WBCSD

Scope 3: Unlocking decarbonization through real value chain transparency

World Business Council for Sustainable Development
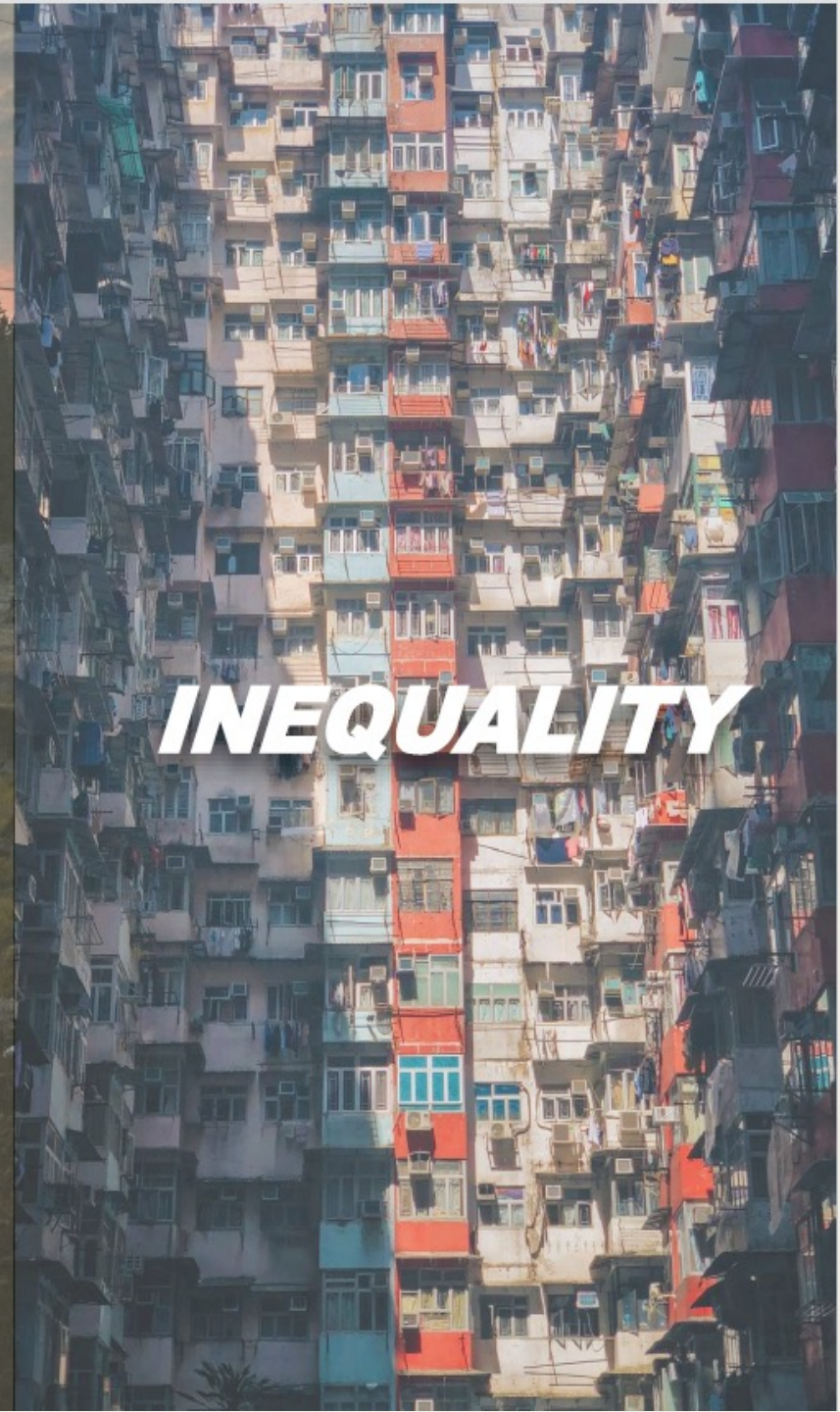
WORLD MATERIALS FORUM
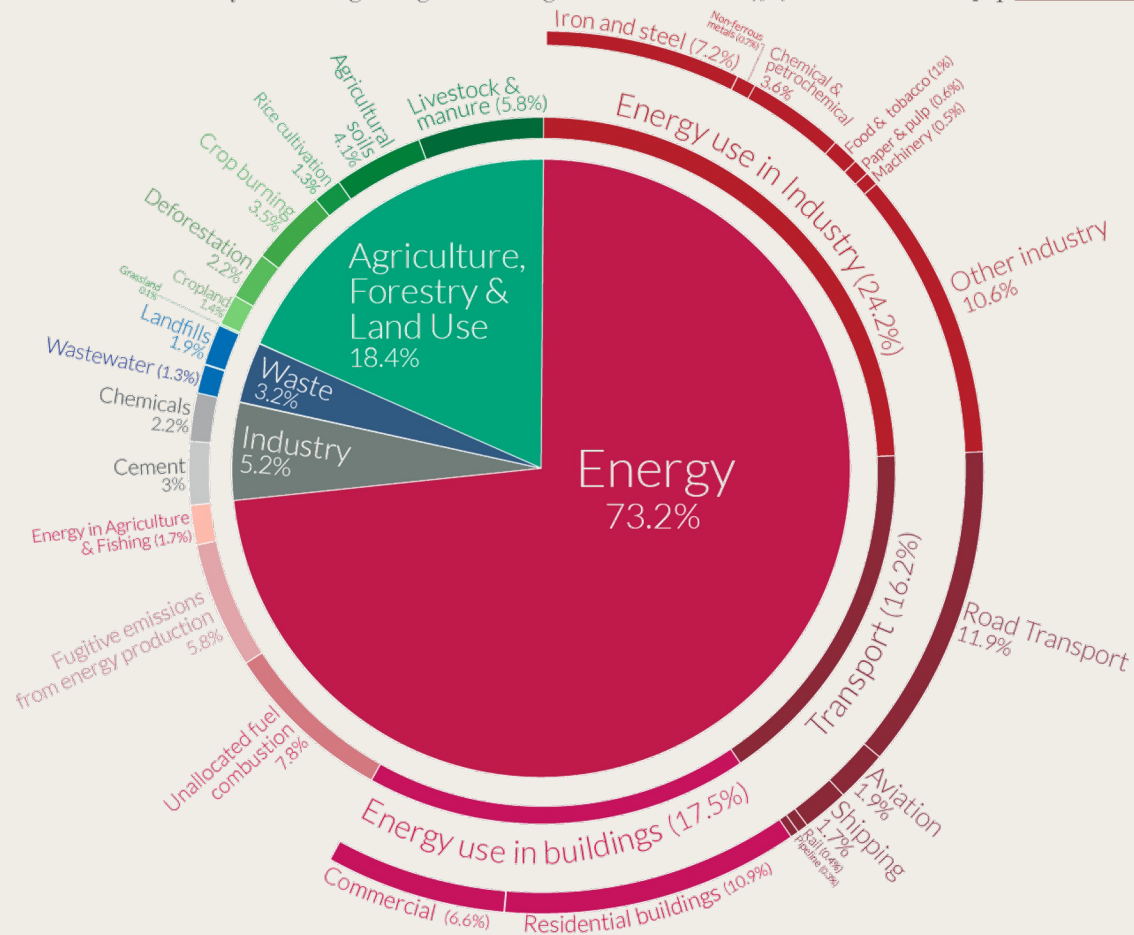
7 July, 2023

