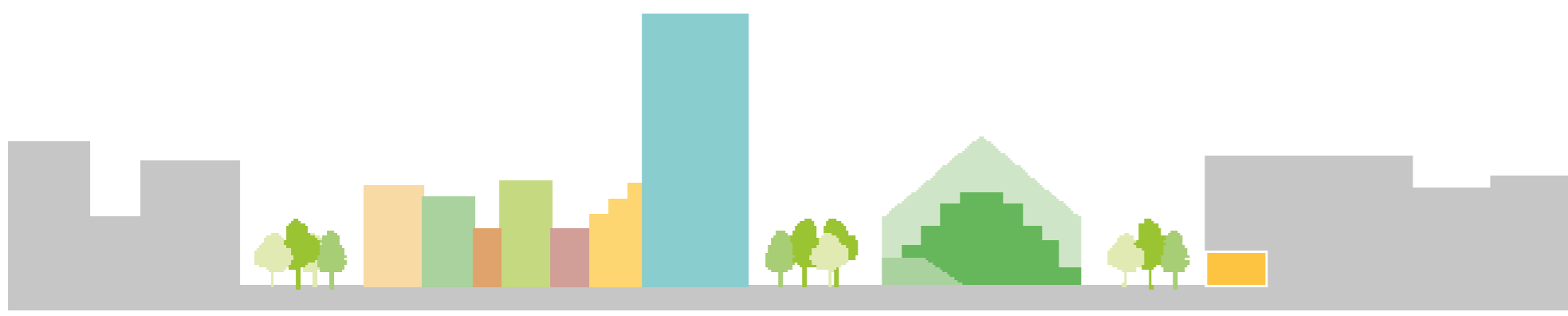


MVRDV Carbon Guidelines

At MVRDV, our mission is both practical and exploratory as we seek ways to address and alleviate the urgent climate challenges. The building industry is responsible for 39% of greenhouse gas emissions. As designers of the built environment, we recognize our crucial role in providing impactful responses to the climate crisis.

The road to zero carbon is a complex one. Challenges and opportunities vary per typology, brief, regulation and country. However, a targeted application of one or more carbon reduction strategies can lead to lowering emissions.

When it comes to decarbonizing our projects, we can have the most impact early on in the process. The "MVRDV Carbon Guidelines" help to inspire and target strategies for active carbon reduction in early design stages. They are not sequential steps or rules; rather, you can combine one or several of these guidelines into a customized strategy for your project.



Small / Medium Scale

- Bio-based materials
- Alternative construction
- Re-use

Large Scale

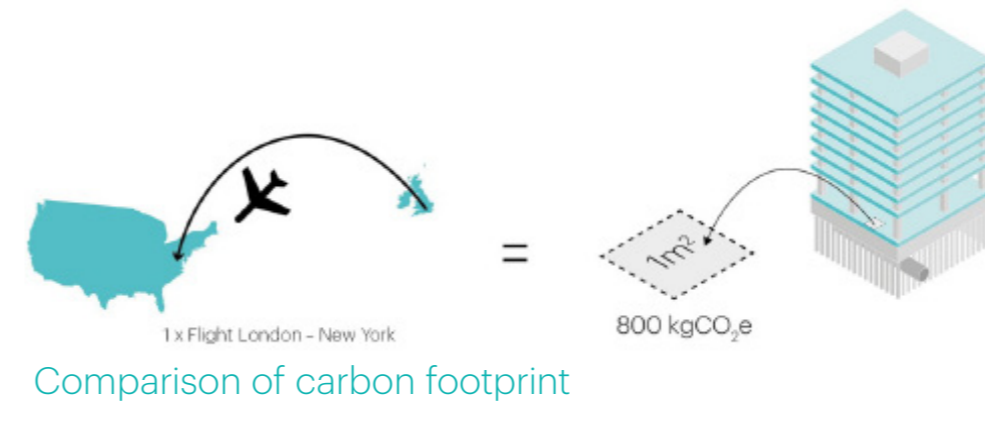
- Reduce structure
- Future Adaptability

Public

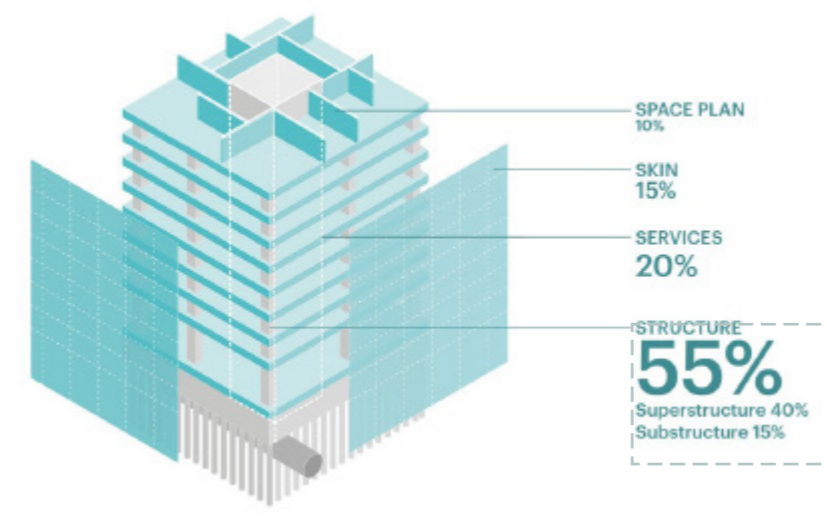
- Material showcase
- Programmatic Synergies

