

Building for Tomorrow: How Project Leaders Shape a Sustainable Future



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Can you give me a better, more engaging title for my presentation? Something that links to Penang



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Penang Catalyst: Project Leaders Igniting a Greener Tomorrow



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Can you spice it up? I want a witty, humorous title that still keeps it somewhat professional.

Penang Catalyst: Project Leaders Igniting a Greener Tomorrow



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From Char Kway Teow to Clarity: Practical Tips for Project Leadership in Penang



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I need your absolute best, most polished title for a professional audience. Go!”

From Char Kway Teow to Clarity: Practical Tips for Project Leadership in Penang



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Project Leadership 2025

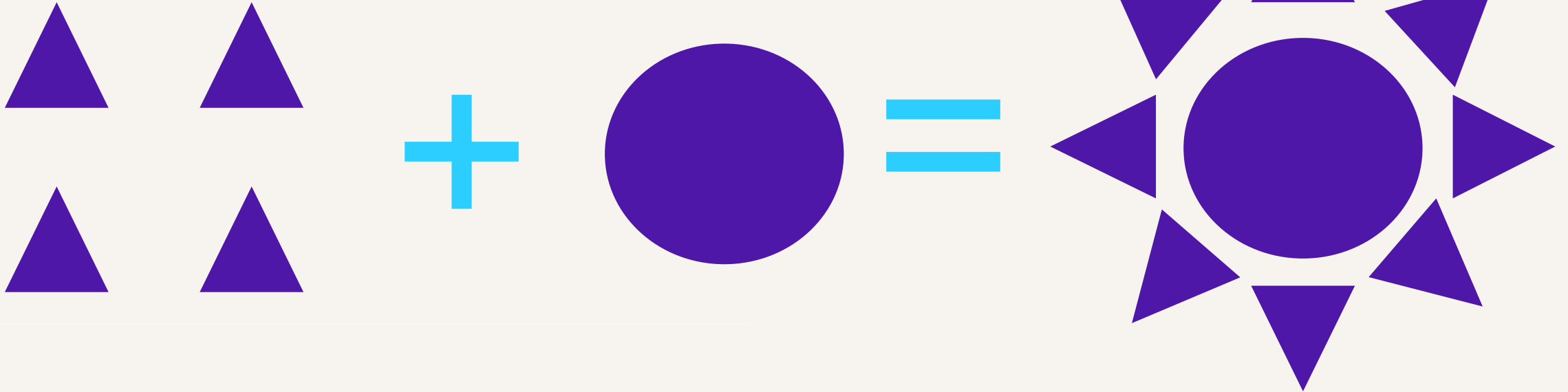
Unlikely Truths: How Project Leaders Can Drive Sustainable Impact



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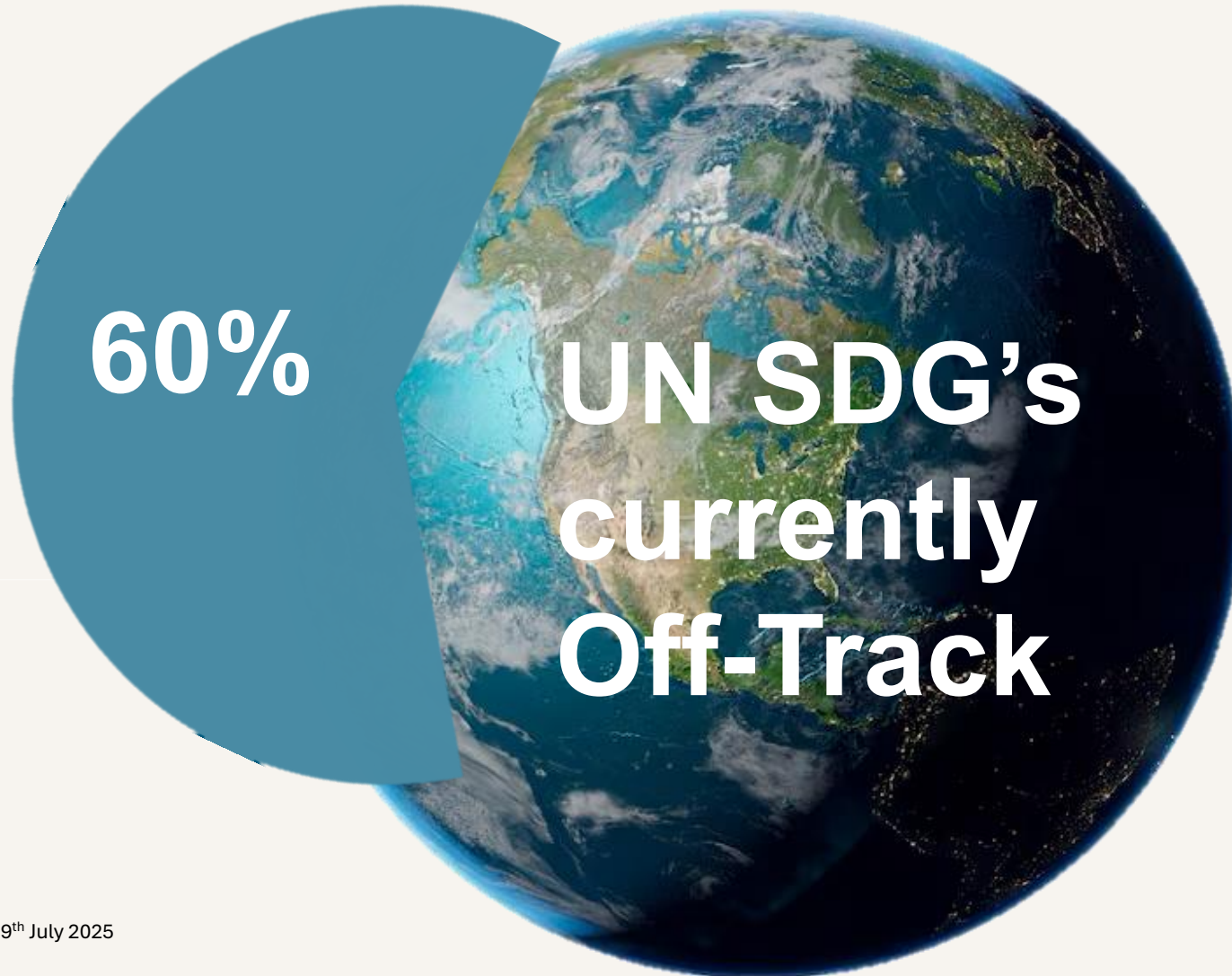
Disclaimer... the objective is not to tell you the future but to help you connect the dots



