Caterpillar Inc
USA, Other Industrials

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Climate Assumptions</th>
<th>Audit</th>
<th>Date of analysis: May 25 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judgements</td>
<td>Consistency with other reporting</td>
<td>Visibility</td>
<td>Paris alignment</td>
</tr>
<tr>
<td>Significant concerns</td>
<td>Significant concerns</td>
<td>Significant concerns</td>
<td>Significant concerns</td>
</tr>
</tbody>
</table>

Summary view:
- The company’s position as a global manufacturer of heavy equipment means it is at considerable risk relating to climate change, in its operations but also including demand for its products in the industries served, the use of its products and the associated Scope 3 emissions profile, and even residual value risk from financing of its product sales/leases.
- Announced climate-related targets are somewhat limited, with Scope 3 emissions not yet disclosed.
- The absence of any visible consideration of climate-related information or assumptions in the financial statements and auditor report stands in stark contrast to the range of risks.

Background

The Business
- Caterpillar is a manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. The company principally operates through three segments: Construction Industries, Resource Industries, and Energy & Transportation (together Machinery, Energy & Transportation). Through a Financial Products segment, it also provides financing to customers and dealers, and financing for vehicles, power generation facilities and marine vessels that typically incorporate Caterpillar products.
- By geographic region, total 2020 sales/revenues were 42% North America, 8% Latin America; the rest was split roughly evenly between EAME and Asia/Pacific. Distribution is largely through a network of dealers, 45 US and 116 outside the US, serving 192 countries.
- Purchases from suppliers include uniformed materials including steel products, rough parts including steel and iron castings/forgings, and finished, ready to assemble components.
- Emissions disclosed for 2020 include Scope 1 of 694,000 tCO2e, and Scope 2 of 767,000 tCO2e. Scope 3 emissions are not disclosed, but are likely to dwarf Scopes 1&2 combined.

Approach to climate change
- Risk factors disclosed by the company include factors relevant to climate change, including economic circumstances, environmental laws and regulations, climate change and emissions.
- The energy, transportation and mining industries are major users of the company’s products. Decisions to reduce capital expenditures by such customers are likely to lead to falls in demand for its products and may also cut demand for aftermarket parts as customers extend preventative maintenance schedules and delay major overhauls. While Caterpillar does not appear to focus on climate change in this area, we note that companies involved in these industries are under pressure to act on climate change and emissions, and in some cases under pressure to reduce future investment in capex that may become uneconomic.
- The company is also exposed to commodity price increases, for example in relation to steel, production challenges at suppliers, and transport delays impacting availability and price.
- Caterpillar is regulated by environmental laws governing the use, transport and disposal of substances and control of emissions. It notes the importance of robust product development and manufacturing processes to help it comply with these regulations, including development to achieve compliance with air emissions standards applicable to internal combustion engines. Repeated references to R&D and capital expenditures being made in order to comply could be interpreted as implying that innovation is driven largely by the need for compliance.
- Regarding transition risk, changes in climate change concerns or in regulation associated with climate risk including GHG emissions, could subject the company to additional costs and
restrictions, including increased energy and raw materials costs, additional investment in product design, and increased environmental compliance expenditures.

- Caterpillar's 2020 emissions targets were set in 2013 and address only Scopes 1&2. It reports: a 51% reduction in GHG intensity from 2006 (vs a 50% goal); alternative/renewable sources used for 33% of its 2020 energy needs (vs a 20% goal); and a 33% reduction in the intensity of its energy use vs 2006 (missing its target of 50%).
- In May 2021, the company announced new targets for 2030. These include: science-based 30% reduction in absolute GHG emissions (Scopes 1&2) vs 2018; and a requirement that 100% of new products through 2030 will be ‘more’ sustainable than the previous generation, through collaborating with customers, reduced waste, improved design for rebuild/re-manufacturing, lower emissions or improved efficiency. We note this would help reduce the undisclosed Scope 3 emissions, but no more details are evident. Other initiatives include increased re-manufactured products (25% vs 2018), water management strategies in high-risk areas, and reduced landfill intensity by 50% vs 2018.

**Accounting: judgements and consistency with other reporting**

<table>
<thead>
<tr>
<th>Accounting judgements</th>
<th>Significant concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no explicit 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.</td>
<td></td>
</tr>
<tr>
<td>PP&amp;E has a net value on the balance sheet of $12.4bn, and includes assets used in the company’s operations of $8.4bn, and equipment leased to others of $4bn. Gross amounts (before accumulated depreciation) are $23.2bn and $6.1bn, respectively. Own-use PP&amp;E is predominantly depreciated using accelerated methods. At the end of 2020, amounts subject to depreciation (excluding land and construction in process) were 68% depreciated. The split of the remaining 32% between assumed residual amounts and the remaining amount to be depreciated, is not clear. There did not appear to be any disclosure of changes to residual value amounts or lives in the 2020 accounts.</td>
<td></td>
</tr>
<tr>
<td>Equipment leased to others (with a gross value of $6.1bn) is depreciated on a straight-line basis. We estimate remaining lives to approximately 2.5 years, and while this is relatively near-term (at least on average), residual amounts could be impacted swiftly should new requirements be introduced to place limitations on use of the equipment leased. Any changes to residuals are accounted for prospectively, as depreciation or finance revenue, depending on the type of lease. The company discloses the aggregate residual value as being $2.1bn, and that a 10% non-temporary decrease in the market value of the equipment would reduce residual value estimates and result in around $95m of additional annual depreciation. It does not appear there have been significant changes in the year.</td>
<td></td>
</tr>
<tr>
<td>Goodwill has a balance sheet value of $6.4bn at the end of 2020; there was no impairment in the year. The impairment test process requires valuation of the respective reporting unit, which Caterpillar primarily determines using an income approach. A discounted 5-year forecast cash flow is used, and a year-five residual value is computed using a constant growth method which values the forecasted cash flows in perpetuity. Specific assumptions are not disclosed. It states that the annual impairment tests in Q4 2020 indicated the fair value of each reporting unit was substantially above its respective carrying value, including goodwill.</td>
<td></td>
</tr>
<tr>
<td>Finance receivables of approximately $22bn at the end of 2020 included retail loans (approximately two-thirds) and leases (one-third), and represented just under 28% of the company’s total assets. Retail customer receivables accounted for 87% of the total, with an average initial life of 46 months, with 26 months remaining. The rest of the amount related to dealers. Cat Financial typically maintains a security interest in equipment financed by retail customers, and if collection efforts fail to bring a defaulted account current, it generally can repossess and sell the financed equipment. There did not appear to be any disclosure of changes to residual value amounts in the 2020 accounts.</td>
<td></td>
</tr>
<tr>
<td>The company indicates it has made, and will continue to make, significant R&amp;D and capital expenditures to comply with emissions standards. We note however, that overall reported</td>
<td></td>
</tr>
</tbody>
</table>
R&D expense declined in 2019 and again in 2020. It is also down 30% as a % of sales from 2016. Capex also declined in 2019 and again in 2020.

