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# NZAOA's Climate Solutions

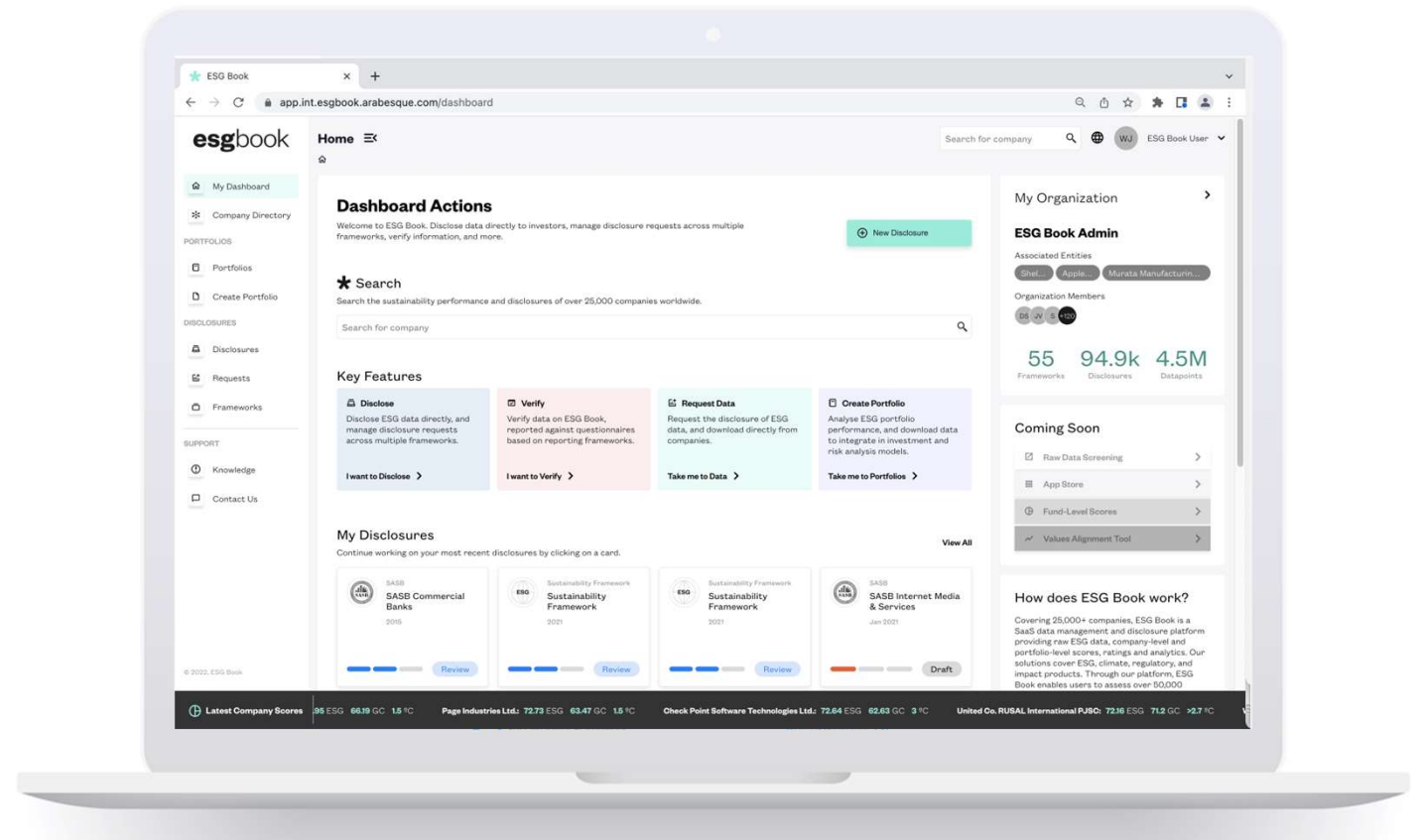
**v1.0**

Prepared for:



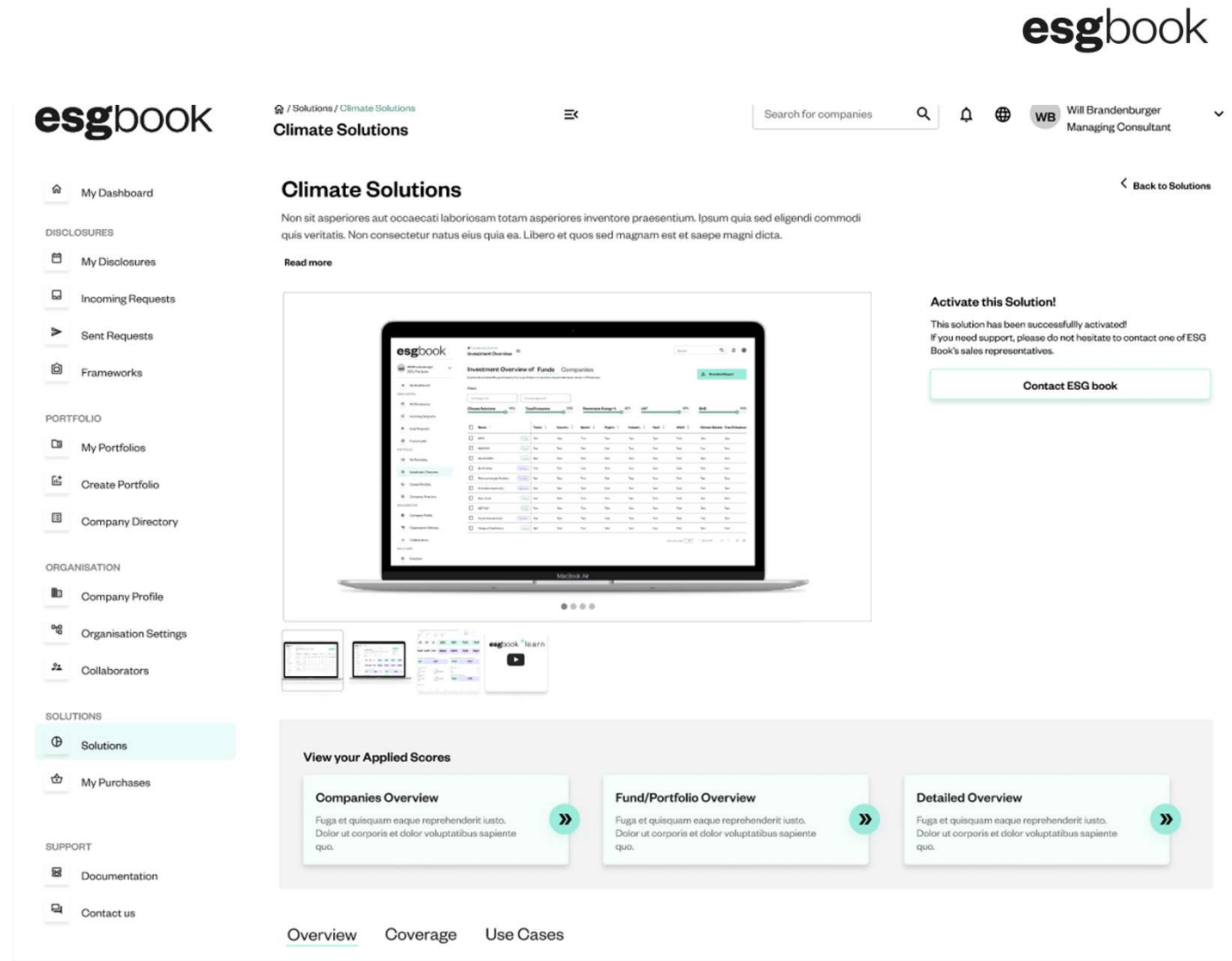
**esgbook**

# Our ESG Book Platform



# Climate Solutions – Homepage

The Climate Solutions homepage where an overview of the climate solutions will be provided, in addition to the ability to subscribe



# Investment Overview – Funds

Fund-level database with filters on top

- My Dashboard
- DISCLOSURES
  - My Disclosures
  - Incoming Requests
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- PORTFOLIO
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- ORGANISATION
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  - Collaborators
- SOLUTIONS
  - Solutions
  - My Purchases

## Climate Solutions Overview of Funds Companies

Explore the sustainability performance of your portfolios or companies and generate report based on filtered data.