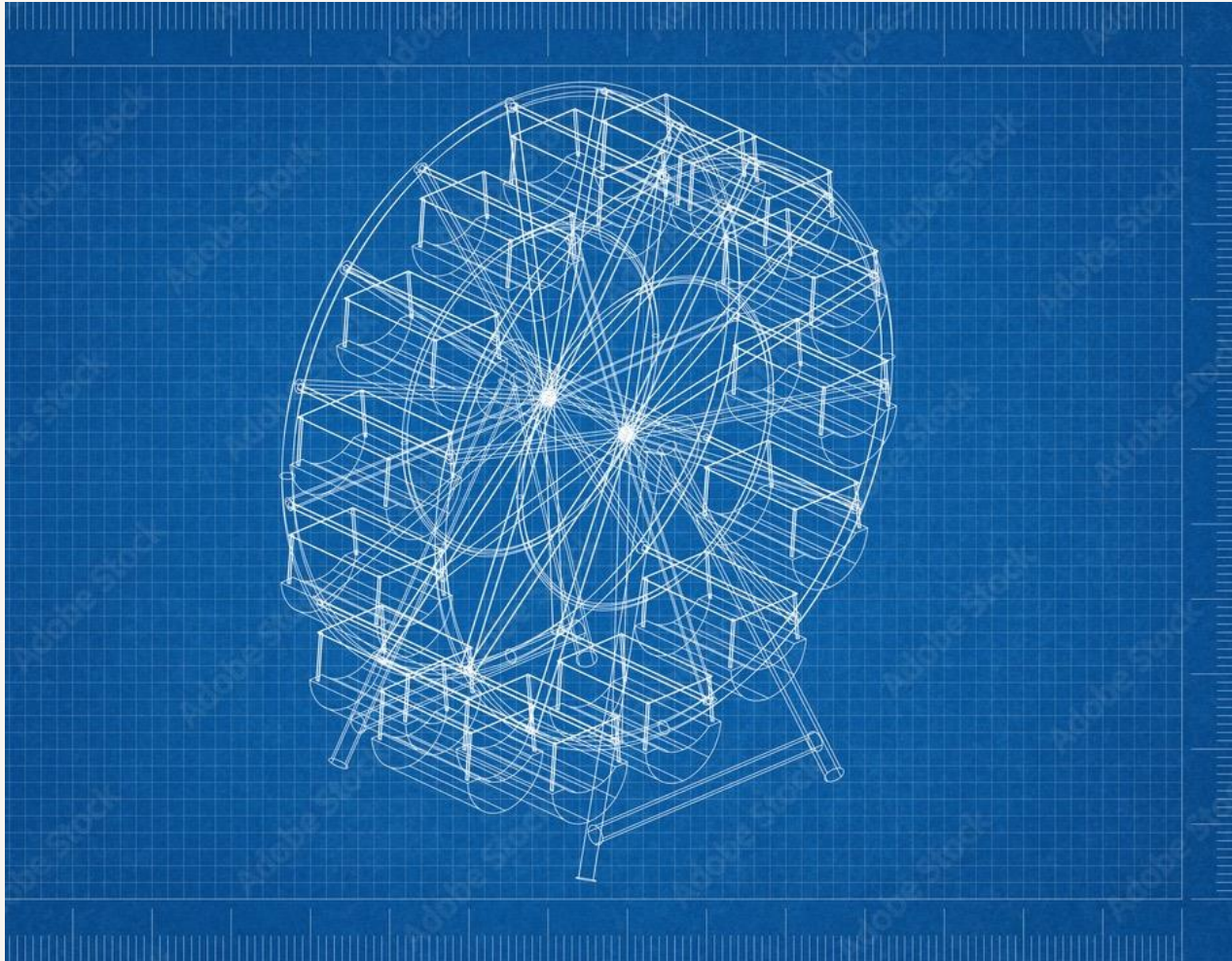
AMBITON ≠ IMPACT



AMBITON \neq IMPACT

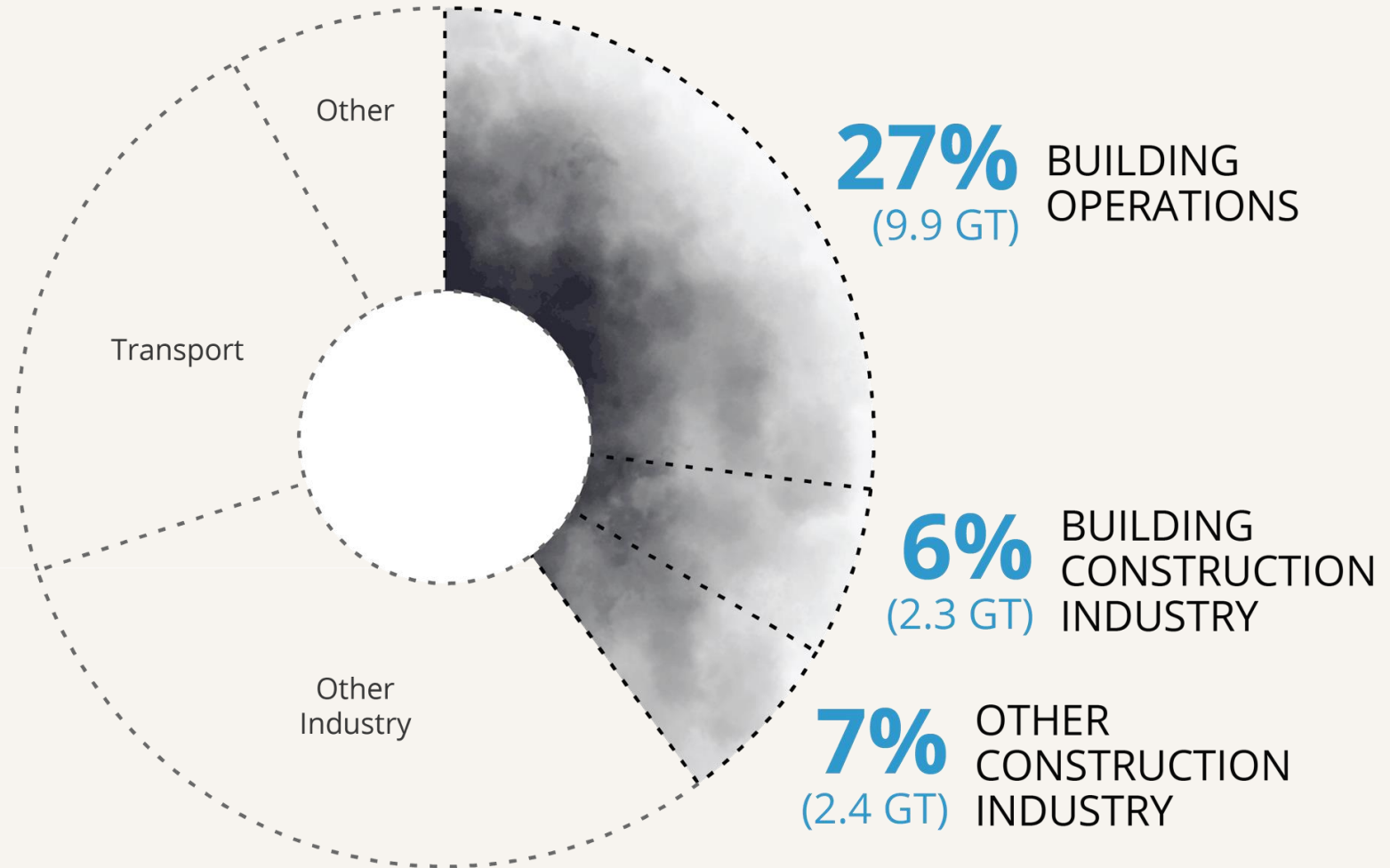


Every Failure is a Blueprint to Learn



**We don't need to reinvent
the wheel, but we must
scrutinize these
breakdowns meticulously**

The Built Environment accounts for 40% Global CO2 emissions



