

Constrained by Accounting:

Examining How Current Accounting Practice is Constraining the Net Zero Transition

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Abstract:

In February 2020, BP made a commitment to become carbon neutral by 2050, creating an obligation to society and investors. We explore how accounting practice constrains BP's transition plans. While BP can achieve much of its net zero obligation through technical innovation, these investments will typically be expensed through the income statement, whereas capital expenditures on hydrocarbon projects would tend toward capitalization and slow depreciation through the income statement. And whereas internally-generated innovation will be expensed, intangibles acquired in M&A will be capitalized. Accounting's logic must support BP's net zero obligation as a social imperative and reward its acceleration. Normative accounting for intangibles provides a promising solution to overcome these challenges and restore accounting for net zero decision-making and reporting.

I. Introduction:

On August 4th, 2020, BP's CEO, Bernard Looney, provided the strategic plan to execute on the company's February 2020 promise to become carbon neutral by 2050 in Scopes 1 and 2, with substantial reductions in Scope 3 upstream and downstream emissions. The plan was ambitious, committing the company to move away from hydrocarbon based energy and becoming a green energy pioneer through substantial investment of approximately \$5bn annually, a 10x increase from current levels, while also reducing current hydrocarbon production and promising no exploration in new countries. Further, BP also committed to 30—35% reductions in Scope 1 emissions and 35-40% in Scope 3 emissions by 2030.¹ To support this strategy, the firm cut its dividend by 50% but also committed to returning 60% of surplus cash flow to shareholders via buybacks.

By November 15th, the firm's stock had fallen approximately 20%. BP's performance substantially trailed the performance of the NYSE Arca Oil and Gas Index, of which BP is a component, which declined 8.4% over the same time period.² There are multiple hypothesized reasons for this decline, including concerns over geopolitical risks, a pandemic, and confidence in the ability of the 111-year-old firm to fundamentally shift its portfolio mix, especially in the context of previous failed attempts by BP in the renewables sector. Addressing the later possibility, energy companies, including BP, need to transition

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¹ "From International Oil Company to Integrated Energy Company: Bp Sets out Strategy for Decade of Delivery towards Net Zero Ambition: News and Insights: Home." bp, August 4, 2020.

<https://www.bp.com/en/global/corporate/news-and-insights/press-releases/from-international-oil-company-to-integrated-energy-company-bp-sets-out-strategy-for-decade-of-delivery-towards-net-zero-ambition.html>.

² "Yahoo Finance - Stock Market Live, Quotes, Business & Finance News." Yahoo! Finance. Yahoo!

<https://finance.yahoo.com/>. Data spans from August 4 to November 15th using close prices

their portfolio mix to remain competitive and to act in the best interests of their investors while meeting the expectations of customers, regulators, and the public at large.

Ideally, accounting statements and disclosures (in particular the balance sheet as the store of long term value and a lead indicator of management's decisions to invest into the long-term) would be the means with which its transition plans and decisions would be communicated to investors and other stakeholders. However, current accounting practice is unlikely to be helpful. Indeed, it could actually constrain BP's decision-making, reducing transition levers and the amounts able to be invested. Our hypothesis, therefore, is that current accounting practices might be an obstacle in the transformational change needed for energy companies. This hypothesis is based on several substantial disincentives that accounting practice generally applies to organizations seeking to introduce more sustainable business practices.

Using BP as a case-study, we will explore the disincentives and the ways in which they constrain management decision making, at risk to planet, society, and the future viability of their organizations. We then propose an alternative, applying deductive logic through normative accounting for intangible assets and liabilities. Combined with impact monetization, we believe that this can result in greater optionality for these teams and better outcomes for all.

II. Background

II.a BP Company Background

The legacy of sustainability at BP dates to the mid-1990s when Lord Browne, then the group chief executive, announced in a speech that climate change was real and action was needed.³ In 2000, BP began investing heavily in a climate-forward image, changing its name from British Petroleum to BP, which stood for “Beyond Petroleum.”⁴ BP continued the sustainability push, establishing its alternative and low-carbon energy business in 2005, committing to invest up to \$8 billion in the business over 10 years, which it achieved ahead of schedule in 2013.