CLIMATE NATURE INEQUALITY

Decarbonizing the materials industry is critical to achieving net zero

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO_2eq.

Our World in Data

Materials industry is responsible for **~27% of global carbon dioxide (CO2) emissions** (incl. energy related emissions)

The top 3 sources:

➡ **Iron** and **steel** accounts for **~11% of global CO2 emissions** (~7% of global GHG emissions)

➡ **Cement** accounts for **~8% of global CO2 emissions** (~3% of global GHG emissions)

➡ **Chemical & petrochemical (e.g., plastics, rubbers...)** accounts for **~9% of global CO2 emissions** (~3.6% of global GHG emissions)
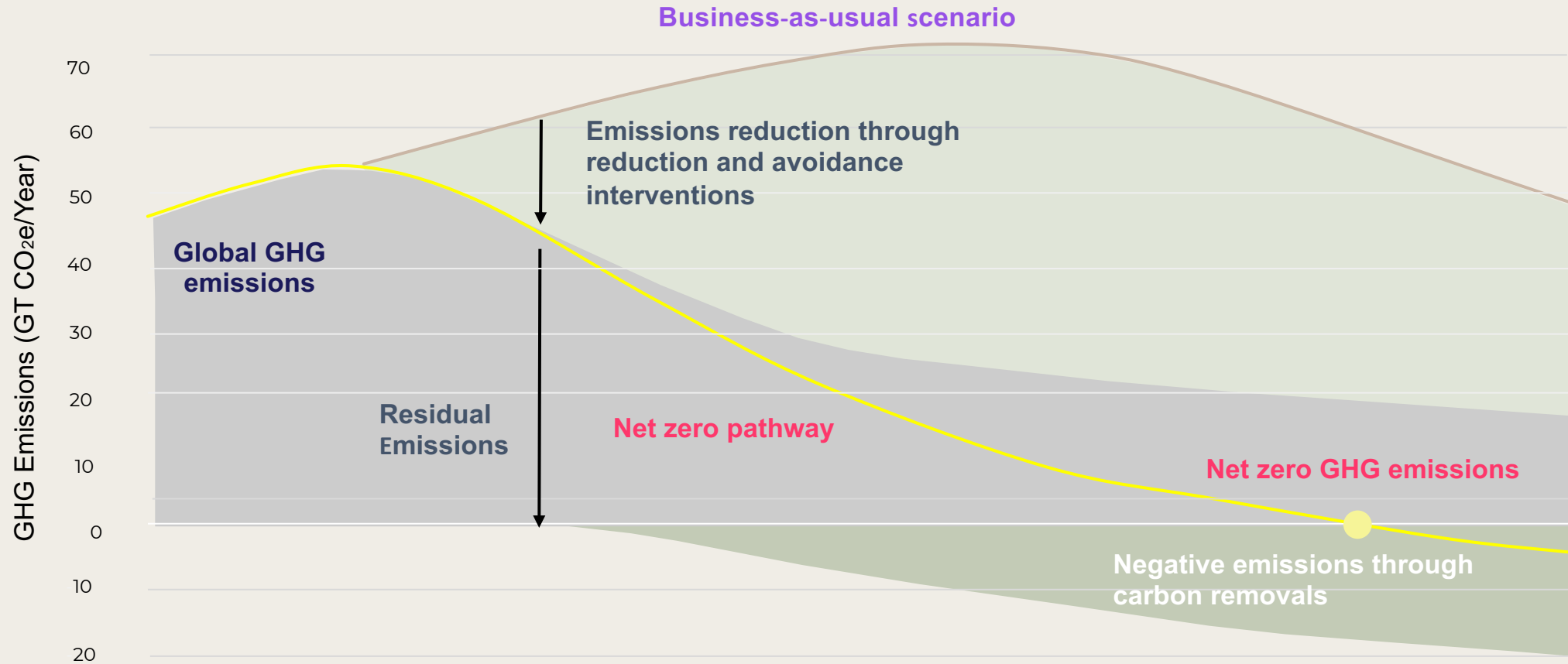
Net Zero: *a global goal to tackle climate change*

Business-as-usual scenario

Emissions reduction through reduction and avoidance interventions

Global GHG emissions

Residual Emissions

Net zero pathway

Net zero GHG emissions

Negative emissions through carbon removals

GHG Emissions (GT CO2e/Year)

Scope 3 emissions comprise a large share of carbon footprints, making abatement critical - but this is difficult to achieve today

Across industries, Scope 3 emissions are **significantly larger** than their Scope 1+2 counterparts…

% of total Scope 1-3 emissions, 2018, based on CDP self-reported data

Legend: ▢ Scope 1 & 2   ▮ Scope 3

B2B companies

Industry	Scope 3	Scope 1 & 2
Oil & Gas[2]	85	15
Mining	97	3
Cement & Concrete	16	84
Fertilizer	43	57
Packaging	61	39
Chemicals	72	28

