

Presented at the FIG e-Working Week 2021,  
21-25 June 2021, in Virtually in the Netherlands

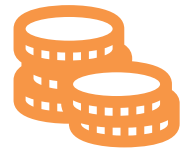
# How carbon metrics are to be incorporated in ICMS3

Chris Fry, CDir  
*Managing Director, Accelar Limited*

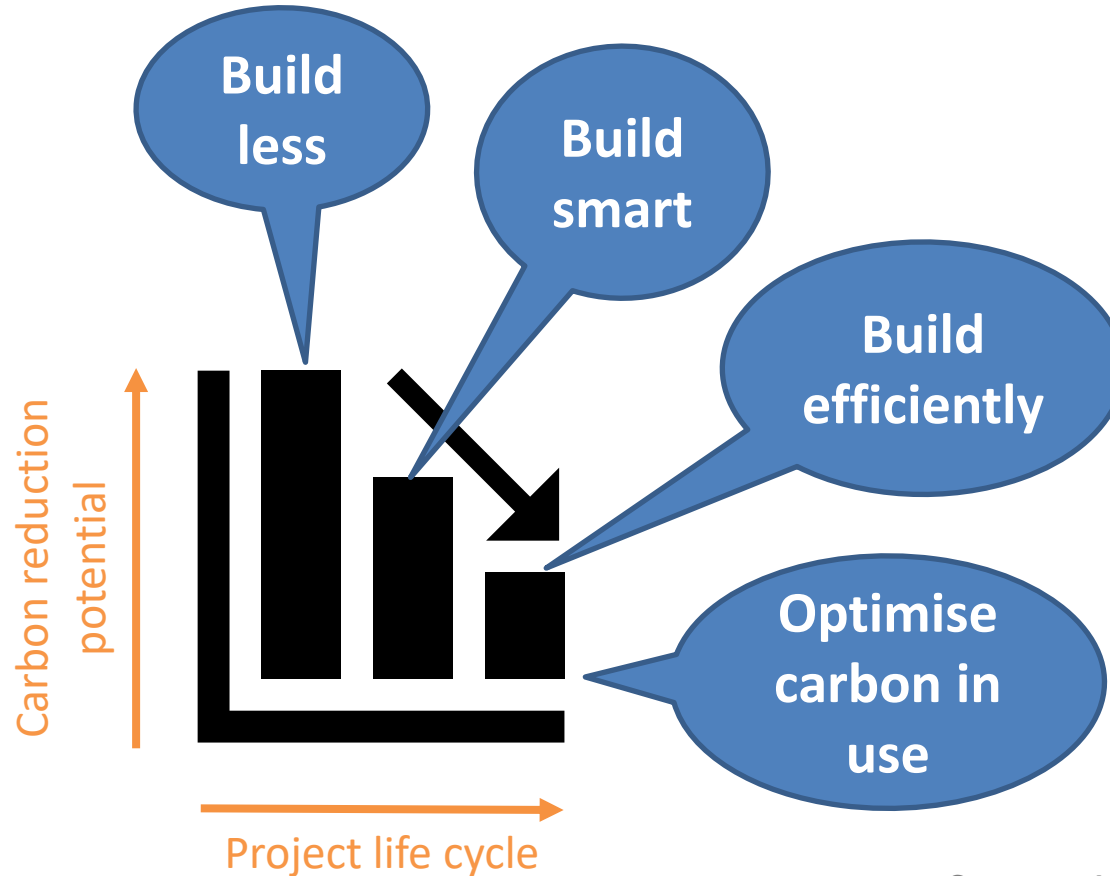


# The rationale for tackling carbon

- The imperative to tackle climate change is clear and construction has a big part to play globally in reducing carbon emissions
- Carbon affects cost... and in fact reducing carbon usually reduces cost
- Aided by technology, there are many different opportunities to reduce carbon in buildings and infrastructure



# Carbon reduction opportunities



Source: Adapted from HM Treasury / Green Construction Board

# Principles for integrating carbon in ICMS

## 01

To assess carbon via existing carbon measurement standards & tools:

- starting early (forecasts > actuals)
- in as much detail as is practical



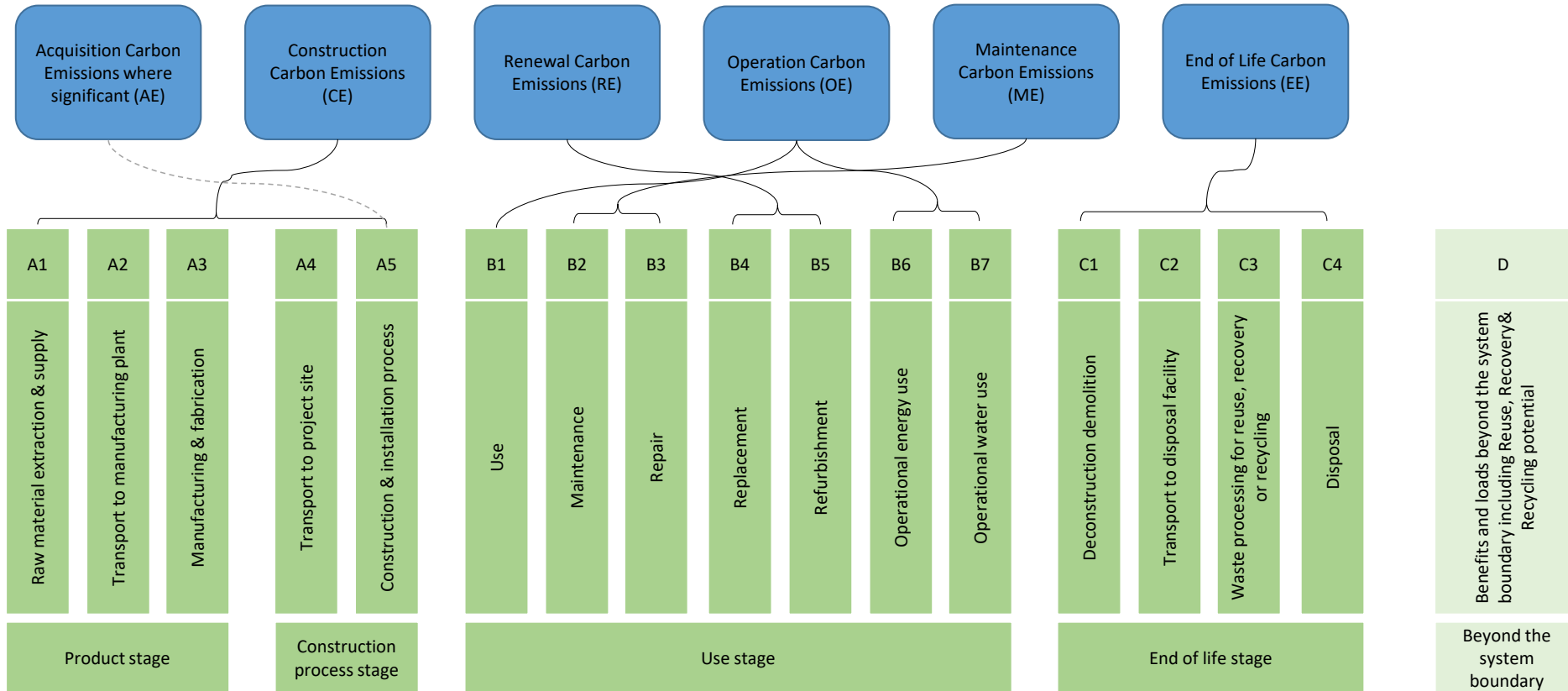
# Principles for integrating carbon in ICMS

