



SYSTEMS
CHANGE
LAB

Systems Change Lab

Introduction

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Partners

CONVENED BY



WORLD
RESOURCES
INSTITUTE



BEZOS
EARTH
FUND

FUNDERS AND PARTNERS



Interconnected Systems



Industry



Power



Transport



Buildings



Cities



**Carbon
Removal**



Food



**Land &
Forests**



Freshwater



Ocean



Finance



**Social Inclusion
& Equity**



**New
Economics**



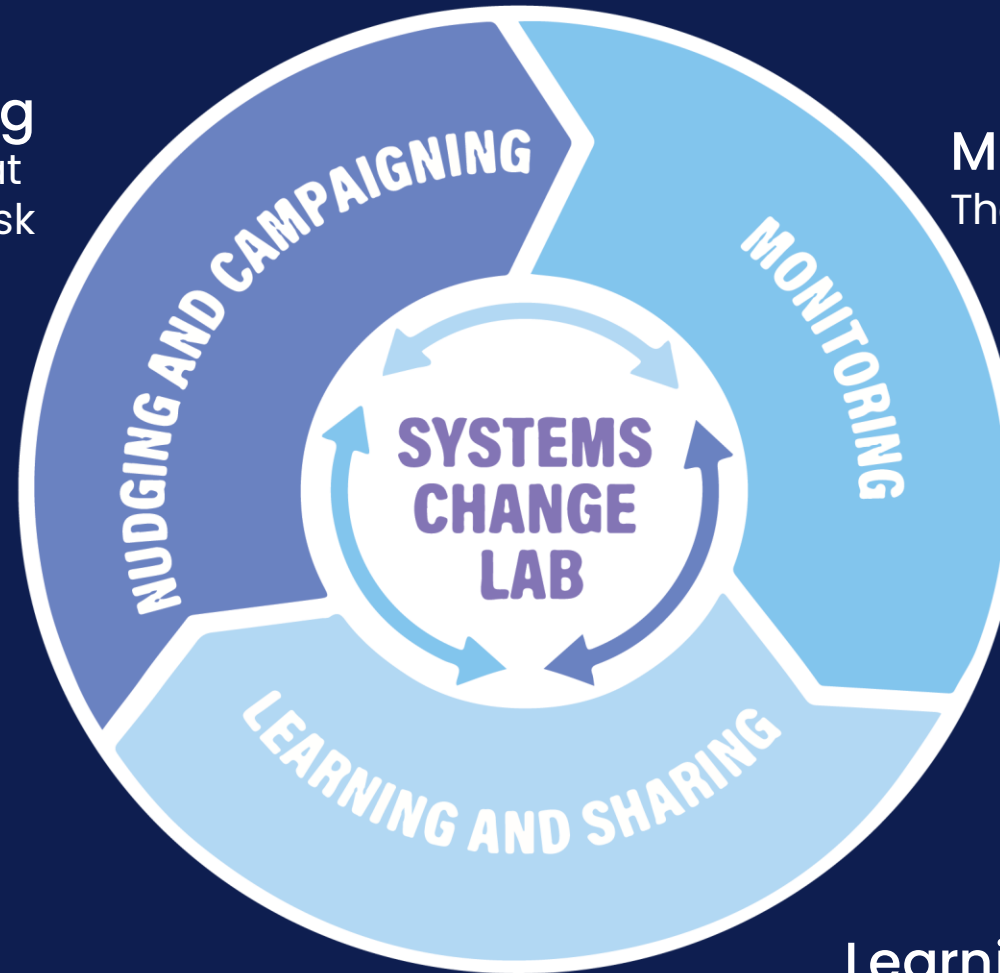
Governance



**Circular
Economy**

Systems Change Lab

Nudging and Campaigning
For the Transformations at
Greatest Risk



Monitoring
The Required Transformations

Learning and Sharing
About the Ingredients for Change

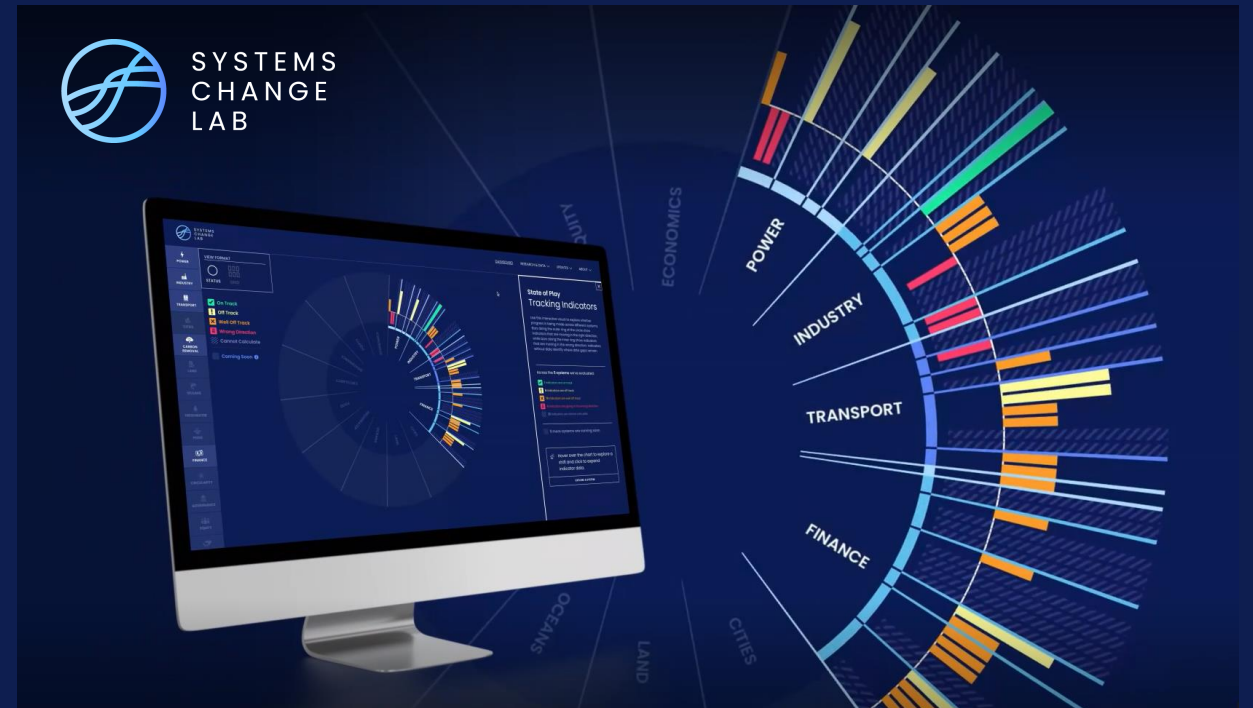
Monitoring

