Whitepaper

Trust in Trade.

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## Whitepaper

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Executive Summary

enVoy is an end-to-end supply chain and financing network. Our digitised trade and Supply Chain Finance marketplace will catalyse an evolution in trade finance, delivering at near instant speed and reducing costs across the supply chain, through tokenised letters of credit (tLC™), Voy pay global supply chain payment solution, tokenised bills of lading (tBL™), Smart Escrow™ and other innovative, industry-leading technologies. enVoy plans to be a major driving force in the evolution of trade through digital transformation, risk reduction, enhanced transparency, increased trust and efficient turnaround times. enVoy’s innovations will ultimately lower risk for financiers, increase trust between parties, decrease transaction times, reduce costs, remove antiquated and redundant paper-based processes, increase security, and increase accountability. This will propel supply chain and trade finance into a world once thought unobtainable. Through the integration of vessel carbon and supplier tracking and carbon discounting, enVoy is leading the charge in positive environmental change and green energy investing with sustainable finance. Pairing this with democratising LCs to unlock new liquidity to a once unavailable opportunity for individuals, will allow us to help close the finance deficit in global trade. enVoy is the long-awaited evolution in Trade and Supply Chain financing, supporting the great reset in the wake of a global pandemic and driving the fourth industrial revolution.
Industry Problems and Opportunity

What Supply Chain means to enVoy.

In the context of enVoy’s planned operations, Supply Chain refers to the cross-border ordering, financing, payment and shipping of goods. enVoy is initially focusing on SMEs and freight forwarders with containerised cargoes. Specifically enVoy is targeting those parts of the Supply Chain that are in desperate need of improvement, such as the processes and costs surrounding traditional letters of credit.

Problems with the Supply Chain

For the past several decades, the supply chain process, and especially the $40 trillion global trade finance industry, has seen little change or innovation, leaving it in dire need of modernisation. Many of the critical processes are still paper based, with single-copy documents sent by post, rubber-stamped, and passed from one agency to the next. Stakeholders still produce reams of paperwork for things such as documenting a transaction, agreeing transport, describing cargo, invoicing, etc. Each document is then physically sent to at least one other party for approval,
returned for corrections or forwarded to another party. While this is great for courier firms and paper-shufflers, it is extremely inefficient and cannot scale to meet growing modern needs and leaves our global supply chain vulnerable to disruption.

The primary document used within the supply chain to certify the movement of freight goods is a Bill of Lading (BoL). In the traditional supply chain, a BoL is another paper-based, unique document that serves as a receipt of freight services and acts as a contract between a freight carrier, shipper, and is a document of title. Convention has led to these potentially sensitive and valuable documents being manually marked up and then signed or stamped. Any changes to the contract often require that the BoL be physically mailed (sometimes around the world), amended, and recertified, causing significant delays and with a real risk of loss. If any details on the BoL do not match up against other shipping documents, this creates potential legal issues and delays, resulting in financial loss.

The paper-laden trade process can take several months to complete one transport and financing operation. Cargos often arrive at the destination port before the paperwork is complete, meaning more delay, cost and risk. The system is creaking at the seams. We have all seen this process break down first hand with the recent Covid-19 pandemic resulting in store shelves void of simple necessities, skyrocketing prices on basic goods, an inability to send life-saving equipment and panic across the globe.

Problems with financing international trade:

We have seen in the previous paragraph how the supply chain is anchored in a sea of outdated, analogue working practices and drowning in a deluge of paper. The trade finance industry is no different. Letters of Credit, the lifeblood of trade finance, are based still on manual processes which date back decades. Yet again, the siloed, unconnected nature of the parties and complex relationships in both the supply chain itself and the financing of the supply chain, result in duplication of effort, error-strewn manual paperwork relying on original copies being required in several places at once, costly delays to physical shipments and elevated risks of fraudulent behaviour.
Let us also consider that in this example, there is no:

- Trade Intermediary connecting Buyer and Seller, who often arrange separate, back-to-back LCs, as well as having input into the trade documentation;
- Freight Forwarder to provide the documents required for payment;
- Carrier to issue the Bill of Lading to the Freight forwarder or direct to the banks;
- Separate Confirming and Negotiating bank if there is no direct LC relationship between the Issuing and Advising banks, meaning there could be up to four different banks involved.

Even more delay to the process; even more cost to the LC user. Small wonder then, that today’s financial institutions are concentrating more and more on their very large, high volume / high fee clients with the result that Small to Medium size Enterprises (SME) are squeezed out of the international trade finance market.
The Trade Finance Gap

The trade finance gap is a term used to describe a phenomenon where a willing buyer and willing seller both exist but cannot complete a deal because the buyer, for any variety of reasons, is unable to secure financing and there is a lack of trust between the buyer and seller. This results in goods being left unsold, potentially wasted, and a general standstill in commerce. Historically, the trade finance gap has been around $1.5 Trillion. However, amidst the Covid-19 fallout, that number has skyrocketed to a staggering $3.4 Trillion. Most of that gap is found in trade between small and medium-sized enterprises (SMEs). Servicing just a fraction of this group will boost cross-border trade and global economies, delivering real price reductions to consumer goods and supermarket shelves.

The global trade finance industry is over $20 Trillion in size, but this entire market is currently being serviced almost exclusively by large banks and institutions. With their monopolistic grip on this entire industry, there is little incentive for innovation nor true competition and a more democratic financial landscape is needed.

Resistance to Change

In the past, incumbent stakeholders in the supply chain process have been resistant to change. Global supply chains are hugely complex and require end-to-end integration in order to function at peak efficiency. Razor thin margins incentivise the industry to resist change and simply go with what they know works.

As such, global supply chain processes have been stuck in time and have seen very little innovation over the past few decades with only 0.1% of bills of lading currently being issued electronically. The technology required to make such an evolutionary leap exists but is complex to apply in a user-friendly and economical way.

The winds have begun to shift as it becomes increasingly apparent that a change is needed. G7 finance officials have gone so far as to create a ministerial declaration regarding digitisation of data across supply chains, citing this as playing a crucial role in trade recovery and to strengthen the resilience of our global economic system. This declaration has been further endorsed by the International Chamber of Commerce as, “a momentous step forward to reaping the benefits of digitalisation in international trade transactions”. The ICC has recognised the necessity for change to combat the huge problems in trade finance and have updated their Digital Trade Roadmap to promote and champion the urgent need to adopt digitalisation within the industry and at the government level.

enVoy will be among the first to deliver on the promise of a digitised supply chain. By finding the best-in-class technologies and housing them within enVoy’s ecosystem, enVoy is able to lead the charge and effect real change in the industry. This is an opportunity to pick up a large portion of an untapped market. By moving quickly and adapting existing technologies, the time it takes to deliver an operational service with huge industry benefits can be greatly reduced, allowing enVoy to focus on innovation, upgrades, and increased margins.
We often view our current monetary system as digital - after all, most no longer carry cash and simply swipe to pay. But this partial digital representation is not applied end-to-end and there are still many hurdles when it comes to large scale global payments. While our retail credit card transactions are processed digitally at the point of sale, bank to bank settlements behind the scenes are not necessarily processed as you might expect.