Why South East Asia, Why Now?

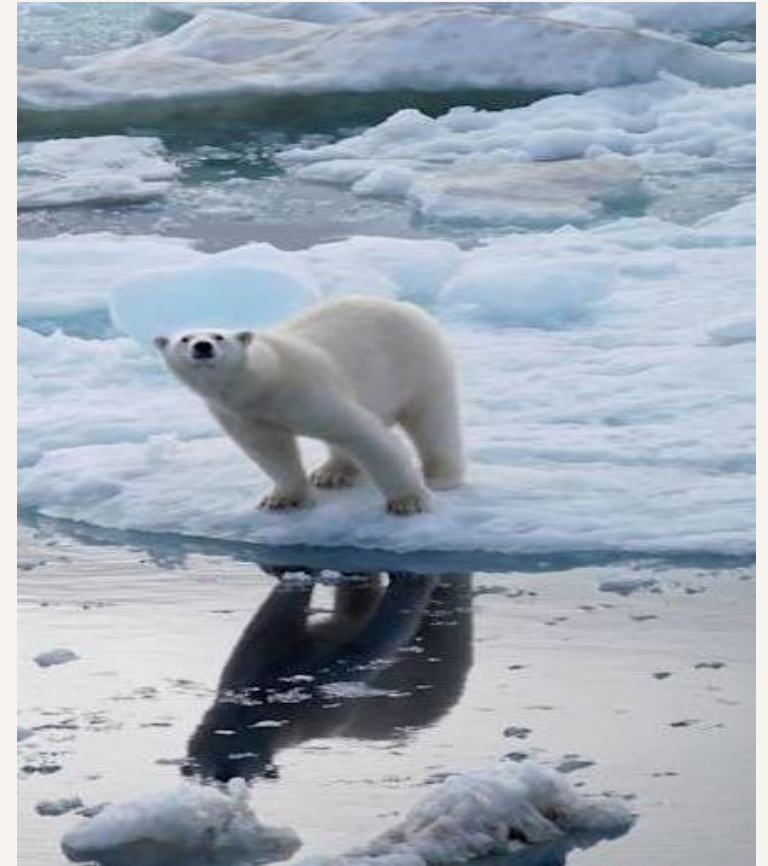
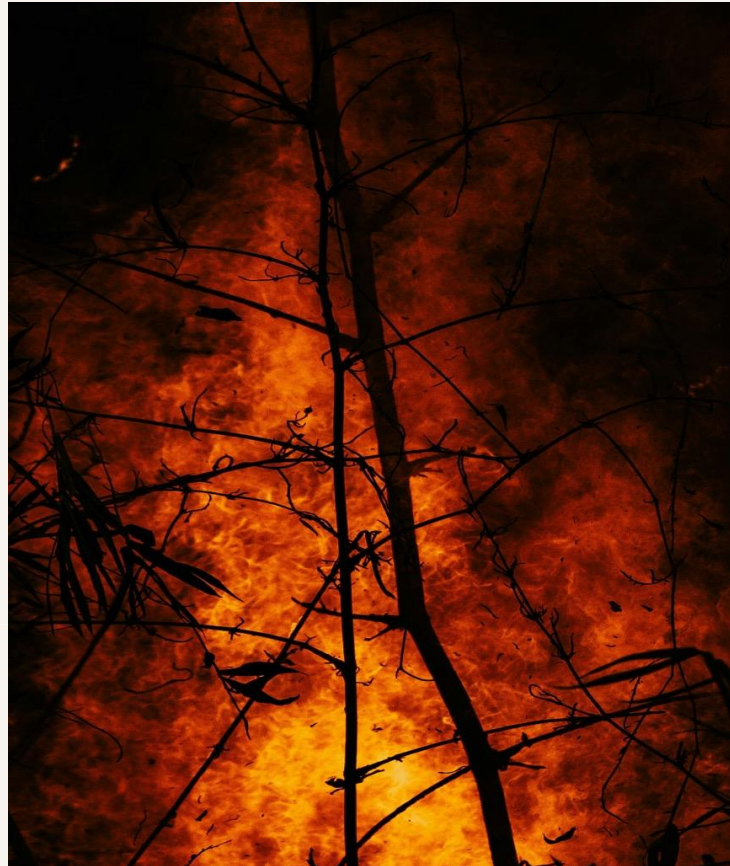
**9 out of 10 occupiers targeting
100% green certified**

60%

**74% willing to
pay a premium**



Sustainability is no Longer nice to Have





This Starts with You!