The Required Transformations

1) State of Climate Action Reports



2) Data Platform





Phase out unabated coal in electricity generation
6 times faster



Reduce the annual rate of deforestation
2.5 times faster



Increase the share of electric vehicles in passenger car sales
5 times faster



Lower consumption per person of meat from cows, goats, and sheep
5 times faster*



Expand zero-carbon sources in electricity generation
6 times faster



Scale up global climate finance more than
10 times faster

*in the Americas, Europe, and Oceania

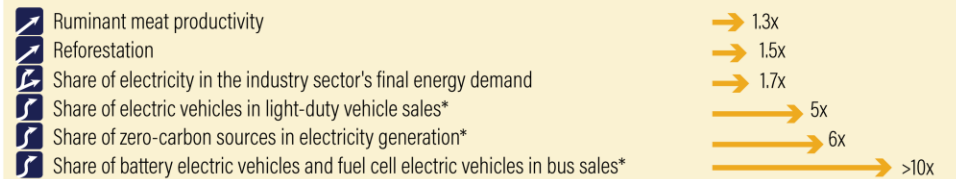
Getting on Track for 2030

State of Climate Action 2022: Assessing Progress toward 2030 Targets

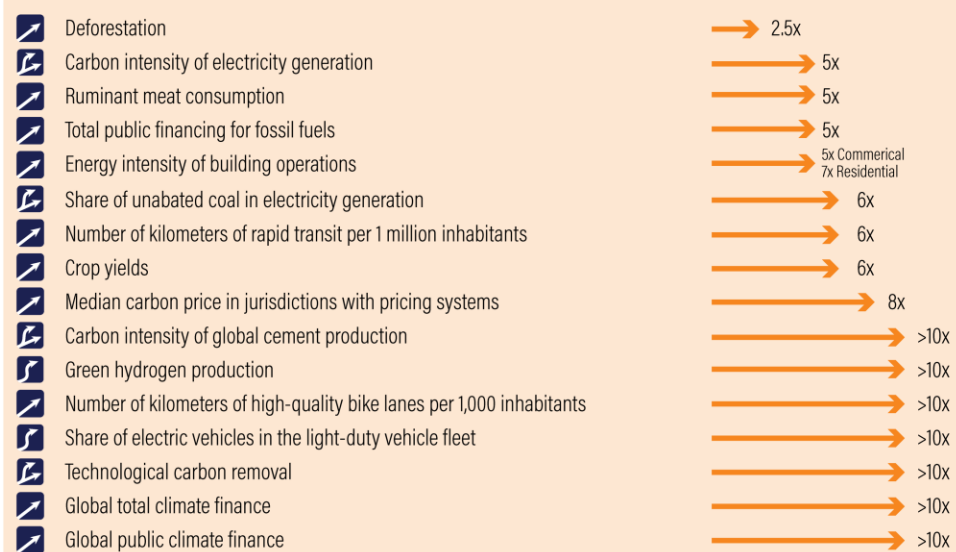
