

Net-Zero Data Public Utility

Free. Transparent. Accessible to all.

February 22, 2024

NZDPU

Data Challenges Impeding the Transition to a Net-Zero Economy

Climate transition-related data is necessary to inform and provide transparency on the transition to a net-zero economy. However, several existing data challenges are impeding its use by key stakeholders such as financial institutions, corporates, civil society, and governments.



Climate transition-related data **lacks the granularity** needed to assess its credibility and quality

- Important calculation metadata often not available
- Lacking information related to assurance and verification



Climate transition-related data is largely **inaccessible to most entities**

- Behind paywalls
- Spread across numerous sources



Climate transition-related data **lacks comparability** across sources and entities

- Different disclosure formats
- Varied calculation methodologies
- Incomplete or missing data

A Public Utility as the Solution for Climate Data Challenges

The Net-Zero Data Public Utility (NZDPU) aims to address current climate data challenges by becoming a **trusted central source of verifiable climate transition-related data**.

Transparency

The NZDPU enables transparency through capturing key metadata around data **sources, calculation methodologies, and other key inputs**, providing users with the requisite **granularity** to assess data credibility and quality.

Availability

The NZDPU is **free for all users** and offers an attractive, **user-friendly interface** tailored to the diverse needs of various users. The NZDPU is designed to ultimately be integrated with the UNFCCC Global Climate Action Portal.

Comparability

The NZDPU's **flexible data model** aims to facilitate comparison across sources and entities by aligning its data offerings with global and regional regulatory requirements and standards.

NZDPU's Origin and Ongoing Oversight

In June 2022, French President Emmanuel Macron and UN Special Envoy for Climate Ambition and Solutions Michael R. Bloomberg created the **Climate Data Steering Committee (CDSC)** to advise on the creation of a unified, global, open climate data utility to aggregate, help standardize, and make publicly available critical climate-related data.

This led to the publication of the **Recommendations for the Development of the Net Zero Data Public Utility** in November of 2022.

The CDSC and its advisors continue to oversee the NZDPU's **ongoing and iterative development.**

CDSC Composition

Jurisdictions

- Chile
- European Commission
- France
- Ghana
- Japan
- Singapore
- Switzerland
- United Kingdom
- United States

Multinational Organizations

- Glasgow Financial Alliance for Net Zero
- International Energy Agency
- International Monetary Fund
- Network for Greening the Financial System
- Organization for Economic Co-operation and Development
- United Nations Framework Convention on Climate Change
- Financial Stability Board

Global Standard Setters

- European Financial Reporting Advisory Group
- International Organization of Securities Commissions
- International Sustainability Standards Board



Diverse Team of Experts Driving the NZDPU's Development

Climate Data Steering Committee

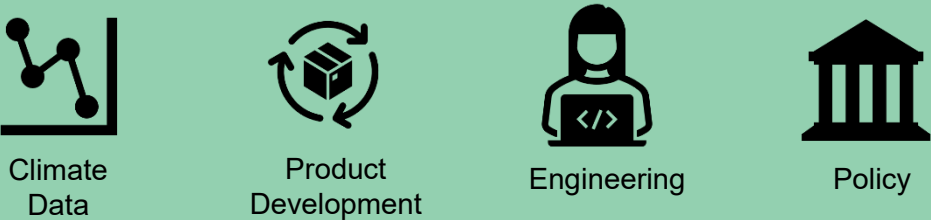
Technical Advisory Board (TAB)

The TAB provides regular feedback to the NZDPU on the implementation of the CDSC's recommendations and will provide advice to the NZDPU on the technical feasibility of any additional guidance/recommendations issued by the CDSC. The TAB is comprised of representatives from the following organizations:



NZDPU Core Team

The Core Team guides the execution of building the NZDPU platform and coordinates the implementation of the CDSC's recommendations. The Core Team is composed of experts from the following fields:



Improving Transparency and Comparability: Core Data Model

The NZDPU Core Data Model

- Covers GHG emissions and emission reduction target fields
- Contains detailed calculation metadata, enabling greater transparency
- Facilitates comparison across climate reporting standards and requirements
- Viewable at nzdpu.com

Compatibility of NZDPU Core Model with global standards (Illustrated for select Scope 1 metadata fields)

NZDPU proposes a generic Scope 1 emissions field with the emissions value shown alongside **calculation metadata** to provide transparency of differences and enable comparability

	Greenhouse Gas Types	Greenhouse Gas Methodology	Global Warming Potential Value
Standard A	Kyoto Protocol plus other gases	Greenhouse Gas Protocol or ISO	100 year timeframe
Standard B	Only Kyoto Protocol gases	Any methodology	Any timeframe
NZDPU Core Model	Any gases	Any methodology	Any timeframe

