

**An Ocean of Change** 

**Bridging DeFi and ESG Standards** to Digital Trade Finance



HyperLedger Supply Chain & Trade Finance SIG Nov 3, 2022

## Voy/Finance

### It Starts With a World-Class Team

- Who are we?
- How we started











### **Trade Finance**



### A \$1.7 Trillion Opportunity



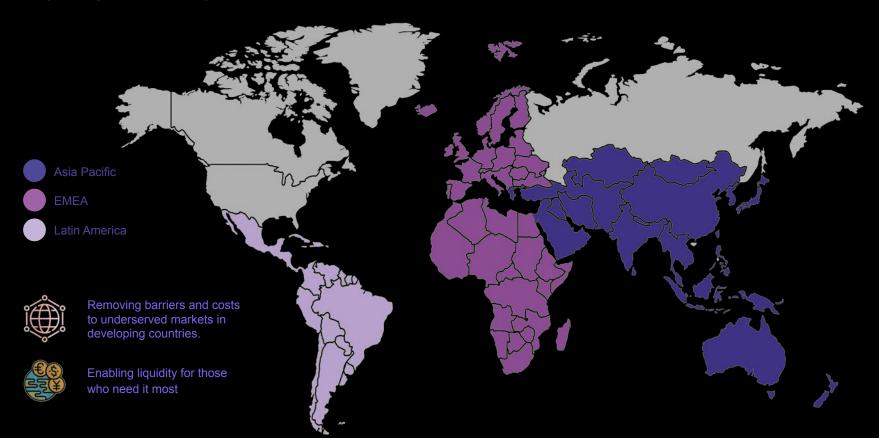
- What is the TF Gap?
  - The difference between how much trade finance is requested and the actual trade finance provided by lending institutions
  - Reached \$1.7 Trillion in 2021
  - How to tackle the TFG?



### **Emerging Market Corridors**



Injecting new liquidity for markets that need it most





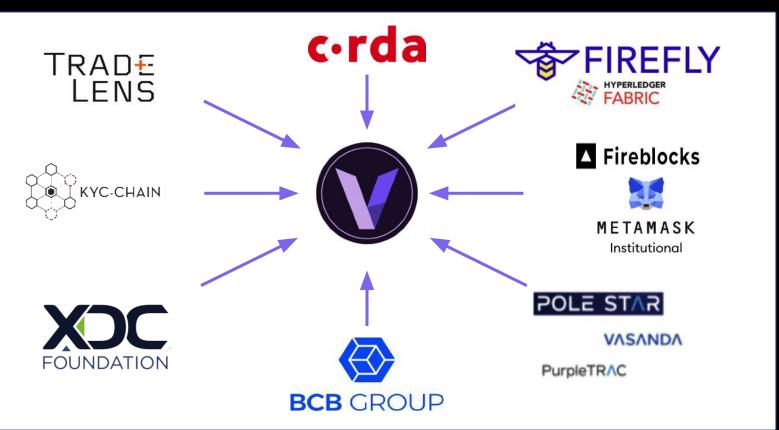
Bringing Together Trade Finance, ESG, DD, and Defi to Solve supply chain issues

- Liquidity
  - Defi bridge
  - TVL & Liquidity pools
- Interoperability
  - Public & private chains resources
  - Regulatory compliance on public & private chain (banks & corporates
  - Data Privacy
  - Risk mitigation
- ESG SASB standardisation
- Analogue to Digitisation





Integration and cooperation



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Integration with IBM Hyperledger



- Kaleido & Firefly
  - Multichain Node Deployment
  - Audit and Management layer
- IBM Hyperledger & Tradelens
  - eBL aggregator of digital shipping documents to supply chain stakeholders

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### **Considering Banking and Compliance**



- Banking Requirements
  - Regulatory compliance
  - Private data
  - Risk mitigation
  - Auditable processes and transparency
  - Evolving ESG & sustainable financing
- Cofinancing
  - AKA Syndicated financing
  - Institutional custodian access
  - Alternative to traditional affiliate DeFi and CeFi financing

### **Banking**

# Voy/Finance

#### Global Trade is Broken

- More than 80% of global trade needs financing
- SMEs account for around 90% of companies around the world but most of them lack access to affordable trade finance
- Banks focus on large suppliers with established onboarding processes, credit histories and less impact on their cost of capital
- As of 2022, the global trade finance gap increased to well in excess of USD 1.7 trillion.
- The manual paper-based trade documentation processes are:
  - slow, long and expensive
  - o fragile and prone to human error
- Using Pdf documents is not digitalization!
- ICC pre requisite on demand for real digitalisation

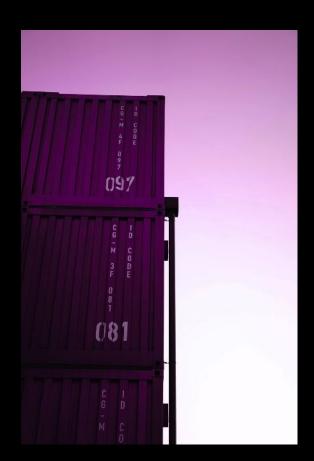


### **Banking**

# Voy/Finance

### **Voy Changes the Game**

- Can be treated as a catalog and tailor different combinations
- Tokenized LCs become tradable assets
- Connects liquidity to trade finance through De-Fi
- Syndications & Co-financing opportunities
- Secondary Market Trading
- Monitors ESG & Sustainability





#### **Benefits to Banks and SMEs**



#### **Banks**

- Lower lending risk
- Automated processes
- Lowers risk of human error
- Quicker cash turnover
- Tokenized letter of credit
- Immutable records
- Digitised documentation
- Enhanced due diligence
- Diversified portfolio high yields into SME
- Co-financing risk reduction



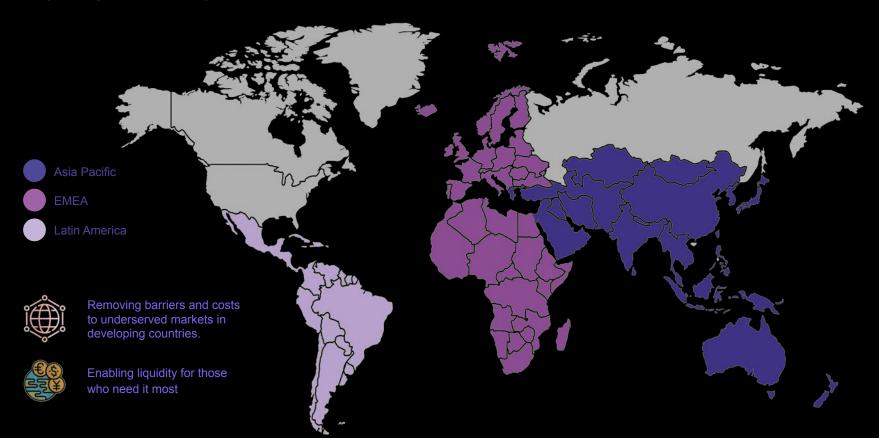
#### **SMEs**

- Lowers inherent risk
- Increased available liquidity
- Transparent financing process
- Faster trade
- Decreased costs
- Real time remittance
- Real time financing
- Sustainable financing
- ESG monitoring

### **Emerging Market Corridors**



Injecting new liquidity for markets that need it most



### **ESG Global Standardisation**



#### Non ESG World vs the ESG Standardised World of Tomorrow

- The world is increasingly requiring transparency and integrity through the entire Supply Chain.
- ESG compliance with recognised standards will provide that.
- VOY is building the tools to empower all stakeholders to have trust in the system.





### A Global opportunity



- Businesses are getting on board.
- ESG understanding and engagement is growing
- Consolidation of complex ESG Frameworks
- Regulations imminent in largely unregulated space



### **Our Role in Solving the ESG Problem**

VOY is being built to ensure that trust is maintained in the whole system





### Our Role in Solving the ESG Problem



- How will VOY do this?
- Financiers/logistics/Suppliers
- First the shipping industry and its specific challenges:
  - Shipping is totally powered by fossil fuels.
  - Shipping has pledged to reduce carbon emissions by 50% from 2008 levels by 2050
  - Cargo volumes will grow by 130% by 2050
  - Cargo volumes have grown four fold since the 1980's
  - there is currently no capability to replace fossil fuels at the scale required
- Shipping needs to
  - o focus on operations to reduce carbon emissions
  - whilst purchasing carbon offsets to bridge the gap until cleaner fuels are available.



### **Maritime and Industry Challenges**



### **Compliance and Financial Risk**

- Changing Regulations and sanctions
- Screening inefficiency
- Multiple point solutions and shadow co's



**Illicit Activity** 

- Vessel and company identification
- Sanctions evasion



### **Sustainability Concerns**

- Fossil fueled shipping industry
- Difficult to quantify sustainability risk
- Lack of understanding

### **ESG - VOY ESG Screening**



### **Supplier and Corporate E, S and G Monitored Values**



#### **Environment**

- Emissions
- Energy management
- Ecological impact
- Waste & hazardous materials
- wastewater and bilge water management



### Social

- Human rights
- Customer privacy
- Data security
- Labor practices
- Health and safety



#### Governance

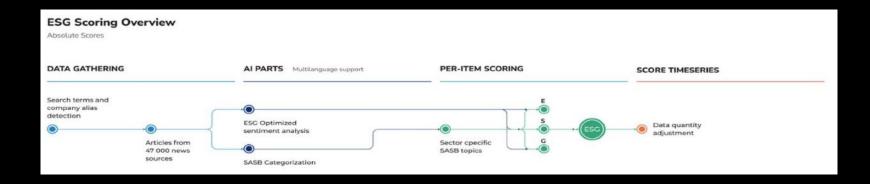
- Business ethics
- Competitive behavior
- Management
- Regulatory environment
- Critical incident risk management
- Accident and Safety Management
- Sanctions



#### How we do it

### **Sentiment Analysis - 3 Stage Evaluation**

- Al sentiment analysis
  - Scanning over 47k publications and news sources
  - SASB financially material topics
- Comparative Screening
  - Compared against peer group in relative sector
  - Ranking in performance quartile
- Screening for Key Sustainability Topics
  - Product involvement
  - Impact performance over time





### **Sample Report**

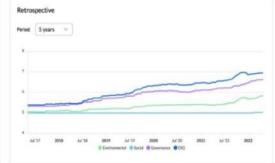
## Veolia Environnement S.A. **3 stages of evaluation**

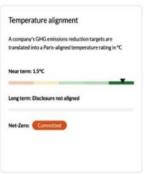
#### France

Infrastructure / Water Utilities & Services

VIF , Darie

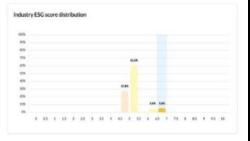












### **Digitalization of Trade Finance**

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A real opportunity



#### **Technology Enables Change**

- Technology path
  - Digitisation > Tokenisation > Smart Contract Automation
- Create efficiencies in real time remittance
- Enhanced data transparency
- Accessible audit trails
- Secure institutional third party custodian access

### **Undeniable Changes Ahead**

- Major financial institutions
  - Forming crypto-strategy hedge funds
  - Implementing DeFi solutions into core businesses
- Current financiers only focused on increasing profits within existing core businesses
- Leaving a \$1.7 Tillion each year and growing of unserviced financing
- A real opportunity to fill an entirely untapped market segment

### **Trade Finance**



### **Two Major Problems**



- Nearly all TF is bank financed
- Banks have low risk tolerance
- SMEs are high risk



Liquidity

- Banks seek "low hanging fruit" first
- Affiliate banking process spreads risk but is slow
- No liquidity remaining for high risk SMEs

### **Decentralized Finance**

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### **Bridging DeFi pooled Liquidity and Real World Trade**

- TVL and liquidity pools
  - Staking
  - Farming
- Interoperability
  - Providing access to additional cross-chain liquidity.
  - Cross-chain bridges and swaps
- Bringing crypto value into the real world
  - DAO and the Voy Marketplace
- Enabling Defi yields via real world returns
- Truly sustainable Defi
  - No math magic
  - No crypto magic internet money



### **Bringing Supply Chain into the New Era**



#### The Future is VOY

- Trade finance and supply chain in dire need of change
  - Digitsation and tokenisation are keys
- \$1.7 Trillion trade finance gap
  - Massive opportunity
- Building the ecosystem with existing best-in-class solutions
  - IBM Hyperledger
  - Firefly
  - Intel SGX
- Disconnect between crypto liquidity and real world trade
  - Defi and DAO to connect the physical and digital worlds





### **A Full Suite of Enterprise Solutions**



Digitalised Trade Finance Solution



Liquidity Pools & Democratised Defi



Payment rail for Supply Chain Finance





- tBL and tLC | Immutable Blockchain Security |
- Full KYC/AML | Sanctions Screening | ESG Scoring |
- Data Repository | Automated Smart Contracts and Escrow | Permissioned Transparency
- Fees charged for contract listing on marketplace and financed trade contracts.
- Professional Fund Management Advice | Exclusive On-platform Funding Source
- Staked Defi tokens creates a crowdfunded liquidity pool (TVL)
- Funds directed by DAO
- Interest income from on-platform financed trade contributes to TVL
- Cross Border Payments
- Instant Remittance
- Instant FX Translation
- Fiat/Crypto Enabled
- Fees charged for remittance
- NGO driven data supporting ESG
- Tokenized Letters of Credit
- Tokenised Bills of Lading
- Digitised Trade Documentation

## Voy/Finance

### **Creating New Marketplaces**

- All stakeholders onboarded to the ecosystem
  - Blockchain based
  - Secure
  - Auditable
  - Transparent
- Global supply chain consolidated into a Supply Chain as a Service (SCaaS) ecosystem
  - Ancillary standalone services
    - TF Marketplace, ESG, X-Border Pmts, etc.
  - Tokenized Letters of Credit
  - Tokenized Bills of Lading
  - Digitised shipping documents
- Tokenized LCs can become a tradable asset class
- Defi liquidity pools are connected to trade finance at both retail and corporate levels
  - Retail DAO
  - Institutional custodians & fund managers for accredited regulated investments
- ESG supply chain standardisation



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