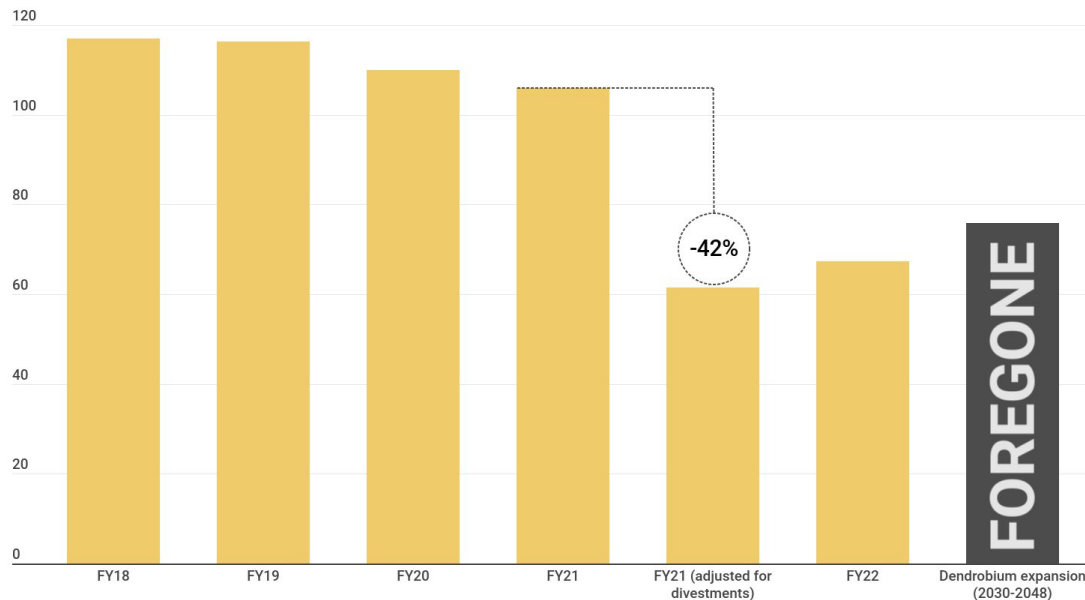
ACCR does not expect South32 to have concrete plans but there is a lack of detail to outline how the company will support and advocate for the development of these technological solutions to and post-2035.

South32's decarbonisation pathway



South32 has commenced planning to decarbonise its value chain, more detail is expected

South32's Scope 3 emissions FY18-FY22, adjusted for divestments and to show foregone emissions from DND expansion



In the near-term, South32 intends to look at **three strategic areas:**

- **Partnerships:** building meaningful partnerships with customers and suppliers to support and co-design emission reduction programs
- **Industry engagement:** contributing to industry groups that support decarbonisation and product stewardship initiatives
- **Innovation:** supporting the development of technology solutions to address value chain emissions

South32, CCAP, p.90

2050 average global commodity demand
in 1.5°C scenario versus base case



South32's 1.5°C scenario analysis appears to be incompatible with the IEANZE

“Seaborne hard coking coal is required to support GHG emissions reduction target and new integrated capacity in the steel industry.”

South32, CCAP, p.77

The IEA Net Zero Emissions (IEANZE) Scenario states that while, “demand for coking coal falls at a slightly slower rate than for steam coal... **existing sources of production are sufficient to cover demand through to 2050.**”

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Climate policy, Capex, accounts and audit,
governance

South32 is funding negative climate advocacy, against its own policy

Industry Association	South32's FY22 Review of Industry Associations findings	InfluenceMap Performance Band
NSW Minerals Council (NSWMC)	Aligned	E-
Queensland Resources Council (QRC)	Aligned	E
Minerals Council of Australia (MCA)	Aligned	E+

NSWMC: “Coal also has a continuing and important role, as outlined by modelling by the independent International Energy Agency (IEA) showing global coal demand to remain steady to 2040.”

QRC: “Right now, steel can only be produced commercially by using metallurgical coal, and thermal coal is the only 100 percent reliable way to produce energy.”

