

VOLUNTARY CARBON MARKETS

Food and Footprint



Voluntary Carbon Markets

Voluntary carbon markets are considered key to achieve net zero goals by 2050. However, for this to happen VCM need to grow 15 times in 25 years to meet those goals.

What are voluntary carbon markets (VCM) ?

VCM is, as its name indicates, a market in which buyers can voluntarily offset their emissions by purchasing carbon credits in a variety of sectors. These markets are not regulated as compliance markets, but they tend to be more complex as voluntary carbon credits can be issued by different standards across the globe following diverse methodologies, traded in different registries and through many intermediaries.

Stakeholders in VCM

The VCM supply chain includes a range of intermediaries in complex finance and good flows.

1. Project Developers
2. Carbon Offset Standards
3. Third-party auditors or Validation and Verification Bodies (VVBs)
4. Consultants
5. Brokers, Carbon exchanges, Retailers
6. Voluntary Carbon Credits Buyers

VCM – Supply Chain



Sectoral scopes

Afforestation/reforestation, Agriculture, forestry and other land use (AFOLU), Carbon capture and storage, Chemical industry, Community Services Activities, Construction, Energy (renewable/non-renewable), Energy distribution Energy demand, Fugitive emissions – from fuels, or Industrial gases, Improved land management, Livestock and manure management, Manufacturing industries, Mining/Mineral production, Metal production, Transport Efficiency, Nature-Based Solutions, Social and environmental, Solvents use, Waste handling and disposal, Wildlife restoration



Project Developers plan and develop projects to obtain verification

To obtain a verification, a project developer must comply with carbon offset standards' processes and rules, apply methodologies approved by the standards.



Carbon Offset Standards certify carbon projects and programs

and facilitate carbon credit trading through their registries.

Each standard has a particular geographical and sectoral scope, and each credit represents **1tCO₂e**.



Validation and verification Bodies check that requirements are met

Validation occurs before or during implementation. If all conditions are met, then projects can be registered and after a project has been developed and running then credits can be issued to be **verified**. **Third-party auditors** verify reports of real avoided or sequestered data reported by developers during their projects.



Verified Carbon Standard
A VERRA STANDARD

VERIFIED CARBON UNITS

VCUs

Gold Standard

VERIFIED EMISSIONS REDUCTIONS

VERs



American Carbon Registry

EMISSION REDUCTION TONS

ERTs



PLAN VIVO
For nature, climate and communities

PLAN VIVO CERTIFICATES

PVCs



CCBA

VCU + CCB LABEL

CCB label



Woodland Carbon CO₂de

WOODLAND CARBON CREDITS

WCCs

PEATLAND CODE 

PEATLAND CARBON UNITS

PCUs



STANDARDS

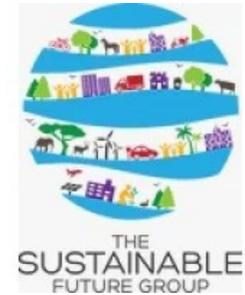
AENOR



Earthood



EPIC Sustainability



4K EARTH SCIENCE PRIVATE LIMITED
 AENOR INTERNATIONAL S.A.U.
 AGRI-WASTE TECHNOLOGY, INC.
 ASTER GLOBAL ENVIRONMENTAL SOLUTIONS, INC.
 BUREAU VERITAS INDIA PRIVATE LIMITED
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 COLOMBIAN INSTITUTE FOR TECHNICAL STANDARDS AND CERTIFICATION (ICONTEC)
 CONTROL UNION CERTIFICATIONS
 DILLON CONSULTING LIMITED FIRST ENVIRONMENT, INC
 EARTHOD SERVICES PRIVATE LIMITED
 ENVIRO-ACCÈS INC.
 EPIC SUSTAINABILITY SERVICES PVT. LTD.

ERM CERTIFICATION AND VERIFICATION SERVICES LTD.
 FIRST ENVIRONMENT, INC.
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 LGAI TECHNOLOGICAL CENTER, S.A. (APPLUS+)
 MUTU INTERNATIONAL
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 RUBY CANYON ENVIRONMENTAL, INC
 S&A CARBON, LLC
 SCS GLOBAL SERVICES
 SHENZHEN CTI INTERNATIONAL CERTIFICATION CO., LTD (CTI)
 THE SUSTAINABLE FUTURE GROUP (SFG)
 TÜV NORD CERT GMBH
 TÜV SÜD SOUTH ASIA PRIVATE LIMITED
 VKU CERTIFICATION PVT. LTD.



