RFI Carbon Risk

NYC Comptroller

May 2018

ENGAGED TRACKING

C. Response Elements and Format

1. Executive Summary

Name: **Engaged Tracking**

Contact information:

Office address: Level 39, One Canada Square, Canary Wharf, London, E14 5AB	**Telephone:** +44 (0)207 183 3221
Key Contacts:	
Sam Gill - CEO	+44 (0)79 8324 0336
Brigitte Small - Managing Director	+44 (0)780 4859 852

Website address: https://www.engagedtracking.com/

Description of entity

Engaged Tracking (formerly known as ET Index) is a mission-driven organisation dedicated to helping investors and corporates identify, understand, and manage climate-related risks and opportunities.

Engaged Tracking is a specialist provider of climate-related data, actionable insights and tailored investment strategies. Our products and services are designed to help investors and corporates identify, understand, and manage climate-related risks and opportunities.

Engaged Tracking products are guided by clear principles that are intended to ensure their integrity and to maximise sustainable impact.

1. We prioritise simplicity over complexity
2. We make our products and methodologies transparent
3. We seek to maximise sustainability impact
4. We seek to minimise system-wide sustainability risk
5. We value independence and objectivity

The Engaged Tracking team has over 7 years experience analysing corporate carbon emissions data and publishes the ET Carbon Rankings each year. The ET Carbon Rankings score the world's largest listed companies according to the greenhouse gas emissions intensity of their activities.

Engaged Tracking was spun out from the not-for-profit Environmental Investment Organisation (EIO) in 2014 with funding from Climate-KIC, the European Union's main climate innovation initiative.

The company was initially nurtured at the Imperial College Innovations Incubator, working with Imperial College's Risk Management Laboratory to validate its models and methodologies. Engaged Tracking is now based at Level39, Canary Wharf, Europe's largest financial technology accelerator.

In March 2017, Engaged Tracking was admitted as a member of the Social Stock Exchange, the world's first regulated exchange dedicated to businesses and investors seeking to achieve a positive social and environmental impact through their activities.

IV. Information Requested

The Systems request information that will assist them in achieving the purpose and objectives described above and that is responsive to the following questions:

A. General Information (all responders must provide the following information)

1. Name and business address of responding party (if responding on behalf of a firm or organization, provide for that entity)

Trading Name: Engaged Tracking
Legal Name: Engaged Tracking (ET) Index Ltd
Address: Level 39, One Canada Square, Canary Wharf, London, England, E14 5AB

2. Website address, if available

http://engagedtracking.com/

3. Name, address, email address and phone number for single point of contact for all communications.

Sam Gill, CEO
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4. Please briefly describe your occupational and professional status and background, expertise related to the issues in this RFI and any other relevant background information.

Sam Gill, CEO & Co-founder Engaged Tracking

Thought leader in developing Engaged Tracking carbon, circular economy and sustainability ranking methodologies.

After starting his career at Google, Sam led the not-for-profit research body - the Environmental Investment Organisation (EIO) - to become the first organisation in the world to rank the world's largest listed companies by their greenhouse gas emissions and disclosure. In 2014 he co-founded Engaged Tracking to commercialise the work of the EIO. Sam is author of Environmental Tracking 3.0 and the main architect behind the Engaged Tracking methodology. Sam holds a first class degree in French from the University of London Institute in Paris.

Jonathan Harris, Head of Research

Expert in risk modelling, portfolio construction, carbon factor research.

Jonathan has over a decade's worth of expertise in portfolio risk modelling. Before joining ET Index Research, he completed the development of a global multi-asset class portfolio risk model at Credit Suisse. He has worked at investment and trading houses across four continents. Jonathan holds an MSc in Financial Mathematics from Stanford University and a BSc (Honours) in Physics and Mathematics from the University of British Columbia. He is currently completing an executive PhD in Finance at EDHEC Business School, the leading business school for index-related financial research.

5. Please state whether the responder is able to provide the Investment Analysis Services, or a portion of such work, including legal fiduciary analysis services, and is likely to respond to an RFP that includes Investment Analysis Services. If yes, please respond to the questions in Attachment 1.

Yes - Investment Analysis Services.

B. Information Requested Regarding RFP and Investment Analysis Services (Responders must address one or more of the following questions). Responders are encouraged to respond with other considerations and approaches not covered herein that would achieve the Comptroller's and Systems' purpose and objectives regarding potential prudent divestment strategies.

