

Webinar: Integrating Sustainable Development Goals into Corporate Sustainability

Strategic Planning for Sustainable Change

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Remarks:

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Strategic Planning for Sustainable Change


DAVIS BOOKHART

HEAD OF SUSTAINABILITY, HKUST

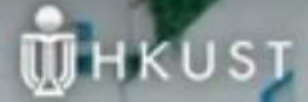
HKUST  Sustainability

Leading Organization Change

Question #1: What do we want?

A photograph of a long wooden pier extending into a calm lake at sunset. The sky is filled with soft, colorful clouds in shades of blue, orange, and yellow. The sun is low on the horizon, casting a warm glow over the water. A small boat is visible in the distance on the right side of the pier. The water reflects the colors of the sky and the pier.

*In order to achieve
a sustainable
future, first we
must imagine it*



Clear Water Bay

Sunny

26°C

Ready for a sustainable campus life?

Yes

No

THE HONG KONG JOCKEY CLUB ATRIUM

MORE VIDEOS

0:07 / 1:01

Question #2:
What is the role of a responsible organization in building a better future for everyone?



A photograph of a large tree trunk with thick, gnarled roots in a forest setting. The tree trunk is the central focus, showing detailed bark texture. The roots spread out across the ground. The background is a dense forest with other trees and vines. A semi-transparent black box with white text is overlaid on the right side of the image.

I DON'T WANT TO PROTECT
THE ENVIRONMENT,
I WANT TO CREATE A WORLD
WHERE THE ENVIRONMENT
DOESN'T NEED PROTECTING.



Sustainability Mission

HKUST will become a global leader in sustainability education by transforming the Clear Water Bay campus into a

zero carbon, zero waste, and net-positive environmental impact

living laboratory for experiential learning, demonstrating cutting-edge research and sustainable operations within a vibrant and engaged community.



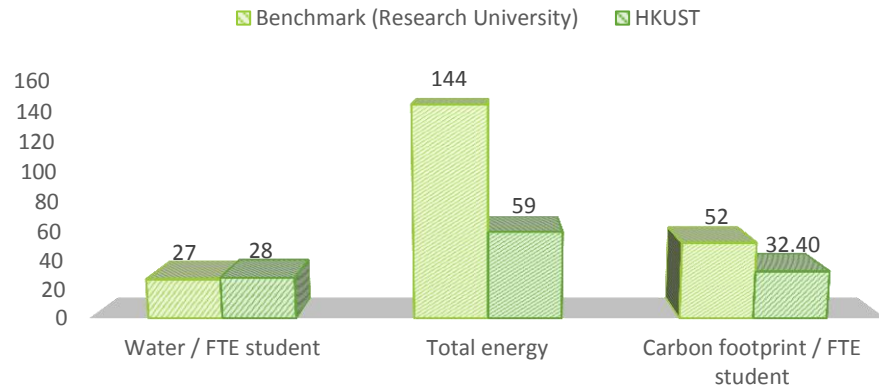
**Question #3:
How do we evaluate our
actions against a
sustainability
benchmark?**

