



Submitted to: The Securities and Exchange Commission

Re: The Enhancement and Standardization of Climate-Related Disclosures for Investors

Date of Submission: April 22, 2022

[iClima Earth](#) (iClima) appreciates this opportunity to provide input on the Proposed Rules for the Enhancement and Standardization of Climate-Related Disclosures for Investors (proposed rules). As the regulation setter for some of the largest stock exchanges in the world, the SEC has an unparalleled opportunity to support the alignment of the financial system with globally agreed climate targets, and a necessary duty to mitigate the recessionary risk posed by a changing climate and an economy wide transition. Disclosure in particular is an integral part of these efforts, efforts thrust into even starker relief by the recent publication of the IPCC's Sixth Assessment Report. In sum, we would like to show our support for the proposed rules and make three specific recommendations:

1. Require companies to split both their revenue and their CAPEX figures into 'green' and 'brown'. The EU taxonomy provides a good example of this style of reporting.
2. Make Scope 3 emissions reporting mandatory and provide companies with a ratcheting timeframe by which this reporting becomes mandatory.
3. Propose that companies publish data on the Potential Avoided Emissions<sup>1</sup> (PAE) of their products.

iClima Earth is a research-focused green fintech company based in London UK, with products traded on the NYSE. We offer financial products comprised of companies providing solutions to global environmental problems, particularly climate change. We are incredibly vocal about the flaws and inconsistencies we see in the way that climate change mitigation and adaptation are tackled by financial institutions, particularly when using ESG scores. Therefore, we incorporate a pioneering approach into the curation of our products, which are sold on the NYSE under 40 Act ETFs (tickers CLMA and SHFT), alongside our UCITS ETFs which trade on key European markets such as the LSE, the Borsa Italiana and Swiss Six. We believe iClima's approach is incredibly relevant to the crucial question of climate related disclosure and the proposed rules.

### **Our Theory of Change**

To provide some background for our recommendations to the SEC, we offer a very brief outline of our approach. Our methodology is currently unique, but we are seeing increasing signs of financial institutions across Europe and beyond starting to embrace similarly rigorous and forward-looking techniques. Our approach stems from the belief that financial actors have for too long focused on rewarding mainstream companies for simply 'doing less harm', rather than

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<sup>1</sup> [Mission Innovation \(2020\)](#): "The overall concept of avoided emissions is that a solution (product or service) enables the same function to be performed with significantly less GHG emissions. The method of measuring avoided emissions is to compare a baseline scenario without the enabling solution with a scenario using the enabling solution, where the baseline represents the 'business as usual' (BAU) scenario."

actively working to solve the broader problem of climate change. Our theory of change, and where disclosure fits into it, is as follows.

We see the economy as divided into three buckets of companies based on their relationship to climate change:

1. Companies whose main line of business directly drives climate change, such as fossil fuel majors.
2. Companies whose business model is not directly related to emissions intensive practices, or to decarbonisation. These companies represent the majority of the economy.
3. The solution providers whose business model is directly driven by decarbonisation. Examples are solar providers or electric vehicle companies.

In our view, nominally 'sustainable' finance all too often ends up rewarding the companies in the middle bucket. Just take a quick look at the composition of the major ESG indices, where healthcare, technology and consumer goods companies abound. These companies are investing in carbon offsets or renewable energy certificates, but are still very much vulnerable to climate change due to a lack of action to shift business models and avoid emissions. Our approach, by contrast, is to focus on bucket three: the solution providers for whom decarbonisation is a revenue generating item and thus, more likely to withstand the economic transition to a low carbon economy. We believe that too much nominally sustainable financing lacks a clarity of outcome and thus supports companies who are not making investments in reducing their climate risk. The actions of these companies generally have low impact compared to emissions reductions by those in bucket 1 or, in particular, the emissions avoided by the products sold by companies in bucket 3, and they will therefore be followers rather than leaders in the transition to Net Zero.

A key piece of this puzzle is data. Part of the reason we see these vague outcomes, with tech stocks (particularly the FAANG/MAMAA) dominating green indices, is down to vague inputs. If it is difficult to robustly identify who is making positive steps, then the obvious answer is just to identify who is doing less harm; an easier task, based as it is on backwards looking data from a wider pool of potential companies. As financial institutions seek to profit from the deluge of capital chasing 'sustainable' products, now is a particularly crucial time to ensure that the right data is available. Therefore, we encourage the SEC to implement the proposed rules with a view to ensure the climate data disclosed includes additional information discussed in this submission.

