

Less is More: Should we build and buy less

Chair

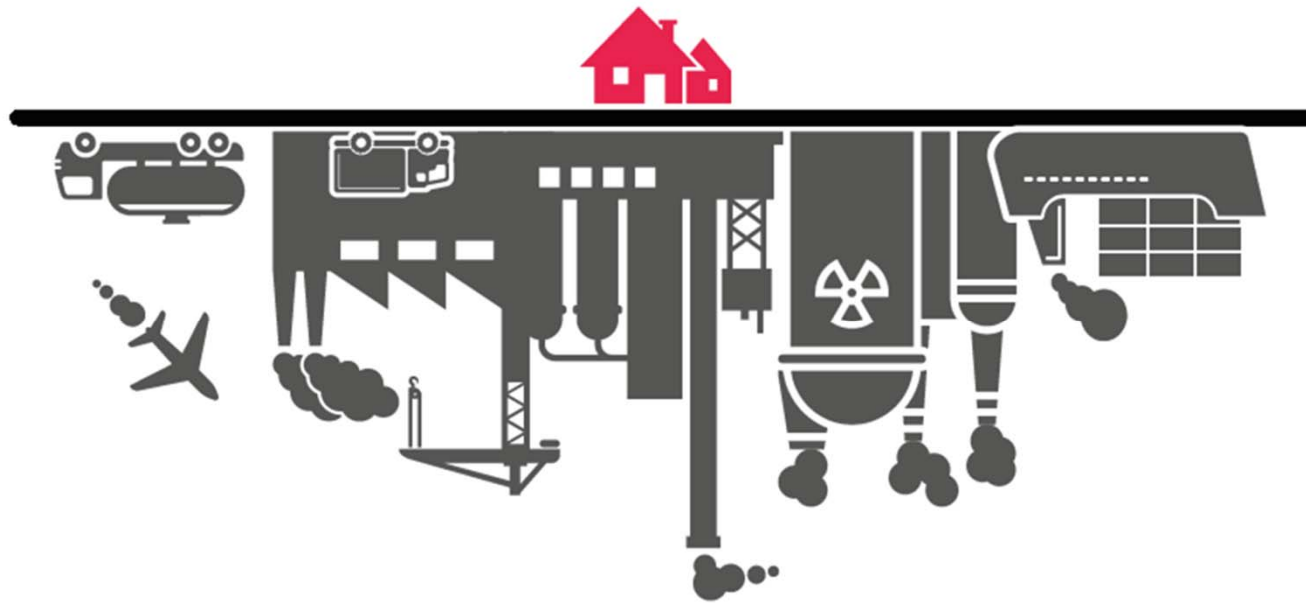
Sara Edmonds

Director, Studio seARCH

Theatres Trust
Conference 21:
Making Theatre
Sustainable



#MakingTheatreSustainable



EMBODIED CARBON IN CONSTRUCTION



ACAN



ARCHITECTS!
CLIMATE
ACTION
NETWORK

Architects Climate Action Network (ACAN) is a voluntary network of individuals from within architecture and its related built environment professions taking critical action to transform our industry in the face of the climate and ecological crises.

ACAN exists to address the way our built environment is made, operated and renewed in response to the climate emergency.

ACAN is driven by three aims:

1. Rapid decarbonisation of the built environment,
2. Ecological regeneration through the immediate adoption of regenerative & ecological principles, and
3. Cultural transformation of the profession.

Campaign for Regulating Embodied Carbon

www.architectscan.org





49%

of UK total carbon emissions are attributed to buildings

50m

tonnes of CO₂e are released every year into the atmosphere from new buildings and infrastructure alone



What is Embodied Carbon?



Greenhouse gas emissions associated with materials and construction processes throughout the whole life cycle of a building, including: material extraction, manufacturing, transport, construction, maintenance, repair, replacement, refurbishment, deconstruction disposal.

- *London Energy Transformation Initiative (LETI) paraphrased*



EXTRACTION

A large industrial manufacturing scene, likely a steel mill, featuring a glowing orange molten metal being poured into a mold, creating a shower of sparks. The word "MANUFACTURE" is overlaid in a black box.

