



Covenant University,
OTA, NIGERIA



International Conference on Energy and Sustainable Environment ICESE 2020

REPORT OF THE CONFERENCE

1.0 Introduction

The 2nd International Conference on Energy and Sustainable Environment (ICESE 2020) held July 28 – 30, 2020. The conference was hosted virtually by Covenant University Ota using the Zoom platform. The conference was well attended with almost a hundred participants at the opening ceremony.

The conference started on a very good note. The Vice-Chancellor of Covenant University Prof A A A Atayero was available to declare the conference open. Two very exciting keynote papers were presented by two distinguished Professors: Adeola Adinikinju, an Energy Economist in the University of Ibadan and Fidelis Emuze, a built environment expert based at the Central University of Technology, Free State, South Africa. The opening ceremony was attended by about 100 participants.

2.0 Paper Submission and Presentation Details

The conference papers were presented under the four main themes of the conference namely:

- i. Environment
- ii. Energy
- iii. Energy Management
- iv. Built Environment

There were 12 technical sessions with an average attendance of 35 participants. Altogether, 113 papers were received while 108 papers scaled through the preliminary evaluation and were sent for review. 93 papers were accepted and subsequently presented at the conference. The papers are being processed further for IOP publication. Most of the papers accepted (83.5%) were from Covenant University authors. Three papers were sent in from South Africa, one from the USA and one from Swaziland. This represents an improvement in comparison to papers presented at ICESE 2019.

3.0 Conference Recommendations

Salient recommendations were made in line with the sub-themes of the conference. The conference contributions were many but some key resolutions are presented subsequently:

- i. The Conference underscored the central role energy plays in the achievement of the sustainable development goals SDGs in terms of poverty alleviation, climate change mitigation and curtailment of environmental degradation
- ii. However, it was observed that energy access in most developing countries including Nigeria is still very low especially in rural areas where energy poverty exists with economic poverty.

- iii. Given the positive correlation between energy access and economic development, strategies should focus on not only improving energy access but also in delivering affordable and efficient energy to the rural poor
- iv. In this respect, the adoption of green or clean energy options such as renewable energy holds the key to improving energy access while at the same time mitigating energy related climate change impacts.
- v. Similarly, the adoption of energy efficiency strategies across all spheres of human endeavor should be encouraged especially through improvement of awareness of energy related challenges at all levels of human endeavor.
- vi. The built environment was recognized as an area that requires specific actions to improve energy efficiency and manage increasing energy demands due mainly to population growth
- vii. In this respect, the adoption of green building strategies such as use of low impact building materials and energy efficient building design and construction.
- viii. A suite of incentives and statutory backing for energy efficiency and clean energy strategies were adjudged to be key critical issues to increase uptake of new technologies in energy management.
- ix. On the state of the environment, it was observed that polycyclic aromatic hydrocarbons (PAHs) in urban soils have increased over Nigeria.
- x. Also, there are increased cases of polluted waterways from poor waste management and improper disposal of industrial effluents.
- xi. There is the need to for government to adopt a parametric approach towards conducting field test to ascertain the level of danger posed to water and land resources especially for agricultural use.
- xii. The use of plants for medicinal purposes was proposed as a prospective avenue for organization to invest in.
- xiii. The conference recommended that sustainable urbanization might not be possible in developing countries if certain germane challenges are not addressed.
- xiv. The decadence of building and building practices was traced to quality of building materials, and poor recycling of building waste
- xv. It was recommended that sustainable urbanization is the sure way of resolving the multi-challenges confronting the built environment.
- xvi. The COVID-19 pandemic was holistically discussed and its impact on the achievement of the SDGs clearly articulated
- xvii. It was observed that the virus develops slowly within the host in Nigeria and that the isolation period be revised to prevent its spread.
- xviii. It was projected that the COVID-19 infection in Nigeria may increase to about 80,000 by the end of September, 2020, and integrated strategies for flattening the curve should be put in place.
- xix. It was also recommended that Nigeria have huge biomass resources; hence, there is the need to work on our policy, awareness, investment, and laws to encourage foreign and local investors. This aspect of the economy can yield over 1 million jobs yearly. The sustainable energy project was proposed as the simplest way developing countries can meet up with the growing energy demand.
- xx. In general, the conference recognized the importance of entrenching sustainability principles in all spheres of human endeavor and especially in the corporate sector.

- xxi. In this respect, it was found that gender and board diversity in corporate organisations play a positive role in improving the organisation's ESG profile.
- xxii. Similarly, it was observed that gender also plays a key role in agricultural productivity which suggests gender sensitivity in poverty alleviation programmes.
- xxiii. Still on agriculture, the conference recommended the setting up of safety nets to cushion shocks in agricultural productivity that may be occasioned by climate change and other related challenges.

4.0 CUCRID Support

Covenant University, through CUCRID supported the conference by sponsoring staff and postgraduate students to the conference. The sponsorship covered conference registration and publication of the papers in IOP outlets. Altogether, the sum of Two Million, Sixty Nine Thousand only (N2,069,000.00) was received. The papers are currently undergoing IOP processing preparatory to publication.

5.0 Appreciation

The Organisers of ICESE 2020 express deep appreciation to the Chancellor Covenant University for the overarching vision and the management of Covenant University for consistently pushing the frontiers of research through conferences such as ICESE 2020. We also appreciate the Covenant University Centre for Research, Innovation and Discovery (CUCRID) for driving the research component of the vision and the Covenant University Centre for Systems and Information Science (CSIS) for providing the backbone for the virtual hosting of the conference

The Conference was jointly organized by the following Research Clusters in Covenant University:

- i. EMEG: Energy Metereology and Environmental Group
- ii. CEPDeR: Centre for Economic Policy and Development Research
- iii. RERC: Renewable Energy Research Cluster
- vi. BEREC: Built Environment Research Cluster

The third edition of the conference has been fixed tentatively to hold in July 2021.

Dr. Isidore Ezema

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Dr. Olayinka Oloke

Secretary, Local Organising Committee

Dr. Moses Emetere

Chait, Conference Technical Committee