

Preface

Welcome to the publication of selected articles from the 2nd edition of the Africa International Conference on Clean Energy and Energy Storage (AICCEES). In the pursuit of advancing clean energy and energy storage solutions for a sustainable future in Africa, AICCEES 2024 brought together an assembly of brilliant minds, innovative researchers, and industry leaders. This book is a testament to the vibrant exchange of ideas and knowledge that took place during the conference.

AICCEES 2024 in Retrospect

AICCEES 2024 served as a pivotal platform for researchers, practitioners, and policymakers to converge and deliberate on the latest developments in the field of clean energy. The conference aimed not only to showcase the current state of research but also to foster collaborations and inspire future breakthroughs.

Acknowledging the Contributors

We extend our deepest gratitude to all the authors who shared their insights, research findings, and expertise. Your dedication to advancing the discourse on clean energy is evident in the quality and diversity of the selected articles included in this compilation. We also acknowledge the Scientific Committee members who provided quality reviews that significantly improved the quality of the research papers.

Appreciation

A special appreciation goes to Tovero Energy Ltd, the driving force behind the organization of AICCEES 2024. Their commitment to fostering knowledge exchange and innovation was instrumental in the success of this conference. We also express our heartfelt thanks to the Conference Chairs, members of the Scientific Committee, and Keynote Speakers for their leadership, guidance, and contributions that shaped the conference agenda.

Recognition of Supporting Organizations

The success of AICCEES 2024 would not have been possible without the support of organizations that share our commitment to advancing clean energy solutions. We extend our appreciation to Transforming Energy Access Learning Partnership (TEA-LP), Modern Energy Cooking Services (MECS), CODAHEA, Energy Technology Institute, University of Port Harcourt, The Africa Center of Excellence in Future Energies and Electrochemical Systems (ACE-FUELS), and others who played a vital role in supporting the conference.

Looking Ahead

With this edition, we invite readers to explore the cutting-edge research and ideas that were presented at the second AICCEES meeting. May this compilation serve as a source of inspiration and a reference for those committed to the pursuit of sustainable and cleaner energy solutions. Thank you for being a part of this transformative journey.

Engr. Anthony Mbukobong Akpasoh
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Acknowledgements

Tovero Energy Ltd sincerely thanks God Almighty for making the 2024 edition of the Africa International Conference on Clean Energy and Energy Storage a great success. Tovero Energy Ltd would like to thank the Conference Chairperson, Professor Roland Uhunmwangho, the Conference Co-Chairpersons, Professor Sunday Oyedepo, Professor Fidelis Abam and Dr. Ogheneruona Diemuodeke, and the management of the University of Port Harcourt, who worked hard to make this conference what it is by providing scientific and logistical support.

Tovero Energy Ltd would like to express its appreciation to all members of the scientific committee for their tremendous efforts and contribution to the success of the 2024 Africa International Conference on Clean Energy and Energy Storage. Tovero Energy Ltd is grateful to be known as an organisation that amasses a highly qualified and competent team who relentlessly worked for months to make this conference successful in hopes of creating a well-rounded society.

We further express our sincere appreciation to our partners for their tremendous contributions to the 2024 edition of the Africa International Conference on Clean Energy and Energy Storage, Energy Access and Renewable Energy Programme of the University of Port Harcourt, Nigeria, Transforming Energy Access Learning Partnership (TEA-LP), Consortium for the Development and Advancement of Hydrogen Economy in Africa (CODAHEA), ASACCOV, The Africa Center of Excellence in Future Energies and Electrochemical Systems (ACE-FUELS), and Modern Energy Cooking Services (MECS).

We acknowledge the prominent role undertaken by the brilliant keynote speakers, Professor Youba Sokona, and Professor Ishola Foluke, the authors, moderators, and panel session members who contributed scholarly and industry knowledge to the success of the 2024 conference.

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