BP's' first climate efforts were tarnished, however, by several events that illustrated safety failings, indicating a narrow sustainability mindset. In 2005, a Texas Oil Refinery exploded, killing 15 and injuring 170. In 2006, a pipeline operated by the company caused one of the largest oil spills ever in Alaska. Finally, in 2010, an explosion at the Deepwater Horizon oil rig in the Gulf of Mexico killed 11 and constituted the largest oil spill in the history of the industry, with oil spilling for almost five months with an estimated 4.9 million barrels released into the environment.⁵ These safety failings illustrate the need for 'sustainability' to be viewed and managed as a core competency for management.

The firm returned to its commitment to move beyond carbon intensive energy with a February 2020 announcement that it aims to transition to net zero by 2050 or sooner, setting numerous strategic directions. It followed this commitment in August 2020 with further ambitious targets and strategic implementation plans. By 2030, the firm aims to reduce its oil and gas production by 40% from roughly 2.6 million barrels per day to and to achieve 50 gigawatts of energy generation capacity, up from 2.5

³ “The New Millennium – 2000-2012: Who We Are: Home.” bp . Accessed January 4, 2021.

<https://www.bp.com/en/global/corporate/who-we-are/our-history/the-new-millennium.html>.

⁴ Paul Nastu, "'Beyond Petroleum' Pays Off For BP," Environment + Energy Leader, January 15, 2008.

<https://www.environmentalleader.com/2008/01/beyond-petroleum-pays-off-for-bp/>.

⁵ Carpenter, Scott. “After Abandoned 'Beyond Petroleum' Re-Brand, BP's New Renewables Push Has Teeth.” Forbes. Forbes Magazine, August 5, 2020. <https://www.forbes.com/sites/scottcarpenter/2020/08/04/bps-new-renewables-push-redolent-of-abandoned-beyond-petroleum-rebrand/?sh=2119f9d01ceb>.

gigawatts in 2019. BP's statements of intent are commendable. However, its previous attempt to move beyond petroleum may raise questions about its ability to implement the new strategy.

II.b BP's Environmental Impact

In 2019, BP released 54,400,000 metric tonnes of CO₂-equivalents from Scope 1 & 2 activities. Using the methodology developed in Freiberg et al (2020)⁶ for calculating organizational environmental impact, BP's undiscounted Environmental Impact from operational (Scope 1) and Scope 2 activities totaled \$14.0 billion. This represents 87.8% of the firm's operating income of \$15.9 billion. Indeed, only three times in the years going back to 2010, applying the same methodology, has environmental damage been less than 100% of operating income. Using a 3% social discount rate, the annual damage costs are \$5.5bn and 34.9% of 2019 operating income. The scale of these damages, both in absolute value and relative to operating income, signal a substantial business risk given slow but increasing awareness of the challenges of the climate crisis, which generates both reputational and regulatory risk.⁷ It is clear that if BP were to be held accountable for even a fraction of these emissions, its financial performance would be substantially affected.

III. Current Accounting Practice in Recognition of Liabilities

The problem of accounting in practice begins to become clear in the treatment of intangible liabilities including social obligations that arise through changing social norms. Under International Accounting Standard 37, which covers Provisions, Contingent Liabilities, and Contingent Assets, an organization is required to disclose or recognize risks that are not remote. Determining remoteness for a Big Oil major requires a high burden of proof on the improbability of occurrence. For illustration, the dictionary definition of 'remote' gives the example that 'the probability of Martians landing on Earth is remote'.⁸ IAS 37 provides guidance on the accounting treatment required for a non-remote risk either as a disclosure with details of the financial exposure (if the liability is possible) or by recognizing a provision (if the liability is probable, meaning more rather than less likely). A further clue as to what should be followed is the definition of a constructive obligation which sets third party expectations (paragraph 10 of IAS37) and paragraph 20 which states that even the identity of the person to whom the obligation is owed does not need to be known and that it can be the public at large.⁹ By this interpretation IAS37, it seems that in its own statements to transition, BP has set expectations that qualify under the definition of a constructive obligation.

The US Tobacco Master Settlement Agreement of 1998, totaling over \$206 bn, in addition to other settlements globally, demonstrate that broad civil actions against organizations posing a threat to

⁶ Freiberg, David, DG Park, George Serafeim, and T. Robert Zochowski. "Corporate Environmental Impact: Measurement, Data and Information." Harvard Business School Working Paper, No. 20-098, March 2020. (Revised July 2020.)

