

FREE

SUSTAINABILITY & NET ZERO

Decarbonisation Strategy Fundamentals

Decarbonisation strategy fundamentals.



· Sustainability & Net Zero Lesson 1 of 10

Decarbonising the built environment is the largest single climate lever. Buildings = 40% EU energy / 36% emissions; new construction adds embodied carbon; operations add operational carbon over decades.

This lesson sets the strategic frame for the rest of the course.

Learning objectives

Remember	Key terminology.
Understand	How the framework works.
Understand	Standards and benchmarks.
Apply	Apply to a working project.

1 • The decarbonisation lever map

Operational efficiency (insulation, plant) → fuel switching (heat pumps, renewables) → embodied carbon reduction (low-carbon materials) → circular reuse (existing fabric retention). Each layer enables the next.

2 • Science-based targets

SBTi (Science Based Targets initiative) provides corporate decarbonisation pathways aligned to 1.5°C. Required by many investors; increasingly by tenants. Buildings sector specific guidance.

3 • Transition planning

Climate Risk + Transition Plan disclosure under TCFD / CSRD. Asset-level decarbonisation pathways. Stranded asset risk if not aligned.

4 • Three time horizons

Now (operational efficiency, easy wins). Mid-term (heat pump conversion, deep retrofit). Long-term (embodied carbon, supply chain). Sequence matters.

5 • What this looks like on a real project

UK UKGBC Net Zero Roadmap

UKGBC roadmap to 2050 sets sector targets — heat pumps, fabric upgrades, embodied carbon limits.

EU EU Climate Law -55% 2030

Regulation (EU) 2021/1119 sets binding -55% by 2030. Building sector contribution material.

UAE UAE Net Zero 2050

First MENA country to commit to net zero by 2050. NDC 3.0 sets -79% buildings sector by 2035.

6 • Why this matters

Decarbonisation is no longer a nice-to-have — it's the lens through which CFOs, lenders, and tenants evaluate every asset. You now understand the strategic pillars (energy, embodied carbon, supply chain, offsets) and the order they matter in. That framework keeps your strategic recommendations defensible and your tactical ones aligned.

Quiz

Your score

0 / 5

1. SBTi stands for:

- a) Sustainable Building Technology Index
- b) Science Based Targets initiative
- c) Solar-Battery-Thermal initiative
- d) Standard Building Tier index

2. TCFD covers:

- a) Cooling tower fluid dynamics
- b) Climate risk and disclosure
- c) Tenant Cost Framework
- d) Total cost feedback

3. Stranded asset risk in buildings:

- a) Building demolished prematurely
- b) Building cannot be let / sold without major retrofit
- c) Building outside city boundary
- d) Building with vacant tenant

4. Decarbonisation lever sequence typical:

- a) Embodied first, operational later
- b) Operational efficiency → fuel switch → embodied → circular
- c) Random
- d) All at once

5. EU Climate Law -55% target year:

- a) 2030
- b) 2050
- c) 2025
- d) 2040

Answers (for print): 1b · 2b · 3b · 4b · 5a

Resources

PRIMARY SOURCES

- UKGBC Net Zero Whole Life Carbon Roadmap.
- EU Climate Law (EU) 2021/1119.
- IPCC AR6 Working Group III.

STANDARDS AND GUIDANCE

- SBTi corporate buildings sector guidance.
- TCFD framework, IFRS S2.

INDEPENDENT COMMENTARY

- World GBC Advancing Net Zero programme.

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Ready for the rest of the course?

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