### **New Data Sets to Drive Change: Focus on the Financials**

The SEC's mandate, as we understand it, is effectively twofold: to ensure that companies are not over-exposed to the physical risks posed by runaway climate change (including by supporting efforts to mitigate that climate change) and to minimise the transition risks associated with those mitigation efforts. Both priorities amount to trying to protect investors by avoiding a recessionary response to climate change within the financial system. In order to successfully fulfil this mandate, the SEC needs companies to demonstrate how their business model is exposed to climate change. We believe that revenue and CAPEX are integral data points for gaining a financially material understanding of this exposure, which includes both physical risk and the risks associated with the economic transition to a low carbon economy. We do not believe that the disclosures can fully fulfil their stated purpose without these data points. As well as providing a more granular, accurate and holistic picture of a company's exposure than emissions data or other company reporting, financial data is also of far more use to investors, who are primarily interested in financial returns and how these will be affected by climate change and the economic transition. Therefore, **we would like to make the case for the inclusion of green and brown revenue and green and brown CAPEX within the SEC's new disclosure rules.**

For both the SEC and investors, it is critical to understand those companies whose business models are dependent on carbon intensive practices. The volume of finance generated by these assets or practices is crucial in assessing this exposure. This can be measured as **'brown revenue'**. Whilst there is no universal standard for these activities, there are myriad guidelines, and it would not be a stretch to turn these into a taxonomical regulation.

Similarly, definitions of **what constitutes 'green'** have always varied, but the introduction of the EU taxonomy now presents an opportunity to overcome this hurdle. For the first time we have a standardised and universally applicable definition of what counts as green. Revenue can easily be mapped onto points in the EU taxonomy and we encourage the SEC to consider a similar approach. Companies that have high proportions of green revenue are likely to not only be less exposed to physical and transition risks from climate change, but also to contribute to mitigation through the sale of their products. This allows financial institutions to not only exclude risky companies, but also to seek out the solution providers who will lead mitigation efforts over the coming decades. **Revenue analysis therefore provides a relatively objective measure of a company's commitment to tackling climate change.**

As well as revenue, we would argue in particular that **CAPEX figures should be reported in a manner that distinguishes green from brown, similarly to revenue.** CAPEX allows for a robust and granular assessment of future climate impact and exposure – far more so than self-imposed targets or pathways. As mentioned, we are one of a growing number of financial institutions seeking forward looking metrics of climate impact. These will be critical in developing financing strategies that actually achieve necessary climate outcomes.

In addition, iClima is pioneering the use of **Potential Avoided Emissions (PAE, as defined by [Mission Innovation](#))** as a forward-looking metric. The calculation assesses the difference in emissions between a high carbon business as usual (BAU) scenario and a solution enabled low carbon emissions scenario; for example, the difference between a year commuting in an internal combustion engine (conventional) car versus an electric car. This allows us to robustly calculate the impact-potential of different solutions and make investment decisions based on the results. CAPEX is an important part of this calculation, as it allows us to forecast the scale of the solution, and thus the volume of emissions avoidance it could enable.

We have spent a long time trying to source even the basic data needed to calculate PAE alongside splitting up revenue and CAPEX, and have found its availability wholly lacking. While CAPEX and revenue are of course reported, it is usually by business line, making it nigh on impossible to determine what goes or comes from where in terms of environmental impact. Some companies provide more granular data, allowing financial institutions like us to pass their own judgement on investments, but this is not as common as it should be, and of course relies on the capacity of financial institutions to undertake such analysis.

As more and more firms seek out the companies providing solutions and use forward looking metrics such as PAE, we need robust data. In his statement, Chair Gensler writes that he is guided by the concept of materiality, which the Supreme Court defines as information wherein 'there is a substantial likelihood that a reasonable shareholder would consider it important.' We would make the case that both green and brown revenue and the associated CAPEX data fits these criteria. Historical emissions are difficult to measure and by definition backward looking, whilst emissions targets are far from concrete. By contrast, CAPEX offers a robust view of a company's exposure to carbon intensive assets and processes. Revenue is a similarly secure measure of business focus, and can be more useful than just emissions, for it offers a holistic picture of a company and its business lines. Mandating companies to split their CAPEX (and revenue) into green, brown and neutral based on the EU or similar taxonomical regulation would be a major step in facilitating

better investment decisions (including the assessment of climate risk exposure) and would not be a significant extra burden on the reporting arm of the company.