HKUST Benchmark on North America Key Facilities Metrics Survey



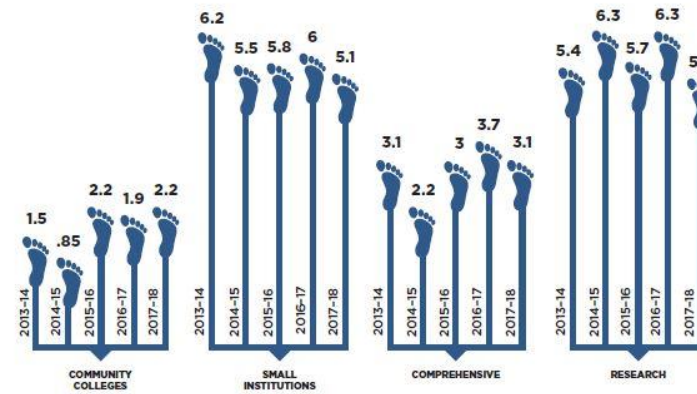
Key Facilities Metrics Survey

BENCHMARK: ENERGY, GHG, AND WATER

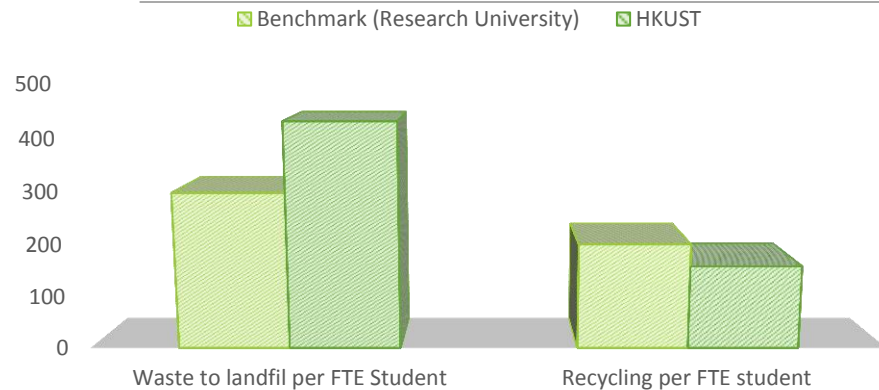


CARBON FOOTPRINT

MEDIAN IN METRIC TON CO₂ ANNUALLY PER FTE STUDENT ENROLLED

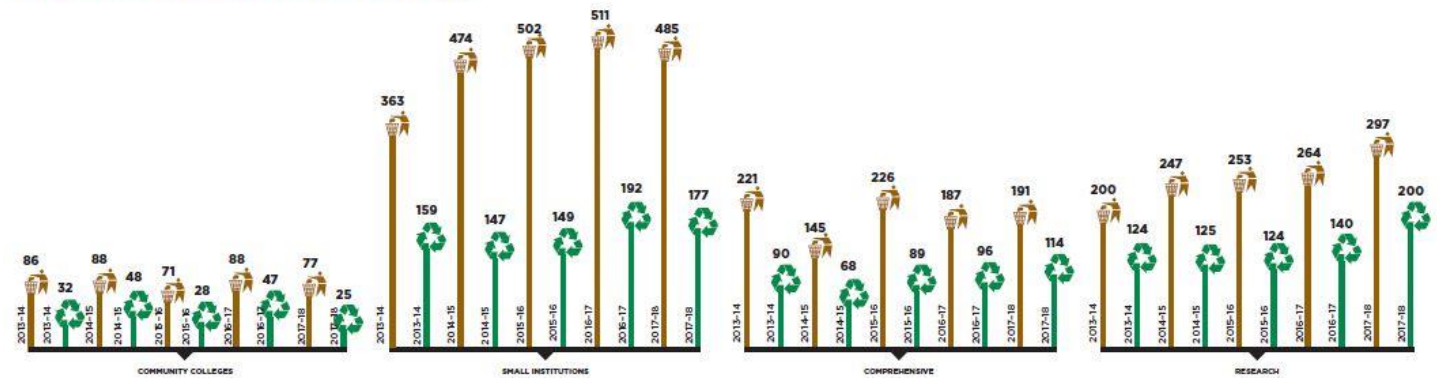


BENCHMARK: WASTE AND RECYCLING



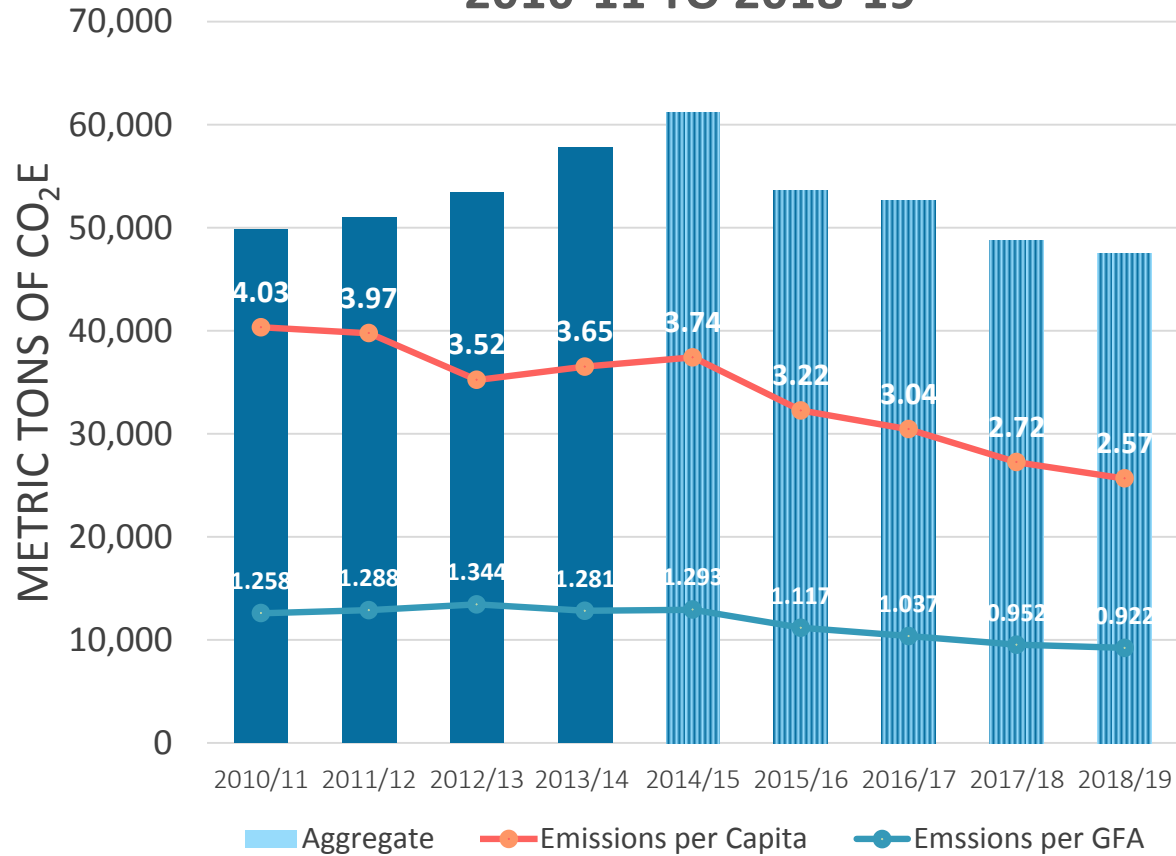
GARBAGE/ RECYCLED WASTE

MEDIAN WASTE IN POUND ANNUALLY PER FTE STUDENT ENROLLED
MEDIAN IN POUNDS ANNUALLY PER FTE STUDENT ENROLLED

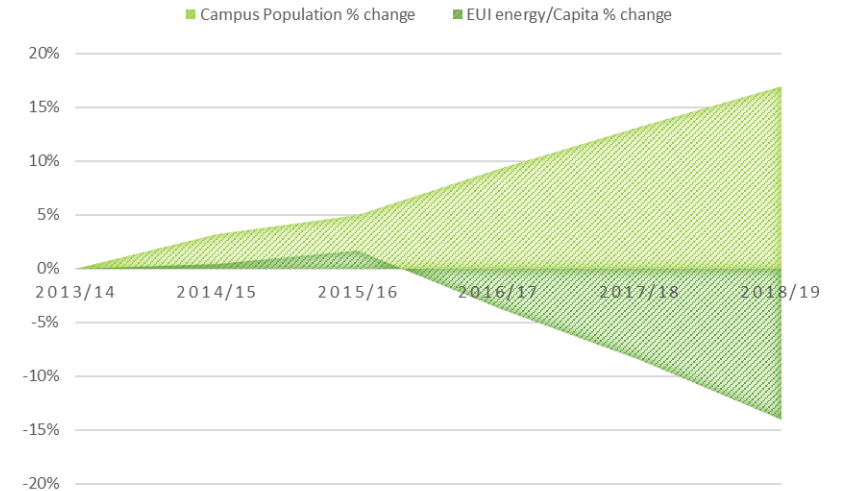


Where we are today

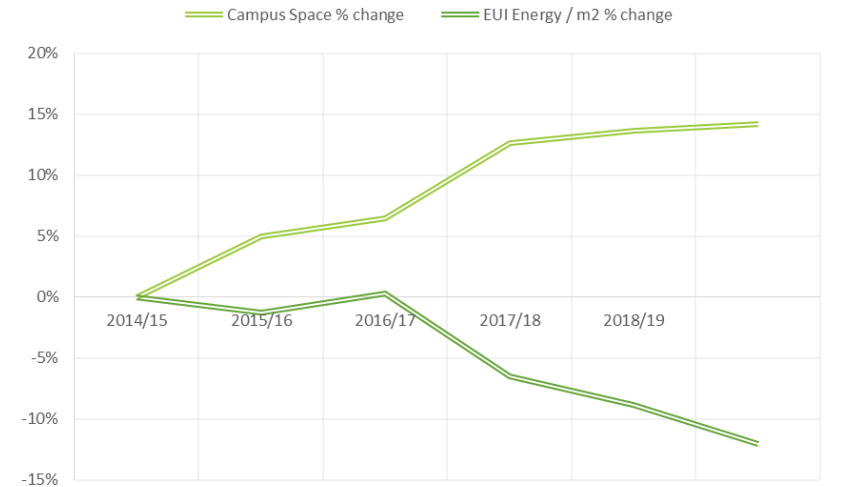
SCOPE 1&2 GHG EMISSIONS TREND 2010-11 TO 2018-19



ENERGY METRIC: CAPITA



ENERGY METRIC: SPACE (GFA)



Overall GHG reduction = 22.5%

Emissions /Capita = 31.3%

Emissions /GFA = 28.7%

SUSTAINABILITY FIGURES
YEARLY HIGHLIGHTS



174,303
Full-time equivalent