B2C companies

Industry	Scope 3	Scope 1 & 2
Pharma-ceutical	83	18
Apparel	91	9
Retail	93	7
FMCG	95	5
Automotive	98	2
Air transport	13	87
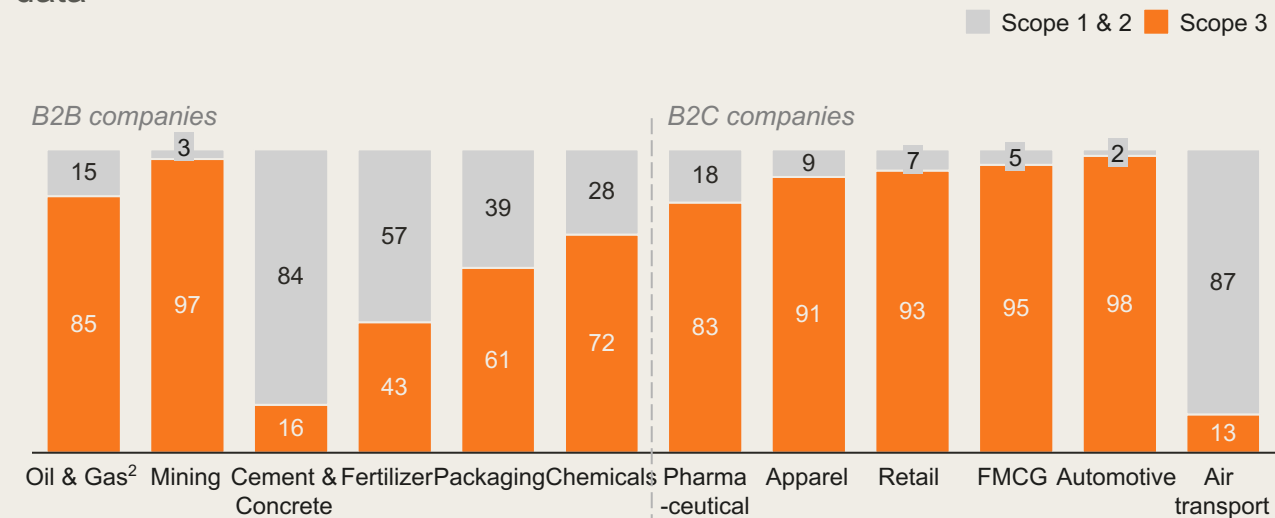
…however, companies face a **common challenge: Transparency**

Lack of granular, accurate and verified primary data

➡ **No consistent methodology** for calculating and allocating **product level** carbon emissions

➡ **Complex value chains** and **no interoperability** between tech solutions

➡ **Growing number of stakeholders** working to tackle challenge separately

Transparency on the real impacts created by value chain products is critical for all business decisions to decarbonize Scope 3

Accurate, granular and comparable product-level Scope 3 emissions data is fundamental for companies in...

Setting accurate decarbonization targets

Determining how much reduction to aim for

Identifying where to tackle in the value chain

Understanding exactly where to engage to reduce

Tracking performance

Measuring effectiveness of decarbonization activities over time

Now, imagine a world where you can calculate and easily exchange emissions data like you do with financial data

Financial Accounting

Financial data "flows through" companies via profit and loss statement and balance sheets – maintained via the general ledger in a company's ERP system

Data is often shared digitally, across companies via purchase orders and invoices along value chains
Global standards govern how the data is calculated

Carbon Accounting

While carbon and financial accounting differ, a similar approach needs to be adopted for carbon

Carbon footprint calculations must be harmonized and shared in an open, digitally enabled manner across technology solutions and platforms

Companies need access to standardized emissions data at each step of the supply chain, tied to specific products and services in the form of a carbon invoice. Enabling companies to accurately set targets and track progress

Solutions exist today; PACT supports companies to take credible decarbonization action across value chains and measure progress

What we do

Developing the global standard for calculating and exchanging consistent, comparable and credible Scope 3 emissions data across value chains, allowing organizations to take carbon-informed decisions

How we do it

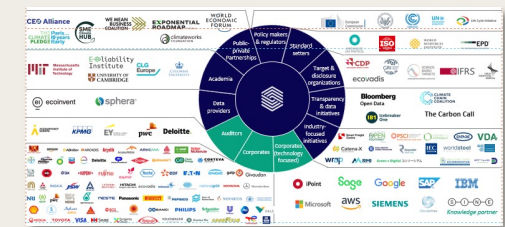**1** Harmonization of emissions accounting for products

Calculation methodology endorsed by 50+ organizations and in implementation

2 Standardization of data exchange across value chains

Data exchange specifications enabling connection between tech solutions

3 Driving collaboration across entire ecosystem

150+ stakeholders and industry initiatives representing 2,500 companies involved

Thank
You

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for Sustainable
Development

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