

24/7 Carbon-Free Coalition

Technical Criteria Executive Summary

Introduction

In May 2025, Climate Group's [24/7 Carbon-Free Coalition](#) published version 1 of the 24/7 carbon-free electricity (CFE) technical criteria, developed with leading experts in the corporate, NGO, and academic community. The Technical Criteria serve as a global framework detailing the rules that 24/7 Coalition partner companies will observe when procuring CFE and defining their progress towards their 24/7 CFE targets.

This document provides a high-level summary of some of the key features of the criteria, available in full [here](#), that ensure that corporate procurement leads to ambitious and impactful outcomes, while also supporting the continuation of existing CFE resources on grids today.

Key themes

Definition of CFE

- Resources are classified as carbon-free based on total fuel-cycle greenhouse gas (GHG) emissions.
- Resources with GHG emissions less than or equal to zero within a tight certainty margin are classified as carbon-free. Embodied emissions from construction are not considered.

Time matching

- Claims to use require hourly matching and require measurement of a company's demand and procured generation at hourly resolution.
- Improving performance measurement is itself a major objective of the campaign and is emphasized as a key goal for early-stage members

Geographic Market Boundaries

- The criteria defines new geographic boundaries for applicable CFE sourcing claims, meant to represent the reasonable expectation of deliverability of claimed CFE purchases to consumption.
- Some of these boundaries are different than those used for the RE100 campaign.
 - In particular, for the United States, the campaign requires the use of grid regions defined by the US EPA's eGRID emissions reporting database.
 - For Europe, the campaign requires the use of bidding zones.

Some other very large countries are broken down into regions, while the boundaries for all other countries remain at the country or grid level.

Technologies

- Electricity generated from the following energy resources are considered to be fully carbon-free:
 - Wind; Solar;
 - Zero-emissions geothermal;
 - Marine (wave and tidal);
 - Sustainable hydropower;
 - Sustainable biomass; and
 - Nuclear (fission and fusion).
- Notably, this is the first standardised framework to recognise and enable the use of energy storage technologies.
- Fossil-fired electricity with carbon capture and sequestration (CCS) is *not* considered carbon-free due to upstream methane leakage.

Existing vs. new CFE

- The campaign defines an asset age criteria requiring companies to purchase CFE from assets no older than 15 years.
- However, it also provides an optional “baseline” allowance for each market for companies to purchase from existing CFE assets older than 15 years, up to the “firm CFE” (nuclear + hydro) share that each technology represents in the relevant grid.

The technical criteria will undergo a testing phase during its first two years where it will be regularly revised, taking into account the real-world experiences of partners and the development of related standards and best practices. In particular, the technical criteria may be revised to align with upcoming Greenhouse Gas Protocol Scope 2 updates.