Climate change represents an existential threat to humanity and will require the greatest mobilization of resources and collaboration in human history. In this effort, the Climate Action and Accounting Special Interest Group (CA2SIG) is focused on supporting the development of an open global climate accounting system to support stakeholders’ efforts to manage our single planetary carbon budget and help achieve the goals of the Paris Agreement (the United Nation’s global climate accord). To accomplish this, the CA2 SIG is fostering a collaborative network of stakeholders to explore how to use digital technologies such as blockchain DLT, open source software, AI, IoT, Big Data, machine learning, etc. to create a transparent climate accounting system that is capable of balancing global climate emissions against global climate actions in order to achieve a net-zero carbon future.

Get involved

Hyperledger, as part of the Linux Foundation, is an open source community and anyone who is interested is welcome to contribute to projects, share expertise, or engage with the group to learn about the emerging climate accounting ecosystem. See the contributions opportunities we have for everybody!

Mission and Goals

Our mission is to bring stakeholders together to look at climate related use cases, technologies, frameworks and partnerships needed to build a global and open climate accounting system to support stakeholders’ efforts to achieve the goals of the Paris Agreement (the United Nation’s global climate accord) and to support implementation of the recommendations of the Task Force for Climate-related Financial Disclosure (TCFD), among various initiatives. The SIG encompasses the wide array of climate actions, for example GHG management and mitigation, resilience and adaptation to climate impacts, and climate finance, including also for various types of applications (e.g. facilities, supply chains, communities, technologies, etc.).

The CA2SIG is fostering a collaborative network of climate, DLT, and other emerging technology organizations (i.e. universities, NGOs, government, startups, corporations, multilateral development banks, etc.) that can create a center of gravity around the role of DLT and open source software to address challenges in the global climate action, policy and digital accounting space. A focus point of the SIG would be to turn this network into action under a common open source project that defines shared protocols, standards, and platform tools for a globally integrated climate accounting system to be operationalized. This open climate project can act as a shared initiative where participants can contribute value to and share explorations in the use of DLT alongside other emerging technologies such as IoT (Internet of Things), big data, and machine learning to address the challenge of keeping a transparent climate accounting system towards the climate targets set in the 2015 Paris Agreement.

The community will take initiative to specifically address:

- Compilation of completed, ongoing, and proposed future activities related to blockchain for climate action & accounting
- Directory of organizations and initiatives involved with blockchain and the climate space (map of organization location, contact person, description, website, etc.)
- Consolidate the architecture of an integrated system, involving multiple blockchain mechanisms connected through shared protocols, allowing contractual automation in the link between finance and climate value flow based on the agreed physical parameter of the Earth system
- Identify Hyperledger tools and frameworks to develop and maintain a single record-keeping ledger with global consensus (i.e. a ‘ledger of ledger’ where all parties agree)
- Propose and define shared protocols and standards to allow interoperability across the climate accounting system and integrated platforms

How to Get Involved

This is open source special interest group is open to anyone that is interested in contributing. Below we’ve provided some recommendations to help you get started.

- Sign-in and sign-up
- Get up-to-speed
- Contribute as a non-technical member
- Contribute as a technical member/developer
- Mentorship Opportunities
- Make a Video
- Tell us your climate idea!

Communications Channels

These are the mechanisms that this working group uses to communicate:

**Mailing List**

- You can post to the list by emailing climate-sig@lists.hyperledger.org
- Subscribe to the list to receive emails
- Archives contain past list messages

**Chat Channel**

Talk to people in the group on Hyperledger’s chat server at:

#climate-action-sig

Recent Climate SIG Content

- Blog Post Climate Change Action: Five Ways to Get Involved in Our Global Climate Accounting Efforts
- Blog Post Help Us Scale Up Our Operating System for Climate Action
• Compilation of best practices, lessons learned, and recommendations to stakeholders (policymakers, technology developers, etc.)
• Supporting events (e.g. at blockchain and climate conferences such as COP) and related activities for collaboration among members and stakeholders
• Propose, discuss and define a longer-term strategic vision of an open innovation consortium that can help steward, fund, and maintain an open source climate action and accounting project and system

Meetings

There are also regular community calls that you can dial-in to. See the Meetings information to your left for more details.

Scope

The scope of the SIG is defined by the terms climate action and climate accounting.

Climate Action is a broadly encompassing term that involves all climate-relevant actions (e.g. policies, programs, technologies, goods, services…) taken by actors (e.g. states and non-state actors such as businesses, cities, individuals…) — from emission generating activities, to the broad set of actions encompassed within climate mitigation and adaptation and its associated finance mechanisms.

Climate Accounting, on the other hand, is referred to here as the encompassing term that involves all processes of recording climate-relevant information/data — from the physical state of the planet to the list of all climate actors, their broad set of climate actions and agreements in respect to the shared account of the climate challenge.

Whilst climate action occurs in the real world, climate accounting is recorded in the digital world.

This SIG will help build the relationship between both and consolidate technological tools to do so.

Meetings

All Hyperledger meetings are run covered by the following Antitrust Policy.

Recent space activity

Si Chen
- Decarbonization DAO updated yesterday at 11:19 PM
- View change

Oil & Gas Methane Emissions Reduction Project commented yesterday at 7:36 PM

Bertrand Hiox
- Oil & Gas Methane Emissions Reduction Project commented yesterday at 1:54 PM
- Oil & Gas Methane Emissions Reduction Project commented yesterday at 1:54 PM

Si Chen
- Supply Chain Decarbonization Project commented yesterday at 12:27 AM

Space contributors

• Si Chen (9 hours ago)
• MA Howard (1 day ago)
• Christiaan Pauw (2 days ago)
• Wai Kit Edward Sze (2 days ago)
• David Boswell (5 days ago)
• ...

Leave the below sections for all space types.
This can be a good reference on how to measure Climate Change Action. Source: Boston Consulting Group.