



MEDIA RELEASE

Changes to the Building Control Act to enhance Energy Efficiency measures in Existing Buildings for a Sustainable Future

Under the new Mandatory Energy Improvement regime, owners of energy-intensive buildings will be required to conduct an energy audit and implement energy efficiency improvement measures to reduce energy consumption.

Singapore, 10 September 2024 – Amendments have been made to the Building Control Act to introduce the new **Mandatory Energy Improvement (MEI) regime**, aimed at reducing energy consumption in existing energy-intensive buildings. In line with the nation’s ongoing efforts to green Singapore’s buildings, this regime will support the shift towards a low-carbon built environment, contributing to our national commitment to achieve net-zero emissions by 2050.

2 The MEI regime will require owners of energy-intensive buildings to engage a professional to carry out an energy audit and implement measures to reduce the building’s energy consumption.

Striving towards net zero emissions by 2050

3 Accelerating energy efficiency improvements in existing buildings is crucial for Singapore to achieve net-zero emissions by 2050, as buildings account for over 20% of Singapore’s carbon emissions. Over the years, the Building and Construction Authority (BCA) has implemented a comprehensive suite of measures under the Singapore Green Building Masterplan (SGBMP). These measures encompass incentives, energy benchmarking, and legislative requirements, to drive carbon emission reduction in both new and existing buildings (refer to **Annex A** for more information on SGBMP).

4 Currently, existing buildings that undergo major works or chiller retrofits are required to meet minimum energy performance requirements. This ensures existing buildings meet prevailing sustainability standards after upgrading. However, if such works are not carried out, there is no requirement for building owners to improve their building's energy performance.

5 To address this, the MEI regime has been introduced with the aim of reducing energy consumption in such energy-intensive buildings, and by extension, reducing carbon emissions. It also aims to enhance the energy performance of such buildings over time.

Mandatory Energy Improvement (MEI) Regime

6 The MEI Regime will apply to energy-intensive (i) commercial buildings; (ii) healthcare facilities; (iii) institutional buildings (namely education, civic, community and cultural buildings); and (iv) sports and recreation centres with Gross Floor Area (GFA) of 5,000 m² and above. Smaller buildings with GFA less than 5,000 m², which consume less energy, are not subject to the regime to reduce the regulatory burden and compliance costs. Buildings are considered energy-intensive if their Energy Use Intensity (EUI)¹ exceeds the prescribed EUI threshold over a period of three consecutive years. It is estimated that fewer than 100 energy-intensive buildings across the four building typologies will be subject to the MEI regime when it is first implemented in 3Q 2025.

7 Under the MEI regime, the owners of energy-intensive buildings will need to appoint a qualified professional² to carry out an energy audit and develop an Energy Efficiency Improvement Plan (EEIP) to reduce the building's EUI by at least 10% from pre-audit levels. Considering the constraints in existing buildings, the required EUI reduction has been set at a moderate level.

¹ EUI refers to the annual energy consumption of a building per unit of gross floor area (expressed in kilowatt hour (kWh) per square metre per year).

²A Professional Engineer (Mechanical) or energy auditor registered with BCA.

8 The 10% EUI reduction requirement also gives building owners the flexibility to adopt measures that best suit their needs and budget. These measures can range from simple, low-cost maintenance works (e.g. replacing faulty parts or sensors, finetuning of system control parameters and lighting upgrades to reduce energy consumption) to more extensive retrofitting works (e.g. upgrade of building management systems, partial or full replacement of chiller systems). Building owners may also engage their occupants and tenants through sustainability initiatives such as providing guidelines that outline energy saving practices or green leasing³. Building owners who choose to achieve even higher energy efficiency standards through more significant retrofitting works can also tap on the Green Mark Incentive Scheme for Existing Buildings 2.0 (GMIS-EB 2.0) for up to 50% of co-funding support.

9 Building owners must undertake the measures within three years from the submission of the audit report, and maintain the EUI improvement for one year thereafter (refer to **Annex B** for more information on the MEI regime).

10 BCA has engaged industry stakeholders extensively on the MEI regime over the last two years, conducting around ten engagement sessions with over 500 stakeholders across the built environment value chain. Stakeholders recognise the importance of ensuring that our buildings are sustainable, and are generally supportive of the regime. Building owners who will potentially be affected have been given notice ahead of the implementation next year.

Benefits of Implementing Energy Efficiency Measures

11 Through the MEI regime, building owners can expect to generate cost savings from the reduction in energy use over their buildings' lifecycle. This will also reduce the overall environmental impact from building operations.

12 Some building owners have already taken steps to improve their building energy performance and are reaping the benefits of much lower energy cost (refer to **Annex C** for building profiles that have benefitted from energy efficiency improvement works).

³ Green Leasing refers to a type of rental agreement where both building owners and tenants commit to efforts to reduce overall building energy consumption. BCA has also put in place the [Green Lease Toolkit](#) for reference.

For example, Singapore Thong Chai Medical Institution had worked closely with its energy consultant to upgrade and optimise its building's key energy-consuming systems such as the chiller system and air-distribution system.

13 Singapore Thong Chai Medical Institution's Head of Property Committee, Mr. Ng Cheng Huat said, "The management has always been proactive in looking for ways in which we can reduce our carbon footprint. When the opportunity arose to re-engineer our old central air-conditioning system for Thong Chai Building at Chin Swee Road, we chose to go for an energy efficient model rather than opting for a one-to-one replacement. We also implemented other green initiatives, like adoption of LED lighting and a recycling programme which in turn, helped us achieve the Green Mark Platinum certification. We have seen substantial energy savings of more than 40%, along with other benefits like having a healthier environment, improved thermal comfort and increased productivity for our occupants. Lastly, having an energy efficient building is also one of our objectives in alignment with the Singapore Green Plan 2030."

14 Another building owner, Singapore Land Group, has also benefitted from cost savings following energy efficiency retrofits of its building, The Gateway. General Manager, Strategy and Planning of Singapore Land Group, Mr. Heng Chin Hong said, "SingLand embarks on energy efficiency retrofits for The Gateway as part of ongoing effort to improve the environmental performance of our portfolio. We see a strong need to reduce the impact of climate change and provide better conditioned spaces to our occupants."

15 Providing the impetus for building owners to take action to reduce their buildings' energy consumption, the MEI regime enhances the suite of SGBMP initiatives to pave the way towards a more sustainable and low-carbon built environment.

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Factsheets:

Annex A – Factsheet on Singapore Green Building Masterplan (SGBMP)

Annex B – Factsheet on Mandatory Energy Improvement (MEI) Regime

Annex C – Factsheet on building profiles that have benefitted from energy efficiency improvement works