Bringing the Vision to Life via the Proof-Of-Concept

The NZDPU's proof-of-concept includes ~400 seed companies to **demonstrate the viability of the Utility** as a concept, including a **subset of its target-state information and functionality**

Core Data Model

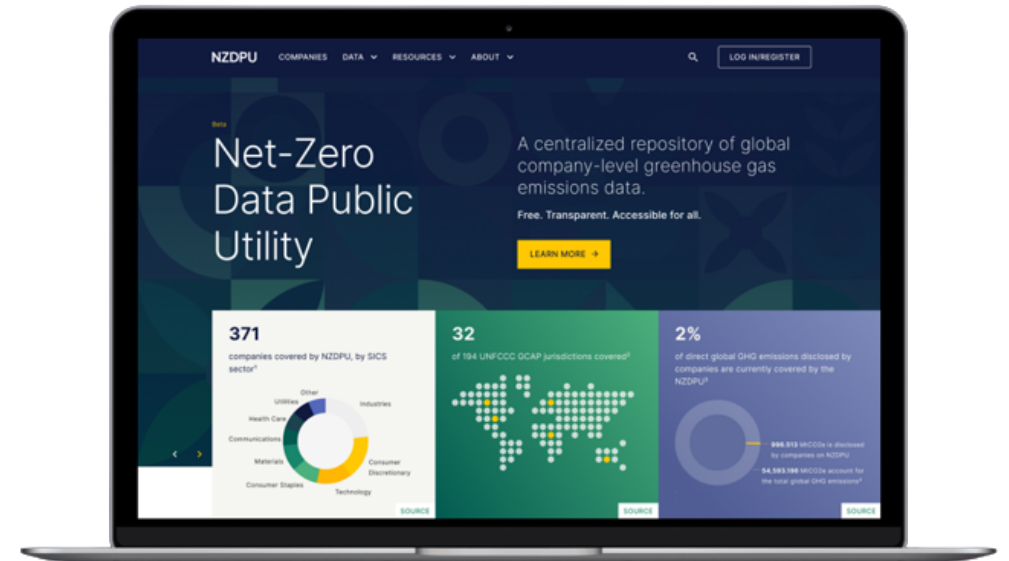
The screenshot displays a web interface for 'Reported Disclosures'. It features a table with columns for 'Reported Year', 'Data Model', 'Reporting Period', and 'Last Updated'. Below the table, there are tabs for 'SCOPE 1 EMISSIONS', 'SCOPE 2 EMISSIONS', 'SCOPE 3 EMISSIONS', 'FINANCED EMISSIONS (SCOPE 3)', and 'ASSURANCE AND VERIFICATION'. The 'SCOPE 1 EMISSIONS' tab is active, showing a table with columns for 'Data Type' and 'Number'. The table content is partially obscured by a dark overlay.

Reported Year	Data Model	Reporting Period	Last Updated
2025	NZDPU Core	2024-04-01 – 2025-03-31	2026-10-01

SCOPE 1 EMISSIONS	SCOPE 2 EMISSIONS	SCOPE 3 EMISSIONS	FINANCED EMISSIONS (SCOPE 3)	ASSURANCE AND VERIFICATION
Data Type				
Scope 1 Emissions				
Total Scope 1 Emissions				
Total Scope 1 GHG emissions in tCO ₂ e				
Number				

An innovative data structure enabling better transparency and comparability across a range of climate reporting standards and requirements.

