CARBON FOOTPRINT REPORT: NASDAQ-100 INDEX (NDX)

Report as of Date: April 5, 2024

- Index Weighted Total Emission: 3,685,023.72 metric tonneCo2e

- Index Weighted Total Revenue: 119,251.27 Mil USD

- Index Carbon Intensity: 30.90 metric tonneCo2e per Mil USD Revenue

- Index Carbon Impact: 16.52 metric tonneCo2e per Mil USD Investment

Methodology Overview

Nasdaq calculates the Index-based Carbon Footprint Scores with Carbon Emissions and Revenue data sourced from Sustainalytics.

- Carbon Intensity Score:

We calculate the index-weighted Carbon Emission and the index-weighted Total Revenue as follows:

$$Index\ Weighted\ Carbon\ Emission = \sum_{i=1}^{n} Weight_i \times Carbon\ Emission_i$$

$$Index\ Weighted\ Total\ Revenue = \sum_{i=1}^{n} Weight_i \times Total\ Revenue_i$$

Where $i=1$ to n is the ith component in Nasdaq index.

If Sustainalytics' Carbon Emission and Revenue data do not cover 100% of the index universe, we adjust (scale up) the computed figures. This is done by dividing the computed figure with the total weights of all components with the valid inputs:

$$Total\ Weight\ of\ Carbon\ Emission = \sum_{i=1}^{n} Weight_i \times I_i$$

$$Total\ Weight\ of\ Total\ Revenue = \sum_{i=1}^{n} Weight_i \times J_i$$

Where I and $J = 0$ or 1 are indicators to identify whether the ith index component has the valid Carbon Emission or Revenue data.

Therefore,

$$Adjusted\ Index\ Weighted\ Carbon\ Emission = \frac{Index\ Weighted\ Carbon\ Emission}{Total\ Weight\ of\ Carbon\ Emission}$$

$$Adjusted\ Index\ Weighted\ Total\ Revenue = \frac{Index\ Weighted\ Total\ Revenue}{Total\ Weight\ of\ Total\ Revenue}$$

Finally, the Carbon Intensity for the index is:

$$Index\ Carbon\ Intensity = \frac{Adjusted\ Index\ Weighted\ Carbon\ Emission}{Adjusted\ Index\ Weighted\ Total\ Revenue}$$

- Carbon Impact Score:

To calculate the index-based Carbon Impact score, we need to first calculate the Carbon Impact for every individual security in the index:

$$Carbon\ Impact_i = \frac{Total\ Emission_i \ \times 1\ million\ USD}{Full\ USD\ Market\ Cap_i}$$

Once we have the security level carbon impact scores, we can calculate the index level Carbon Impact as such:

$$Index\ Weighted\ Carbon\ Impact = \sum_{i=1}^{n} Weight_i \ \times Carbon\ Impact_i$$

$$Total\ Weight\ of\ Carbon\ Impact = \sum_{i=1}^{n} Weight_i \ \times I_i$$

$$Index\ Carbon\ Impact = \frac{Index\ Weighted\ Carbon\ Impact}{Total\ Weight\ of\ Carbon\ Impact}$$

Where *i=1 to n* is the *i*th component in the Nasdaq index, and *I = 0 or 1 is the indicator of whether the* i*th component has valid Carbon Impact data*.