

CLIMATE TRACE

Tracking greenhouse gas emissions with unprecedented detail and speed to enable faster, easier, more-effective climate action.

climatetrace.org



About Climate TRACE



Hypervine.io



Global Energy Monitor



Duke
NICHOLAS INSTITUTE
for ENERGY, ENVIRONMENT
& SUSTAINABILITY

Former
VP Al Gore



Michigan State
University

JOHNS HOPKINS
UNIVERSITY APPLIED
PHYSICS LAB

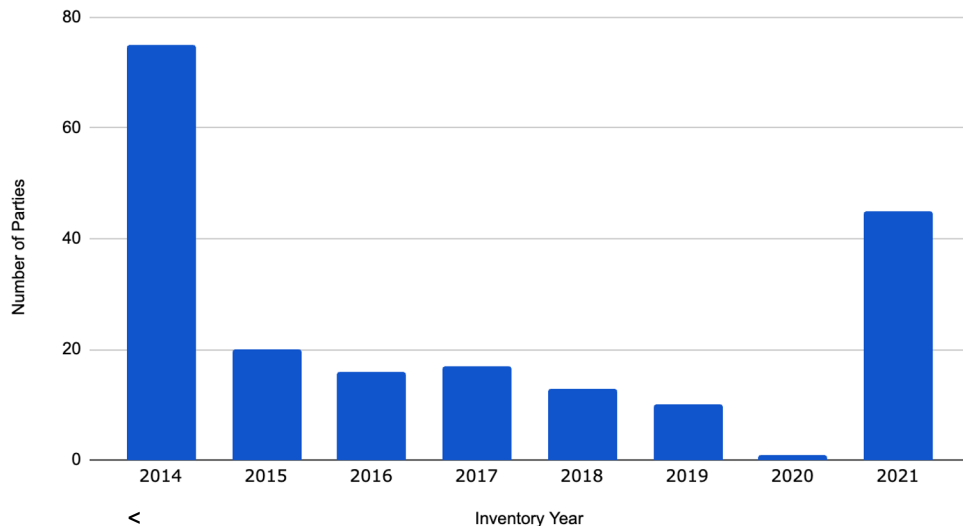
- Climate Group
- CTREES
- Descartes Labs
- Duke University
- Climate Change AI
- Nikki Arnone
- Avoin
- Elliot Block
- Peter Bronski
- Allen Cao
- CarbonPlan
- April Chen
- Michelle Chen
- Val Cohen
- Heather Couture
- Wanda Czerwinski
- Charmaine Dalisay
- Benedicte De Gelder
- Caleb Dittmar
- Marvin Dong
- Christopher Dowd
- Shawn Drost
- Clara Duffy

- GHGSat
- Global Energy Monitor
- Michigan State University
- Minderoo Foundation
 - Dr. Sara Farag
 - Leor Fishman
 - Martin Fuhr
 - Ann Marie Gardner
 - Brian Goldman
 - Kevin Gurney
 - Jonas Hansen
 - Hudson Carbon
 - Iran Open Data
 - Justas Janonis
 - Mihir Joshi
 - Kathi Kitner
 - Dan Knights
 - Naoki Lucas
 - Harsha Vardhan Madiraju
 - Colin McCormick
 - Amar K Mehta
 - Paul Moura
 - Tiffany Nakano

- Planet Labs
- Synthetiaic
- Universiti Malaysia Terengganu
 - James Palmisano
 - Barbara Ryan
 - Sheng Shih
 - Paul Bodnar
 - Siglar Carbon
 - Socially Responsible Agriculture Project
 - Patrick Song
 - Spire
 - Brady Spiva
 - Vitaliy Stepanov
 - Alok Talekar
 - Daniel Tyrrell
 - Natalie Vais
 - Julia Wang
 - Jon Wang
 - Andre Weertman
 - World Resources Institute

GHG data are often missing or outdated

Latest available official inventories



Inventories can also be:



National or otherwise too high level for cities



Resource intensive to prepare



Self-reported without third party auditing

Source: UNFCCC data updated till July 2023

Our approach

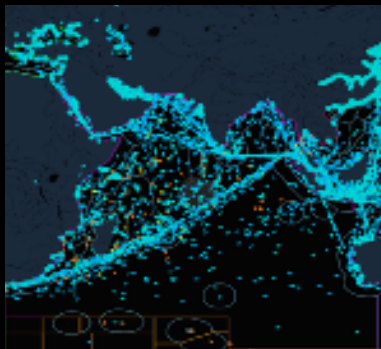
Direct observation with satellites, big data, and AI



