

Credibility of Transition Plans

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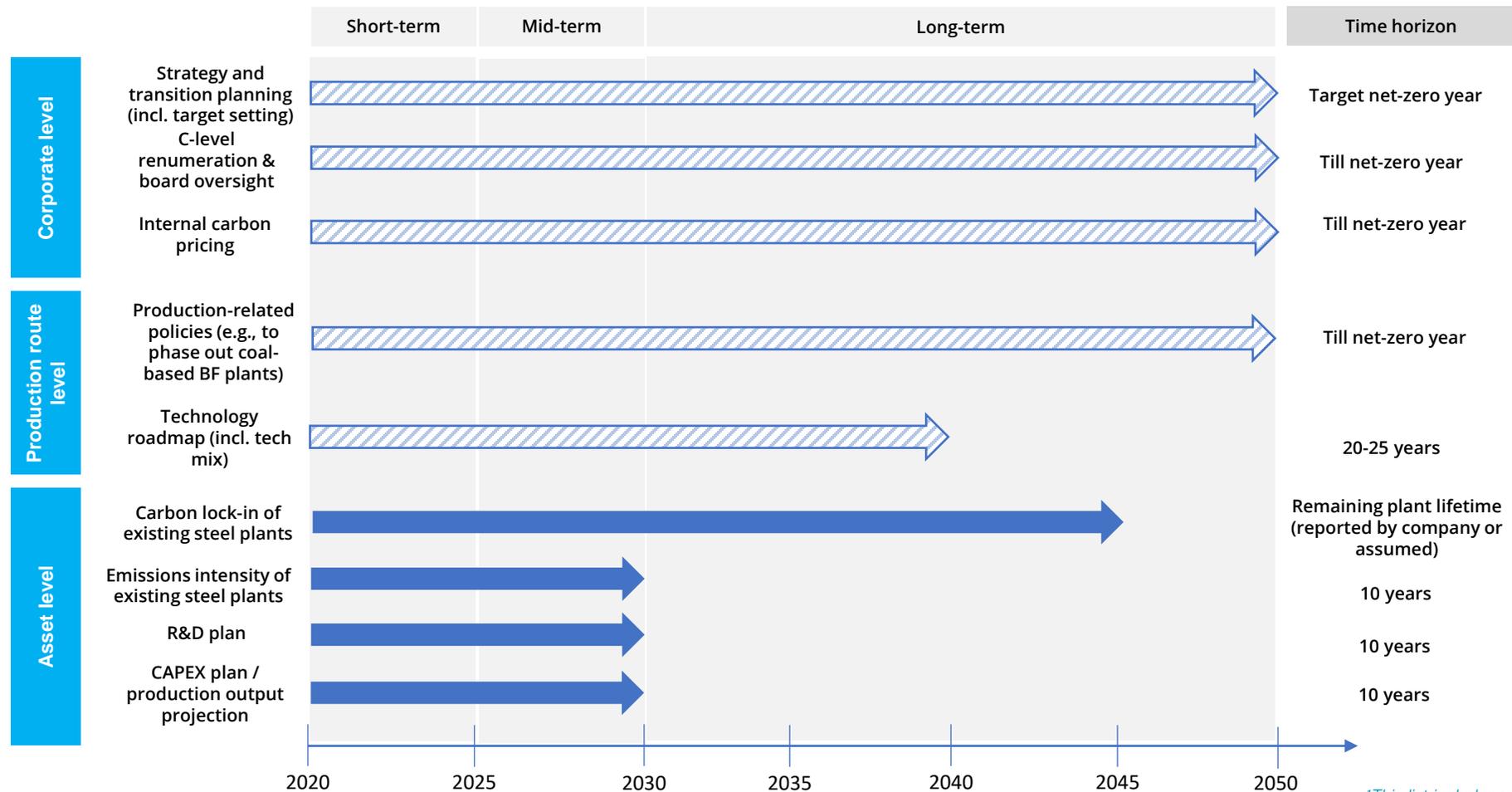
Oxford Sustainable Finance Group

Credibility is a multiple level assessment

- Level 1: *Are the firm's emission pathways consistent with net-zero targets?*
- Level 2: *Are the firm's (technology) transition pathways consistent with net-zero targets?*
- Level 3: *Do the firm's direct actions (e.g., investments) support net-zero targets?*
- Level 4: *Do the firm's indirect actions (e.g., policy engagement) support net-zero targets?*

