FINANCING THE ENERGY TRANSITION

With the ratification of the Paris Agreement, the world has entered to a period where, as Ged Davis – Executive Chair to one of World Energy Council's "World Energy Scenarios" – put it; we are steering towards a new, transformed future that requires "new policies, strategies and consideration of novel and risky investments, and (…) human ingenuity and leadership." The single most vital component of meeting these requirements is offering adequate financial support. Moving forward, the questions of who pays for what, when and how, and how will governments and the private sector access that money will play a critical role in shaping the tomorrow's energy realities. And each of these requirements offers its own set of financial challenges that stands in our way of realizing our COP21 targets, of transforming the energy sector in such a way that achieving a balanced trilemma in a sustainable way in a global scope for the long haul does not remain a theory. What were the lessons to be derived at the 23rd World Energy Congress, from more than 250 energy leaders?

The Paris Agreement and the climate change mitigation efforts lie at the heart of energy financing.

Jeroen van der Veer, the Chairman of the Financing Resilient Energy Infrastructure Department of the ING Group, pointed out how there is a mounting pressure on financial institutions to limit, reduce or even stop investing in fossil fuels. The speakers from Development Finance Institutions (DFIs), like Christopher Knowles, the Head of Climate Finance of the European Investment Bank (EIB), were particularly vocal about how environmental concerns are factored into every decision made these days.

Most countries will not be able to meet its COP21 targets without financial support.

Some countries simply won't be able to keep up with their commitments without financial support, especially for those to whom fossil fuels offer a source of income. Tom Delay, CEO of Carbon Trust, pointed out that fossil fuels, for those who are fortunate enough to have them, are an undeniable source of income. With the very likely possibility of stranded resources and even shrinkage in hydrocarbons, the coming decades will present a formidable challenge to countries that depend on hydrocarbons – as more and more countries will begin adopting green technologies.

Climate warming is global in its scope and character and so should be its solutions.

The nature of the main issue at hand, that is curbing the environmental deterioration before the process is irreversible, requires its solution to rest on a global level, both in management and finance. Sean Cleary, the Founder and Executive Chair of Future World Foundation, pointed out how even now, with an extensive effort put to evoke a global response, the governments are overwhelmed with their share of the task. Moving forward, we will need the international community to pick up the slack where governments are and will be too overburdened to undertake.

The realities of the developing world, their needs and their challenges, differ greatly from the developed West.

The developing countries' current energy reality, their needs and their answers, often times differ greatly from that of the West. This variance was highlighted particularly in the congress. For instance, while in the Western example new sources of energy and new technologies bring about questions on the fate of already existing infrastructures and the need to orchestrate a transitioning period, this debate has no relevancy in Asia or Africa where the infrastructure is still being built. Similarly, unlike the Western world where natural gas' role as a transition fuel is central to its rhetoric, having been introducing both conventional and unconventional sources concurrently, these countries have very little need to differentiate gas from other energy sources.

There was an insistent call, especially from Yongping Zhai, Technical Advisor to Energy Sector Group of Asian Development Bank (ADB), for South – South cooperation. Most of these countries struggle with energy equity and lack of infrastructure and intricate grid systems, meaning even if highly complex technologies were to be imported from the West, they wouldn't yet be able to be integrated into their energy systems. It is easier to adapt PV panels from India to Bangladesh than it is from Germany, so technology trade from neighbouring countries should be prioritised.

The center of finance continues to shift to East, as financial institutions fall short on acknowledging the new realities of the world.

Despite the most significant global megatrend of the last 70 years, which is the rise of emerging markets, the Bretton Woods institutions have undergone very little change in terms of control structures. Leslie Maasdorp, Vice President and Chief Financial Officer of the New Development Bank, pointed out how this historic imbalance and the swelling sluggishness mean these institutions are no longer up to the task of addressing energy sector's needs. These circumstances have convinced the developing world, led by China, to establish a new set of multilaterals.

We have plenty of liquidity around, what we are short on is risk capacity.

Christopher Knowles, the Head of the Climate Change and Environment Division in the European Investment Bank (EIB), puts the estimate for investable capital around the world somewhere around US $90 Trillion, which he assured is plenty of liquidity to go around. What he believes we are short on is risk capacity. Somewhere around 30 – 40 years is the average time investors could expect before starting to receive some returns from their investment and this ineluctable length means, pretty much all things, from government policies to regulations to even bank's operations and rates, are subject to change, creating massive risks for energy investments.

The safest and shortest way of whittling risk in a country is by eliminating risk borne from political decisions.

Mansur Muhtar, Vice President of the Operations of the Islamic Development Bank, singled out qualities like predictability, stability and transparency in terms of policy and regulations as crucial in easing investor and bank concerns. Many speakers, like Tayfun Beyazıt, who is the Chairman of Marsh & McLennan Companies; Andi Aranitasi, Head of Power and Energy of ERDB and Albert Mugo, Managing Director of the Kenya Electricity Generating Company, echoed this opinion. For developing countries, an evidence of political commitment, like announcing a well – articulated, comprehensible long - term vision, or adopting a long - term plan or even carrying out a reform, will send all the right signals. Once these conditions are built, the next step for governments is to the ensure that the information about these clear, long – term policy frameworks and regulations is readily available to potential investors.

Despite the heavy reliance, subsidies present formidable but ultimately different risks to the sector depending on the country and region.

The common conviction that subsidies are necessary for renewables to reach competitiveness against conventional sources, means investors enter a heavily subsidised market and often rely extensively on the favourable conditions they create when making an investment. Given the length of energy investments, however, those investments end up carrying a high risk of failure under the possibility of those subsidies being withdrawn. And speakers like Prince Michael of Lichtenstein, Founding Director and Chairman of Geopolitical Intelligence Services SG, were adamant that they will be withdrawn because governments almost always discover they cannot afford that level of subsidy.

Subsidies treat certain symptoms but cure nothing in the long run.

Dr. Brian Motherway, Head of the Energy Efficiency Division at the International Energy Agency, highlighted the subsidies' and other regulatory policies' obstructive impact on proper price signals, which misguide investors and bankers alike when they are making their long-term decisions. By setting artificial price points for energy sources via policies, we eradicate the market off some of the vital signals investors need to make the right decisions. The lack of proper price signals also misleads consumers and hinders debates on real solutions like energy efficiency and greener alternatives from emerging.

The role for governments and decision makers is not to lead, but to provide a robust market for business.

The role for governments and decision makers is not to lead or decide what is the cheapest option, Rainer Baake, the State Secretary to Federal Ministry for Economic

Affairs and Energy of Germany, defended, but to keep up with the investor expectations and create stable and intelligent market frameworks to allow the market to find the best solutions. Although governments and international institutions will probably jumpstart the process, it will ultimately be the private sector who will come up with the answers. Private sector is more capable and more flexible in adapting to new emerging challenges and is able to deploy better technology faster.

Creating a better world for trade would create a better world period.

A World Bank study confirms that the liberalisation of trade in the top 18 countries, ranked by greenhouse gas emissions, would increase imports of energy efficiency lighting by 63%, wind power generation by 23%, solar power generation by 14% and clean coal technology by almost 5%. Ottmar Edenhofer, Deputy Director and Chief Economist, Potsdam Institute for Climate Impact Research, pointed out how on top of demonstrating the criticality of trade for energy’s future, these numbers also show that significant barriers have remained and interferes with green energy sources and their products. Creating an open, transparent system in terms of trade will lead to enormous development and growth globally.