⁷ California, the largest market for new cars in the United States and 10th in the entire world, according to <https://www-statista-com.ezp-prod1.hul.harvard.edu/chart/23023/top-10-markets-for-new-passenger-car-registrations/>, just announced a ban on new gas powered vehicles starting in 2035. Richter, Felix. "California Is Among the World's Largest Car Markets." Digital image. September 24, 2020. Accessed January 05, 2021. <https://www-statista-com.ezp-prod1.hul.harvard.edu/chart/23023/top-10-markets-for-new-passenger-car-registrations/>

⁸ *Cambridge Dictionary*, s.v. "remote," accessed January 4, 2021, <https://dictionary.cambridge.org/us/dictionary/english/remote>.

⁹ Remote under IAS is defined as is a subset of 'possible', at the lower end of the range of probability. It represents events that are not expected to occur, but which cannot be ruled out completely.

society are at least within the range of IAS37's definitions of possibility and probability, and thus should not be considered remote or incalculable. Intense regulation of the tobacco industry followed changing public opinion and should also be considered in any probability assessment of climate risk. Further, the degree of scientific research on the implications of climate change and the emerging body of research that allows for quantification and monetization of that risk would thus mandate that organizations with large current and historical emissions profiles disclose and calculate those liabilities and manage them. If recognized as a provision (if the liability is considered probable) or as a note of a contingent liability (if the liability is considered possible) management would then be responsible to manage the liability and consider options to mitigate the liability. It would then follow that decision makers who fail to manage these risks could be in breach of their fiduciary duty of care to shareholders. Some commentators assert that decision-makers could also be in breach of the employee duty of trust and confidence.¹⁰

Additionally, while many civil lawsuits and punitive damages awards against the tobacco industry were reversed on appeal because tobacco giants were able to demonstrate that the smoker was aware of the risks, in the climate crisis, there is no choice for global society but to be affected by it.

For many years, oil companies broadly managed these risks by forestalling regulatory actions and societal pressures by casting doubt on the science of climate change.¹¹ ExxonMobil is now under substantial scrutiny for the dissonance between its internal research and acknowledgement of climate change and its externally focused statements that served to confuse the American public and reduce pressure on legislatures to act definitively.¹² However, given the growing awareness of and evidence for climate change, it seems that market forces are moving against such deterrence strategies; therefore, the best option for the management team that might foresee its business model declining and liabilities rising is to invest in repositioning the company for the future.

IV. Current Accounting Practice in Recognition of Intangible Assets

The current practice of accounting remains rooted in an economy in which value was created by physical capital. However, this is a hallmark of the industrial manufacturing economic era. As the economy has transitioned through networks and toward delivering value through intellectual property, services, and technical know-how, relationships and reputation (collectively examples of intangible assets), the practice of accounting has failed to keep up with commercial reality.

¹⁰ Fiduciary duty is a principle found in common law based legal systems, including the United States, Canada, and the United Kingdom. Fiduciary duty is defined as the obligation resulting when a person or entity places trust, confidence, and reliance on another to exercise discretion or expertise on behalf of the client. The fiduciary must knowingly accept that trust and confidence. For countries with civil law based codes, the employee duty of trust and confidence refers to the implied obligation of employees to not act in any way that is calculated or likely to breach the trust and confidence of others in the organization.

¹¹Shannon Hall. *Scientific American*. "Exxon knew about climate change almost 40 years ago." October 26, 2015 Available at: <https://www-scientificamerican-com.ezp-prod1.hul.harvard.edu/article/exxon-knew-about-climate-change-almost-40-years-ago/>

¹² Greenpeace USA. 2021. Exxon'S Climate Denial History: A Timeline. [online] Available at: <https://www.greenpeace.org/usa/global-warming/exxon-and-the-oil-industry-knew-about-climate-change/exxons-climate-denial-history-a-timeline/>.

Bill Gates observes this in his review of *Capitalism Without Capital* by Jonathan Haskel and Stian Westlake

'The portion of the world's economy that doesn't fit with the old model just keeps getting larger. That has major implications for everything from tax law to economic policy to which cities thrive and which cities fall behind, but in general, the rules that govern the economy haven't kept up. This is one of the biggest trends in the global economy that isn't getting enough attention.'

