

Project Controls for Net Zero



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A global team of over **36,000** employees



speaks over **70 languages**,
representing **130 nationalities**
across **six continents**



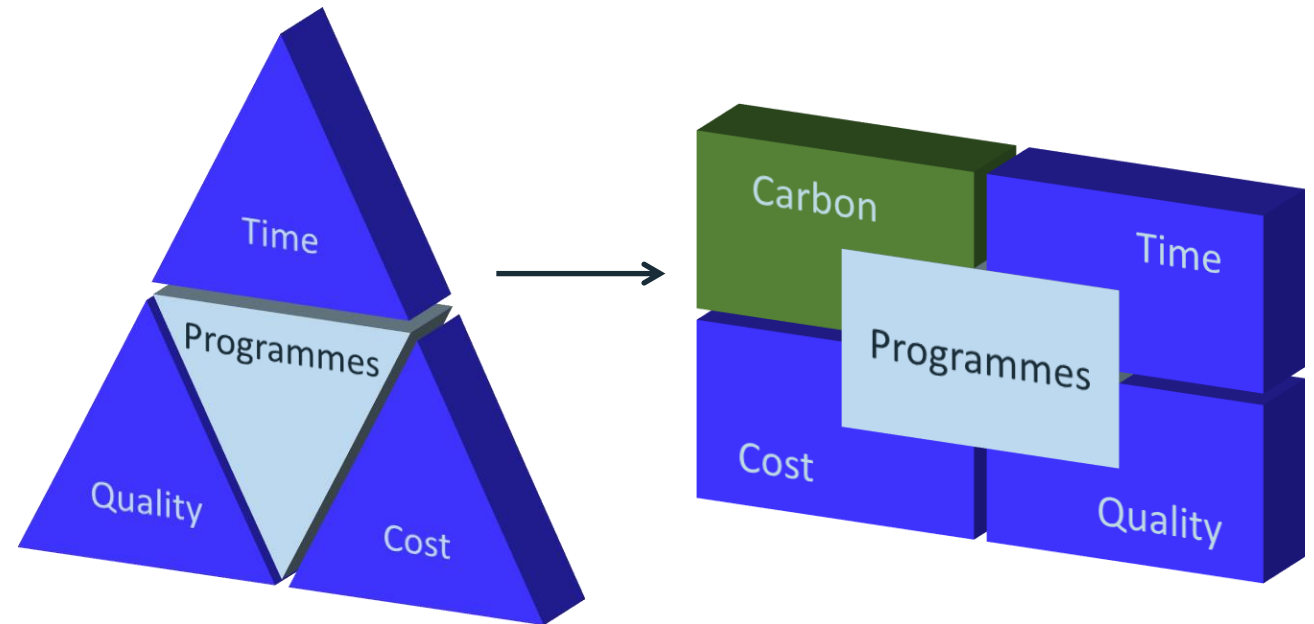
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1 Why Project Controls is well placed to support Net Zero

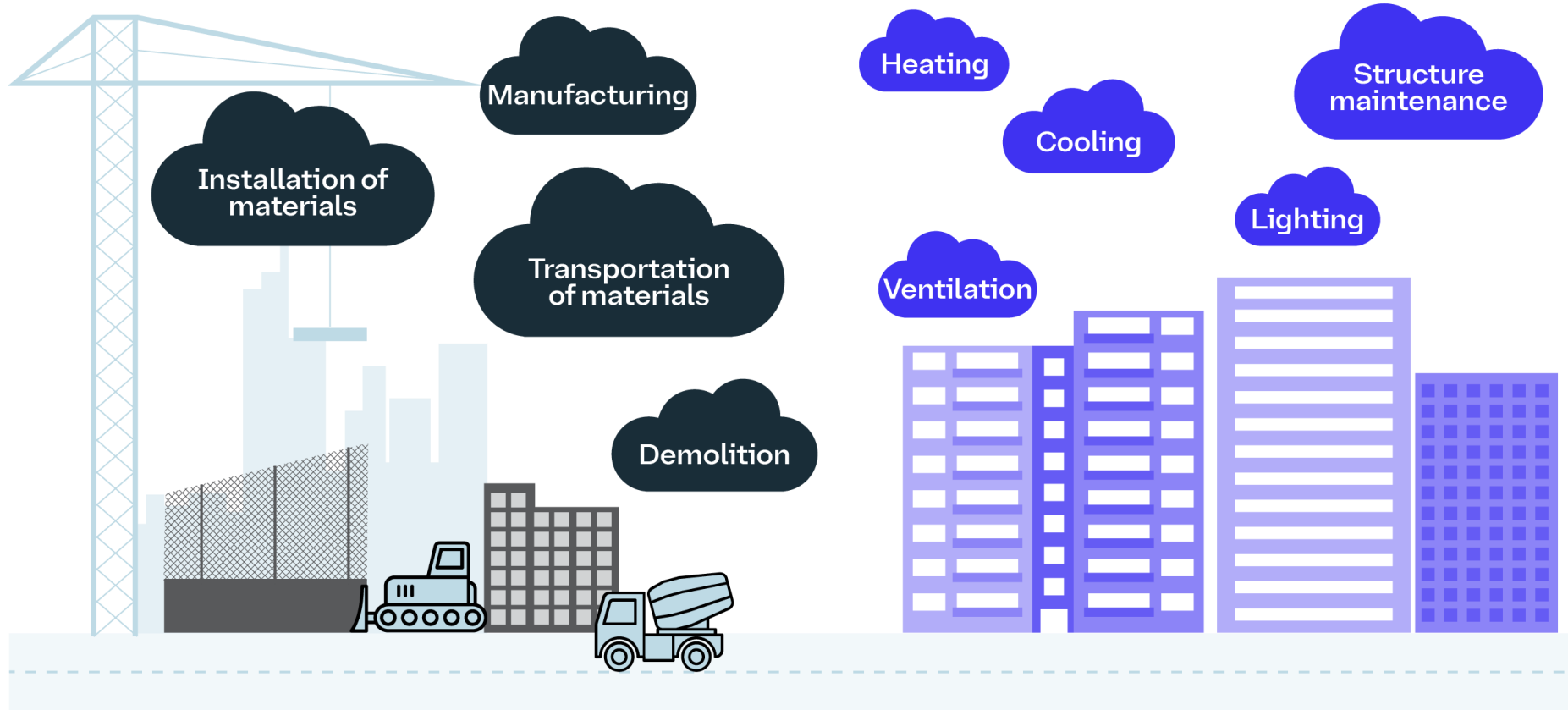
We know how to:

- Baseline
- To measure against Baseline
- Develop metrics
- Communicate on metrics and support governance and decision making
- Analyse and report in an integrated way



Whole Life Carbon:

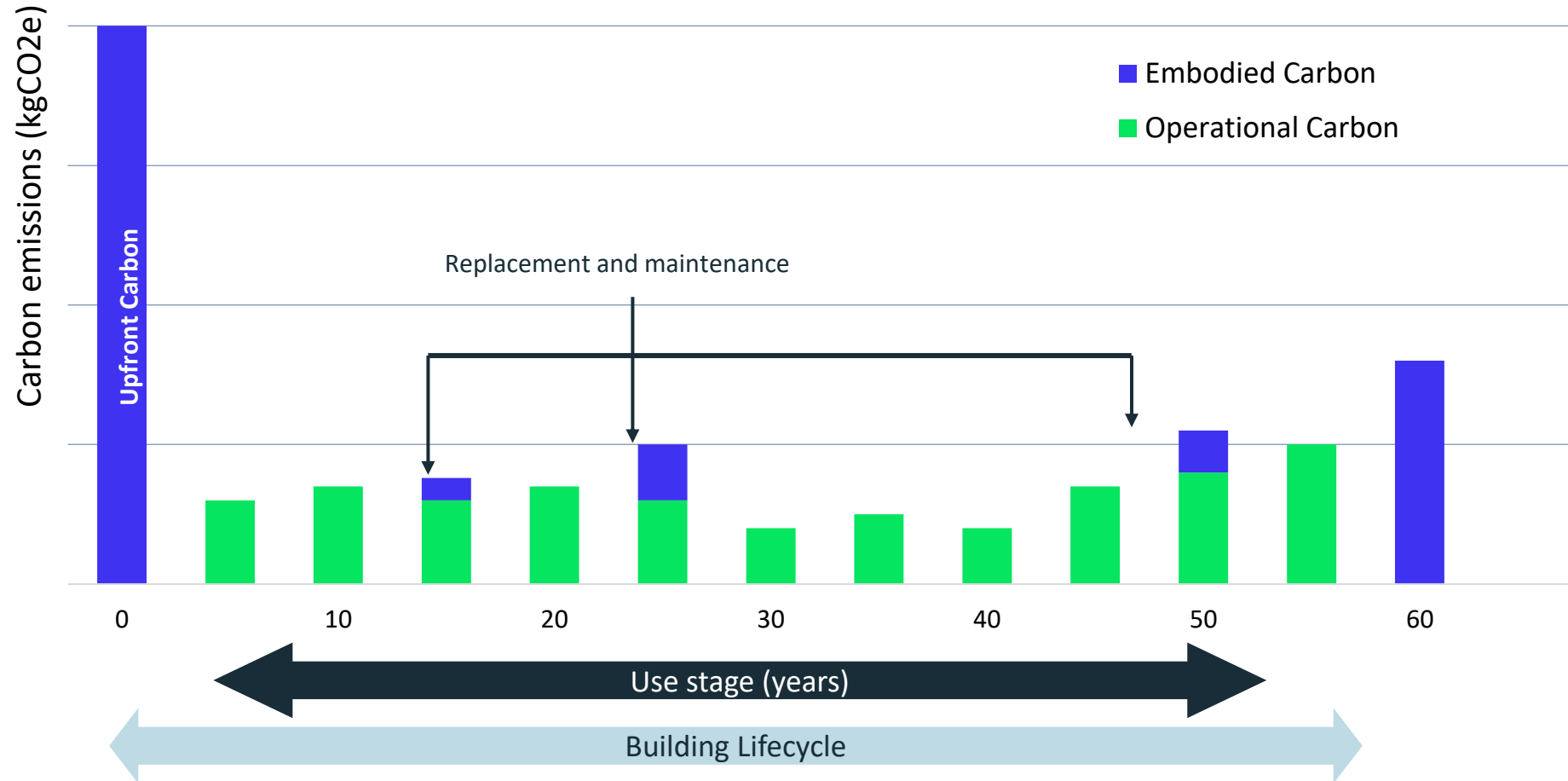
Embraces both embodied and operational carbon, providing the total carbon produced across the lifespan of **an asset**