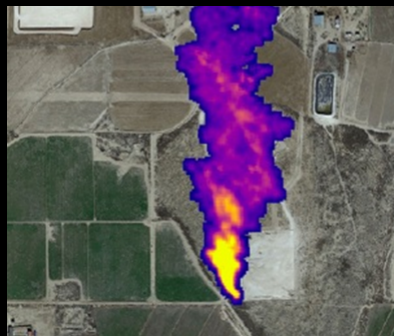
- **Satellites** directly observe each individual emitting source
- **Big data** pooled from > 100 institutions and > 30,000 sensors adds additional information on individual facilities
- **Artificial intelligence** combines results



Example sectors



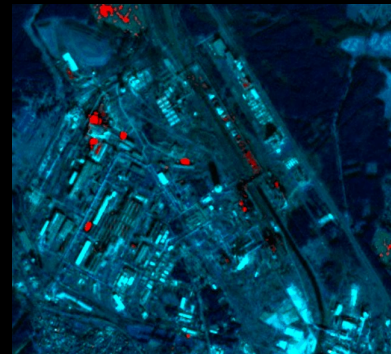
Transportation



Oil & gas



Fires



Heavy industry



Power



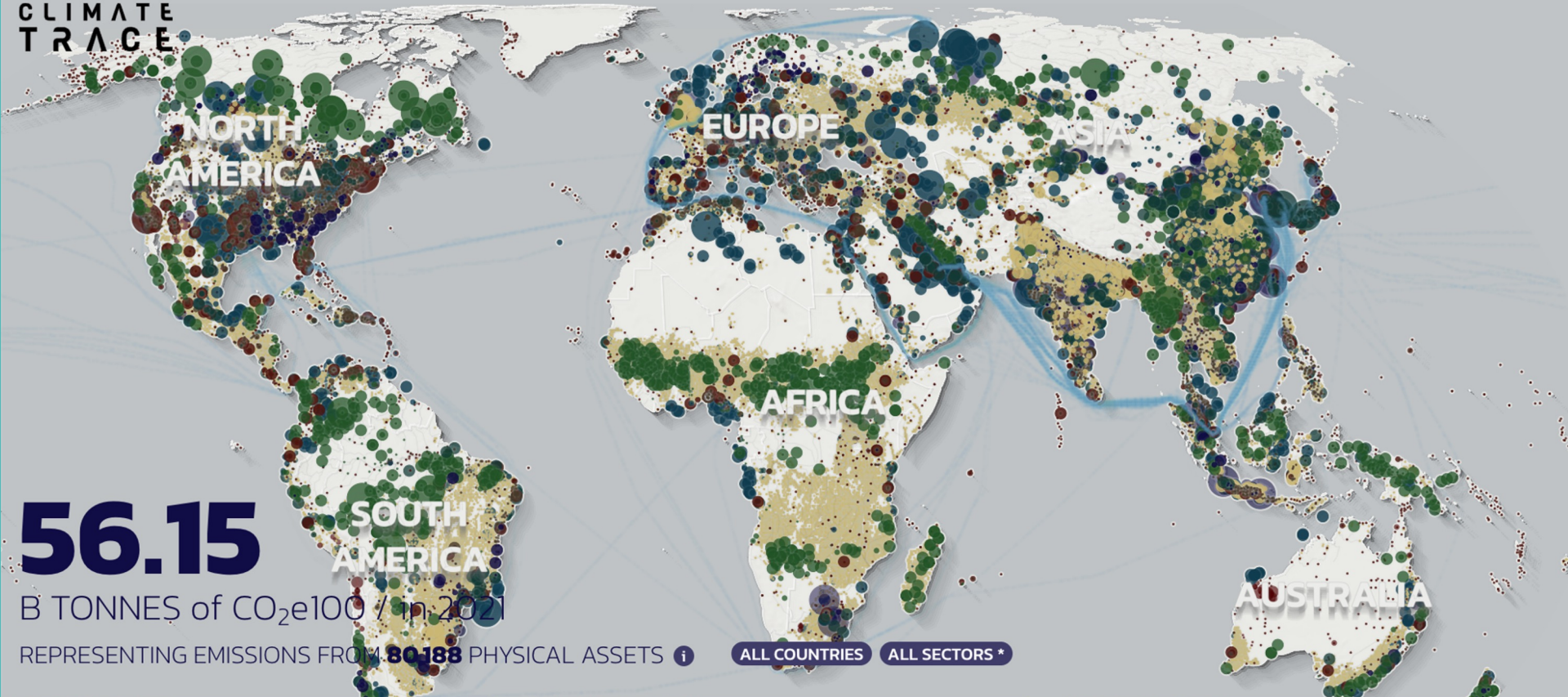
Agriculture



Waste



Forests



56.15

B TONNES of CO₂e100 / in 2021

REPRESENTING EMISSIONS FROM **80,188** PHYSICAL ASSETS [i](#)