Accounting scholars, such as Baruch Lev, have consistently worked to overcome this resistance to recognizing intangible assets for over 25 years. His 2016 book, *The End of Accounting*, argued for new accounting standards in this area. But by 2018, his focus turned to the ability to capitalize applying the existing IASB Conceptual Framework and Standard on Intangible Assets, IAS38.¹³

Developing intangible assets requires substantial technical knowledge, research, trials, and iterations. As a rule under US GAAP, and, according to practice under IFRS, unless under very specific circumstances are met, expenditures into their creation are expensed.¹⁴

KPMG notes that demonstrating the “technical feasibility” required to meet the IFRS standard is much harder to do for projects in which the company has little experience and thus are expensed through the income statement.¹⁵ This appears to be a misunderstanding of the practical reality of innovation in which new breakthroughs often occur through learnings of failure and experimentation.

By contrast, physical assets are generally biased toward capitalization so long as an organization expects to derive future value from them, which means the investment in acquiring or building such assets is not included in the income statement and thereby does not impact net earnings.

Returning to the example of BP, Rystad Energy estimates that BP's new goals, including the aim to build 50 gigawatts of renewable capacity by 2030, will require \$200bn of investment¹⁶. This investment should be expected to involve both investment in M&A activity and new technical and strategic expertise within the company as well as research and strategy expenditures to explore implementation and improvements of known and undiscovered sustainable energy technologies, well before any physical assets are developed.

¹³Baruch Lev (2018): Ending the Accounting-for-Intangibles Status Quo, *European Accounting Review*, DOI: 10.1080/09638180.2018.1521614

¹⁴ According to KPMG: IFRS allows capitalization of development costs. Development costs are defined as “Expenditures incurred in the development phase of a project are capitalized from the point in time that the company is able to demonstrate all of the following: the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete the intangible asset and use or sell it, its ability to use or sell the intangible asset, how the intangible asset will generate probable future economic benefits, the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset, and its ability to reliably measure the expenditure attributable to the intangible asset during its development.”

¹⁵ Bogle, Kevin. “IFRS vs. US GAAP: R&D Costs.” KPMG LLP. KPMG, June 14, 2019. <https://advisory.kpmg.us/articles/2017/ifrs-vs-us-gaap-rd-costs.html>.

¹⁶ Board, The Editorial. “The Slow Death of Big Oil,” September 17, 2020. <https://www.ft.com/content/c343b958-63f4-44a4-9485-130d7740a843>.

BP is first and foremost an engineering company, with over 10,000 engineers. Freeing these experts to address BP's climate transition is a stated part of the strategy and recognizes the confidence that these resources will play a key part in the transition strategy.

Given the perceived high accounting burden for capitalization, most of BP's transition investments outside of those for M&A, will be expensed through the income statement, reducing net income in the short term, despite the long term economic benefits of such investments. By contrast, capital expenditures on ongoing hydrocarbon projects would tend toward capitalization, with slow depreciation through the income statement over a number of years. This inconsistency in the practice of accounting for assets creates an uneven playing field where ongoing investment into hydrocarbon assets are capitalized but those into the energy transition and its future state are not. We emphasize that the inconsistency appears not to be caused or required by accounting standards but by the practice of accounting for assets.¹⁷

The combination of these practices will show a materially unfair view of the assets, equity and profitability of an entity and BP's transition in particular. This also creates an incentive tilt toward acquisition which could likely have meaningful implications for the success of strategy changes for a company like BP. Instead of focusing purely on reducing its reliance on hydrocarbons and discovering new businesses and energy forms, management and the board needs to spend a substantial amount of time on acquisition deal terms, integration challenges across morale, systems, HR and culture, which cumulatively, may end up resulting in substantial value destruction without the intended result of strategically pivoting the century-old company's business model to address the needs of the next century of energy consumption.

Applied to BP's transition, it seems apparent that these inconsistencies in accounting practice for assets demonstrate an inherent logical flaw. The logic should be to recognize that BP's transition is in response to a commercial and social imperative. Accounting should be an important resource for management in strategic planning and budgeting. It should underpin the assumptions of its transition commitment and plan. It should represent the current value of both sides of the balance sheet and the impact of transition decisions on the income statement and cashflow, as well as provide autonomy and flexibility to management to apply a range of levers to complete and accelerate the transition. Lastly, it should also be the standard method by which an organization's stakeholders understand and can judge those decisions and take their own decisions, to invest or otherwise engage, based on a view of the probability that management will deliver on their commitments.

