



WB ER Transaction Registry CATS

(Carbon Assets Tracking System)

Summarized overview. Core Functionality

March 30th, 2022

Outline

- **Definition and Clarifications**
- **Highlights**
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- **Core Structure Design**
- **CATS Accounts Chart**
- **Transactions**
- **On-boarding**
- **Integrity Due Diligence**
- **Materials**

Definition and clarifications

Definition

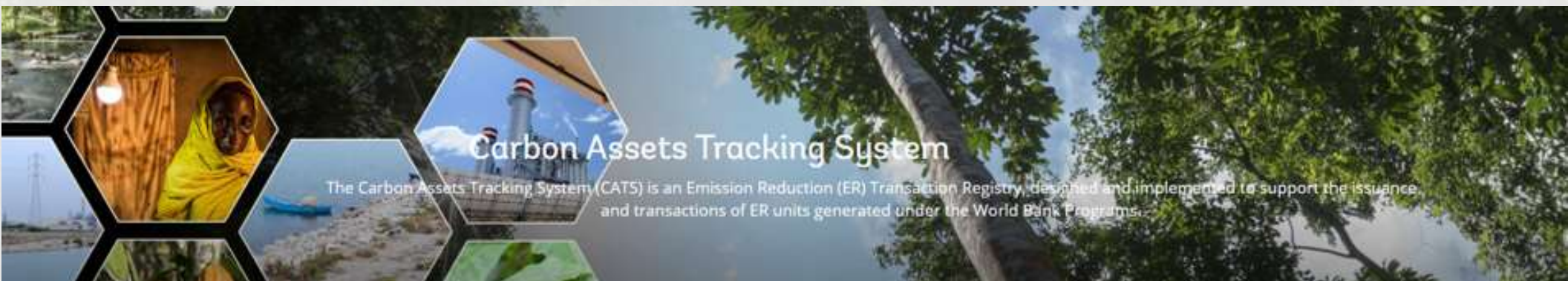
- ❑ The **Emission Reduction (ER) Transaction Registry** is a web-based platform, that serves as a database to enable the recording of serialized ER units and the other metadata (supplementary information related to the results-based climate finance programs). It also allows, tracking and transferring of ER units between the registry's accounts holders (internal transfer), and to accounts holders of other transaction registries (external transfer).
- ❑ An ER Transaction Registry is a key piece to safeguard environmental integrity by **mitigating the risks of double counting, double selling and double claiming**.
- ❑ The WB designed **CATS – Carbon Assets Tracking System** as a central platform to support the operations under the FCPF CF and the BioCF ISFL ER Programs but keeping the operational rules flexible enough to be adapted easily to other WB Programs and future scenarios.



Definition and clarifications

Clarifications

- ❑ The WB issues ER units on behalf of the host countries (ERP) due to their current lack of capacity (none of the host countries have proven to have an operational transaction platform so far).
- ❑ The WB is not competing with other issuing parties to the extent that host countries are part of the governance system of the registry and the WB will issue and transact the ER units on behalf of the host countries, with their consent and approval.
- ❑ The World Bank -as the trustee of trust funds supporting these results-based climate finance programs- provides a secure and transparent transactional platform minimizing risks.



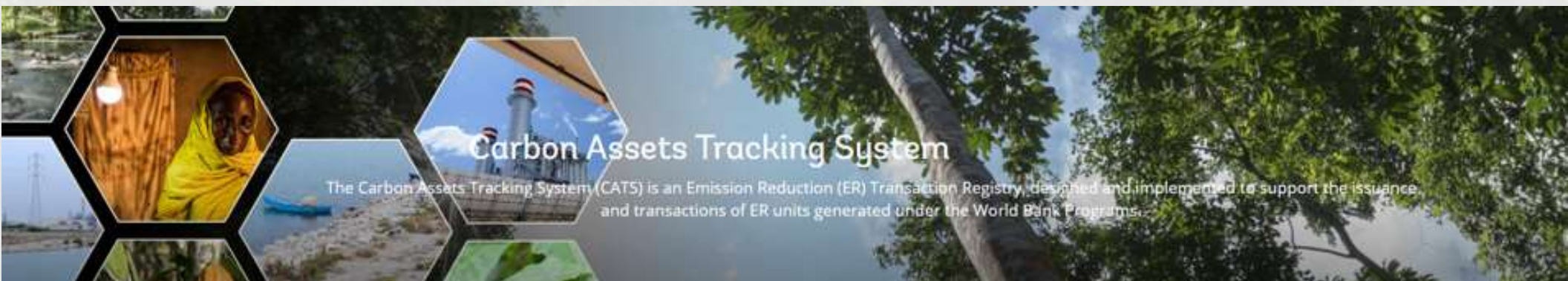
Highlights

- ❑ The first phase of **Carbon Assets Tracking System (CATS)** project has officially concluded (05/21/2021), and the platform is fully operational as a Central Transaction Registry managed by the **AMU (Administrative Management Unit)**.
- ❑ CATS offers a platform solution to **record, issue, and transfer emissions reduction** units generated under the **FCPF CF** and **BioCF ISFL ER Programs**.
- ❑ CATS is **ICAO/CORSIA compliant** (attestation submitted).
- ❑ **Operational guidelines, User manual and Terms & Conditions** have been updated to incorporate the latest improvements and uploaded into the platform (Knowledge Center):
<https://cats.worldbank.org/>
- ❑ **On-boarding process** of external entities and users defined, cleared by legal and launched for the **FCPF CF Participants** and **Mozambican team** (Zambézia Integrated Landscape Management Program (ZILMP)).



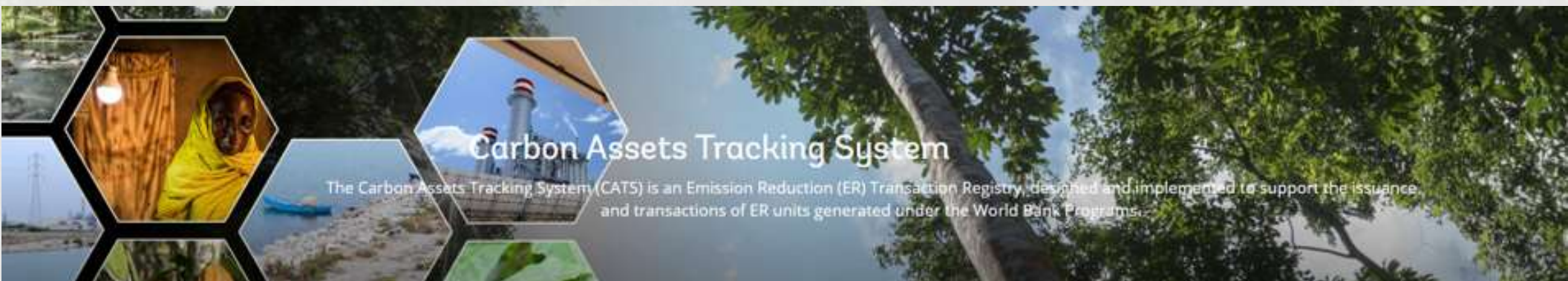
Highlights

- ❑ The **communication plan** was delivered and included **3 regional webinars (LAC, AFR, ASIA-PAC) for program entities (+donors)** with presentations, videos (26) and examples:
 - ❑ **CATS Introduction:** general overview from a business and technical point of view. Dec 15-18, 2020.
 - ❑ **CATS1:** first training session focused on the on-boarding process, IDD (Integrity Due Diligence) / Sanction Screening process, Issuance and Buffer of ERs. Feb 22-24, 2021.
 - ❑ **CATS2:** second training session focused on the main transactions, cancellation and retirement of ERs. Feb 22-24, 2021.
 - ❑ Dedicated Training Sessions for AMU and WB core users. May 10, 2021.
 - ❑ Dedicated Training Sessions for Host Countries: On-boarding process and review of the country transactions. May 17, 2021 (Mozambique). January 13, 2022 (Fiji). March 23, 2022 (Cote d'Ivoire).