✓ ON TRACK: Change is occurring at or above the pace required to achieve the 2030 targets

NONE

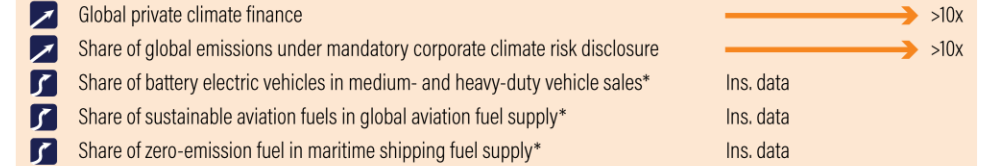
! OFF TRACK: Change is heading in the right direction at a promising, but insufficient pace



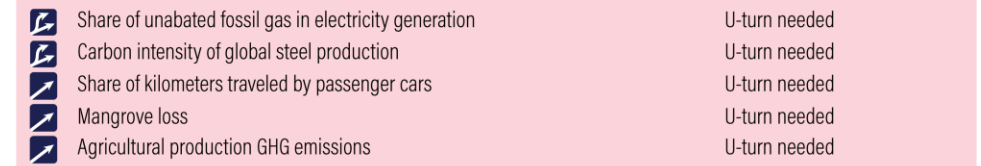
✗ WELL OFF TRACK: Change is heading in the right direction, but well below the required pace



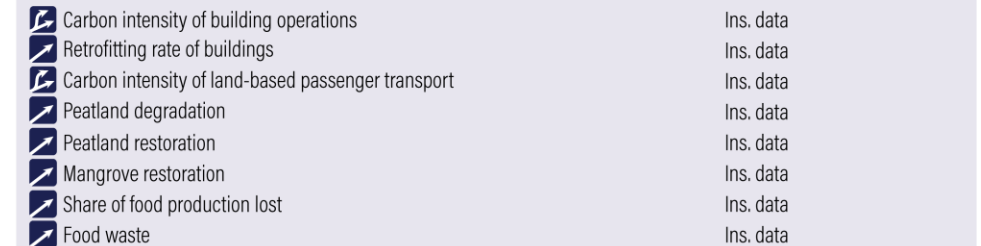
✗ WELL OFF TRACK: Change is heading in the right direction, but well below the required pace



↩ WRONG DIRECTION: Change is heading in the wrong direction, and a U-turn is needed



? INSUFFICIENT DATA: Data are insufficient to assess the gap in action required for 2030



Exponential Change Likely Exponential Change Possible Exponential Change Unlikely