THIRD PARTY AUDITORS - VVBS

Financial & Product Flows

The background of the slide is a teal color with a subtle pattern of financial charts, including line graphs and bar charts. In the lower-left quadrant, there are three stacks of coins of varying heights, with some faint text like 'March', 'July', and '70' visible around them.

VOLUNTARY CARBON CREDITS DEVELOPMENT

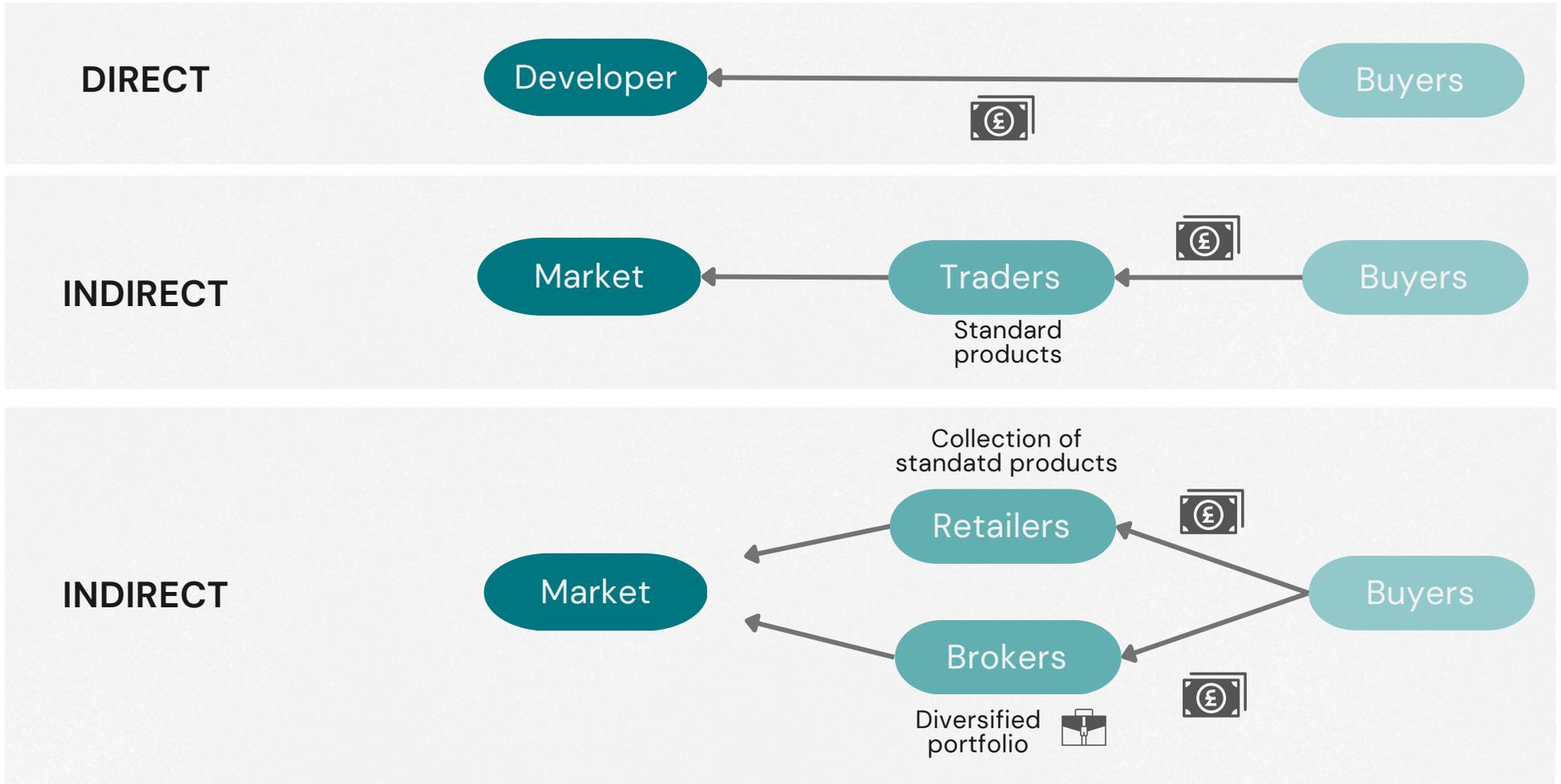
- Developers pay fees for project registration and credit issuance to Carbon Standards, and they must pay validation and verification fees to Validation and Verification Bodies. Developers could pay VVBs directly or they could use consulting services to assist them in dealing with validation and verification processes.
- Consultants will also need to pay annual fees to Carbon Standards for accreditation.

BUYING VOLUNTARY CARBON CREDITS

- Credit buyers can purchase carbon credits directly from developers or can use intermediaries either carbon exchanges, traders or brokers to complete their transactions.

