



The ‘United Nations’ of Energy: Charting the path to a sustainable energy future

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As I reflect upon my first six months as Chair of the World Energy Council, I have to recognise that our organisation is growing in stature and influence. I therefore pay tribute to the leadership of my predecessors, who, with the support of the Officers’ Council, have helped to ensure that the World Energy Council is a highly valuable organisation for its members and is also relevant for the global leadership community.

I started my involvement with WEC in 1998. WEC today is a completely different organisation from the one to which I was introduced 15 years ago. I have watched first as member of the Canadian Member Committee and subsequently as Chair of Communications and Outreach Committee how WEC has transformed itself into a more active and more effective organisation with a wider reach and considerably greater influence.

The origins of WEC date back to 1923 when the sector came together to stage the World Power Conference in London. This event was the manifestation of the search for a new international order after the upheaval of the First World War. Then as now our community provides pragmatic paths to address the challenges facing the world. The famous writer H.G. Wells wrote of our first event that there was “a strong breadth of human common sense” and that the

conference was truly global in spirit. Throughout our history the WEC has been at the forefront of the energy debate. Through good times and bad, the WEC has provided a reference for the sector, with H.G. Wells reflections being as relevant today as they were 90 years ago.

Last October, during the World Energy Congress in South Korea, the WEC published a short statement entitled *Exposing the Myths, Defining the Future – It’s Time to Get Real to Secure Tomorrow’s Energy Today*.

It points out that complexity and uncertainty are increasing at an accelerating rate and energy leaders in both the public and private sectors need to make inspired decisions. It exposed a number of myths which influence our understanding of important aspects of the global energy landscape and reveals that current pathways fall short of delivering on the global aspirations of energy access, energy security, and environmental sustainability.

It is therefore important to note that, as the world enters a period of increased complexity and uncertainty, our organisation is uniquely positioned to play a leading role globally, regionally and nationally.

Few, if any, organisations are as inclusive and diverse as ours, be it in terms of its regional representation or the scope of its membership. Energy consumers, energy producers, governments from developing as well as emerging economies, multilateral agencies, environmental NGOs, private and public corporations, academics, all sit at the same table united by an understanding of the value of energy and the need to use it wisely with a view to the needs of future generations.

The challenges we face are great. 1.2 billion people continue to remain without access to any form of modern energy. This is equivalent to the entire population of India, the world’s second-most populous country after China.

It is not the WEC’s role to deliver a solution to this enormous challenge. Governments, multilateral agencies and, above all, the private sector all have an active role to play. However, through our expertise and global network the WEC can provide valuable pointers that can help facilitate the path towards improved access to energy.

Passing the baton: Marie-José Nadeau assumes the WEC chair in Daegu



The WEC's analysis shows that on current paths, between 730 million and 880 million people will still be without access to electricity in 2030 and between 320 million and 530 million people in 2050 globally. The majority of this burden will fall on Sub-Saharan Africa where WEC estimates that between 266 and 402 million people could still lack access to electricity by 2050. This is a bleak outlook and is unacceptable.

This is why the WEC supports the UN's Sustainable Energy for All initiative. Along with colleagues from organisations like the World Bank, we are determined in our commitment to tackle the challenge of energy access, while addressing the impacts of climate change and increasing efficiency in the delivery of modern energy services to enhance the life chances of all. This is good for the communities we serve and it is fundamental to ensuring the prosperity of our economies.

However, the WEC is more than just an initiative brought together to achieve predefined goals. In representing the entire energy sector, in both the northern and southern hemispheres, we provide a neutral platform to address the many challenges facing us all. But to be effective, we need to move away from a linear or one dimensional discussion.

This is why I firmly believe that the Energy Trilemma provides a simple and effective way to frame the debate: energy access, energy security and environmental mitigation are the three key pillars in which we can all discuss the most pressing problems facing energy and find consensus on appropriate solutions. Addressing the triple challenge of the energy trilemma enables us to reconcile the trade-offs and enable us to promote a sustainable and competitive society.

Session after session at our World Energy Congress in Korea showed us that global energy supplies are plentiful. Continued exploration successes and emerging technologies have ensured that we have plentiful supplies of coal, oil and natural gas resources. Likewise, technological advances have made renewables more viable and nuclear safer. And hydro power remains a massive resource with huge untapped potential.