RFP Structure for Investment Analysis Services

1. What specific areas, factors, risks and impacts should an RFP consider in order to enable selection of a provider or providers that can best conduct comprehensive and in-depth Investment Analysis Services?

Does the provider provide comprehensive information regarding:

- Greenhouse Gas Protocol defined Scope 1, 2 and 3 emissions absolute values (tCO_2e).
    - Scope 3 information is provided at the individual category level.

- Greenhouse Gas Protocol defined Scope 1, 2 and 3 emissions intensity values (tCO2e/$m revenue).
- Evaluations of corporate disclosure quality and completeness.

2. What other important questions should be included in an RFP that includes Investment Analysis Services?

- To what extent does the provider perform engagement services with the companies in the portfolio in order to encourage greater public disclosure and lower emissions?

3. What information and format do you believe would be useful for soliciting and evaluating Investment Analysis Services?

4. What criteria, experience and qualifications for services providers should be considered for Investment Analysis Services?

- Does the provider have a deep understanding of Scope 3 emissions, which typically account for more than 85% of a company's total carbon footprint?
- To what extent does the provider engage with companies to encourage greater public disclosure and lower emissions?

Approaches to Investment Analysis Services

5. What do you believe are best approaches to:

a. Determining the scope of companies, including further defining fossil fuel reserve owners, appropriate for divestment.

We would ask that the Comptroller considers what the purpose of divesting from fossil fuel companies is (however fossil fuel companies are defined). If the primary objective is to reduce exposure to carbon risk, then fossil fuel divestment may not yield the desired outcomes as other carbon-intensive companies outside of the fossil fuel industry are also at risk.

Following the 2015 Paris Climate Change Agreement over 165 countries have submitted their Nationally Defined Contributions (NDCs) for cutting emissions.

In addition, more than 40 countries and 20 cities, states and provinces now have carbon pricing mechanisms in place. Significantly, China launched the world's largest emissions trading scheme in December 2017. This means that 25% of global emissions are now subject to some form of carbon pricing (World Bank, State and Trends of Carbon Pricing 2017).

Carbon pricing and policies to cut emissions will not apply exclusively to fossil fuel companies, or those with fossil fuel reserves, although these may be the worst affected.

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Indeed, in a rapidly de-carbonising world, companies with higher emissions will be increasingly penalised by the market relative to their more carbon-efficient peers.

We would therefore suggest that the scope is widened from companies in the fossil fuel industry or with fossil fuel reserves to carbon-intensive companies more generally.

The Engaged Tracking approach to low carbon and fossil free investing is to:

1. Publicly rank the largest listed global companies according to their combined greenhouse gas emissions intensity (Scope 1, 2 and 3).
2. Produce investable indexes in which company free-float market capitalisation re-weights are determined by each companies relative ET Carbon Rank.
3. Additionally, companies in the Oil, Gas and Coal sectors can be excluded altogether.

This approach has several advantages:

1. Engaged Tracking Index investors reduce their overall exposure to carbon risk across the portfolio, not just within the fossil fuel sectors.
2. Carbon risks across the supply chain (Scope 3) are taken into account - Scope 3 emissions typically represent 85% or more of a company's total footprint.
3. Engaged Tracking Index investors benefit from data-driven engagement with constituent companies on their behalf carried out by ET through public rankings designed to encourage greater transparency and lower emissions across the entire economy.
4. Engaged Tracking Index investors can pool assets and signaling power with other investors via a transparent mechanism to encourage economy wide reductions in carbon emissions, reducing exposure to the systemic risks posed by climate change risk.

b. Determining the timetable and specific milestones within a five year period appropriate for divestment.

The advantage of a rankings-based approach to reweighting companies in a low carbon version of the benchmark index is that the 'slope' of the reweight curve can be incrementally adjusted over time.

