

Global Alliance for Buildings and Construction (GlobalABC)

Towards a zero-emissions, efficient and
resilient buildings and construction sector:
Setting the Scene

April 2024

The GlobalABC

- Founded in 2015 at COP21, hosted by UNEP
- More than 300 members, including 42 countries
- Leading global platform for all buildings stakeholders committed to a common vision: **A zero-emission, efficient and resilient buildings and construction sector.**



GlobalABC: Paving the way for radical collaboration



GOVERNEMENT

*Liberté
Égalité
Fraternité*

Buildings Breakthrough

Launched on 6th December 2023 at COP28.

Target- Near-zero emission and resilient buildings are the new normal by 2030.

Co-led by France and the Kingdom of Morocco coordinated by GlobalABC

To date **29 countries** have joined the Buildings Breakthrough.

In addition, **the European Commission and 26 international initiatives** have announced their support.

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[Global Alliance for Buildings and Construction \(GlobalABC\)](#)

Buildings and Climate Global Forum

7th and 8th March 2024, Paris , France

Builds on momentum from the Buildings Breakthrough launch

- 1 Ministerial declaration – **Declaration de Chaillot**
- 25 Thematic sessions
- 1 CEO and 1 Local governments roundtable
- 10 High-level dialogues
- Launch of Buildings Breakthrough priority actions

More than 1400 participants, more than 70 nationalities represented.



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Why focus on the buildings & construction sector?

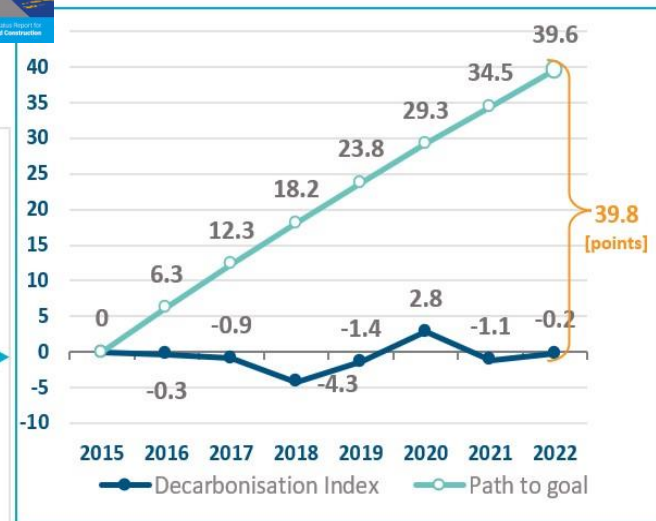
- **A major emitter** - 21% of global GHG emissions (IPCC)
- **A major consumer of natural resources** – over one third of materials consumption in weight (OECD)
- **Highly vulnerable to climate change** - heating and cooling, performance, durability and safety (IPCC).
- **Need more buildings** - Half of buildings that will exist by 2050 not having been built yet (IEA)
- **Aging building existing building stock** - Need to renovate about 20% of existing building stock to zero-carbon-ready by 2030 (IEA).
- **A key sector for national economies and employment** - 11-13% of global GDP and about 7% of global employment (ILO)



Building decarbonization trends since 2015



- The GlobalABC Buildings climate tracker shows a **stagnation of progress since 2015**.
- Critically the **building sector emissions have not reduced over the past 7 years**. In 2022, emissions are higher than 2015 levels.