Traditional payments require a series of SWIFT messages to be sent to different parties in the transaction, local banks, correspondent banks, in some cases having to transit additional intermediaries due to poor international connections. Because these messages follow different paths there is ample room for mistakes and bringing the messages from different streams back together is both time-consuming and error-prone. Furthermore, each step in the process, which may span diverse countries and time zones, is subject to financial institutions being open and able to respond. For example, Eastern time zones (e.g. Japan and Australia) enter their weekend before the US East coast has woken up on Friday, and it is not until Tuesday in the East that the US can be relied on to respond, assuming that no public holidays crop up during that time.
Traditional Payments
Slow, expensive

enVoy Payments
Quick, low fees
A Dying Planet of our Own Design

According to the IMO, international shipping contributes to roughly 13% of the annual global NOx emissions and 12% of the annual global SOx emissions. This is unacceptable and will leave future generations choking on a dying planet.

While recognizing the issue exists is an important first step, it is not nearly enough to solve the problem and in fact creates new problems of its own. With increasing carbon & related “green” regulations from jurisdictions around the world, it can be difficult for companies to navigate these requirements both legally and fiscally. For example, in 2021 so far, there are more than 60 different regional, national and sub-national jurisdictions with carbon pricing initiatives either already or soon to be, implemented (see www.carbonpricingleadership.org). This becomes especially difficult when the current discovery and disclosure process of greenhouse gas emissions (GHG) within the supply chain has been characterised by opaque data, high cost and delays.

The Need for Proper Digitisation (aka Tokenisation)

By now it should be abundantly obvious there are many problems within the traditional supply chain and trade finance infrastructure. Digitisation is the first step in the right direction but simply converting paper documents into a digital format is not enough to provide the security and efficiency needed to evolve trade and supply chain finance. Tokenisation is what allows the proper digitisation of these necessary processes; it is the digital representation of real-world assets where ownership of the token is ownership of the underlying goods.

One of the major reasons why paper-based processes are still used today is because there is a need for non-fungible or unique, single-copy documents. For example, when creating a title of goods, this title serves as a proof of ownership. If that title were able to be easily copied or forged, the value of that title would be lost. This led to the traditional use of stamps and seals to validate a given document to produce verifiable single-sources of truth.

Historically, there has been resistance to digitisation as digital files are generally easy to duplicate. Thus, at first glance, a physical paper-based process is the simplest and most straightforward solution. But a paper-based solution has significant downsides when it comes to redundancy, security, issuance, certification, and transfer times. With paper-based systems, illegible handwriting, accidental damage, the loss of a document or other common mistakes can completely derail billion-dollar contracts. With tokenisation, we are now able to digitise these documents securely, deliver trust and security, and speed up issuance and transmission.
The enVoy Solution

03

With blockchain innovation, a single decentralised payment system can theoretically service the movement of funds required by the entire supply chain and increase margins for all stakeholders tremendously. As technology improves, there comes an inflection point when upgrading technology no longer just provides an incremental benefit in cost effectiveness but rather delivers a quantum leap in efficiency to overcome the significant costs associated with logistics, customs, and other associated fees. We are at that point today.

With the onset of a global pandemic and the stressed supply lines that go along with it, there has never been a better time to step in with an enhanced solution that embraces digitisation, increased efficiency delivering immediate turnaround times, along with the enhanced security and transparency provided by digital ledger technology.

The enVoy team has spent over three years behind the scenes deeply immersed in the sector engaging with industry experts and users to develop the enVoy framework and create a targeted solution to industry pain points. These discussions have brought to light the need for three integral core components:

1. A supply chain finance marketplace
2. A cross-border payment system
3. All of this sitting on blockchain/DLT rails

The enVoy solution has embraced this and is comprised of two main components, each of which are built on blockchain rails: enVoy’s Supply Chain Marketplace and Cross-Border Payment Gateway. At the onset of the supply chain digital transformation, these two systems can function independently of each other while the industry begins to find its feet and starts its transition to adopt new processes and technology. But as the industry evolves and accepts the change in its entirety, enVoy’s innovation will truly shine when both systems are adopted by the user and used in conjunction seamlessly as a single user experience. This allows for significant efficiencies in settlement time, data tracking and transparency which ultimately results in a substantial reduction of fees and risk.

Supply Chain Finance (SCF) Marketplace

The SCF Marketplace brings together all the elements necessary for a committed buyer to purchase from a willing seller. It is a one-stop-shop for securing letters of credit, validation checks, choosing sustainable vessels with carriers, digitisation of bills of lading, insurance and full management of the supply chain. This includes everything from ordering an empty container (through carriers), get-
ting that container to the port and shipped, to delivery to the buyer. Buyers can also ensure that the transport routes and vessels chosen have the lowest carbon footprint possible, allowing them to benefit from the green financing incentives that are increasingly offered by financiers. Transparency and automated event-driven triggers allow for the platform to de-risk trade and reduce manual processes for all parties to lower overall costs and ensure trust, without sacrificing services.

Through its basis of distributed ledger technology (DLT), enVoy’s end to end management of a trade provides full visibility of each process for all parties to that particular trade. Key documents are produced, held, shared and agreed digitally and immutably on the platform, increasing efficiency and trust whilst reducing the possibility of fraud.

enVoy’s SCF digitisation provides virtually real-time discovery of all events within the supply chain flow; everything from delivery of an empty container to the seller for stuffing, collecting and delivering the container to the carrier, allowing freight forwarders to manage the voyage, vessel arrival and unloading, to delivery of the container to the consignee.

Cross-Border Payment Gateway

The Cross-Border Payment Gateway delivers near real-time settlement leveraging an extensive network of payment nodes across the globe enabling decentralised payments to its users and supporting new efficiencies with banks and supply chain payments.

enVoy’s payment gateway is a tokenised standalone module which facilitates cross border payments with speed and ease. When used in conjunction with the SCF platform, the application is seamlessly integrated and gives users a simple, fast, and low-cost method of sending and receiving payments in any denomination or token. The flexibility and speed of the system is what gives it an edge over existing methods such as SWIFT bank settlement or the credit card network.

enVoy sets to be the standard in supply chain payments for all marketplaces and platforms across all networks and process flows as a currency, offering its benefits and solving real world trade and logistics problems in cross-border payments and buyer/supplier liquidity. When used in its entirety, the enVoy ecosystem delivers exactly what each of the different supply chain stakeholders truly needs, allows them to engage efficiently & effectively, and cuts out the fat to deliver at the precise moment that truly matters.
Each of the industry problems we have outlined requires a unique solution and targeted methodology to properly address all the pain points. enVoy reaches down to the root of each of these problems and has formulated the special recipe to tie it all back together better than ever before.

The enVoy Token (VOY)

VOY sits at the heart of enVoy’s efficiency. It is designed to be a utility token native to the Corda blockchain and is a core component of the enVoy funding revolution. This token permeates the majority of the behind-the-scenes functionality within the ecosystem and is used as both a method of value transfer and data management/retrieval system. VOY allows trade to move faster and more efficiently than ever before and as the Spanish translation implies, VOY exists so that trade can go go go!

In addition to being accepted in settlement for various enVoy and third-party services, VOY holders can benefit from the use of their tokens in the supply chain finance ecosystem through a staking program. The VOY staking program allows token holders to make their tokens available to the ecosystem as a means of providing liquidity for supply chain payments.