EMBODIED – the carbon footprint of construction material

OPERATIONAL – the building energy consumption when in use

Whole Life Carbon & Upfront Carbon

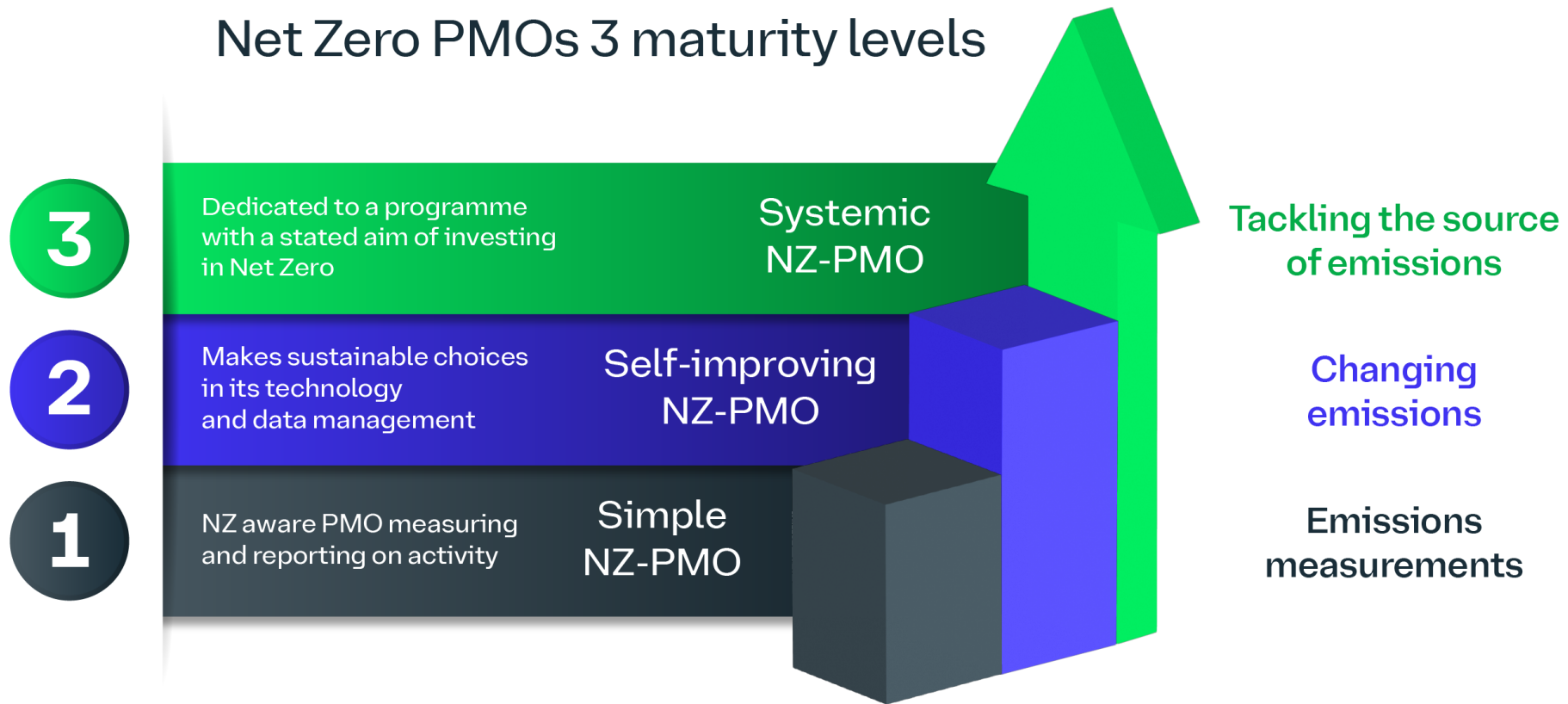


4. Net Zero PMOs

AtkinsRéalis have designed and implemented PMOs for Net Zero

Net Zero can be incorporated into any PMO or project controls operation at any level of maturity.

Net Zero PMOs 3 maturity levels



3. Incorporating carbon into project controls

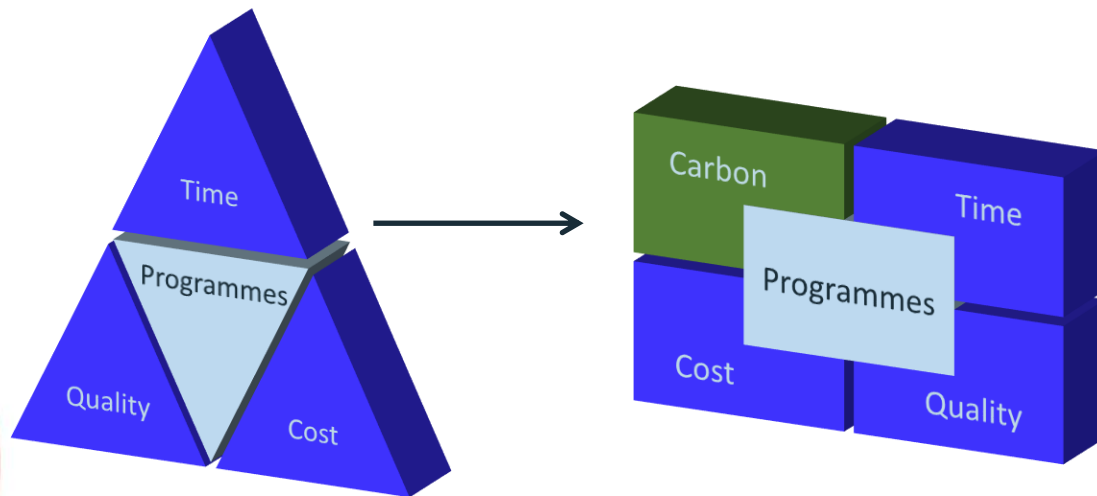
Baking carbon into project controls

In PMOs we traditionally enable projects, programmes, or portfolios to view their performance from the perspectives of T, C & Q.

