

## MEDIA RELEASE

### **New BCA study confirms 80% Energy Efficiency target is within reach for Singapore's Built Environment sector**

- *Alternative Cooling Technologies (ACTs) and plug load management identified as key levers, capable of reducing building energy consumption by up to 50%*
- *More than 40 buildings in Singapore have adopted ACTs to date*
- *Record 107 nominations for Singapore's Top Green Building Awards signal growing industry momentum*

**Singapore, 30 July 2026** – The Building and Construction Authority (BCA) shared insights from the completed Design Prototyping for Decarbonisation (DPfD) study, confirming that Singapore's target of achieving an 80% improvement in energy efficiency from 2005 levels is technically feasible for new and existing office buildings, new hotel buildings, and new mixed-development buildings with incremental decarbonisation pathways proposed to accommodate varying financial, operational, and technical considerations across different buildings. A public report documenting details of the study will be made available by end of 2026. The announcement was made at the Singapore Green Building Council (SGBC) Awards Gala Dinner 2026 by Guest-of-Honour Ms Grace Fu, Minister for Sustainability and the Environment.

2. This comes as Singapore's buildings sector makes steady progress towards its "80-80-80 in 2030" targets under the Singapore Green Building Masterplan (SGBMP). As of July 2026, the following results have been achieved:

- For the target to have 80% of buildings by Gross Floor Area (GFA) to achieve Green Mark Certification by 2030, 66% of buildings by GFA have been greened
- For the target to have 80% of the new buildings to be achieve Super Low Energy (SLE) standard from 2030, approximately one-third have achieved the SLE standard; and

(iii) For the target to have best-in-class buildings improve energy efficiency by 80% compared to 2005 levels by 2030, our best-in-class buildings have achieved 72% improvement in energy efficiency from 2005 levels thus far.

### **Charting the Path to 80% Energy Efficiency**

3. The DPfD is a consultancy study commissioned by BCA to explore decarbonisation pathways for high-rise commercial office, hotel, and mixed-development building typologies. The study assessed the technical options and commercial viability across a range of solutions, providing building owners with practical guidance on how to improve the energy efficiency of their buildings.

4. Two strategies emerged as particularly impactful. First, plug load management offers a practical and accessible means for building owners to track and reduce energy consumption, with green leases enabling landlords and tenants to co-share cost savings. Second, Alternative Cooling Technologies (ACTs) — such as Passive Displacement Cooling (PDC) and Hybrid Cooling systems — are capable of reducing building cooling energy consumption by 30 to 50% while maintaining thermal comfort. Given that cooling accounts for 40 to 60% of building energy consumption, ACTs can help to provide a meaningful pathway to meet Singapore's decarbonisation goals.

5. As of July 2026, at least 33 public buildings and 14 private buildings in Singapore have adopted ACTs. At Dulwich College (Singapore), the adoption of PDC across classrooms, the auditorium, and collaborative spaces has achieved 49.5% energy savings for the air-distribution system. At Paya Lebar Green, a cooling system combining perimeter active chilled beams with interior VAV (Variable Air Volume) AHU (Air Handling Unit) systems and a high-efficiency dual-temperature chiller plant has delivered 45% energy savings. Both projects are recipients of the SGBC-BCA Leadership in Sustainability Award in the Carbon Performance category.

### **SingLand to Pilot Advanced Solutions at The Clifford**

6. Singapore Land Group (SingLand), one of the developers involved in the DPfD study, has committed to advancing its decarbonisation efforts through the Green Building Innovation Cluster (GBIC) Demonstration programme for the redevelopment of The Clifford at Raffles Place (The Clifford). The project will adopt high-efficiency lighting solutions and promote plug load management systems in its office floors, with a target to raise its office block's energy efficiency performance from 65% to 75% compared to 2005 baseline. SingLand will also test-bed Passive Displacement Cooling solutions in the building's retail space to assess viability ahead of potential scaling up. More details can be found in Annex A.