ALL COUNTRIES

ALL SECTORS*



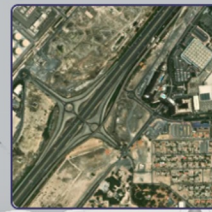
CHINA 

RANK 134

Zouping Shandong aluminium plant

17.28MT
CO2E_100YR

ALUMINUM PLANT



UAE 

RANK 135

Jebel Ali M Power and Desalination Station

17.25MT
CO2E_100YR

POWER PLANT



BRAZIL 

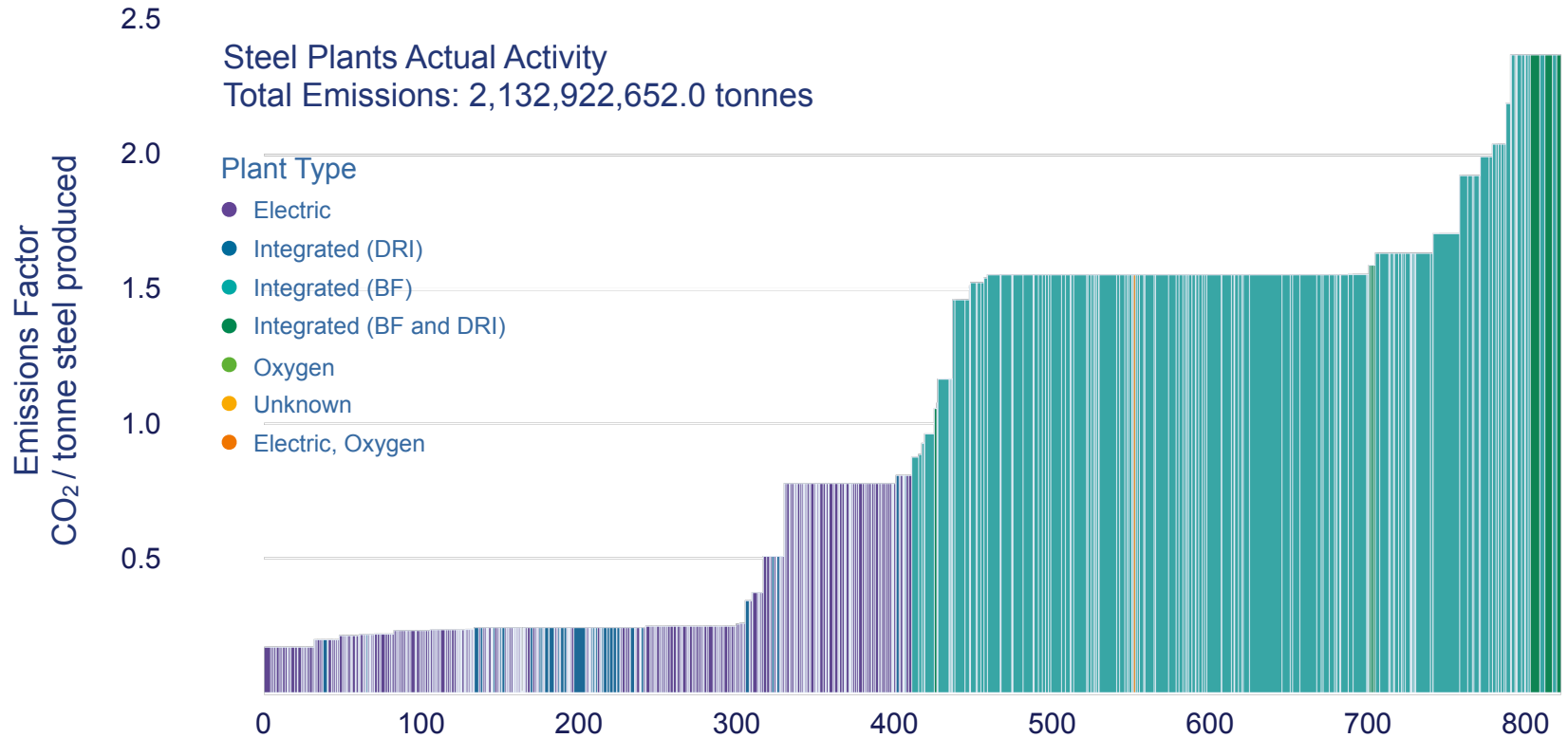
RANK 136

Brazil_Rondônia_Porto Velho

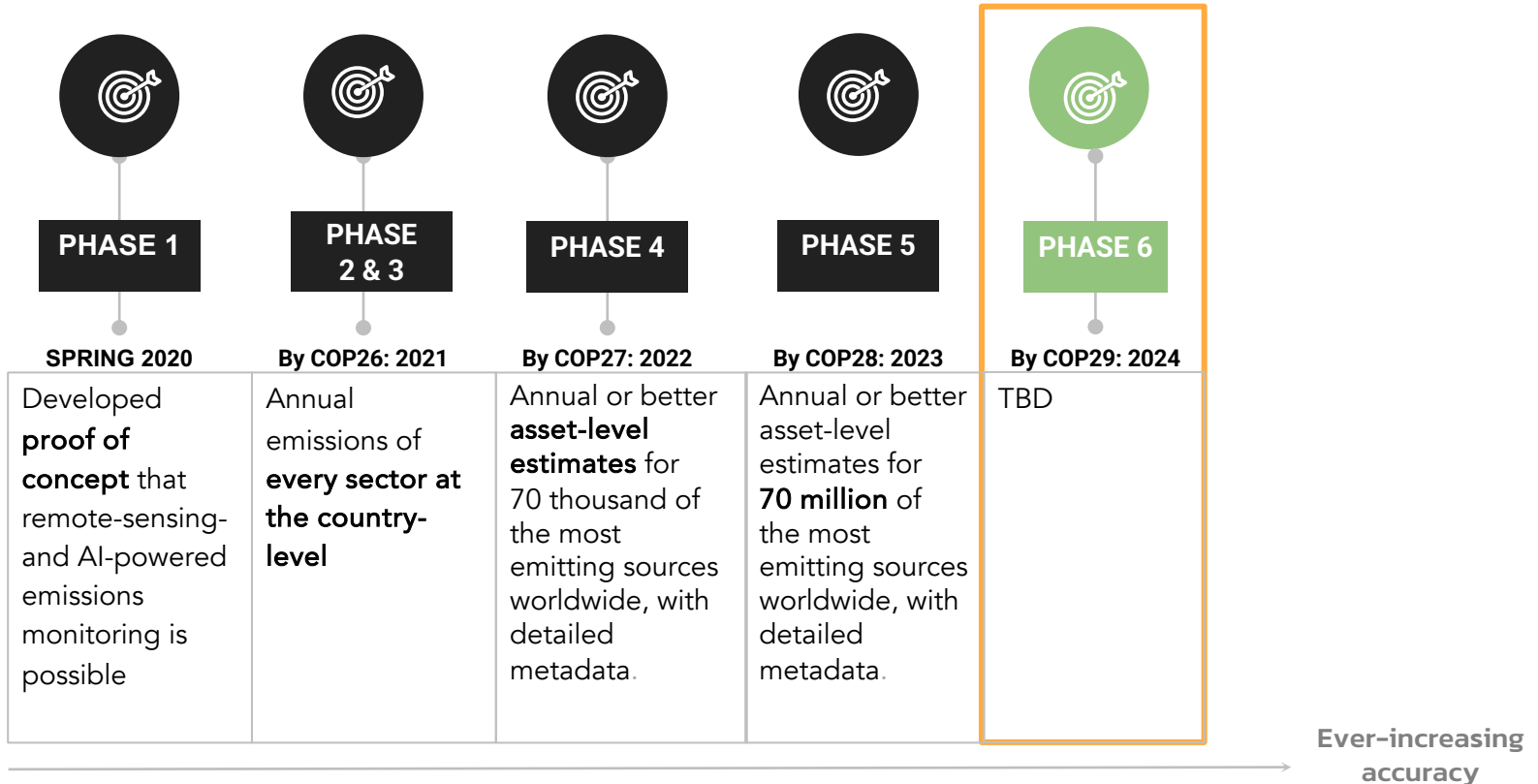
17.24MT
CO2E_100YR

FOREST

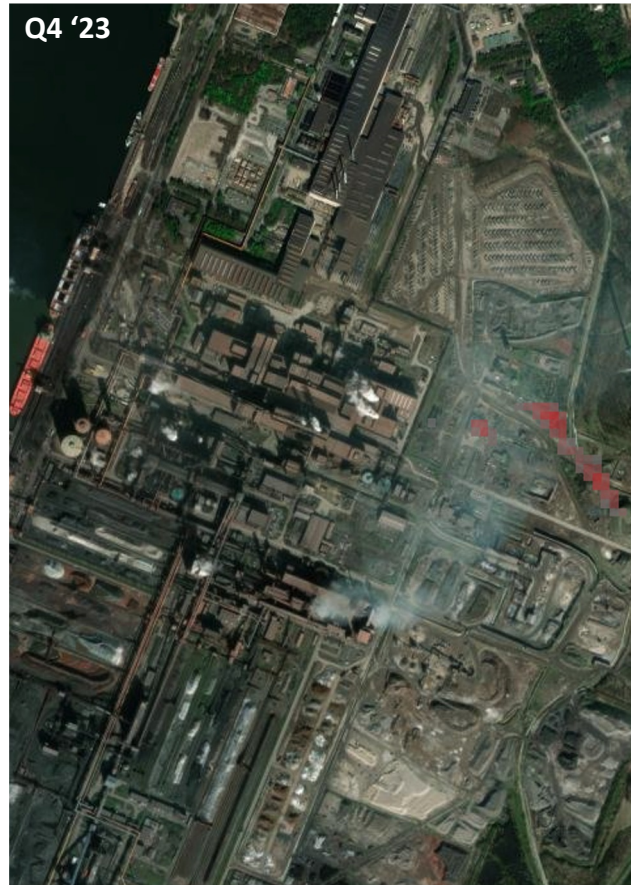