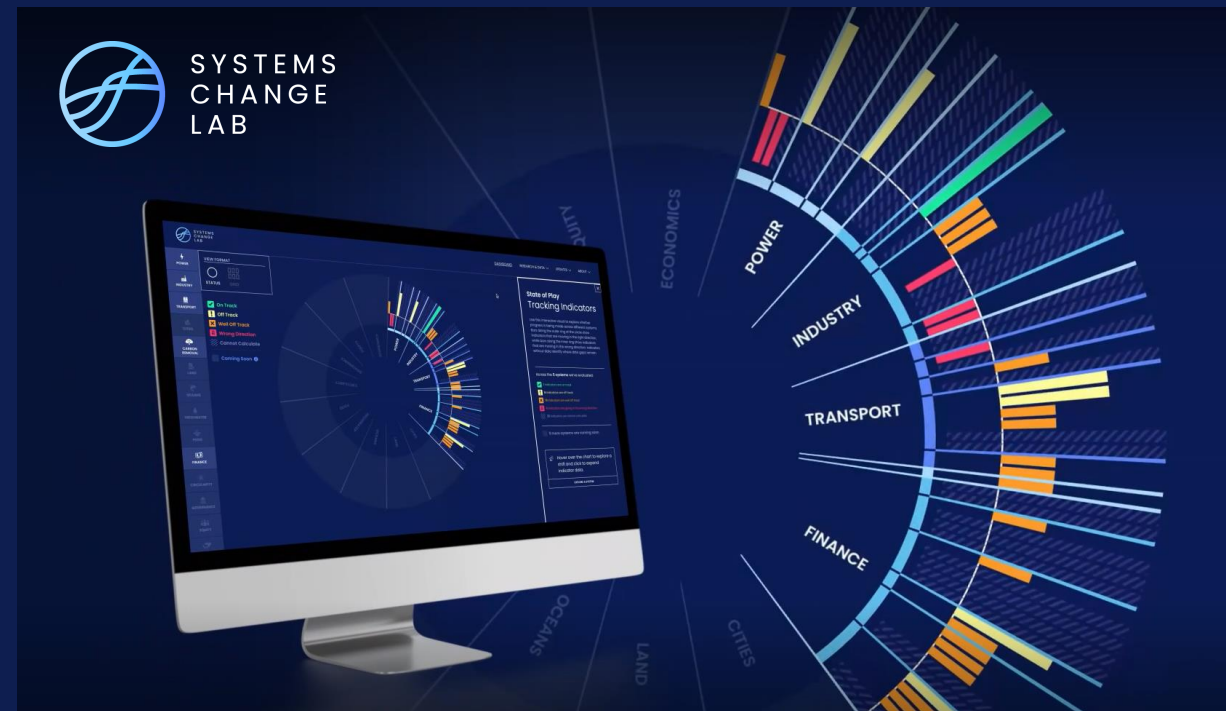
*For Exponential Change Likely indicators, in some cases we adjusted the status based on the literature or expert judgment.

Enablers & Barriers of Systems Change



Systems Change Lab Data Platform

- Initial launch included research, data visualizations and analysis for:
 1. Power
 2. Industry
 3. Transport
 4. Finance
 5. Carbon Removal
- Platform focus:
 - Tracks indicators measuring progress towards 2030 and 2050 targets
 - Pinpoints and tracks enabling conditions and barriers of change



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Questions We're Exploring This Year

- What are the ingredients for transformational change?
- Where do tipping points lie and how close are we to reaching them?
- Which systemic connections are most vital to consider?
- How to prioritize action?
- What will it take to realize the scale required?



