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Investors' Ideal Corporate Environmental Data Disclosure

TERRA ALPHA
INVESTMENTS

This table shows ideal corporate environmental data disclosure from an investor's perspective - timing, range of information, the depth and breadth of released data. As an investment firm, we use disclosed environmental data as a key, material piece of information in our analysis of a company. We assess a company's Environmental Productivity - the intensity of use of natural resources such as carbon, water, and materials - as part of our process. Our premise is that companies that are more environmentally productive will be the most prepared for - and therefore poised to succeed in - an increasingly resource-constrained world.

We advocate for the disclosure of this information to help business leaders and all investors make better-informed investment decisions. We believe that the investment community at large will increasingly be demanding environmental information in the near future, and we hope that this document will serve as a useful template for disclosure of environmental data going forward.

Terra Alpha Investment LLC (TAI)'s Expectations for Corporate Disclosure of Environmental Data for an Investor from our current base requirements through the evolution to best-in-class ideal disclosure:

TAI's Expectations for Corporate Disclosure of Environmental Data for an Investor	Current Minimum Base Requirement	Preferred Base Requirement	Expected Disclosure	Best-in- Class Future Expectation
Publicly disclose the data	x	x	x	x
% of operations included in disclosure			x	x
All operations/locations are included in the data numbers				x
Sustainability reporting			x	
Integrated reporting				x
Emissions: GHG Scopes 1/2 (tonnes CO2e)	x	x	x	x
Scope 3, explained				x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Targets are all science-based (GHG)				x
Water extracted and purchased (cubic meters)		x	x	x
Water audit/assessment			x	x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Waste generated -recycled, non/hazardous (tonnes)		x	x	x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Identify risks from climate change scenarios (per Financial Standards Board Task Force on Climate-related Financial Disclosures)				x
Environmental data assured			x	
Environmental data audited				x

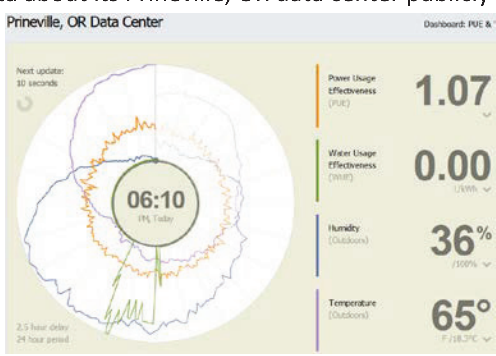
Why Public Disclosure?

We advocate for this data to be easily and publicly available for all investors to use. A critical point: in asking companies to publicly disclose this information, we do not want to contribute to "survey fatigue" with another stakeholder request; rather, we are asking companies to publicly release data that is already requested by major surveys such as CDP (formerly the Climate Disclosure Project) or Global Reporting Initiative (GRI).

Timing, Why is Integrated Reporting the Ideal, and Why Include all Operations?

Timeliness and accessibility of data makes for credible and useful information for an investor. **We advocate that environmental data is material information for investment decisions. As such, companies should report it the same way they report other information disclosed to the capital markets.**

The current standard for ESG data is to release it typically a year - or more - out of date. Ideally, the information would be released in a more timely fashion as the current financial reporting standards expect - on a quarterly basis, or at least annually and reporting on the year just closed - and in an integrated report. Presently, investors typically receive environmental data that may not cover 100% of operations. However, **this data should be a complete picture just like inventory or revenue is collected from every site of a company**. Already, some companies track and share data in real time. For example, Facebook shows up-to-the-minute operational data about its Prineville, OR data center publicly via website.



Why GHG Scope 3? Why Upstream/Downstream Emissions, Water, and Material Information?

Scope 3 is still "in the works" definitionally. Alongside Scope 1 and 2, Scope 3 information fills out a full picture of company GHG impacts from the suppliers it requires in its operations, to the impact of its produced goods and services. Tracking upstream and downstream company operations give the full picture of the intensity of use of natural resources that the business operations have on the environment - i.e., Scope 3 is important because these impacts would not be happening if the business were not in operation.

Why Science-based Targets (SBT)?

Science-based targets provide the mechanism to keep global warming below a 2 degrees increase, address the 70% of global emissions that come from the private sector, and assign proportional responsibility for reducing the world's emissions in order to reach the 2 degrees scenario. Our expectations are that companies will set and disclose targets for water, waste, and emissions, that may not be science-based targets initially but should be eventually. As of November 2016, there were 200 companies globally committed to SBT through the Science Based Targets Initiative.

Why Identify Scenarios, and Sites that Might be at Risk for Climate Change Impacts?

"(T)he financial impacts of climate change may not be correctly priced,[1]" per the 2016 Financial Stability Board's Task Force on Climate-related Financial Disclosures. If companies scenario plan, particularly a 2°C scenario, and evaluate costs of sites' climate change vulnerability, it forces the assessment, and subsequent management, of risk and potential opportunity.

Please read our full report Disclosure Matters (available on our website under Resources) for a more in-depth discussion of issues that pertain to environmental data disclosure.

[1] https://www.fsb-tcfd.org/wp-content/uploads/2016/12/TCFD-Recommendations-Report-A4-14-Dec-2016.pdf