V. Accounting in practice is not fulfilling any of these requirements.

The under-capitalization of intangible assets, which represent an increasing majority of corporate value in the economy, and disincentives to invest in the future health of the company results in financial statements that do not adequately represent the long-term financial health of a company. Instead, the accounting statements are a relic of prior capital based economic paradigm and are likely to create incentives to avoid investing to manage and reduce risk.. As we show below, the bias toward expensing causes substantial reductions in EBIT, Operating Profits and earnings per share, which serves as a significant short term disincentive to making strategic investments into an organization's long term alignment with sustainability needs and societal norms.

¹⁷ It should be noted that there are other methods available to companies to generate new business lines, however, each has its own challenges within the accounting framework but which are outside the scope of this paper. Corporate Venture Capital (CVC), Partnerships, and Mergers & Acquisitions are among these methods.

Table 1. Pro-forma Group Income Statement 2019 including Long-Run Expected Investment in New Energy Sources

Group income statement For the year ended 31 December 2019 \$ million	Baseline	Pro-Forma Including Expected Long-Run Expenditures	%Change
Total revenues and other income	282,616	282,616	
Purchases	209,672	209,672	
Production and manufacturing expenses	21,815	21,815	
Production and similar taxes	1,547	1,547	
Depreciation, depletion and amortization	17,780	17,780	
Impairment and losses on sale of businesses and fixed assets	8,075	8,075	
Exploration expense	964	964	
Sustainable Energy Transition Expense		2,500	
Distribution and administration expenses	11,057	11,057	
Profit before interest and taxation	11,706	9,206	-21%
Finance costs	3,489	3,489	
Net finance expense relating to pensions and other post-retirement benefits	63	63	
Profit before taxation	8,154	5,654	
Taxation **	3,964	2,748	
Profit for the year	4,190	2,906	-31%
Non-controlling interests	164	164	
Attributable to BP shareholders	4,026	2,742	
Less Dividend Requirements for Pref. Shares	1	1	
Attributable to BP ordinary shareholders	4,025	2,741	
Earnings per share			
Per ordinary share (cents)			
Basic	19.84	13.51	-32%

The above assumes that 50% of \$5bn long-run investment into sustainable energy expenditure is considered to be an expense under current accounting practice with the remaining eligible to be capitalized as M&A and Goodwill. The exact percentage that would be expensed vs capitalized is not known and 50% represents an illustrative estimate to show the difference that expensing can make. By contrast, \$5bn of investment into proven hydrocarbon assets would have almost no impact on the income statement.

VI. Proposing an Alternative Accounting Approach

The current accounting practices described above when applied to BP create unnecessary constraints on its investment decisions relating to the transition. They reduce the available transition levers, favoring M&A over applying internal expertise, limit decision options and reduce the extent of investments able to be made, due to the risk to short term earnings.

Coming back to the transition to net zero, while organizations should arguably already be recognizing and managing liabilities, the treatment of transition expenditures and the associated asymmetric, relevant to expenditures to support the existing business, reduction in earnings, can be a deterrent to meaningful action.¹⁸ They also place senior leaders and boards at risk of being replaced if investors see earnings and stock prices decline.

If accounting practice is failing to show a fair view of an entity's assets and liabilities and considerably constraining decision-making, what can be done to support BP in its own transition and as an example to others. We suggest to begin with a deductive logic that supports these decisions. In deciding to invest into carbon capture or forest conservation, what is BP actually doing is:

1. Mitigating the risk associated with future technological, regulatory and reputation impacts.
2. Recognizing a constructive obligation to the public at large.
3. Investing to eradicate that liability and into its reputation as an asset.
4. Properly complying with the duties of decision-makers to manage risks, assets and liabilities.

There are clues throughout existing GAAP, double-entry bookkeeping and the International Accounting Standards that provide accounting support for this logic.

As explained above, the concept of the constructive obligation owed to the public at large is within the existing International Accounting Standard on Provisions, Contingent Liabilities & Contingent Assets, IAS37. Further authority to apply IAS37 is cited in the TCFD Guidelines as an Area for Further Research (pages 36 and 37).¹⁹

A further clue is provided by the IASB Conceptual Framework which defines an 'Asset' as '*a resource controlled by the entity..... from which there is potential for future economic benefits.*' We postulate that while an organization does not control the environment, its employees, or other stakeholders, it has control of its relationship with those entities, intertwined with its reputation, through the alignment of its decisions with social norms. It follows that the definition of an asset should be applied to an entity's reputation or its social license to operate, resulting in capitalization and fair valuation of these assets. This treatment balances the requirement to recognize social obligations as liabilities and reduces the punishing treatment of costs related to complying with social norms. Such costs could be viewed as investment in reputation and the potential benefit to the organization from such investment would be capitalized.