Voy tokens are not a security and are not for sale to US persons or any other prohibited categories of entity and/or individual.
Tokenised Letter of Credit (tLC)

The Tokenised Letter of Credit ("tLC") is one of enVoy’s first major innovations. In traditional trade finance, a letter of credit is a note which guarantees a buyer’s payment, normally through a secured loan. This letter of credit is essential in the supply chain because it assures the seller they will be paid for their goods.

As previously outlined, there are two major problems surrounding the traditional letter of credit:

1. It can be difficult to obtain a large letter of credit for SME buyers who do not have access to the proper credit facilities or if their lenders do not have sufficient banking affiliates to support large scale trade.

2. LCs can take significant amounts of time to obtain and are inefficient instruments. Simply holding a letter of credit is not enough to push a transaction through the trade process, does not immutably bind to specific goods or contracts, and does not generally allow for multiple financiers on a single set of goods.

A tokenised letter of credit delivers significant upgrades. A tLC has all of the benefits of digitisation over paper-based processes, such as electronic signatures, quicker transmittal times, and global access. However, there are bigger innovations that are far less obvious.

By both digitising and tokenising the letter of credit, we are able to create a unique non-fungible token (NFT) for each contract. An NFT acts as a digital container that can house title to real-world assets (title to goods, bills of lading, shipping manifests), contractual rights and workflow progress (escrow transactions) and this NFT can then be amended, traded or sold as a single digital package.

Tokenised Bills of Lading (tBL)

enVoy’s solution will incorporate a tokenised Bill of Lading (tBL) which, similar to the tLC, comes with many benefits that result from digitisation. Our innovative NFT solution allows tBLs to be associated with a particular contract and links physical goods to digital contracts and processes.

Going a step further, enVoy applies security through unique digital signatures and encryption to prevent forgery. By combining this with finance elements, such as loan terms, escrow, and smart workflows, enVoy can conditionally automate events such as the release of title or transfer of goods. What currently requires significant manual processing and human intervention that can take days or even months to complete can now happen automatically, in minutes.
NFT Wrapped

An NFT is a uniquely identifiable container which can hold digital assets securely and verifiably. NFTs gives enVoy the ability to package contracts, loans, titles, eBL, validation checks etc. all into a single programmable package that can be bought and sold. What this represents is a unique token that cannot be duplicated nor counterfeited.

This concept of an NFT lends itself to be the perfect container for the various digital assets created throughout the supply chain processes. Imagine all of the paper documents that might be created during the life cycle of a particular trade. Now imagine all of those documents are placed in a lock box, labeled, and serialized for that specific trade. Finally, take that lock box and digitise all the documents within it. This digitised lock box is an NFT. An NFT has many benefits including the ability to standardise contracts which allows financiers to quickly and easily buy and sell existing contracts to rebalance their risk exposure, refinance or reassign the debt, sell off & recoup bad debts, and even create derivative products from underlying NFTs to further hedge and de-risk their investments. This has the potential to create an entirely new class of assets. By digitally combining all documents and contracts related to a specific trade together into a single secure package, it becomes much easier to track documents, prevent fraud, allow for easily automated and verifiable processes, with a clear auditable digital trail. All of this can happen without extensive paperwork or messy and time-consuming transfer processes.

Smart Escrow™

Through the issuance of tLCs and tBLs, enVoy employs smart workflows to save time, reduce counterparty risks, limit the need for human intervention and establish trust.

Simply put, Smart Escrow can deliver automated, event-triggered execution of contractual terms (e.g. international transfer of funds). For example, when purchasing goods from overseas, a buyer does not want to prepay, as they have no assurance the goods will be shipped. Similarly, a seller does not want to ship goods before receiving payment, as they have no assurance that the payment will arrive. Rather than employing a traditional letter of credit, enVoy’s Smart Escrow automatically transfers beneficial ownership of a tLC at the instant that title to a tBL has been transferred; this is an atomic transaction, one leg cannot happen without the other.

enVoy’s approach improves on traditional mechanisms. Funding is committed only when needed as opposed to far in advance, so reducing interest costs. The mechanism for creating tLCs is largely automated, significantly reducing fees. Beyond that though, Smart Workflows enable the fast and immutable management of disputes, failures to deliver and the many other exceptions that are every-day problems in cross-border trade. It is important to recognise that the intended outcome is not to disintermediate banks and traditional financiers, but rather to provide them with a transparent, efficient and trusted platform on which to deliver funding.

It means no more having to worry where your money is in relation to your goods or having to fly across the
world to check your goods are what they say they are. Your payments are safe. enVoy smart escrow means trust in transaction, trust in trade.

**enVoy DeFi Pool**

With enVoy DeFi, we aim to take back the reins and democratise trade & supply chain financing by allowing the greater population to provide liquidity and earn alongside the big banks.

Traditional trade finance utilises a linear system of affiliate banking whereby a single large bank will often take on the risk of financing a trade. They must then derisk this investment by selling portions of that contract to other affiliate banks. Those banks in turn will sell their investment to their affiliates and so on down the line. Red tape and regulations within major banks, coupled with this slow linear methodology, creates extensive lead times and high costs and a single break in the chain can often leave buyers and sellers high and dry with significant delays and no other available avenues for finance.

enVoy breaks this mould by applying a system of syndicated financing, similar to crowdfunding, where multiple accredited financiers can simultaneously apply partial credit to a given contract. Once the full contract value has been financed, trade can begin immediately.

enVoy DeFi democratises the process by allowing individuals to stake their VOY tokens within the DeFi pool, providing liquidity to enVoy’s dedicated manager who makes independent financing decisions for contracts on the SCF. Users who stake tokens will then be able to earn tokens in return. Staking tokens on the enVoy DeFi platform is easy and does not require any specialised financial knowledge as it is akin to placing funds into a savings account and earning on that balance. Users can stake/unstake and withdraw their earned tokens at will. Staking on enVoy DeFi simply provides liquidity and is not a direct investment into the SCF contracts and therefore is not directly subject to the risks from those contracts. Instead, it provides the user a steady percentage of tokens in return for extending their liquidity to the dedicated fund manager.

**Frictionless Payments**

Cross-border payments, clearing, and remittance on a large corporate level has always been a slow process. enVoy’s payment gateway will essentially allow users to send and receive fiat or tokens of any denomination. All of this can happen in the matter of mere minutes as opposed to days. This is achieved by enhanced prescreening and thorough AML processes, teleport bridges, and the use of underlying virtual currency exchanges (CEXs) & decentralized exchanges (DEXs).

Payments made in one denomination to arrive as a separate denomination are automatically swapped to VOY tokens, mapped and routed through an optimised path across various connected CEXs/DEXs, and finally swapped on the other end to arrive as intended with low fees and quick transmission. All of this happens behind the scenes and without user intervention.

All users of the payment gateway will undergo the various due diligence and AML processes as described in subsequent sections to ensure international compliance. Due to this enhanced level of pre-cleared compliance, all users of the payment gateway can quickly and easily send payments to and from any enVoy wallet.
enVoy sees a great opportunity working with third party logistics providers (3PLs) by using the payment gateway to help relieve the massive pain point of managing the payment process for the thousands of transactions they control. Each transaction will involve the payment of fees, costs, invoices etc to a range of parties, agencies etc across the supply chain in many countries and currencies. By linking the 3PLs transactions to the payment gateway smart contracts, much of the payment process becomes automatic upon completion and validation of each stage within the smart contract.