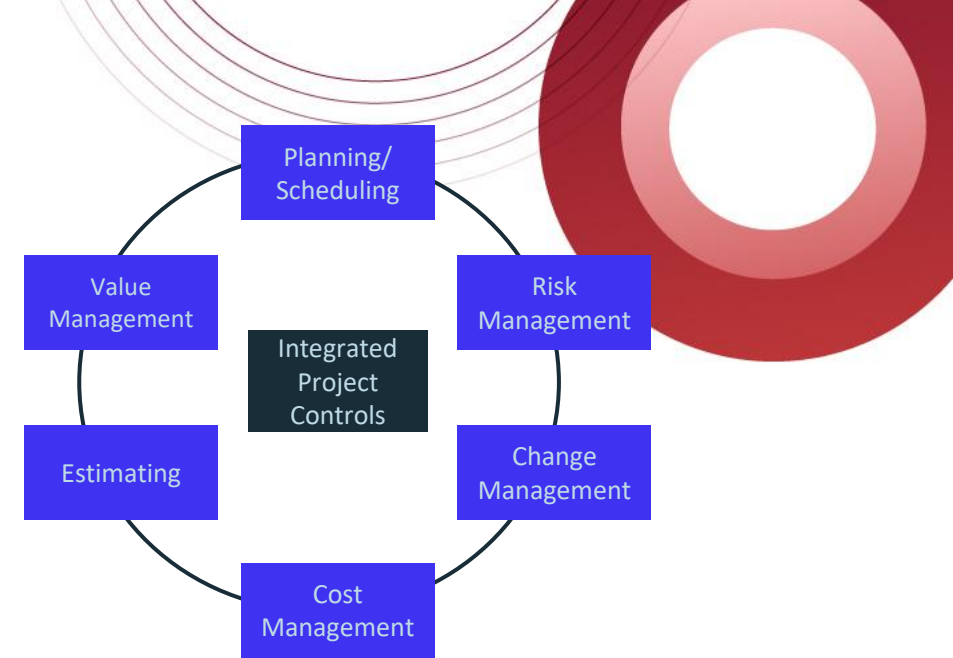
We measure what we value.

We'd argue that we need to value carbon and give it a status as high as T, C or Q.

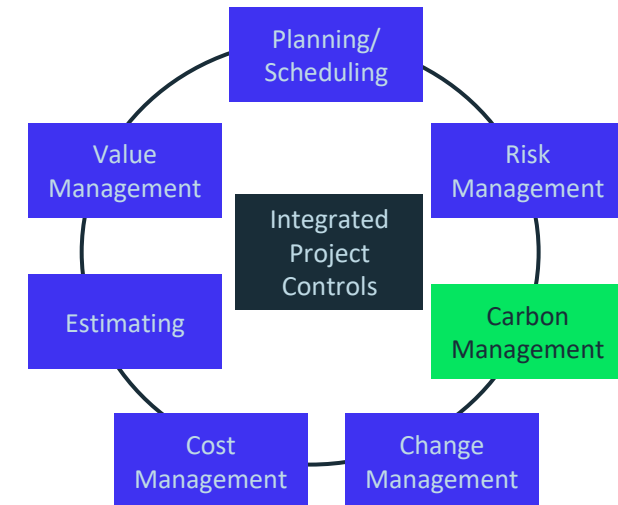
Carbon controls need to be integrated into project controls service delivery.