Energy consumption and CO2 emissions

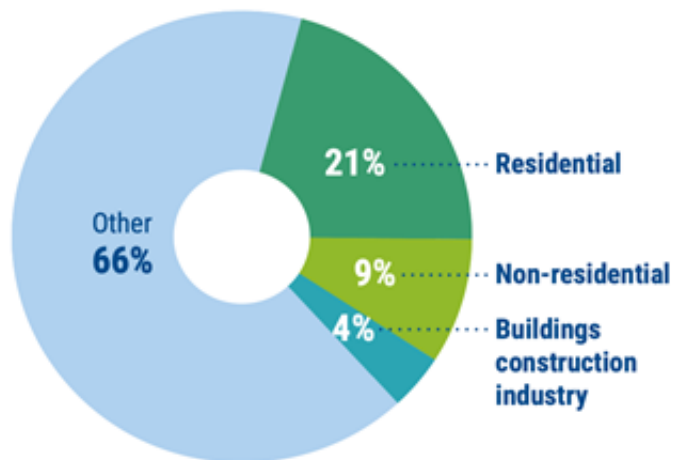


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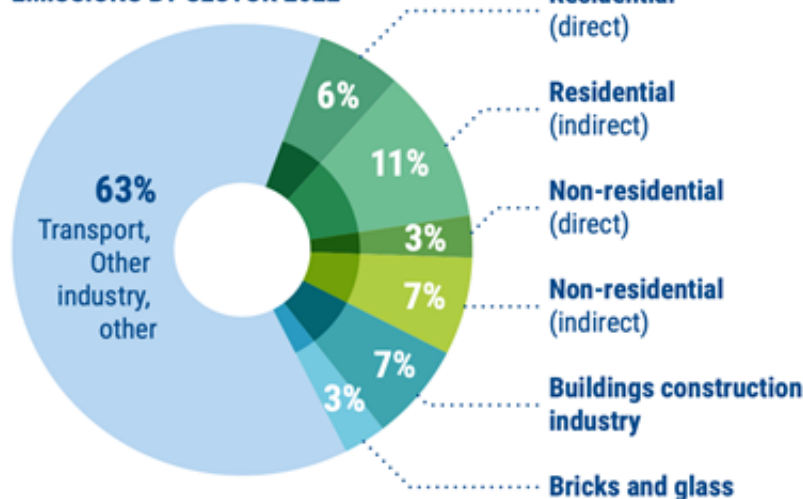


Figure 1 Share of buildings in total final energy consumptions in 2022 (left) and share of buildings in global energy and process emissions in 2022 (right)

ENERGY DEMAND BY SECTOR 2022



EMISSIONS BY SECTOR 2022



(Source: IEA 2023a. Adapted from 'Tracking Clean Energy Progress')

Notes: Buildings construction industry refers to materials used in construction, including concrete, steel and aluminium. Other materials shown separately.

Some progress but not enough...

ENERGY INTENSITY

- The energy intensity **has decreased only 5% since 2015**

BUILDINGS EFFICIENCY INVESTMENTS

- Global investment in the energy efficiency **increased about 60% since 2015**. Need to increase significantly – **still less than 5% of total global investment in the buildings sector**

RENEWABLES SHARE IN BUILDINGS ENERGY DEMAND

- The **Renewable share in final energy demand in buildings is around half of the needed value**

BUILDING ENERGY CODES

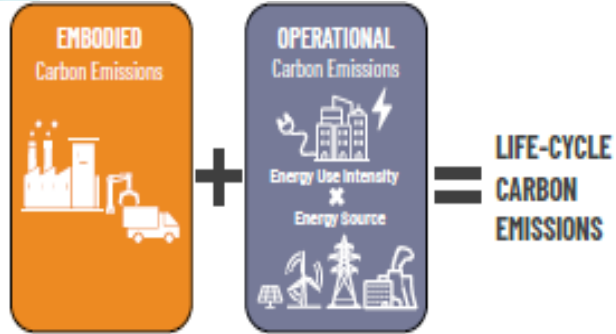
- More than **25% increase since 2015** with over 81 countries with building energy codes in 2023 but many are outdated - By 2022, **only 3 countries have energy codes aligned with Zero Energy Buildings**

NDCs

- The number of countries mentioning Buildings in their NDCs almost doubled since 2015. In 2022, **161 mention Buildings in their NDCs** but most **lack clear and ambitious targets and actions**.



We need to decarbonize along the lifecycle



A **Whole Building Life Cycle and Systems Approach** to decarbonization is essential to maximizing long-term sustainability.