**enVoy Green**

As a major contributor to global GHG emissions, the international shipping industry can be instrumental in reducing emission levels. enVoy is well aware of the need to reduce pollution and to preserve our world for future generations. As part of this awareness, enVoy will roll out the enVoy Green program in which vessel carbon emissions are tracked and recorded. Discounts are offered to financiers who back contracts which choose to ship their goods via low-emission vessels in order to be a leading force in positive environmental change.

enVoy Green’s database of vessel carbon emissions currently covers more than 75,000 individual vessels, covering container vessels and bulk carriers. When a shipper is contracting with a carrier, the database is used to ensure that high efficiency & low carbon footprint vessels are requested. Leveraging enVoy’s partnership with a leading GHG data solution provider, enVoy users will be able to measure GHG emissions across the entire supply chain, quickly receiving cost effective, granular, transparent and trustable data. This will in turn provide transparency over the carbon output of individual vessels and enable specific LC financing for those low carbon vessels to create blue carbon sustainability.

Working to achieve the goals of the Paris Agreement, major carbon tax schemes are already in place around the world. These tax regimes will present challenges to all parties in the supply chain. enVoy’s auditable carbon reporting draws on trusted accounting frameworks and standards thus allowing trusted reporting to government authorities for carbon taxation purposes.

The enVoy GHG emissions reports are auditable and can form a key part of a company’s strategy when negotiating the move to low carbon. These reports can help companies comply with increasing regulatory and compliance requirements, such as the use of carbon markets to manage emissions taxes or providing access to green markets and discounted financing rates. Through use of enVoy, companies can define their brand as low carbon and environmentally friendly, helping to benefit from consumer and investor shifts in preference towards low carbon operations.
The enVoy GHG emissions reports cover not only the rated Co2 equivalent (Co2e) output of the vessel but also the proposed voyage, taking into account the deadweight of the vessel and the planned route in nautical miles (nm) from port of cargo loading to port of cargo unloading. The Co2e emissions are derived from the IPCC Fifth Assessment Report 2014 (Intergovernmental Panel on Climate Change) and aggregated using global warming potentials (GWPs) over a 100-year horizon (https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf)

The report shows the total calculated emissions of Co2e in metric tonnes (mt) for the voyage. The key carbon metrics shown are the Intensity (i.e., mt of Co2e emitted per mt of cargo delivered), and the total cost to offset the Co2e at a notional USD price per mt. Also shown is the vessel’s environmental performance in grammes of Co2 output per mt per nm. This performance is then rated against the median environmental performance for the vessel class peer group.

As well as providing monitoring of individual vessels’ GHG output, enVoy will also provide users with carbon reports across complete supply chains in sectors such as mining, agriculture, energy production, manufacturing and logistics. enVoy is further developing an ever-increasing database of GHG emissions covering assets around the globe. This monitoring of low carbon suppliers, farms and factories, combined with the huge benefits of instant LCs and enVoy’s expedited supply chain marketplace will undoubtedly contribute to a global change in the way suppliers operate. It will go a long way to combat the cost of becoming green and to support a greener planet before it really is too late.

enVoy’s commitment to incentivise reduction of the carbon footprint of the supply chain through green finance opportunities is matched by a commitment to incentivise goods produced using sustainable, less environmentally harmful practices. The rapid growth of interest in and support for green investment will allow enVoy to offer a dedicated marketplace for the financing of trade in goods such as organic or ethically farmed agricultural products, alternatives to single use plastic, clothes produced in factories with ethical labor practices, and goods from factories powered by renewable energy sources. The list is long and growing longer, pressuring existing producers to clean up their acts and reap the benefits of enVoy Green’s sustainable marketplace.

**Trust in Trade**

enVoy puts trust back into trade through key pillars, including:

1. Full suite due diligence (DD) checks including
   a. Know Your Client (KYC)
   b. Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF)
   c. Know Your Supplier (KYS)
2. Periodic due diligence (DD) checks and vessel tracking
3. Secure permissioned transactions
4. Immutable audit trail through version controlled and tokenised digital documentation
5. Document cross checking
6. Commitment to sustainability
7. Smart escrow
8. Trusted validation checks
9. Private blockchain digital documents
enVoy deploys the latest technology to ensure the integrity of all users of the platform. The Blockchain-based DD module ensures that all potential users of both the Payment Gateway and the SCF platform must pass significant levels of enquiry and discovery before any access is granted. The initial due diligence client questionnaire with subsequent screening and on-going monitoring of users follow international standards, requirements and recommendations of bodies such as the Financial Action Task Force (FATF) and major national governments (US, UK, EU) in the fight against financial and trade-based crime.

enVoy recognises that DD is not a static, “one shot” process. Just as enVoy users will evolve with changes in ownership and control, personnel, business lines etc, the enVoy DD process is dynamic with regular refreshes of user base data and subsequent re-analysis of risk profiles. Changes in a user’s risk profile will be reviewed and may result in further DD action by enVoy.

All potential users of the enVoy platform must satisfactorily complete the initial KYC questionnaire to gain access. Individual users, along with shareholders, directors and Ultimate Beneficial Owners (UBOs) of legal entities are required to provide proof of identity as part of enVoy’s KYC process. AML and CTF form a key part of not only enVoy’s initial KYC process on new users, but also the on-going monitoring and screening process in the fight against financial and trade based crime.

enVoy’s SCF platform provides users with full visibility of shipping events and data throughout the lifecycle of a trade. Each party handling some element or action within the lifecycle of a trade updates the platform in their turn. This sequencing and tracking of events is recorded on the blockchain and builds an immutable and agreed record of the cargo’s process. This tracking of each key event allows participants to better plan and schedule their responsibilities to the trade with the knowledge that each previous action or event has been completed successfully. Each participant must accurately record the event as close to real time as possible in order not to hinder the next phase of the cargo’s journey. With the immutable audit trail recording each shipping event on the blockchain, all stakeholders are able to track overall progress through the transaction and trust the data they are receiving. Carriers, freight forwarders, agents, logistics providers, etc. can also trust and utilise the data for scheduling container pickups and deliveries, preparing customs documents, drafting export or import paperwork, warehousing and other necessary ac-
enVoy also provides live satellite tracking of vessels, allowing all stakeholders to monitor the progress of a voyage, including any deviations from the expected route, unscheduled stops at port or at sea, or suspicious events such as “going dark”. This visibility enables users to react immediately to unexpected events during a voyage by requesting further information from the carrier and allows early mitigating action should an issue arise.

Consumers are increasingly aware of the importance of understanding and assessing the environmental impact of the production and shipping of imported goods, as well as the supplier’s social responsibility and governance standards (ESG). Supply chain financiers are beginning to understand the real reputational risks of association with environmentally dangerous or hazardous products, exploitative production practices and poor company governance. To assist with this, enVoy is developing a KYS report for sellers to complete as part of the DD process. Available to buyers and financiers, the KYS report provides a valuable resource when assessing the ESG implications in dealing with a particular seller. Buyers can use the information to influence price negotiations as sellers see that improving their ESG record will benefit the bottom line. Financiers increasingly offer favorable rates for goods with high ESG standards whilst penalty rates are charged for poor ESG standards. enVoy’s KYS report process ensures that this virtuous cycle feeds back to the sellers, further encouraging positive change in production and transport practices.
Technical and Economic Architecture

**DAHV**

At the core of the enVoy, Trade Finance Platform is the Distributed Ledger Network. R3’s Corda has been selected as the DLT platform based on a detailed analysis of DLT vendors, as it provides the capabilities required by enVoy, such as data privacy, ease of implementation, and a proven enterprise operational model. It will allow us to future-proof the solution. R3 guarantees backward compatibility of releases so that upgrade and migration decisions can be made on a case-by-case basis.