Open Data Repository



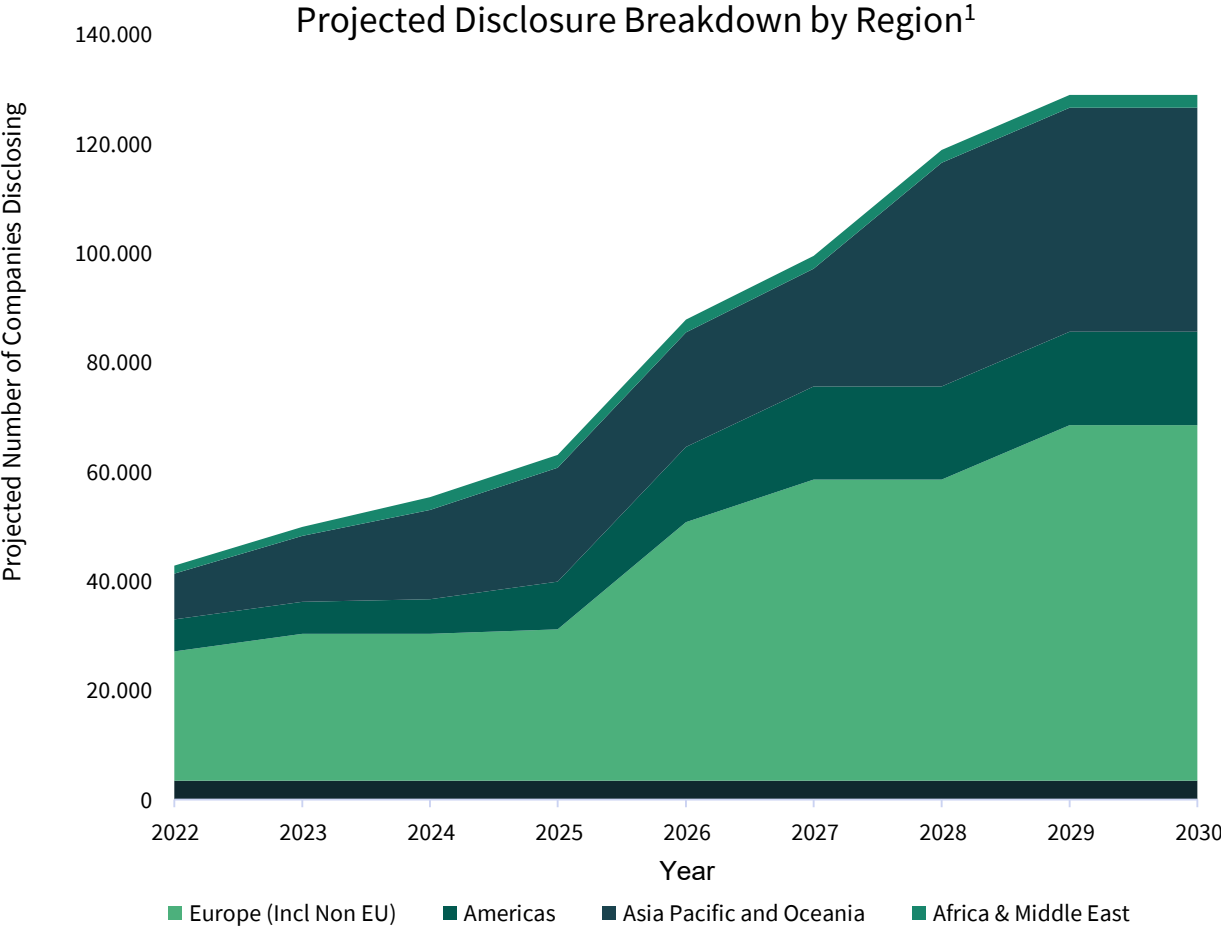
Free and open data, allowing all stakeholders to access relevant metrics within the NZDPU's disclosure universe.

Growing Need for Global and Open Climate Data

The climate data landscape is evolving, and the projected scaling of climate disclosures globally has created an urgent need for a centralized global data repository that enables easy access and interpretation of climate transition-related data, providing stakeholders with the information needed to drive the transition to a net-zero economy.

A key trend driving this evolution is the projected expansion of companies covered by both voluntary and mandatory emissions disclosure regimes, with over 120,000 companies covered by 2030.

¹ Note: Company coverages of some individual disclosure requirements have been estimated based on best available industry data. Future estimates are based on existing number of companies that fall into requirement scopes. Disclosure requirements included cover major economies and recent announcements but is by no means exhaustive. Requirements incorporated into total figures include some still in consultation periods not yet officially finalized to demonstrate the potential extent of the universe. Dates reflect filing dates and not reporting year dates. Includes both voluntary and mandatory disclosures.



How Statisticians Can Utilize the NZDPU

The NZDPU enables easy access and interpretation of climate transition-related data, providing statisticians with the foundational information needed to conduct analysis.



Facilitates **comparison of companies** based in jurisdictions using different climate disclosure standards and/or requirements.



Provides greater transparency to the **methodologies** used by companies to calculate their emissions.



The NZDPU provides the ability to view **emission restatements** a company has made, enabling statisticians to analyze these changes over time.



The NZDPU is working with CDSC members to embed **data quality practices** in the collection of climate transition-related data.

Framework for Assessing Data Quality

Data quality importance:

Growing requirement for companies to adopt more robust and transparent approach to reporting emissions. Poor quality data for one company can cause nested data quality issues for other companies using the data.

Lessons learned:

The level of quality of a calculation can have a significant impact on the emissions figures computed, with different methods resulting in different numbers for the same activity.

As the NZDPU begins to work with other organizations to bring data into the Utility, there is a need to create a more systematic framework or approach for assessing data quality. The NZDPU is looking at data quality across four Data Quality Practices:

- Base Data Type Used
- Calculation Method
- Level of Customization
- Identification of Anomalies