Strategic Business Opportunity

NFT based sustainable financial products. Direct investing into climate change transition and ESG strategies designed to track sustainability and climate goals via crypto/NFT network.

Executive Summary

The innovation will allow firms, funds and activist investors to raise financing for climate transition, ESG-style and impact projects directly with retail customers outside mainstream financial infrastructure. Obligations for payments, social and environmental goals are embedded into NFT tokens. This opens potential to lower fees and commissions partly eliminating usual financial intermediaries.

The key innovation is to condition contract payments with non-financial indicators using “smart contract” feature of the NFT tokens. Retail investors are able to invest minted NFT with crypto currencies and trade tokens via public blockchain network.

Optionally NFT contract may include ownership of unique or limited edition digital art works with supplementary cultural and inherent monetary value. The approach is designed to attract “Generation Z”, proponents of the progressive values and woke culture focusing on social justice, inclusion and climate change.

Business Case

Sustainable investments

Sustainable finance and investments experience unprecedented levels of customer demand with ESG funds increased 15% in 2020. Experts estimate growth of more than 30% till 2025 of all assets under management. Financial providers are investing into intensive product development with 330 new ESG funds created only last year. And while climate accounts for about 20% of new ESG funds launched in 2020, experts forecast a growing role of social issues (‘S’ in ESG abbreviation).

These money inflows on financial markets support new levels of demand for ESG projects. Green bonds market launched in 2013 from $3bn and then effectively doubled each year. When pandemic first hit economy and society, large-scale effects became evident in spring last year, there were speculations of reducing demand for ESG. But instead, the market experienced unprecedented growth. Green bond issuance hit $279bn in 2020. Sustainable bonds and sustainable loans market last year increased 72% reaching $742bil. Overall, the green and social bonds market topped $2tr in 2020.

EU areas (including the UK) are in dominant positions leading this growth. Both EU and UK regulators accelerated adoption of regulatory requirements for both asset managers and investors. Growing number of countries are making Net Zero commitments while more than 60 global banks introduced financial restrictions on fossil fuels financing. Another important development is a rise of shareholder activism focusing on ESG topics.

Finance and Climate Change

International organisations play important role codifying “positivity” in a form of UN sustainable development goals and carbon reduction targets to combat climate change. Financial industry cater solution for positive social stance in a form of sustainable finance products.

At financial markets there is a number of organisations that advocate ethical principles and provide guidance. TFRD proposed framework to play a role in net-zero transition. (This must be distinguished from climate risk programmes pursued by a number of central banks - BoE, ECB and others, whose focus is to safeguard financial system from climate-related shocks). PRI provides guidance on ESG practices for investment markets which is designed to counterbalance profits and impact into environment and society.

Separately, corporate management practise is evolving to adopt stakeholder capitalism philosophy as opposite to still dominant shareholder oriented approach.

Culture and worldview

Modern developed societies express significant interest in topics of diversity and inclusion. There is a clear rise of “woke” culture that can be defined as severe intolerance to any form of discrimination. Some groups among other things express strong preference in progressive values that can be translated into greater attention to social justice and environmental problems. Scientific evidence provides backdrop for the environmental impact of the society and unequal spread of climate change costs and benefits among regional populations, age generations and social groups.

Ethical principles are derived from fundamentals of human nature and were first postulated in ancient times. There is a long-term role of philosophy and religion to define moral guidance for the humanity. But in the modern world ethical norms are heavily narrated by newspapers, broadcasting and social media.

On top of that governments and international organisations, including EU and UN, are influencing this narrative to make it more practical. United Nations proposed a framework of UN SDG (sustainable development goals) and sponsors global net-zero transition. European Commission proposed EU Taxonomy to define technical criteria for environmental impact.

World of Crypto

Decade of 2010-2020 lead to an unprecedented rise of financial universe of crypto currencies based on blockchain technology. This alternative market is fundamentally designed to provide financial capabilities via anonymous information network as an intermediary, instead of banking institutions as a trusted party.

Regulations and standards

Describe regulations and standards here. EU-green taxonomy standard defining what is green and what is not. ICMA developing KPI-linked derivatives. Set of EU green regulations for asset managers and bank on reporting of how much they invest and finance into green project (SF…, similar for bank - see what I was working on at a fastest few days in EY).

