## IET International Travel Award 2020 - Travel Report Dr. Suresh Vishwakarma P.Eng., CEng, MIET, MBA, PhD, PostDoc Senior Engineer, Vancouver, Canada Email: sureshvishwakarma@hotmail.com

Thanks to the IET Travel Award 2020. After the relaxations for travel were announced, I flew to Trinidad and Tobago on Jan 11 to present the postdoctoral research work of my co-researcher Dr. Ruchi Tyagi and me at the Ministry of Planning and Development, Government of Trinidad and Tobago on Jan 12, 2023.

It was a big honour to present the findings of the research work of the team to Honourable Pennelope Beckles-Robinson, Minister of Planning and Development (MoPD), Government of Trinidad and Tobago in the presence of Mr. Kishan Kumarsingh, Head, Multilateral Environmental Agreements at Ministry of Planning and Development. Hon. Minister was quite impressed by the findings of the research and expressed her interest to explore the possibility of further collaboration.



Suresh with Hon. Minister and Head Multilateral Environmental Agreements after giving brief presentation to the Minister.

After giving a brief presentation to the Minister, Mr. Kishan Kumarsingh arranged a detailed presentation in the afternoon before the executives of the MoPD. The coresearcher Dr. Ruchi Tyagi joined online from the UAE.

T&T aimed to have 10% Renewable Energy by 2021 and reduce GHG emissions by 50% to 85% by 2050. Oil and natural gas reserves are in abundance and have a considerable subsidy for domestic energy consumption. There are weak energy conservation support mechanisms, low alternative clean energy sources, and insufficient energy conservation awareness. Subsidized domestic energy consumption putting a financial burden on the government can be reduced by exploring alternative transportation fuels, promoting energy efficiency, and implementing Renewable Energy Technologies. The current tariff is inimical to anyone conserving energy. Interviews revealed that a gradual increase of the tariff every year over the next decade would require people to consider alternative energy sources and practice energy conservation. It will allow everyone to become energy efficient. The residential sector has tremendous potential for energy savings.

The research concluded that the effective implementation of low-cost measures in energy conservation applications in residential consumption will further help plug the gaps between operations. It highlighted the importance of developing low-carbon resilience as a strategic approach for local government decision processes and strategies. It also underlined the need for a cohesive institutional structure for the education, training and development, implementation, and administration of EE & EC policy, including the appropriate regulatory and legislative frameworks with dedicated financing mechanisms. The research recommended allocating personnel of existing distribution utilities/companies into the newly formed company/agency, based on their experience and skill set. Managers of power companies can organise LCECM training programs to bridge the skill gaps of personnel and develop a healthy operational environment.



Suresh presenting findings of research at MoPD



Coresearcher Dr. Ruchi Tyagi answering questions online.

On the next day, the University of West Indies (UWI), and the local chapters of IET and IEEE invited me to give a seminar on the same topic and share the findings of the research work undertaken by the team.



Flyer issued by UWI, IET, and IEEE Trinidad LN

Suresh sharing findings of research at University of West Indies

I benefited from meeting executives from the MoPD and UWI who shared a few additional perspectives on energy conservation in small island developing states. I thank the IET for the travel scholarship that greatly impacted me positively. The researcher duo has already created awareness of energy conservation measures among energy users through their webinars and talks under the IET & IEEE chapters of Vancouver, Mauritius, Bahrain, Malaysia, and India. Both have also addressed the students at the University of Nairobi, University of Bahrain, University of Mauritius, and Asian Institute of Technology after the completion of their research.

I express my sincere gratitude to the IET and the Award Panel for supporting my research. Special thanks go to the Project Team Lead Dr. Chanan Syan, and my coresearcher Dr. Ruchi Tyagi for the success of the project. I look forward to getting more such support from the IET in the future.

\*\*\*\*\*