Three Key Messages



**You Shape
the Agenda**



**Start Smart,
Save More**



**Constraints
Create
Breakthroughs**

Project Leaders as Catalysts for Sustainable Innovation

Beyond Compliance – The Influence of Leadership



Conventional Believe: If we meet the mandated standards, we've done our job.

**Elevate to be Innovative :
Rallying teams to pursue bolder green solutions even when not explicitly required**

Integrate Sustainability into the projects DNA



CDL Singapore launched a “Queen Bee” Program

- **Empower SME suppliers to track and reduce carbon emission**
- **Trained and incentivized subcontractors**
- **The result? Dozens of firms began their sustainability journeys, cutting carbon in their processes.**



Unlikely truth #1

A single project owner or leader, by sharing knowledge and standards, can elevate sustainability performance across an entire network of companies.

Case in Point (Public Sector Influence):



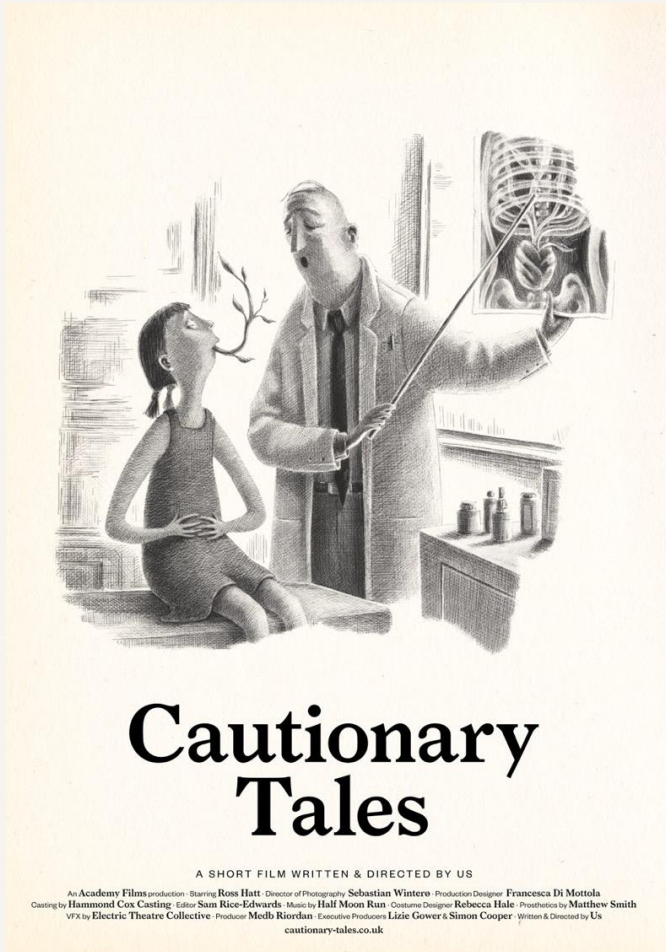
- **Not in ‘Vacuum’**
- **Lead By Example**
- **Sends strong market signal**

Unlikely truth # 2

Leadership by example can shift industry norms.

What was once ambitious (net-zero energy usage, for instance) is becoming the “new normal” when leaders consistently push the envelope

When Leadership Falters – A Cautionary Tale



- Company sets grand sustainability goals but the project lead prioritises “real” project goals like cost and schedule
- Green features were value-engineered out as the project leader didn’t believe in them
- Energy-saving systems were installed but never commissioned due to lack of championing

Human factors are pivotal

It's the leader's vision and persistence that often determine whether innovative solutions make it into the final build.

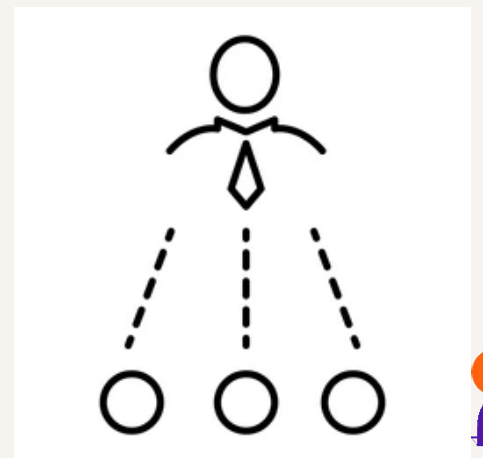
(like a novel rainwater harvesting system or a new low-carbon material)



Unlikely Truth #3:

Catalytic Leadership beats passive compliance

The biggest advances in sustainable design often start with an individual leader's conviction, not a directive from above.



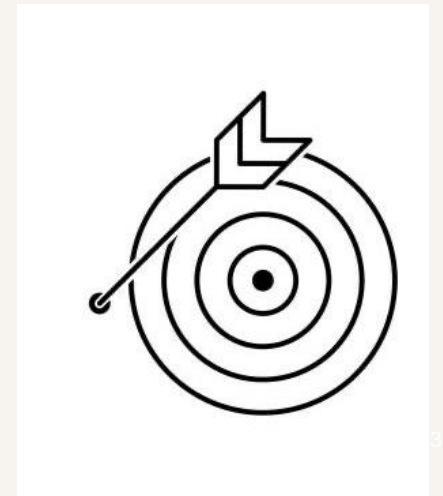
Strategic Integration of Carbon Reduction from Day One

“Start at the Start” – Why Early Integration Matters

The conventional industry belief has been that sustainability features can be addressed later

“We’ll design the building first, then see if we can add solar panels or get a green certification at the end”.

This approach is flawed.