Yesterday



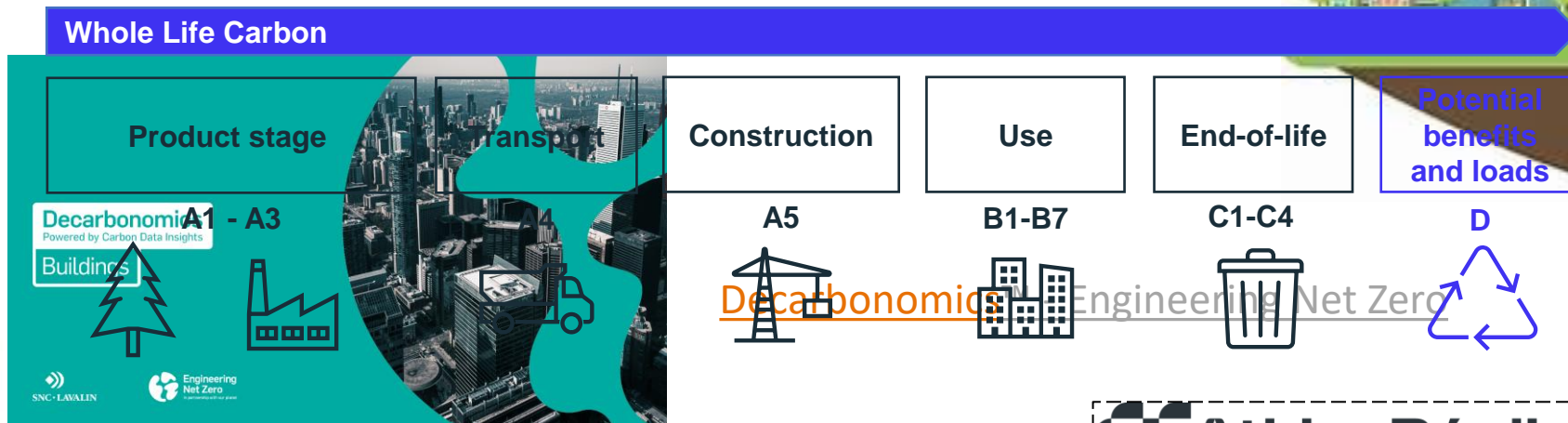
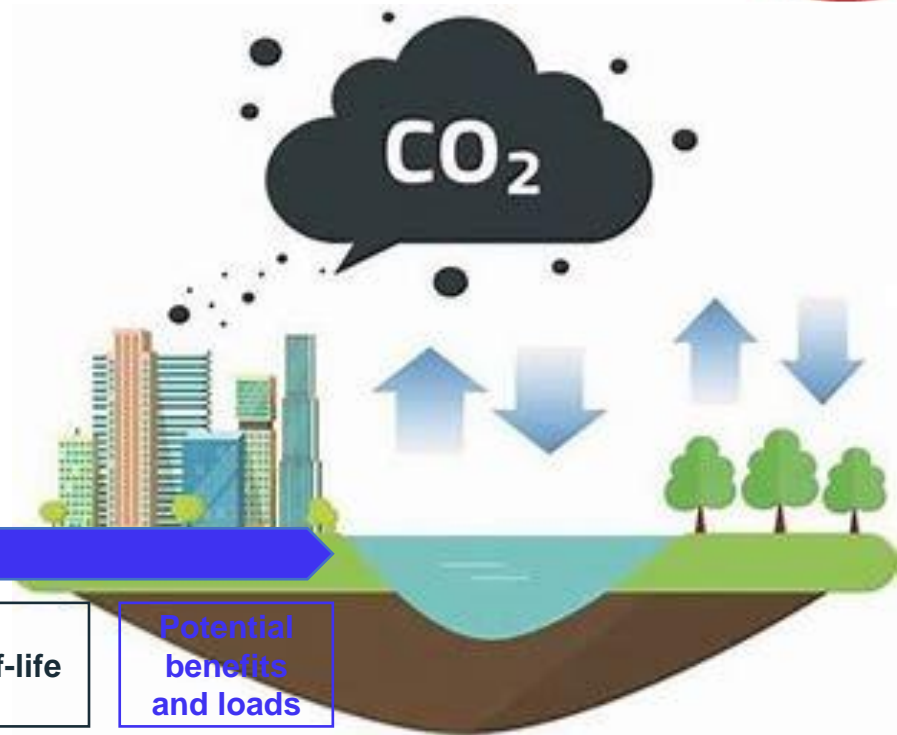
Today



5. Incorporating carbon into project controls

3 key Carbon Management services to add to Project Controls delivery

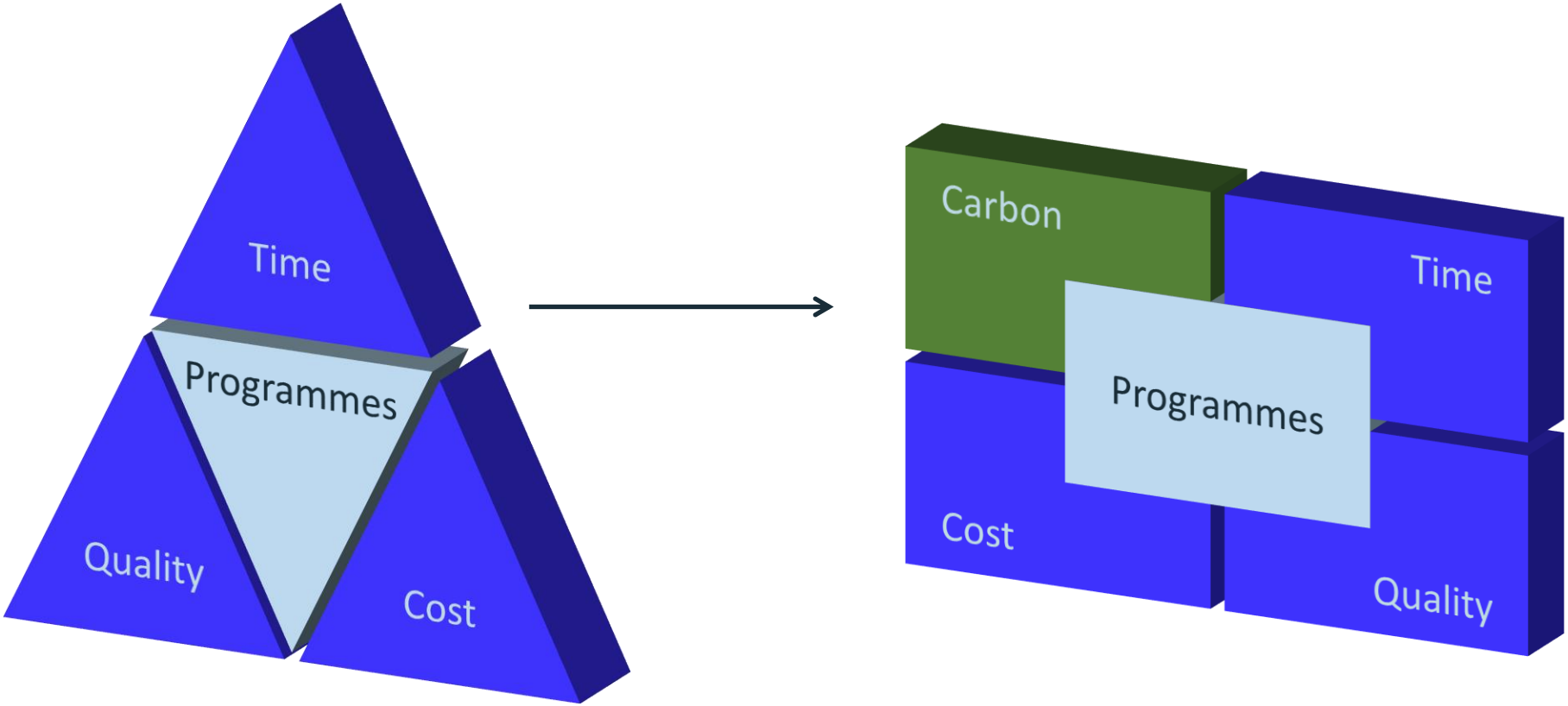
- **Carbon accounting**
A framework of methods to measure and track how much greenhouse gas an organisation emits.
- **Whole life carbon assessment**
A whole life approach to reducing emissions in the built environment for single assets/projects.
- **Carbon metrics**
Enable us to measure progress on journey to Net Zero.



