POSCO

South Korea, Steel

Accounting		Climate Assumptions		Audit		Date of analysis: May 17 2021
Judgements	Consistency with other reporting	Visibility	Paris alignment	Visibility in CAMs	Consistency check	Year end: December 2020 Report date: April 29 2021 AGM: March 24 2021
						CA 100+ company, so seen by
Significant concerns	Significant concerns	Significant concerns	Significant concerns	Significant concerns	Significant concerns	investors as key to driving global net zero emissions

Summary view:

- One of the world's leading steel-makers, POSCO has a significant carbon footprint. While it currently enjoys significant
 free allowances under Korea's emissions trading scheme, it acknowledges these allowances will reduce over time and
 costs will increase.
- With significant ambitions for carbon neutrality in its steel production (though not apparently in any of its other
 operations, which include gas fields, pipelines and power generation) it is concerning that there appears to be no
 reflection of these ambitions in the financials, nor even in the narrative reporting in the 20-F.

Background

The Business

- POSCO is known as a steel producer. Alongside this core operation (now 50% of revenues), it also includes a broad 'trading' business (34%) and a construction arm (11%). The company produces slightly more than 40m tons of steel products a year, nearly 90% in Korea itself, 7.5% in Indonesia, 2.5% in China and 1% in Vietnam.
- As part of a broader strategy to diversify from steel, the trading business is increasingly
 developing from a traditional export business to include energy and mineral resources
 development. A particular focus is gas fields in Myanmar, which alone provide around 1% of
 total group revenues.
- Part of the 'other' segment of the business (5% of revenues) is POSCO Energy, which has 3.4GW of thermal power generation capacity in Korea and southeast Asia. This business is seeking to expand into renewables. The segment also includes an LNG logistics operation.

Approach to climate change

- POSCO states that it is committed to producing sustainable steel. It has a stated aim of being carbon neutral by 2050; it is seeking a 20% reduction in CO2 emissions (apparently against a 2017-19 baseline) by 2030, through efficiency gains; and a 50% reduction by 2040, based on recycling, initial testing of hydrogen power technologies, and carbon capture and storage. The 2050 ambition depends on full adoption of green hydrogen and renewable power sources. It suggests that this is in line with the IEA SDS scenario and so well-below 2°C of warming.
- In December 2020, POSCO set out its ambitions to develop a hydrogen business, and a roadmap for delivery. It aims to expand by-product development of hydrogen to 70,000 tons by 2025, 500,000 tons of blue hydrogen (dependent on carbon capture and sequestration) by 2030 and 2m tons of green hydrogen by 2040. Note, however, that its steel production capacity would require nearly 4m tons of hydrogen annually, and it is also exploring hydrogen as a fuel for its power generation operations. Its stated long-term aim is for 5m tons of green hydrogen production capacity by 2050.
- Korea has a GHG emissions trading mechanism. POSCO enjoys an allocation of free
 emission allowances which cover most of its activities, and buys additional allowances as
 needed. It expects a future reduction in free allowances and an increase in prices, but does not
 seem to specify expected timing nor quantify the potential exposures.
- POSCO reveals Scopes 1&2 emissions of 80m tCO2 in its Climate Action Report, but these appear to be just from its steel-making activities. Scope 3 emissions are stated as 13m tCO2.

Accounting: judgements and consistency with other reporting

Accounting judgements

Significant concerns

- POSCO reports under IFRS as issued by the IASB.
- There appears to be no reference to climate change in the notes to the US GAAP financials. It is not apparent that any consideration of climate has been built into the numbers.
- Many assets are held in the books on very long lives. Buildings and structures have estimated useful lives up to 50 years, machinery up to 25 years and lease assets up to 30 years. Depreciation is on a straight-line basis over these lives. The book value of buildings is some W4,161bn, structures W3,025bn with depreciation levels in both cases implying average remaining useful lives of more than 13 years and machinery W16,857bn (where implied average remaining useful lives are around 7 years)¹.
- The two largest associates and joint ventures on the balance sheet are W1,418bn for its 12.5% stake in the Roy Hill iron ore mine and associated infrastructure in Australia and W199bn for the 25% holding in South-East Asia Gas Pipeline, the Myanmar-China gas infrastructure company.
- Even after an impairment of W189bn during the year, goodwill on the books for POSCO International, which includes POSCO's fossil fuel exploration and production activities, remains W763bn.
- The company accrues a small liability in respect of payments required for GHG emissions above its free allowances. In 2019 this was W51bn, in 2020 W79bn.

Consistency with other reporting

Significant concerns

- POSCO's 20-F is published as a stand-alone document, already one month after the AGM. The 2020 Citizenship Report, which combines an annual report with sustainability reporting, is still to be published. The company also sets out its climate-related undertakings in a range of other stand-alone publications and presentations, including a TCFD-consistent Climate Action Report from July 2019 (there does not appear to be a more recent update of this document).
- Apart from brief discussions of the Korean CO2 emissions trading scheme (ETS), a brief mention within risk reporting, and a reference to it being among the responsibilities of the board ESG committee, there is almost no mention of GHG emissions or climate change in the 20-F narrative reporting just as there is not in the financials.
- The Climate Action Report makes clear that POSCO expects a future reduction in free CO2 emission allowances under the ETS and an increase in prices. The expected timing of this is not revealed, nor is there any quantification of the potential additional cost exposures.
- The scale of the company's ambition for net zero steel production, and the roadmap set out for delivering it, which sets milestones in 2025 and 2030, are in no way reflected in the financial reporting nor even in the narrative reporting in the 20-F.

Climate assumptions in accounts: visibility and Paris alignment

Visibility of climate assumptions in accounts

Significant concerns

• There are no apparent climate-related assumptions. There is thus no sensitivity analysis.

Paris alignment

Significant concerns

• With no visibility, there can be no alignment with the goals of the Paris Agreement.

¹ In the absence of better data, implied lives are roughly estimated using depreciation expense and year end asset values net of depreciation.

Audit: visibility in CAMs and consistency check

Audit firm: KPMG Samjong	Responsible partner:
Audit standards: PCAOB standards	

Visibility in Critical Audit Matters

Significant concerns

- There no explicit reference to climate change in the auditor's report.
- There are 2 CAMs identified (i) goodwill impairment in POSCO International; and (ii) costs and revenue recognition in construction contracts.
- Goodwill impairment judgements are dependent on estimates of future revenues and profitability, and so would potentially be impacted by climate change considerations, including additional CO2 emission constraints or costs. Though the auditor identifies a number of key sensitivities, including estimated sales, discount rate and terminal growth rate, it is not apparent that climate change considerations were incorporated in the approach.
- The reference to the use of advice from specialists refers to valuation experts, not those expert in climate change or CO2 markets.

Consistency check

Significant concerns

- PCAOB audit standards require the auditor to read other information that is presented together with financial statements and the auditor's report thereon. The auditor's report is silent on the outcome of the review, which implies that no material inconsistency was identified in the other information within the 2020 20-F.
- The 20-F appears to be internally consistent, given the minimal discussion on climate change in the narrative reporting and the fact it appears to be ignored in the financial statements.

The Climate Accounting Project is an independent investor-led project to reinforce the statements of the <u>IASB</u> and <u>IAASB</u> that material climate change issues are incorporated within their standards. This analysis seeks to understand the extent to which companies and auditors are delivering against this aspect of these standards and similar local standards.

Key
Good practice
Few concerns
Some concerns
Significant concerns

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