

Carbon Allowance & Credits

IBERCLEAR, Spanish CSD



Voluntary Carbon Markets
A SIX White Paper



Agenda

01 RENADE: The Spanish Compliance Registry

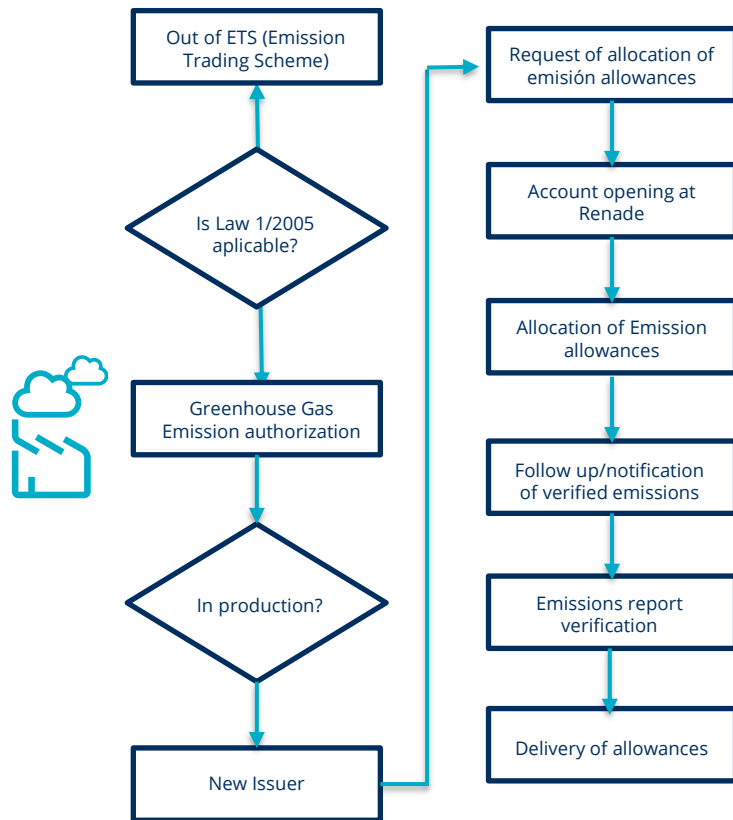
02 Compliance vs Voluntary Carbon Markets

03 BME PoC

01

RENADE: The Spanish Compliance Registry

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About RENADE:

- Functions of the National Registry for Greenhouse Gas Emission Allowances, by virtue of the agreement of the Spanish Council of Ministers of 19 November 2004.
- Spanish Section of the Union Registry, subject to the United Nations Framework Convention on Climate Change (the Paris Agreements and other applicable EU regulations).

Main functions:

- Accountancy of allowances, the issue, ownership, transmission and cancellation of the emission allowances and the units defined within the Kyoto Protocol and the Paris Agreements.
- Electronic Database which ensures the public availability and permanent update of the ownership and control of emission allowances.

02

Compliance vs Voluntary Carbon Markets

Compliance vs Voluntary Carbon Markets

Mandatory Market - ETS

Carbon Allowance.

A carbon allowance represents the right to emit one metric ton of carbon dioxide or equivalent greenhouse gas. Such rights are issued to companies and organizations participating in a compliance national or international carbon market.

Purchasing a carbon allowance can take away an emitter's right to emit a ton.

Most carbon credits are part of cap-and-trade systems.



Voluntary Offset Market

Carbon Offset.

Like a carbon allowance, a carbon offset represents one metric ton of carbon emissions. It is generated by a reduction in emissions made by a voluntary project designed specifically for that purpose.

Purchasing a carbon offset supports a prior reduction of a ton.

Voluntary markets where the price is fixed on different marketplaces.