Therefore, the challenge we face is not how will we satisfy demand but how can we manage demand more effectively while finding more sustainable solutions for our planet.

The Intergovernmental Panel on Climate Change recently published its Fifth Assessment Report and Working Groups 2 and 3 have reported the mitigation and adaptation implications for our planet. We have long recognised that the energy sector

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is the largest source of greenhouse gas emissions by sector, producing over a third of all anthropogenic GHG emissions. We now also see the increasing severity of extreme weather events is beginning to have a measurable impact on the resilience of our energy systems.

This presents additional risk factors for an industry already trying to come to terms with the significant transformation required in the energy sector. As our recently published *World Energy Scenarios* report estimates that between now and 2050 the world will need to invest in the region of US\$19 trillion and US\$25 trillion for electricity generation alone, with the majority of investments being directed towards solar PV, hydro and wind.

However, the reality is that the capital required to achieve this is extremely sensitive to perceived political and regulatory risks. Moreover, due to the growing pressures on public finances in most countries, public funds will not be available to substitute or augment the private financing of energy initiatives. Climate risk just adds to the uncertainty.

I firmly believe that to enable the energy transition required for transportation, heat and electricity generation, policy and institutional frameworks and funds are urgently needed to de-risk and support entrepreneurial approaches. While there are no silver bullet solutions, in order to attract this much needed investment, national policy and regulatory frameworks have to be more balanced. We need robust, predictable and transparent frameworks that allow the market freedom to exercise informed choices in terms of innovation, technology and investment. Price controls, subsidies, trade barriers and absolute targets for individual technologies distort the market and can have unintended consequences, so policymakers must use them only sparingly.

This is where the World Energy Council's Energy Trilemma ranking, analysis and dialogue platform can play such an important role in providing a better assessment of the risk and ultimately catalyse the flow of funds. As highlighted at our recent World Energy Leaders' Dialogue meeting in Abu Dhabi, "Utilities used to be seen as safe havens – not anymore". If we are to meet the multiple challenges facing us we must change this view.

As Chair of the World Energy Council, three objectives will drive my action until our next Congress in 2016.

Like all representative organisations, there are always areas in which we need to grow and become stronger. My first objective is to increase WEC's presence in countries that are not represented or where we have under-representation

of key stakeholders in both our membership and governance structure. I know I can count on the support of the co-chair and regional vice chairs to achieve this goal. But I also invite members and non-members to assist in this objective. This will ensure that the WEC can live up to the title we are often given as the United Nations of energy spanning all energy forms and all corners of the globe.

My second objective is to work on our inclusiveness and diversity. Few, if any, global organisations are as inclusive and diverse as WEC, both in terms of regional representation and scope of our membership. That does not imply that we cannot improve. I would like to see more young professionals, men and women, involved in the dialogue that we will be building. Securing tomorrow's energy today calls for the contribution of tomorrow's energy leaders. They have a word to say in the global energy debate. I will work with WEC's Future Energy Leaders with a view to have them participate actively in our discussions. I consider Turkey the perfect venue to give visibility to the upcoming energy leaders. And I insist on men and also women – currently there are very few women in the organisation. I am committed to be supportive of their endeavors to increase their participation in our various forums.

My third objective is to pursue our quest for excellence in our work program, including our flagship reports *World Energy Trilemma* and *World Energy Scenarios*. These reports are widely read and quoted and they have contributed to move the WEC into the top league of global energy organisations. It is our responsibility to ensure that our publications continue to meet the highest standards of governance and quality. To that end, I know I can count on all those involved in our work program, including our Member Committees and the Officers Council.

The next two years will be crucial for the energy sector. 2015 will see the culmination of negotiations at the UNFCCC climate talks in Paris. This will have impacts for our sector. We will also see the adoption of the post 2015 Millennium Development Goals which rightly recognise the important role that energy plays in providing access to better life chances. At our congress in 2016, forums such as our World Energy Leaders' Summits and our members meetings, informed by our excellent studies, we have the opportunity, as H.G. Wells put it back in 1924, to bring a strong breadth of human common sense with a truly global spirit to provide valuable pointers that can help facilitate the path for a sustainable energy future. 