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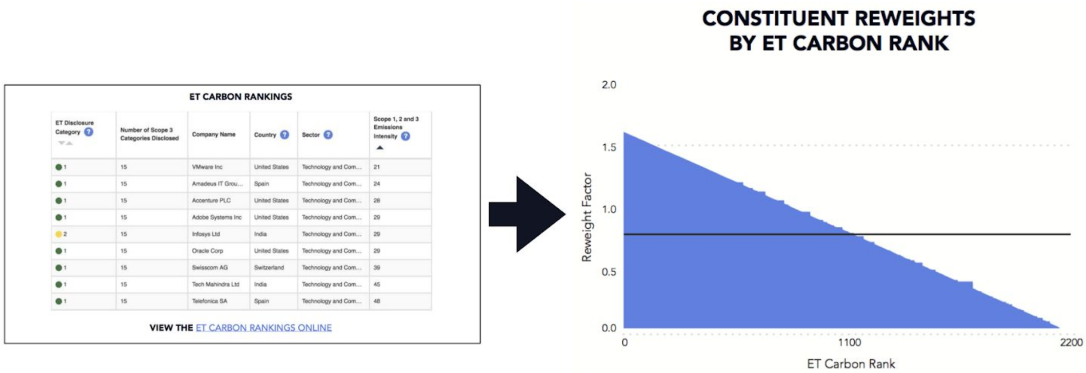
Engaged Tracking Rankings based approach to reweighing



ET CARBON RANKINGS

ET Disclosure Category	Number of Scope 3 Categories Disclosed	Company Name	Country	Sector	Scope 1, 2 and 3 Emissions Intensity
1	15	VMware Inc	United States	Technology and Com...	21
1	15	Amadeus IT Grou...	Spain	Technology and Com...	24
1	15	Accenture PLC	United States	Technology and Com...	28
1	15	Adobe Systems Inc	United States	Technology and Com...	29
2	15	Infosys Ltd	India	Technology and Com...	29
1	15	Oracle Corp	United States	Technology and Com...	29
1	15	Swisscom AG	Switzerland	Technology and Com...	39
1	15	Tech Mahindra Ltd	India	Technology and Com...	45
1	15	Telefonica SA	Spain	Technology and Com...	48

VIEW THE ET CARBON RANKINGS ONLINE

Furthermore, it can be combined with engagement approaches. E.g. The Comptroller could signal to fossil fuel companies that those that do not align with a reasonable 2 degree transition pathway budget within 5 years will be excluded altogether. In such a scenario, Engaged Tracking could coordinate the collection and evaluation of fossil fuel company responses to this request. The quality of the company responses could for the basis for a custom ranking that the Systems could use to publicise their engagement with the companies, thereby making its impact even stronger.

c. Assessing appropriate divestment approaches based on asset classes, strategies and styles.

We believe that the most effective divestment/low carbon approaches have the following characteristics:

- They take into account the fact that carbon risk will affect the entire portfolio, not just fossil fuel stocks or those with fossil fuel reserves.
- They take into account value chain (Scope 3) emissions. This is particularly important when considering fossil fuel stocks, as the 'Use of sold products' category is typically the most relevant for a fossil fuel companies, i.e. when the fossil fuel reserves are burnt by the end user.
- They are based on public, transparent ranking system of all constituent companies. This has the advantage of sending a clear signal to constituent companies of what steps they need to do in order to gain a higher weighting within the strategy. In the case of the ET Carbon Rankings, lower relative greenhouse gas emissions intensity and full disclosure are rewarded; higher relative greenhouse gas emissions intensity and poor disclosure are penalised.

d. Analyzing the investment risks posed by climate change and fossil fuel reserve owners to the Systems' portfolios (including scenario analysis).

Cutting through all the complexity, we believe that there are three key drives for understanding the investment risks posed by climate change:

- Greenhouse gas emissions - since this is what will be increasingly taxed.
- Disclosure - Companies and fossil fuel stocks that refuse to disclose their risks and/or discuss changes in their business models are more likely to be divested than more progressive fossil fuel companies.
- The extent to which a company's business is in line with a 2 degree emissions pathway - as more capital begins to move away from high-carbon companies, investors are likely to judge companies whose businesses are less well aligned to a 2 degree pathway as higher risk and so they are more likely to see a drop in decline for their shares (see the decline of Coal stocks over the last few years as an example of things to come).

e. Analyzing potential investment impacts on the Systems' portfolios of divesting from the securities of fossil fuel reserve owners, including impacts on return, risk, diversification and cost (including tracking error).

Engaged Tracking can provide analysis of the impact of portfolio changes on return, risk, diversification and cost using its standard risk analysis system based on historical data.

In addition, as per best practice, Engaged Tracking can also provide scenario analysis of the behaviour of the portfolio before and after security weight changes.

Separately, given the unprecedented nature of the transition to a low carbon economy in terms of speed and scale, it could be considered that existing measures of risk, tracking error etc. may not be helpful forward looking indicators of future financial risk.