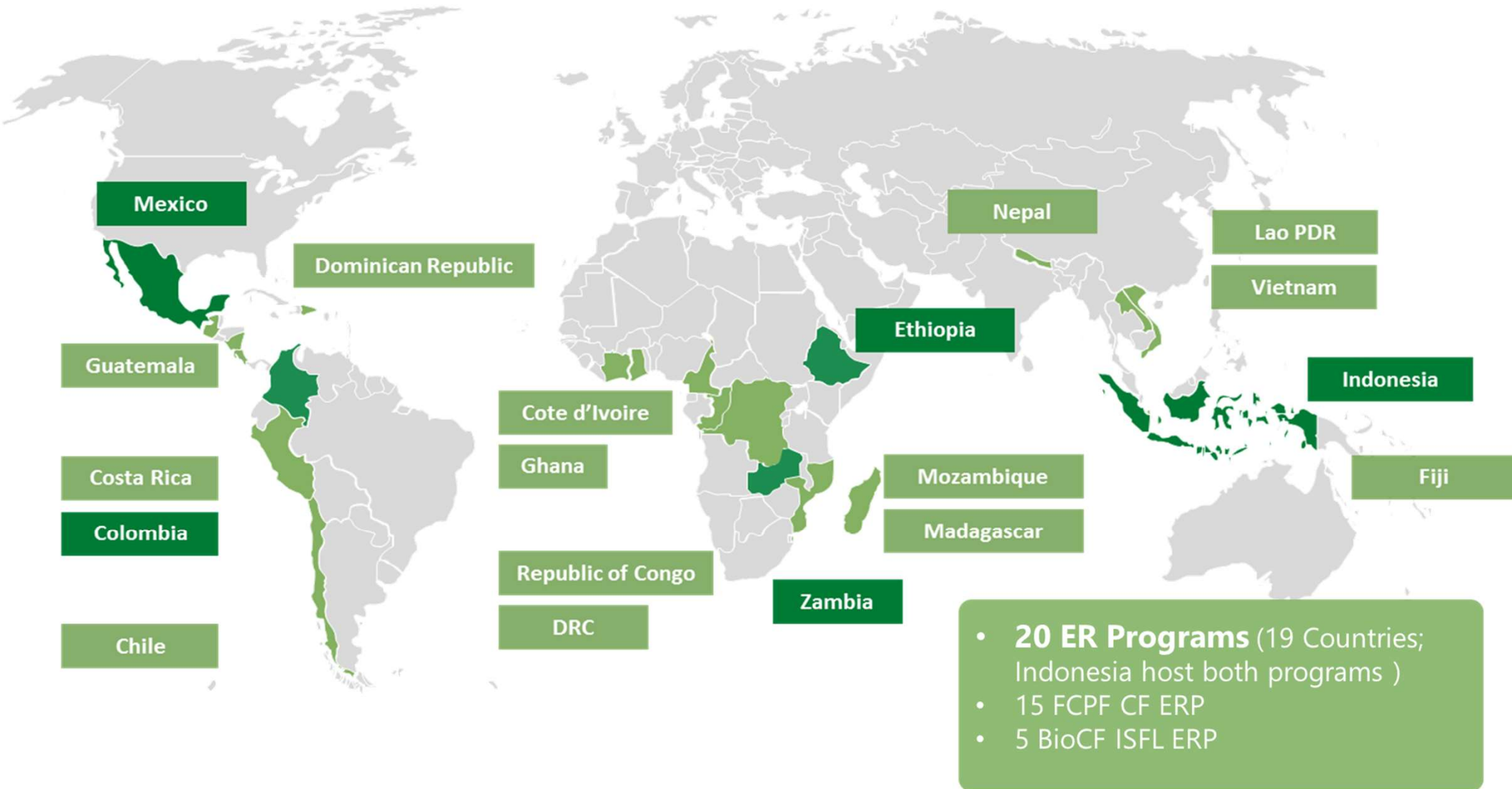


Highlights

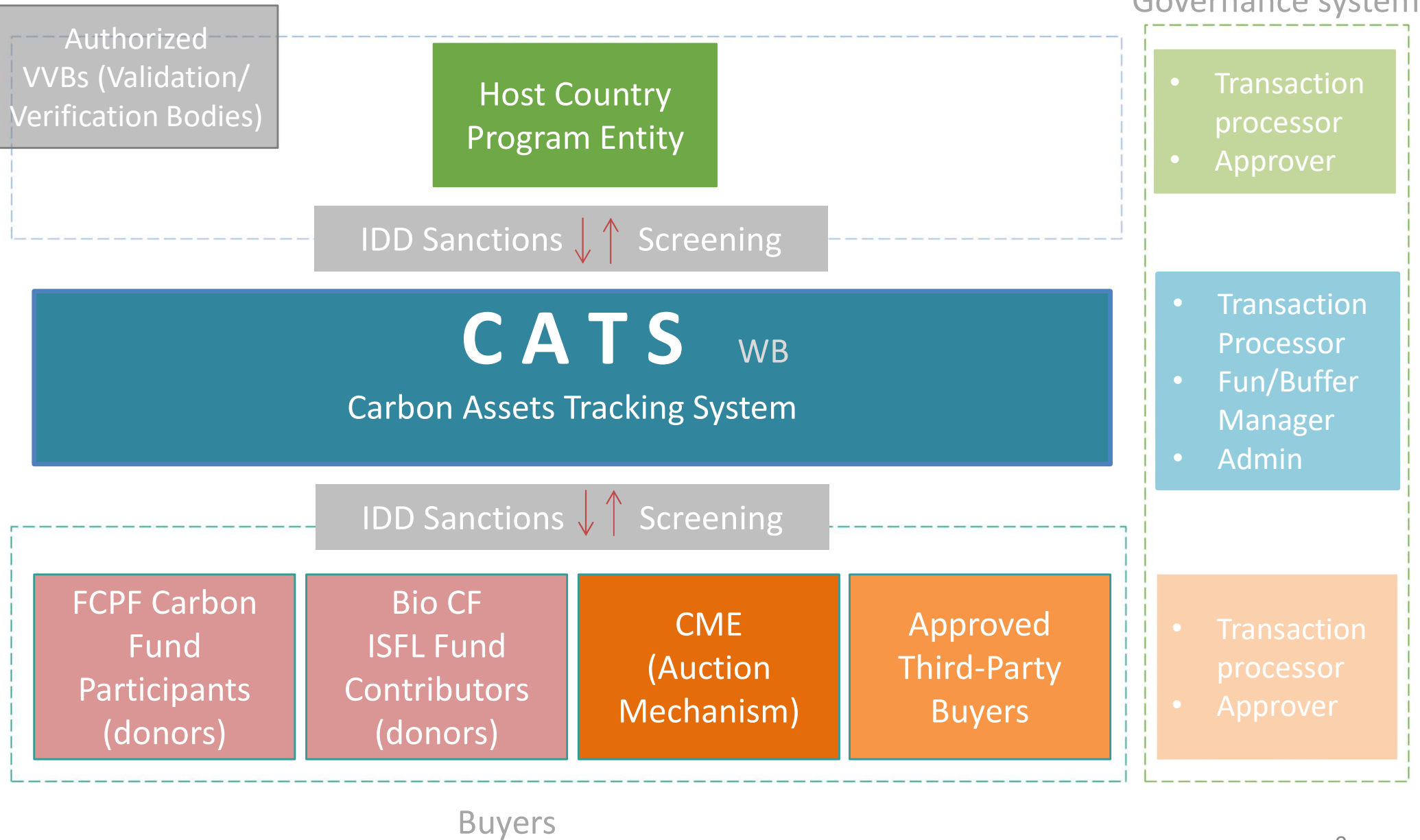
- ❑ **Next steps on the Registry Platform (KP CATS Phase II): (under discussion)**
 - ❑ **Administrative tools** demanded by the AMU, responsible for operating the platform, to improve the efficiency of its day-to-day tasks in registry operations.
 - ❑ **Accommodation of existing WB programs and projects** generating carbon credits and new mechanisms adapted to the new accounting and market framework designed under the Paris Agreement.
 - ❑ **Incorporation of a MRV data integration interface** to generate a simple geodatabase with basic information by GHG category.
 - ❑ **Communication with other third-party and national registries;** to connect CATS to the **Climate Warehouse** prototype.
 - ❑ **Provide support and capacity building to host-countries on transaction registries.** To utilize the knowledge outcomes of the first phase project in supporting the efforts of the host-countries to build and operate RBCF registries (e.g., multitenant portal, customized CATS software, etc.).