From
2005

Mandatory Market
ETS

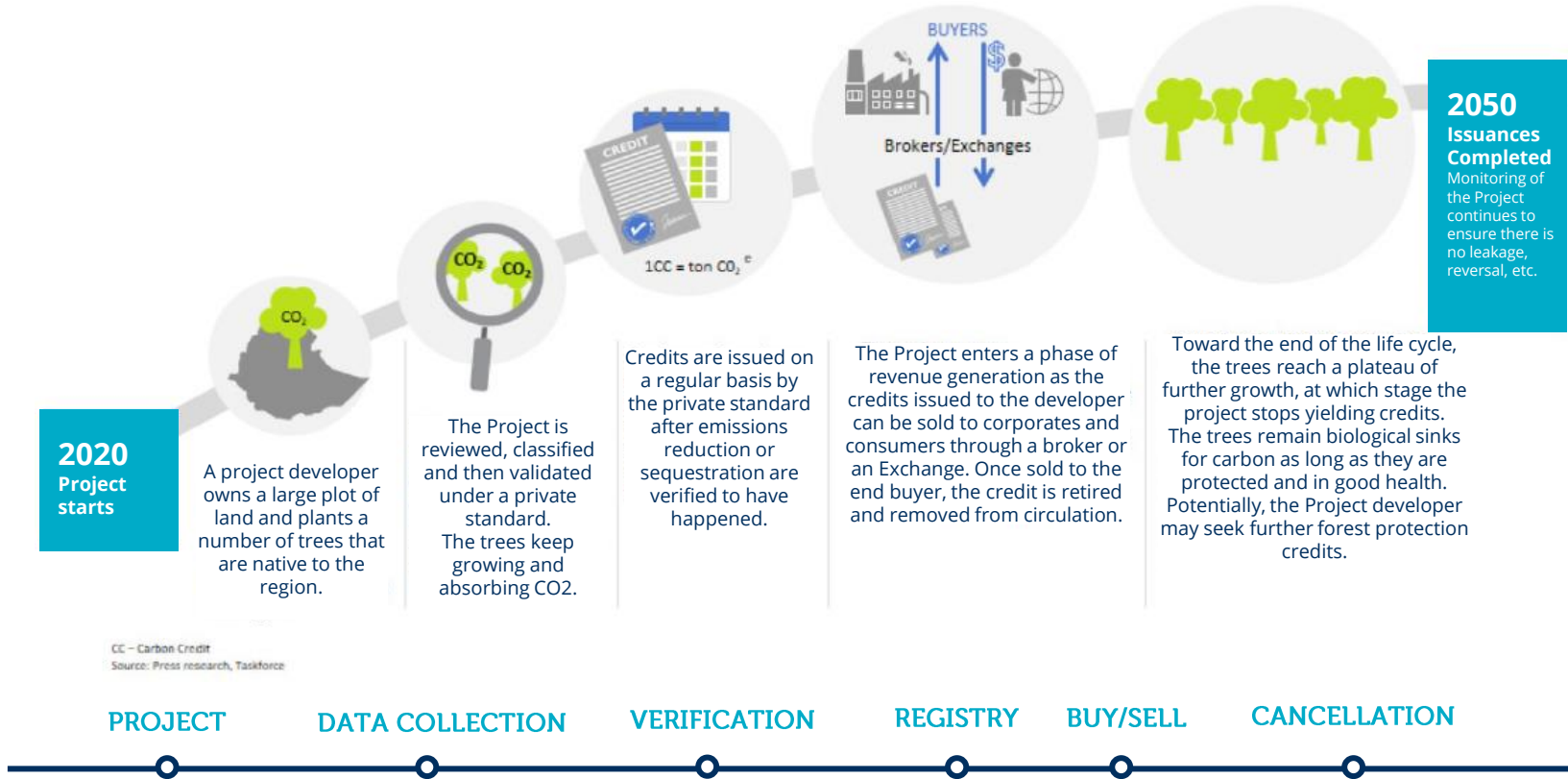
RENADE. Compliance
National Registry for
Greenhouse Gas Emission
Allowances
Spanish Section of the
Union Registry

From
2022

Voluntary Offset
Market

One step ahead,
combining CO₂ market
experience, knowledge and
state-of-the-art
technology, to create a
Voluntary Registry in DLT
of Carbon Credits

Voluntary Markets: Lifecycle of the Carbon Credits (CC)