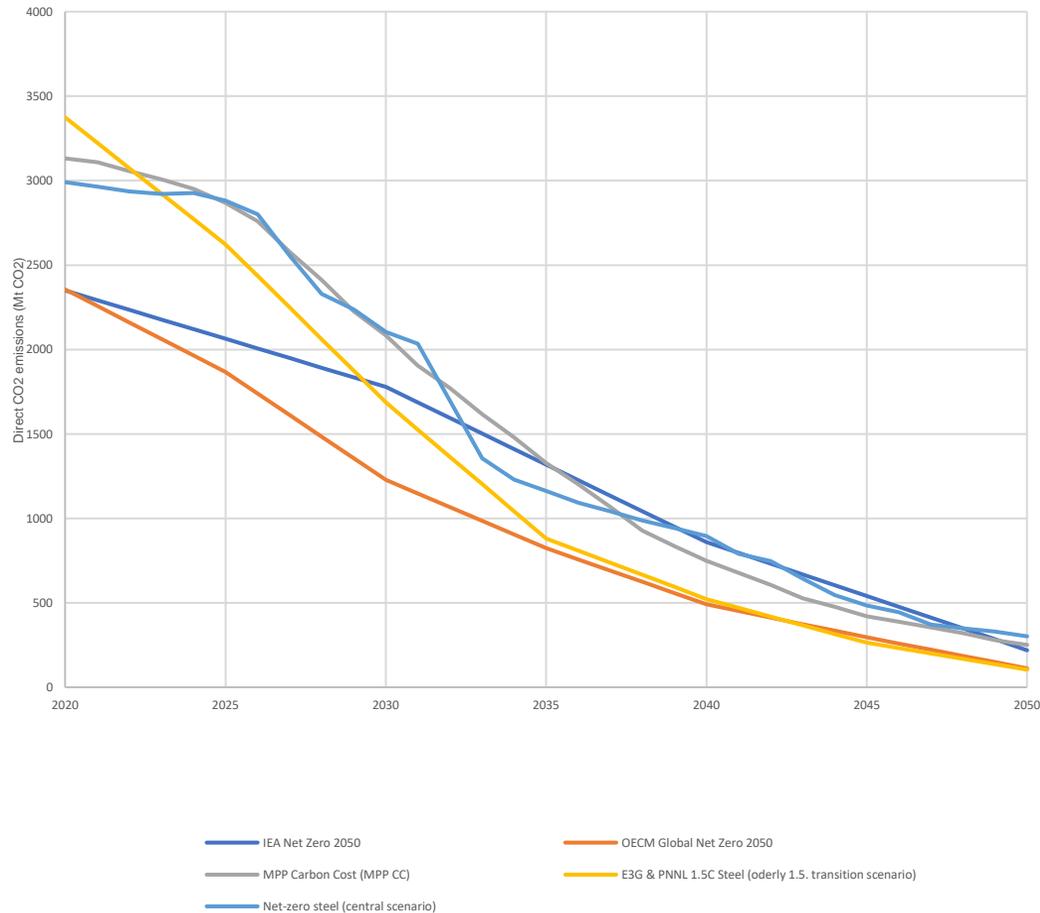
How do we assess the likelihood today that steel company X will reach net zero CO2 emissions in 2050 (or not)?

1. What type of information could be used **today** to assess the likelihood that a steel company will reach net-zero aligned emission reduction by 2050?
2. Could different types of information (disclosure or otherwise) provide short-, medium, and long-term **signals** that the company is more or less likely to reach net-zero emissions by 2050?¹



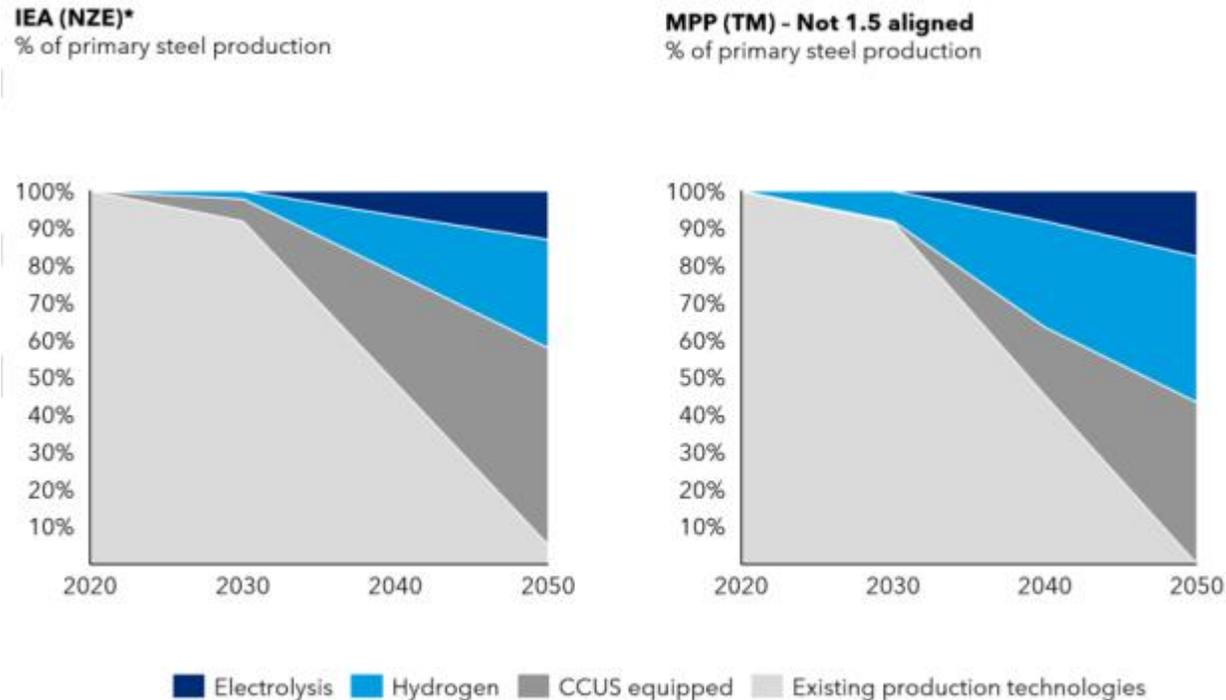
¹This list includes representative examples and is not comprehensive.

