

# Public Response to UNFCCC Recognition & Accountability Framework

## CLIMATE ACTION DATA 2.0 COMMUNITY

### About the CAD2.0 community

The Climate Action Data 2.0 (CAD2.0) Community is an open community of climate data experts committed to developing open, standard, digital tools and approaches that enable ambitious climate action. The community meets monthly, is co-convened by Open Earth Foundation and Data-Driven EnviroLab, and a CAMDA workgroup (more details on our website: <https://wiki.climatedata.network/>). At COP26 the CAD2.0 community declared its intention to enhance the credibility of non-state climate action taken by subnational governments, private businesses, investors and organizations.

In this comment to the proposed Non-Party Actor Recognition & Accountability Framework (RAF), we emphasize the need to leverage digital technology to enhance non-state climate actor data, tracking, and transparency. The digital age has long since arrived, and the UN Climate Secretariat and RAF should fully take advantage of all of the efficiency and scale opportunities that technologies like machine learning, generative artificial intelligence (AI), earth observation, among others, provide. The private sector and large technology companies like Google and Microsoft are moving quickly in this space, and the UNFCCC's RAF risks being vastly incomplete and ineffective if these tools and approaches are not considered in its design and implementation.

Any data reporting platform and its underlying components - data infrastructure (e.g., software, metadata, data model or communication protocols) and data inputs themselves - should be developed transparently and made publicly available. They need to be open-source, interoperable (e.g., able to seamlessly exchange information between platforms), and actionable for the public while preserving data privacy for competitive business. Our community is well aware that many platforms aim to quantify non-state actor (NSA) climate action data. We respond positively to the RAF'S aims to ensure that NSAs will have a framework for which to feed into the UNFCCC's accountability and recognition processes. However, we also would like to urge the UN Climate Secretariat to take steps to ensure the longevity and effectiveness of the framework.

### General Considerations

There is a lack of capacity, financial resources, and coordination for regular data collection and reporting of non-state actor (NSA) climate data. **NSA information is crucial for meeting the nationally determined contributions (NDCs)** to the Paris Agreement, yet NSA data and accounting frameworks

are scattered. To respond to this challenge, the CAD2.0 community has **developed a nested climate accounting infrastructure for data stocktaking**<sup>1</sup> and an **open data model to facilitate interoperability between diverse NSA datasets**<sup>2</sup>. We encourage the UNFCCC and RAF to build from this work, particularly the open data model, which already identifies key data points necessary to evaluate the state and progress of NSA climate action. Additionally, we urge those developing the RAF framework to consider the capacity building necessary **to bridge the data and digital infrastructure gap**, particularly in the Global South. Since many national governments<sup>3</sup> have adopted or are considering mandatory corporate disclosure regulations, the UNFCCC and RAF should consider how to best align with these efforts to **lower reporting burdens for NSAs, while streamlining reporting standards and practices across the board**.<sup>4,5</sup> For NSAs in the Global South, building data capacity and leveraging digital technologies such as Earth Observation data and utilizing AI/ML to estimate emissions inventories can go a long way in filling data gaps.<sup>6,7</sup> **Building upon the current norms and best practices in voluntary reporting can lead to more streamlined mandatory reporting**. Finally, as a community we would like to see the RAF **prioritize pragmatism and speed** in delivery of an approach.

## Specific Recommendations

- Encourage a digital 'data commons' that enhances data flow, efficiency, security, and ingestion across different frameworks. We define a digital commons as a database that provides granular information as a common pool resource for further analysis.
  - Open, transparent architecture, data model, and documentation
  - Metadata standardization: common practice for metadata standardization should be adopted to enhance data consistency and comparability.
  - Strongly prefer seamless data integration flows such as APIs to encourage real-time, best available data
  - Enable data for NSAs to be connected not collected

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<sup>1</sup> Schletz M, Hsu A, Mapes B and Wainstein M (2022) Nested Climate Accounting for Our Atmospheric Commons—Digital Technologies for Trusted Interoperability Across Fragmented Systems. *Front. Blockchain* 4:789953. doi: 10.3389/fbloc.2021.789953

<sup>2</sup> <https://github.com/Open-Earth-Foundation/OpenClimate/blob/develop/api/schema/README.md>

