

Smart Sustainability

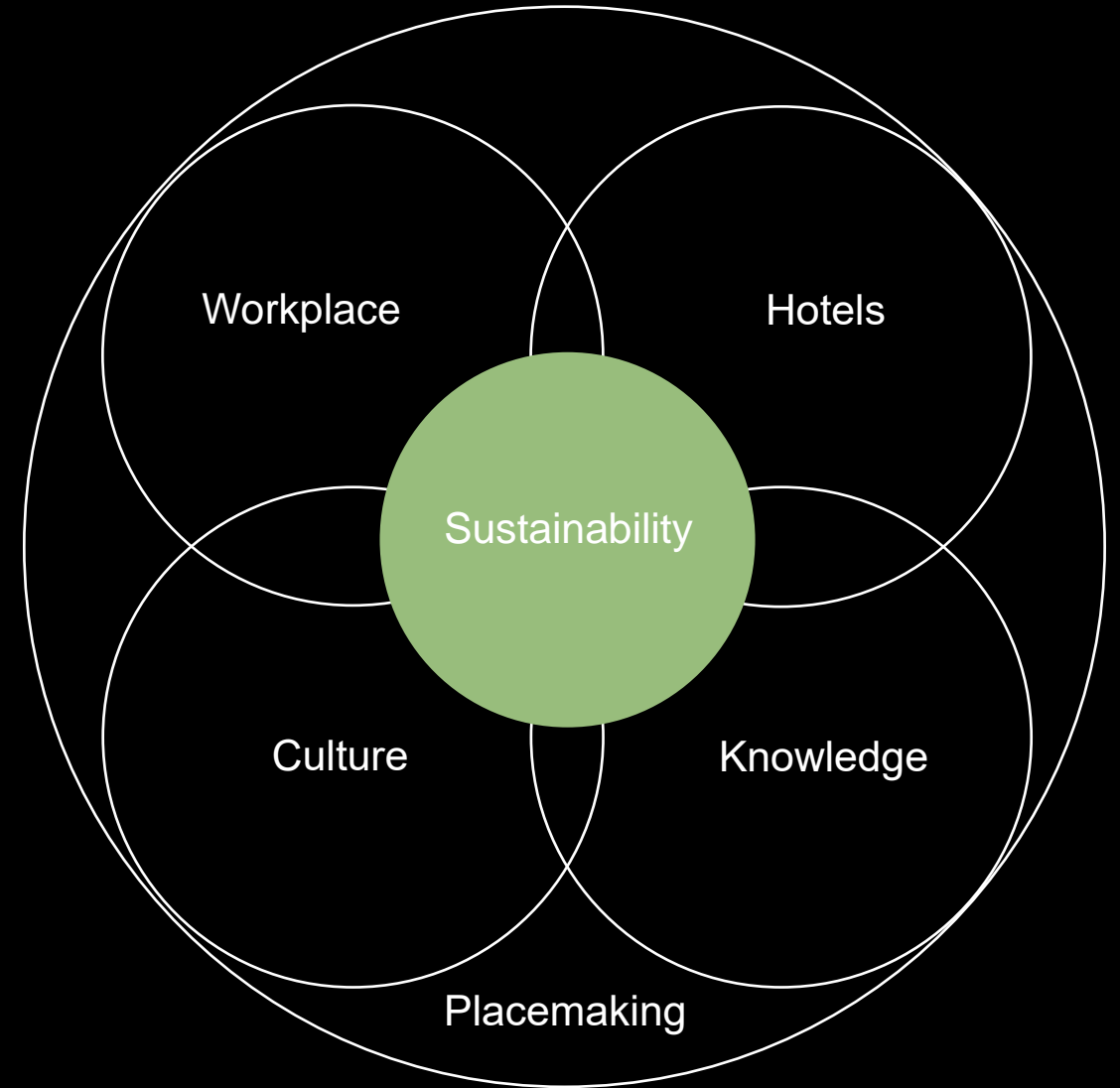
Energy Efficiency in Buildings 2023, Athens