Corda is designed in such a way that each node on the network runs the same code-base which simplifies code and network maintenance. From an infrastructure and software perspective, each node looks the same. The business logic associated with modelling specific workflows between network parties will be codified using the Corda Flow Framework which governs the interaction between parties and will enforce a role-based model. Flows that represent on-ledger processes will be coded, forming the core of the enVoy Trade Finance Platform implementation.

With Corda as the backbone of the enVoy platform, connections will go out to established third-party providers who will deliver specific functionality. enVoy will host a number of tokens on Corda, ranging from the VOY utility token through individually-backed tokens, representing traditional bank balances, to NFTs representing bills of lading and trade finance transactions. There are additional plans to introduce security tokens in due course.

In order to accelerate development, enVoy is deploying the Digital Asset Hub by enVoy (DAHV), an application that sits on top of Corda. DAHV supports functionality including account creation/management and bridging to other blockchains. This means that selected classes of token created on Corda can seamlessly travel across foreign blockchains (initially Ethereum with others to follow) and vice versa. The DAHV bridge is discussed in more detail in the next section.
DAHV’s escrow functionality further allows the rapid implementation of business logic without requiring direct programming of Corda. This abstraction limits the requirement for specialist developers and reduces delivery and other related risks. Deploying to AWS, enVoy is confident that the solution is reliable, robust and secure.

Detailed Look at the Supply Chain Platform, trade finance and the end of issuing Letters of Credit

We have established from the chapters above that the global trade system finds itself trapped in a deeply inefficient and highly limiting cycle which increasingly acts as a brake on economic performance. Across the entire industry, a lethal combination of fear of innovation, the sheer size of the challenge to change and a pervading inertia of “it may not be perfect, but if it ain’t broke, don’t fix it”, conspires to maintain the status quo with a bit of tinkering at the edges. New digitalisation and blockchain technology such as the enVoy platform gives us the opportunity to break free from this highly inefficient, paper-based vortex.

There are four key challenges presented to the enVoy platform:

- Data is trapped in independent, organisational siloes resulting in inconsistencies and errors that are time-consuming and frustrating to resolve:
  - Manual, time-consuming, paper-based processes requiring repeated and duplicated manual checking, follow-up and correction. Errors and delays are endemic.
  - Clearance of goods is delayed and fraud becomes easier due to insufficient, trust-able information.
  - High costs and poor customer service meaning that, ultimately, customer service and satisfaction deteriorate. Business is lost.

The enVoy platform meets these challenges head on, by:

- Connecting the ecosystem: All parties in the supply chain are brought together onto our Blockchain-based platform with secure, permissioned access and identity framework. Parties include Importers, Exporters, Logistics companies, Financiers, Freight Forwarders, Agents, Customs authorities, Port authorities and more.
- Enabling true information sharing: so that users are able to immediately act to prevent problems and delays through predictability and management by exception.
- Increasing cooperation and trust through use of Blockchain technology ensures secure, auditable and immutable transactions.
- Facilitating innovation which allows all parties in global trade to benefit from new tech, greater customer satisfaction, increased demand for goods and ultimately, higher profits.
Structure of the platform:

The enVoy Supply Chain platform leverages the Digital Asset Hub by enVoy (DAHV) to connect all parties in the supply chain and allow true and timely information sharing and management. Key features and facilities of the structure are as follows:

- Transport Insight provides a complete end-to-end view of the shipment. Individual changes and updates to schedules and routes are entered and resulting Knock-On effects to the schedule are managed:
  - Access to transport plans: The transport provider loads the actual transport plan for each container to the platform. Any changes to the transport plan are re-published to provide full visibility to the entire trade ecosystem.
  - Linking discrete transport segments: Origin inland truckers, ocean carriers and rail providers, all publish data directly to the platform. This confirms a shipment’s location at any point in the process.
  - Post-booking flexibility: Post booking changes or splits are allowed whilst keeping the correct container event information.

- DAHV document sharing
  - Paper documents are delayed or lost just when they are needed; duplicated when they should be unique; amended when they should be re-done.
  - DAHV takes the paper out of documents. Structured documents are provided in JSON format, allowing easy analysis, interpretation and sharing among trade and logistics parties with security, version control and privacy.
  - Published documents are available to all permissioned parties in real time. They remain under the control of the provider on Blockchain nodes they operate. Thus sensitive documents such as Bills of Lading can only be viewed by members of that channel.
  - Document authenticity, immutability and traceability (whether structured or unstructured) is assured through the permissioned blockchain.
Continuous Data Improvement checks and standardises data entered to the platform to provide that rarity: accurate, complete, consistent and reliable, near real-time data. Each data provider connects directly to the platform and is directly accountable for their data.

- Incoming data checks follow validation rules to ensure immediate flagging of any issues. Adherence to standards is required.

- A monitoring feedback loop proactively detects and reports potential data issues, giving ongoing data improvement.

- Parties are able to report issues with data received from other parties. Errors etc reported are immediately referred to the data provider for correction in real-time.

- DAHV Notifications allows parties to receive specific notification when an expected document or process is available, rather than having to sift through similar information on many different trades.

- Parties can separate what is important from what isn’t.

- Improves customer service by being able to instantly inform customers when a particular event happens for a particular shipment.

The enVoy dashboard allows more users to see more information in a more sophisticated way and so, better analyse what’s happening in a supply chain.

- Gives a global snapshot of all a user’s consignments which can be drilled down into for more granular information.

- Allows identification of exceptions and events requiring action and updates immediately.

We could continue to write hundreds of lines of text employing buzz-words and phrases like transport provider “Elevated Supply Chain Visibility” and “Dynamic Collaboration”….but we believe the graphic on page 27 below best demonstrates the key features required by the global trade industry in adopting the enVoy platform.
In the chapter “Problems with financing international trade”, we have seen that the essential role played by the Financier in the global trade industry is beset with similar problems to the logistics and shipment side. Namely, outdated, paper-based information flows, leading to lengthy processing times, decreasing trust and confidence between parties, elevated costs and the concentration of financing from a narrow, specialist selection of providers to large-scale players. This to the detriment of SMEs worldwide, developing economies and the ever-widening trade gap.

The enVoy platform uses the same powerful benefits of digitalisation and blockchain technology that allow it to revolutionise the supply chain, to the sector of supply chain finance. Financiers are now able to take advantage of the huge benefits of enVoy’s “Trust in Trade” (see chapter above) to take a larger slice of the trade finance business pie with greater confidence, along with a side order of reduced trade gap and democratised supply chain finance.

As an enVoy platform user, the financier has all the trade documentation required to make informed decisions such as shipment schedules, invoices, product quality certificates and so on available immediately, as soon as it is published, agreed by other parties via the blockchain and in immutable format. Crucially, the financier will also be able to secure his collateral to the finance in the form of the “Tokenised Bill of Lading” or “tBL”, (see chapter above). Once again, the immutable, digital nature of the enVoy supply chain platform provides the trust and confidence levels that allow more financiers to do more business, more often.