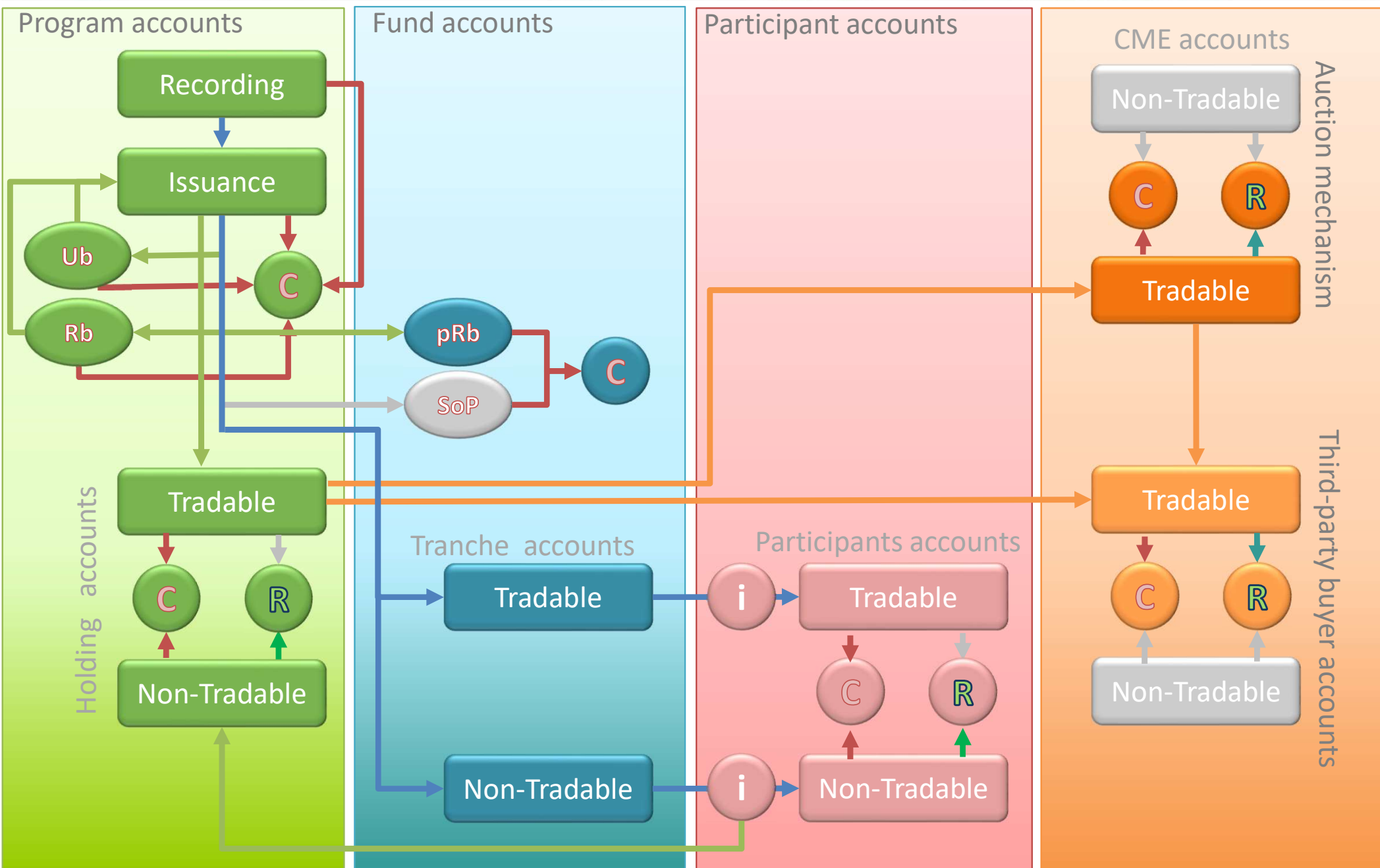
Scale



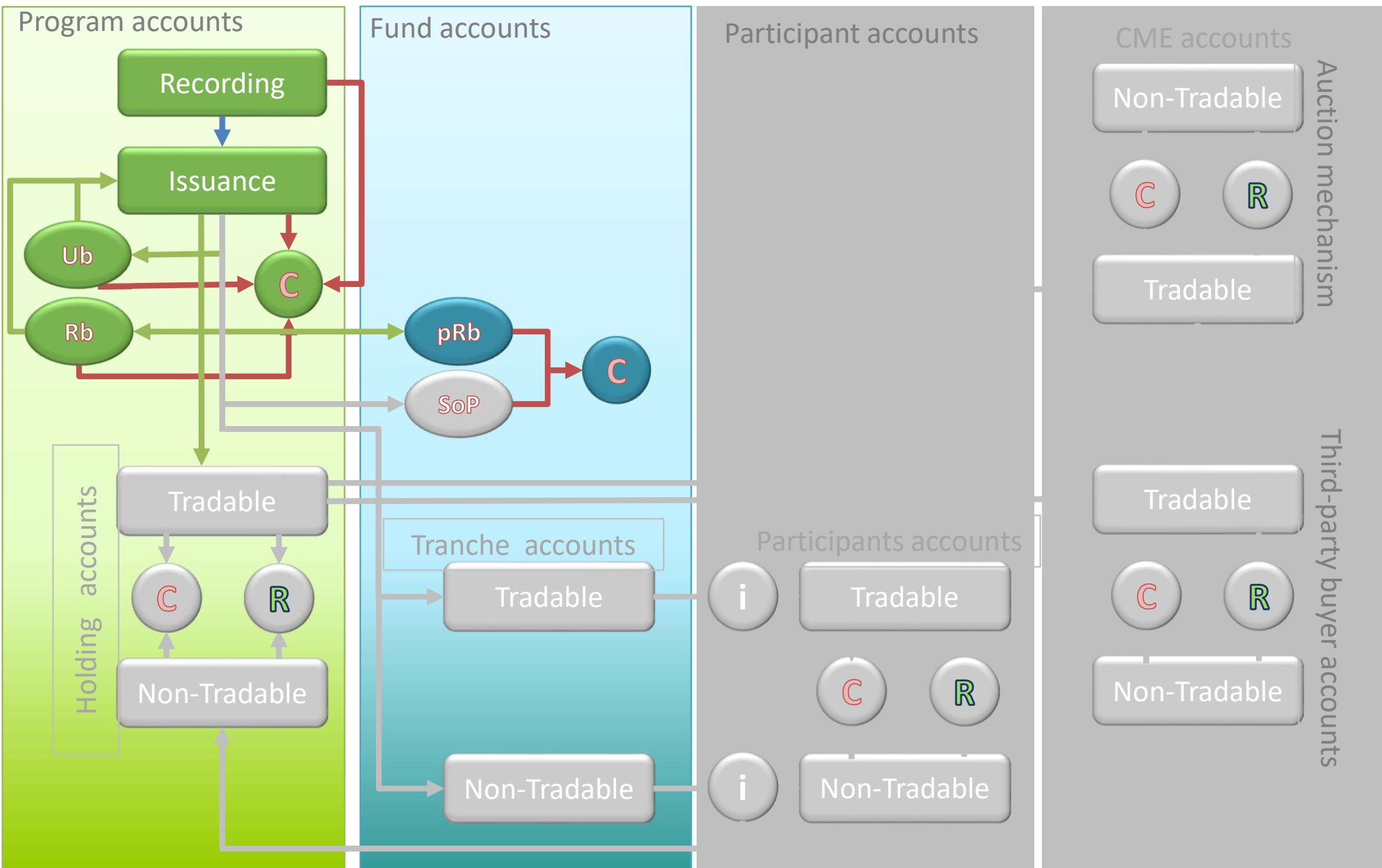
Core Structure Design



CATS ACCOUNTS CHART



CATS ACCOUNTS CHART



Transactions

Recording

ER units **reported** by a host country (monitoring report) and **verified** (VVB) will be recorded in the program's Recording Account (ERs can optionally be recorded as 'reported' or 'verified' ERs).

Fund Transaction Processor records and submit the transaction / Fund Manager approves [recording account]

Issuance

