



ETTORE MAJORANA FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE

TO PAY A PERMANENT TRIBUTE TO ARCHIMEDES AND GALILEO GALILEI, FOUNDERS OF MODERN SCIENCE
AND TO ENRICO FERMI, THE "ITALIAN NAVIGATOR", FATHER OF THE WEAK FORCES



INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES

WORLD FEDERATION OF SCIENTISTS Permanent Monitoring Panel – Energy

18th August 2021 at 13:30-16:00 GMT Remote Zoom

19th August 2021 at 13:30-15:30 GMT Remote Zoom

(18th August 15:30 -18:00 Erice time, 19th August 15:30-17:30 Erice time)

TOPIC A: TRANSITION TO NET-ZERO FOCUSING ON IEA'S RECENT REPORT *NET ZERO BY 2050*

Chairmen: William Barletta, MIT
Carmine Difiglio, Sabancı University
Robert Schock, World Energy Council
Meeting Chairman: Bruce N. Stram, BST Ventures

Presenters

- Adnan Shihab-Eldin, Kuwait Foundation for the Advancement of Sciences (retired)
Overview of the IEA Report: Key issues and Controversies
- Robert Budnitz, Lawrence Berkeley National Laboratory (retired)
What's Behind the Low Expectations for Nuclear Power in the IEA Report?
- Jef Ongena, Plasmaphysics Laboratory Ecole Royale Militaire
European Plans to Achieve Net-Zero
- Tatsuo Masuda, Kaishi Professional University
Japanese Plans to Achieve Net-Zero
- Vitaly Yermakov, Oxford Institute for Energy Studies and the Higher School of Economics, Russia
Energy transition and Russia's low-carbon adaptation strategy

Discussion: 30 minutes

TOPIC B: ENERGY STORAGE IN THE POWER SECTOR

Presenters

- Apurba Sakti, MIT Energy Institute (MITeI)
Energy Storage and Decarbonization — Technology Tracking, Evolving Market and Regulatory Structures, and Advanced Analytics for Power System Applications
- William A. Barletta, MIT
Holistic Assessment of Grid Management Policies

Discussion: 25 minutes

19th August 2021, 13.30 GMT to 15.30 GMT

**TOPIC C: SUB SAHARAN AFRICA FOCUSING ON AFRICAN
POWER SECTOR GROWTH AND RURAL ELECTRIFICATION**

Presenters

- Abubakar Sani Sambo, Director General of the Energy Commission of Nigeria
Power Sector Growth for prosperous African economies: What are some of the diverse challenges in different African countries? Best renewable strategies. Using African gas instead of exporting it off Continent.
- Andrea Contin, University of Bologna
Providing Energy Services to Rural People: Progress Report, What More is Needed?

Discussion: 25 minutes

**TOPIC D: ENERGY PMP PRIORITIES FOR THE 2021-2022
ACADEMIC YEAR**

Discussion: 60 minutes

Energy PMP Members and Invited Participants

Professor William A. Barletta

Department of Physics
Massachusetts Institute of Technology
Cambridge, MA, USA

Dr. Robert Budnitz

Lawrence Berkeley National Laboratory (retired)
Earth Sciences Division
Berkeley, California, USA

Professor Carmine Difulio

Network Faculty Member, Business School
Sabanci University
Istanbul, Turkey (residing in the United States)

Professor Andrea Contin

Director of the Research Centre for Environmental Sciences (CIRSA)
Ravena, Italy and
Department of Physics, University of Bologna
Bologna, Italy

Professor Michael Jefferson

ESCP Europe, Business School
London, UK

Professor Tatsuo Masuda

Kaishi Professional University
Niigata, Japan

Dr. Charles McCombie

President Arius Association
Gipf-Oberfrick, Switzerland

Dr. Anita Nilsson

President, AN & Associates
Uppsala, Sweden

Dr. Jef Ongena

Research Director, Plasma Physics Lab
Ecole Royale Militaire
Brussels, Belgium

Dr. Hans-Holger Rogner

International Institute for Applied Systems Analysis
Laxenburg, Austria

Dr. Robert Schock

Center for Global Security Research
Livermore, CA, USA

Dr. Adnan Shihab-Eldin

Director General, Kuwait Foundation for the Advancement of Sciences (retired)
Safar, Kuwait

Dr. Bruce N. Stram

Center for Energy Economics, University of Texas
Houston, Texas, USA

Dr. Vitaly Yermakov

Oxford Institute for Energy Studies and the National Research University, Higher School of
Economics
Moscow, Russian Federation

Other Participants

Mr. Latsoucabe Fall

Regional Manager, Africa, World Energy Council
London, U.K.

Mr. Lee Kraus

USA Managing Director and Partner
Philbro LLC
Samford CT, USA

Dr. Richard C. Lanza

Department of Nuclear Science and Engineering
Massachusetts Institute of Technology
Cambridge, MA, USA

Dr. Sally Leivesley

Newrisk Limited
London, UK

Dr. Apurba Sakti

Research Scientist, MIT Energy Institute (MITeI)
Cambridge, MA, USA

Professor Abubakar Sani Sambo

Chair, Nigerian Member Committee, World Energy Council; Former Director General of the
Energy Commission of Nigeria
Abuja, Nigeria

Mr. Fabrizio Zichichi

Chief Operating Officer at Phibro LLC
Stamford, CT, USA and
Member of the EMFSC Administrative Council