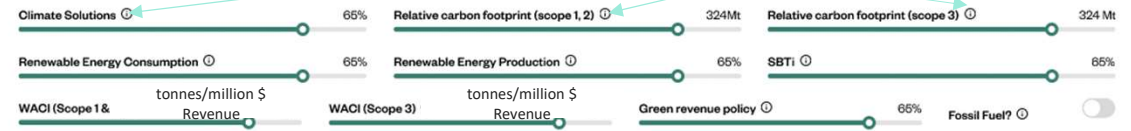
Download Report

Filters

Coverage level

Percentage of revenue that is derived from climate solutions

Tons of CO2e emitted per million dollar invested



<input type="checkbox"/>	Name	Ticker	Country	Style	Region	Industry	WACI	Climate Solution	Total Emissions (Scope 1, 2)	Total Emissions (Scope 3)
<input type="checkbox"/>	INRG	Fund	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	NASDAQ	Fund	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Russel 2000	Fund	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	My Portfolio	Portfolio	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Pharmaceuticals Portfolio	Portfolio	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Potential Investments...	Portfolio	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Dow Jones	Fund	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	S&P 500	Fund	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Automotive portfolio	Portfolio	Text	Text	Text	Text	Text	Text	Text	Text
<input type="checkbox"/>	Vanguard Real Estate	Fund	Text	Text	Text	Text	Text	Text	Text	Text

# Investment Overview – Companies

Company-level database with filters on top

**esgbook**

WB Will Brandenburger CEO / FinCo.Inc

My Dashboard

DISCLOSURES

- My Disclosures
- Incoming Requests
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- Frameworks

PORTFOLIO

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Climate Solutions Overview

Search

Download Report

Climate Solutions Overview of Funds Companies

Explore the sustainability performance of your portfolios or companies and generate report based on filtered data.