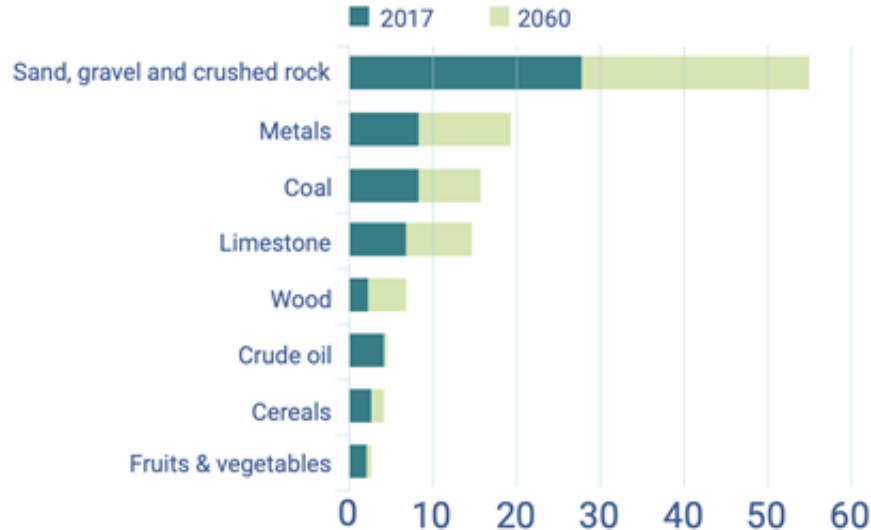
BUILDING MATERIALS AND THE CLIMATE: CONSTRUCTING A NEW FUTURE



The Materials Challenge

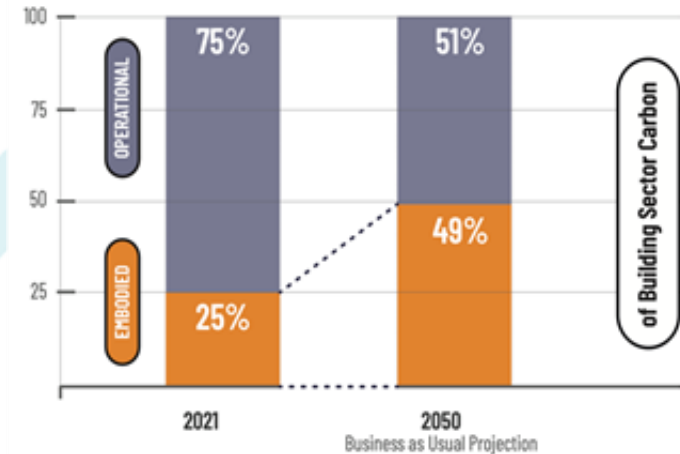
Construction materials dominate resource consumption

Consumption in gigatonnes



Projected Contributions from Embodied and Operational Carbon within the Building Sector

From 2021 to 2050 with Business as Usual Projections



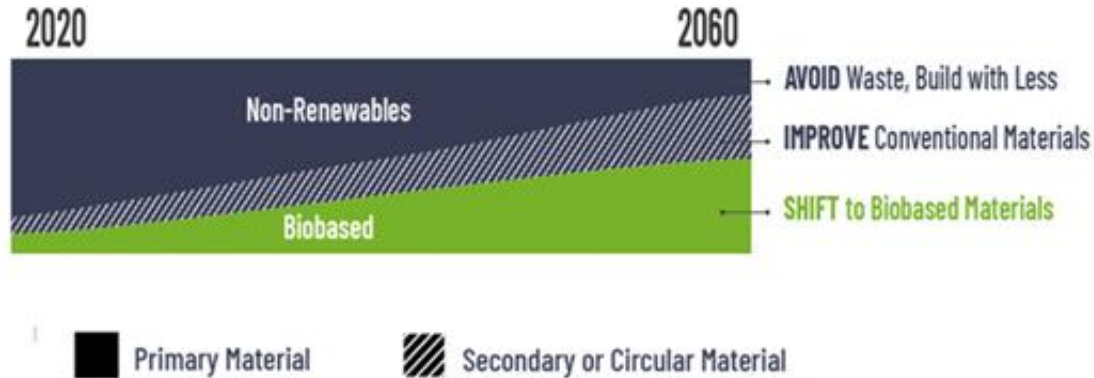
If business as usual continues, **embodied emissions will contribute nearly half of all building emissions by 2050.**

Avoid-Shift-Improve

Transitioning to low-carbon buildings



The challenge for policymakers



- 50% of the buildings that will stand in 2060 have not yet been built – how do we deliver this next wave of construction sustainably?
- How do we improve circularity and decarbonise key materials at the same time as a massive rise in demand?
- How can we make bio-based and low-carbon materials the norm?

Sustainable Public Procurement



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Sustainable Public Procurement is a powerful tool to move the market towards sustainable practices.

Examples:

- **Colombia** - Sustainable Building Certification System (SBCS) helps public agencies to prioritize sustainable design and construction practices when selecting contractors and suppliers
- **Costa Rica** - government criteria and guidelines to ensure that public buildings are designed and constructed in an environmentally friendly and socially responsible manner
- **Singapore** – public procurement criteria and guidelines and Green Mark Scheme, a certification program that assesses the environmental performance of buildings and construction projects
- **China** - Green Building Evaluation Standard (GBES) - public procurement policies often require buildings to meet certain GBES standards to be eligible for government contracts
- **South Africa** - government agencies incorporating Green Star rating system requirements into their procurement processes
- **Senegal** - National Sustainable Procurement Guidelines for Buildings and Construction

Recommendations

GOVERNMENTS

- Develop and enforce **Climate action roadmaps for Buildings and Construction** taking a lifecycle approach
- Strengthen **building energy codes** to enhance efficiency
- Increase **investment in building decarbonisation**
- Policies to **reduce embodied carbon** and **promote retrofitting**
- **Lead by example** (public procurement, public buildings)



Déclaration de Chaillot goals and means

1. Implementing roadmaps, regulatory frameworks, and mandatory building and energy codes to move towards carbon-neutral buildings;
2. Implementing an appropriate financial framework with financial and fiscal incentives, and regulatory tools to increase the share of resilient, near-zero emission, and affordable buildings;
3. Leading by example by adopting ambitious policies regarding public procurement;
4. Promoting the adoption of labels, standards, and certifications;
5. Promoting the production, development, and use of low-carbon, durable, and cost-effective construction materials;
6. Promoting collaborative value chains, as well as research and development of innovative solutions;
7. Improving skills by strengthening local know-how, considering mitigation and adaptation strategies;
8. Developing multi-level governance, coordination among different stakeholders, and a more participatory approach to ensure coordination of implementation;
9. And developing tools and regulatory frameworks to collect and share data and best practices.



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Find out more:

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