WEC Call for Nominations 2

The World Energy Council has been producing authoritative studies for over 80 years. These studies and the work programme that supports them are recognised around the world as providing high-quality and realistic insights for all aspects of the energy sector. The insights are used by governments, intergovernmental organisations, non-governmental organisations, corporations and consultancies to guide energy strategies. Wherever possible, the WEC is committed to making these studies available at no cost as a contribution to the common good and to encourage knowledge transfer.

The inherent strength in the WEC's work programme is derived from its members which enables the WEC to call upon expert knowledge from across the world and at all levels. This bottom-up approach, aligned to the guidance provided by our committees and secretariat, provides a unique depth of understanding of the global energy system. Our expert network is organised into Study Groups and Knowledge Networks which allows us to call upon the very best insights to ensure our studies and events are topical and reliable.

The World Energy Council's main work programme produces our Strategic Insights in the form of regular reports that seek to understand what is happening in the entire energy sector and to provide solutions for a more sustainable energy system. Our sector- or issue-specific World Energy Perspectives provide for outcome-oriented work, while our Global and Regional Agendas provide a platform for collaborative dialogue.

In the first part of our call for nominations we asked for submission of experts, developing members and observers to join the teams of our Strategic Insights – World Energy Resources, World Energy Scenarios and World Energy Trilemma – as well as two key World Energy Perspectives, namely Energy Efficiency Policies and Rules of Trade and Investment.

In this second part of our call for nominations we ask for submission of experts, developing members and observers to participate in and contribute to the following World Energy Council work programmes:

World Energy Perspectives	To become a member please state <u>one</u> of the below groups on the nomination form
1. Global Frameworks	Global Framework
The mission of the Global Frameworks activity is to make sure that the insights from the WEC have an impact on global organisations and processes to ensure that global decisions are made to secure the sustainable supply and use of energy for the greatest benefit of all.	
The purpose of the work is to assess WEC's impact on global organisations and processes provide expert analysis and insights to global framework processes such as UN Framework Convention on Climate Change (UNFCCC), UN Sustainable Energy For All (SE4ALL) or the Clean Energy	

Ministerial (CEM). In parallel, the work will aim to feed latest developments from those processes back into the WEC membership and work programmes to ensure our network receives the most accurate and up to date information regarding the development of those negotiations and initiatives.

Specifically, we would appreciate nominations of experts which are members of those existing processes such as UNFCCC negotiations, the UNSE4ALL hubs and initiatives, the CEM, Carbon Sequestration Leadership Forum (CSLF) and so on.

2. Financing Resilient Energy Infrastructure

The World Energy Council expects emerging risks including the increased water stress, the accelerating energy-water-food nexus, extreme weather events or cyber risks to challenge our current understanding of infrastructure resilience and the need to adapt our energy systems to a new normal. Further risks that have changed in their nature and importance over the past decade include social media driven activism and terrorist threats.

The purpose of the work is to identify concepts that mobilise capital to accelerate the transition to a resilient energy economy; concepts that help define resilient infrastructure, that provide an overview on financial instruments and that enable the segmentation of and coping with different types of risk.

Specifically, we would appreciate nominations of experts from energy infrastructure and technology companies looking at infrastructure risk s and resilience as well as experts from the financing community looking at financing mechanisms and (infrastructure) risks.

3. Performance of Generating Plant

Implementation of best practices in power generation with respect to efficiency and availability improvement can bring substantial benefits, in terms of reductions of both GHG emissions and costs of electricity production. It is estimated that by improving

Financing Resilient Energy Infrastructure

Performance of Generating Plant

availability of all generating plants in the world to the levels reached by the best performing 25% of power plants, the world could each year save over 80 billion dollars and avoid emitting 1Gt CO2.

The objective of this WEC activity is to promote international data exchange and best operational practices for the existing power generation assets around the world using plant KPI for plant benchmarking to identify and communicate key success factors.

Specifically, we would appreciate nominations of experts daily working with collection and analysis of generating plant performance statistics (availability and unavailability indicators) and/or development and deployment of new methodologies and tools required for an assessment of the impact of the new emerging industry paradigm on the plant performance to improve understanding of the factors shaping the future of power industry.

4. Renewables System Integration

To increase the understanding of challenges of sustainable supply of electricity and the implications of integration of volatile and intermittent renewables in electricity systems, WEC is launching a new activity designed to focus on these challenges.

The objectives include highlighting the importance of appropriate regulation and market structures to help decision-makers define what actions should be implemented taking into consideration the complexity of the electricity systems operation.

Specifically, WEC invites nominations of experts representing utilities, Transmission Systems Operators (TSOs), regulators, power systems consultants and other relevant bodies.

Renewables System Integration

5. World Energy Scenarios - Thematic Knowledge Networks

The overarching aim of the WEC scenarios effort is to ensure that its world energy scenarios are the leading, robust, most independently informed and most oft quoted and used source of scenarios in the energy field.

The World Energy Council (WEC) is now launching the next round of its scenario activities, undertaking two regional scenario projects (Latin America and Africa) and producing a new set of world energy scenarios for the World Congress in 2016. Additional projects will be

considered if sufficient interest and funding are available.

In developing scenarios the team will examine certain themes, which provide partial guidance to the forthcoming work programme. Since these themes are based on topics that are of strategic importance to our clients, they would require in-depth and expert insight and analyses that would mostly likely not exist in the Scenario Study Group. In establishing Knowledge Networks for these themes, they would help the scenarios SG to have a deeper understanding in areas that are particularly complex.

5a. Energy-Water-Food Nexus

Aligned with interests in Latin America (EA/WELS 2014) and Africa (EA/WELS 2015): energy-water-food (EWF) nexus, with special focus on bioenergy and hydro, and energy access. Evaluation of the potentials of bioenergy and hydro; assessing opportunities/limitations with regards to these potentials; assessing the relevant aspects of the EWF nexus with specific focus on the region(s); and refining the WEC/PSI energy model capabilities with regards to the EWF nexus.

Energy-Water-Food Nexus

5b. E-Mobility

Aligned with interests in Asia, notably: e-mobility, urbanisation, distributed generation and the system defining role of e-storage, assessing potential implications for e-mobility, and effects on electricity versus liquid fuels demand; assessing the opportunities/limitations with regards to these potentials. This would include assessing the regional implications of shifting technology and demand patterns; refinement of the WEC/PSI model to handle innovation in e-storage, e-mobility and consequent system implications

E-Mobility

As topics for deep dives are agreed on, the WEC may form additional working groups where appropriate. For more information on WEC's Strategic Insights and World Energy Perspectives please visit http://www.worldenergy.org/work-programme/