

Decarbonizing the 40%: leverage system collaboration to transform the built environment

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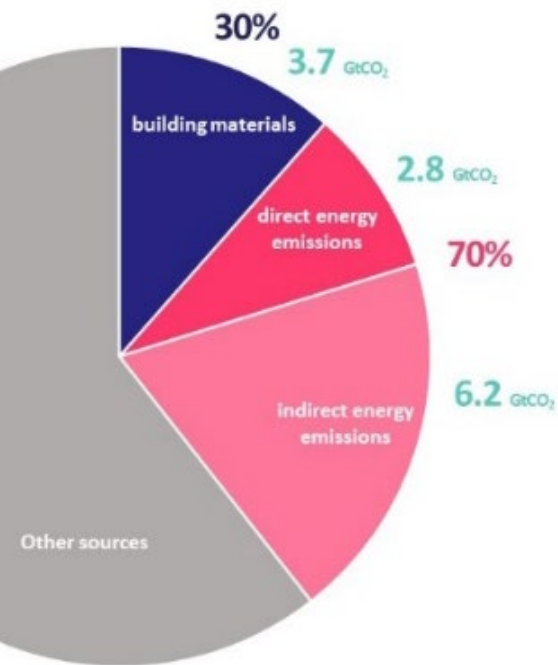
WBCSD – Business leadership for a sustainable future



200 global companies united around a common vision creating a world in which over 9 billion people are all living well and within planetary boundaries by 2050

Built environment decarbonization: Our vision

Accelerating the achievement of *net-zero emissions* across the *entire built environment lifecycle* no later than 2050 through *system-wide collaboration*.



The building sector represents approx. **40% global energy-related CO₂ emissions**



Every 5 days
a surface of the size
of Paris is built

Source: Global Status Report 2018, Global Alliance for Building and Construction

GOAL

HALVE by 2030 and achieve NET-ZERO by 2050
of the BUILT ENVIRONMENT LIFECYCLE emissions

Operation - Net Zero :

- 2030: all new buildings
- 2050: all buildings

Embodied carbon:

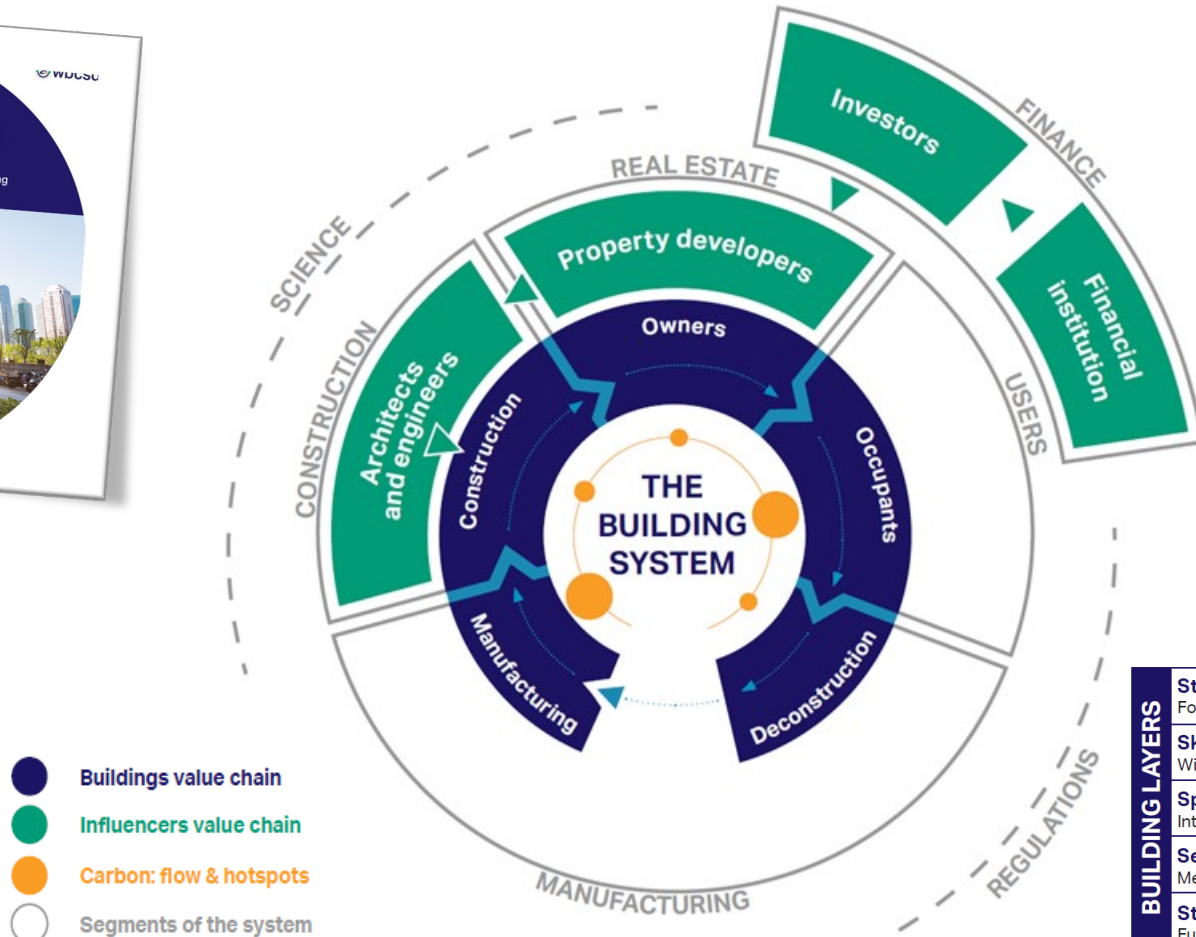
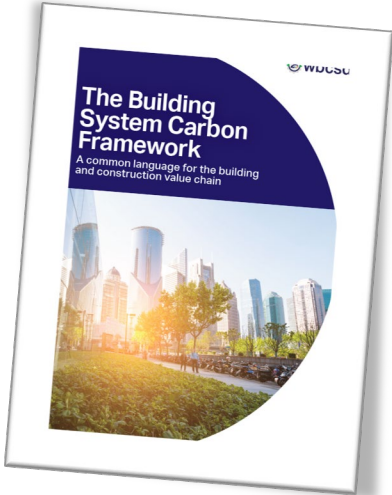
- 2030: -40% CO₂ emissions
- 2050: Net Zero



