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Orientation towards Using Smart Technical Solutions in New Cities, Case Study: Noor-City, New Administrative Capital in Egypt

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Abstract:

Cities utilize between 60% and 80% of the world's energy consumption and produce over 70% of its carbon emissions. Numerous problems, such as water pollution, energy consumption, and traffic congestion, have been brought about by rapid urbanization. Smart cities around the world are looking to harness the power of technical solutions in order to become more efficient and improve the lives of their citizens. The results were able to automate repetitive tasks, such as automated devices, Smart Building (SB) and Smart Transportation System (STS). This paper aims to provoke the design of future cities into smart sustainable cities; to providing resources and streamlining, while simultaneously granting tools that assist via more challenging problems like pollution control and public safety. The relevance is to face and develop cities by allowing them to optimize their resources, reduce costs, and improve service delivery; as a part of Smart Digital Sustainable City (SDSC) while preserving the Smart Safety and Security (S3) and the Smart Renewable Energy (SRE) to improve air quality, reduce water consumption and monitor noise levels in urban areas. This paper exposed Noor City as an iconic case-study for smart cities in the Middle East region, and to adopt smart methods and technical solutions in the new administrative capital in Egypt; to tackle a framework for the cities to be more digital and smarter.

Keywords:

Smart Cities (SC), Smart Building (SB), Smart Renewable Energy (SRE), Smart Transportation System (STS), Smart Safety and Security (S3), Smart Digital Sustainable City (SDSC).

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