MCA: In its pre-budget submission to the Federal Government, the MCA argued to retain the fuel tax credit scheme in its current form, which would lock in a significant public subsidy to the coal industry.

South32 does not
“support direct advocacy
from industry members
on energy coal
expansion or energy coal
subsidies.” CCAP, p.74

South32 has an opportunity to exert climate-positive policy influence as a means of accelerating the decarbonisation targets within its own climate change plan and of the economies in which it operates.

While South32 has not explicitly committed to align CapEx with 1.5°C pathway, is prioritising future facing commodities

- South32 has not made explicit commitment to align capital expenditure with 1.5°C
- Only provides indication of capital expenditure for decarbonisation to FY24.
- Has not made huge splash announcement for decarbonisation funding like peers - although smaller than peers
- ACCR notes that renewable energy contracting will comprise significant share of the company's strategy and that expenditure will present in OpEx rather than CapEx

South32 has strong focus on “**allocating growth capital to commodities that support the global transition to a low-carbon world.**” CCAP, p.75

Accounts and audit: FY22 financial statements improved recognition of climate risk

South32's scored poorly in the initial assessment of its FY21 disclosures in the CA100+ Net Zero Company Benchmark Accounting and Audit indicator

Within the 2022 Annual Report, South32 made improvements, including:

- Disclosing key estimates, assumptions and judgements
- Impairment of non-financial assets

Areas for improvement include:

- Disclosure of the 1.5°C sensitivity analysis
- Disclosure of how carbon prices have been considered and how climate change can impact other aspects of the financial statements including impacting commodity prices and the risk of physical damage

Climate Governance: 2035 target and portfolio transition linked to remuneration

South32 has two related strategic measures linked to the long term incentive (LTI), each with a weighting of 10%:

1. South32's response to climate change, being the achievement of the 50% 2035 Scope 1 & 2 emission reduction target; and
2. The transitioning of the portfolio towards the metals critical to a low-carbon future

The linkage of 20% of the LTI to shifting the business in response to climate change is notable in aggregate. However, considering the commercial imperatives associated with decarbonising Hillside and Worsley, having a higher weighting on the achievement of the 2035 target could be worthwhile.

It is critical that a quantifiable reduction in emissions is the primary input to assessing success for the first strategic measure.

South32 2022 Say on Climate Summary

Positive developments and CCAP commitments:

- South32's decision to **not progress with the Dendrobium next domain project** and its commitment to not pursue greenfield metallurgical coal projects is **extremely welcome**. The company is clearly focused on restructuring its portfolio towards the “metals critical to a low-carbon future”
- Whilst the **2035 Scope 1 & 2 target is not completely aligned with a 1.5C trajectory**, the Transition Pathways Initiative has determined that the company's **aluminium and alumina pathway is**. This is the most material emissions source for South32, comprising 83.3% of total Scope 1 & 2.
- South32 has **significantly increased its recognition of climate change in its FY22 financial statements**
- Whilst more detail is always welcome, the company is clearly **taking a Just Transition seriously**

South32 2022 Say on Climate Summary

However ACCR holds concerns around the following:

- ACCR has engaged with South African energy market experts and whilst challenges exist, **the company has ready opportunities to underwrite the build out of renewable energy systems on the Eskom grid.**
- South32 may **not be sufficiently prioritising the leapfrogging or minimisation of gas use** at Worsley Alumina.
- Want to see further evidence of **constraining negative lobbying** from MCA, QRC and NSWMC, and like BHP, more positive advocacy that complements its strategy

ACCR conditional support for South32's Say on Climate vote

The core principles of South32's Climate Change Action Plan (CCAP) are sound and worthy of investor support. However, such support should come with conditions:

1. South32 commits to provide more granular, quantified update in 2023
2. South32 commits to exert enhanced climate-positive policy influence, as a means of accelerating the decarbonisation targets within its own CCAP and of the economies in which it operates

ACCR strongly encourages investors to advocate for these outcomes in its engagement prior to the AGM

Voting recommendation: FOR, subject to provision of quantified updates in 2023