

## # [4.2] - 2025-04-23

## ClimateTRACE,multiple-sectors

### Added

### Changed

- [Changed] Improved unit standardization: unit strings now consistently use 't' for tonnes rather than 'T'.

### Deprecated

### Fixed

### Known Issues

## agriculture,crop-residues

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture,cropland-fires

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture,enteric-fermentation-cattle-operation

### Added

- [Added] Increased France cattle operations (sources) coverage from 12,238 (v4.0) to 25,995 in April 2025 (v4.2).

### Changed

- [Changed] Updated France cattle operation assets metadata.

- [Changed] Early France cattle operation version used Great Britain total head of cattle means to estimate emissions. This has changed to European Union total head of cattle means to estimate emissions.

### Deprecated

### Fixed

- [Fixed] Quality controlled and reduced false-positive cattle operations in a subset of regions in France.

### Known Issues

- [Known Issues] False-positive locations exist in this subsector and will be continually removed in future releases.

- [Known Issues] USA Country-level emissions do not match the sum of USA asset level emissions. This will be fixed in a later release.

## agriculture,enteric-fermentation-cattle-pasture

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture,enteric-fermentation-other

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture,manure-applied-to-soils

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture,manure-left-on-pasture-cattle

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

# agriculture,manure-management-cattle-operation

### Added

- [Added] Increased France cattle operations (sources) coverage from 12,238 (v4.0) to 25,995 in April 2025 (v4.2).

### Changed

- [Changed] Updated France cattle operation assets metadata.

- [Changed] Early France cattle operation version used Great Britain total head of cattle means to estimate emissions. This has changed to European Union total head of cattle means to estimate emissions.

### Deprecated

### Fixed

- [Fixed] Quality controlled and reduced false-positive cattle operations in a subset of regions in France.

### Known Issues

- [Known Issues] False-positive locations exist in this subsector and will be continually removed in future releases.

- [Known Issues] USA Country-level emissions do not match the sum of USA asset level emissions. This will be fixed in a later release.

# agriculture,manure-management-other

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

# agriculture,other-agricultural-soil-emissions

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture, rice-cultivation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## agriculture, synthetic-fertilizer-application

### Added

### Changed

- [Changed] Capacity now reported in '1000 ha' for all timestamps.

### Deprecated

### Fixed

### Known Issues

## buildings, non-residential-onsite-fuel-usage

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## buildings, other-onsite-fuel-usage

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## buildings,residential-onsite-fuel-usage

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fluorinated-gases,fluorinated-gases

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,forest-land-clearing

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,forest-land-degradation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,forest-land-fires

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,net-forest-land

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,net-shrubgrass

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,net-wetland

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,removals

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,shrubgrass-fires

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,water-reservoirs

### Added

### Changed

- [Changed] Missing data for petrochemical-steam-cracking assets are forward-filled rather than being assumed to be closed assets

### Deprecated

### Fixed

### Known Issues

## forestry-and-land-use,wetland-fires

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fossil-fuel-operations,coal-mining

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fossil-fuel-operations,oil-and-gas-production

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fossil-fuel-operations,oil-and-gas-refining

### Added

- [Added] Data period extended for existing sources in Asia, the Middle East, Africa, Latin America, and CIS. Start\_date 2024-04-01 to end\_date 2024-06-30.

- [Added] Added coverage. 19 new assets added, referring to ID #822 - #840. The number of assets increased from 707 to 728.

### Changed

- [Changed] Updated capacity for #55 Phillips 66 Rodeo Refinery and #262 North Atlantic Refining Come by Chance Refinery

- [Changed] Corrected location (coordinates) for 7 refineries in South Korea: #497, #499, #500, #501, #785, #786, #787

### Deprecated

### Fixed

### Known Issues

- [Known Issues] Will cross-check utilization rates with annual throughput published in late June, so there might be updates for the quarterly emission factor estimates of certain regions.

