[5.3.0] - 2026-01-23

ClimateTRACE,deprecation-warning

- No deprecation warnings in this release.

ClimateTRACE,multiple-sectors,post-processing

Added

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] Error in imputation of country-level pre-2021 road-transportation resulting in a ~2% increase in road transportation emissions before 2021.

ClimateTRACE,individual-changelogs

agriculture,crop-residues

Added

- [Added] Monthly data added from Oct'25 to Dec'25.

Changed

Deprecated

Removed

Known Issues

agriculture,cropland-fires

Added

- [Added] Monthly data added from Oct'25 to Dec'25.

Changed

Deprecated

Removed

Known Issues

agriculture,enteric-fermentation-cattle-operation

Added

Changed

Deprecated

Fixed

Known Issues

- [Known Issues] An error in the agolin emission reduction solution (ERS) applied to individual cattle operations has existed since the v4.8.0 release, resulting in overestimated methane emissions' reductions. This will be corrected in a future release.

- [Known Issues] Duplicate and false-positive/false-negative cattle operations may exist since the v4.8.0 release. Please report any issues by email with the asset ID and latitude/longitude.

agriculture,enteric-fermentation-cattle-pasture

Added

Changed

Deprecated

Fixed

Known Issues

- [Known Issues] An error in the agolin emission reduction solution (ERS) applied to individual cattle operations has existed since the v4.8.0 release, resulting in overestimated methane emissions' reductions. This will be corrected in a future release.

agriculture,manure-applied-to-soils

Added

- [Added] Monthly data added from Oct'25 to Dec'25

Changed

Deprecated

Removed

Known Issues

agriculture,rice-cultivation

Added

Changed

- [Changed] We identified an issue where monthly emissions associated with rice cultivation in Southeast Asia were previously concentrated in the harvest month rather than the distributing emissions throughout the growing season. We implemented an approach to more evenly distribute those emissions in this release.

- [Changed] We identified an issue where some GADMs in PRK and CHN had outsized emission factors. We corrected these emission factors by re-running the model.

Deprecated

Removed

Known Issues

agriculture,manure-management-cattle-operation

Added

Changed

Deprecated

Fixed

Known Issues

- [Known Issues] An error in the agolin emission reduction solution (ERS) applied to individual cattle operations has existed since the v4.8.0 release, resulting in overestimated methane emissions' reductions. This will be corrected in a future release.

- [Known Issues] Duplicate and false-positive/false-negative cattle operations may exist since the v4.8.0 release. Please report any issues by email with the asset ID and latitude/longitude.

agriculture,synthetic-fertilizer-application

Added

- [Added] Monthly data added from Oct'25 to Dec'25

Changed

Deprecated

Removed

Known Issues

buildings,non-residential-onsite-fuel-usage

Added

- [Added] Data period extended for existing sources. Start_date 2025-6-01 to end_date 2025-6-30.

Changed

Deprecated

Fixed

Known Issues

buildings,residential-onsite-fuel-usage

Added

- [Added] Data period extended for existing sources. Start_date 2025-6-01 to end_date 2025-6-30.

Changed

Deprecated

Fixed

Known Issues

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

Added

- [Added] Added 2025 Q3 emissions data.

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] The 2025 quarterly emissions dataset utilizes CTrees 2025 land use change alert (LUCA) data as the basis for estimating disturbance-related emissions. The current 2025 quarterly emission estimates may not fully attribute specific disturbance types (deforestation, degradation, and fire) that occurred in early-mid 2025.

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

Added

- [Added] Added 2025 Q3 emissions data.

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] The 2025 quarterly emissions dataset utilizes CTrees 2025 land use change alert (LUCA) data as the basis for estimating disturbance-related emissions. The current 2025 quarterly emission estimates may not fully attribute specific disturbance types (deforestation, degradation, and fire) that occurred in early-mid 2025.

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

Added

- [Added] Added 2025 Q3 emissions data.

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] The 2025 quarterly emissions dataset utilizes CTrees 2025 land use change alert (LUCA) data as the basis for estimating disturbance-related emissions. The current 2025 quarterly emission estimates may not fully attribute specific disturbance types (deforestation, degradation, and fire) that occurred in early-mid 2025.

forestry-and-land-use,shrubgrass-fires

Added

- [Added] Added 2025 Q3 emissions data.

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] The 2025 quarterly emissions dataset utilizes CTrees 2025 land use change alert (LUCA) data as the basis for estimating disturbance-related emissions. The current 2025 quarterly emission estimates may not fully attribute specific disturbance types (deforestation, degradation, and fire) that occurred in early-mid 2025.

forestry-and-land-use,wetland-fires

Added

- [Added] Added 2025 Q3 emissions data.