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ASSOCIATES**

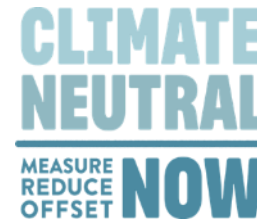
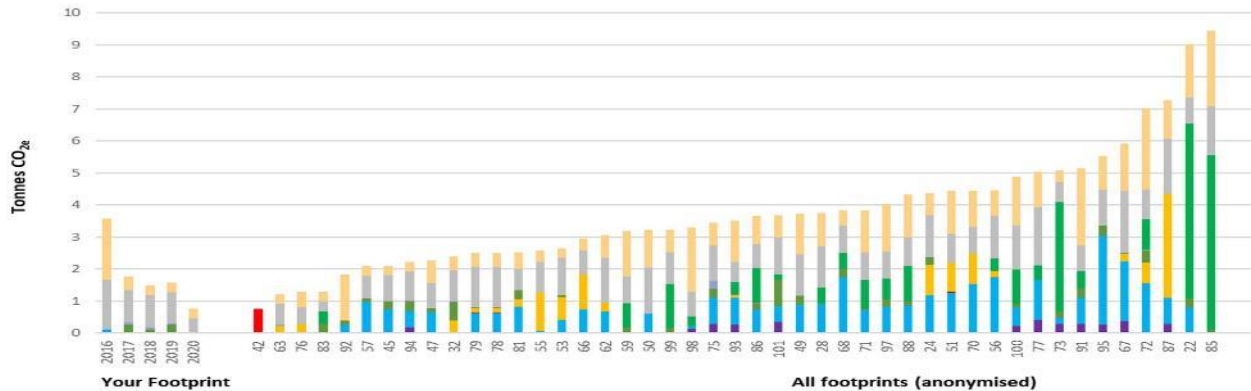
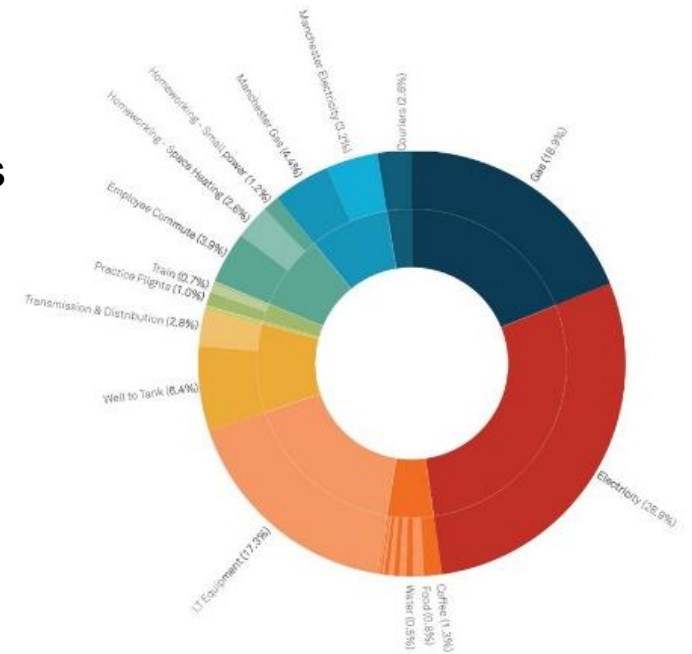
About Us

- Pioneers in sustainability for +30 years
- One of UK's leading architects
- Employee Owned Trust & B Corp
- +250 Major Awards in 35 years
- People-Place-Planet approach
- Projects in UK, Greece & India



Sustainability

- First architects globally to sign up to UN ‘Climate Neutral Now’
- First architects globally with agreed Science Based Targets for operations
- Highest scoring architectural B Corp in Europe (at the time of joining)
- 1.5° Lifestyle & Business Practices – “Be the change you want to see”
- 50% Carbon Removals for 2021 emissions



Sustainability



Eco Urbanism



Low-Impact Ecosystems



Net Zero Pioneers



Responses Rooted in Contexts



Benchmarks & Landmarks



Innovation in Technique/Tools

How Did We Get Where We Are?

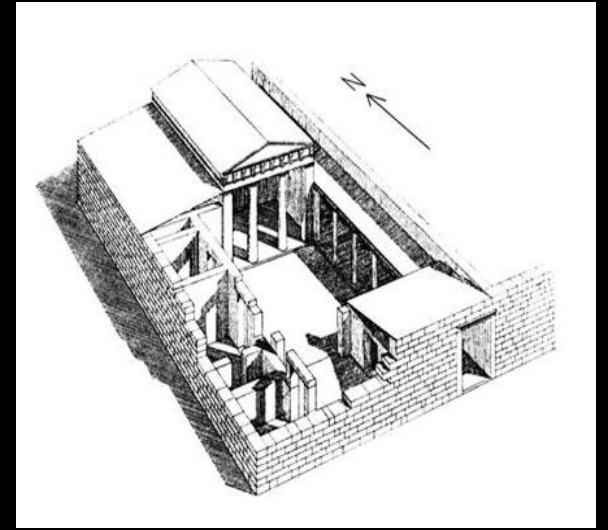
- Socrates - environmental design in 400s BC
- Advent of Air Conditioning – a watershed
- Lessons learned over aeons forgotten
- Architects' love affair with glass
- Globalisation of 'st-architecture'
- Plundering of resources & culture of waste
- Built environment ~ 40% of global emissions

Socrates felt so strongly for building with the sun in mind that he even set up a class to teach his acolytes the finer points of putting up a passive solar house.