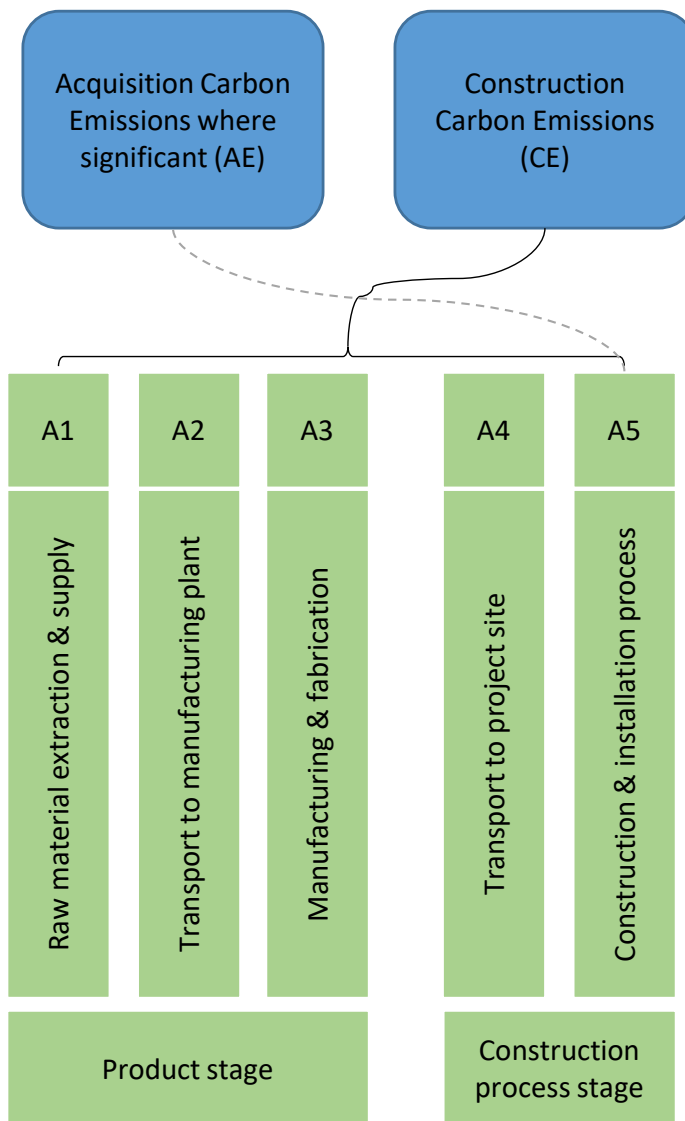
## 02

Report carbon emissions  
alongside costs via ICMS (as  
the umbrella)



