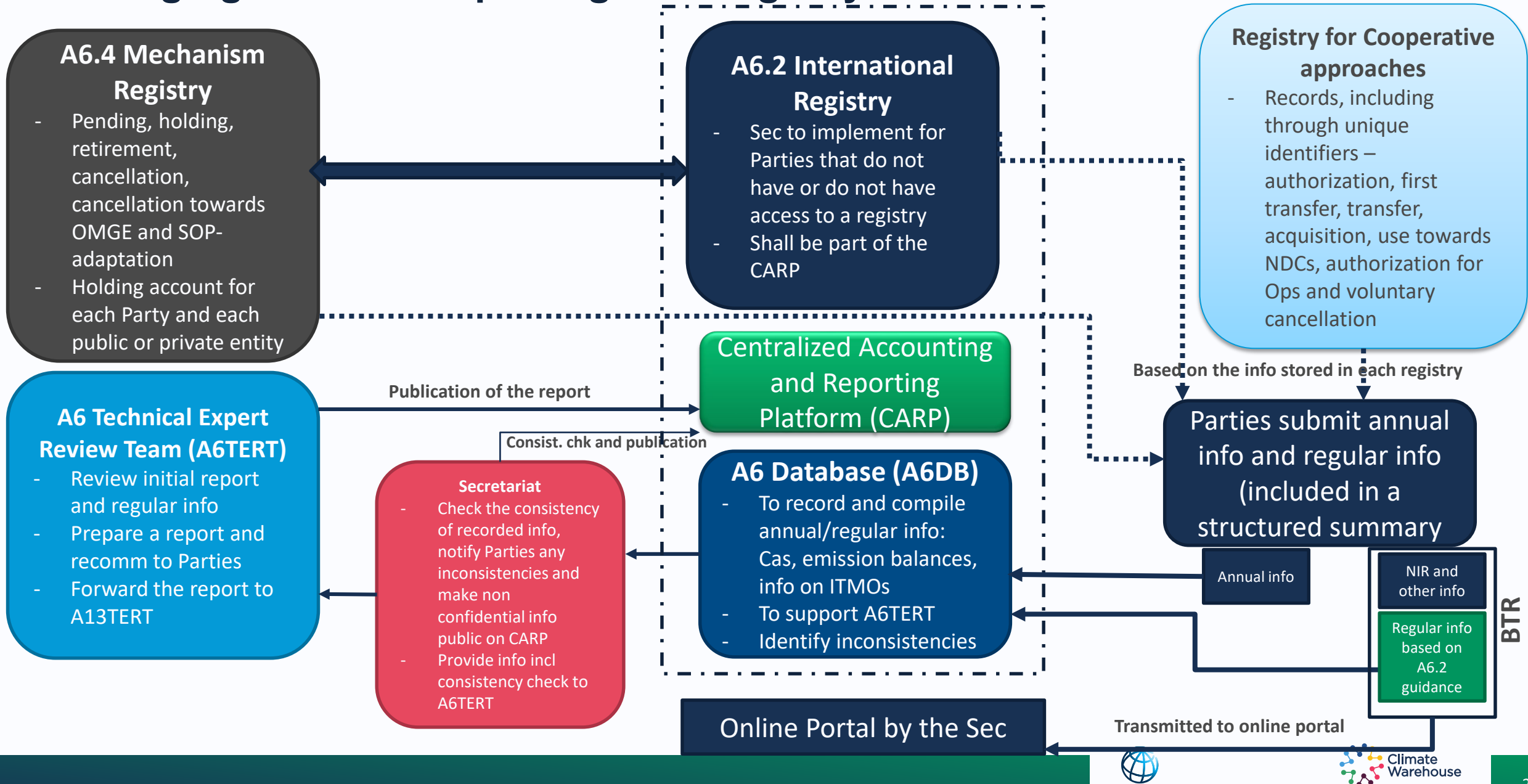


# Capacity Building Support for Countries on Reporting Requirements under Article 6

**Hari Gadde**  
**World Bank**

**Oct 18, 2023**

# Emerging Article 6 Reporting and Registry Infrastructure

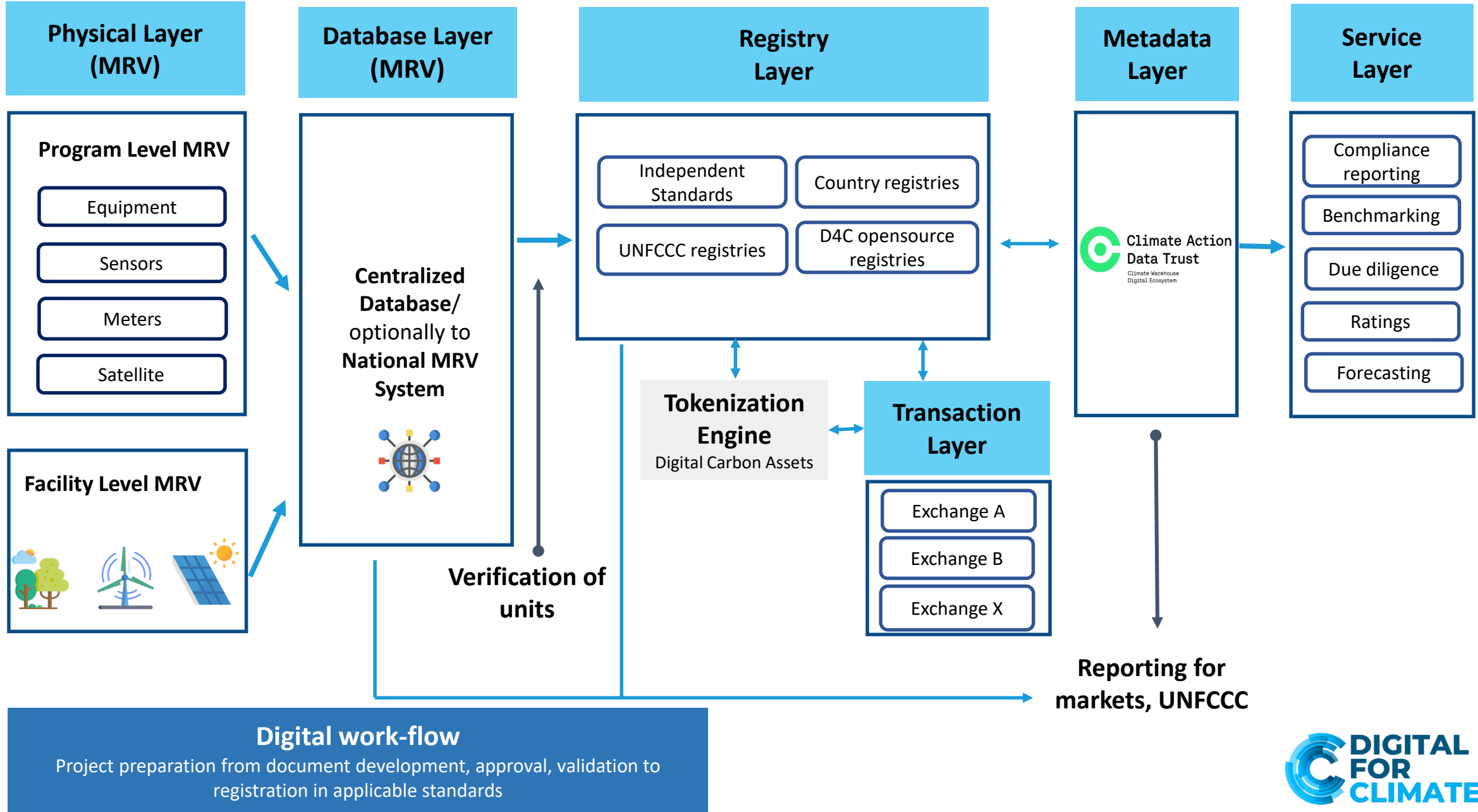


# Reporting Requirements Versus Infrastructure

	Required Information	Supporting Infrastructure	Reporting and Frequency
<b>Initial Report</b>	NDC quantification (in tCO <sub>2</sub> and non-CO <sub>2</sub> metric), measurement metric for ITMOs, CA process, and proposed cooperative approaches	GHG Inventory (for NDC Quantification)  No infrastructure needed for other information	One-time Initial report to the secretariat before 1 <sup>st</sup> transfer under any cooperative approach.
<b>Yearly Information on ITMOs</b>	Authorization(s), transfers, cancellation, use towards NDC, or other international purposes	Registry (National, Regional, or International)	Annual electronic submission
<b>Biennial Transparency Report (Cooperative Approaches)</b>	For each cooperative approach, annual information on corresponding adjustments, any updates to information submitted for previous years  How each cooperative approach mitigates GHG emissions, contributes towards implementation of the NDC, etc.	Registry (National, Regional, or International)  DMS	Every two years (as part of Biennial Transparency Report)
<b>Biennial Transparency Report (GHG, MO, and ITMO balances)</b>	Annual information on changes in emissions and removals from sectors and GHG covered by the NDC  Quantity of ITMOs first transferred (annual and cumulative), quantity of mitigation outcomes labelled	GHG Inventory (change in GHG emissions)  Registry (Quantities of ITMOs)	Every two years (as part of Biennial Transparency Report)