He began the course by asking, "When someone wishes to build the proper house, must he make it as pleasant to live in and as useful as it can be? And is it not pleasant to have the house cool in summer and warm in winter?" the sage continued. "Now in houses with a southern orientation, the sun's rays penetrate into the porticoes [covered porches], but in summer the path of the sun is right over our heads and above the roof, so we have shade." Therefore, Socrates concluded, it is in such a designed house "that the owner can find a pleasant retreat in all seasons . . . which makes the house at once the most useful and most beautiful."

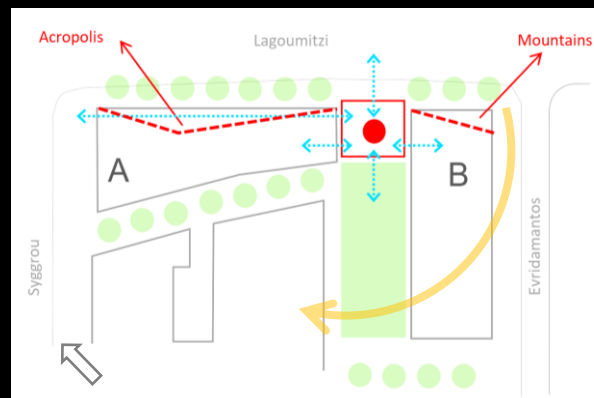
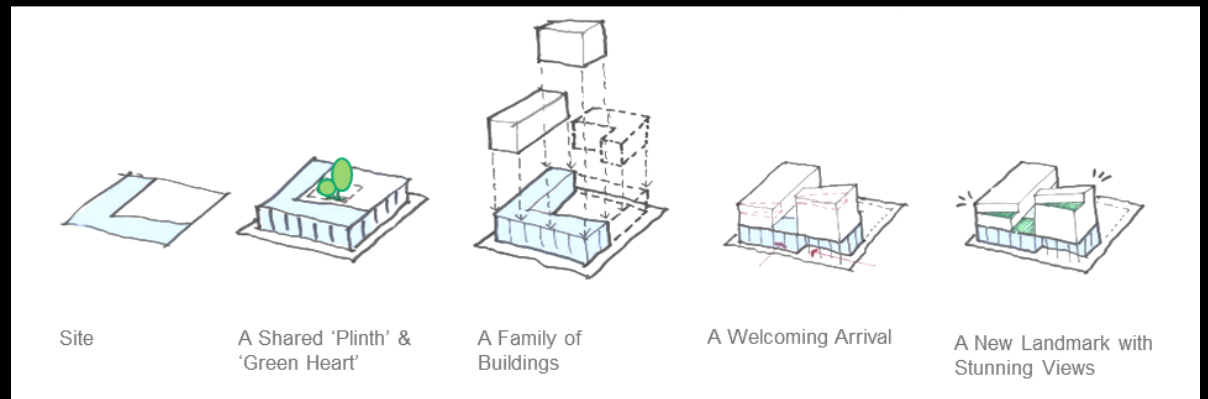
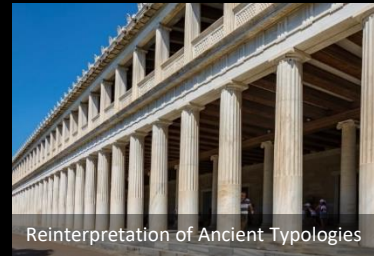
The ancient Greeks planned whole cities in Greece and Asia Minor with regard to environmental principles

The 6,000-Year Story of Solar Energy
John Perlin, 2013



Our Approach to 'Smart Sustainability'