# Mapping whole life carbon assessment stages into ICMS



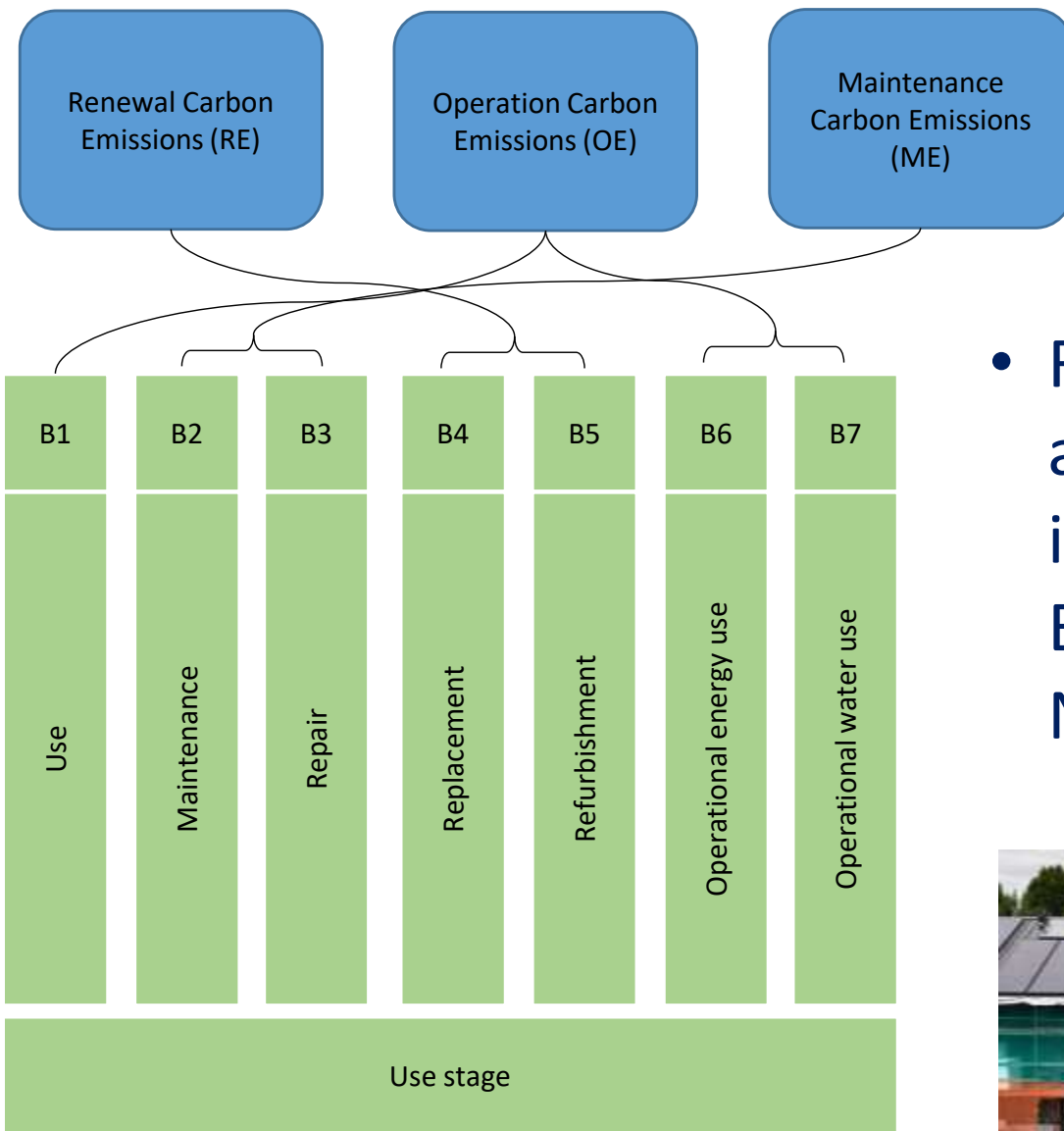


## Construction opportunities e.g. concrete in infrastructure

- Materials: Alkali-activated cementitious binders saving 60-80% carbon
- Products: Connectable pre-cast concrete blocks for retaining walls, saving >15% carbon

Source: CLC, Infrastructure Carbon Review Seven Years On, 2021



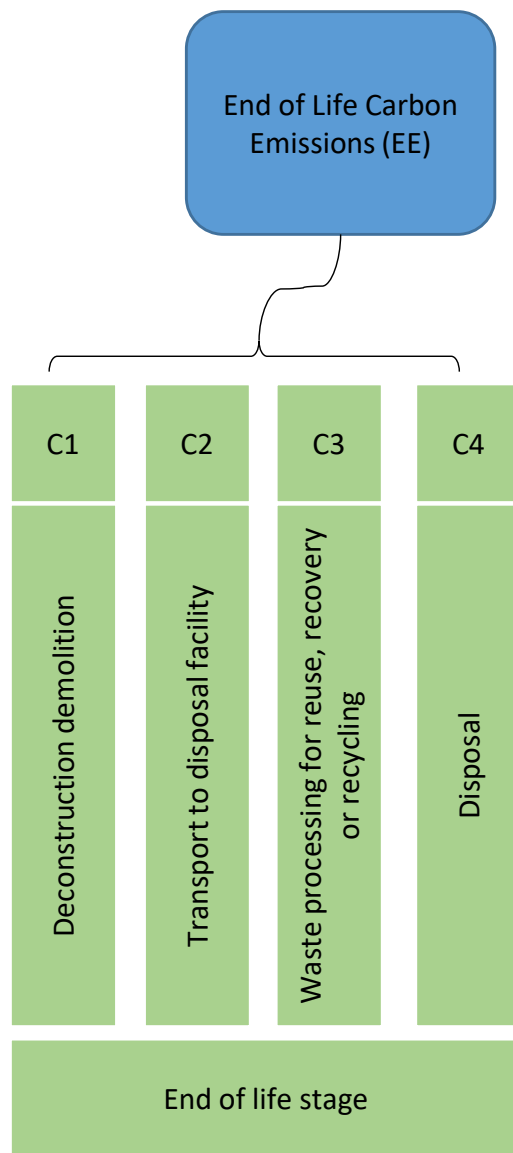


## Renewal/operation opportunities

- Retrofitting housing to achieve net zero energy in use e.g. Energiesprong, Netherlands







## End of Life opportunities

- Design for reuse e.g. modular assets & other Modern Methods of Construction
- “Buildings as Materials Banks” & Materials Passports



# What needs to happen?

- Get started and get comfortable with carbon – you don't have to be fluent
- Measure, benchmark and set carbon targets/budgets
- Demonstrate and share insights



Thank you

Chris Fry

cfry@accelar.co.uk



*Helping to accelerate the clean growth transition*