Filters

Coverage level

Climate Solutions 65%

Relative carbon footprint (scope 1, 2) 324Mt

Relative carbon footprint (scope 3) 324Mt

Renewable Energy Consumption 65%

Renewable Energy Production 65%

SBTI 85%

WACI (Scope 1 & 2) 12 Mt

WACI (Scope 3) 48 Mt

Green revenue policy 65%

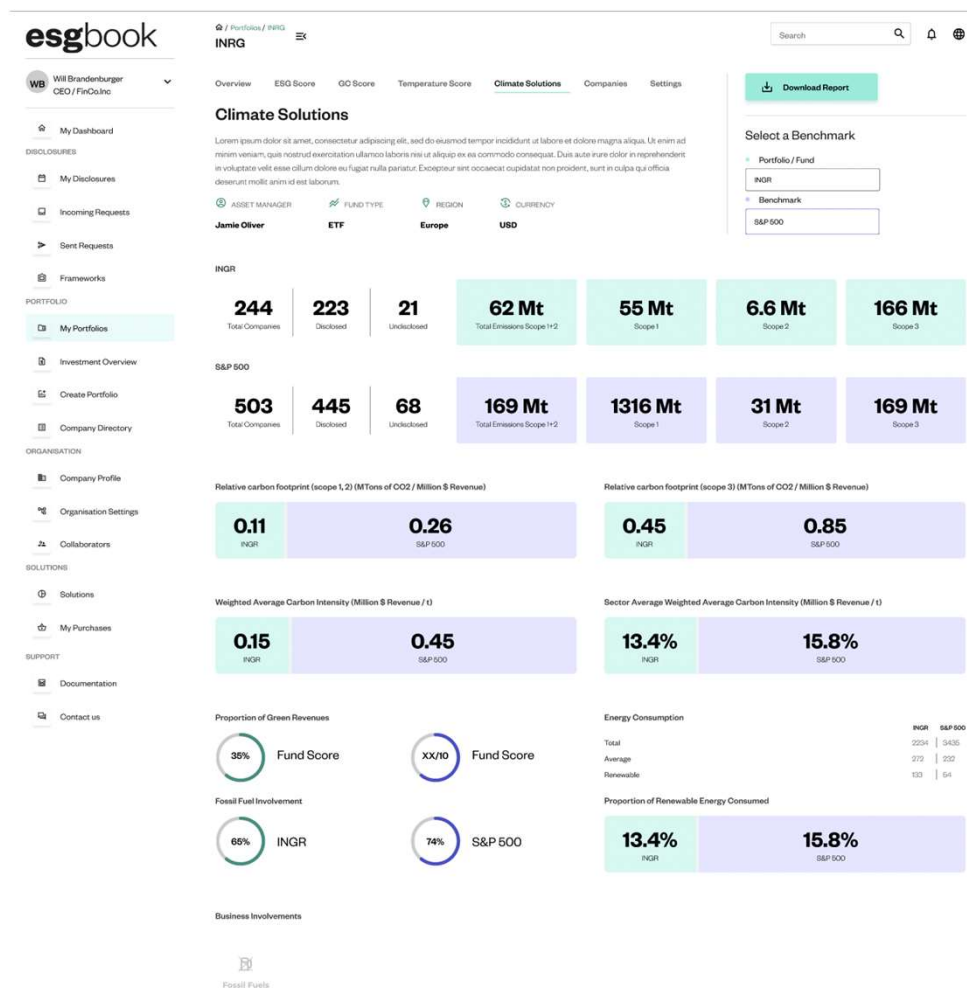
Fossil Fuel?

<input type="checkbox"/> Name	Ticker	Country	Sector	Region	Industry	WACI	Climate Solution	Total Emissions Scope 1, 2	Total Emissions Scope 3
<input type="checkbox"/> Accenture	Text	United States	Technology..	North America	Packaged..	Text	Text	Text	Text
<input type="checkbox"/> Adobe, Inc.	Text	Ireland	Technology..	Europe	Information..	Text	Text	Text	Text
<input type="checkbox"/> Alphabet, Inc	Text	United States	Electronic..	North America	Telecommunica..	Text	Text	Text	Text
<input type="checkbox"/> Apple, Inc	Text	United States	Technology..	North America	Packaged..	Text	Text	Text	Text
<input type="checkbox"/> Best Buy Co., Inc.	Text	United States	Finance	North America	Investment..	Text	Text	Text	Text
<input type="checkbox"/> BlackRock, Inc.	Text	United States	Retail Trade	North America	Electronic/..	Text	Text	Text	Text
<input type="checkbox"/> Capri Holdings Ltd.	Text	United Kingdom	Retail Trade	Europe	Apparel/..	Text	Text	Text	Text
<input type="checkbox"/> Caterpillar, Inc.	Text	United States	Producer..	North America	Trucks/..	Text	Text	Text	Text
<input type="checkbox"/> Citigroup, Inc.	Text	United States	Finance	North America	Investment..	Text	Text	Text	Text
<input type="checkbox"/> Microsoft Inc	Text	United States	Technology..	North America	Internet..	Text	Text	Text	Text

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# Dashboard with Analytics

Dashboard with analytics to compare and benchmark funds/companies



## Slide 6

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**WJO**

Disclosed/not disclosed. Good to have a a %

William Javaux, 2022-11-14T13:54:52.635

# Our Questions



## Financial Metrics for Carbon Footprint (relative) & Weighted Average Carbon Intensity

- To make the absolute carbon footprint relative to the size, should we use Enterprise Value (EVIC) or Market Cap?
- Any preference between Revenues or Enterprise Value (EVIC) as the denominator of the Carbon Intensity?
- If both metrics are chosen, should both metrics be shown on the platform as a choice? (Conditional to technical feasibility)



## Smoothing: Rolling 12 months

- “smoothing market data” to reduce or eliminate short-term volatility in data. A smoothed series is preferred to a non-smoothed one because it may capture changes in the direction better than the unadjusted series does..



## Carbon Footprint (Relative)

- Shall we show in the dashboard in combination with the total footprint numbers. The current set up is to show the relative number in the dashboard only but to have both numbers in the report. Discuss how member prefer it with the fund and company view.



## Filtering

- Discuss the filter definitions (next slide) and agree that it makes sense how it is looking now.
- There is no filter with criteria. The data will be random until members start to work with the filters. Discuss if the climate solution filter works for everyone or we have alphabetical.



# The Filter's Definitions

Filter	Definition	Filter as shown on platform	Units	
1	Climate Solutions	Percentage of revenue of the fund derived from business activities related to climate change mitigation and climate change adaptation (consistent with the EU Taxonomy)	Climate Solutions	Proportion of Revenue that is 'Green'
2	Carbon Footprint (Relative)	Total absolute emissions attributed to the fund, relative to the size of the fund	Scope 1 & 2 Carbon Footprint (relative)	Tons of CO2e emitted (scope 1 & 2) per million dollar invested (EV or Market Cap)
			Scope 3 Carbon Footprint (relative)	Tons of CO2e emitted (scope 3) per million dollar invested (EV or Market Cap)
3	Renewable Energy Consumption	Percentage of renewable energy consumed at a fund level compared to total energy consumed	Renewable Energy Consumption	Percentage of total energy consumed that originates from renewable sources
4	Renewable Energy Production	Percentage of renewable energy produced or distributed at a fund level compared to total energy produced	Renewable Energy Production	Percentage of energy produced that originates from renewable sources
5	Weighted Average Carbon Intensity (WACI)	Emissions Intensity Ratio of fund (tons CO2e/million USD revenue)	WACI (Scope 1 & 2)	Weighted Average Carbon Intensity (WACI) in tons of CO2e emitted (scope 1 & 2) per million-dollar revenue (or EV)
			WACI (Scope 3)	Weighted Average Carbon Intensity (WACI) in tons of CO2e emitted (3) per million-dollar revenue (or EV)
6	Fossil Fuel Flag	Percentage of revenue from business activities related to fossil fuels	Fossil Fuel Flag	Yes or no whether the fund generate more than 5% of its revenue from Fossil Fuels
7	Forward Alignment	Forward alignment metrics that indicates companies' actions in mitigating climate change and transitioning to a low carbon economy, aggregated at a fund level	SBTi target indicator	Percentage of the fund that has an SBTI target
			Green revenue policy	Percentage of the fund that a policy and/or strategy to increase its exposure to green revenues <sup>8</sup>

# Climate Solutions

Percentage of revenue of the fund's covered assets derived from business activities related to climate change mitigation and climate change adaptation (consistent with the EU Taxonomy)

## Methodology

- The Climate solutions filter takes metrics from ESG Book's Green Revenue (GR) Module that is mapped to the EU Taxonomy (see table for example and examples are: Manufacture of batteries, Forest management, Professional services related to energy performance of buildings )
- The climate solutions filter is then calculated by taking the ratio of a company's total amount of green revenues in these categories to total revenue, multiplied by the weight of the company in the fund.
- The % value is normalized by the assets covered, not the total market value of the fund

## ESG Book Mapping

Taxonomy Objective	Taxonomy Activity	ESG Book GR Module Metric	Description & Explanation	Match
Climate Mitigation, Climate Adaptation	Electricity generation from wind power	Energy Production - Wind	Revenues generated from wind energy production and/or distribution, including but not limited to horizontal axis and vertical axis turbines where the reduction of 1.Climate Change 2.Raw Material Consumption 3.Environmental Erosion are important functions of the power generation process on a life cycle analysis basis or at the point of generation.	M
...	...	...	...	...