Interiors

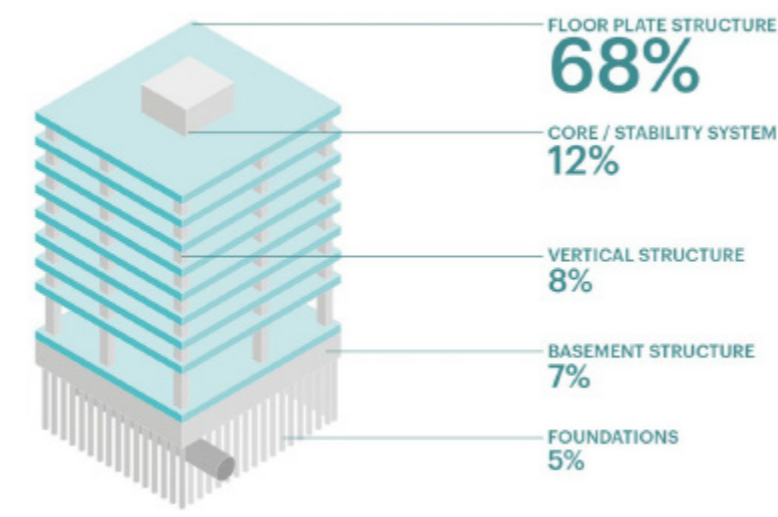
- Demountable elements
- Recycled / fast growing bio-based materials



