

## **Systematic review of sustainable design approach for mosque**

### **ABSTRACT**

As one of the prominent public spaces for the community, Mosque is considered one of the high energy consumption buildings. Many modern mosques are designed and built without respecting the contextual environment, resulting in a non-environmentally friendly Mosque. In Malaysia, the operating cost of mosques is majorly relying on public funds, and statistically are high specifically for electricity usage. Due to the use of air conditioners in cooling down the huge prayer hall due to the non-environmental design consideration. Hence, it is crucial to justify sustainable design approaches in mosques to develop environmentally friendly mosques. On the other side, the environmentally friendly mosque design is important as one of the monumental Islamic symbols that shall manifest Islam's values and philosophies towards the benefits of 'Alam' (world). The main objective of this study is to analyse the principles of Islamic methods in attaining the attributes of sustainable mosque design. It systematically reviews the existing publications to discover the concepts, definitions, and issues regarding the sustainable design approaches for Mosque. Based on the conducted reviews, sustainable design strategies for mosques are suggested at the end of this paper. The Mosque can use some renewable technologies to save energy and be concerned about the climate condition for its design. Furthermore, it can also use sustainable materials, use natural ventilation and daylighting to provide good indoor air quality and be concerned about the social life of Muslim's religious activities.

**Keyword:** Mosque; Sustainable design; Islamic principles