Boeing

US, Industrials

Accounting		Climate Assumptions		Audit		Date of analysis: April 12 2021
Judgements	Consistency with other reporting	Visibility	Paris alignment	Visibility in CAMs	Consistency check	Year end: December 2020 Report date: February 1 2021 AGM: April 20 2021
Significant concerns	Significant concerns	Significant concerns	Significant concerns	Significant concerns	Significant concerns	CA 100+ company, so seen by investors as key to driving global net zero emissions
Summary view: • As a major supplier to the airline industry, heavily exposed to a sector with significant carbon emissions and facing potentially major climate change-related constraints. • Boeing has made significant individual commitments, but the impact of these on the financials is not made clear.						

Background

The Business

- Boeing is one of the world's two leading commercial airplane manufacturers, with an additional defence business largely focused on fixed-wing aircraft.
- Commercial airplane revenues have fallen by 70% in the past two years, following the grounding of all 737 MAX aircraft following two deadly accidents, 787 production issues and because of reduced orders and activity among airlines during the Covid-19 pandemic. The segment was significantly loss-making in both 2019 and 2020.
- Boeing has exposures both as a major manufacturer and procurer of heavily carbon-intensive materials, and because its products are currently powered by fossil fuels.

Approach to climate change

- During the year, Boeing committed that all of its commercial airplanes be capable and certified to fly on 100% sustainable aviation fuel by 2030.
- The company is also targeting a 25% reduction in greenhouse gas emissions from operations by 2025 (against a 2017 baseline) – having delivered net-zero GHG emissions from manufacturing and worksites in 2020 through the use of offsetting.
- These individual commitments are stated in the context of the airline industry's collective aim that all growth beyond 2020 should be carbon-neutral – though most of this is intended to be achieved through offsetting (and through a programme about which there are significant doubts[1.]). Boeing notes the significant technological change that will be needed to deliver the airline industry's other aim, of cutting 2050 CO2 emissions from flying to half of those in 2005, but gives no indication of what this might mean for its business.

Accounting: judgements and consistency with other reporting

Accounting judgements		Significant concerns

- A US company so subject to US GAAP standards.
- 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.
- PP&E expected lives are up to 40 years for buildings and up to 20 years for equipment. But, given the use of accelerated depreciation methods (150% declining balance and sum of years respectively) the actual financial exposures to future years is limited: if depreciation were straight line from now, at current rates remaining lives would be under 8 years.
- The bigger weight of assets at risk is the $70 billion in inventory in commercial aircraft, built up particularly because of the issues with the 737 MAX and 777 programmes. This represents more than 500 individual planes, several of which need to be remarketed. There is also a

reported order backlog of $282 billion in the commercial aircraft segment, down from $377 billion in the prior year after cancellations and changes in assumptions. This significant weight of assets in the accounts is valued on assumptions that aircraft will still be marketable. Though the accounts note questions about the future of the airline industry because of the impact of the Covid-19 pandemic, there is no similar such doubt raised with regard to climate change, and the technological change that will be required to deliver on industry CO2 targets.

Consistency with other reporting		Significant concerns

- As with most US companies, the 10-K report is issued independently of other reporting. Nonetheless, both a proxy statement and glossy annual report are also available. The Environment Report is produced to a different timetable, the latest considering 2019 data.
- The 2030 goal for all commercial airplanes to be capable and certified to fly on 100% sustainable aviation fuel is not referenced anywhere in the 10-K. This deadline is still more striking as both the 737 MAX 10 and 777X current programmes are due to deliver their first aircraft only in 2023. The company provides no insight into the potential cost burden of delivering this ambition.
- There is limited discussion of climate change in any of the associated reporting, which makes only the most general statements and commitments.

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.

Audit: visibility in CAMs and consistency check

Audit firm: Deloitte & Touche LLP	Responsible partner: Christopher Allen
Audit standards: PCAOB standards	

Visibility in Critical Audit Matters		Significant concerns

- There is no explicit reference to climate change in the auditor's report.
- There are 4 CAMs identified: (i) cost estimates on fixed-price contracts; (ii) estimates for new 777X aircraft programme; (iii) liabilities for 737 MAX grounding; and (iv) deferred tax.
- The consideration of the recoverability of deferred tax assets (and the decision in the year that not all deferred tax was likely to be recoverable) is based on estimates of future profitability. It appears that this decision-making was based on the economic effects Covid-19 pandemic rather than the future impacts of climate change. Similarly, there is no apparent consideration of climate change impacts on estimated revenues from the 777X programme.
- The references to the use of advice from specialists do not refer to specialists 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 10-K.
- The 10-K 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.

Stripes image credit: Prof. Ed Hawkins   www.showyourstripes.info

1. See for example *The EU's assessment of the Corsia airline CO2 deal*, Transport & Environment, March 17 2021

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.		**Key**
		Good practice
		Few concerns
		Some concerns
		Significant concerns

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