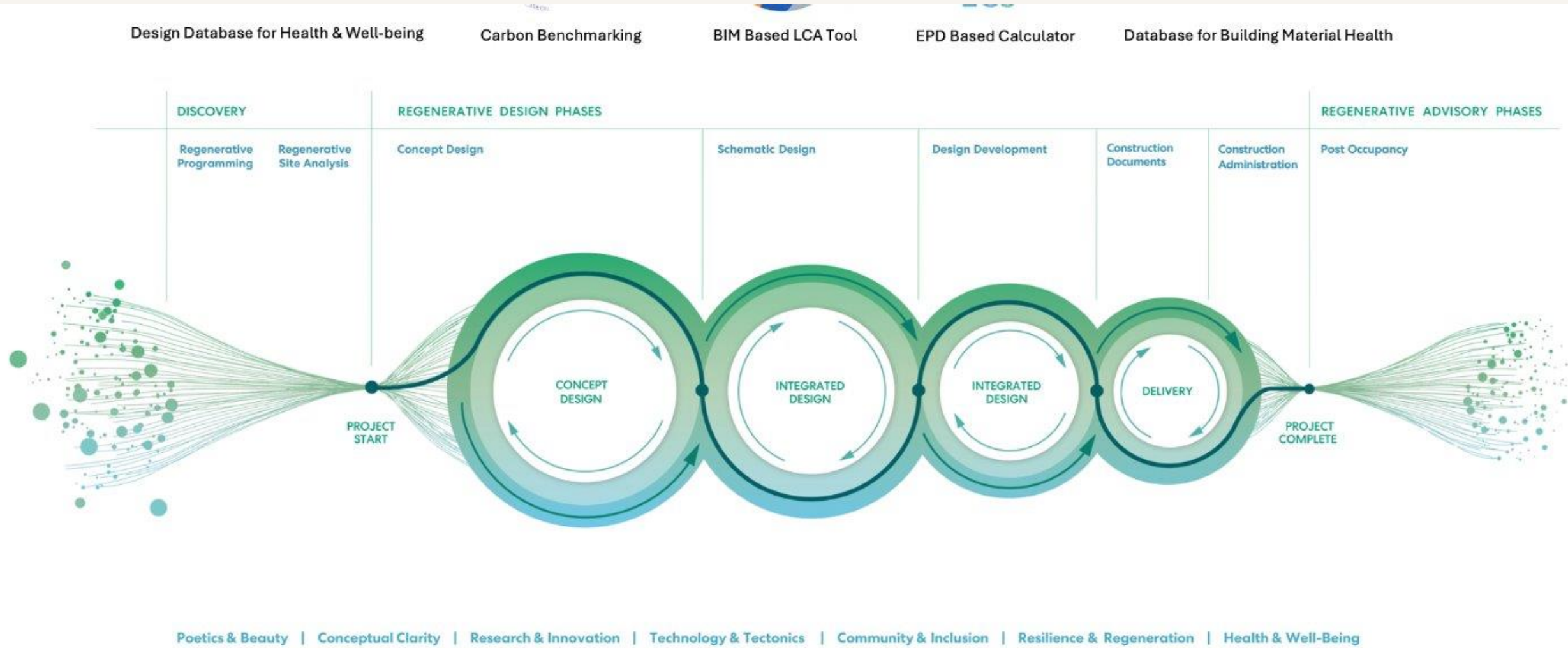
“Start at the Start” – Why Early Integration Matters

Embodied carbon – from cement, steel, glass, etc. – is emitted during manufacturing of materials and construction processes *before occupancy*

...and cannot be reduced later



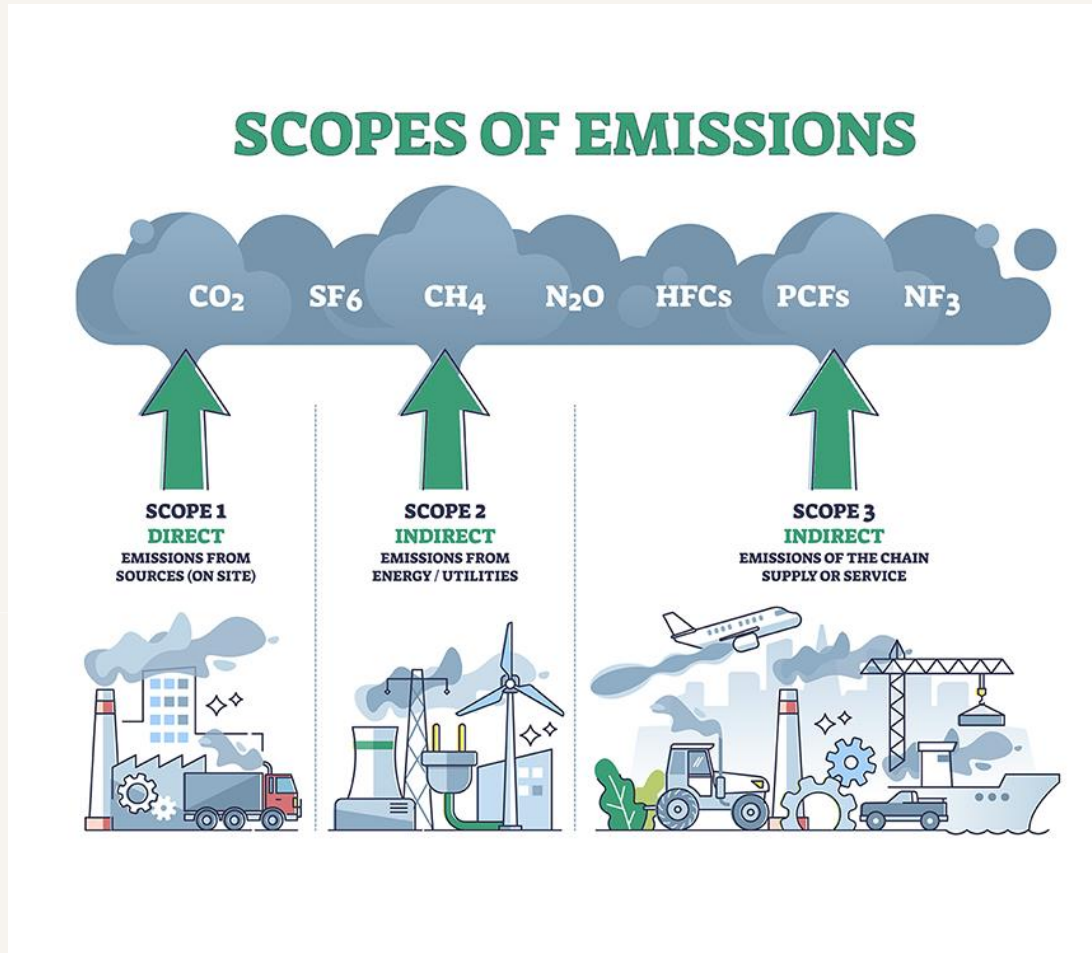
“Start at the Start” – Why Early Integration Matters



Poetics & Beauty | Conceptual Clarity | Research & Innovation | Technology & Tectonics | Community & Inclusion | Resilience & Regeneration | Health & Well-Being

Project leaders don't have to start from scratch – we have robust frameworks to guide early integration of sustainability.