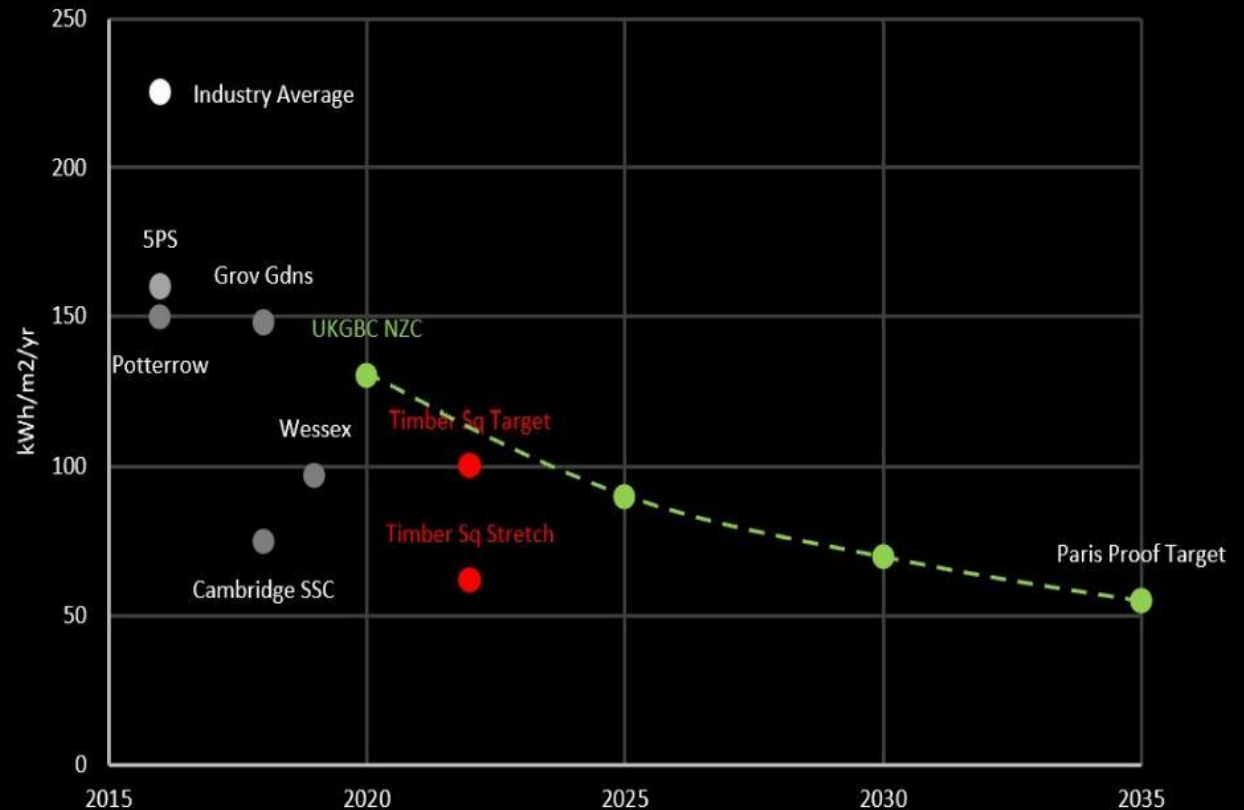
- Learn from history & local knowledge
- Connect to context, culture, climate
- Get the architecture right first
- Avoid placeless globalised designs
- Reject the love affair with glass
- Maximise passive design first to reduce need
- Narrow the energy gap as a priority
- Simple, robust, well-engineered buildings



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Our Approach to 'Smart Sustainability'

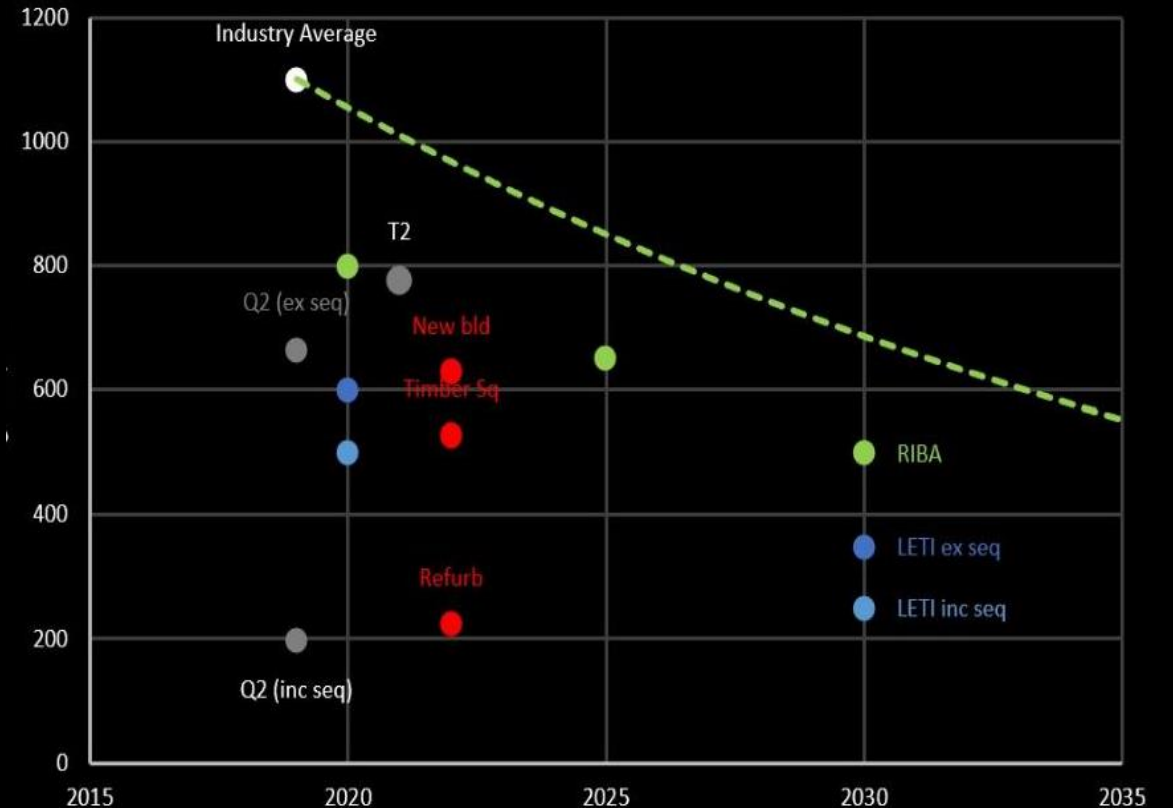
- Fact not Fiction; Data not Greenwash; No BS
- Smart in design but simple in operation
- Apply technology only where required
- Apply renewables last not first
- Use less stuff & build responsibly
- Think lean, long life, loose fit
- Honesty, openness & sharing
- Be the change we need to see



