

# IET International Travel Award 2024 - Travel Report

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Thanks to the IET International Travel Award 2024. I travelled to Mauritius in June 2024, to present a research paper titled “*Challenges and Opportunities for Energy Efficiency and Sustainable Practices in Small Island Nations*” authored by my co-researcher Dr. Ruchi Tyagi and me at the 1<sup>st</sup> International Conference on Smart Energy Systems and Artificial Intelligence held at Ravenala Attitude Hotel, Turtle Bay, BalACLava, Rep. of Mauritius from Jun 3 to Jun 6, 2024. It was a great moment to talk about energy efficiency, sustainability, and sustainable practices focusing on small island nations. Energy security and the vulnerability of the islands that do not produce or export fossil fuels were discussed. The need to develop renewable energy sources at small islands for energy independence, energy security, and sustainability was underlined. Energy efficiency initiatives and sustainable practices in a few island nations were also shared.



The future of electricity will have a net zero, and eventually, real zero carbon content. Regulators, politicians, and customers worldwide aim to achieve Net zero or real zero energy by 2050. While small island nations face challenges, they also have unique opportunities to embrace energy efficiency and sustainable practices. SIDS' geographical location makes them highly desirable choices to adopt renewable resources to meet their energy needs. With a collaborative effort involving governments, local communities, international organizations, and the private sector, small island nations can build resilience, reduce their environmental impact, and create sustainable economies by strategically leveraging their unique opportunities. There is a need for a long-term plan focusing on practical and impactful solutions to keep SIDS afloat and give them a sustainable and safe future. This presentation can be a good reference for energy sector professionals, utility engineers, and future researchers.



I express my sincere gratitude to the IET and the Award Panel for supporting my paper presentation. Special thanks go to my coresearcher Dr. Ruchi Tyagi for the success of the presentation.

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