<sup>3</sup> A few examples of countries with corporate disclosure regulations, include France (Article 173 of the Law on Energy Transition for Green Growth requires institutional investors and asset managers to disclose climate-related risks and carbon footprint of their portfolios; (Government of France, 2015); the UK became the first G20 country to mandate Britain's largest businesses to disclose climate-related risks in line with the Taskforce on Climate-related Financial Disclosures (UK Government, 2021). The EU's Non-Financial Reporting Directive (2014/95/EU) requires large companies to disclose information on environmental performance, including climate-related risks and greenhouse gas emissions (EU Parliament, 2014). China has also implemented mandatory environmental, social, and governance disclosure (Thomson Reuters, 2022).

<sup>4</sup> Mol, A. P. J. (2008). *Environmental reform in the information age: The contours of informational governance*. Cambridge University Press

<sup>5</sup> Hsu, A., & Schletz, M. (2023). Digital technologies – the missing link between climate action transparency and accountability? *Climate Policy*, 1–18. <https://doi.org/10.1080/14693062.2023.2237937>

<sup>6</sup> Anderson, K., Ryan, B., Sonntag, W., Kavvada, A., & Friedl, L. (2017). Earth observation in service of the 2030 agenda for sustainable development. *Geo-Spatial Information Science*, 20(2), 77–96. <https://doi.org/10.1080/10095020.2017.1333230>

<sup>7</sup> Belenky, L. G., Iyadomi, K., David Carevic, S. E., & Gadde, H. (2022). *Digital Monitoring, Reporting, and Verification Systems and Their Application in Future Carbon Markets*. Washington, D.C.: World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099605006272210909/idu0ca02ce8009a2404bb70bb6d0233b54ffad5e>

- Ensure the feasibility and longevity of the framework's success through sustainable finance and capacity building
  - Ensuring long-term maintenance and enhancement of any digital platforms or assets
  - Equity Considerations: acknowledge different capacities and resources available to different stakeholders by allowing for differentiated data reporting requirements and capacity building support.
  - Support the development of tools both outside and inside the UNFCCC that assist NSAs in developing emission inventories, climate action and transition plans.
  - Connect NSAs with opportunities and success stories for how to leverage a mix of financial resources, from private to public, to effectively participate and implement the RAF's requirements.
  - Ensure there is funding for communities such as CAD2.0 to provide community input from climate action data experts with a breadth of expertise and experience focused on data for public good
- Align with evolving science-based norms and standards
  - Recognition of the convergence of standards, with UNFCCC playing a convening role so that we can speed action
  - Alignment with CDP and other voluntary and/or mandatory disclosures programs for consistency and comparability.
  - Alignment with EFRAG, ISSB, ISO, and GRI reporting standards
- Build on existing work and partnerships
  - Actor and sector-specific efforts to enhance NSA data standardization and reporting:
    - PACT and WBCSD enabling consistent reporting should be considered to improve data reporting and standardization.
    - XBRL (eXtensible Business Reporting Language) data format should be considered to improve data reporting and standardization such as in financial reporting.
    - API integration of data should be considered to connect data sets together.
    - Carbon Call's work to define corporate metadata requirements for consistent target setting and reporting.
  - NSA accounting and aggregation:
    - CAMDA Climate Action Tracking: annual NSA stocktaking reports aggregating and assessing potential and actual NSA contributions to global mitigation, compared to national government efforts.

- Openclimate.network: nested climate accounting and open data model to harmonize and make NSA data interoperable.

