

Remarks

by

Mr. Adnan Z. Amin

**Director-General
International Renewable Energy Agency**

**Programmatic Discussion – perspectives for the energy transition:
investment needs for a low-carbon energy system**

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Excellencies,

Distinguished Delegates,

Ladies and Gentlemen,

It is my pleasure to open this discussion on decarbonisation pathways for the energy sector, and its centerpiece is our recent study “*Perspectives for the Energy Transition: Investment needs for a low-carbon energy system*”, launched at the Berlin Energy Transition Dialogue (BETD) in March. I wish, at the outset, to thank the Government of Germany, the G20 Presidency this year, for having requested IRENA to examine this important topic, in collaboration with the IEA, and for the constant support that enabled us to come to a common agreement on a project that is really remarkable in the scope of what has been proposed.

Many of you might already be familiar with the study’s key findings, which were extensively covered in international media, with close to 600 articles published in 47 countries. Considering the importance of this subject and the interest expressed by a wide range of stakeholders, I believe it is important for us to discuss them in this setting to examine their implications for our future work and common efforts to accelerate the transition to a sustainable energy future.

I think I don't need to elaborate much on the rationale behind the study. The Paris Agreement sets out a vision for a world where climate change is limited to 'well below 2C degrees'. But a matching global long-term vision for transforming the energy sector in line with these objectives is critical considering the fact that energy is responsible for two thirds of emissions.

With "*Perspectives for the Energy Transition*," we have strived to outline this long-term vision, building upon our well-established REmap methodology, extending our horizon from 2030 to 2050, and working in collaboration with experts from around the world.

From the analysis undertaken, a very compelling and positive message emerges: an energy transition in line with the 'below 2C' objective by 2050 is both technically feasible and economically attractive.

This is a very fundamental statement that we have now the possibility, on the basis of a positive economic scenario, to achieve the level of decarbonisation we need to secure the future of the planet. That is a very big statement, and I hope that you will take this on board in your discussions and give some time to review what has been put forward. This

is the collective wisdom of the two key energy institutions at the international level.

From the analysis undertaken, a very positive and compelling message is that energy efficiency and renewable energy have the potential to achieve 90% of the emissions reductions needed in the energy sector by 2050, with renewables accounting for two-thirds of primary energy supply. Recent trends show that we are making good progress in the power sector towards this. Falling costs of renewables in the coming decade, as well as improved technologies, will add further momentum to the sector's ongoing transformation.

Beyond the power sector, our findings show that 60% of renewable energy potential can be realised in buildings, industry and transport, where much progress is still required. Part of this will be done through electrification of these sectors, powered by renewables. End-use sectors are clearly the next frontier in the energy transition, and will become increasingly central for our mission.

In undertaking this study, we have been able to leverage our work on the socio-economic benefits of renewables within this extended timeframe.

Our findings show, that despite the additional investments needed, the energy transition will have a net positive economic impact by fueling

economic growth and creating jobs while also generating welfare benefits due to avoided climate and health expenditures. This is a much more productive way of addressing this rather than the discussion on the externalization of costs.

Building on IRENA's macroeconomic work, we find that global GDP could be boosted by 0.8% and as many as 26 million people, up from the almost 10 million people today, could be employed in renewables in 2050. This afternoon, we will present IRENA's latest Annual Jobs Review, an up-to-date overview of the benefits that renewables already bring in terms of much-needed employment opportunities around the world.

These macro-economic findings have been particularly well received since the study's release, encouraging us to further deepen our work in this area. This is quite instructive for our work in the future – what was more positively received in the media was not that we could achieve decarbonisation, but that we could do so with a net positive economic outcome.

The challenges are immense to achieve a decarbonisation of the energy system. With this study, we have now a better perspective of key areas where action is needed to increase investments and foster innovation to accelerate the energy transition, particularly in end-use sectors.

Bold leadership is necessary, at all levels, as delayed action will increase the costs of this transition. Governments, in particular, have a key role to play by providing the right frameworks and incentives to private sector developers and investors. And we see more and more signs of such leadership. Our host country, the United Arab Emirates (UAE) announced last January that it would cut carbon emissions by 70% and have 44% of power generation from renewables by 2050. This is impressive coming from a major oil producing country, and we have the first evidence that this is a very serious commitment with the launch earlier today of the 1GW solar PV park at the lowest recorded price so far worldwide.

Our discussion today will help guide the Agency on how we can best take this work forward in support of our Members as they accelerate the energy transition in their countries and regions.

In concluding, I wish to point to a statement made by my friend Bertrand Piccard when we were at the opening of the Berlin Energy Transition Dialogue last March for the launch of the study. Commenting on the current energy system, he said “If the paradigm is creating problems for us, it’s time for us to change the paradigm”. I could not agree more, and this is what he set out to do with the Solar Impulse project. Transitioning to a sustainable energy system is not just the replacement of one source of energy for another; it is a paradigm shift in the way energy is produced

and consumed and a path to securing economic prosperity and social wellbeing for all. IRENA is both the brainchild of this paradigm shift and the instrument to help realize it through international cooperation and partnership, and this cannot materialize without your active support and ownership of this process. This is the principal reason that I was so delighted over the level of engagement and interest, as well as the ownership of the discussions that have had so far.

Finally, I would like to express my deep appreciation to my colleagues from the Secretariat who contributed to this study for their dedication and their commitment, and for producing what has become an important milestone in our analytical work.

Thank you.