Issuance refers to the process of certifying ERs (WB certification Authority), assigning a GCTC (unique serial number) and moving units from the Recording account to the Issuance account. Partial issuance is possible (not overlapped periods).

Fund Transaction Processor records and submit the transaction / Country Program approves / Fund Manager approves [recording account] > [issuance account]

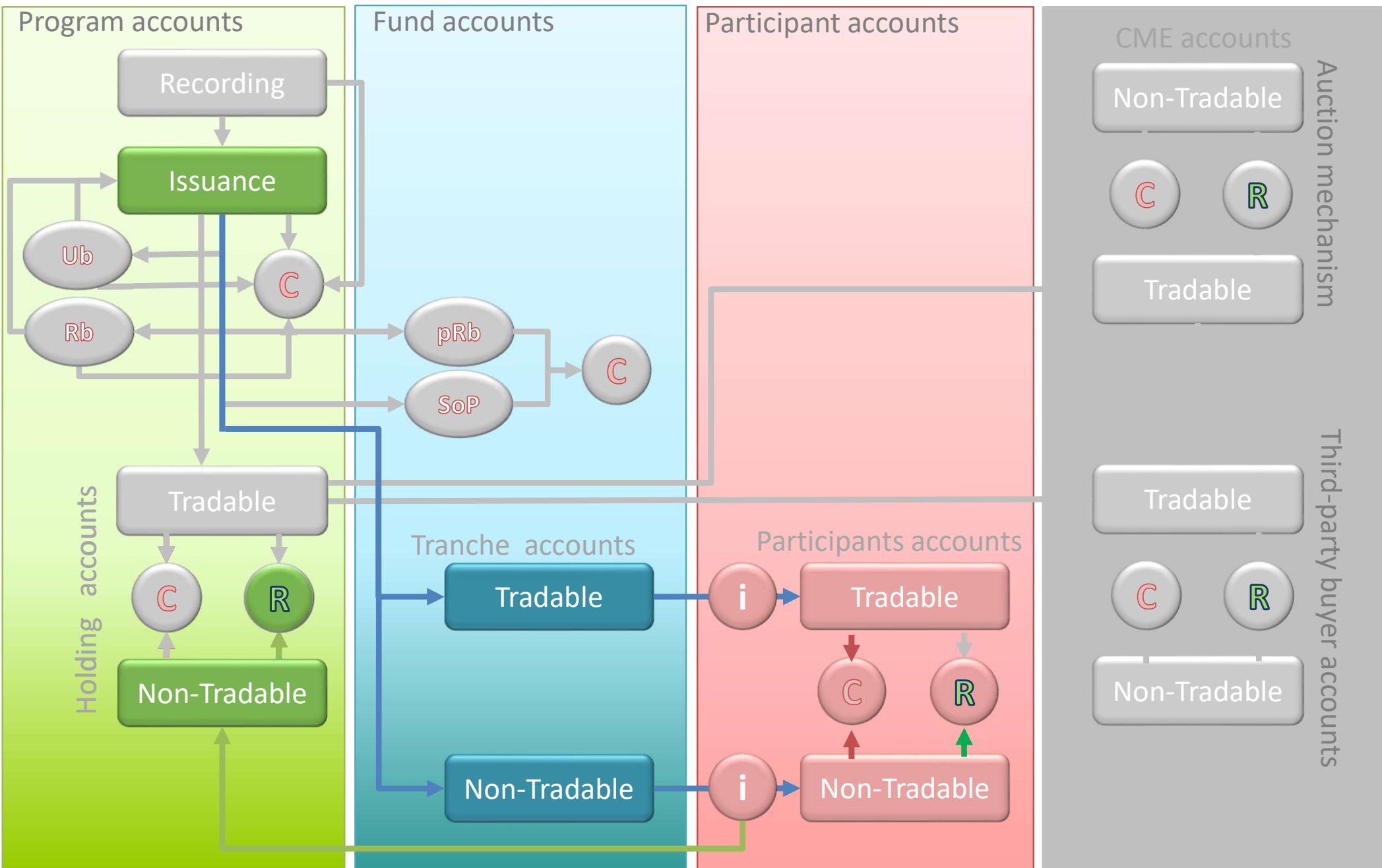
Buffer Allocation / Release / Cancellation (reversal event)