For example, if existing market capitalisation based benchmark indexes take no account of carbon risk, does it make sense to limit one's actions to reduce carbon risk exposure to within 1% tracking error of such indexes?

f. Assessing potential alternative investments available to the Systems that have risk and return characteristics equivalent to the securities that may be divested.

Engaged Tracking can assess potential alternative investments available to the Systems both based on traditional risk and return characteristics, as well as climate-related risk and opportunity characteristics.

6. Are there any precedents that can help guide the approach to analyzing the impacts of and determining a prudent strategy for divesting from fossil fuel reserve owners?

7. What are ways to address the costs of externalities in investment portfolios that can help mitigate risk?

The Engaged Tracking approach of rankings-based indexes and engagement is designed precisely to create an incentive mechanism for companies to reduce their negative externalities (i.e. greenhouse gas emissions). Furthermore, it is designed to mitigate individual investor exposure to carbon risk and system-wide exposure to climate change risk, which will affect all investors but particularly universal investors.

8. How do you view the extent to which the market currently prices in climate change risk and, specifically, the economic and investment risks related to the carbon intensive businesses such as fossil fuel reserve owners?

It is our house view that climate-related risks are, by and large, not yet incorporated into market prices. Slow, long-term, complex issues like climate change are exactly the kinds of issues that markets struggle to price. One example of clear, public evidence to support this view is the recent work by Professor Harrison Hong on 'Climate Risks and Market Efficiency'.

That said, the outperformance of the Engaged Tracking low carbon investment strategies over the last 8 years is likely a sign that the market is moving towards underweighting carbon-intensive assets and that this is having an impact on prices. Anticipating which businesses the market is most likely to evaluate as having the greatest climate risks, and thus which businesses are most likely to be subject to divestment actions on an ongoing basis, is thus a material short and medium-term risk management issue for the Systems.

In this context, engagement with the market is very important both to drive the impact of the positions the Systems choose to take, and to encourage other investors to take similar positions. The ideal outcome of engagement work is thus that it acts as a driver of returns, a risk management tool against the positions going wrong, and a tool for positive social impact. Engaged Tracking is a highly credible, mission-driven partner that can help the Systems achieve these benefits of a public, transparent engagement approach.

9. How could divestment be effective in influencing fossil fuel reserve owners to take steps toward addressing carbon risk?

We believe that the most effective way to influence fossil fuel companies and companies in the portfolio as a whole is to:

1. Publicly rank them according to their greenhouse gas emissions (ET Carbon Rankings).
2. For investors to re-allocate capital according to their relative rank in the ET Carbon Rankings (ET Low Carbon Indexes).

This approach is designed to 1) maintain ownership of all companies and therefore maintain influence over them 2) send a clear signal that carbon reductions will be rewarded.

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That said, should significant numbers of investors divest altogether, this will weaken demand for fossil fuel company shares and increase their cost of capital.

Attachment 1

Please answer these questions only if you are able to provide the Investment Analysis Services, or a portion of such work that would be sought in the above- referenced RFP and would likely respond to that RFP.

a. What services can you provide that could satisfy the Investment Analysis Services sought in the above-referenced RFP? Describe briefly what other services relating to mitigating climate change or carbon risk you can you provide.

WHAT WE OFFER

Service	Description	How investors are using our specialist services?
ET Advisory	Leverage the world-class expertise of the ET Research team to inform your low carbon/responsible investment strategy and goals.	• To supplement in-house resources with independent, external expertise.
ET Corporate Engagement	Data-driven engagement with companies on behalf of investor clients, across the entire ET Carbon Rankings universe to encourage better disclosure and improved carbon and climate performance.	• To track the carbon and climate-related performance of companies over time in a transparent way through the ET Carbon Rankings. • To be publicly recognised as taking an active leadership role in corporate engagement. • To support and encourage the adoption of the corporate disclosure recommendations outlined by the TCFD

		by providing a clear signal to companies that this is demanded by ET Investors. ● To encourage companies to reduce carbon and climate-related risks in their business operations and supply chains.
ET Carbon Dataset	Access the ET Carbon Datasets that underpin the ET Carbon Rankings, a public corporate carbon benchmark. The ET Carbon Dataset includes information on the Scope 1, 2 and 3 emissions of global companies, the completeness of the data publicly reported by companies, whether it has been third-party assured, as well as statistical analysis and estimation models for non-disclosing companies.	● To identify carbon risk exposure and inform asset allocation decisions. ● As a data input and/or methodological framework for the construction of low-carbon investment strategies. ● To respond to mandatory and voluntary reporting requirements, e.g. TCFD, French Law, Asset Owners Disclosure Project etc. ● To perform in-house carbon footprinting. ● To inform universe selection and/or stock exclusion. ● As an input into risk models and scenario analysis. ● As an engagement tool that can be used with investee companies. ● To supplement and sense check other carbon datasets.
ET Bespoke Data Collection	Are you looking for more data on your investee companies?	● To understand the carbon emissions and disclosure profile of investee companies. ● To inform investment decision making