The tBL along with all other trade-relevant data are stored on Corda’s R3, a permissioned network, and that data is securely referenced by an “NFT” (see chapter above). enVoy’s data consistency matrix ensures that data points across various documents (both handwritten and digital) stay consistent and immediately flags any inconsistencies for quick remediation.

To ensure trust and control of traditional paper BoLs where they are still used, enVoy’s Bill of Lading Validation process includes Optical Character Recognition (OCR) and AI learning to detect errors and anomalies. In the case of digitalised copies of paper Bills of Lading, financiers are still able to fully establish and confirm their interest in the cargo as collateral to the financing. Errors and omissions can be highlighted and corrected immediately through the enVoy platform with no time wasted through costly couriering of paper documents between parties and documentation is immediately available to relevant parties regardless of geographic location.

The graphic below summarises the transfer flow of a tBL between parties on the platform:

Referring back to the chapter “Problems with financing international trade”, we can see how traditional Letters of Credit are stuck in the same outdated, risky and slow era as traditional supply chain documentation. enVoy’s innovative solution to this issue is the “Tokenised Letter of Credit” or tLC (see chapter above).
enVoy’s Supply Chain Finance Marketplace allows the Financier to select a trade to finance according to their own required criteria. As part of the preparations for a finance deal, the Financier can review the Due Diligence pack submitted by both Buyer and Seller of the cargo and review the documents to the trade in the DAHV. As a future development, they will also receive a credit score on the Buyer; they are likely to want to do their own credit analysis separately. Other criteria for review may include Green Financing where, for example, a Buyer is looking for finance on a cargo carried on a low-carbon output vessel, organically produced foodstuffs, goods produced using renewable energy and so on.

Having agreed financing terms, the tLC is created in the enVoy “Smart Escrow” (see chapter above). The Smart Escrow controls all contractual events in the life of the trade including terms of the tBL. This ensures the financier is the Consignee of the goods and his collateral is thus secured. Payments and release of beneficial ownership of the goods are also controlled by the Smart Escrow following events driven by and reported through DAHV.

Since the tLC is powered by data and documents held in the DAHV and the store of Voy tokens held in the Financier’s enVoy wallet, and also that all parties to both the trade and the financing are on the enVoy platform, we can instantly see how the enVoy tLC revolutionises the financing process: no more waiting to receive paper documents that may need returning for correction; no more setting up of complex banking relationships to manage the traditional LC process; no more paper documents getting lost in the post.

enVoy has killed the traditional LC. Long live the tokenised LC!

Detailed Look at the Supply Chain Platform and issuing Letters of Credit

The Bill of Lading Validation process includes Optical Character Recognition (OCR) and AI learning to detect errors and anomalies. This ensures trust in and maintains control of traditional paper BoLs where they are still used. Tokenised Bills of Lading and packing lists further speed up the production and acceptance process through full digitisation of trade documents. Buyers and sellers receive immutable documents confirming both the contract of carriage and title of the cargo.
Financiers are able to fully establish and confirm their interest in the cargo as collateral to the financing. Errors and omissions can be corrected immediately through the enVoy platform with no time wasted through costly couriery of paper documents between parties and documentation is immediately available to relevant parties regardless of geographic location.

The tBL along with all other trade-relevant data are stored on Corda’s R3, a permissioned network, and that data is securely referenced by an NFT. enVoy’s data consistency matrix ensures that data points across various documents (both handwritten and digital) stay consistent and immediately flags any inconsistencies for quick remediation. Logistics companies can tie into this data to significantly reduce their manual workload and help track shipments and goods.

**TRANSFER FLOW FOR enVoy eBL (SINGLE TRANSFER)**

<table>
<thead>
<tr>
<th>ACTION TAKEN</th>
<th>ACTION BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue eBL to Consignor (Seller)</td>
<td>Carrier</td>
</tr>
<tr>
<td>Transfer eBL to Consignee (Financier)</td>
<td>Consignor</td>
</tr>
<tr>
<td>Surrender eBL to Carrier</td>
<td>Consignee</td>
</tr>
<tr>
<td>Carrier posts goods to Buyer’s account</td>
<td>Carrier</td>
</tr>
<tr>
<td>Goods released for delivery to Buyer</td>
<td>Customs</td>
</tr>
</tbody>
</table>
**Teleport Bridge**

Although Corda is an ideal platform for the delivery of enVoy’s SCF requirements, there is a need to access resources and services that are only available on other chains. With that in mind enVoy has implemented a Teleport Bridge.

Initially the VOY token will use the bridge, being able to seamlessly travel between Corda and the Ethereum blockchain. Additional chain integrations are in development, initially to include Stellar and Ripple, with others to follow. This will give enVoy access to virtual currency exchanges (CEX and DEX) across all eligible jurisdictions. However, it is planned for tBLs and other tokens to be made available in due course.

VOY tokens issued on Corda may be transferred to wallets on other chains (initially Ethereum) via the Teleport Bridge, which guarantees that the supply of VOY remains constant (the sum of all VOY tokens on all chains). Funds raised through the sale of VOY are deployed in supply chain finance, in support of the token value, and as part of our real-time global payments infrastructure. It is enVoy’s goal to make the VOY token the medium of choice for settlement of cross-border supply chain transactions.
**Payment Gateway and Smart Workflow**

enVoy has secured various registered licenses and is able to facilitate the transfer and exchange of both fiat and token value through Electronic Money Issuer (EMI), Remittance Agent (RA), and Virtual Currency Exchange (VCE) licenses.

Payments begin by either utilising a user’s existing VOY balance within the platform or by on-ramping fiat value via an integrated gateway. Once a destination account has been designated, the payment is automatically routed through various exchange channels and decentralized exchanges (DEXs) and optimized for speed and low cost until it arrives at the destination wallet. The recipient now has full control of the value and can then withdraw this balance through the integrated off-ramp gateway as fiat or translated into an alternative token.

When used within the SCF platform in the context of trade and supply chain finance, the VOY token passes through an intermediary stage where the value is stabilized and sits in a smart escrow awaiting execution. Once conditions are met for release (ie. transfer of goods), the escrow is able to automatically unlock the token value and release to the recipient. In the case of disputes, the system is able to lock disputed value and place it under quarantine until resolution.
**Staking**

enVoy provides staking for the VOY token. Tokens which are staked for a staking period (starts every Monday and lasts 168 hours) will receive a bonus allocation of VOY tokens, based on that week’s staking rate.

Staking on enVoy DeFi is done through a user’s dashboard. A verified user simply has to load their wallet with VOY tokens, designate the amount to stake and unstake, and sit back and earn additional VOY tokens. Staked token balances are recorded and tokens are then transferred into the DeFi pool.

The liquidity provided by the staked tokens will be directly managed by an independent, dedicated manager whose sole responsibility is to fund contracts on the enVoy platform such as any other third party financier would operate.

Staking is available on Corda and at any participating VCE, with native Ethereum staking due to launch soon.
Tokenomics

The VOY token economy will have a fixed token supply of VOY 500,000,000. Of those, 10% (VOY 50,000,000) will be immediately available for sale on exchanges and for marketing promotions and competitions. The enVoy platform will keep VOY 450,000,000 in reserve to support demand following future expansion.