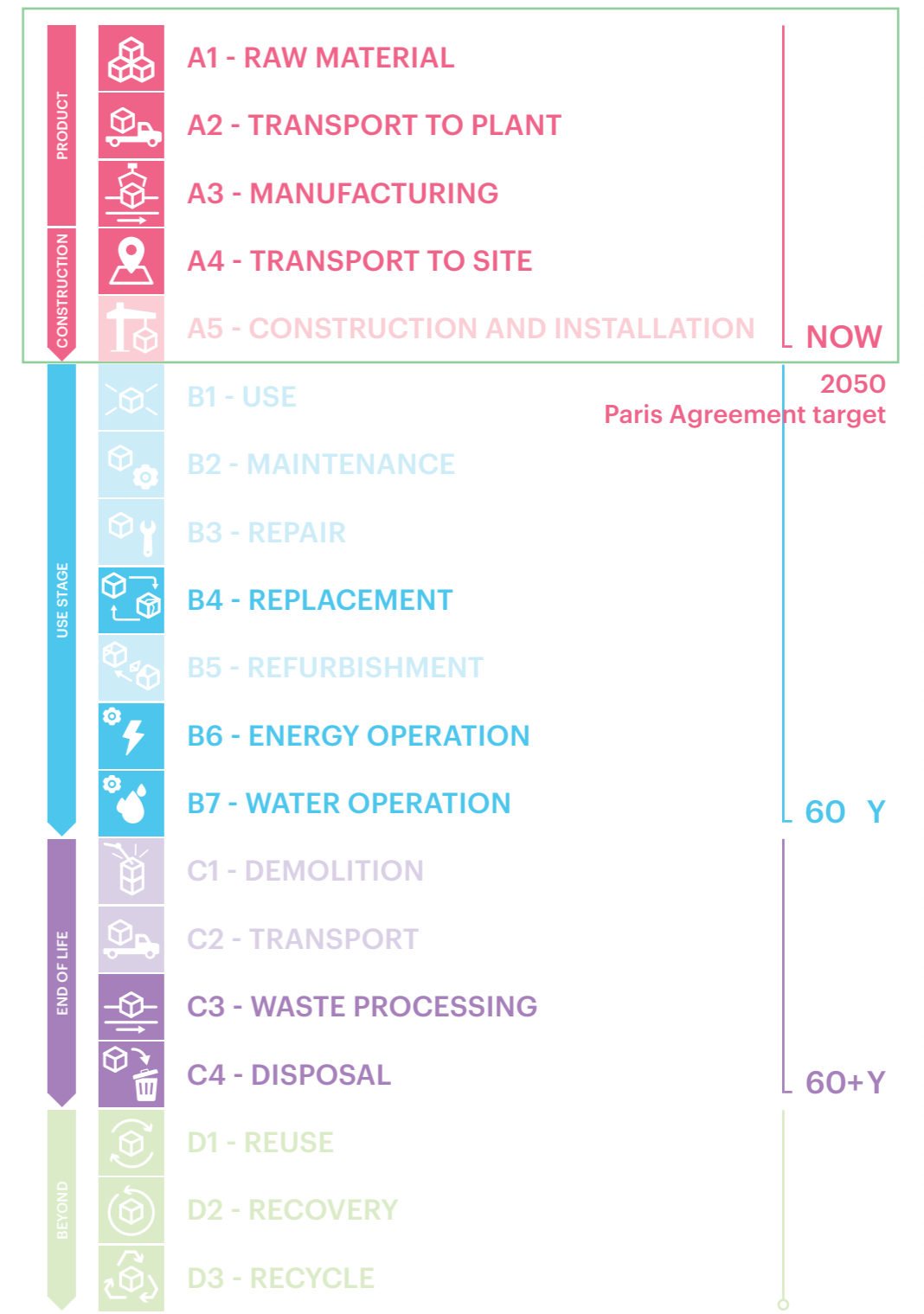
Comparison of carbon footprint



Embodied Carbon in Buildings



Embodied Carbon in the Structure: detailing the 55%

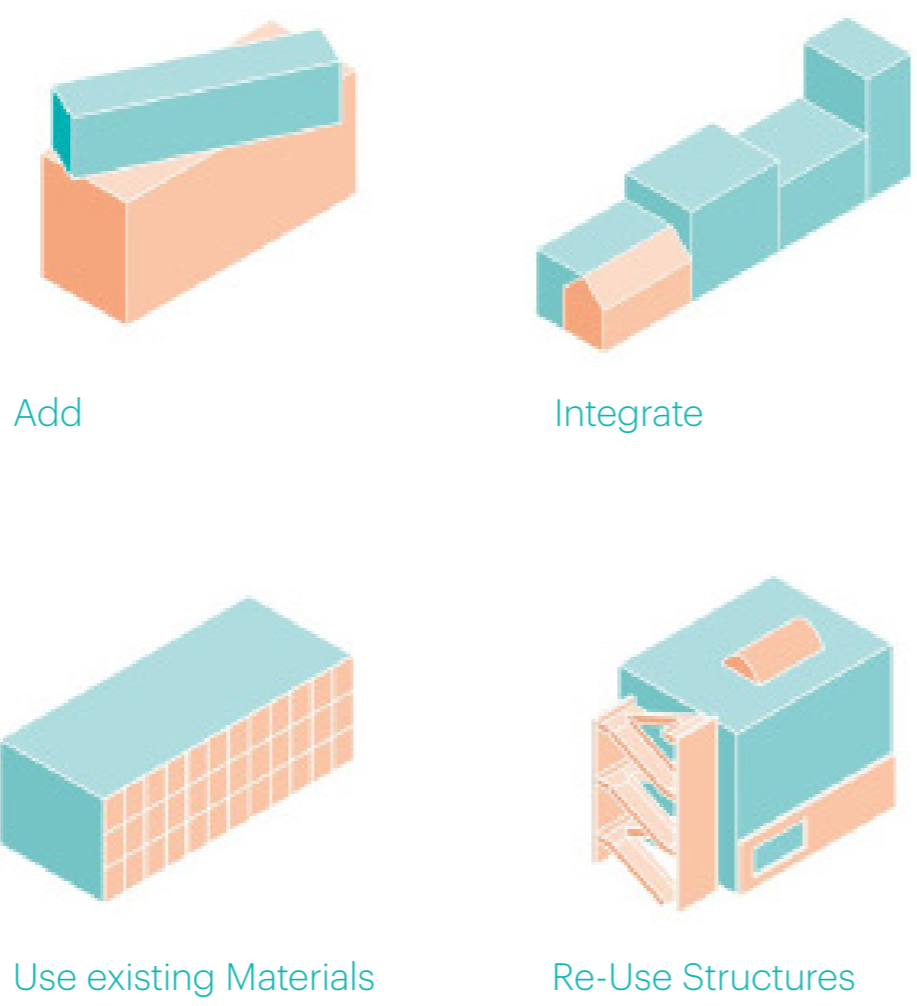


Embodied carbon must be considered throughout the design process, with a particular focus on the Life Cycle Assessment (LCA) gates A1 - A3.

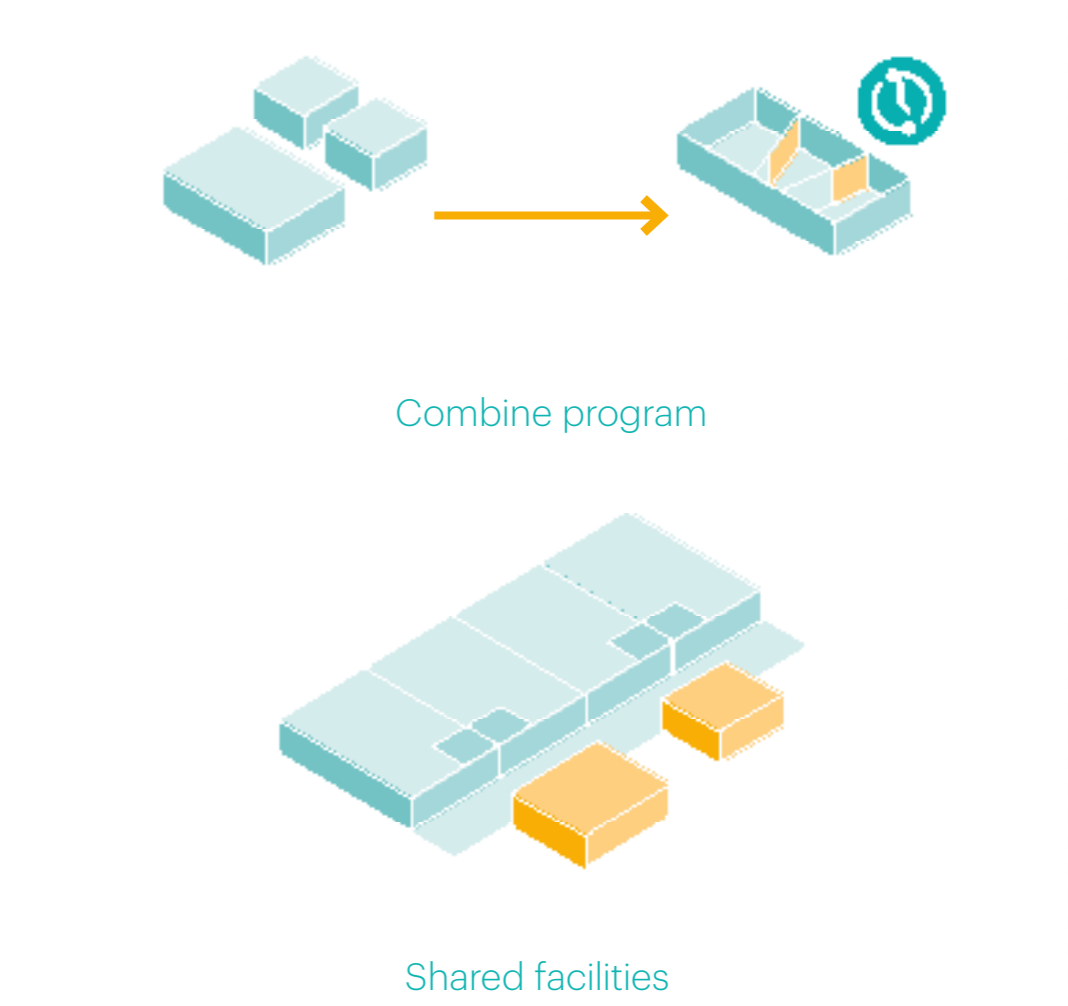
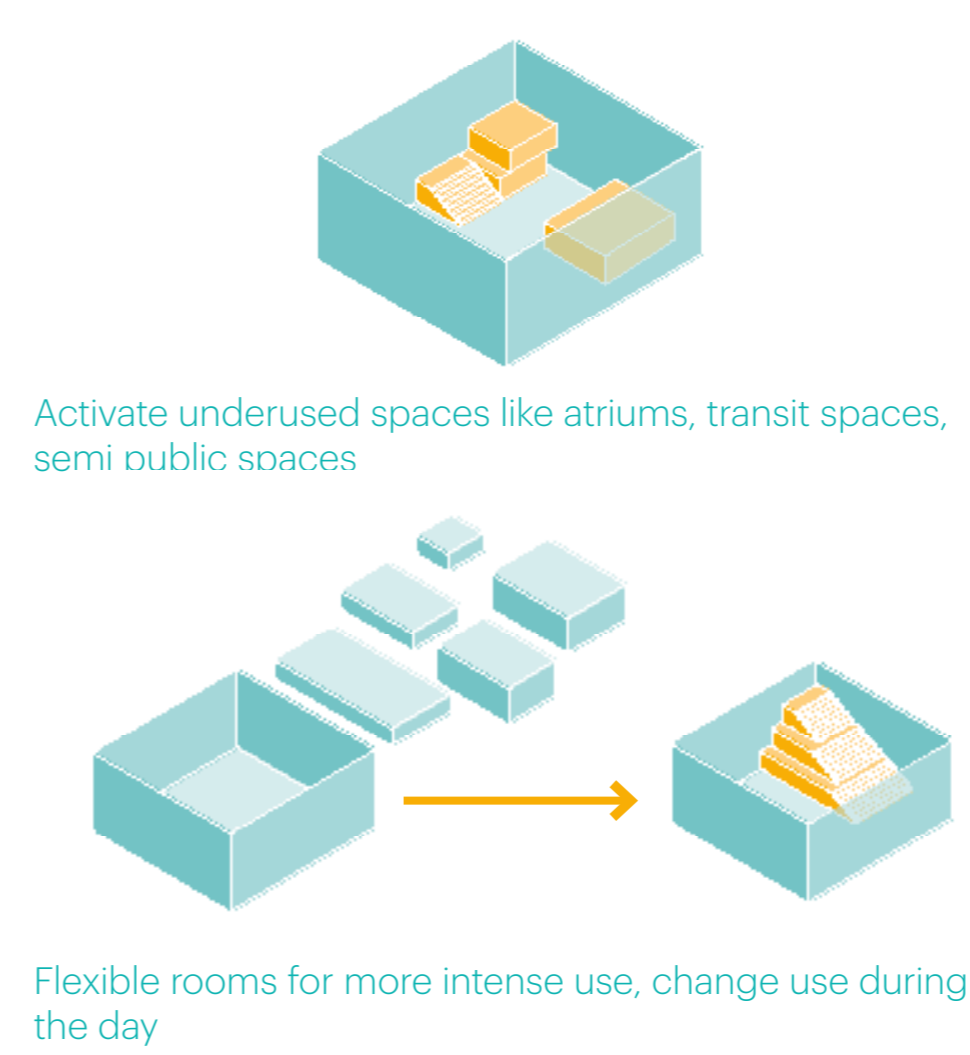
0 Do not build new!

Do not build new!