Occupied
2,819,042 m²
of building space



Produced
363,672
tonnes of greenhouse
gas emissions

Equivalent to the amount of
CO₂ that 15,811,826 trees can
absorb in a year
A mature tree absorbs 23kg of CO₂ per year
(Carbon removal factor adopted by ISO-14064)



Consumed
608,432,586 kWh
of energy

The total electricity
consumed is
able to power **133,428**
regular households for a year



Generated
1,795,602 kWh
renewable energy



Consumed
4,083,647 m³
of potable water



Equivalent to
the volume of
1,633

Olympic size
swimming pools
The volume of a standard
Olympic-size swimming pool
is 2,500m³



Disposed
10,950 tonnes
of waste to landfills



Equivalent to the
weight of
730
double decker buses



Diverted
2,046 tonnes
of materials from landfills
for recycling and reuse



Chris Laszlo and Nadya Zhexembayeva

EMBEDDED SUSTAINABILITY

THE NEXT BIG
COMPETITIVE ADVANTAGE

Question #4:
How do we move
towards embedding

How Embedded is Sustainability?

Successes

- Great demonstration of efforts
- High visibility
- Excitement of campus community
- Empowerment of our people
- Performance

Challenges

- Efforts often feel like “add-ons”
- But low impact
- Sense of more getting done than reality
- Narrow slice of self-selected and motivated
- Going beyond “low hanging fruit”





Current Snapshot:

Strength in four areas where the university is making significant contributions

Research and discovery

Leveraging university resources and human capital to solve pressing problems for human society

Campus operations

Transitioning towards a campus that becomes an integral part of the learning experience and training of the students.

Education

Preparing students for careers and social interaction within a 21st century environment (resource-constraints, rapid and unpredictable technology changes, globalization)