- The company has significant defined benefit pension and similar plan obligations, and plan assets set aside to fund these were valued at $22.3bn at the end of 2020. The degree to which the value of these assets is insulated from climate risk is not clear.

### Consistency with other reporting

- While climate-related goals appear to be absent from the 10-K, there is recognition in the company’s discussion of the business and risk factors of issues including sensitivity of demand for its products, issues with the supply chain (including availability and costs), and risks associated with environmental laws – including those associated with climate change. In addition, the financing activities of the company appear to expose it to continuing risk from the residual value of its sold products, and credit risk for the payment of leases and loans.
- We also note that the company references its R&D and capex spend as being key to compliance with environmental laws and regulation, however it appeared these investments have declined in the past two years.
- The absence of visible consideration of climate-related information or assumptions in the financial statements stands in stark contrast to the risks identified in the 10-K and the commitments undertaken on climate and emissions, also absent from the 10-K.

### Climate assumptions in accounts: visibility and Paris alignment

- There are no apparent climate-related assumptions. There is thus no sensitivity analysis.
- With no visibility, there can be no alignment with the goals of the Paris Agreement.

### Audit: visibility in CAMs and consistency check

- There is no explicit reference to climate change in the auditor’s report.
- The auditor’s report only identified one CAM, relating to an Uncertain Tax Position – Caterpillar SARL IRS Examination. Caterpillar SARL is a Swiss subsidiary, and concerns relate to exports from the US, sales outside of the US, the movement of products between the US and SARL, and the allocation of profits.
- 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 10-K.
- While climate related goals appear to be absent from the 10-K, there is recognition in the company’s discussion of the business and risk factors, of issues including the sensitivity of demand for its products, issues with the supply chain (including availability and costs), and risks associated with environmental laws, including those associated with climate change.
- The absence of consideration of climate risks in the financials and auditor’s report stands in contrast to disclosed risks.
The Climate Accounting Project is an independent investor-led project to reinforce the statements of the IASB and IAASB 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.

<table>
<thead>
<tr>
<th>Key</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good practice</td>
<td></td>
</tr>
<tr>
<td>Few concerns</td>
<td></td>
</tr>
<tr>
<td>Some concerns</td>
<td></td>
</tr>
<tr>
<td>Significant concerns</td>
<td></td>
</tr>
</tbody>
</table>

No copyright is asserted on this document. It (and any element of it) may be freely copied and shared.

Terms, conditions and disclaimer

The information contained in this document is for general information and educational purposes only. Nothing in this document constitutes investment, legal, accounting, tax or other professional advice, or any recommendation to buy, sell or hold any security or other financial instrument, nor to exercise voting rights in any particular way. The information contained in this document is not intended to form the basis of any investment or voting decision, it does not constitute any form of investment recommendation or investment research and has not been prepared in accordance with any legal requirements designed to promote independence or objectivity. The authors of this report are not regulated by the Financial Conduct Authority or any other financial regulatory authority. You should make your own independent assessment and seek your own professional advice.

No representation or warranty is made that any of the information contained in this document is accurate or complete and no responsibility or duty of care of any kind is assumed by any person for errors or omissions in the contents or for the fairness of the opinions given. The authors do not accept any liability whatsoever for any direct or consequential loss howsoever arising, directly or indirectly, in connection with the use for any purpose of the information contained in this document.

You expressly agree that you use the information in this document at your own risk.

All information in this document is believed to be current as of the date of publication. Information may have been updated subsequently. The authors may make additions, deletions, or modifications to the contents at any time without prior notice.

This document reflects the authors’ own interpretation and opinion of accounting and auditing standards and how companies and their auditors have applied those standards. No representation or warranty is made that any interpretation or opinion of International Financial Reporting Standards, International Standards for Auditing, other financial reporting and regulatory requirements or the application of these standards or requirements by individual companies or their auditors is correct, complete or fair, nor that they are incorrect, incomplete or unfair, or that the same views would or would not be arrived at by others. You should seek your own professional advice if making decisions that depend on the interpretation of any standards related to financial reporting or auditing, or other regulatory requirements.

The views expressed in this document reflect the personal opinions of the authors and not those of any other companies, organisations, committees or persons with which they may be associated.