

## The Potential Role of Industrialized Building Systems in Malaysian Sustainable Construction: Awareness and Barriers

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**Abstract :** Industrialized building system (IBS) is a method of construction with concentrated practices consisting of techniques, products, and a set of linked elements which operate collectively to accomplish objectives. The Industrialised Building System (IBS) has been recognised as a viable method for improving overall construction performance in terms of quality, cost, safety and health, waste reduction, and productivity. The Malaysian construction industry is considered one of the contributors to the development of the country. The acceptance level of IBS is still below government expectations. Thus, the Malaysian government has been continuously encouraging the industry to use and implement IBS. Conventional systems have several drawbacks, including project delays, low economic efficiency, excess inventory, and poor product quality. When it comes to implementing IBS, construction companies still face several obstacles and problems, notably in terms of contractual and procurement concerns, which leads to the low adoption of IBS in Malaysia. There are barriers to the acceptance of IBS technology, focused on awareness of historical failure and risks connected to IBS practices to provide enhanced performance. Therefore, the transformation from the existing conventional building systems to the industrialized building systems (IBS) is needed more than ever. The flexibility of IBS in Malaysia's construction industry is very low due to numerous shortcomings and obstacles. Due to its environmental, economic, and social benefits, IBS could play a significant role in the Malaysian construction industry in the future. This paper concentrates on the potential role of IBS in sustainable construction practices in Malaysia. It also highlights the awareness, barriers, advantages, and disadvantages of IBS in the construction sector. The study concludes with recommendations for Malaysian construction stakeholders to encourage and increase the utilization of industrialised building systems.

**Keywords :** construction industry, industrialized building system, barriers, advantages and disadvantages, construction, sustainability, Malaysia

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