GHG Protocol (Greenhouse Gas Protocol):



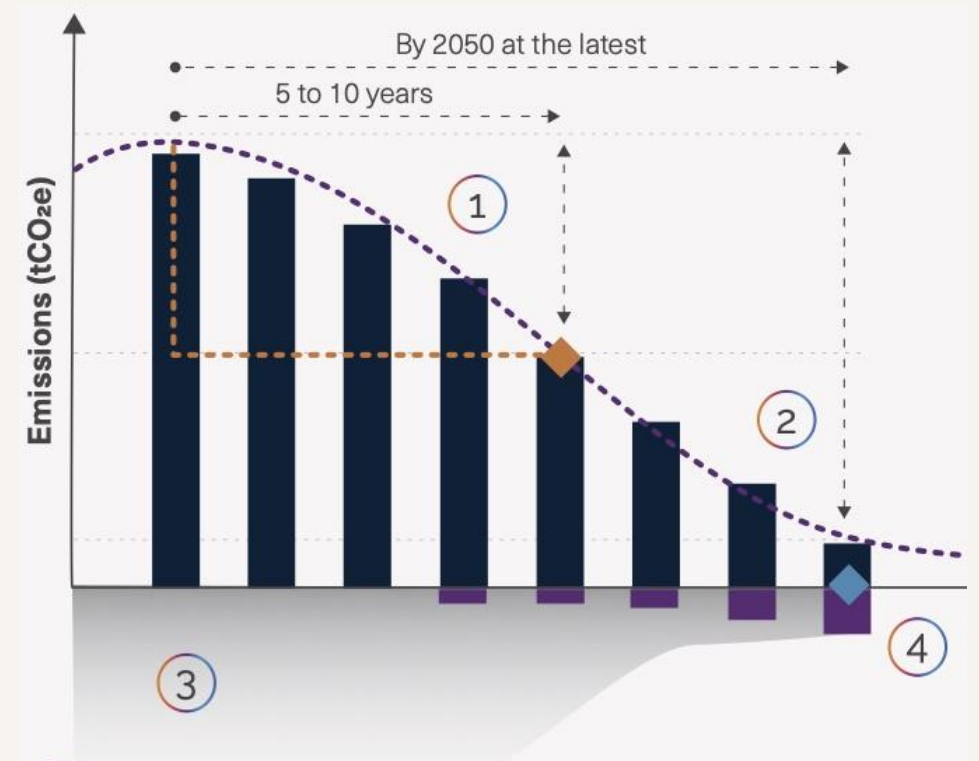
**Asses Carbon Footprint
(and set a carbon budget)**

It's far easier (and cheaper) to choose a low-carbon material at design time than to retrofit or offset emissions later.

SBTi (Science Based Targets initiative):

Many corporates commit to SBTi for carbon reduction at the corporate level

This building must incorporate X% renewable energy, Y% reduction in materials' carbon intensity, to meet our 2030 target



Green Building Rating Systems



Pursuing Green Building Certification commits to

Conducting energy modeling and daylight simulations during schematic design, choosing low-carbon materials early.

The Payoffs of Early Action – Busting the Cost Myth



Conventional Thinking



The Truth

The Payoffs of Early Action – Examples



5% reduction in material cost, whilst achieving a higher GreenMark rating through using recycled steel and several design optimisations

Case in Point (Success through Early Integration):

Front-loading sustainability doesn't hinder greatness – it enables it



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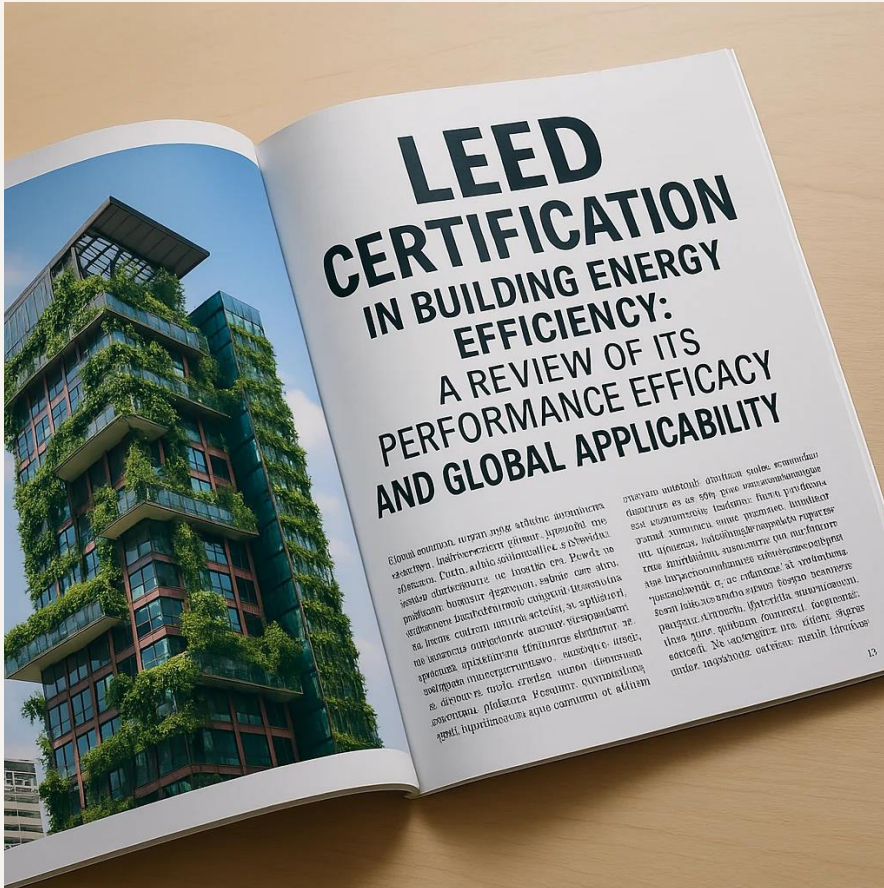
Case in Point (Failure Avoided)

- **Scramble** to add insulation and more efficient chillers
- The **late changes** caused cost overruns and design conflicts
- **Barely got certified** but performs only marginally better than code

if sustainability had been a core goal from the start, the project could have achieved much more at a lower cost



Case in Point (Failure Avoided)



LEED-certified offices in Bangkok on average used ~24% less energy than typical, but there were **large gaps** in some performance predictions.