	We offer a bespoke data collection service to clients wishing to outsource their data collection needs, allowing them to focus on their core business.	processes. ● To select which companies to engage with. ● To inform their engagement agenda with investee companies.
ET Portfolio Analytics	We provide portfolio carbon footprint and carbon risk analysis reports to investors that want to better understand their carbon risk exposure and meet their reporting requirements. Our bespoke reports enable investors to identify and understand climate-related risks in their portfolios quickly and easily. Our reports are aligned with best practice as advocated by the Task Force on Climate-related Financial Disclosures (TCFD) and the reporting requirements of Article 173 of the French Energy Transition Law. At a minimum, both require investors to calculate the carbon exposure of their holdings, stress test different scenarios and communicate their strategy for managing those risks to their stakeholders. Results are presented in a customised report that can be made public and used as a communication tool for internal and external stakeholders. This is ideal for French investors responding to Article 173, Montreal Pledge signatories and	● To fulfill disclosure requests, e.g. national mandatory reporting requirements, Montreal Pledge, Asset Owners Disclosure Project etc. ● To report on carbon emissions exposure of funds to stakeholders/clients. ● To compare carbon emissions exposure of funds to multiple benchmarks. ● To perform scenario analysis as advocated by the TCFD. ● To identify high risk assets within a portfolio. ● To inform engagement strategies. ● To inform asset allocation strategies. ● To monitor changes in portfolio risk exposure over time.

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	investors seeking to improve their rating in the Asset Owners Disclosure Project Global Climate Index.	
ET Bespoke Portfolio Construction	The ET Carbon Dataset can be used as the basis for the construction of Exchange Traded Funds or other fund vehicles. The ET Carbon Dataset can: ● Inform universe or portfolio selection. ● Determine stock weightings for passive portfolio strategies that incorporate engagement via the ET Carbon Ranking Series. ● Be combined with other datasets to create multi-factor approaches.	● To leverage quality-assured, standardised and useful carbon data to inform portfolio construction and weighting. ● To construct and market 'engaged tracking' investment strategies based on transparent data, underpinned by the public ET Carbon Ranking Series.
ET Low Carbon Index Series & ET Fossil Free Low Carbon Index Series	License the ET Low Carbon Index Series as a benchmark or for the creation of index-based investment products. Custom strategies are available with varying tilts and tracking error targets relative to the underlying market capitalisation weighted index.	● To increase exposure to companies set to benefit from the transition to a low carbon economy. ● To reduce exposure to companies expected to be disadvantaged by the transition to a low carbon economy. ● To decarbonise portfolios and support transparent mechanisms to bring about emissions reductions in the global economy (ET Carbon Ranking Series). ● To incorporate a data-driven

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		engagement strategy directly into their low carbon investment strategy via the ET Carbon Ranking Series.

b. Describe your business including your primary business activity and all the professional services that you or your company or organization provide.

See above.

c. What skills, experience, expertise or tools do you have that enable you to provide Investment Analysis Services? Please include a list of similar prior projects and/or services; a description of experience with providing similar services to public pension funds or other institutional investors; and the length of time that you and your company or organization have provided such services.

Our team has over 7 years experience in collecting, analysing and working with carbon emissions data. We have built a number of tailored low carbon investment strategies for asset owner and asset manager clients. In January 2018 we launched a membership scheme providing asset owners and asset managers with carbon data, portfolio analytics and advisory services.

d. Would you be willing to serve as a fiduciary to the Systems if you performed the Investment Analysis Services?

N/A

e. What are your sources of income other than from clients? If you are a not-for-profit organization, please identify your donors.

N/A

f. What is the estimated pricing structure and cost for provision of Investment Analysis Services?

Our standard membership package starts from $22,000 and includes access to advisory services, data and portfolio analytics. We can also simulate various backtests to input into the decision making process for choosing and appropriate low carbon/low carbon fossil free investment strategy.