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Annex

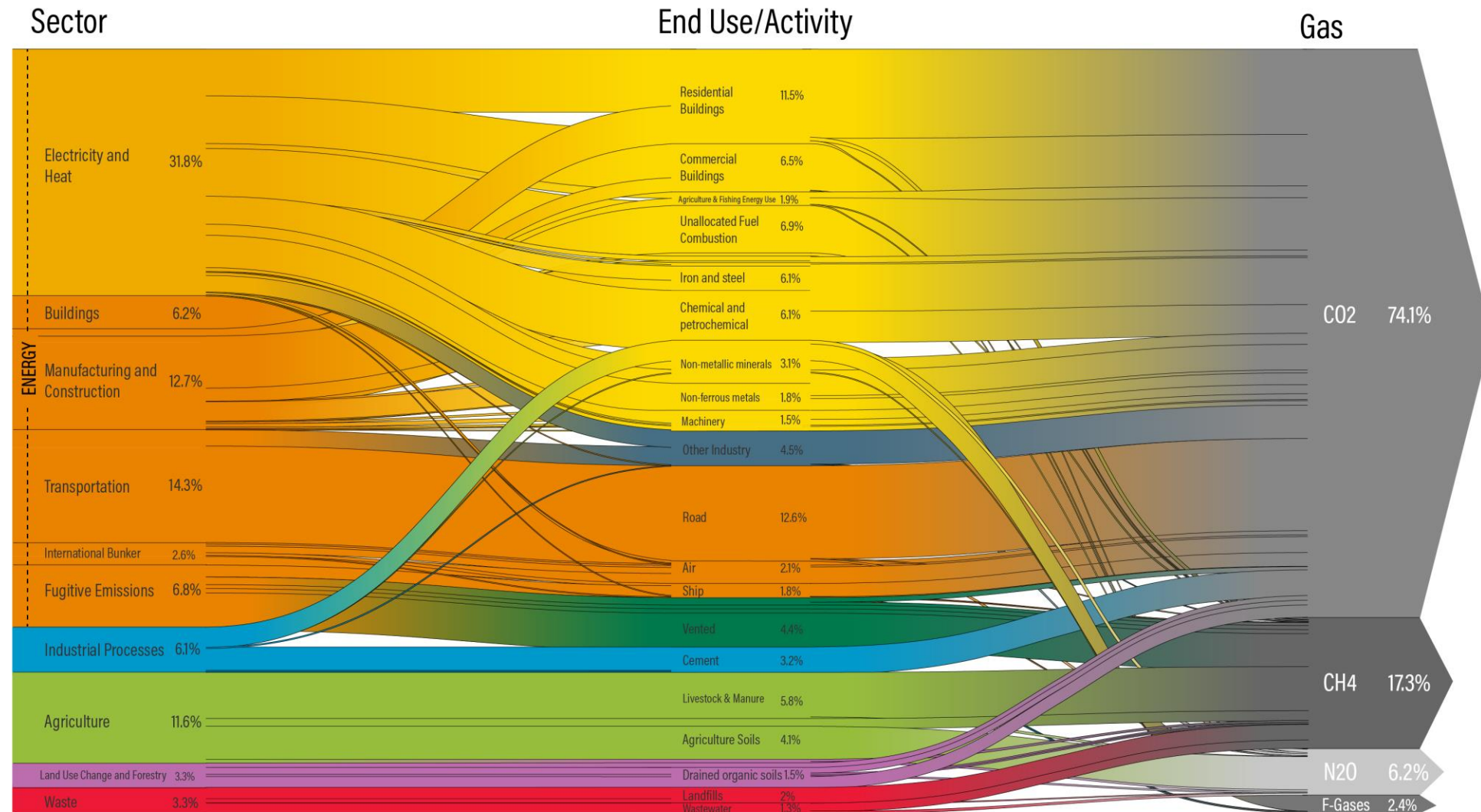
A network diagram background consisting of a complex web of interconnected nodes and lines, rendered in shades of blue and white. The nodes vary in size, and the lines are thin and light blue. The overall effect is a sense of global connectivity and data flow.

CLIMATEWATCH

<https://www.climatewatchdata.org/>

World Greenhouse Gas Emissions in 2019 (Sector | End Use | Gas)