Decarbonomics Engineering Net Zero



Impact of Carbon reductions on projects



Carbon Impacts on Time

- **Programme Implications**

Can we feasibly add this product to our programme?
Mitigate with Programme managers.

- **Lead Time Implications**

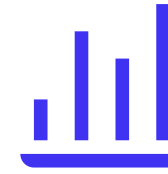
Can we receive this product within a timely manner? Mitigate with Surveyors.

- **Resource Scarcity**

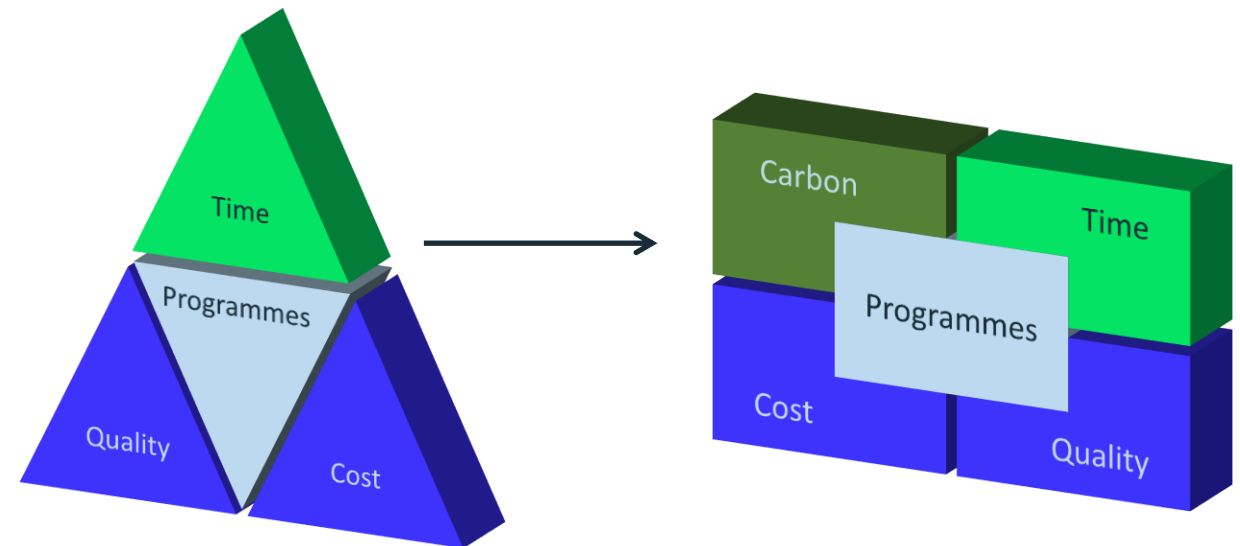
Is this product available in quantities for the scale of project we are creating? Please consult with the supply chain.



Program Management



Consulting, strategy & advisory



Carbon Impacts on Cost

- **Capex Implications**

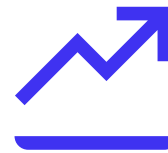
How much does this cost in comparison to the traditional product? Please consult with cost managers.

- **Opex Implications**

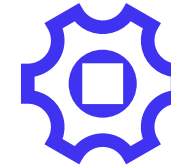
How does this product impact the asset maintenance? Please consult with Lifecycle analysts.

- **Design and Project Management Costs**

Does this process of optioneering cost significantly more? Please consult with the project managers.