Serialized ER units (after issuance) are **allocated in Buffer accounts** to help manage both Uncertainty and Reversal Risks. Buffer accounts:

1. **'Uncertainty Buffer'**: uncertainty associated with the estimation of ERs and manage the risk that the emission reductions were overestimated for prior reporting periods;
2. **'Reversal Buffer'** to insure against potential Reversals;
3. **'Pooled Reversal Buffer'** to insure against potential large-scale Reversals

Buffer Transaction Processor records and submit the transaction / Country Program approves / [Buffer Manager] Admin approves alloc: [issuance account] > [buffer account] release: [buffer account] > [issuance account] cancellation: [buffer account] > [cancellation account]

CATS ACCOUNTS CHART



Transactions

Purchase

From the Issuance account, and once the buffer discounts have been performed, the available serialized ER units from a specific certification period can be transferred to the Fund Participants accounts (tranche tradable or non-tradable account).

Fund Transaction Processor records and submit the transaction / [Fund Manager] Admin approves [issuance account] > [tranche tradable or non-tradable account]

Allocation participants

Based on the Participants' contributions the corresponding amount is allocated in the Participant Interim Accounts waiting to be forwarded to the Participant's Non-Tradable or Tradable Accounts.

Fund Transaction Processor records and submit the transaction / [Fund Manager] Admin approves [tranche tradable or non-tradable account] > [participant's interim account]

Forward

The corresponding amount credited in the Participant Interim Accounts is forwarded to the Participant's Permanent Non-Tradable or Tradable Accounts.

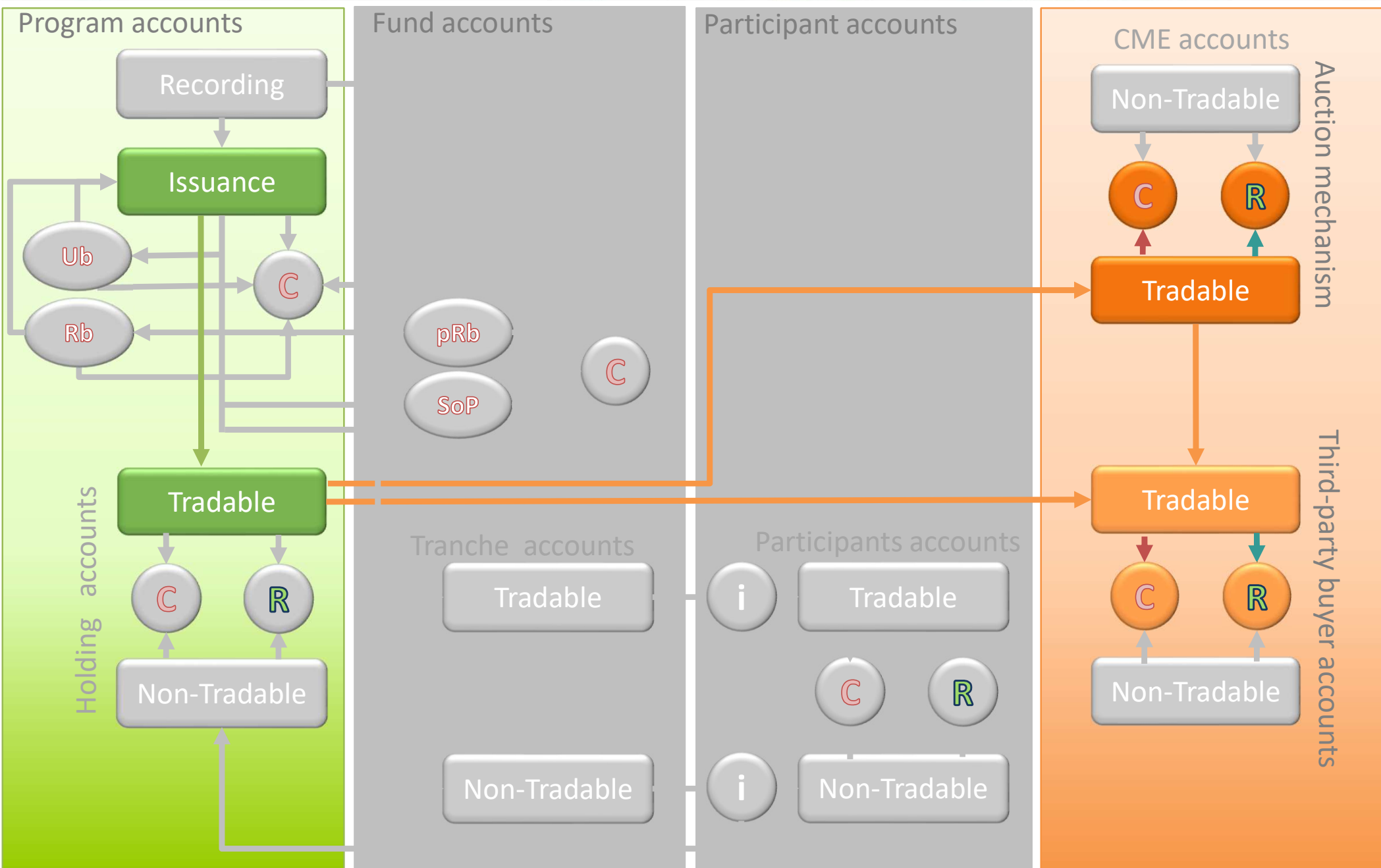
Fund Transaction Processor records and submit the transaction / [Fund Manager] Admin approves [participant's interim account] > [participant's permanent account]

Re-Transfer

Re-Transferring ERs from the Participant Interim Account to the Program specific (holding) Non-Tradable account (NDCs justification) for retirement.

Fund Transaction Processor records and submit the transaction / Admin approves [participant's interim non tradable account] > [program holding non-tradable account]

CATS ACCOUNTS CHART



Transactions

Allocation program

Allocating available serialized ERs from the Issuance account to the Program holding Accounts. For those ERs beyond the committed volume (ERPA) with the fund participants.