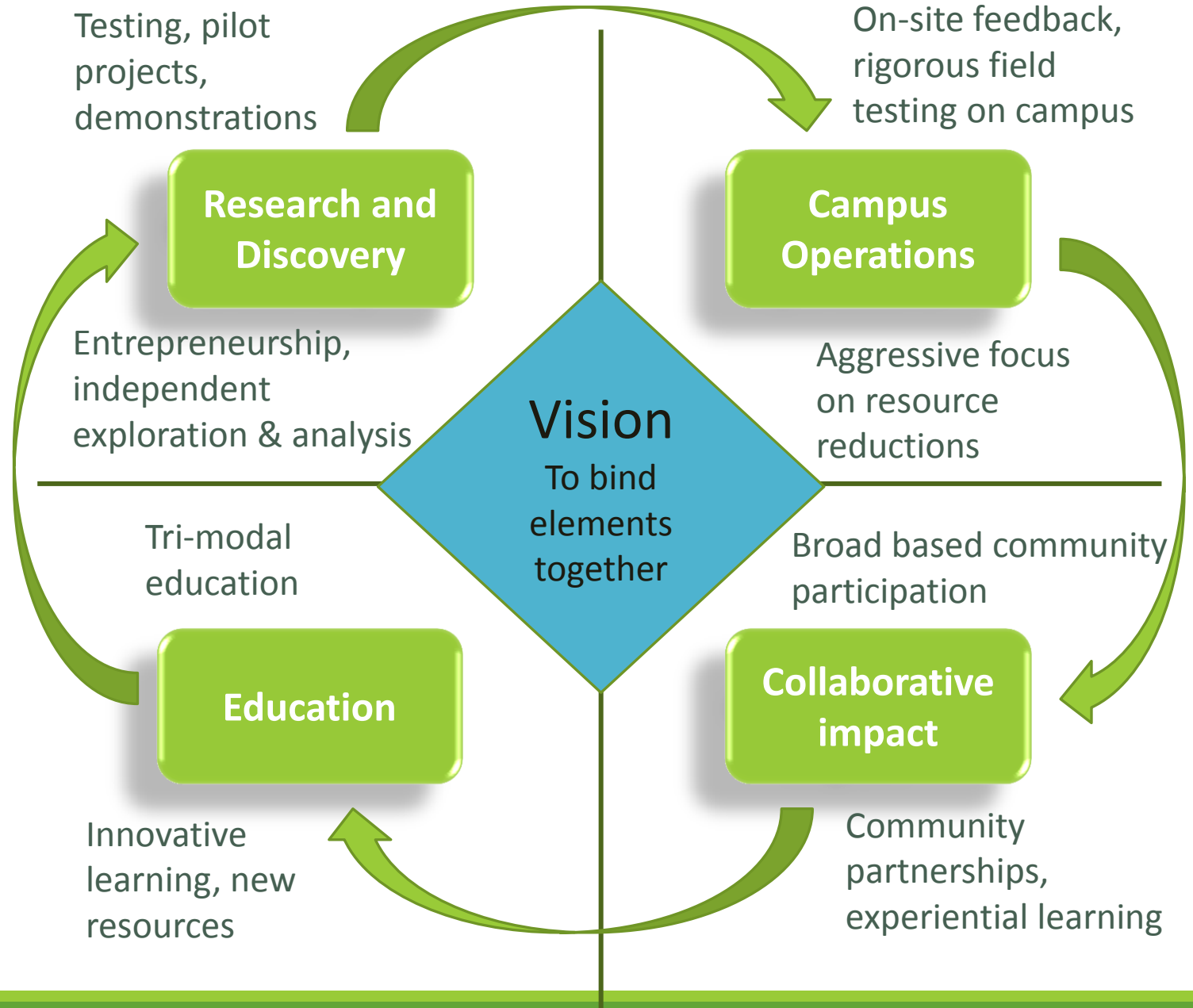
Collaborative impact

Contributing to the advancement of the HKUST community, Hong Kong, and the world (“spilling out”)



Perspective

A sustainability vision can bind existing elements together in new and interesting ways