It should be noted that where the enVoy Teleport Bridge is used to move tokens to foreign chains, the overall token supply does not change; VOY tokens on all platforms are fungible.

Tokenomics will be overseen by a separate VOY Committee. The Committee’s terms of reference are, in order of priority:

1. Promote use of the enVoy Token
2. Support a liquid market in the Tokens (exchange and OTC)
3. Maintain token value
4. Promote the purchase of Tokens

This fully aligns the goals of the Committee with the needs of token holders. The Committee will also be tasked with setting staking bonus rates and instructing VOY market makers. The members of the committee will initially include members of the enVoy management team, with additional independent members.

VOY tokens will initially be listed on Liquid virtual currency exchange in Singapore and has obtained legal opinion letters on its utility token status. VOY tokens are not a security and are not for sale to US Persons nor any other prohibited categories of entity and/or individual.
enVoy’s technical architecture makes the best use of the security provided on both public and private blockchains. Where a central, organising party is required, such as in the SCF marketplace and contract agreement, enVoy’s systems rely on Corda, a private, permissioned blockchain. However, for cross-border settlement enVoy takes full advantage of existing public-chain infrastructure (initially Ethereum with other chains to follow).

enVoy’s approach to law and regulation is to comply with existing regimes and continue to evolve as regulations change. enVoy’s entities are domiciled in jurisdictions where local laws have evolved to support both enVoy’s SCF platform and payment infrastructure. If/when a new trade has nexus in a less technically friendly jurisdiction, enVoy will provide alternative means of settlement for our tLCs.

enVoy’s management recognises that the huge benefits brought to cross border trade and settlements with the platform’s adoption of cutting edge blockchain technology, is also accompanied by its own set of risks. Some of this risk is traditional, including counterparty/credit risk, operational risk, operator error, documentary risk, or settlement risk. Other examples of risk are either new or are accentuated by rapid evolution and change in traditional arenas: legal, regulatory, political, security, governance, reputational and technological risks. Despite those risks, enVoy’s early adoption of this new technology allows much greater transparency of processes and the immutability of information based on mutual acceptance and agreement between parties. These benefits ultimately reduce the overall risks from traditional SCF substantially.

With enVoy’s highly experienced personnel and engagement of professional advisors, enVoy is constructing a robust network of systems and controls to manage what risks remain. The cutting edge tech behind the enVoy SCF platform and the enVoy Payment Gateway is once more instrumental in helping mitigate these risks by utilising data transparency for monitoring of system abuse, the mutual agreement between parties of documents and actions and other state of the art security protocols. enVoy is working to ensure the highest levels of governance, security, compliance and control are central pillars of the SCF platform and Payment Gateway.

**Know your Client (KYC) and Know your Supplier (KYS)**

enVoy’s KYC module is robust and provides the necessary features to comply with international regulation. To achieve this, the KYC module uses OCR and AI technology to check the authenticity of submitted documents. All individuals are required to pass a “liveness” check. The module employs digital mapping of the face against the submitted ID document. The module will source foundation documents for legal entities from its database for reference against the submitted questionnaire.

The enVoy DD module refers all potential users to its KYC screening programme to check for violation of international sanctions, exposure to risk from association with Politically Exposed Persons (PEPs), adverse media comment and potential for involvement in Terrorist Financing (TF).
enVoy applies a Risk Based Approach (RBA) to the KYC process allowing assessment of the potential user according to the results obtained. enVoy’s RBA to the KYC process is based on four key principles:

1. Identify risk factors;
2. Assess the level of risk;
3. Understand the impact of risk;
4. Mitigation of risk

The application of each of these principles in turn allows enVoy to assess the level of risk presented by the user themselves, their jurisdiction, their products and services and associated industry or business activity risk.

Where no issues are found, the user can proceed to the platform. Where issues have been found, the potential user will be subject to Enhanced Due Diligence (EDD) to allow further discovery and assessment around the issue(s). Potential users may be rejected outright, if issues found are deemed to present unacceptable risk levels to the platform.

enVoy also requires users to positively accept a business partner’s KYC pack before booking a trade or financing operation. The DLT infrastructure immutably records all actions on its ledgers as an audit trail and reinforces the principles of transparency, trust and security of the platform.

Anti Money Laundering (AML) and Counter Terrorist Financing (CTF)

All enVoy wallet transactions not directly related to an SCF trade on the enVoy platform must undergo AML and CTF scrutiny for any suspicious activity (e.g. high frequency, unusual currency pairs, unexpected size, etc.). Payments or receipts to/from individuals or entities not on-boarded with enVoy themselves must undergo basic screening for jurisdiction, sanctions, PEPs and Adverse Media reports. The transaction itself must also be scrutinised for unusual, inconsistent or any otherwise unexpected and suspicious characteristics before acceptance by the enVoy wallet. All wallet transactions in and out must comply with international “Travel Rule” standards, providing an
audit trail of the payment details and the transaction history of the VOY tokens involved in the transaction. enVoy’s compliance regime for SCF business includes scrutinising for potential Trade Based Money Laundering and CTF. Suspicious trade characteristics include unusual or unlikely products and frequency of trades, buyers receiving goods at a destination other than their home base, association with sanctioned jurisdictions, import and export of the same goods, repetition of unusual trades, trades of unusual or unexpected size, unusual routes, sudden changes in destination, products outside a company’s legal remit, potential dual-use products, weapons etc. enVoy will develop a list of suspicious products as part of its Terms and Conditions. These products will not be permitted on the enVoy platform.

All enVoy SCF users have use of the vessel screening and satellite tracking facility within the platform. Any vessel and its operator proposed for a cargo can be screened for a history of breaking sanctions (e.g. visiting sanctioned jurisdictions, carrying sanctioned goods), pollution incidents, infringement of port authority rules and suspicious “dark” periods. Progress of a voyage may also be tracked in real time, with alerts provided.
User Experience and User Interface

enVoy’s user experience is all about simplicity, accessibility and speed. As with any properly built user facing product, the workflow and required steps are built in a simple and easy to understand way, with an interface that properly guides new users from beginning to end without overstepping nor slowing down experienced users. An intuitive user interface that is segregated by role and segmented by modules allows users to quickly identify relevant information and navigate with ease.

enVoy’s platform is connected to a multitude of databases both internally and externally in order to provide a one-stop shop for all parties within the supply chain workflow and will have accessible data even for registered third party users such as logistics coordinators and carriers. The UI designers at enVoy are very mindful that with such a large amount of data, organization and categorization of that data is of utmost importance. The architecture of the enVoy platform was built with this in mind from the start and is broken out into modules so that as physical goods move through the supply chain, relevant data points are readily available and easy to access, seamlessly transitioning the user through the various modules - mirroring the real-life progression. The enVoy user experience is intuitive and transparent, providing users ease of use as well as building a sense of security that all bases are covered and documented.
Looking Forward

The current product offering, as enVoy moves through initial MVP and early rounds of releases, will deliver contract financing, requisite KYC/AML/CTF, conditional escrow, and electronic bills of lading. All of this is boxed up in a tokenised letter of credit which, in simple terms, commoditises the process and allows for simple, automated title transfers, instant digital letters of credit, quick financing, and the ability to buy/sell loan contracts. As part of the tokenised letters of credit, enVoy’s conditional escrow system and smart workflows will remove the need for traditional, paper-based letters of credit, while maintaining trust between parties. This initial build will push out an immediate market-ready product and allow for operating income to be generated from launch. As enVoy gains experience, we will respond to customer feedback, adapt to economic changes, and update and enhance our service to lower costs, increase efficiency and expand customer reach.

