

### CAETS 2021 - THE FUTURE OF ENERGY BUENOS AIRES – ARGENTINA September 17 – 24, 2021

#### Friday, September 17th, 2021

08:30-12:00		CAETS Committee Meetings	
Communications Committee	Hugh Bradlow	ATSE – Australian Academy of Technology and Engineering	
	Lucas Noldus	ACTI.nl - Netherlands Academy of Technology and Innovation	
Engineering Education Committee	Jesse Zhu	CAE – Canadian Academy of Engineering	
	Robert Crawhall	CAE – Canadian Academy of Engineering	

#### Monday, September 20th, 2021

08:30-12:30		CAETS Board Meeting	
-------------	--	---------------------	--

#### Tuesday, September 21st, 2021

08:30-10:00		OPENING PLENARY: ENERGY AND GLOBAL WARMING	
Welcome and Opening Remarks, by the CAETS President	Manuel Solanet	ANI - Argentina	
Introduction, by the Moderator	Oscar Vignart	ANI - Argentina	
Opening Presentation	Fatih Birol	IEA - International Energy Agency	
Climate Change Data Update	Thelma Krug	IPCC - Intergovernmental Panel on Climate Change	
Evaluation of COVID impact	David Walt	Wyss Institute Harvard University/Medical School - USA	
Discussion Panel and Q&A from the Audience			
Virtual Tour of the Colón Theatre			

#### Coffee Break

10:10-12:05		TECHNICAL SESSION 1: ENERGY DEMAND / NEW TRENDS	
Introduction, by the Moderator	Yves Bamberger	NATF - National Academy of Technologies of France	
Opening Presentation	Yves Bamberger	NATF - National Academy of Technologies of France	
Grid Edge Technology: Micro Grids	Lachlan Blackhall	Australian National University	
Energy Efficiency in Residential, Industrial and Service Uses	Andrea Heins	CACME – Comité Argentino del Consejo Mundial de Energía (WEC)	
Electrification in Mobility	ChangHwan Kim	Hyundai Motor Group – Korea	
Challenges and Plans for the Energy Transition in Korea	Seung ill Moon	Seoul National University – Korea	
Discussion Panel and Q&A from the Audience			
WEC-Start-up Energy Transition Awards-Finalists SET 2021	Ben Hutt	Evergen - Australia	
	Ivar Kruusenberg	PowerUp Energy Technologies - Estonia	

#### Coffee Break

12:15-14:10		TECHNICAL SESSION 2: THE FUTURE OF NUCLEAR ENERGY	
Introduction, by the Moderator	Raúl Bertero	ANI - Argentina	
Opening Presentation	Rafael Grossi	IAEA – International Atomic Energy Agency	
Nuclear Technology Developments: Update	Xiangeng Zhao	CAE – Chinese Academy of Engineering	
Argentina SMR Project: CAREM	Sol Pedre	CNEA – Comisión Nacional de Energía Atómica - Argentina	
Discussion Panel and Q&A from the Audience			
Virtual Technical Tour of CAREM - Atucha			

### Wednesday, September 22nd, 2021

08:30-10:40	TECHNICAL SESSION 3: RENEWABLES	
Introduction, by the Moderator	Roberto Brandt	ANI - Argentina
Opening Presentation	Ulrich Wagner	Acatech - National Academy of Science and Engineering - Germany
Energy Conversion and Storage-Batteries	Atsuo Yamada	The University of Tokyo - Japan
Hydrogen	Masakazu Sugiyama	The University of Tokyo - Japan
Hydrogen and Biofuels: The View of Europe and Spain	Eloy Alvarez Pelegrý	RAI – Real Academia de Ingeniería - Spain
Key Raw Materials: Lithium / Cobalt	Martín Pérez de Solay	Orocobre Sudamérica - Argentina
Intermittency Challenges: CAETS 2020 Report Follow-up	Oscar Ferreño	ANIU – Academia Nacional de Ingeniería - Uruguay
Discussion Panel and Q&A from the Audience		
WEC-Start-up Energy Transition Awards-Finalists SET 2021	Hamed Beheshti	Boreal Light GmbH - Germany

#### Coffee Break

10:50-13:20	TECHNICAL SESSION 4: OIL AND GAS	
Introduction, by the Moderator	Roberto Carnicer	ANI - Argentina
Opening Presentation	Bassam Fattouh	Oxford Institute for Energy Studies - UK
Oil Scenarios: Future Components	Frank Behrendt	Acatech - National Academy of Science and Engineering - Germany
Role of Natural Gas in the Transition	Andy Calitz	IGU – International Gas Union
Natural Gas and Climate Change	Michael Stoppard	IHS CERA - UK
LNG Growth - Coal Replacement	Roberto Aguilera	Curtin University, Perth - Australia
Carbon Capture and Storage	Franklin (Lynn) Orr	Stanford University - USA
Nature Based Solutions	Martín Fraguío	Carbon Group - Argentina
Discussion Panel and Q&A from the Audience		

### Thursday, September 23<sup>rd</sup>, 2021

08:30-10:10	TECHNICAL SESSION 5: EDUCATION ON ENGINEERING	
Introduction, by the Moderator	José Luis Rocés	ANI - Argentina
Opening Presentation: How can Engineers work with Policymakers to achieve Emissions Reduction Targets?	Nilay Shah	Imperial College - London
Artificial Intelligence and Education	Nuria Oliver	RAI – Real Academia de Ingeniería - Spain
En-Roads Model	Eduardo Fracassi	ITBA – Instituto Tecnológico de Buenos Aires - Argentina
Discussion Panel and Q&A from the Audience		
Engineering Students: Why do I study Engineering? – Wrap up by the Moderator	Argentinian Students & José Luis Rocés	

10:10-10:40	CAETS COMMUNICATION PRIZES – Award Ceremony	
Award Ceremony	Hugh Bradlow	ATSE - Australian Academy of Technology & Engineering

#### Coffee Break

10:50-12:45	CLOSING PLENARY: LATIN AMERICAN ENERGY OVERVIEW AND CAETS 2021 WRAP UP	
Introduction, by the Moderator	Julio Fernández	ANIU – Academia Nacional de Ingeniería - Uruguay
International Agreements to reduce Carbon Emissions	Helen Plume	Ministry for the Environment – New Zealand
Latin American Energy Matrix: Regional Overview and Future Developments	Alfonso Blanco	OLADE – Latin American Energy Organization
Argentina	Oscar Vignart	ANI - Argentina
Brazil	Mário Menel	Academia Nacional de Engenharia - Brazil
Mexico	José Luis Fernández Zayas	AI – Academia de Ingeniería – Mexico
Uruguay	Federico Ferres	ANIU – Academia Nacional de Ingeniería - Uruguay
Discussion Panel and Q&A from the Audience		
Summary of Previous Sessions, and Closing Remarks	Manuel Solanet	ANI - Argentina

### Friday, September 24th, 2021

08:30-12:30	CAETS Council Meeting	
-------------	-----------------------	--