## Example

- The example below shows the climate solutions output for a selected fund.

Fund Name	Climate Solution
iShares Core S&P 500 UCITS ETF USD (Dist)	18.23%

# Carbon Footprint (Relative)

Total absolute emissions attributed to the fund, relative to the size of the fund

## Methodology

- The relative carbon footprint displays how many tonnes of CO<sub>2</sub>e the fund emits per million dollars of market value.
- The total CO<sub>2</sub>e of the fund is calculated by how working out how much of each entities' CO<sub>2</sub>e the fund is responsible for through: Enterprise Value / Market Value \* Emissions
- The absolute Emissions of the fund is then divided by the funds covered market value to produce the Relative Carbon Footprint per million dollars invested
- This is calculated for both Scope 1 + 2 Emissions and Scope 3 emissions separately.
- The absolute total emissions will be available in the table on the dashboard and on the report
- The emissions included CO<sub>2</sub>e are the seven set out by the Kyoto protocol and used by the GHG Protocol: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PCFs), Sulphur hexafluoride (SF<sub>6</sub>) and Nitrogen trifluoride (NF<sub>3</sub>).

## Example – Scope 1 & 2

- The example below shows the **Scope 1 & 2 Carbon Footprint** output for a selected fund.

Fund Name	Scope 1 & 2 Carbon Footprint (by EV)
iShares Core S&P 500 UCITS ETF USD (Dist)	39.47 tCO <sub>2</sub> e/\$

## Example – Scope 3

- The example below shows the **Scope 3 Carbon Footprint** output for a selected fund.

Fund Name	Scope 3 Carbon Footprint (by EV)
iShares Core S&P 500 UCITS ETF USD (Dist)	330.12 tCO <sub>2</sub> e/\$

# Renewable Energy Consumption

Percentage of renewable energy consumed at a fund level normalized by market value covered

## Methodology

- Renewable Energy Consumption is calculated by dividing each entity's total energy consumption by its renewable energy consumption and multiplying by its weight in the fund.
- This results in a weighted average of the covered constituent's renewable energy consumption displayed as a % of total energy consumption
- Definition of Renewable energy - Company discloses its consumption of renewable energy, e.g. from Wind, solar, hydro, electric etc.
- The % value is normalized by the assets covered, not the total market value of the fund

## Example

- The example below shows the **Renewable Energy Consumption** output for a selected fund.

Fund Name	Renewable Energy Consumption
iShares Core S&P 500 UCITS ETF USD (Dist)	44.59%

# Renewable Energy Production

Percentage of renewable energy produced or distributed at a fund level

## Methodology

- The Renewable Energy production metric is the percentage of renewable energy produced by the fund compared to the total amount of energy produced.
- It is Calculated by dividing the total amount of each entities' renewable energy production by its total energy production and multiplying by its weight in the fund.
- This generates a weighted average of renewable energy production at fund level
- The % value is normalized by the assets covered, not the total market value of the fund
- The definition of Renewable energy used – 'generating/producing electric power from renewable sources where sources include: clean/alternative energy such as solar, wind, hydro, geothermal, biomass, tidal, wave, waste-to-power among others'

## Example

- The example below shows the **Renewable Energy Production** output for a selected fund.

Fund Name	Renewable Energy Production
iShares Core S&P 500 UCITS ETF USD (Dist)	20.07%

# Weighted Average Carbon Intensity

Emissions Intensity Ratio of fund (tons CO<sub>2</sub>e/million USD)

## Methodology

- The WACI of the fund displays the amount of tons of CO<sub>2</sub>e which is emitted by the fund per million dollars of revenue produced.
- This is calculated by dividing each entities' CO<sub>2</sub>e by its revenue and then multiplying these by the weights of each entity in the fund.
- This is calculated both for a companies Scope 1 + Scope 2 Emissions and for a companies Scope 3 Emissions separately.
- The weights of each asset are normalized by the market value of assets covered, not the total market value of the fund before the weighted aggregation

## Example – Scope 1 & 2

- The example below shows the Scope 1 & 2 **Weighted Average Carbon Intensity (WACI)** output for a selected fund.