Fund Transaction Processor records and submit the transaction / [Fund Manager] Admin approves [issuance account] > [program holding account]

Transfer

Transfer transactions are restricted to Tradable units only and require 3 levels of approval: Sending entity / Receiving entity / The WB.

E.g., Transfer from the Program holding tradable account to a Third-Party Buyer account (selling) once the buffer discounts have been performed and considering the specific ERPA conditions.

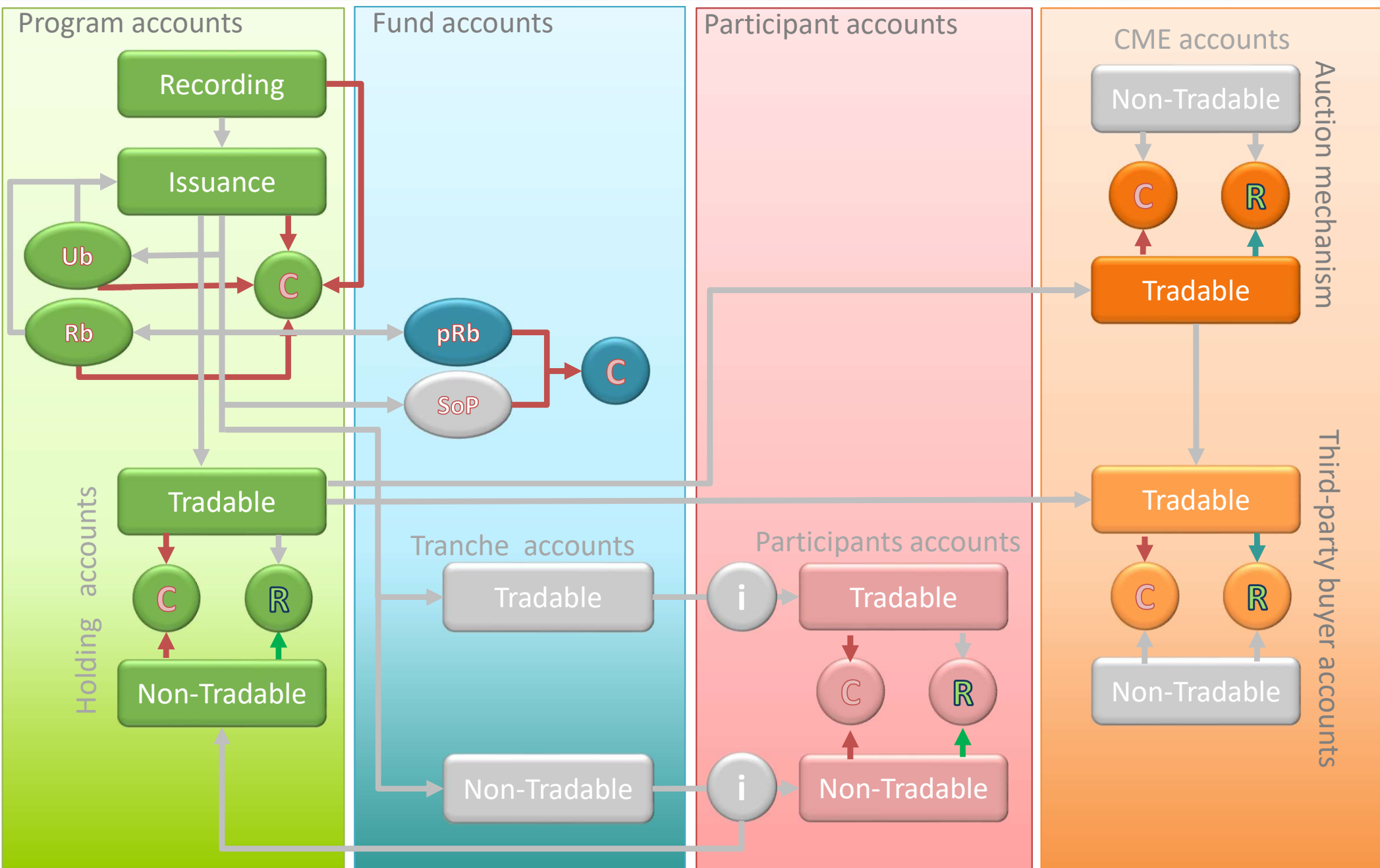
Program Transaction Processor records and submit the transaction / Country Program approves / Third-party buyer approves / [Fund Manager] Admin approves [program holding tradable account] > [third-party buyer tradable account]

Auction mechanism

CME Group (American Global Markets Company) acting as intermediate of the auction mechanism will receive tradable units from the tradable country program account and will transfer those units to the auction winner.

It is a 3-step process in the registry (a program allocation and 2 transfers): (1) to allocate available serialized ERs from the Issuance account to the Tradable Country Program Account, (2) transfer a specific amount to be auctioned to the CME Tradable Account, (3) to transfer the auctioned volume to the Auction Winner Tradable Account.

CATS ACCOUNTS CHART



Transactions

Cancellation

Both tradable and non tradable units can be cancelled. Cancellation is permanent; not allowed to be released out of the cancellation account (status change from active to cancelled). Two- levels of approval: ER units owning Entity / the WB

e.g., Cancellation of tradable ERs by a Third-Party Buyer (e.g., ICAO CORSIA participating company; cancellation of tradable ERs after the sale and transfer from the country program tradable account).

e.g., Third-Party Transaction Processor records and submit the transaction / Third party approves / Admin approves [third-party tradable account] > [third-party cancellation account]

Retirement

Both tradable and non tradable units can be retired. Retirement is permanent; not allowed to be released out of the retirement account (status change from active to retired). Two-levels of approval: ER units owning Entity / the WB

e.g., Retirement of non-tradable ERs by a Country Program (e.g., Retirement of non-tradable ERs re-transferred to the country for NDC compliance).

e.g., Program Transaction Processor records and submit the transaction / Country Program approves / Admin approves [program holding non-tradable account] > [program holding cancellation account]

On-boarding

On-boarding external users

The on-boarding process for external entities and users starts with an official request from the CATS Admin to complete an **On-boarding Form** and submit it along with supporting documents and a **Data Privacy Consent Form**.

No limit on the number of on-boarded users to be part of an external entity: three different roles: **transaction processor, approver**, (viewer).

- It is recommended to nominate **two staff members for each role** (transaction processor and approver). In any case, always keep CATS Admin informed of any modification that may occur, considering that unsubscribing an existing user and on-boarding a new one can take some time to process.

WB cloud-based user authentication service (Microsoft Azure AD): external users may utilize a **government/corporate or commercial domain email addresses as user ID to access CATS**.

- It is recommended to use a government/corporate domain email address as user ID with a secure process to recover the corresponding password if the user forgets it.** A change in the email address involves to unsubscribe the existing user and re on-board the user again as a new one; it can take some time to process.

CATS Admin (WB) manages users' access and assign roles and authorizations.