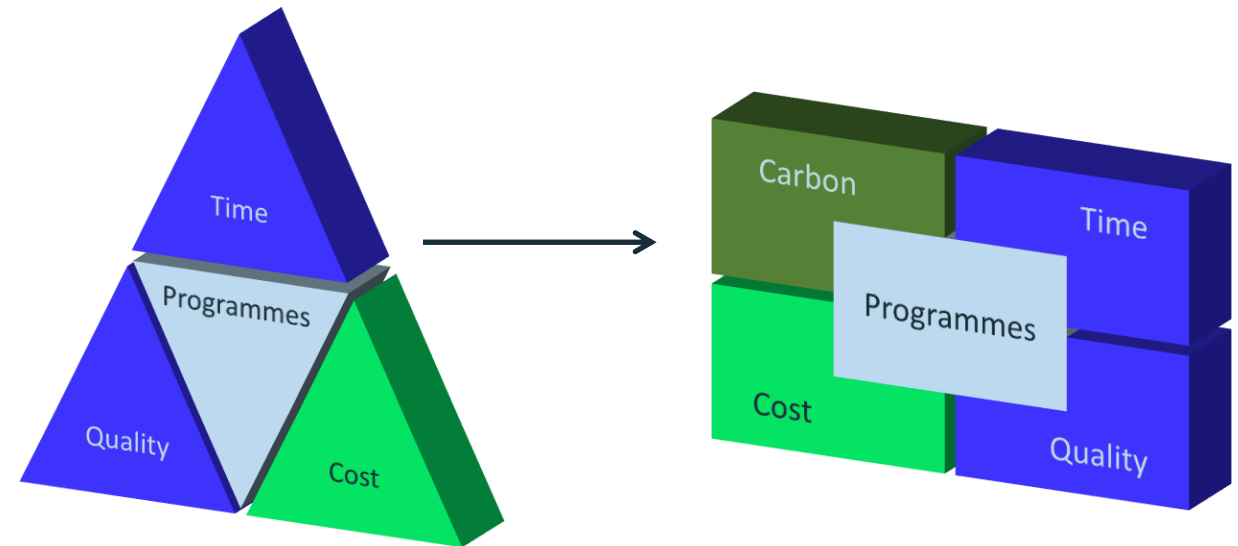
Capital



Operations & maintenance (O&M)

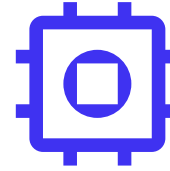


Project management

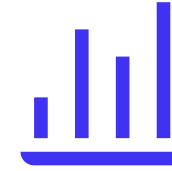


Carbon Impacts on Quality

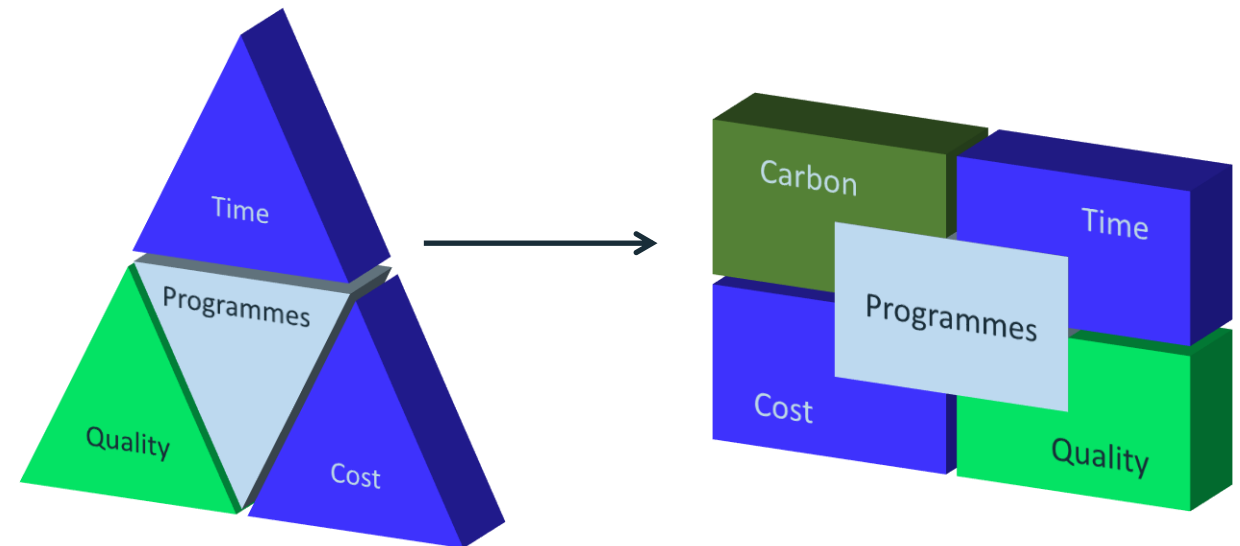
- **Aesthetics**
How will this impact the desired look of the aesthetic?
Please consult with the client.
- **Standards and Requirements**
Do these products fulfil the desired requirement?
Please consult with your engineers.
- **Embodied Carbon VS Operational Carbon**
Is this product positively impacting one quantity and negatively impacting the other? Please consult with sustainability!