## The Importance of ESG and Scope 3 Emissions

ESG investing is dominating the paradigm of responsible investing. Created by a UN working group and rooted in the best principles of the SDGs and MDGs, it has since lost much of its integrity. This has been well publicised, as ratings providers produce opaque scores from reams of data points which vary significantly between providers. Absurd cases are well publicised, where inconsequential or even compulsory changes can lead to ratings upgrades. This has led many commentators from all sides of the political spectrum to criticise ESG.

In its purest form, however, ESG remains incredibly valuable and important in climate discourse. The attention it now receives affords it the potential to drive impactful decision making, but only once financial institutions begin to look past the providers, at **the raw data**. This is clearly starting to happen, but we must ensure that the data is ready for this level of scrutiny. We would like here to push for stronger rules around scope 3 emissions, particularly for companies who produce high quantities of emissions through their products. The importance of this cannot be overstated. Allowing companies to avoid disclosing their Scope 3 emissions risks undermining the entire policy and facilitating greenwashing. While it can be difficult to accurately measure Scope 3 emissions, particularly in longer supply chains, it is unlikely to become easier without regulation that demands, or at least strongly encourages it. We would strongly suggest the rules promote all Scope 3 emissions reporting, whether material or not, and whether or not a registrant has set a goal including them. The SEC should facilitate some form of transition process whereby companies must show an attempt to capture this data over the next few years (with an accompanying narrative outline of their attempt), before mandatory disclosure comes in at a set date. This will encourage the development of better techniques of measurement. If we are going to have any chance of mitigating climate change, we need Scope 3 disclosure, and given current evidence, ratcheting regulation is the best, if not only, way to achieve it.

As well as Scope 3 emissions, we would call for the SEC to encourage the publication of Potential Avoided Emissions. As covered, PAE accounts for the emissions that do not get emitted as a result of the uptake of a product or service. In 2013, the [World Resources Institute \(WRI\)](#) suggested the accounting of PAE, proposing that they would comprise a new 'Scope 4' of emissions. The idea never came to fruition, but we, alongside a growing number of NGOs, Thinktanks and Financial Institutions believe that this should change. Publishing PAE would allow investors to objectively weigh up the potential climate impact of a company's solutions. This would help to tackle greenwashing, reward the true innovators and maximise the impact of well-intentioned capital.

## Case Studies

At iClima, we have spent almost three years working on a way to assess the impact of different climate change solutions based on raw, forward-looking indicators rather than the black box scorecards common within the world of ESG. Here, we present three case studies of our work. First, we outline some developing ways of underwriting investments based on the data we have recommended for inclusion in the disclosure, which translate financial metrics into metrics for carbon accounting. Secondly, we outline the concept of a 'transition ratio' which we hope to be able to develop moving forward. While the metrics in case study 1 can help to assess the potential impact of various climate change solutions, this transition ratio provides a much needed assessment of the current and future exposure of high emitters to climate risks. We strongly believe that financial institutions must be given access to this data in order to fairly mitigate climate

risks. Finally, we demonstrate our use of green revenue, brown revenue and PAE to vet the companies in our flagship index.

### *Case Study 1*

The idea of the Time Value of Carbon (TVoC) and the Carbon Return on Investment (CRoI) are two novel forward looking metrics which can be used to weigh up different companies and investments. The Time Value of Carbon refers to the time horizon within which the solution enabled emissions avoidance occurs. For example, an investment in a moon-shot technology such as direct air capture right now could take 10 years to produce any saving. An investment in a solar farm, by contrast, could displace fossil fuel energy demand within months. The Carbon Return on Investment refers to the volume of emissions avoided per unit of capital invested. By this metric, telepresence displacing air travel is a powerful solution, while something like plant-based food offers a lower return. Such metrics are hugely important for ensuring that climate focused investment is not misallocated; a risk to both individual companies and the entire financial system.

### *Case Study 2*

Next, we are hoping to begin work on a 'transition ratio', a very simple metric that demonstrates where a company is on its transition to Net Zero. Unlike other transition metrics which rely on the aggregation of myriad data points by a third party, such a tool would be based solely on revenue, CAPEX, R&D and acquisitions; more specifically a comparison between green and brown. Investors themselves could undertake this calculation and come up with their own specific take on thresholds and standards in order to gain a simple snapshot of a company's exposure to climate risk. For example, if automakers like Ford or GM, or E&P names like Exxon or Marathon Oil were to disclose their green and brown revenue, R&D, acquisitions and CAPEX, investors would be able to see the cash flow generated by products and services that are incompatible with the inevitable demand shifts of a Net Zero future. A significant body of research has focused on the risk of asset stranding due to the economic transition. Investors must be given the tools to evaluate this risk, and we do not believe that other types of disclosure do this sufficiently, particularly as many are backwards looking and allow companies to skirt the fundamental financial data. Our proposed metrics therefore plug this essential gap.