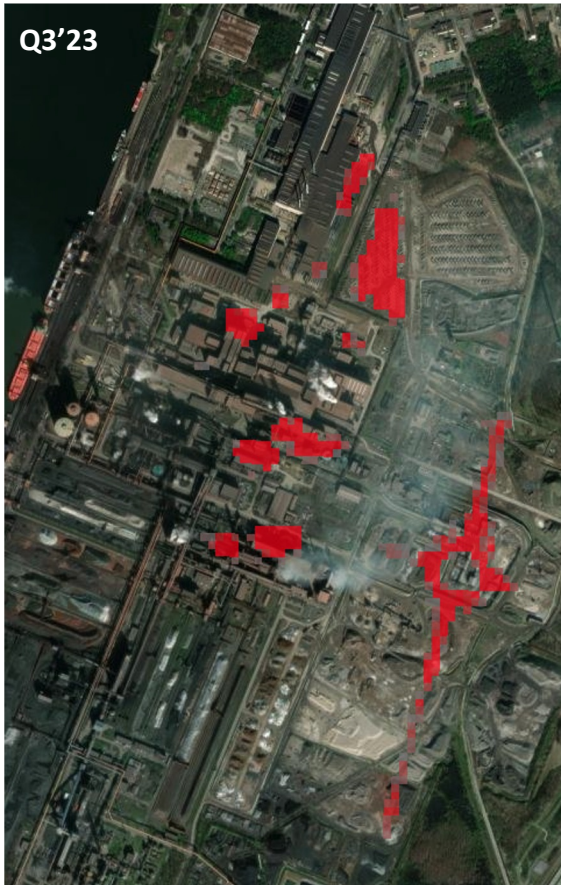
Emissions factor of every global steel plant



Our product roadmap



Identifying refractory relining and production targets





Contact us

matt@transitionzero.org

coalition@ClimateTRACE.org