Changed

Deprecated

Fixed

Known Issues

- [Known Issue] The 2025 quarterly emissions dataset utilizes CTrees 2025 land use change alert (LUCA) data as the basis for estimating disturbance-related emissions. The current 2025 quarterly emission estimates may not fully attribute specific disturbance types (deforestation, degradation, and fire) that occurred in early-mid 2025.

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

Added

- [Added] Data period extended for existing assets in the rest of the world. Start_date 2025-01-01 to end_date 2025-03-31.

Changed

Deprecated

Fixed

Known Issues

manufacturing,aluminum

Added

- [Added] Added new month, October 2025 data included in this release.

Changed

Deprecated

Fixed

Known Issues

manufacturing,cement

Added

- [Added] Added new month, October 2025 data included in this release.

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 2025-01-01 to end_date 2025-03-31.

-[Added] Asset ID 239 Long Son Petrochemicals in Vietnam.

-[Added] Non-GHG emissions for existing sources in Asia Pacific and Middle East. CO, N2O, PM10, PM2.5, SO2, and VOC emissions are modeled. For methodology for non-ghg emissions please visit the methodology: https://github.com/climatetracecoalition/methodology-documents/blob/main/2025/Manufacturing%20and%20Industrial%20Processes/Petrochemical%20Ethylene%20Steam%20Cracker%20Emissions-ManufacturingandIndustrialProcessesSector-112025.docx.pdf

Changed

-[Changed] Asset ID 84 changed refinery match ID from 296 to 343.

Deprecated

Fixed

Known Issues

manufacturing,iron-and-steel

Added

- [Added] Added new month, October 2025 data included in this release.

Changed

Deprecated

Fixed

Known Issues

mineral-extraction,bauxite-mining

Added

Changed

- [Changed] Updated metadata [activity, CO2_emissions_factor, CO2_emissions].

Deprecated

Fixed

- [Fixed] Removed activity and emissions data incorrectly duplicated to additional asset (BAU-042003).

Known Issues

- [Known Issues]

mineral-extraction,copper-mining

Added

Changed

- [Changed] Updated metadata [location, capacity_factor, activity, CO2_emissions_factor, CO2_emissions, status]

Deprecated

Fixed

- [Fixed] Corrected CO2 emissions factor for multiple assets under group ownership, with subsequent updates to national/regional average values.

Known Issues

- [Known Issues]

mineral-extraction,iron-mining

Added

Changed

- [Changed] Updated metadata [location, CO2_emissions_factor, CO2_emissions].

Deprecated

Fixed

- [Fixed] Updated incorrect CO2 emissions factor for 3 assets (IRO-003004, IRO-003005 and IRO-045092).

Known Issues

power,electricity-generation

Added

- [Added] Data period extended for existing sources. Start_date 2019-01-01 to end_date 2025-11-30.

Changed

- [Changed] Updated to Global Energy Monitor Global Bioenergy Power Tracker (version: October 2025).

- [Changed] Updated unit/plant level information due to manual research. These can reflect changes in our estimates.

- [Changed] Updated and added new links to source data. These can reflect changes in our estimates.

- [Changed] Pulled newly released and most recent months from reported generation sources.

- [Changed] Updated reported generation validation tests.

Fixed

Known Issues

- [Known Issues] For non-operational plants the data is reported as zero values for capacity, capacity factor, activity, emissions intensity, and emissions. The related uncertainties are also reported as zero. This is not strictly correct since there can be uncertainty in the operating status in a given month. Future work will better quantify the uncertainty when the plant is reported as non-operational.

power,other-energy-use

Added

Changed

Deprecated

Fixed

Known Issues

transportation,domestic-aviation

Added

- [Added] Data period extended for existing sources. Start_date 2015-01-01 to end_date 2025-11-30.

Changed

Fixed

transportation,non-broadcasting-shipping

Added

- [Added] Data period extended. Start_date 2025-11-01 to 2025-11-30.

Changed

Deprecated

Fixed

Known issue

transportation,domestic-shipping

Added

- [Added] Data period extended. Start date 2025-11-01 to 2025-11-30.

Changed

Deprecated

Fixed

Known Issues

- [Known Issues] OM 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] OM Attribution of emissions to ports as 50/50 on trips with significant loitering can cause emissions reductions assigned to a port that is greater than the emissions assigned to that port.

transportation,international-aviation

Added

- [Added] Data period extended for existing sources. Start_date 2015-01-01 to end_date 2025-11-30.

Changed

Fixed

transportation,international-shipping

Added

- [Added] Data period extended. Start date 2025-11-01 to 2025-11-30.

Changed

Deprecated

Fixed

Known Issues

- [Known Issues] OM 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] OM Attribution of emissions to ports as 50/50 on trips with significant loitering can cause emissions reductions assigned to a port that is greater than the emissions assigned to that port.