

The utility of smart transportation systems in designing eco- friendly bus stations

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Abstract:

Generally the research is concerned about problems facing public transportation in Egypt, especially bus stations and how to solve these problems, it also concerned about the core of smart transportation systems, its targets and objectives through analyzing some Arab and international bus stations-[Slough and Poole Bus Stations in UK, Trans bay in USA and Olia in KSA]- to identify most important weakness and strength points, comparing them to an Egyptian bus station (El Torgoman) as a case study to rephrase its architectural façade and its mall skylight by using self-cleaning glass as no chemicals needed for cleaning; once it's exposed to daylight, the coating chemically reacts in two ways: Firstly, it breaks down any 'organic' dirt deposits –and secondly, rainwater 'sheets' down the glass to wash the loosened dirt away, we used also transparent photovoltaic glass in rephrasing El Torgoman architectural façade and its mall skylight to save the environment as a photovoltaic energy conversion. Surrounding environment and architectural pharaonic style were taken into consideration in rephrasing the architectural glass façade of El Torgoman bus station and its mall skylight (16 ref.).