ESG -linked derivatives

Problem statements

There is a need to collect funds for transition projects, social projects, impact strategies, climate mitigation projects, other UN SDG oriented projects. Only climate change transition finance requires more than $130tr. Financial features of sustainable finance contracts are based on a set of ESG-style KPIs that may trigger changes in values and payment terms between several counter-parties. Retail banking clients and investors rely on financial intermediaries to validate performance against those indicators.

Interest in sustainable finance and climate change in clearly growing among general public and financial market participants. ESG investing market reached more than $2 trillion in 2020 and is a long-established trend.

Banks and investment companies are acting as intermediaries on financial markets converting retail savings into capital and investments for the firms. They act in a similar capacity in area of sustainable finance. Banks and asset managers analyse ESG credentials of companies distorting allocation of the capital and investments to archive both financial and non-financial outcomes. Different horizons and preferences lead to a fundamental conflict with financial administrators between financial rewards and values, including impact into environment and society.

Suggested Approach

Rapid rise of sustainable finance and popularity of ESG strategies is unprecedented with ESG-linked financial products market gained more than $2 trillion in 2020. Market innovations are booming. ESG-flavoured products are marketed capital market (green and sustainable bonds), corporate banking (sustainability-linked loans), retail investing (variations of thematic funds and sustainable or climate version of popular index trackers) and asset management (exclusionary, thematic strategies, ESG integration, etc.)

Crypto network provides necessary mean to establish direct link between investors interested in social and climate impact and companies that require financing for climate transition and social impact projects.

These “direct sustainable finance” products can be styled in a form of a limited edition art projects minted as NFTs with a smart contract embedded into the token. Smart contract provides a great means to structure KPI and links them with associated payment terms that will be validated by a “public” blockchain ledger.

Correctness and completeness of KPIs are verified by the bank delegated to third-party agent.

Think of art NFT picture combined with carbon unit within. Picture or short movie clip associated with respective positive change and attached smart contract. Use automation to generate collection of different collectible NFTs with slightly different variation of pictures and smart contract with KPI indicators. Owner have access to portal with real time(?) indicators values clarifying owners impact.

This of smart contract royalty clause to implement interesting features of ESG framework (some advanced features of ESG derivatives or bonds?)

Smart contract is technically a piece of code that represent something and all parties agreed it make sense. Smart contract suppose to define condition to which all parties within the contract should agree upon. Many says now to sell NFTs you still need paper classical contract to support your transaction and enforce all parties. In current state NFT system is build purely trust. The smart contract need to be stored in Ethereum network as a text. This costs gas (money to execute transaction in network) and may be pricy.

Find a artist to create a collection of pictures and then mint them with a smart contract royalties attached buying carbon allowances on specific carbon markets (EU, US, UK). The more price rise, more carbon allowances extracted markets, more price of carbon, more incentives of companies to invest into carbon reducing technologies. Essentially convert carbon tax into woke public initiative.

Consider mining mixed art and KPI-enabled NFTs as a way to raise funds for transition projects, social projects, climate mitigation projects, other UN SDG oriented projects and anther ESG-style projects (i.e. governance improvement).

Consider NFT for social impact initiatives and; for index-fund type engagements; for impact strategies.

Further developments

Idea then is to start with simple but popular product that is easy to implement (fractional trading and surrender of carbon allowances from carbon markets via crypto/NFT network - need to think if there better and potentially more popular product). Then expand into something or somewhere (metaverse) people can bout a piece of good. Which means to buy fractional tokens with attached smart contract designed to track ESG based KPI framework attached to climate and wider ESG targets for companies evolving transformation (climate-related and ESG transformation). For companies that may be new retail market to leverage financing of transition activities on top of existing wholesale trading sustainability and green bonds. We need some trusted third parties to track real life activities and indicators and feed events into crypto network. These events will trigger smart contract events.

Mix gamification and fun. Convert ESG values and UN sustainable goals into consumable thing. Someone can buy a piece of good. Then can be journey from basic level to more advanced level in a form of game. This must be genuine and practical.

Opportunity Estimates

In this environment investors are increasingly looking for opportunities to finance ESG projects. Our firm is in a good position to help demand and supply meet. The challenge for the corporate customer is to identify appropriate projects with measurable impact-oriented outcomes that fits well with sustainable finance opportunities. There are some hurdles to overcome. For example, industry associations like ICMA recommend clearly identifying environmental and social objectives and high levels of transparency for project selection and evaluation to satisfy its Green Bond and Sustainable Bond principles. Similar requirements usually apply at the burgeoning sustainable loans sector.

