



CAD Trust Glossary

- CAD Trust:** Climate Action Data Trust (CAD Trust) is a decentralised metadata platform that links, aggregates, and harmonises major carbon registry data to enhance transparent accounting in line with Article 6 of the Paris Agreement. The CAD Trust's open-source metadata system uses blockchain technology to create a decentralised record of carbon market activity with the aim of avoiding double counting, increasing trust in carbon credit data, and building confidence in carbon markets.
- Data:** Data' in the context of the CAD Trust platform primarily refers to comprehensive information related to carbon credits. This includes detailed records of carbon projects, each of which is meticulously documented with information about project types, locations, and methodologies. Additionally, the platform provides extensive data on carbon units including their issuance details. This data is integral to the operation of the carbon market, providing transparency and facilitating informed decisions for all stakeholders involved in carbon markets.
- Metadata Layer:** A blockchain-based platform that aggregates data from various registries through an open-source model. Carbon registry data is stored locally by a member (in this case, registries and governments), while proofs of the data are stored on the blockchain with URLs that can be used to fetch the stored data.



4. **Data Dashboard:** The Data Dashboard (or Public Observer Node) is a public-facing interface of the CAD Trust metadata layer.

5. **Common Data Model:** A common data model has been agreed upon and consulted with several governments, international organisations, and market players. It constitutes 85 data sets that are essential for providing the most vital carbon registry data to all market players under a shared taxonomy.

6. **Service Layer:** The Service Layer represents a robust connection to the CAD Trust metadata layer, leveraging an API. This connection type is particularly advantageous for large-scale users who require regular and intensive access to data. It facilitates seamless integration, ensuring efficient and reliable data retrieval and management. Ideal for organisations seeking to maximise their interactions with CAD Trust metadata, the Service Layer offers a scalable and secure solution for handling extensive data requirements with ease.

7. **Open-Source Model:** The Climate Action Data Trust is delivered as open-source software, meaning there are no fees associated with obtaining the CAD Trust application, apart from a very low XCH blockchain fee to submit transactions. Open-source software is software with source code that anyone can inspect, modify, and enhance, allowing developers to read, view, and change the software's code, in contrast to proprietary software, where only the original developers can legally alter the code.

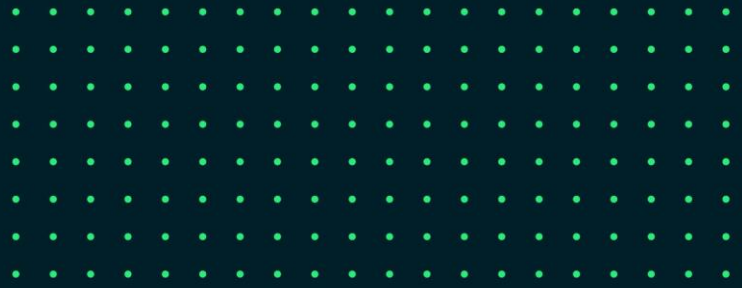


8. **Distributed Ledger Technology:** Distributed Ledger Technology (DLT) is a digital system for recording the transaction of assets, where the transactions and their details are recorded in multiple places simultaneously. Unlike traditional databases, distributed ledgers have no central data store or administration functionality.

9. **Chia Blockchain:** The Chia Blockchain ensures transparency and credibility in the process of registries providing access to their data. This is done from an infrastructure perspective that assures security and sustainability and allows for multiple uses. The CAD Trust code is open source, offering complete transparency: sellers of carbon credits can search for carbon offset projects, and civil society may follow what is happening in their region and who is involved in these projects. Chia designed a more sustainable blockchain, offering globally inclusive access to those farming—Chia blockchain’s version of mining—and to the broader financial system.

10. **Chia Data Layer:** The Chia Data Layer is a shared data network without a central authority. Carbon market data is stored locally by a member (in this case, registries and governments), while proofs of the data are stored on the blockchain with URLs that can be used to fetch the stored data. Members in this network can subscribe to data from other nodes and receive updates whenever the data changes. They can compare the received data to the proof on the blockchain to confirm that the data is correct.

11. **Independent Standard:** An independent carbon market standard is a framework developed by non-profit organisations to ensure the quality, transparency, and credibility of carbon offset projects. These standards play a crucial role in the voluntary carbon market, where entities buy carbon credits to offset their greenhouse gas emissions.



12. **Carbon Registry:** A carbon registry is a database that tracks the ownership, issuance, retirement, and transfer of carbon credits. It maintains comprehensive records of each carbon credit, detailing the specific project that generated it, as well as the entities that have purchased, sold, or retired these credits.

13. **National Registry:** A National Carbon Registry is essential infrastructure for any country engaged in carbon trading and offset mechanisms under the Paris Agreement, particularly for implementing Article 6. It ensures the integrity, transparency, and efficiency of national and international efforts to reduce greenhouse gas emissions.

14. **Registry Connection:** The process of installing the CAD Trust software and broadcasting registry data to the network.

15. **Data Activation:** The assessment process each registry needs to undertake before its data can appear in the public dashboard, available on the CAD Trust website.

16. **The Climate Warehouse Digital End-to-End Ecosystem for Carbon Markets:** Managed by the World Bank, the Climate Warehouse program connects several digital tools and products into an end-to-end carbon markets' digital ecosystem under the requirements of the Paris Agreement. The Climate Warehouse End-to-End Digital Ecosystem for Carbon Markets includes infrastructure such as digital MRV systems, open-source national carbon registries, tokenization instruments to issue and track digital carbon assets, and the Climate Action Data Trust.



17. **Article 6 Implementation:** Article 6 is a critical component of the Paris Agreement, facilitating voluntary collaboration between countries to meet their emission reduction goals outlined in their Nationally Determined Contributions (NDCs). It includes:

- **Article 6.2**, which lays the foundation for cross-border trading of greenhouse gas (GHG) emission reductions.
- **Article 6.4**, expected to resemble the Clean Development Mechanism of the Kyoto Protocol, governing GHG emission reduction trading between countries under international supervision.
- **Article 6.8**, focusing on non-market strategies for mitigation and adaptation, such as financial cooperation, technology transfer, and capacity building, without trading emission reductions. Article 6 directly impacts the formation of global carbon markets compliant with the Paris Agreement, allowing nations to trade carbon credits. It stipulates that emission reductions, once approved for transfer by the selling country, can be sold to another country, but only the buying country may count the reduction toward its NDC.