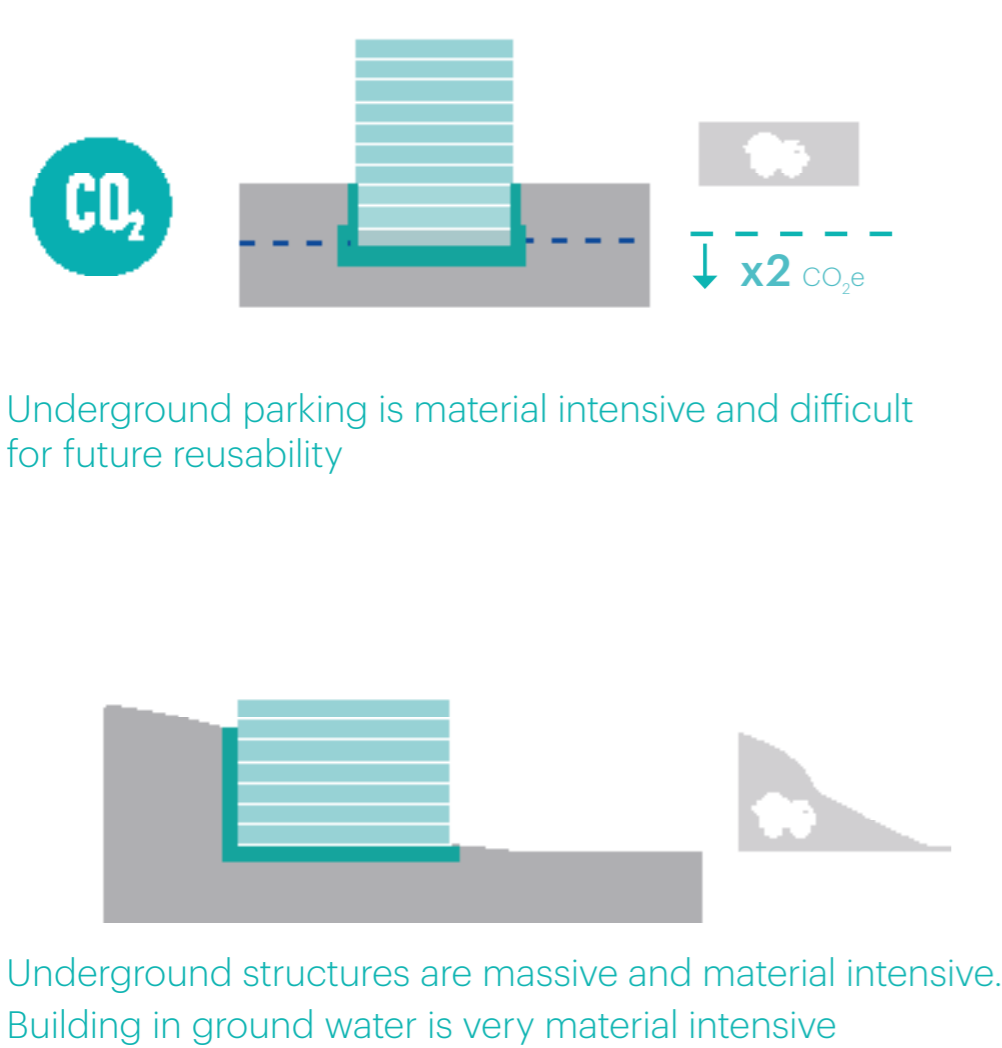
1 Integrate what is already in site



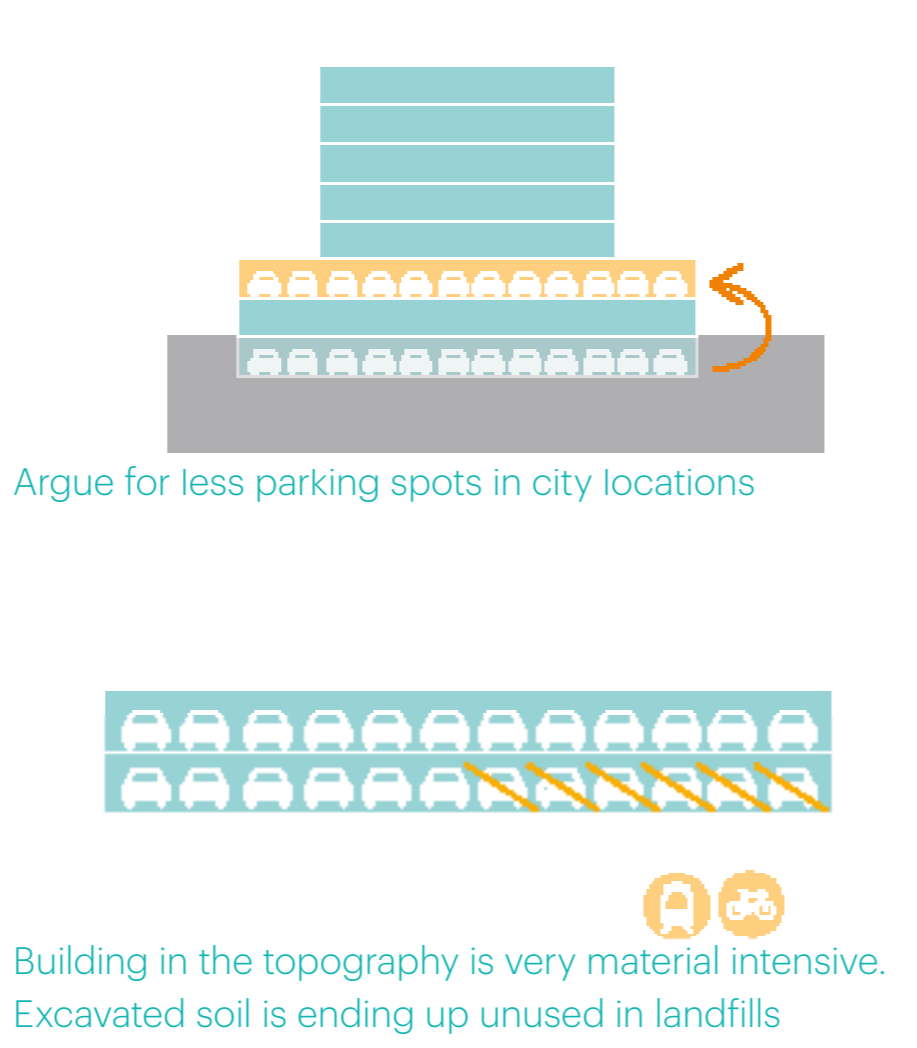