On-boarding

On-boarding
external
users

Contact Us

Onboarding process:

Email:

CATS-onboarding@worldbank.org

Technical support (website/platform):

Email:

ithelp@worldbankgroup.org

Phone: +1-202-473-2121 (Not Toll Free)

Climate Change Fund Management – SCCFM

Mail Stop: MSN 3-309

The World Bank Group

1818 H St NW, Washington, DC 20433, USA

On-boarding

On-boarding external users

Process: **Official onboarding documents** requested via email include (i) **on boarding form**, (ii) **supporting documents** and (iii) **signed data privacy consent form**.

The official onboarding documents should be submitted via email to:

CATS-onboarding@worldbank.org. The on-boarding form includes the following inf/docs:

*Info/docs requested for **external entities/companies**:

- Name of the entity/company
- A copy of an official document related to the entity/company's registration (such as Company Registration Certificate, Tax Certificate, Memorandum & Articles of Association).
- Information on the entity/company's ownership (who owns the company).
- A website address for the entity/company, if available.
- How long the entity/company has been in existence.
- The names and addresses of branches of the entity/company, and the names and addresses of related or subsidiary entities/companies, if available.
- Authorized representative identification.

On-boarding

On-boarding external users

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The official onboarding documents should be submitted via email to:

CATS-onboarding@worldbank.org. The on-boarding form includes the following inf/docs:

*Info/docs requested for **external users**:

- Full Name (First, Middle, Last names).
- A copy of a government issued ID (such as a current passport or driver's license).
Provide the information page of the government issued ID showing full name, date and place of birth. The ID should not be expired. If the documents are not in English, provide a notarized translated copy of the document. Ensure that copies are clear and legible.
- A list of all alternative names and aliases (AKA, also known as).
- Date of Birth.
- Address.
- Nationality.
- Contact info: email / phone number.
- Agreement between user and representative/entity.

On-boarding

On-boarding external users

On boarding process for external entities and users

CATS – Carbon Assets Tracking System. The World Bank

<https://cats.worldbank.org/>

Data Privacy Consent Form

CATS – Carbon Assets Tracking System. The World Bank

<https://cats.worldbank.org/>

*Information and documents requested for external entities/com	
Item	Description
Name of the entity/com	
A copy of an official c related to the entity/c registration (attached).	
Information on entity/company's c (who owns the compan	
Website address for the entity/company.	
How long the entity/ has been in existence.	
Names and addresses o branches of the entity/c and the names and add related or subsidiary entities/companies.	
Authorized repre identification (attached)	
* Information and documents requested for external users (
Item	Description
Full Name (First, Middle, Last names).	
Copy of a government issued ID (such as a current passport or driver's license). <i>Provide the information page of the government issued ID showing full name, date and place of birth. The ID should not be expired. If the documents are not in English, provide a notarized translated copy of the document. Ensure that copies are clear and legible.</i> (attached).	a. Government issued ID b. Passport c. Driver's license d. Other: (to specify)
List of all alternative names and aliases (AKA, also known as).	1. 2. 3. 4.
Date of Birth (Month / Day / Year)	
Address (complete)	
Nationality	
Contact info: email	
Contact info: phone number (national code included)	
Authorization to the user by the authorized entity representative (attached)	
Proposed role (transaction processor, approver, viewer)	

The International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Center for Investment Dispute Settlement (ICSID)] (together the "World Bank" or "Bank", "we" or "us") respect your concerns about privacy. For further information, please read the [privacy notice](https://www.worldbank.org/en/about/legal/privacy-notice), a copy of which can be found here: <https://www.worldbank.org/en/about/legal/privacy-notice>.

I hereby give my consent to the processing of my personal data to the extent necessary for the on-boarding process of external users and the consequential Integrity Due Diligence processes¹ in CATS (Carbon Assets Tracking System), the Emission Reduction (ER) Transaction Registry Platform operated by the World Bank. Both processes are explained in detail in the Operational Guidelines, a copy of which can be found here: <https://cats.worldbank.org/html/knowledge.html>.

All my personal data and related documents will be treated as strictly confidential except for that information that could be publicly shared according to the Terms and Conditions of this service (Article XX. Confidentiality; Disclosure and Sharing of Confidential Information), a copy of which can be found here: <https://cats.worldbank.org/html/knowledge.html>.

By doing so, I authorize the Bank to use the information provided in the CATS On boarding form (external user data) and associated documents (i) government issued ID (ii) agreement between user and representative/entity, for the purposes set out above;

I do not consent to the processing of my personal data for the purposes described above.

(Select only one option)

Signature

Signed by (complete name in cap. letters): _____

Date (month/day/year): _____

The Bank maintains appropriate technical and organizational safeguards against unauthorized processing of personal data and against accidental loss, destruction, or damage. In addition, you may withdraw your consent at any time by contacting CATS Administrator at the following email address: CATS-onboarding@worldbank.org. If you do so, we will apply your preferences going forward, immediately revoking the authorization to operate in the registry.

If you have any questions about this consent form, please contact the World Bank Chief Data Privacy Officer at the following email address: privacy@worldbank.org, indicating as subject line "Privacy Query".

¹ CATS follows the Bank Procedure that sets out the steps for Anti-Money Laundering and Combating Financing of Terrorism (AML/CFT) screening and sanction screening of transactions (Catalogue Number IVP1.04-PROC.110. Effective: April 1st, 2020). The Integrity Due Diligence checks features of external users and organizations on-boarded in CATS using WBG sanctions screening system, to gain a deeper understanding of the potential external users of the registry, primarily from a corruption risk management perspective and to proactively mitigate such integrity risks.

On-boarding

On-boarding external users

Process: **To create an account** (external users)

1. Once the information is received at CATS-onboarding@worldbank.org, CATS Admin checks, enters in CATS and pre-screens (IDD) the submitted information.
2. The Fund transaction processor sends an invitation email to the external user.
3. The external user receives a link to create an account on the WB cloud-based user authentication system and has to review and accept permissions to grant the WB to use external user's name and email address. External user can access now the registry by typing CATS on the URL bar, signs in and checks its profile.
4. The request is submitted for approval to CATS Admin (external user cc). Once it is approved, a notification email is sent to the external user.
5. CATS Admin assigns the role to the external user: user roles based on group membership, roles assigned to a group and each role consist of a set of permissions and the external user receive an email notification with the group membership granting access through a specific role under the program (still it is possible to edit the user profile and send a request for CATS Admin approval).

Integrity Due Diligence

Integrity Due Diligence / Sanction Screening

CATS follows 'Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) and Sanctions Screening Procedure'. Catalogue Number IVP1.04-PROC.110. Effective: April 1st , 2020.

Integrity Due Diligence checks features of external users and organizations on-boarded in CATS using WBG sanctions screening system, to proactively mitigate and manage such integrity risks.

