

Team + Partners

Did You Know?

Climate TRACE is a global non-profit coalition created to make meaningful climate action faster and easier by independently tracking greenhouse gas (GHG) emissions with unprecedented detail and speed.

Our Mission

We harness satellite imagery and other forms of remote sensing, artificial intelligence, and collective data science expertise to track human-caused GHG emissions with unprecedented detail and speed.

Climate TRACE's emissions inventory is the world's first comprehensive accounting of GHG emissions based primarily on direct, independent observation. Our innovative, open, and accessible approach relies on advances in technology to fill critical knowledge gaps for all decision makers that rely on the patchwork system of self-reporting that serves as the basis for most existing emissions inventories.

By the Numbers

>100

 Collaborating organizations

>300

 Satellites harnessed

>90

 Terabytes of data analyzed

>11000

 Sensors utilized

352M

 Assets measured

53

 Sub-sectors

Climate TRACE is now tracking emissions and other metadata from 352,055,431 individual emitting assets: facilities, farms, fields, ships, and so on. That is over 1 billion datapoints; so much information that to view it all requires using specialized data formats such as TIF image files. So, we are presenting this website that aggregates the data into 450,000 sources. For example, we've grouped individual rice fields into all rice production in one county, and all ships into the emissions from one port. For researchers or anyone else who would like to access the full detailed imagery in specialized format, please just reach out via our [contact form](#) and we will share it with you.

Our members

Al Gore



FORMER VP
AL GORE

Former U.S. Vice President Al Gore is known globally for his work to combat the climate crisis. He is the author of the #1 New York Times best-seller “An Inconvenient Truth,” which shares a title with the Oscar-winning documentary about the climate crisis. In 2007, Gore was awarded the Nobel Peace Prize, along with the Intergovernmental Panel on Climate Change, for “informing the world of the dangers posed by climate change.” He is a founding partner and Chairman of Generation Investment Management and Founder and Chairman of The Climate Reality Project.



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Carbon Yield leads Climate TRACE's work in the agricultural sector. Their collaborations with researchers across the globe help solve challenging emissions reporting and accounting challenges in ways that improve the credibility and impact of greenhouse gas markets and ultimately incentivize more regenerative food production systems.

CTrees



CTrees is a nonprofit organization that tracks carbon in every tree and forest on the planet. Led by an international team of scientists and engineers, CTrees delivers science-driven data to governments, companies, and organizations seeking to reduce emissions from deforestation and degradation and restore forests at all scales.

Duke University



Duke University leads the Climate TRACE work on modeling emissions from fuels combusted within buildings based on satellite-derived data. The Nicholas Institute for Energy, Environment & Sustainability at Duke accelerates solutions for energy and environmental challenges through actionable research, sustained engagement with decision makers, and transformative educational experiences for future leaders.

Earth Genome



RACE user interface and platform development. Earth Genome converts Earth systems data into relevant and actionable knowledge to combat climate change. Earth Genome develops and supports policies that fully access and utilize satellite data to both mitigate climate change and adapt to its effects.

Global Energy Monitor



Global Energy Monitor

The mission of Global Energy Monitor is to develop open information in support of the climate/clean energy movement. GEM supplies Climate TRACE with data on coal plants, gas plants, oil plants, steel plants, Chinese "teapot" refineries, bioenergy power plants, and fossil energy ownership.

Hypervine



Hypervine.io

Hypervine leads the Climate TRACE work on modeling emissions from mining and mineral extraction activities. Hypervine.io is digitizing the largest industry in the world. They help companies—especially in the construction and mining industries—understand how their sites can improve operations, in part through satellite imagery, AI, and blockchain technology.

Johns Hopkins APL



The Johns Hopkins Applied Physics Laboratory (APL) leads Climate TRACE coalition initiatives to understand the emissions associated with road transportation based on satellite imagery and other remote sensing data. APL provides critical contributions to critical challenges with systems engineering and integration, technology research and development, and analysis.

OceanMind





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OceanMind leads the Climate TRACE work on modeling emissions from shipping activity. Using satellites and AI, OceanMind powers enforcement to improve compliance with fishing regulations around the world. At Climate TRACE, they're now using their expertise monitoring oceans and vessels to understand the emissions associated with shipping.

RMI



RMI leads the Climate TRACE work on modeling emissions from oil refining and oil & gas production. RMI is an independent, non-partisan, nonprofit organization of experts that for nearly 40 years has published groundbreaking research and analysis. They work to decarbonize energy systems through rapid, market-based change.

TransitionZero



TransitionZero leads the Climate TRACE work on emissions from heavy industry and co-leads the work on emissions from the power sector with WattTime. TransitionZero supports investors, governments, companies, and members of civil society seeking to support the shift to zero-carbon. They combine satellite imagery, machine learning, and financial modeling to provide near-real-time information to support business and policy decisions.