2 Build Less & Flexible Use



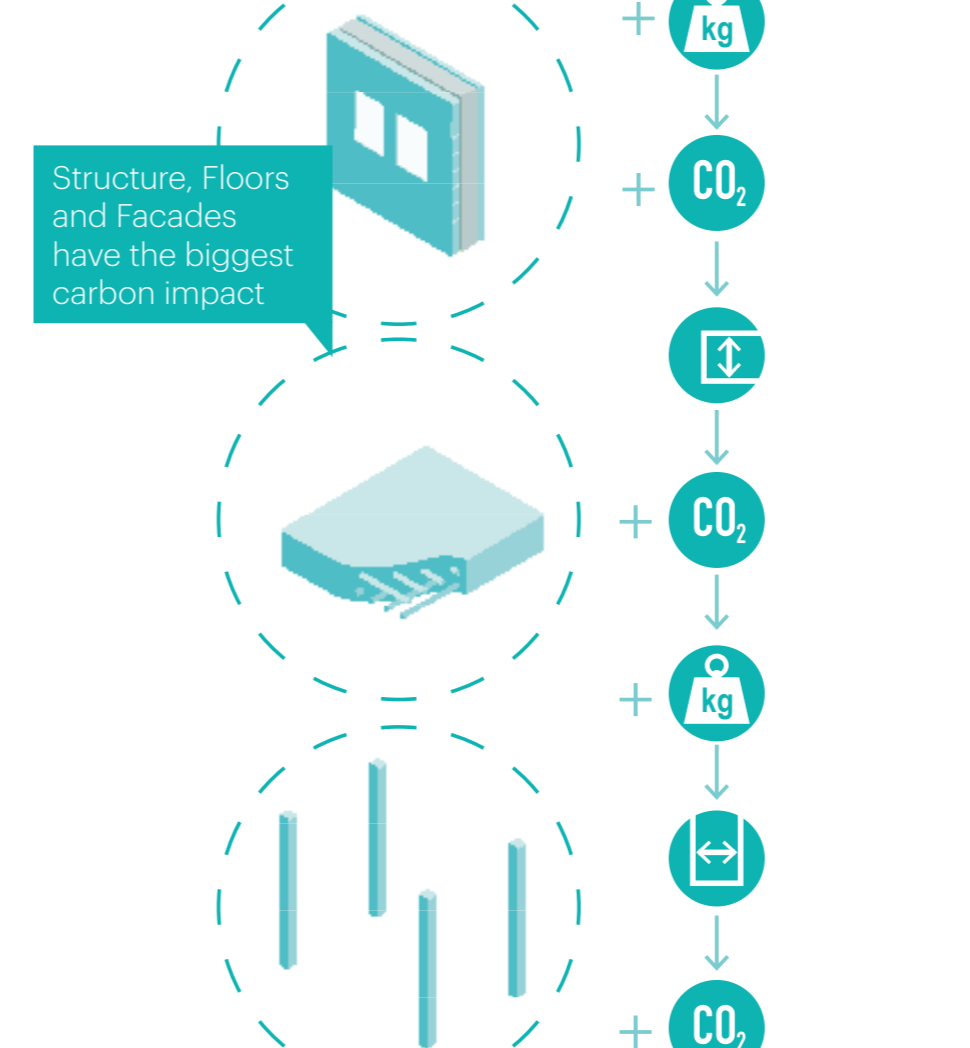
3 Avoid undergrounds



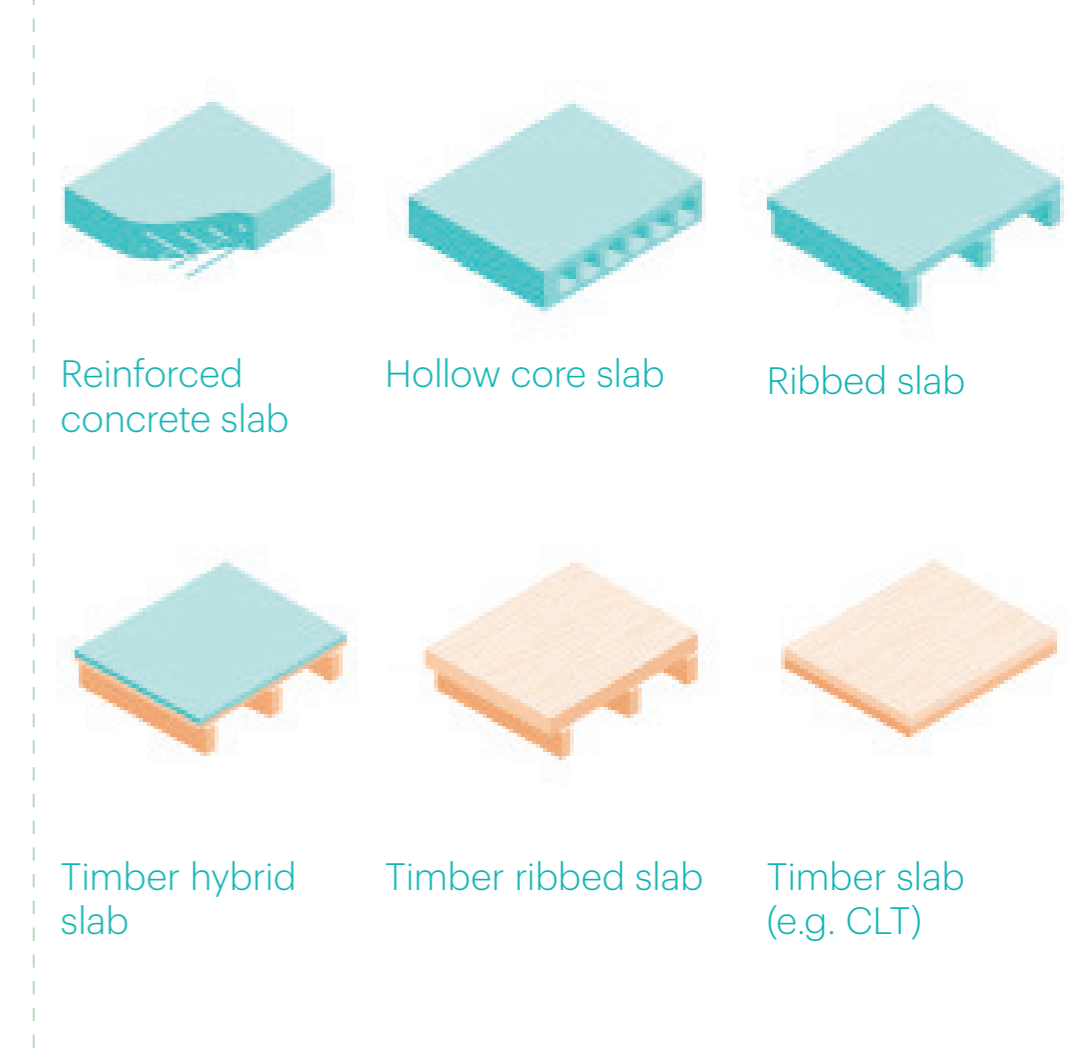
4 Rethink Parking