There are multiple emission pathways for steel



- Which one to pick?
- One pathway: Comparability
- Multiple pathways: Flexibility
- Likelihood of pathways?

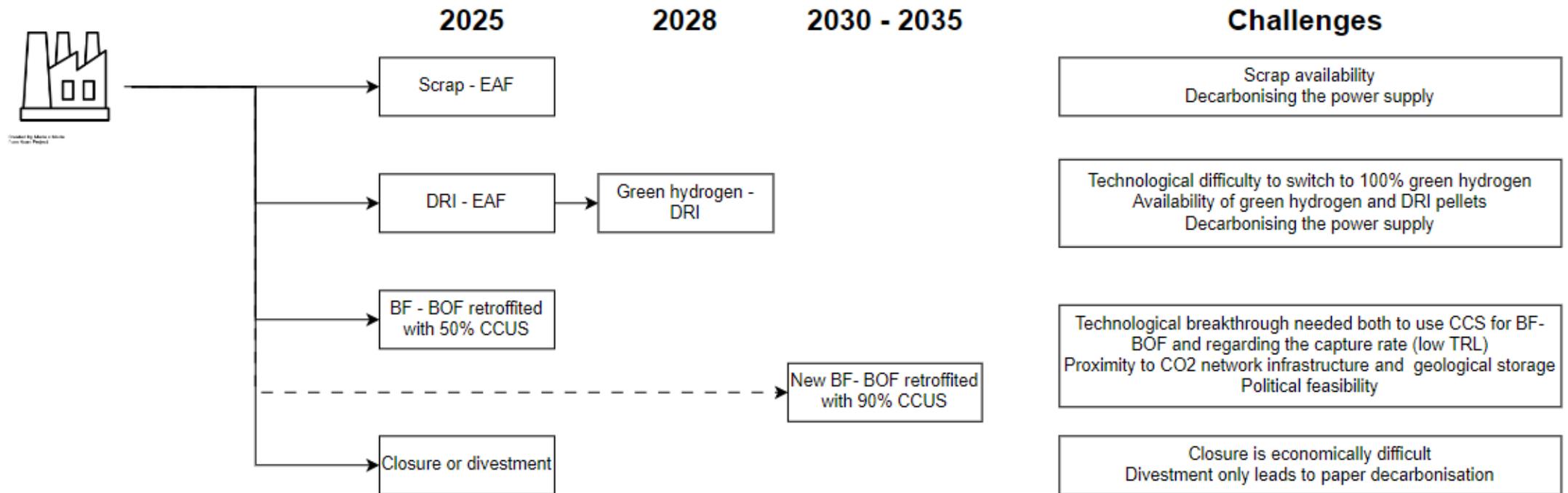
There are multiple transition pathways



* A linear line is drawn between 2030 to 2050 as IEA data is not provided for 2040

- Same technologies in all pathways
- Ultimately, a mix of electrification, hydrogen, and CCUS
- The technology mix depends on assumptions
- IEA relies on CCUS more compared to hydrogen
- MPP relies on EE more over a longer time period

Potential action pathways and challenges



Short-term actions are key

- 61%-70% of the total capacity of the existing asset fleet is based on the highly carbon intensive blast furnace and blast oxygen furnace (BF-BOF) production route
- 30-77% of existing BF-BOF assets require relining before 2030, which would result in significant carbon lock-in and pose a high risk of exceeding the remaining carbon budget
- Green hydrogen and carbon capture and storage (CCS)–are not available at commercial scale yet, and unlikely to become available before 2028 (green hydrogen) and 2030 (CCS at 90% capture rate).
- So, stop relining existing BF-BOF assets and stop investing in new BF-BOF assets from 2025 if they are not equipped with CCS at a capture rate of 90%