**WE MEAN
BUSINESS**

The Building System Carbon Framework

- Involve all actors with “influence”
- Address all emissions in the building system
- Focus on getting to “net zero” across the whole life-cycle
- Performance-based approach to allow for innovation across building stages

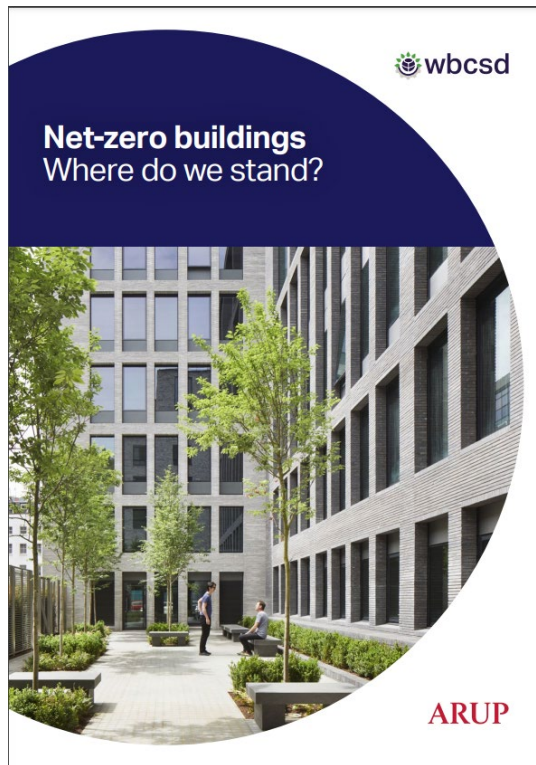


		BUILDING STAGES						
		PRODUCT	CONSTRUCTION	USE		END OF LIFE	EMISSIONS	BEYOND LIFE
		A1-A3	A4-A5	B1-B5	B6-B7	C	kgCO ₂ /m ²	D
BUILDING LAYERS	Structure Foundation, load-bearing							
	Skin Windows, roof, insulations							
	Space Plan Interior finishes							
	Services Mechanical, electrical, plumbing							
	Stuff (optional) Furniture & appliances							
	Building carbon emissions							
Carbon compensation Removals and offset								

● Embodied carbon ● Operational carbon ● Partial and total sums

www.wbcso.org/building-system-carbon-framework

New report: “Net zero buildings – where do we stand?”

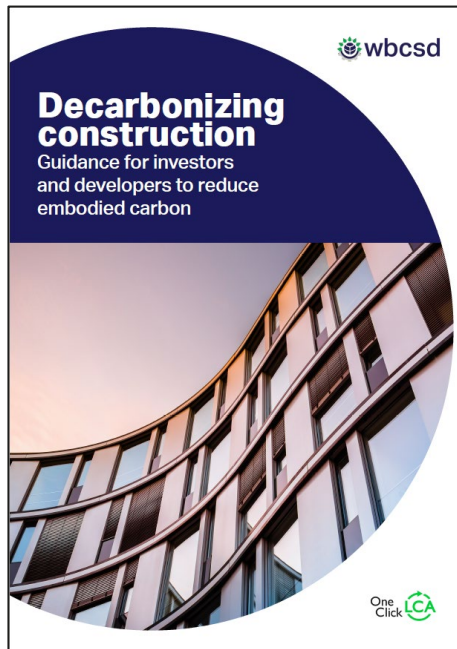


[Download report](#)

Key messages

1. Measure whole life carbon in all building projects
2. Share data openly
3. Start setting clear targets
4. Align on “net zero”, including a valid approach to residual emissions
5. Achieve wider collaboration as individual organizations acting is not enough
6. With focus and collaboration we can set this sector on track to halve emissions by 2030.

New report: “Decarbonizing Construction - Guidance for investors and developers to reduce embodied carbon”



[Download report](#)

Who is this for?

How investors and developers can set requirements to reduce embodied carbon in projects they finance.

Used by different stakeholders:

- Investors
- Developers
- Tenants
- Consultants and designers
- Design-build contractors

What does it do?

It condenses over **50 requirements** - leading embodied carbon reduction practices across all project life-cycle phases into a single report. Measures are grouped into:

Five categories:

1. Create a carbon policy
2. Targets and transparency requirements
3. Prioritize circularity,
4. Design optimization
5. Low-carbon procurement

[Read](#) the Insight by WBCSD’s Roland Hunziker & Yi Sun: Decarbonizing the 40% - How the finance sector can drive the transformation to a net-zero built environment