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Submission to SBSTA under mandate: **FCCC/PA/CMA/2022/L.17, para 14: Parties, observers and other non-Party stakeholders to submit their views on opportunities, best practices, actionable solutions, challenges and barriers relevant to the topics of the dialogues referred to in paragraph 13 of FCCC/PA/CMA/2022/L.17 (4 weeks before each dialogue)**

Please accept this submission from the University of Exeter, UK, on behalf on the Economics of Energy Innovation and System Transition (EEIST) in response to the UNFCCC's Mitigation Ambition and implementation Work Programme's call for views relevant to the programme's dialogues taking place in 2023 that will focus on accelerating just energy transition.

Background information on The Economics of Energy Innovation and System Transition (EEIST) project
Meeting the goals of the Paris Agreement requires unprecedented, policy-led transformations in multiple technologies and sectors. Along with rising climate impacts, the last decade has seen radical developments in low-carbon technologies challenging the use of traditional economic appraisals when we pursue goals of transformational change.

The Economics of Energy Innovation and System Transition (EEIST) project was set up to develop cutting edge complexity-based modelling solutions to support government decision making around low-carbon innovation and technological change, aiming to facilitate a rapid low-carbon transition. To inform a robust Global Stocktake outcome, EEIST provides the summarised key messages of two flagship reports developed by world-leading experts in complex systems modelling, economics and climate and environmental policy.

The project's first report, 'The New Economics of Innovation and Transition: Evaluating Opportunities and Risks', reviews evidence and theory to explain the limitations of traditional policy appraisal methods and the rationale for a new approach. It is concluded that the greatest successes achieved so far in the low-carbon transition in China, Brazil, India, the UK and the EU were generally implemented despite – not because of – predominant economic analysis and advice. Building on this, EEIST developed the ten principles for successful policymaking on low carbon transitions. Based on detailed empirical evidence, these principles overturn conventional wisdom and suggest a new way forward that can help countries accelerate innovation, job-creation, and cost reduction in the shift from fossil fuels to clean technologies.

By engaging with policymakers and stakeholders in Brazil, China, India, the UK and the EU, the project aims to contribute to the economic development of emerging nations and support sustainable development globally.

The consortium
Led by the University of Exeter, EEIST brings together an international team of world-leading research institutions across Brazil, China, India, the UK and the EU.

The consortium of institutions are UK: University of Exeter, University of Oxford, University of Cambridge, University College London, Anglia Ruskin University, Cambridge Econometrics, Climate Strategies, India: The Energy and Resources Institute, World Resources Institute, China: Tsinghua University, Energy Research Institute, Beijing Normal University; Brazil: Federal University of Rio de Janeiro, University of Brasilia, Universidade Estadual de Campinas (UNICAMP) EU: Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna.

EEIST is jointly funded through UK Aid by the UK Government Department for Department for Energy Security and Net Zero, and the Children's Investment Fund Foundation (CIFF).

We hope that this submission, introducing a set of tools and principles to support policy-making and appraisal, will advance international cooperation on low-carbon transitions.

More information on the EEIST project can be found here: https://eeist.co.uk/

Our response below, includes our views on the opportunities, best practices, actionable solutions, challenges and barriers relevant to accelerating just energy transition by:

1-*Implementing policies and measures with global overview and country-specific experience*;

EEIST provides global scenarios of the impact of different policies individually and in combination on accelerating the energy transition in the power and light road transport sectors. EEIST also provides over 15 country-specific case studies of the energy transition and its implications, with a focus on China, India, and Brazil.

2-*Addressing financial, technological and capacity-building needs in this area, such as through international cooperation, including with non-Party stakeholders, and provision of support to developing countries*;

EEIST focuses on capacity-building for the use of complexity economics models of the energy transition to guide policymaking, in our partner countries of China, India, and Brazil.

3-*Promoting sustainable development and understanding socioeconomic effects*;

EEIST provides analysis of the socioeconomic effects of the energy transition both globally and in country-specific case studies from China, India, and Brazil. For example, analysis of shifts in the labour force to guide policy.

We would welcome the opportunity to discuss how we can further contribute to Work Programme and the Global Dialogues.

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