UK Operational Energy Use Intensity
(BA Projects vs Benchmarks)

Our Approach to 'Smart Sustainability'

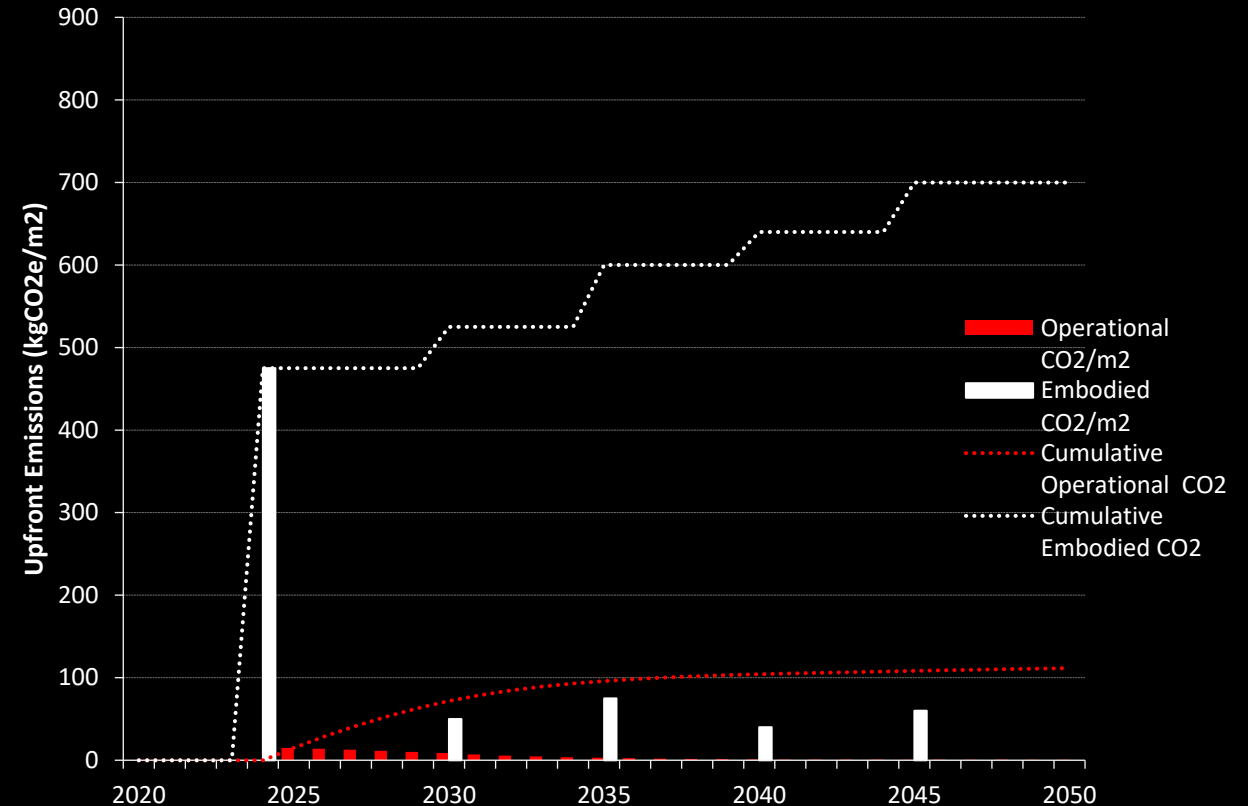
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UK Embodied/Upfront Carbon
(BA Projects vs Benchmarks)

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UK Operational v Embodied Comparison

The Greek Context

“Climate change is a global problem that needs global solutions, and that requires the very best minds to come together.

We’ve been pushing hard in mainstream sustainability in the UK for more than 30 years, and are keen to spread that knowledge globally by collaborating with the best locally.

Greece has an incredible opportunity to ‘Build-Back-Greener’ and we are proud to be helping lead that ”

Julian Lipscombe, Bennetts Associates
Ready-Steady-Greece Webinar 2021

Can Greece do more?