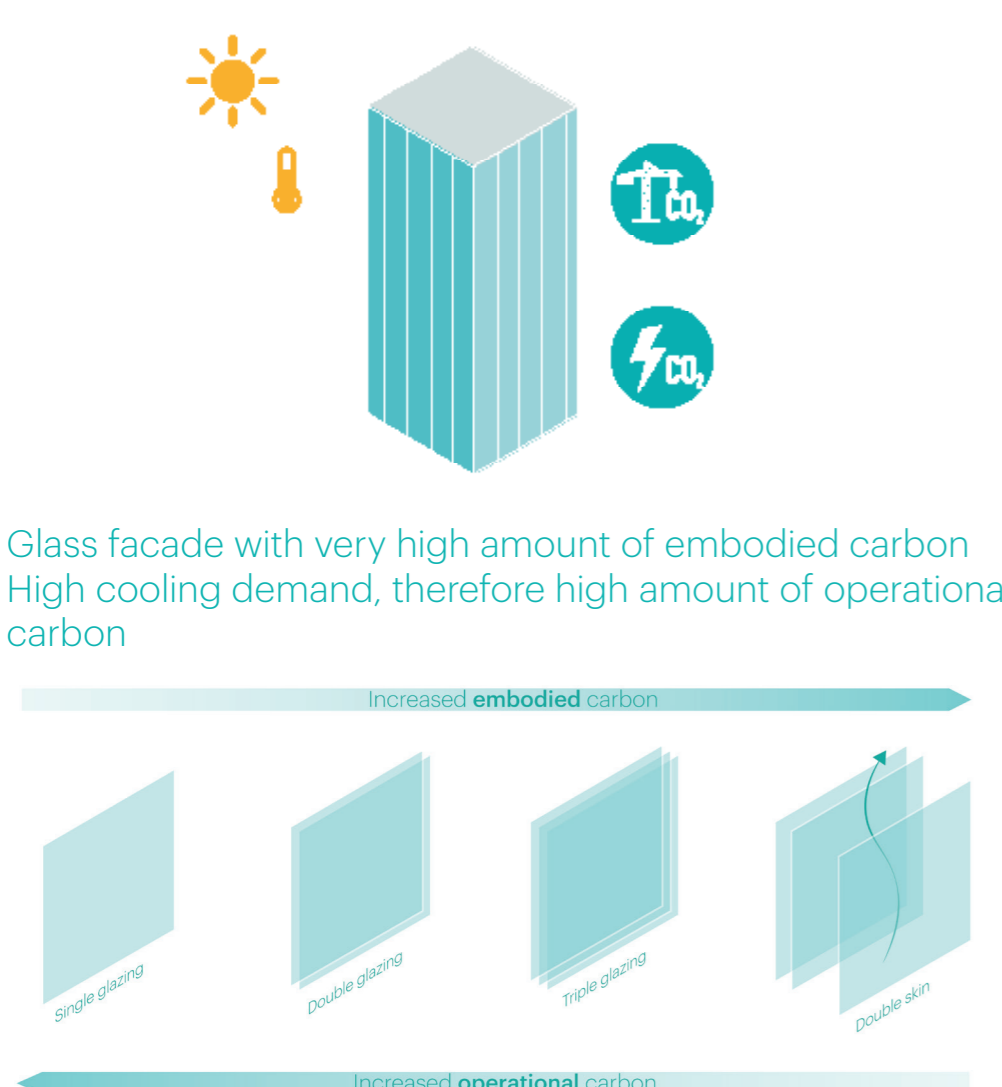
5 Reduce weight



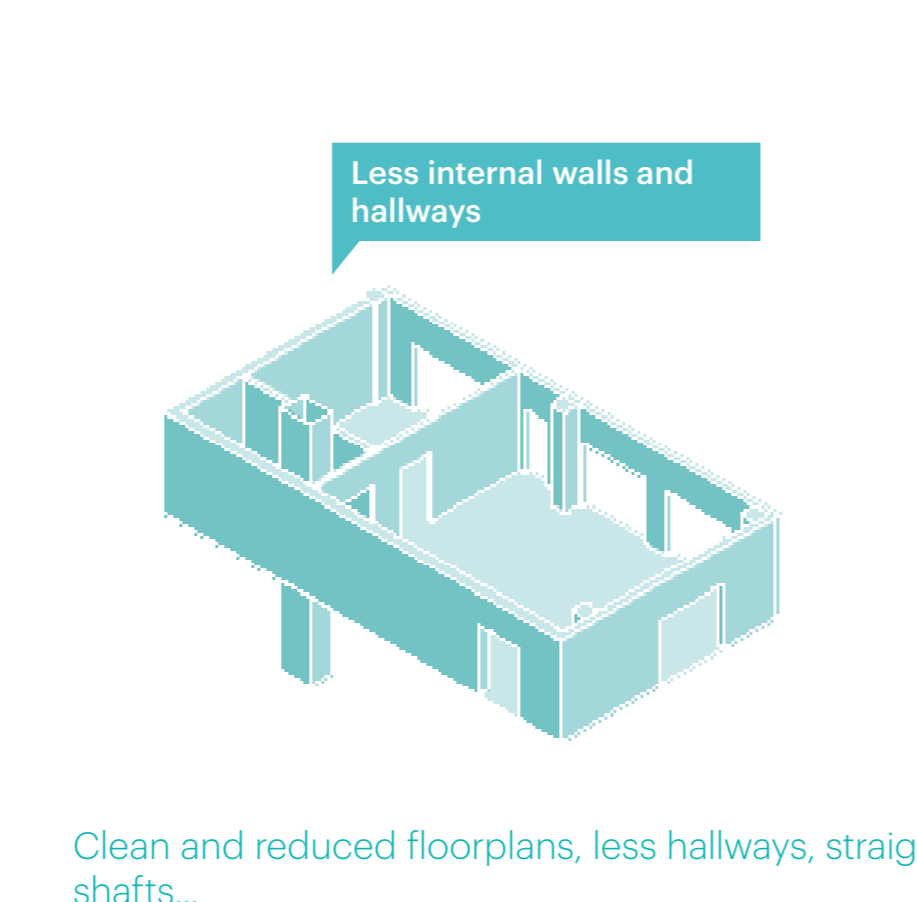
6 Optimize Floors