All external registry users and their institutions (Participants, Programs - Countries, and Third-party buyers) are screened before creation and editing and daily - end of day batch process – against:

- WB internal sanction lists (WBG Debarred and Temporarily Suspended firms and individuals, WBG Corporate Procurement Non-Responsible Vendors, and World Bank Corporate Risk Profile Database - CRPD - watchlist) and
- Major external sanction screening lists (Consolidated United Nations Security Council (UN) sanctions list, United States Office of Foreign Assets Control (US OFAC) – SDN and Non-SDN Consolidated lists, European Union Consolidated (EU) list of sanctions, and United Kingdom HM Treasury's Consolidated (UK) list of financial sanctions targets) using Lexis Nexis (LN) Bridger Insight.

Integrity Due Diligence

Integrity Due Diligence / Sanction Screening

CATS will initiate a Sanctions Screening Plus API call to Lexis Nexis right after CATS Admin approve the complete request submitted by the Fund transaction processor.

If LN returns the call with a no hit, then the external user/entity will be created;

(i) a pop-up confirmation message will be displayed at the Admin's screen, (ii) a notification approval e-mail message will be sent to the fund transactions processor, (iii) an external user/entity profile and accounts will be created, and (iv) the audit-log report will be updated.

On the contrary, if a hit is found,

(i) a pop-up notification message will be displayed and then (ii) the external user/entity onboarding request will be listed as pending for approval tab and (iii) a case under IDD Management is created (Open Cases Tab) . The external user/entity is sanctioned and/or have negative news/substantial risk associated with it, and CATS will flag the external user/entity creation request with a red banner that reads "Due Diligence Block".

Until the case is resolved, users/entities will be frozen, and all their accounts will be blocked, so no one will be able to initiate transactions from or to the frozen account.

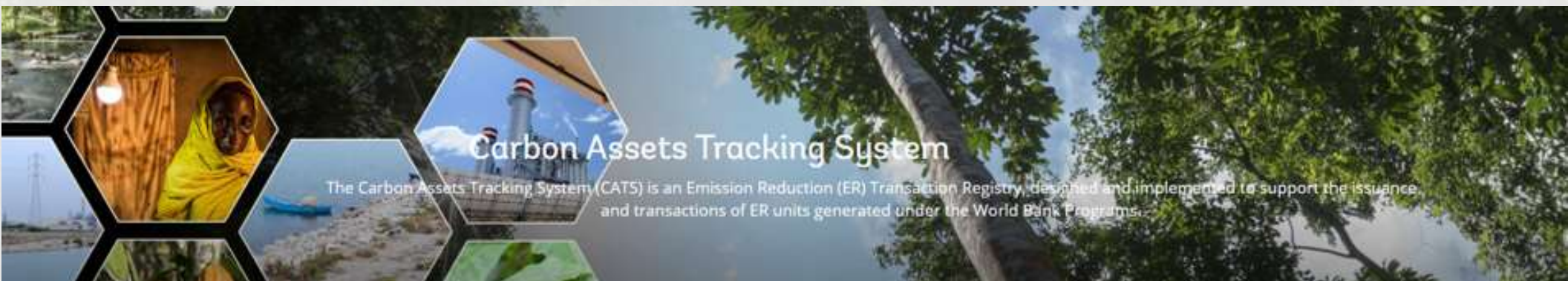
Integrity Due Diligence

Sanctions List	Individual Business Unit	WFATA AML/CFT team	WFA AML/CFT Coordinator	WFAVP	INT	Corporate Procurement
External Sanctions Lists (Confidence Score 100 or True Hits)	Recommender	Recommender	Adviser	Decider		
External Sanctions Lists (False Hit under Confidence Score 100)	Decider					
Debarred & Suspended Firms or Individuals	Decider				Adviser	
CRPD	Decider				Adviser	
Non-Responsible vendors	Decider					Adviser

Materials

- ❑ Operational guidelines, User manual and Terms & Conditions: <https://cats.worldbank.org/>
- ❑ 26 detailed videos explaining step by step all the transactions in CATS.

#	Subject	Link
1	Core Functionality	https://vimeo.com/547757983/a05656a008
2	Core Functionality Transactions Scenario	https://vimeo.com/547758126/d1b5e80ea1
#	Subject	Link
External users	1 External Users Onboarding	https://vimeo.com/514427903/a364924d4a
	2 Issuance	https://vimeo.com/514428053/31acf14e7f
	3 Uncertainty Buffer	https://vimeo.com/514429022/e6fcdb045f
	4 Reversal Buffer	https://vimeo.com/514428433/4e0ef49e21
	5 Pooled Reversal	https://vimeo.com/514428262/74f0a79f27
	6 Transfer	https://vimeo.com/514428611/a5f8a705d5
	7 Transfer back	https://vimeo.com/514428825/5f8ce657f6
	8 Retirement	https://vimeo.com/547580135/5f83057c97
	9 Cancellation	https://vimeo.com/514427796/a8494d54a0



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#	Subject	Link
#	Subject	Link
1	Fund Creation	https://vimeo.com/547760809/e19fda61ee
2	Participant Creation	https://vimeo.com/547760967/053cec3a8e
3	Program Creation	https://vimeo.com/547761050/d4ae287e3e
4	Third-Party Creation	https://vimeo.com/547761144/a57bc86ead
5	Tranche Creation	https://vimeo.com/547761199/5d363b1eb5
6	ERPA Creation	https://vimeo.com/547760871/4a228ee471
7	Donor Agreement Creation	https://vimeo.com/561973895/879d8701f0



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- ❑ 26 detailed videos explaining step by step all the transactions in CATS.

#	Subject	Link
#	Subject	Link
1	Recording Units	https://vimeo.com/561980202/18a6a60db2
2	Close Tranche	https://vimeo.com/561982813/e068fe91e7
3	Purchase Units	https://vimeo.com/561983572/b109654c37
4	Allocation to Participants	https://vimeo.com/561980608/4c9a4f26e0
5	Allocation to Programs	https://vimeo.com/561981461/8f92615ab4
6	Forwarding	https://vimeo.com/561983103/34664378fa
7	Release of Buffered Units	https://vimeo.com/561982407/1beaaa5f05
8	Cancellation of Buffered Units	https://vimeo.com/561981952/3f08ae65ef



Materials

Carbon Assets Tracking System x +

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WHO WE ARE WHAT WE DO WHERE WE WORK UNDERSTANDING POVERTY WORK WITH US

Carbon Assets Tracking System

The Carbon Assets Tracking System (CATS) is an Emission Reduction (ER) Transaction Registry, designed and implemented to support the issuance and transactions of ER units generated under the World Bank Programs.

Who We Are

We are a multi-disciplinary team of experts from the climate change fund management, information technology, environmental and international law, who have contributed towards this initiative.

[KNOW ABOUT US](#)

Login to Our Portal

Do you have an account with us? Login to see your asset generation and reports of your portfolio.

[LOGIN](#)

Knowledge Center

CATS team has created a normative framework for the Transaction Registry. Under this section CATS team provides a complete list of registry related information.

[KNOWLEDGE CENTER](#)

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REPORT FRAUD OR CORRUPTION



THANK YOU!

Dr. Julian Gonzalo

Senior Carbon Finance Specialist - SCCFM

Climate Change

jgonzalojimenez@worldbank.org