### *Case Study 3*

Please see the following table (also available [here](#), which is the database of the companies in our flagship index. It is eminently clear how each company is responding to the issue of climate change thanks to the data we have managed to collect. Making this data easily available means every financial institution could have a database like this, which would be a massive step forward in tackling the threat that climate change poses to the stability of the financial system. With all scopes covered in disclosure, as well as green and brown revenue and CAPEX, companies will have the tools to undertake much more robust analysis of a company's direction of travel and role in the transition to a Net Zero economy.

**Companies with relevant Climate Change Solutions in the iClima Decarbonisation Enablers Index. Reporting on levels of green revenue, brown revenue and the activities that we negatively screen, as well as the levels of PAE per company per year**

(Sample – Please refer to the full table [here](#))

No	Sector	Sub Segment	Company	Estimated or Disclosed	Green Revenues (% of total revenue)				Estimated or Disclosed	Brown Revenues (% of total revenue)				Estimated or Disclosed	CO2e Avoidance (MMtCO2e)			
					Upcoming Player	Partial Player	Majority Player	Pure Player		<-20%	-20% to <-10%	-10% to <-5%	>=5%		<-1	1-3	3-10	>10
1			Algonquin Power Corp	E					E									
2			Atlantica Yield PLC	E					E									
3			Audax Renewables SA	E					E									
4			Boralex Inc	E					E									
5			Clearway Energy Inc	D					E									
6			Contact Energy Ltd	E					E									
7			Covanta Holding Corp	D	TS	TS	TS	TS	D									
8			EDP Renovaveis SA	D					D									
9		Renewable Energy Assets	Encavis AG	D					D									
10			Enervix Renewable Energies Ltd	D					D									
11			Falck Renewables SpA	E					E									
12			Innervex Renewable Energy	D					D									
13			NextEra Energy Partners	D					D									
14			Northland Power Inc	D					E									
15			Ormat Technologies Inc	D					E									
16			Orsted A/S	E					E									
17			Renouis Inc	D					E									
18			Solaris Energia & Medio Ambiente SA	D					D									
19			Transacta Renewables Inc	D					E									
20			Verbund AG	E					NEI									
21		Renewable Energy Developer	Enlight Renewable Energy Ltd	D					D									
22			Neoen SA	D					D									
23			Scatec Solar ASA	D					D									
24			Canadian Solar	D					D									
25	Green Energy		China High Speed Transmission Equipment Group	D					E									
26			Enphase Energy Inc	D					D									
27			First Solar Inc	D					D									
28			GCL Poly Energy Holdings Ltd	D					D									
29			ITM Power PLC	E					E									
30			Jinko Solar Holding Co	D					D									
31			Landis Gyr Group	E					D									
32			Maxeon Solar Technologies Ltd**	D					E									
33			Meyer Burger Technology AG	E					E									
34		Renewable Energy Equipment	Nordex SE	D					D									
35			Prisma SPA	E					NEI									
36			Regal Beloit Corp	E					E									
37			Siemens Gamesa Renewable Energy SA	D					D									
38			SMA Solar Technology AG	D					D									
39			SolarEdge Technologies Inc	D					D									
40			SunPower Corp	D					D									
41			TPI Composites Inc	D					D									
42			United Renewable Energy Co Taiwan	D					D									
43			Vestas Wind Systems AS	D					D									
44			Wacker Chemie AG	D					E									
45			Xinjiang Goldwind Science & Technology	D					D									
46			Xinyi Solar Holdings Ltd	D					D									

## Summary

Once again, we are very pleased that the SEC is seeking to impose mandatory climate disclosure. The proposed rules are an essential first step towards preparing the financial system for climate change, and a step that is already well under way in Europe. That climate change will negatively affect the financial system, and that it is of material benefit for the financial system to try to mitigate that climate change, is no longer up for debate. The SEC with all its power must now act on these scientific facts and promote the reporting of what will become raw data, which we hope different players will not politicize. We therefore thank Chair Gensler and the SEC representatives for opening this campaign, and urge that he and his team will consider our recommendations. **Mandate the reporting of green and brown revenue plus green and brown CAPEX, outline a ratcheting pathway to mandatory Scope 3 disclosure and encourage the reporting of Potential Avoided Emissions.** With these tools available, investors will be able to efficiently allocate capital towards a stable financial system over this next decade of unprecedented transformation.

Yours Sincerely,

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