READY
STEADY
GREECE:

19/10/21

THE RACE TO
BUILD BACK
GREENER

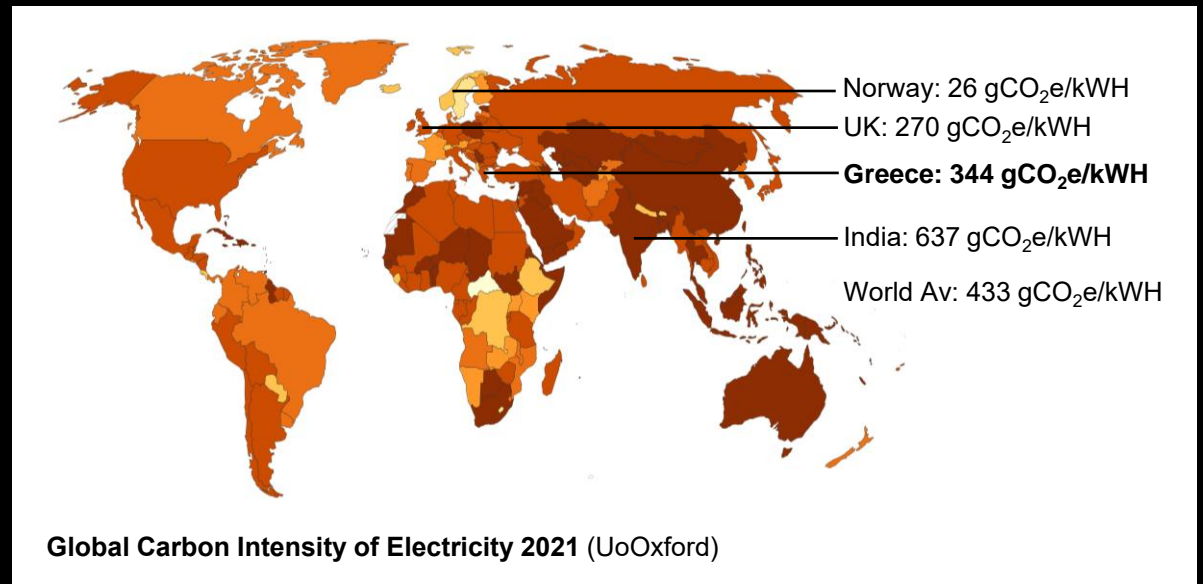
ENTERPRISE GREECE
INVEST & TRADE

DIMAND
REAL ESTATE DEVELOPMENT

BURO HAPPOLD

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The slide features a rainbow gradient background. On the right, there is a 2x2 grid of video call windows showing four participants. Below the grid are the logos for Enterprise Greece, Dimand, Buro Happold, and Bennetts Associates.



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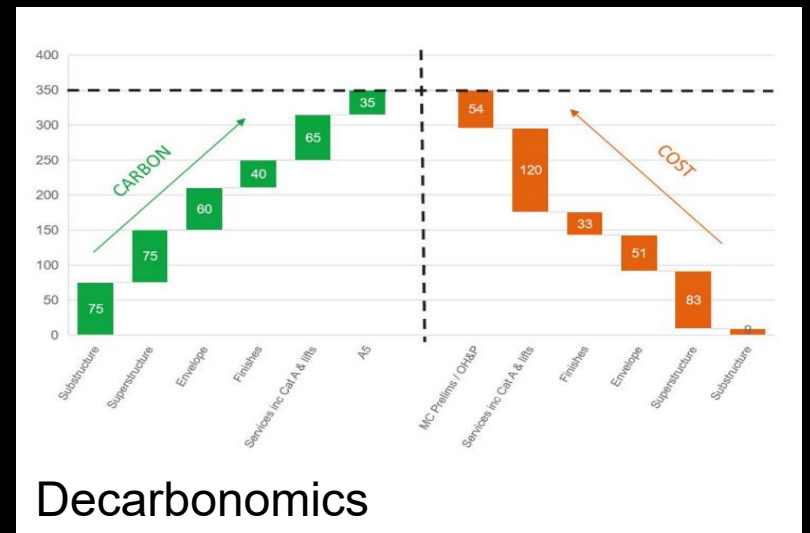
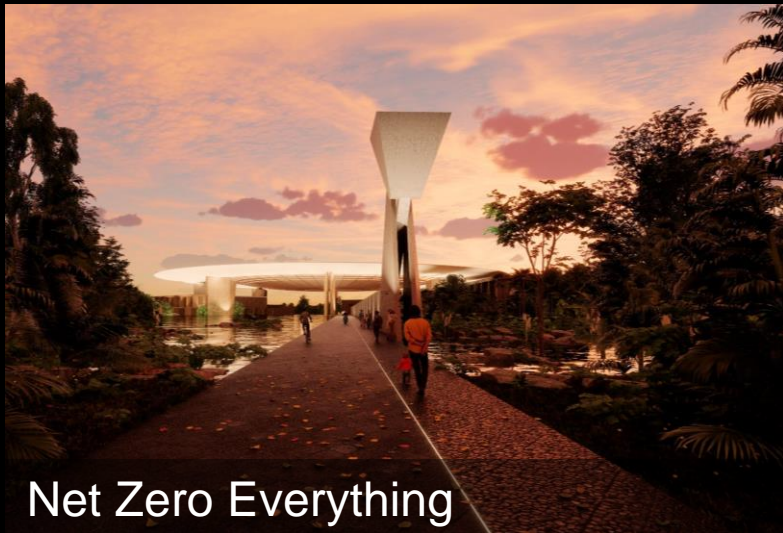
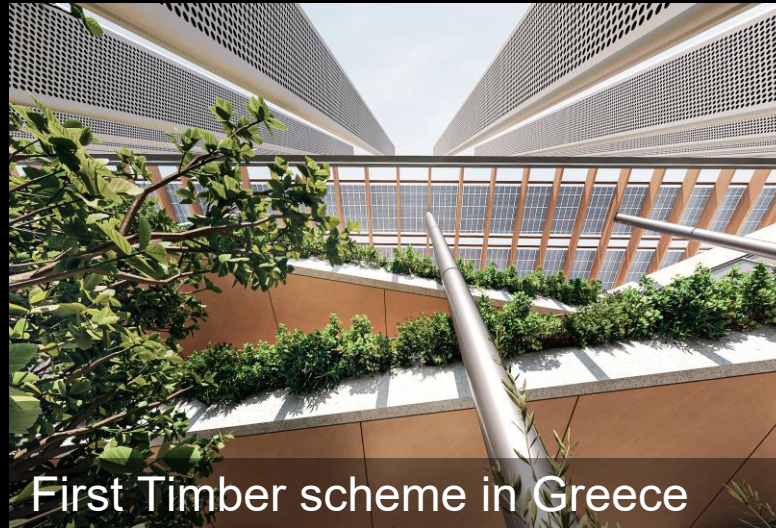
Reflections on Syggrou