The firm should leverage capabilities in sustainable finance, climate change, capital banking, asset management and crypto currencies to put forward innovative proposition targeting financial organisations, corporate entities and independent activist groups.

The approach is essentially may open new financing opportunities for organisations targeting sustainable outcomes and climate change adaptations removing barriers and hurdles in the form of financial intermediaries. Banks and investment firms have longstanding fiduciary duties to act in best interest of investors, which historically were understood as providing best possible profits under set risk profile. While recently some pension providers partially shifted position to accept that younger generation members may benefit from climate change adaptation, improved environment and social cohesion in the long term future, dominating practice still focuses on financial performance. Interest in social and environmental impact and non-financial outcomes either justified as precursor for future financial performance or classified into domain of philanthropy.

This conceptual conflict may be eventually resolved by adopting stakeholder mentality as an opposite of shareholder worldview. This leads to a position where historical domination of shareholders and capital in the firm is diminished and importance of other groups - including employees, suppliers, communities, customers, etc. - significantly raised.

Another motives for organisations to get interest in direct financing rate is to tap into this growing interest of the retail investors in progressive topics, in climate change, environmental and social consciousness. Financial firms and investment companies used to be and still are intermediaries that navigate financial markets, regulation, attract interest from investors and provide convenient way to access capital and debt markets.

Relatively recent events on the market, like developments in "stocks" and reddit-originated events on the equity market in January-February 2021 demonstrated widespread interest of retail investors in direct financing opportunities. Global internet availability and new platforms, like Robinhood, provide direct access to the market from individual mobile phones for billions of existing or potential investors.

Individual investors have off course access to wide range of funds of ETFs that are linked to sustainability or green themes. Those funds invest into a variety of projects and companies with assessment of green and sustainability credentials usually marked as mucky. A few ESG-oriented investment procedures may improve credibility, but generally link between investments on the one hand and outcome or even impact on the other hand is difficult to track.

The idea is to leverage crypto technology to improve this credibility, ride direct investing demand and to remove unnecessary barriers between conscious investors and companies requiring climate transition and ESG adaptation financing.

The credible sustainability tokens outside control of financial system establishment may be of interest for both investors and investees. This NFT/crypto token can be minted (recorded) in public ledger and became a tradable asset in it own means. These can be invested by retail investors directly, via ETF and sustainability-oriented managed funds, linked to derivatives (KPI-linked derivatives), tracked by specialised index funds, sustainability-linked loans and bonds, or included into portfolios by asset managers.

Being at the forefront of the market developments, the firm may provide consulting services to companies or corporate equities attempting to collect capital or debt to transition or green project at direct investment market. Or provide consulting service for banks or financial organisations working on sustainable finance market - those need verifiable ways to track sustainable indicators in invitees to trigger payment conditions, legal clauses, satisfy regulatory requirements, to market sustainable finance opportunities to retail customers, to safeguard agains greenwashing accusations.

The firm should leverage existing capabilities and expertise in materiality review, impact assessment, reporting and communications supporting customers in their transition to the sustainable business models. Sustainable finance (sustainable loans, sustainable bonds, etc.) can be cheaper than mainstream alternatives and that shall be highlighted as a key advantage for the customer. Other customer benefits include compliance with existing and emerging regulatory requirements and better positioning at consumer and labour markets. One important possibility for multinational corporations is that in contrast to equity products, some structured (green / social) fixed income products may be attached to separate projects or subsidiaries within the diversified organization.

Sample consulting projects include climate risk adaptation & transition; physical risk mitigation; energy transition; social issues projects (product quality, improved labour management, etc.)

Proposition focuses on a deep and rapidly growing market. Sales efforts shall be primarily focused at middle-range companies (with turnover above $1bn) and international companies headquartered in the EU/UK. With nominal price per project between £500k - £700k, margin 40% and successful sales of 10-15 projects per year, estimates allow for £5.0 – 10.5Mio gross sales and net revenue of £2.0- 4.5Mio per year.

Notes

Buy emission offsets at carbon market and resell at retail market? What is the benefit for the retail buyer? Can I as an individual sell my savings to carbon market? Collecting carbon savings at retail market and trading them at bulk market? Can we make just transition this way? Can we use NFTs to finance transition projects and divestments in verifiable way? So companies buy NFTs to prove their carbon reduction? Can that be an interest for retail to buy then? For retail that must be super easy and intuitive and really fun.

- Market developments and society trends
- System concept
- Financial analysis

- Future revenue (this may be just a white paper without detailed financial analysis, just describing potential approach).