Future developments related to the monitoring of cargos will include reporting on individual containers via the Internet of Things (IOT). Where multi-modal transport of a container is required, that container itself can carry a tracker, allowing all interested parties to know its exact location at any time. Particular requirements
of a cargo can be monitored using various sensors to transmit data on the conditions and environment of the cargo to the enVoy platform.

For goods that are temperature sensitive or perishable requiring refrigerated containers, they will be monitored with reporting sensors to ensure the correct stable temperature is maintained. Humidity conditions inside a container can be monitored for cargos that must be kept in dry conditions. Even the pallets on which delicate items are loaded within a container can carry sensors for shock or impact preventing careless loading. This monitoring and reporting builds into an audit trail supporting the correct treatment of the cargo: a valuable resource if any disputes should arise.

Further planned releases will also add platform enhancements such as more complex financing flows, enhanced KYC/AML, KYS procedures, risk assessment, and additional vessel and sanctions tracking. As technology continues to evolve and the risks associated with bleeding edge technologies reduce, enVoy will look to continue evolving the service to deliver still greater efficiency and savings.

enVoy’s management of the supply chain will expand in due course to engage other parties who interact with a cargo of goods during its journey. These can include freight forwarders, agents and cargo handlers. Further efficiency can be gained by including government agencies. This includes customs who can quickly and confidently check and issue export/import authorisation papers and assess any duty liability as well as port authorities who will be able to easily schedule vessel movements and charge port fees.

Integrating Third Party Logistics companies (3PLs) where the seller has contracted out the logistics process will create additional revenue streams for the platform. 3PLs will be able to leverage their membership on the enVoy platform to hugely facilitate their role as manager and controller of the complete logistics chain. enVoy’s use of DLT technology, digitisation, OCR and AI will bring efficiencies and cost savings to the role, all to the benefit of their clients and counterparties.
enVoy for Third Party Logistics Providers (3PLs)

The logistics provider is in a unique position overseeing the entire transport of a container, from delivery of the empty container to a seller or exporter for stuffing, through the voyage, to delivery of the container to a buyer or importer and finally, collection of the empty container.

Digital Asset Hub by enVoy (DAHV) for 3PLs:

In becoming a user of the enVoy platform, a 3PL can leverage enVoy’s DAHV to overcome the myriad of issues arising from inconsistent and inaccurate data received from siloed, unconnected partners. The partners in a logistics chain all provide their data to DAHV in near real-time and in a standardised format, ensuring consistency. Each partner is responsible for adding their own data. enVoy’s Blockchain technology ensures that each piece of data or standardised document is validated and accepted by partners in the chain. DAHV delivers the standardisation of data and consequently, document formats. Paper documents and PDF copies can be replaced with data files (JSON format), easily transmitted between partners or downloaded as required. This ensures accurate, timely and complete data is available throughout the whole logistics process; Once the stream of information con-
cerning a logistics chain is digitised, enVoy provides further efficiencies. All partners in a logistics chain join the 3PL’s account on the enVoy platform to maximise the amount and quality of data available. Notifications of key events in the chain (e.g., carrier release, customs release, customs hold, terminal release...) are supplied by the various parties and delivered automatically within the platform. The shipper’s chosen carrier for maritime cargo uses enVoy’s DAHV to issue an electronic Bill of Lading (eBL) for the cargo. This means that the shipper can view the eBL and transfer it to a counterparty or consignee electronically, thus avoiding the risks, costs and delays in couriering original documents. The eBL can also be surrendered electronically by the consignee for release of the cargo. enVoy’s eBL will shortly allow multiple transfers of original eBLs for trade finance processes and “on the water” sales.

**enVoy Cross Border Payment Gateway and Smart Escrow for 3PLs:**

Benefits to 3PL users of enVoy’s payment gateway and Smart Escrow can be summarised in two words: Speed and Security.

Speed is delivered by the payment gateway with instantaneous transfer of value in payments, and by the Smart Escrow with tokenised title documents and transfer (see Smart Escrow, Frictionless Payments and Cross Border Payment Gateway chapters above).

Security is delivered by Blockchain protocols controlling both the Payment Gateway and the Smart Escrow process, meaning for example, that release of goods cannot happen before payment is received.

We nearly forgot: with no complicated correspondent banking chains involved in cross border payments, 3PL users will benefit from hugely reduced banking transaction fees.

enVoy presents a golden opportunity for 3PLs to accelerate their digital strategy, massively increase efficiency in the speed and security of document management and reduce operating costs.
To execute this vision, enVoy has built an experienced team of experts and entrepreneurs from around the world with a wide breadth of focused experiences and knowledge. The specialised expertise of each member has allowed enVoy to amass the skills necessary to build a significant product within this exciting new emerging market. In the face of what is described by the World Economic Forum as The Great Reset, enVoy’s platform will have a long lasting positive impact on the way supply chains, global trade, and finance operate in the years to come. Please see the next page for specific team bios.
Our Team

Lee Tarone BSc. BA.
Chief Executive Officer:
Lee holds a double major from Brunel University in Business/Computer Science. He joined the City in FX, trading currency swaps for Prebon Yaman and Harlow Butler. After many years sitting at the FX desk, he felt he was not truly contributing to the betterment of the world and decided to trade in his suit for a black t-shirt and jeans as a serial entrepreneurship and in overseas charity work. His entrepreneurial endeavours have always been focused on how business and tech can drive change and make positive impacts.

Andrew Liaw
Chief Financial Officer
Andrew has over 14 years in the financial sector working with derivative securities and other alternative financial products, including hedge funds. He has worked for several global accounting and financial institutions including State Street Bank, Goldman Sachs, and Deloitte.

Dave Hopkins
Chief Operations Officer
Dave has 25+ years in the City’s base metals, softs and agricultural commodity markets, working at major banks and brokers as well as boutique hedging and risk managers. As operations manager his experience includes exotic OTC derivatives and structured commodity financing, as well as system development.

Cedric Antonio
Chief Marketing Officer
Cedric is an international marketer. He holds a BSc(Hons) in business & hotel management and MBA from Queen Margaret University. He has been dealing with the marketing strategies of new Fintech companies for the last 2 years. He also founded few start-ups within the digital space and the Co2/NoX technologies.

Mike Reeves
Chief Technology Officer
Mike has founded and held senior roles in many successful financial markets infrastructure projects that have materially reduced the risk, particularly in the design of CCPs (central counterparties), faced by firms trading in the derivatives markets. He has also been involved in new distributed ledger developments, delivering integration with traditional IT systems.

Tom Reeves
Chief Risk and Compliance Officer
Tom has 26 years experience of risk and operational management in financial markets, with specific expertise in OTC products credit risk management and associated legal/regulatory, documentation, operational and market risk processes and issues. The majority of his career was at Citi where he held a number of senior roles within the markets division.

Dinesh Ramalingam
CSO
He is an experienced Managing Director with a demonstrated history of working in the hospitality industry. Strong business development professional skilled in Management, Hospitality Management, Customer Service, Hotel Management, and Customer Satisfaction.
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