HKUST 2020 Sustainability Challenge



Sustainability 2030: Pathway Forward

Steps for completing the plan by the end of 2020

1. PLANNING

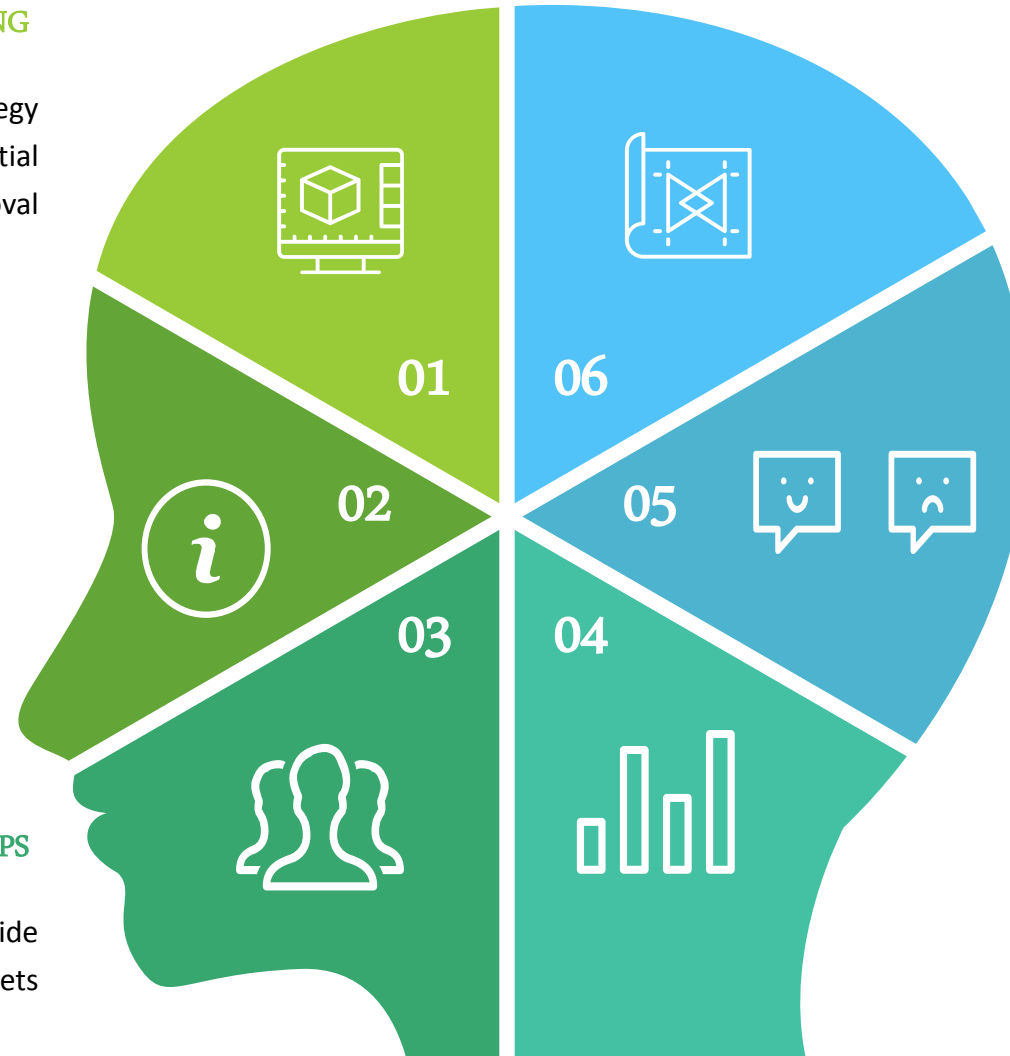
Develop the framework for the strategy and assess on feasibility for initial approval

2. BACKGROUND RESEARCH

Review past performance, data collection abilities, and peer benchmarks to evaluate relative potential

3. FEEDBACK GROUPS

Bring experts on each field to provide feedback on the goals and targets



6. LAUNCH

Hold events to engage community and celebrate the new strategic plan

5. SHARE WITH COMMUNITY

Share plan with Council and HKUST community members to get any final feedback or suggested changes

4. MEASURABLE OUTCOMES

Establish the 2030 targets with measurable KPIs and appropriate data markers

Sustainability Strategy Elements

Creating a Robust System for Success



PROGRESS AND PERFORMANCE

Objective:

To pursue clear and measurable performance targets for efficiency, resource reductions, and campus improvements



SUSTAINABILITY EDUCATION

Objective:

To create the conditions for all students to graduate with sustainability skills and competencies that will prepare them for career challenges



LIVING LAB DEMONSTRATION

Objective:

To transform our campus into one where the campus itself is a platform for learning, experimenting, and showcasing new ideas and approaches.



CAMPUS COORDINATION (CWB / GZ)

Objective:

To ensure that sustainability goals and priorities are shared between the two HKUST campuses



NETWORK AND HK COMMUNITY

Objective:

To create a vibrant community of faculty, staff, and students to become a trusted source of information and inspiration for the Hong Kong region



Questions or Comments?

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