# Carbon Market Infrastructure Framework – End-to-End Digital Ecosystem For Carbon Markets

**Digital Methodology**  
 Digitalization of Methodologies: smart contract toward the digitization of the mitigation activity cycle



# Early Observations of Carbon Markets Infrastructure Implementation

## Understanding technical and functional needs

- ▶ **Gaps and needs assessment:** assess the technical and functional requirements for registry and/or MRV systems; process management, accessibility and interoperability; data models and frequency, etc.
- ▶ **Best practices still to be established:** Few lessons learned about development and deployment of registry and MRV systems

## Assessment of capacity-building needs

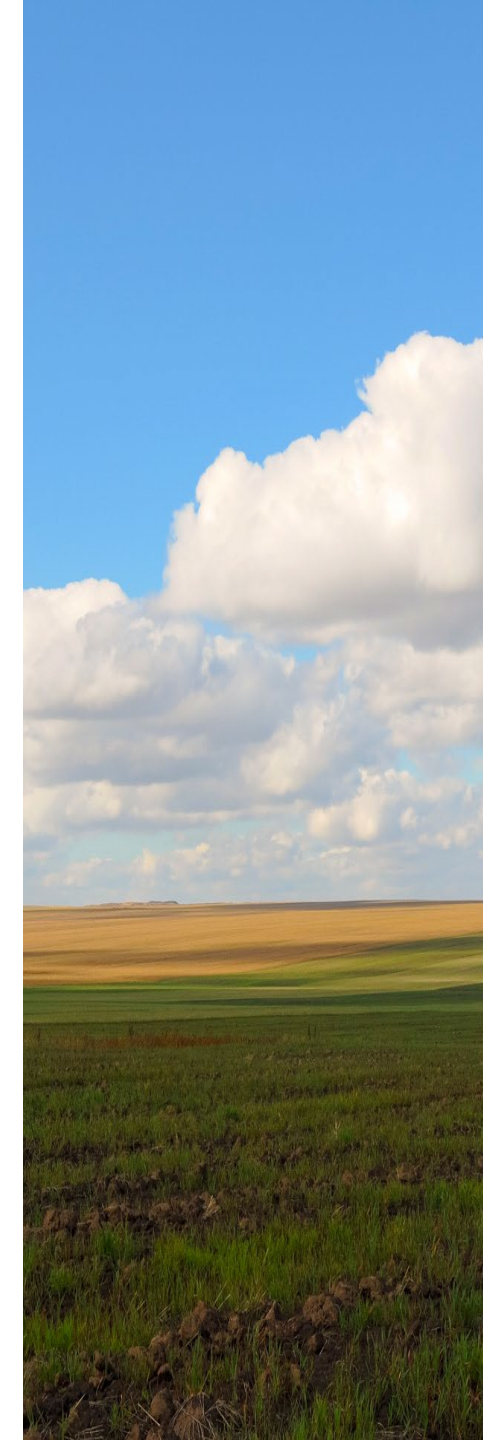
- ▶ **Expertise requirements:** Assessing the technical skills and expertise required within the organization for adopting registry and MRV systems
- ▶ **Infrastructure requirements:** Conduct a comprehensive analysis of infrastructure requirements for the readiness of operating registry and MRV systems

## Assessment of regulatory and policy requirements

- ▶ **Review the regulatory, administrative, and institutional landscape** related to registry and MRV systems. Assess the alignment of current policies with the goals registry and MRV systems adoption and identify implementation actions, as well as barriers or gaps that may hinder the transition

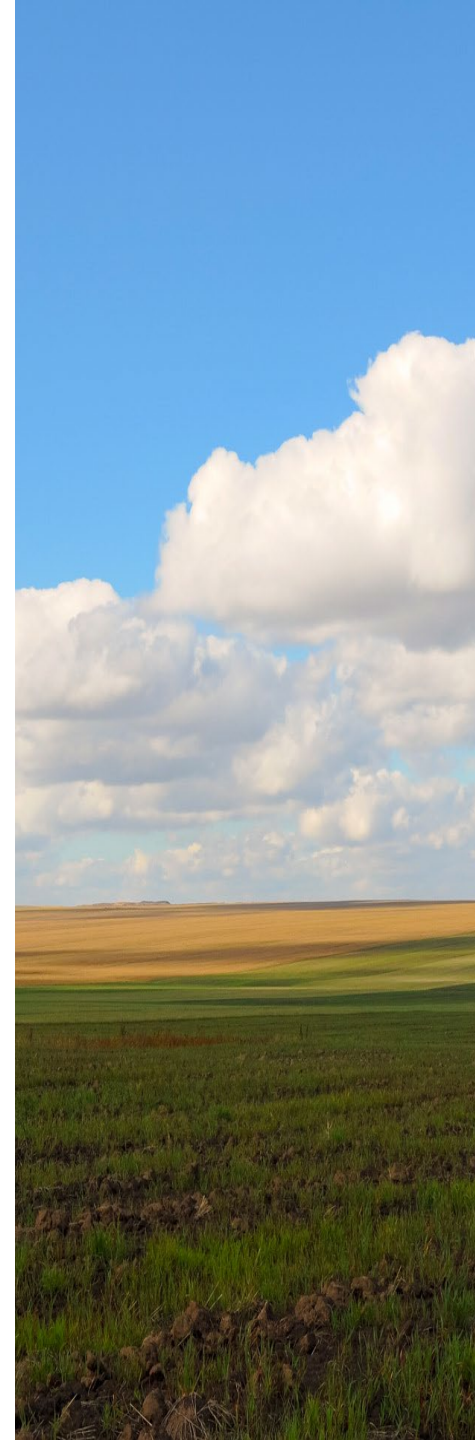
## Assessment of implementation and deployment costs

