

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511106989 A

(19) INDIA

(22) Date of filing of Application :05/11/2025

(43) Publication Date : 26/12/2025

(54) Title of the invention : A COMPUTER-ENABLED TOOL FOR ENERGY-EFFICIENT SMART BUILDING MANAGEMENT

(51) International classification	:F02P 3/06, G21H 3/00, H02S 10/20, B60W 10/24, B60L 53/80	(71) Name of Applicant : 1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India (72) Name of Inventor : 1)RIFA NIZAM KHAN 2)AMITA SHUKLA
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention discloses a computer-enabled tool (101) for energy-efficient smart building management. It integrates IoT sensors (102), an AI analytics engine (103), and a control module (104) to monitor, analyze, and optimize energy usage. Renewable energy sources (108) and storage (109) are incorporated for sustainability. The system adapts dynamically to occupancy and environmental conditions, ensuring cost savings, energy efficiency, and improved occupant comfort. A user interface (110) provides real-time monitoring and control. The invention reduces operational costs while supporting environmental conservation.

No. of Pages : 13 No. of Claims : 6