

# **ESG BASE**

## **EXECUTIVE SUMMARY**

ESG Base is a global premium provider of technology and data solutions enabling ESG investments in real assets. ESG Base is a scalable cloud-based SaaS solution to conduct ESG (environmental, social, and governance) due diligence during real asset investments. Our first-to-market self-service platform enables investors to align ESG into all their investment decisions.

## **BARRIERS TO GREENER INVESTMENTS**

The market for green real-asset investment is expected to grow from \$1 trillion to \$7 trillion and institutional investments in infrastructures grow from \$300 billion to \$4-5 trillion.

Incorporation of ESG into investment decisions is increasingly viewed as an urgent need by governments and investors across the world. This is driven not only by market forces and policies, but also by the looming climate crisis and increasing awareness of social iniquities.

However, real asset investors are finding it difficult to rigorously and impartially analyse the ESG impact of their planned assets. Infrastructure investments, for example in transportation, heat-treatment, water-treatment, industrial processes, agriculture, supply-chain, are extremely complex, multifaceted projects.

Our research shows there is a lack of accessibility to reliable data and the shortage in ESG expertise are currently the greatest barriers to greener, more resilient investments. Current tools and rating agencies are insufficient, especially in scenarios that require multidisciplinary effort to comprehend and evaluate, and specialised ESG consultancy services are expensive and not easily scalable, resulting in these areas only being engaged for high profile projects.

Furthermore, the extent of greenwashing prevalent in the current business environment makes it extremely challenging to discern between genuine and greenwashed investment proposals. One too many times, we have seen fund managers and investors getting blindsided while making an investment, only to find out about its deficiencies when it's too late – leading to costly mitigation and reduced returns.

## **HOW ESG BASE WORKS**

The ESG Base cloud platform automates the predictive analysis of the financial and ESG impact of a real asset by incorporating the asset's unique configuration features, location characteristics, and use cases. In doing so, the platform draws from an enormous variety of datasets such as interpretation of climate data, a range of location specific governance risks and variables, information on government policies and ESG incentives, key performance parameters on various cleantech technologies and activities, etc.

By leveraging ESG Base's proprietary virtualization engine and a comprehensive database, the platform combines asset specific information with location specific signals and policy information and provides a wholistic and futuristic view of the investment. The ESG Base platform can produce within minutes what a team of multidisciplinary experts can currently produce in weeks. Post-investment, the SaaS platform supports the ESG monitoring and impact reporting of the assets, keeping the operators accountable for ESG commitments made during proposal.

Our solution is not only grounded in the state-of-the-art information technology, but brings together the fundamentals of science, engineering, and financial analysis, all in a single integrated and automated platform. Because our first-principles approach, our output offers a level of flexibility, resilience, richness and transparency that has, until now, been unknown in the industry.

Through this approach, ESG Base technology can also effectively identify instances of greenwashing in investment proposals and can cut through the fog where reliable ESG reports of comparable operating assets are not available.

## THE NEED FOR ESG DUE DILLIGENCE IS ACCELERATING

ESG is no longer just a risk mitigation strategy for investors. Since 2020, there has been an acceleration in viewing ESG alignment not only as a strategy to mitigate risks and address volatility, but as a generator of investment alpha. Therefore, to derive competitive advantage from the positive ESG alignment of assets, it is no longer enough to use exclusionary principles while making investments.

ESG due diligence market size will be accelerated by the urgent need to respond to this demand, with a strong projected CAGR (Compounded Annual Growth Rate) of over 10% through the next decade (current market size is \$30 billion) reaching \$500 billion at maturity.

## COMPARISONS AGAINST MARKET PROVIDERS

Fund managers and investors are increasingly looking to benchmark and compare between the expected performance of different assets before making investments. The comparison must be based on the predicted material risks and impact of the assets, much like predicted cash flow statements or income statements, and not on some confusing scores based on some secret formulas. Our approach is to enable real asset investors to do exactly that.

There are three clusters of comparable competitors in this space:

1. **Specialised consultancies:** The Big-4 and other specialised consultancy firms that support ESG investing by offering a service model. While accurate, this model is time consuming and expensive. As a result, these services are engaged by the investors only for high-profile projects. The high cost and the high demand for these services are currently barriers for the majority of investors developing green infrastructure. Even for the more specialized investors, these services are not fit for purpose for evaluation of ESG credentials of projects at the origination stage of the deal flow.

Our ESG Base automated platform offers a similar quality of output as these consulting services, just significantly faster - minutes rather than months- and at significantly lower cost.

2. **ESG product rating agencies:** (e.g., MSCI, Sustainalytics, Reprisk, Arabesque) provide a credit-like score, which signals the ESG risk of a company. There have been broad discussions in the industry about the limitations of these ratings such as the absence of a transparent and standard methodology across providers, and limitation to listed companies. More significantly has been accusations of participating in greenwashing.

While ratings offer a relatively inexpensive and quick way for investors to check the credentials of a company, our ESG Base platform offers a much richer analysis of projects at roughly the same speed. The ESG Base assessment provides not only the risk profile but also financial analysis and impact predictions.

3. **New entries** - Currently, a third cluster of companies are starting to emerge that are essentially trying to solve the opacity problems of the rating agencies by using new techniques. Typically, these companies are technology start-ups that are using AI/NLP techniques to sift through company's financial reports, news reports, review websites, etc. Examples of such companies include Sensefolio, Amenity, ESG2Risk, ParboleAI, RS Metrics, etc. Like the ESG rating agencies, these companies primarily attempt to provide the risk profiles of listed companies.

These companies are yet to be well adopted in the market and suffer from user scepticism due to the potential 'garbage-in-garbage-out' problem.

In contrary, because our ESG Base platform uses a science-based bottom-up approach evaluating projects (instead of using empirical datasets as the basis), the data output from ESG Base carries the same high degree of credibility as the output from specialist consultants.

## ESG BASE SOLUTION CAN ADDRESS A GLOBAL MARKET

Avoiding the climate crisis requires a global deployment of resilient, green infrastructures and real assets; therefore, the geographical scope of our venture is truly global.

Our beachhead market consists of investors in UK and Europe, as a sizeable number of investors in these regions are already backing green infrastructures. The policy position in the USA is also shifting in a favourable direction for our venture. Green infrastructure investments in Australia and parts of Asia – such as Japan and South Korea – are also accelerating, and we would like to expand our offering into these countries and the rest of Asia. Finally,

conditions in the Middle East and Africa are also ripe for a green revolution, and we see our venture being significant in these countries as well.

## **ESG BASE ROADMAP**

Because our venture is knowledge intensive and digital, it would be possible for us to expand rapidly. Our goal is to offer our products all over the world by 2030.

To help us analyse the problems ESG Base is solving, assess the technical need, and test solution ideas, we have conducted two proof-of-concept (PoC) studies last year. These studies allowed us to test our design hypothesis and assumption, enabling us to start visualizing how the solution would function, and begin to inform our prototype build.

In 2020, since we started building the prototype of the software, we have been working with three institutional real asset investors to further develop our product specification and UI design. These funds have helped us establish the specific design features, given us feedback on the prototype, and are likely candidates for piloting the platform. These initial validations have given us high confidence about the product-market fit.

Successful incorporation of ESG is currently the investment community's best option to help develop sustainable, resilient market-driven economies. As the climate crisis is looming large, we at ESG Base know there is an urgent need to develop and maintain green infrastructures all around the world.