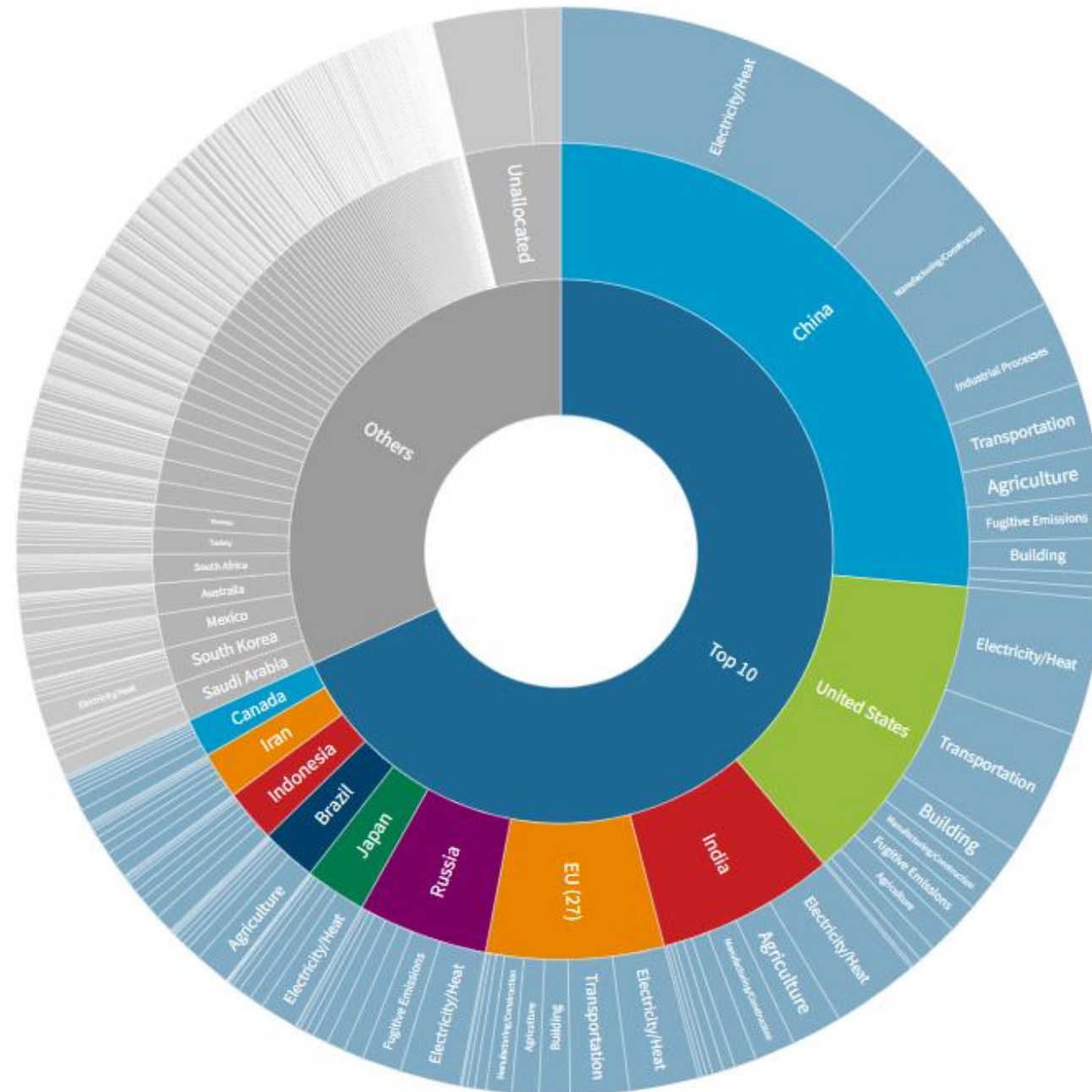
Total: 49.8 GtCO₂e



Source: Climate Watch, based on raw data from IEA (2021), GHG Emissions from Fuel Combustion, www.iea.org/statistics; modified by WRI.

The Top 10 GHG Emitters Contribute Over Two-Thirds of Global Emissions

Explore the Latest Global Greenhouse Gas Emissions Data on Climate Watch



Substantive work in 2023

Building on our foundation

Questions we answer well so far:

- What are science-based targets for 2030 for our required shifts?
- How close are we to being on track to meet them?
- To what extent are we overcoming barriers and spurring enablers to progress?

But several questions we don't answer yet:

- How to prioritize action?
- What are the ingredients for transformational change?
- Where do tipping points lie and how close are we to reaching them?
- Which systemic connections are most vital to consider?
- What will it take to realize the scale required?

And further applications – can our data support the tracking of progress towards other initiatives (e.g., Breakthrough agenda, Glasgow Leaders' Declaration on Forests, CBD outcomes, etc.)

Where do tipping points lie and how close are we to reaching them?

Collaboration to explore broader research agenda on positive tipping points.