- ▶ **Development Plans:** Assess whether to develop a new system, strengthen the existing one, or add new functionalities.
- ▶ **Deployment & Maintenance Requirements:** Determine the requirements for deployment and maintenance.



## Country requests on support on initial report

- Prior work needed to support report preparation (authorization requirements, corresponding adjustments and methods etc)
- Level of details to be provided in the report and the timing
- Relationship between different reporting requirements (BTR, regular report, annual report, inventories etc)
- Support structures to be put in place (institutional, policy, legal)
- How the infrastructure support the Bank provides can integrate these reports
- Capacity building to develop







# Highlights - Carbon Market Infrastructure Knowledge Base

## Websites

- [Website: Climate Warehouse Program](#)
- [Website: Digital for Climate \(D4C\) Working Group](#)
- [Website: Climate Warehouse Library – Open Learning Campus \(OLC\)](#)

## Webinars:

- [Bonn SB58 Climate Change Conference](#) (2023)
- [I4C: D4C: Building an End-To-End Digital Ecosystem for Carbon Markets](#) (2023)
- [Asian Climate Summit- Building a Robust Data Infrastructure for Carbon Markets: Launch of the Climate Action Data Trust](#) (2022)
- [COP 27: Digital MRV for inclusive climate action](#) (2022)
- [COP 27 - Enhancing integrity in carbon markets through the Climate Warehouse End to End Digital Infrastructure](#) (2022)
- [I4C Webinar: Climate Warehouse: End-to-End Digital Ecosystem for Carbon Markets](#) (2022)
- [CAD Workshop: A meta-data infrastructure to support transparency and integrity of climate markets](#) (2022)
- [Webinar: Climate Warehouse: A Meta-data Infrastructure to Support Transparency and Integrity of Climate Markets](#) (2022)
- [I4C Webinar: Is Blockchain/DeFi the Future for Carbon Credits?](#) (2022)
- [Workshop: Building an enabling environment for operationalizing Article 6](#) (2021)
- [Webinar: Benchmarking A Global Price For Carbon.](#) (2021)
- [Webinar: Emerging Digital Technologies for Post-2020 Climate Markets](#) (2020)

## Blogs:

- [Blog Post: Why Data Infrastructure is Key for a Carbon Market](#) (2023)
- [Blog Post: Carbon Markets: Why Digitization Will Be Key to Success](#) (2022)
- [Blog Post: Lessons from creating mitigation outcomes](#)(2021)

## Reports:

- [Final Report: Climate Warehouse Simulation III \(Report\)](#) (2022)
- [Summary Report: Simulation II – the Connecting Climate Market Systems](#) (2022)
- [Summary Report: Simulation I – Connecting Climate Market Systems](#) (2019)
- [Report: Digital Reporting, Monitoring and Verification Systems](#) (2022)
- [Blockchain and Emerging Digital Technologies for Enhancing Post-2020 Climate Markets](#) (2018)

## Technical papers:

- [Test Scripts: Simulation III](#) (2022)
- [Technical Guide for Testing: Simulation III](#) (2022)
- [Data Model: Simulation III](#) (2022)
- [Chia White Paper: Blockchain technology for the Climate Warehouse](#) (2021)
- [Article 6 Approach Paper Serie](#) (2020)

## Videos:

- [Net Zero: The Integrity Pathway](#) (2022)
- [Climate Warehouse: Helping countries leverage climate markets and carbon pricing](#) (2022)
- [Demo: Climate Warehouse Simulation II](#) (2021)

## Data visualization:

- [Tool: How do we ensure environmental integrity under the Paris Agreement?](#)