WattTime



WattTime leads the Climate TRACE work on modeling emissions from the power sector, alongside TransitionZero. WattTime also serves as the coalition secretariat, coordinating fundraising and

accountability across the coalition as well as serving as the interim technical lead for any sectors

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lead. WattTime is a tech nonprofit that empowers people, tries to use data to make reducing emissions faster, easier, and more reliable. Founded by UC Berkeley researchers, it develops data-driven tools and policies that increase environmental and social good.

Meet The Coalition

Leadership



All sectors



All sectors

Gavin McCormick

STRATEGY | WATTIME



Al Gore

STRATEGY | AL GORE

Team



All

Organization leads

Communication

Data

Engineering

Management

Partnerships

Pro



All sectors

Manufacturing

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PRODUCT DESIGN | ODE PARTNERS



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All sectors

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Maritime

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Agriculture

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Buildings

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All sectors

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Forestry and land use

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Mineral extraction

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PRODUCT | HYPERVINE



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Transportation



Fossil Fuel Operations

Joe Fallurin



Ownership

Lee Gans



All sectors

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Buildings



All sectors

Trev

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Manufacturing



All sectors

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Shipping

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ENGINEERING | EARTH GENOME



All sectors

All sectors

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All sectors

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Electricity generation



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Mineral extraction

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Road transportation

All sectors

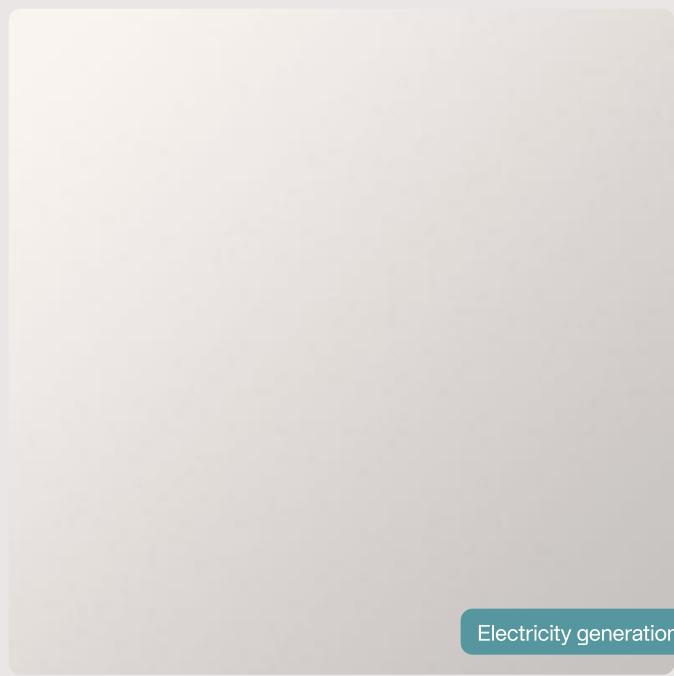
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Electricity generation



Buildings

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Buildings

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All sectors

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PRODUCT | EARTH GENOME



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**Ted
Nace**

Multiple



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All sectors



Agriculture

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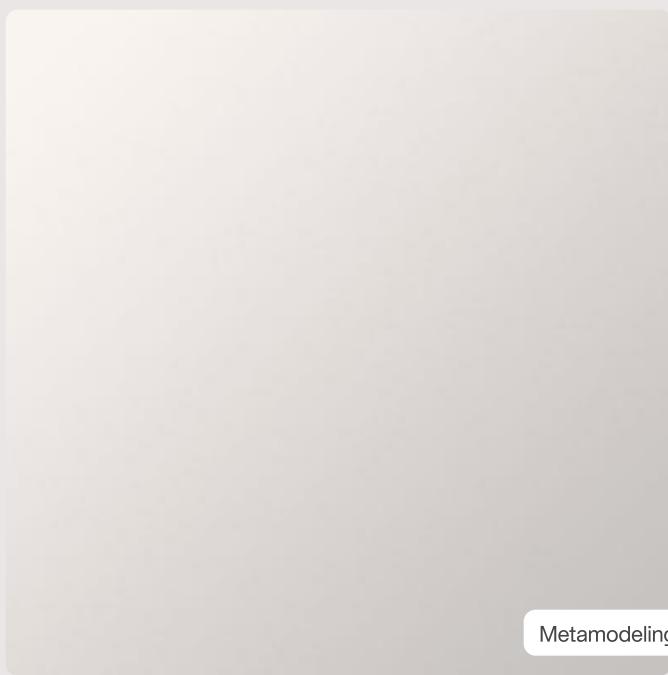
DATA | CARBON YIELD



Landfills

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Electricity generation

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Rice cultivation

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All sectors

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Forestry and land use

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Oil and gas extraction

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All sectors



Maritime

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Shipping



All sectors

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Oil Refining and Petrochemicals



Oil and gas extraction

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Shipping



Forestry and land use

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Global Plastic Watch
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