MANUFACTURE



TRANSPORT



CONSTRUCTION



REFURBISHMENT



DECONSTRUCTION

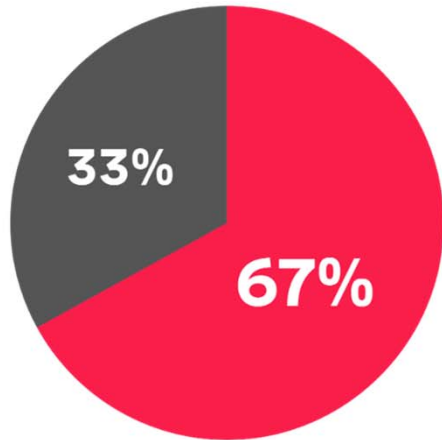


PROCESSING

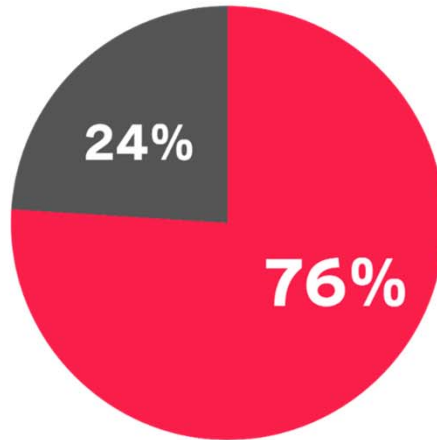


DISPOSAL

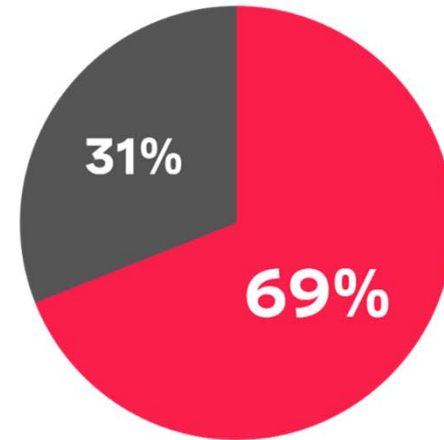
OFFICE



WAREHOUSE



RESIDENTIAL



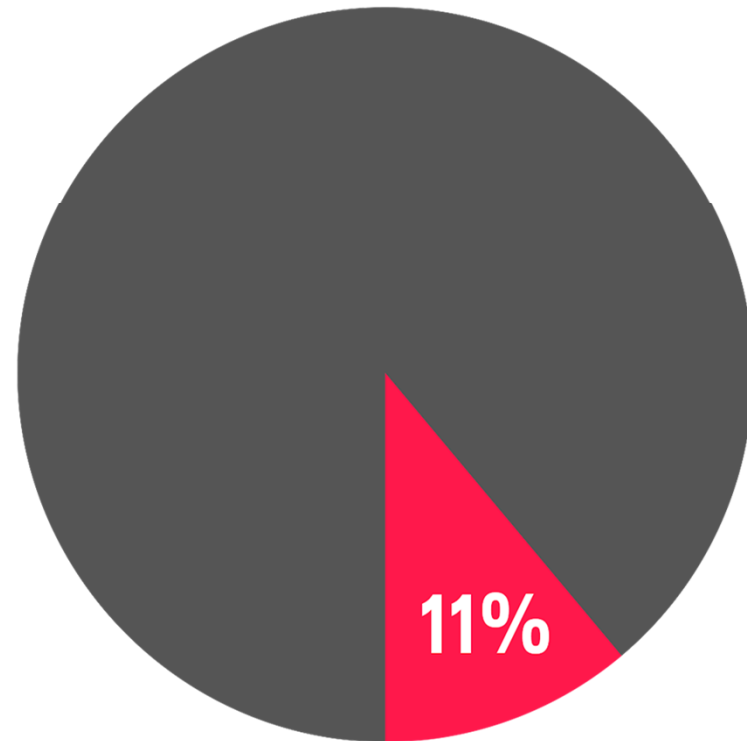
■ Whole Life **Operational**
Carbon Emissions

■ Whole Life **Embodied**
Carbon Emissions

WORLD GREEN HOUSE GAS EMISSIONS

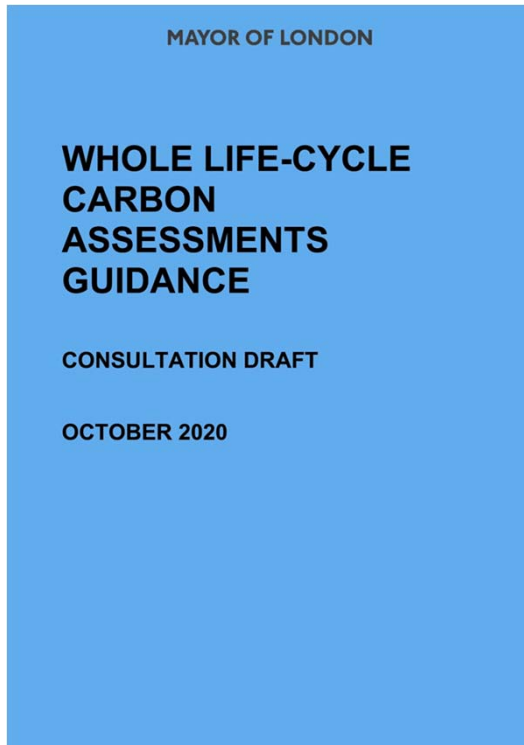
 **Embodied Carbon
in Construction**

 **Everything Else**



Further reading

Planning:



Embodied Carbon:



Regulation / Policy:

