New Report by HKGFA Real Estate Working Group (RE Working Group)

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Background and Key Challenges



Hong Kong's building profile

- ~50,000 existing buildings
- By 2030, around 14,000 will be older than 50 years

commercial buildings (office, hotel, shopping malls etc.)

Building sector contributes:

- 90% electricity consumption
- 60% GHG emissions

Around 2/3 from commercial buildings

Around 8,000 are private

Ø Long-term targets

By 2050, reduce electricity use in

- Commercial buildings by 30-40%
- Residential buildings by 20-30%

Ageing buildings + Energy reduction target = RETROFIT opportunity

Potential Retrofit Market Size (Office tower buildings)

Estimated Market Opportunity

~ HKD3.6 billion

- Private office buildings under 50 years old
- Around 2,050 buildings identified
- Retrofit strategy (Shallow / Mid / Deep) assigned based on building age, size, district, equipment provision

Challenges to UPSCALE building retrofits

Regulatory

- Lack of government incentives
 - → Leads to low motivation and uptake
- Lack of established benchmarks and criteria for building energy retrofitting
 - → Limits effective implementation

Technical

- Lack of transparency and detail in building characteristic and energy data
 - → Limits meaningful comparison

Financial

- High investment cost of retrofit
- Lack of access to financing or financing arrangements
- Low return & long payback

How do other jurisdictions address this?



Addressing regulatory challenge

Australia

NABERS

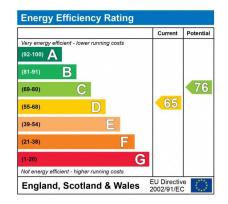
- Ratings from 1 star to 6 stars
- Based on actual operational performance
- Can assess whole building (base building + tenant area)
- Rating must be provided in the sale/ leasing of commercial office space

United Kingdom

Energy Performance Certificates

- Ratings from A to G
- Minimum performance required (E rating) for private rented property
- Rating is used to operationalize performance-based instruments e.g. loans





Addressing technical challenge

In **Singapore**, buildings with GFA \geq 5,000 m2 are mandated to submit building information and energy consumption data to the Government annually.

Building and Construction Autl

Attributes:

- Building type
- Main function
- Building size (Large/Medium)
- Previous year EUI
- Previous year EUI quartile/ energy ranking
- Current year EUI
- Current year EUI quartile/ energy ranking
- Year of completion
- Green building certification (Green/Non-Green; Year of Award, Version)
- GFA

- AC Area
- AC Area Percentage AC Type
- Age of Chiller
- Air-con system efficiency (kW/RT)

Availability of critical building information greatly enhance energy performance comparability

HKGFA Key Recommendations



#1 CLEAR MARKET SIGNAL from the government
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Detailed buildings decarbonisation roadmap with clear targets & guidelines	Specificity in the next version of the Climate Action Plan with granular targets & interim milestones & quantified commitments		
Government MUST lead by example	Establish disclosures & targets for own buildings & Conduct retrofits on relevant government buildings		
Establish a cross-agency task force/committee to push retrofitting	Provide strategic oversight, increased accountability and collaboration and reduce fragmentation		

#2 POLICIES & STANDARDS DRIVERS



Energy audits 8	k data	disclosures	are a MUST
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Need to disclose technical audit details such as energy efficiency coefficients & year of service of major equipment

Mandatory action for underperformers

Results of audits must lead to action

Establish performance benchmarks

<u>Energy labelling drives transparency</u> and underpins policies – rates/tax concessions; better financing, etc.

#3 FINANCIAL INCENTIVES



Government MUST shoulder more risk to incentivise building retrofits

Dedicated funding is essential to accelerating retrofits & energy efficiency upgrades

Balancing retrofit measures can be complex, ideally led by a CROSS-AGENCY TASK FORCE

Ways Forward



While this paper has outlined a range of regulatory & financial mechanisms to support retrofitting, their success ultimately hinges on:

- HKSARG should **set clear & measurable targets** for decarbonizing the existing building stock

 Providing **strong market signals**, encouraging stakeholders to align their priorities with long-term climate goals
- Fostering **cross-disciplinary and cross-bureau collaboration** will be essential to ensure policy coherence and maximize the impact of retrofit initiatives

Collaboration across government, the building sector, and the financial industry to develop a transparent and robust data environment

Improved **data access and standardization** will enable better decision-making, support performance benchmarking, and unlock new opportunities for innovation and investment.

Through coordinated LEADERSHIP, AMBITIOUS GOAL-SETTING, & COLLECTIVE ACTION, Hong Kong can position itself at the forefront of building decarbonization and shape a more resilient, low-carbon urban future.