Engineering & design

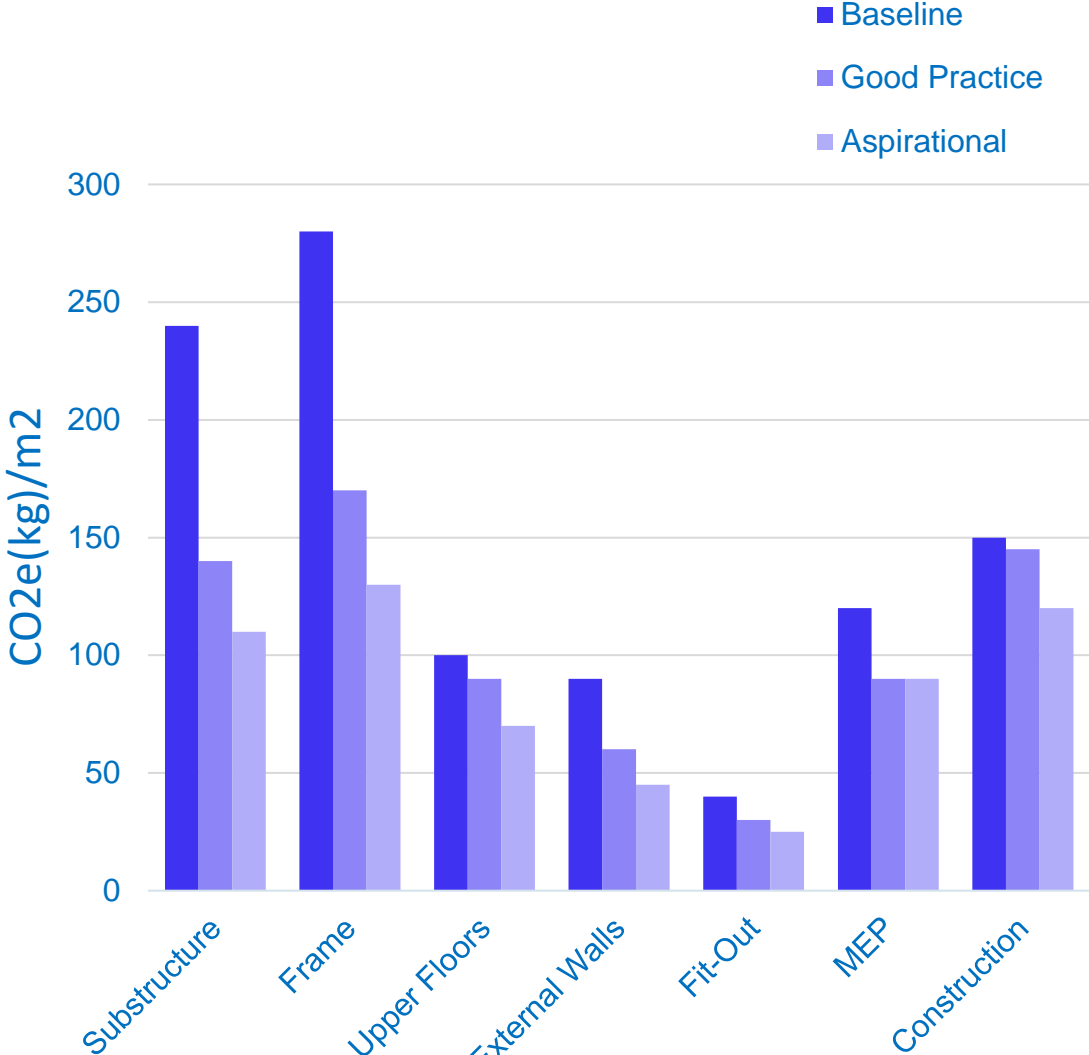


Consulting, strategy & advisory



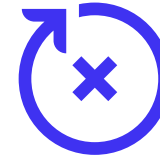
Project Level Optioneering

- **Baseline Option** was our starting point and shows what the emissions would be if we didn't go for low carbon / recycled alternatives
- **Good Practice** is where we explored the mitigations discussed in the previous slides
- **Aspirational** is where we have set realistic targets with the team in order to meet our goal



Other carbon interventions to consider

- **Better waste management**
Have a plan from the onset!
- **Low Carbon Fuels**
Enforce this through procurement channels at tender stage.
- **Modern Methods of Construction**
Encourage and work with contractors to innovate in this space!

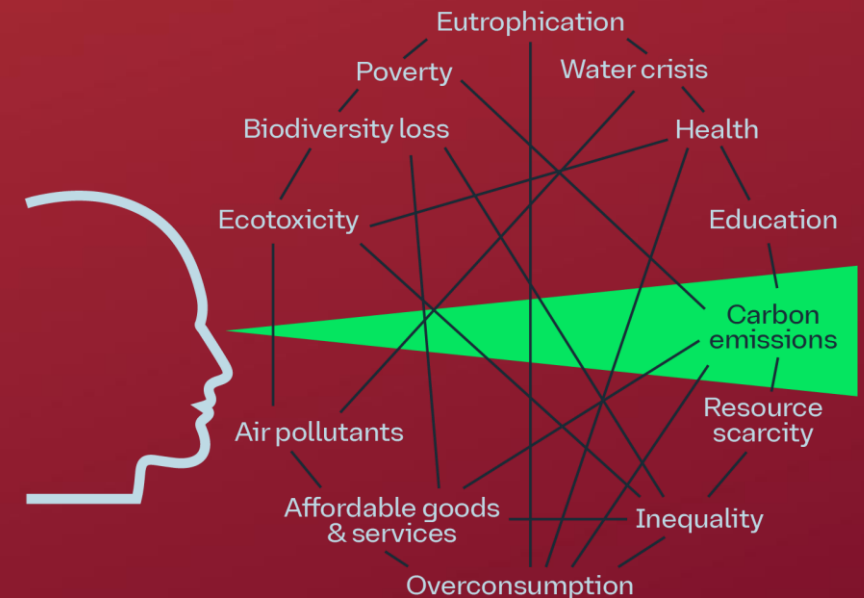


Decommissioning



Key messages

1. An understanding of how crucial the role of the PC is in contributing to the Net Zero goal, New services. An introduction to the types of carbon and how we might measure them.
2. Understanding of how Net Zero can be incorporated into any PMO or project controls operation at any level of maturity
3. Introduce the concept of incorporating carbon performance against traditional measures of time, cost, and quality, and how it will enable project decision-making to achieve Net Zero goals.





THANK YOU