## fossil-fuel-operations,oil-and-gas-transport

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fossil-fuel-operations,other-fossil-fuel-operations

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## fossil-fuel-operations,other-solid-fuels



### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,aluminum

### Added

### Changed

### Deprecated

### Fixed

-[Fixed] A bug was fixed that caused 2024 data to be too low in version V4.1.0.

### Known Issues

## manufacturing,cement

### Added

### Changed

- [Changed] Updated metadata [capacity]: Annual capacity divided relatively, accounting for exact number of days in each month.

- [Changed] Resubmitting historical data from Jan 2021 to Jan 2025 inclusive.

### Deprecated

### Fixed

- [Fixed] Removed/separated duplicated plants (concerning cases of multiple plants with the same point coordinate): removed TZCMT2404000001221 and TZCMT2404000003007; separated TZCMT2404000000267 and TZCMT2404000000271.

- [Fixed] Corrected iso3\_country for asset TZCMT2404000000051

### Known Issues

## manufacturing,chemicals

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,other-manufacturing

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,petrochemical-steam-cracking

### Added

- [Added] Data period extended for existing sources in Asia Pacific and Middle East. Start\_date 2024-04-01 to end\_date 2024-06-30.

### Changed

- [Changed] Corrected location data asset 3.

- [Changed] Corrected location data asset 185.

- [Changed] Missing data for petrochemical-steam-cracking assets are forward-filled rather than being assumed to be closed assets

### Deprecated

### Fixed

### Known Issues

## manufacturing,pulp-and-paper

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,iron-and-steel

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,other-chemicals

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,glass

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,lime

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,food-beverage-tobacco

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,wood-and-wood-products

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,textiles-leather-apparel

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## manufacturing,other-metals

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,other-mining-quarrying

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,bauxite-mining

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,copper-mining

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,iron-mining

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,rock-quarrying

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## mineral-extraction,sand-quarrying

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## power,electricity-generation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## power,other-energy-use

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## power,heat-plants

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,domestic-aviation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,non-broadcasting-shipping

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,domestic-shipping

### Added

- [Added] Data period extended. Start\_date 2025-03-01 to 2025-03-31.

### Changed

- [Changed] All pollutant emissions columns (i.e., \*\_emissions) are now in units of metric tonnes
- [Changed] All pollutant emissions factor columns (i.e., \*\_emissions\_factor) are now in units of metric tonnes per unit activity (i.e., nautical mile)

### Deprecated

### Fixed

### Known Issues

- [Known Issues] Invalid transmissions can cause interpolation of trips over extended data gaps which may result in large erroneous emissions spikes at a port at the time when the data gap ends
- [Known Issues] Duplicated ports identified : Furna vs Fuma

## transportation,international-aviation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,international-shipping

### Added

- [Added] Data period extended for existing sources. Start\_date 2025-02-01 to end\_date 2025-03-31.

### Changed

- [Changed] All pollutant emissions columns (i.e., \*\_emissions) are now in units of metric tonnes.
- [Changed] All pollutant emissions factor columns (i.e., \*\_emissions\_factor) are now in units of metric tonnes per unit activity (i.e., nautical mile).

### Deprecated

### Fixed

### Known Issues

- [Known Issues] Invalid transmissions can cause interpolation of trips over extended data gaps which may result in large erroneous emissions spikes at a port at the time when the data gap ends.

- [Known Issues] Duplicated ports identified : Furna vs Fuma.

## transportation,other-transport

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,railways

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## transportation,road-transportation

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## waste,biological-treatment-of-solid-waste-and-biogenic

### Added

### Changed

### Deprecated

### Fixed

### Known Issues



## waste,domestic-wastewater-treatment-and-discharge

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## waste,incineration-and-open-burning-of-waste

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## waste,industrial-wastewater-treatment-and-discharge

### Added

### Changed

### Deprecated

### Fixed

### Known Issues

## waste,solid-waste-disposal

### Added

### Changed

### Deprecated

### Fixed

### Known Issues