- Performance Level matters
- 35% of building performed worse
- Thermal Insulation Can Backfire in Hot Climates
- LEED ignores operational performance

Unlikely Truth #2:

Early planning for sustainability saves time and money
Integrating carbon reduction and efficiency goals at the project's genesis reduces long-term costs, avoids expensive retrofits, and adds value.



**Transforming
Sustainability Challenges into
Innovation and Value**

Embracing Challenges



We can't afford fancy green tech or that local supply chains aren't ready

Flip the Narrative

Treat each challenge as a **spark for innovation**

We can't afford fancy
green tech or that local
supply chains aren't ready

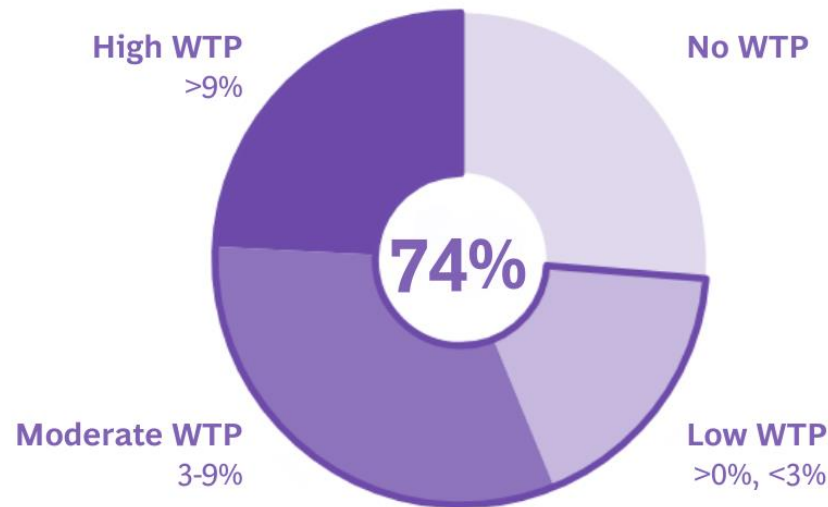


Challenge 1: “Sustainability is too expensive

Willingness to Pay

Willingness to Pay

Willingness-to-pay (WTP) for ‘green’ buildings across US, DE, UK, FR, and KSA



Source: BCG survey of homeowners in the US, Germany, France, UK, and Saudi Arabia (N=909); BCG analysis

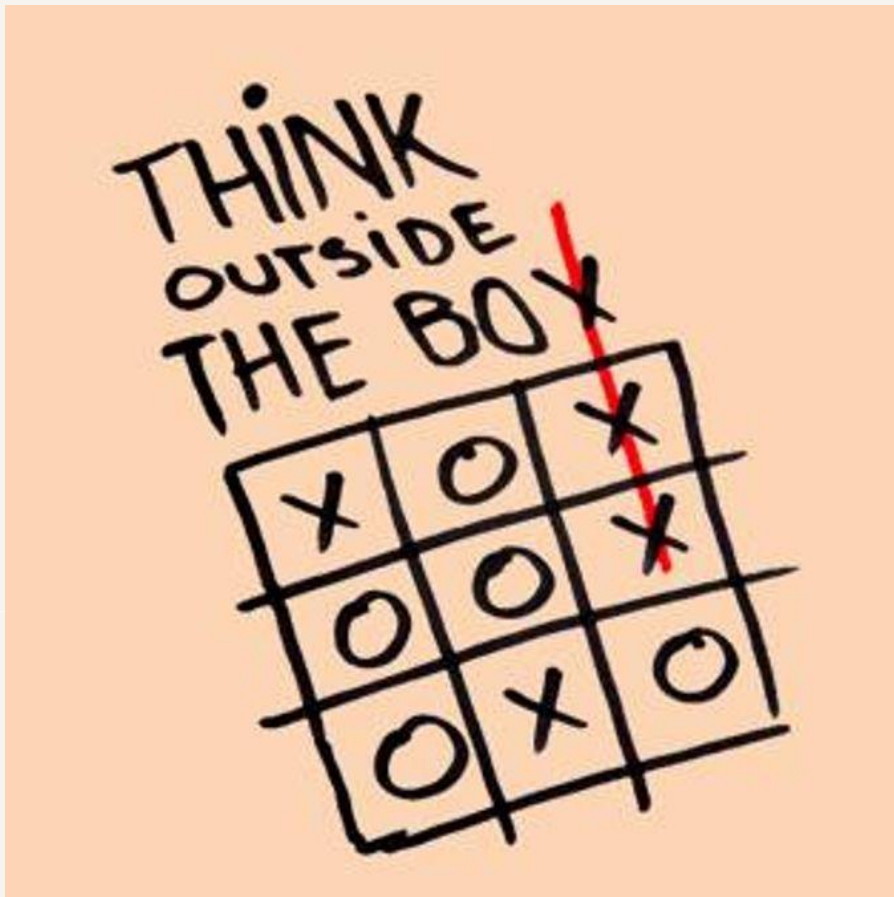
Instead of **value-engineering** out to save on capex, run the numbers on 20, 30-year horizons.

Often, the analysis shows a **positive ROI** for solar panels, high-efficiency chillers, or double-glazed windows when factored in **energy savings and tenant retention**



Sustainability can be a profit center

Challenge 2: “Carbon reduction targets are too restrictive



Some project teams initially feel that strict carbon or energy targets will **constrain design** or functionality.

In practice, constraints drive creativity



Jurong Lake District - Singapore

Challenge 3: “Lack of stakeholder buy-in.”



Successful project leaders turn sustainability into a **narrative that resonates** with each stakeholder.

This is where **storytelling and co-creation** come in as innovative approaches.