## Supplementary Material

### Systemic barriers faced by non-state actors (NSAs) in meeting climate action goals of the Framework

- Legal Liability: Companies and organizations may face lawsuits based on the credibility of their climate commitments, leading to potential financial risks.
- Misaligned Expectations: High expectations from NSAs that are not in line with the expectations placed on governments and other parties can create barriers to effective climate action.
- Capacity Building and Data: NSAs require adequate capacity building to collect and present climate data effectively in the Global Climate Action Portal (GCAP).
- Insufficient Accounting Mechanisms: The cost and lack of reliability and credibility in accounting mechanisms can hinder climate initiatives by NSAs.
- Digital Tools and Common Data Schemas: Lack of accessible digital templates and common data schemas can impede the quick and cost-effective provision and verification of climate data.
- Standards and Expertise: NSAs may struggle with understanding and implementing climate standards and may lack the necessary expertise.
- Limited Resources: Many NSAs, especially in the Global South, face financial constraints, making regular data collection and reporting difficult.
- Governance and Coordination: Challenges in governance and coordination across different geographical areas can hinder effective climate action by NSAs.
- Data Standardization: The absence of clear, efficient, and verifiable reporting data standards can contribute to the politicization and polarization of climate-related issues like ESG (Environmental, Social, and Governance).
- Incentives and Greenwashing: The lack of adequate incentives for NSAs to invest in accountability efforts and the risk of reputational damage from greenwashing can deter meaningful climate action.
- Climate Data Access: Key information, such as emission factors, being restricted behind paywalls can hinder the progress of climate initiatives by NSAs.
- Mobile Mindset<sup>8</sup> – Incorporating mobile technology into accountability frameworks can address the limitations of traditional approaches, improve the overall quality and reliability of audits, and contribute to better decision-making processes based on real-time and accurate information.

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<sup>8</sup>James, Lowellyne. (2019). A mobile mindset. Quality Progress. 52. 40–45.

## How can the CAD2.0 community help to establish these goals?

- **Data Coverage and Recommendations:** Provide the UNFCCC with current data coverage to identify gaps and offer formal recommendations for improving climate action goals.
- **Data Provenance Guidelines:** Establish guidelines for data provenance to ensure the credibility and traceability of climate-related data.
- **Standard Definition and Adoption:** Define a unified standard to be used across non-state actors (NSAs) and advocate for the adoption of CDP data as a common approach.
- **Spatialized Data for Global Development:** Ensure data is spatialized to enable net-zero regions and promote balanced development globally, avoiding a north/south divide.
- **Accounting and Verification Concerns:** Address concerns about background accounting and verification approaches to ensure the accuracy and reliability of reported data.
- **Validation of Self-Reported Data:** Develop methods to validate self-reported data to enhance data quality and accountability.
- **Collaboration with Polluters:** Engage with polluters to inform and start a global adoption process of standards, considering lessons learned from the polarization of ESG.
- **Digital Infrastructure and Architecture:** Advocate for a digital infrastructure and architecture vision to enhance data flow, efficiency, security, and ingestion across different frameworks.
- **Common Language and Metadata:** Work on defining a common set of metadata and connecting terminologies in different taxonomies to align various standards and approaches.
- **Data Discoverability:** Enhance data discoverability by using XBRL tagging and other methods to make climate data more accessible and usable.

## What constitutes appropriate data validation for NSAs?

- **Data Provenance Tracing:** Validating data through data provenance tracing to ensure the credibility and origin of the reported information.
- **Fair and Equitable Approach:** Data validation should be conducted using a fair and equitable approach to avoid bias and discrimination.
- **Alignment with CDP Validation:** Ensuring that the data validation approach aligns with the validation methods used by the Carbon Disclosure Project (CDP) for consistency and comparability.
- **Connection to Party Validation:** Clarifying how the validation approaches for NSAs will differ from or connect to the validation processes used by national parties to maintain harmonization.

- Landscape of Technologies: Providing a comprehensive landscape of technologies available to NSAs for verifying their data, which can help enhance accuracy and transparency in reporting.

## Mapping recommendations for the Framework using an information process flow

The figure below illustrates the architecture and scope of the RAF using stakeholder mapping, information and data flow. The figure is useful to understand who the RAF applies to, what it requires and how it is expected to operate from the context of data and information into GCAP. Original diagram [available here](#).

Some recommendations mentioned above are provided in the context of the diagram: 1) Nest data from Non-State within State jurisdictions, for improved NDC tracking; 2) Ensure the RAF delivers value to Parties in their NDC fulfillments; 3) Consider incentive mechanism for NSA to deliver on the requirements; 4) Ensure support to bridge the existing gap in data, tools and capacity of NSA, particularly subnational governments, to deliver on their RAF requirements; 5) Consider the degree of fragmentation in the climate data space, and foster collaboration across data platforms; 6) Elaborate how the UNFCCC will bridge the IT, capacity and budget gap between the current state of GCAP and the one required to manage direct submissions from NSA, considering it will require multi-decade digital infrastructure maintenance.