- Is it perfect?
- An 'Athenian' spirit that celebrates context, references heritage, projects modernity and sets new standards for sustainability
- Features
 - Good passive design
 - 40% glass, '3Ss' rule & 'parasol principle'
 - Beautiful local materials
 - LEED ???? and servicing innovations
- Issues
 - shading design & VE not fully optimal,
 - all-concrete structure too carbon intensive
- A good first stepbut more to be done



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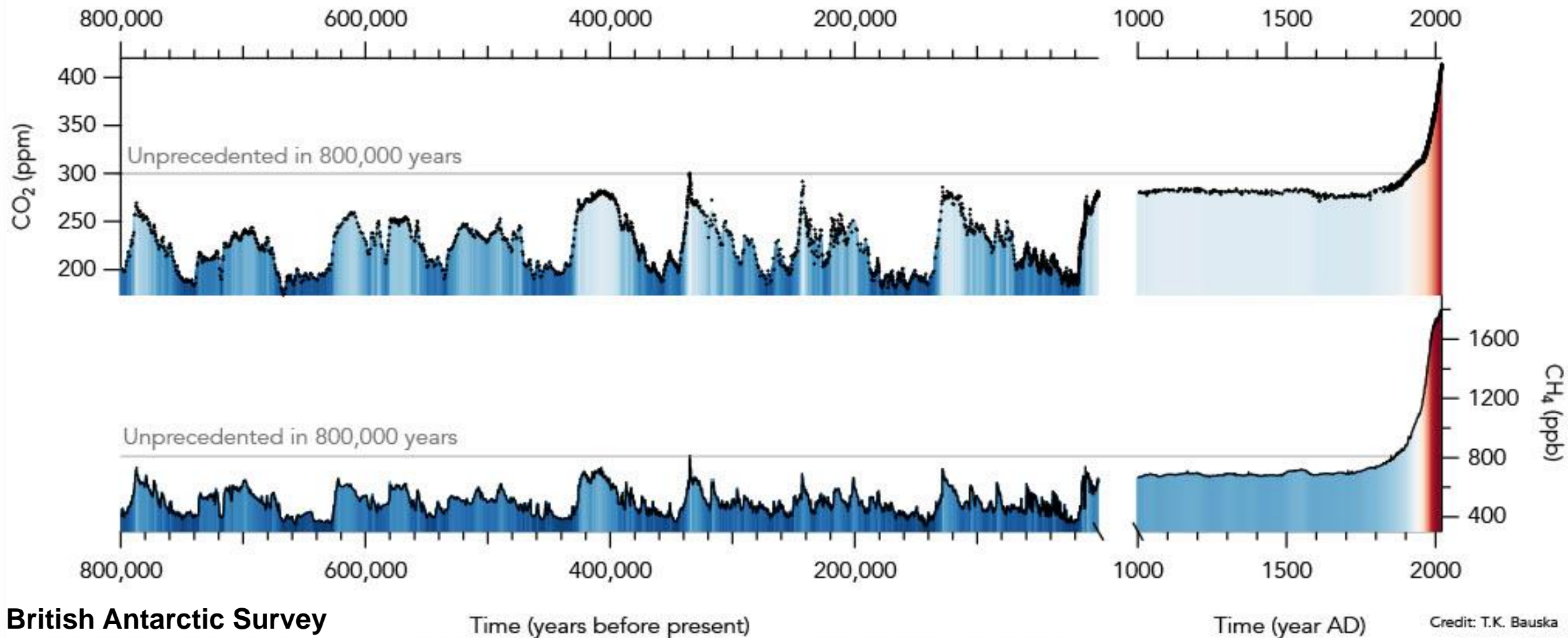
What Next?



Decarbonomics

The Need to Act NOW!

Figure 2: 800,000 years of atmospheric CO₂ and CH₄ as recorded in ice cores and atmospheric sampling

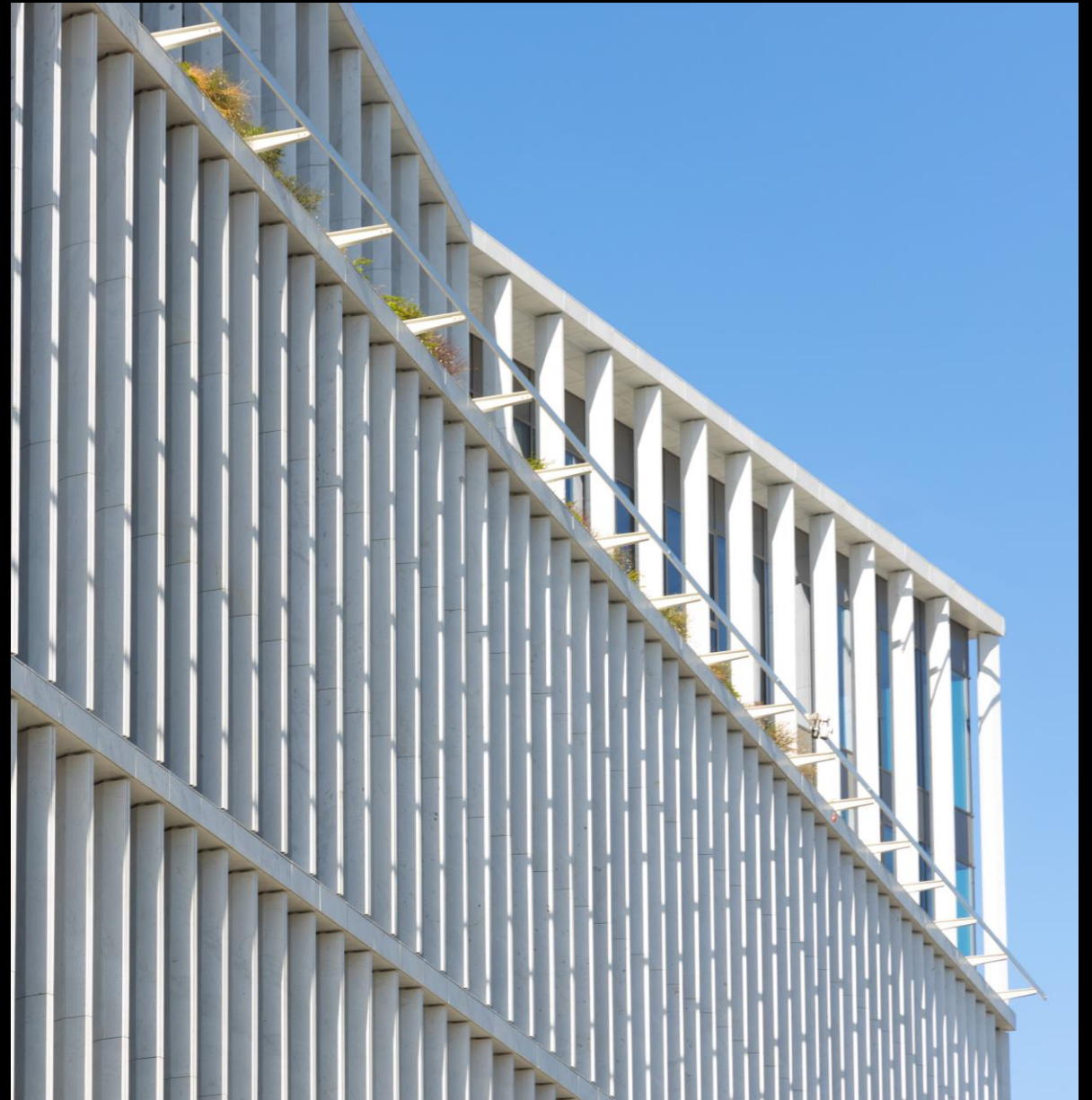


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