Keep dragging their feet

WASTE MANAGEMENT CHALLENGE

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Learning from Failure – The Greenwashing Pitfall

Not all sustainability efforts automatically lead to innovation; some can result in **missteps**





The Garuda Palace in Nusantara

Turning Challenges into Opportunities

Challenge

Opportunity



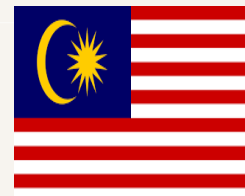
Scarcity of reliable power in areas

Incorporate solar plus battery storage



Water scarcity concerns in project

implement a blackwater recycling system



Investors pressure on ESG Metrics

Digitizing building portfolio energy data using AI.

Win-Win Outcomes

Unlikely Truth #3:



A project leader can convince even the skeptics that sustainable design isn't just morally right, it's economically and socially superior

**From leadership and early
planning to innovation – and
what it means for each of us
as professionals.**

Bringing It All Together

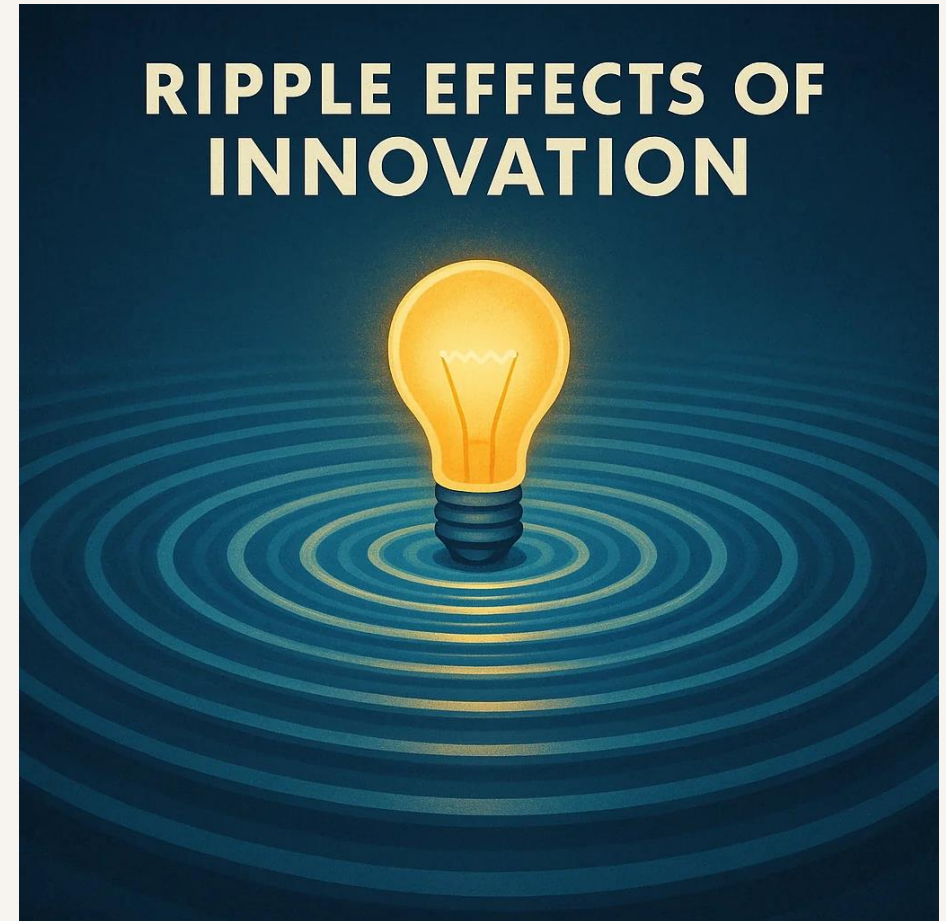
We explored **how** project leaders in Southeast Asia's commercial real estate sector **can pioneer a sustainable future**



Project Leaders as Catalysts

Takeaway:

Don't underestimate the power of your conviction; One leader can galvanize an entire team (or industry) to do better



Early Integration of Carbon Strategies

Takeaway:

Bake sustainability into the project plan at inception. It's cheaper, easier, and more effective to design it right than fix it later.



Challenges to Opportunities

Takeaway:

Embrace the hard problems – they often hide the greatest opportunities for innovation and competitive advantage



Unlikely Truths Revisited

Sustainability can enhance profitability

(through energy savings and premium rents),

Early action prevents cost overruns

(contrary to the belief that it's an extra expense),

Tough constraints can fuel innovation

(where others might see only difficulty)

Calling something “green” doesn't make it so

(integrity and follow-through are key)

Story to Leave You With



Instead of dusting of old specs...

- **Net Zero Carbon**
- **Health & Well Being**
- **Intelligent**
- **Commercial Success**

This is certainly within reach

Your Role – The Catalyst for Change

Project leadership is the bridge between lofty sustainability goals and on-the-ground action.

The decisions we make today in our projects will shape our region's environmental and social well-being for decades.



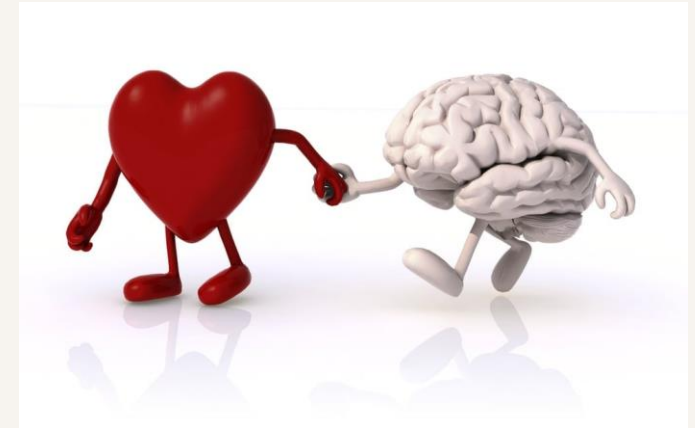
What is one “unlikely truth” I can champion in my next project?



The role of project leaders is central:

**By influencing hearts and minds,
embedding carbon wisdom from the
start, and turning hurdles into triumphs**

**You are the catalyst that will help
Southeast Asia's built environment leap
toward a greener, more resilient future.**





How to best thank the audience for their time and attention after listening for 40 minutes



Thank you all for your time and attention.

I hope you leave inspired about the possibilities and, perhaps, with new ideas on how you to boldly leverage technology, how to learn from past failures.

Together, with curiosity and commitment, we, as project leaders, can shape a more sustainable, innovative future..



**Thank you. Let's go out there
and build that sustainable
future, one project at a time..**



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