More broadly, the collective knowledge of an organization's creative capital applied to creating transition 'assets'²⁰ and research represent critical resources from which an organization can draw future benefits BP can also be expected to learn from what doesn't work as it adapts its engineering focus towards the transition, itself an intangible asset called 'negative know-how (described by Thomas Edison regarding his prototypes of the electric lightbulb as: "I have not failed 700 times. I have not failed once. I

¹⁸ Graham, John R, Campbell R Harvey, and Shiva Rajgopal. "The Economic Implications of Corporate Financial Reporting," June 2004. <https://doi.org/10.3386/w10550.0>; Assets.ey.com. 2016. Short-Termism In Business: Causes, Mechanisms And Consequences. [online] Available at: <https://assets.ey.com/content/dam/ey-sites/ey-com/en_pl/topics/eat/pdf/03/ey-short-termism_raport.pdf>

¹⁹ Bloomberg, Michael (Chair), Jan Ambachtsheer, Matt Arnold, Wim Bartels, et al. *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures*. (2017). Available at: <<https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>>

²⁰ IAS 38 requires an organization to control a resource for it to be considered an asset. While organizations do not own or control their employees, they do have control over the relationship with those employees, with numerous action pathways to improve this relationship. Thus, the proposed asset is a relational capital with the organization.

have succeeded in proving that those 700 ways will not work. When I have eliminated the ways that will not work, I will find the way that will work.”)

So too, even research that does not produce technical feasibility often has numerous byproducts, including unforeseen uses or a better understanding of the conditions needed for success in the endeavor, and thus could be capitalized. Instead, we propose capitalizing the investments into human capital and R&D relating to the business transition at cost and annually testing these for impairment as is done with many physical assets, such as oil and gas reserves. Having capitalized at cost of creation, it will then be down to management's judgment, with oversight from their auditors, on whether the economic benefits expected to arise from the investment will be realized.

The implications of this are substantial. Instead of being expensed, reducing net income as well as operating cash flow, which is a key indicator for credit ratings to evaluate an organization's ability to cover its interest, the investments are capitalized and treated as investment cash flow. Assets, such as relations with employees and technological know-how, which are more reflective of the value upon which the company draws for success are capitalized and tested annually for revaluation or impairment. While some might say the effect is simply to inflate assets, we counter that this is simply making transparent what organizations are already doing in investing in their social, human and intellectual capital.

VII. Conclusion

We do though come back to the big question. If accounting practice is not showing a fair view of the intangible assets, liabilities, equity and profitability of an entity, and constraining management decision-making, how can this be overcome? The solution we are exploring and experimenting with may be found in the concept of normative accounting and its specific application to intangible assets and liabilities to enable and accelerate the transition to net zero, and investments into other social obligations. Its adoption would begin with management decision-making and over time would be reported in transition plans which we expect will be approved by investors.

Theorized in academia since the 1950's normative accounting as a concept assumes that value is subjective from the perspective of each stakeholder and that there are therefore many alternative fair views of an entity or scenario. We have selected this specific definition of normative accounting when applied to intangible assets and liabilities:

'represents theories of accounting, based on deductive logic or reasoning, that prescribe the accounting procedures and policies that should be followed rather than observing or describing those that are followed in practice.'

Our deductive logic includes that an entity investing into conforming with changing social norms must be investing into an asset and thereby increasing equity on the balance sheet. It provides an elegant logic that investment decisions that reduce the risks from climate change will increase equity on the balance sheet and vice versa.

It is intended in the first instance to be a transitional solution for the specific purpose of enabling the climate transition as today's economic imperative.

We believe that normative accounting for intangibles provides a promising route out of the bind for all stakeholders, thereby aligning private interests with public good. With this BP could be the bellwether that shows the route to materially shortening the transition horizon.

These are unusual times where the impossible has become possible. But whereas the moral and the economic case to transition can now be made, the practice of accounting needs an urgent rethink to empower informed decision-making for management, investors and all stakeholders.

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