We aim to explore:

- Methods of better identifying positive tipping points across different sectors
- How to track progress towards positive tipping points to inform action
- Insightful content that can feed into the Systems Change Lab data platform

Key activities:

1. [COMPLETE] Tipping Points Conference – Sept 12-14 at University of Exeter
2. [COMPLETE] Positive Tipping Points Report – Jan 2023 at Davos
3. Research on early warning of tipping points in socio-economic systems
4. Report on the state of tipping points by COP28



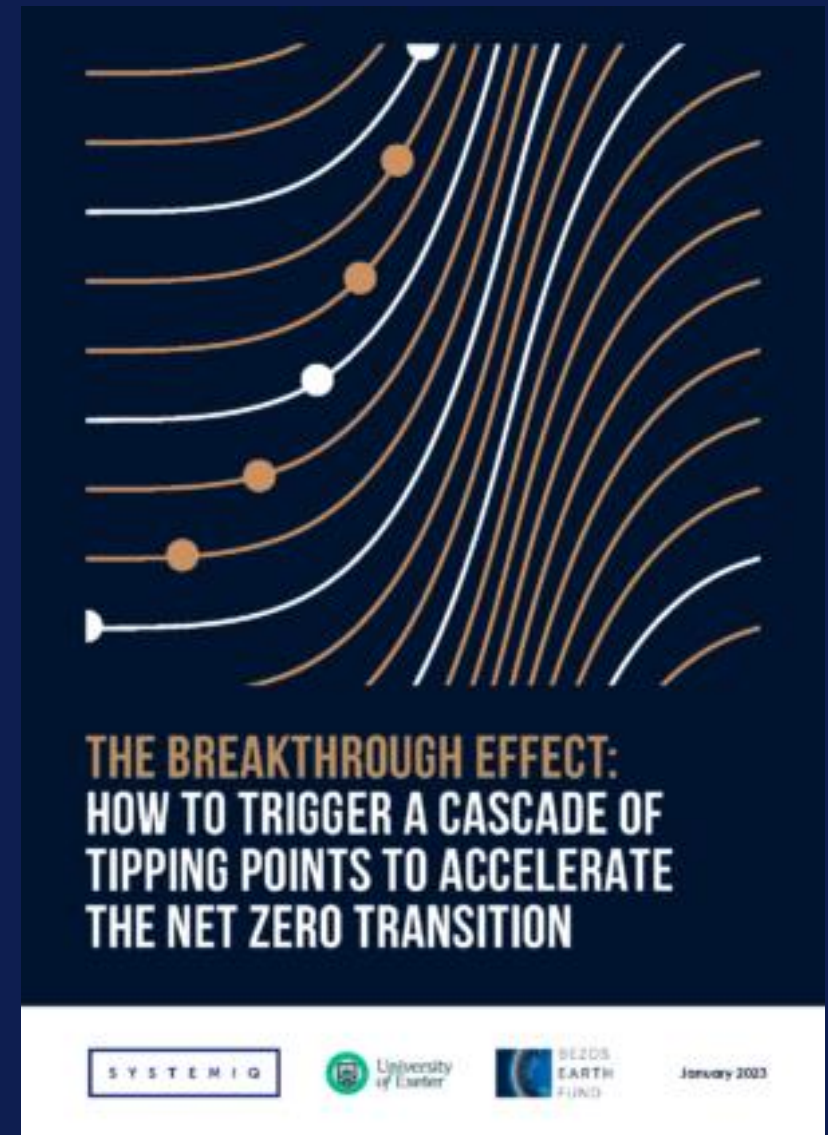
S Y S T E M I Q

Positive Tipping Points

Systemiq-led “Breakthrough Effect” report launched at Davos Jan 2023 as a contribution to SCL

Three “super-leverage points” identified to not only cut emissions in one key sector, but encourage a cascade of tipping points to also support faster changes in other parts of the economy:

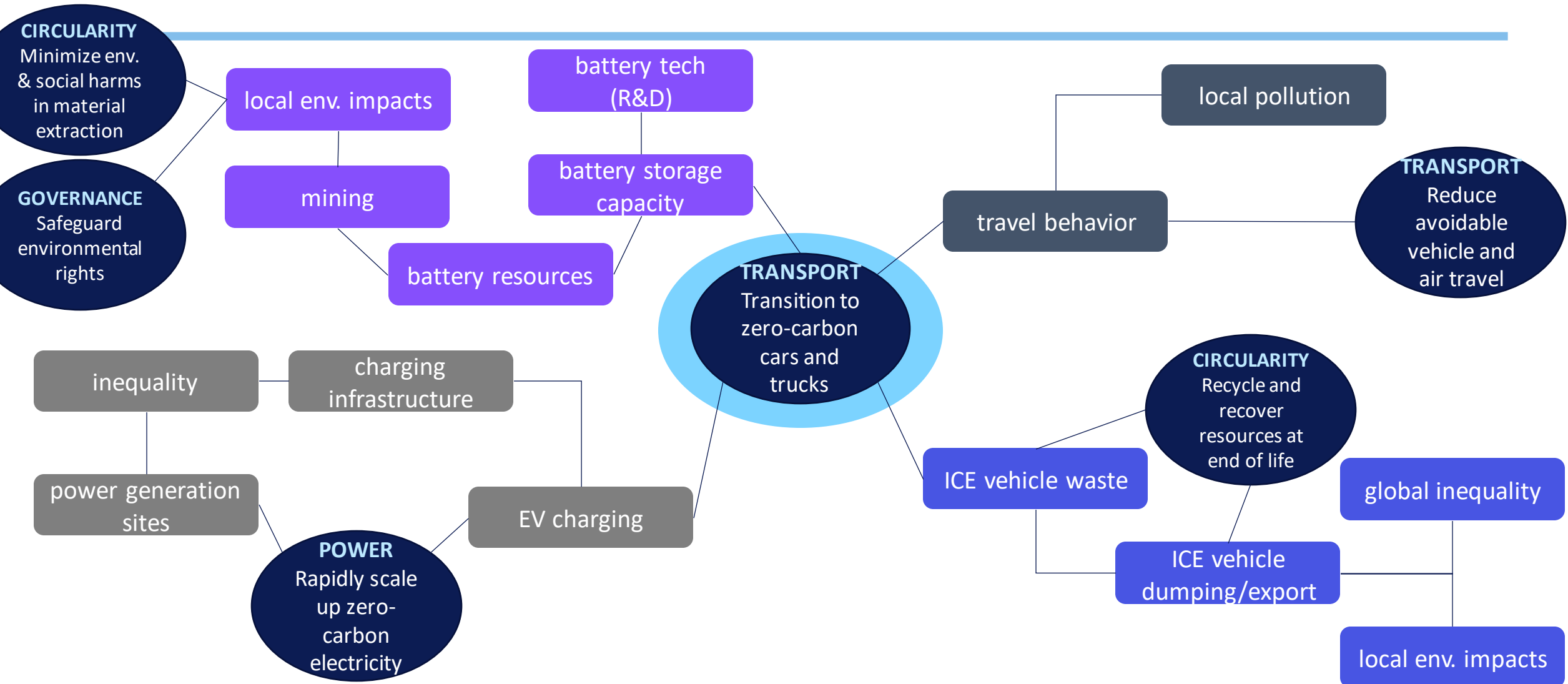
1. Mandates for the sale of **electric vehicles** [storage, energy transition]
2. Mandates requiring “**green ammonia**” to be used in the manufacturing of agricultural fertilizers [hydrogen]
3. Public procurement of **plant-based proteins** [deforestation]



Which systemic connections are most vital to consider?

- **Goal:** Offer a 'systems lens' of the complex interconnections involved in accelerating system shifts, to help inform decision-makers' and leading coalitions' strategy, funding priorities, and collaborations.
- **Key questions:** What dependencies, adverse impacts, co-benefits, limiting/enabling factors, and trade-offs should be considered when looking to scale system transformations?
- **Methods:** Convene with key experts on initial system shifts (power, industry, transport...) and host facilitated dialogues around key connections stories.
- **Outputs:** Publication of initial connection stories by late 2023 (data gap filling, narrative writing, visualizations).

Example connections for “transition to zero-carbon cars and trucks”





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Ethics Hotline

Hosted via our generous support from CI-GEF:

Director of Compliance

Conservation International
2011 Crystal Drive, Suite 600
Arlington, VA 22202, USA

CI Ethics Hotline

<https://secure.ethicspoint.com>