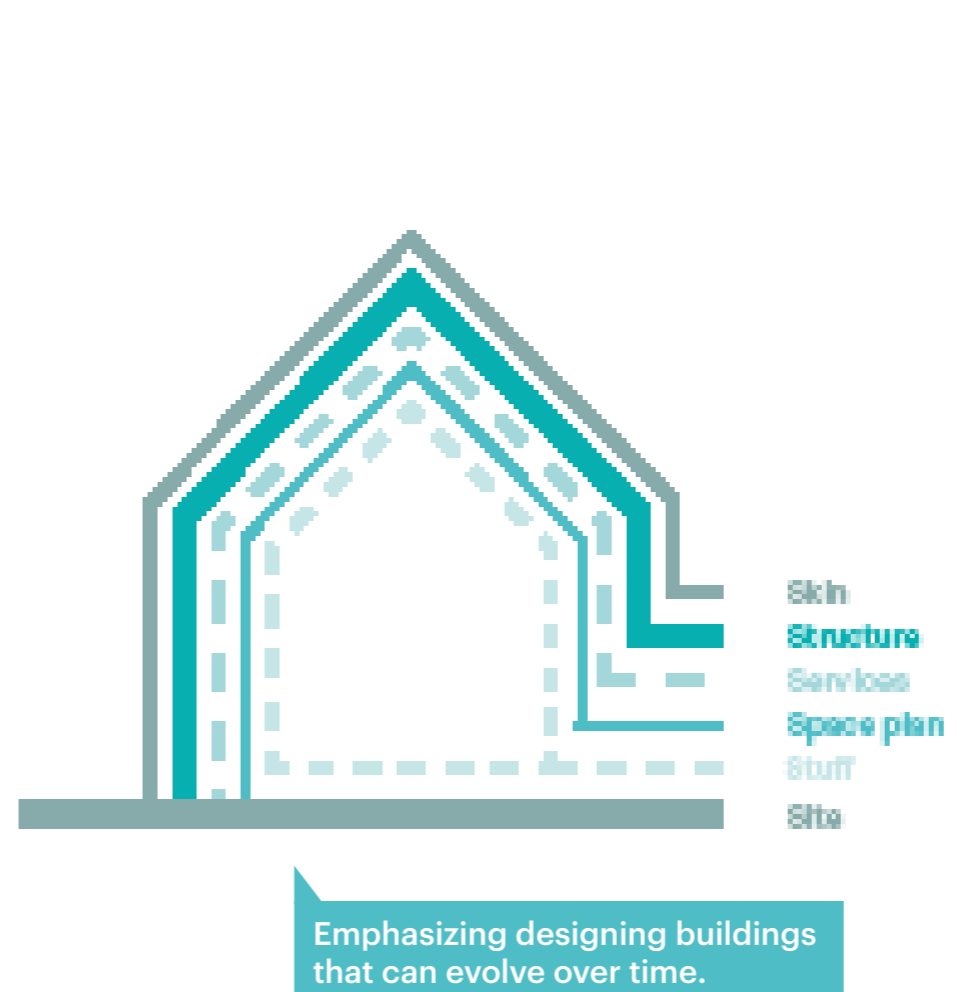
7 Rethink Openings



8 Build Simple & Clean



9 Future flexibility



10 Design for Reusability