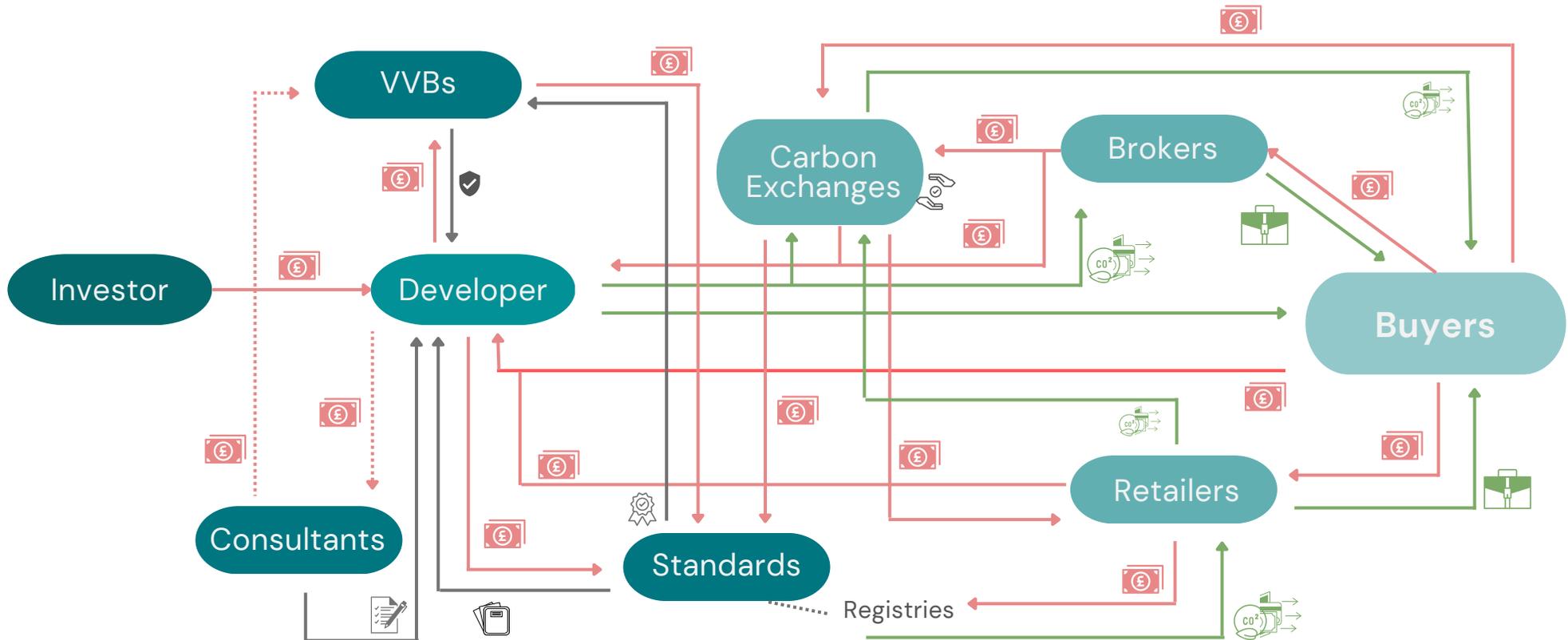
VCM – Supply Chain

Ways of purchasing credits



VCM – Supply Chain

Financial and Product Flows



VCM Main challenges

Key areas to improve

SUPPLY

- VCM are unregulated, and there is a need for transparency and integrity regarding double counting of GHG emission reductions, human rights abuses and greenwashing.
- Opportunity cost of doing a more "attractive" project because of the price.
- Non-standardised pricing for carbon credits. Pricing is influenced by different factors: Additionality, transparency, and trading markets.
- Wide and diverse offer from across the world, difficult to regulate.
- Some countries have banned exports of carbon credits until they have met their climate goals.
- Diversity of roles and overlapping interests. Brokers can also be project developers; buyers can fund development of projects.

DEMAND

- Guidelines to use credits and what are the goals to buy such credits.
- Honesty: Disclosing the use of credits and purpose.
- Diversity of roles and overlapping interests. Brokers can also be project developers; buyers can fund development of projects.

Other Resources

Articles

- Glossary of carbon markets.
- Roundup of farmer consultation.
- Why are carbon markets developing so slowly?
- The impact of carbon price & cost effectiveness in incentivising. mitigation & carbon credit creation.
- Soil carbon code update.

Briefings

- Fact-checking climate change potential.
- State of play in other sectors & countries.
- Next steps for agriculture & carbon markets.

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