Fund Name	Scope 1 & 2 WACI (by revenue)
iShares Core S&P 500 UCITS ETF USD (Dist)	144.51 tCO <sub>2</sub> e/\$

## Example – Scope 3

- The example below shows the Scope 3 **Weighted Average Carbon Intensity (WACI)** output for a selected fund.

Fund Name	Scope 3 WACI (by revenue)
iShares Core S&P 500 UCITS ETF USD (Dist)	676.35 tCO <sub>2</sub> e/\$

# Fossil Fuel Flag

Percentage of revenue from business activities related to fossil fuels

## Methodology

- The Fossil Fuel flag shows if more than 5% of the fund's revenue comes from fossil fuels
- The revenue percentage is calculated by taking the sum of each assets' fossil fuel revenues divided by their total revenue and multiplied by their weight in the fund.
- Fossil Fuels revenues are defined as: companies in the energy industry, encompassing oil and gas exploration and production, pipeline transportation, refineries, and oil and gas equipment and services. Wholesalers which provide electricity generated by hydrocarbons. Natural Gas Utilities which offer service to residential and commercial customers. Companies involved in the leasing of coal mines and the mining and processing of coal. Companies producing coke for sale to others are included.
- The weights of each asset are normalized by the market value of assets covered, not the total market value of the fund before the weighted aggregation

## Example

- The example below shows the **Fossil Fuel Flag** output for a selected fund.

Fund Name	Fossil Fuel Flag
iShares Core S&P 500 UCITS ETF USD (Dist)	Yes/No

# Forward Alignment

Forward alignment metrics that indicates companies' actions in mitigating climate change and transitioning to a low carbon economy, aggregated at a fund level

## Methodology

- Forward Alignment includes two metrics:
  - Percentage of assets with a Science Based Target committed or approved
  - Percentage of assets with a Green Revenue Policy
- These metrics are calculated by taking the percentage of assets in the fund with a target/policy of the fund
- Green Revenues are defined as: revenue derived from products and services that have a positive environmental impact and enables the reduction of :
  - Climate Change
  - Raw Material Consumption
  - Environmental Erosion.
- The weights of each asset are normalized by the market value of assets covered, not the total market value of the fund before the weighted aggregation

## Example – SBTi Target Indicator

- The example below shows the **SBTi target indicator** output for a selected fund.

Fund Name	SBTi indicator
iShares Core S&P 500 UCITS ETF USD (Dist)	33.20%

## Example – Green Revenue Policy

- The example below shows the **Green Revenue Policy** output for a selected fund.

Fund Name	Green Revenue Policy
iShares Core S&P 500 UCITS ETF USD (Dist)	23.46%



# Next Steps

Milestones

Activities

Q1 Scoring Team to power the filters with our data

Q2: Integration on Platform, constant testing of member group. final test from wider members

Phase 2: Develop and implement a Framework for asset managers to provide sustainability data in alternative products (PE, VC, infrastructure)

# Financial Services Partnerships - IFC

## IFC – ESG Book Use Case



### Use Case

The IFC has given ESG Book the mandate to collect sustainability data from financial institutions and corporates in emerging and private markets.



**ESG Book**

### Key Features

- 1 ESG Book facilitated the digitalisation of the IFC's ESG Performance Indicator framework for financial institutions and corporates, and hosted it on ESG Book
- 2 The IFC has identified 250 financial institutions and 150 corporates in emerging and private markets that ESG Book will need to collect sustainability disclosures from
- 3 Once data collection is completed, the IFC and ESG Book will invite financial institutions and corporates to review, edit and verify disclosures on ESG Book