03

BME PoC

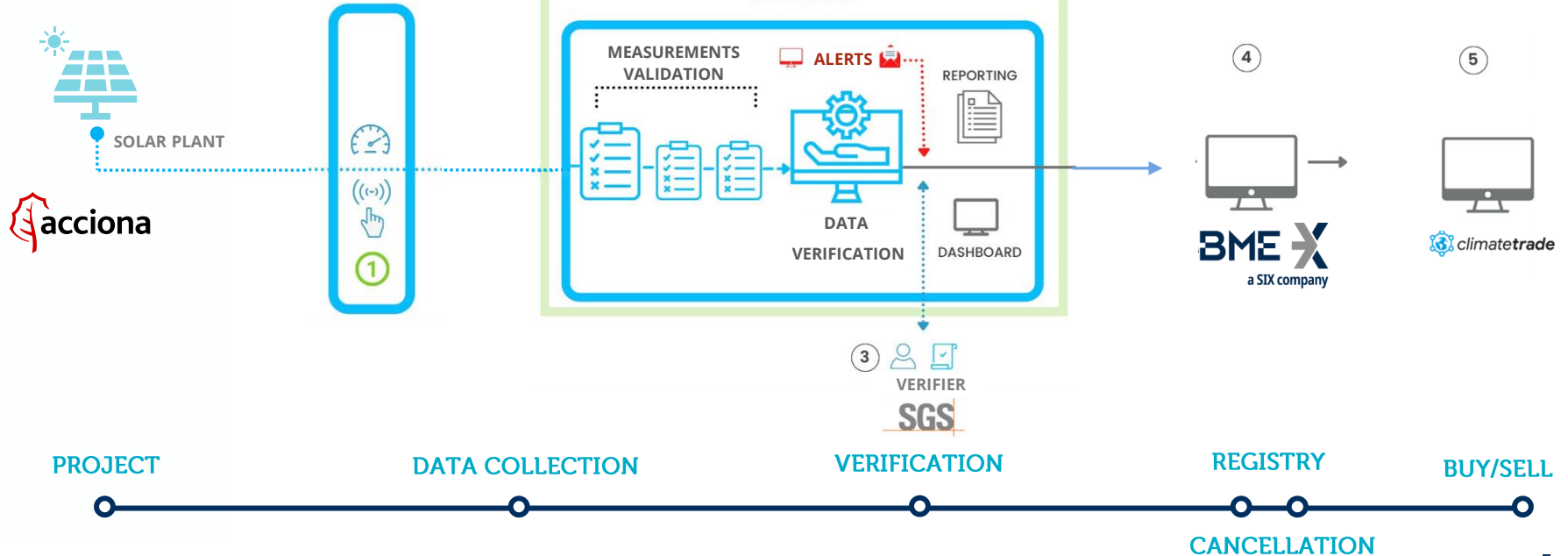
BME PoC: aligned with TSVCM

THE SUPPLIER

THE D-MRV: HARDWARE & SOFTWARE

THE VOLUNTARY
REGISTRY

THE MARKET
PLACE



BME PoC: some screenshots

Vista desarrollador de proyecto

Cancelación

Origen : Proyecto: Proyecto Prueba registro

A nombre de : Compañía Ejemplo S.A.

Concepto : Cancelación anual

Proyecto : Proyecto Prueba registro

Fecha :

Cantidad :

Estado :

Hash de la transacción :

[Descargar Certificado](#)

Proyecto Prueba registro

Transacciones recientes

Detalles

Nombre: Proyecto Prueba registro

Créditos disponibles: 90.000 tCO₂e

Ubicación

Transacciones recientes

Fecha	Proyecto	Empresa	Identificador	Importe
01/12/2020	ProyectoEnCuenta2	BME	awfka	
01/12/2020	ProyectoAlvaro	BME	Account of BME created by Alvaro	

Proyectos

Nombre	Ubicación	Potencia	Capacidad	Créditos disponibles
Osasca	Madrid, España	306 MW	306 MW	671.237 tCO ₂ e
Proyecto prueba David	Madrid, España	44 MW	44 MW	111.534 tCO ₂ e

Empresa

Identificador

Importe

David Pinilla	B0WEVFA9WSBEMK9OUNQZBASHCNTXTNV	1,94
Los Verdes S.L.	RHAWZ7WZLJWKR7ES9Y9508PWK0797L	1,69
Los Verdes S.L.	NTYU1CBAFCS8VU77NSSEZICFWH7HD7	0,60
Jose Lindo	USULWPHAYHOCMO5W2E9I9P1S0YU3U	2752,75
Jose Lindo	CTJ4HEU8T9GL8S20EVP92BLPEY	

Vista administrador BME

BME PoC: a pioneering solution

Main factors of BME Carbon Credits registry

- 1 Measuring /calculation through IoT
- 2 DLT Data Base and registry
- 3 Digital end-2-end
- 4 Interoperability
- 5 Simplicity
- 6 Operational Efficiency
- 7 Modularity

“ *The Taskforce (TSVCM) recommends that the shared digital data protocol explore digital sensors, **DMRVs, and distributed-ledger technologies (DLT)**, to further improve speed, accuracy, and integrity.* ”

TSVCM Report on Market Integrity and Assurance guidelines



BME X
BOLSAS Y MERCADOS ESPAÑOLES
a SIX company

The logo features the letters 'BME' in a bold, sans-serif font, followed by a stylized 'X' symbol. Below 'BME' is the text 'BOLSAS Y MERCADOS ESPAÑOLES' in a smaller font. Below the 'X' symbol is the text 'a SIX company' in a lowercase, sans-serif font. The background is dark blue with faint, glowing grid lines and a wavy pattern at the bottom.