7. "The findings from the DPfD study gives the industry the evidence it needs to act with confidence," said Mr Tan Chee Kiat, Deputy CEO (Industry Development) of BCA. "We now know that achieving 80% energy efficiency improvement is technically feasible for new and existing office buildings, new hotels and mixed developments. ACTs alone can cut cooling energy consumption by up to 50% — the technology is ready and the business case is clear. With extreme weather patterns and rising temperatures increasing the urgency to act, I strongly encourage building owners and developers to take that next step towards adopting ACTs in their buildings."

### **Record Nominations Reflect Growing Industry Momentum**

8. The Gala Dinner also saw the announcement of winners of the prestigious SGBC-BCA Leadership in Sustainability Awards 2026, with a record 107 nominations received — a 29% increase from the previous edition in 2024. The biennial Awards, now in their fifth edition, recognise professionals, organisations, and building projects that have demonstrated outstanding contributions to Singapore's green building movement. 24 winners received their award trophies from Ms Fu at a dedicated ceremony during the evening.

9. "The surge in nominations reflects a clear acceleration in the industry's commitment to sustainability," said Mr. Allen Ang, President of the SGBC. "Across professionals, businesses, and building projects, we are seeing deeper capabilities, more ambitious targets, and a growing



recognition that sustainability is no longer a niche specialisation but a core competency for the entire built environment sector."

### **Expanding the Go 25 Movement**

14. The Gala Dinner also marked the launch of the Go 25 Climate Appropriate Attire Guide by SGBC, the latest addition to its suite of Go 25 resources. Since the campaign's launch in May 2025, Go 25 has attracted more than 200 industry partners, with energy efficiency pledges translating to at least \$6.4 million in annual savings. The Attire Guide joins the Go 25 Indoor Comfort Snapshot and the Go 25 Industry Guide for Building Operators in providing practical support for organisations making the shift to sustainable cooling, offering clear guidance on appropriate attire for Go 25 indoor settings and empowering building occupants to feel comfortable in environments set to 25 degrees Celsius. More details can be found in Annex C.

15. The SGBC Awards Gala Dinner brought together over 800 industry leaders, policymakers, and sustainability practitioners to celebrate the achievements of the 2026 winners.

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### **Factsheets**

ANNEX A - FACTSHEET ON THE DESIGN PROTOTYPING FOR DECARBONISATION (DPFD)  
CONSULTANCY STUDY

ANNEX B - FACTSHEET ON SGBC-BCA LEADERSHIP IN SUSTAINABILITY AWARDS (LSA) 2026

ANNEX C - ABOUT GO 25: MAKING COMFORT SUSTAINABLE

### **About BCA**

The Building and Construction Authority (BCA) champions a safe, sustainable, and liveable built environment for Singapore. As a leader in the sector, BCA is dedicated to driving industry transformation and setting rigorous standards in building safety, quality, and environmental sustainability. By advancing innovation, digitalisation, and the development of a skilled workforce, BCA fosters a dynamic industry that is ready to meet the evolving needs of the nation and build a resilient and progressive built environment for all. For more information, visit [www.bca.gov.sg](http://www.bca.gov.sg)



### About the Singapore Green Building Council (SGBC)

The Singapore Green Building Council (SGBC) is at the forefront of driving sustainability across the built environment value chain. Through our comprehensive suite of Membership, Certification, Education and Outreach programmes, we empower industry transformation by fostering capability development and accelerating the adoption of innovative green solutions. Our curated repository of proven green building technologies facilitates sustainable procurement, showcasing cutting-edge solutions that contribute to a healthier, more resilient built environment sector. Backed by an expanding network of industry-recognised Green Mark Professionals, SGBC provides end-to-end support across the entire green building ecosystem - from design and construction to operation and maintenance. As a catalyst for change, SGBC bridges policy with practice, connecting stakeholders to advance Singapore as a global leader in green building.

For more information, visit [www.sgbc.sg](http://www.sgbc.sg)