

Renewable energy in the post-pandemic world

May 2020

ABSTRACT

Upon the outbreak of COVID-19, the urgent needs of health care workers and the rapid shift to telework has underscored the critical role of electricity in powering modern life. However, as an international oil feud depresses fuel prices to levels not seen in decades and electricity demand dips as the economy slows, the effect on the business case for renewable energy has yet to be seen. Though economic recession may limit available capital for new projects and result in substantial layoffs across the renewable energy sector, the unpredictability of commodity prices and diminishing returns in hydrocarbon investment may make renewables an increasingly advantageous investment. Including clean energy in national economic stimulus packages would generate large employment and infrastructure opportunities for beleaguered economies and workforces. The talk will focus on the future of renewable energy in the wake of COVID-19 and the oil price plunge. It deals with the roles IRENA is playing in advancing renewable energy policy and deployment, lessons from past stimulus efforts that is relevant to the situation and how we can apply funds and financing going forward, how we can we ensure collectively that the investments that we make over the next couple years are targeted towards sectors and strategies that are resilient, strong and pave a way to a 21st century economy as opposed to embedding the increasing inefficiencies of last century's economy.

SUMMARY

The trend of Renewable Energy prior to COVID-19 is mainly about the increasing proportion of renewable energy, which is mainly market driven.

- Installed capacity of renewables systematically outpaced the installer capacity of iteration
- 3/4 of globally new installed storage capacity came from renewables last year.
- 9 years in a row, except for 1 year, installed capacity outpaced fossil fuel's capacity.
- The trend gap of Installing capacity between renewables and traditional fossil fuel is enlarging because renewables are becoming more convenient.
- The auction price of solar and wind power is very high.

Now the oil prices are very low. Main impact for the renewables will come from the supply chain, factories closing to maintain social distance

IRENA's position on market distorting subsidies and view on fossil fuel subsidy reform is very clear and is in line with the goal of decarbonized economy.

- It is not a question of price; it is question of demand and now is the right moment to do this job. 15 trillion of subsidies is to move from the old to new sector

IRENA take position on the merits of those renewable technologies. There are industries that hold or don't hold for the future of low carbon energy.

- Hydro power is playing a big role. A lot of hydro power is able to get flexibility in the system.
- Conserving biofuel is important. It is one of the elements to put into negotiation.
- Regarding hydrogen or green hydrogen, IRENA is providing reports on decarbonization. It is important in long shipping industries.
- All renewables may work together to build a new energy system.

IRENA launched the 'investment platform' with UNDP and GCF education in the last climate summit.

- It will be accessible in more than 14 online platforms, open to all.
- IRENA will provide the most honest and reliable data.

QUESTION & ANSWER

Q: Regarding carbon capture and carbon sequestration, what extent does IRENA view on the importance of and the role for carbon capture in a future low carbon economy?

A: We think it may be useful, but importance is very limited. The contribution of a situation on the decreasing of the emission in our estimate in 2050 will be no more than 3-4%. It will be limited to certain area where they may have economic significance. Although not economical, in certain area they may contribute to lowering the emission. It is not a solution but a complement to the existing solutions.

Q: If the renewable sector is so competitive economically, what is the justification for continuing to subsidize them? For example, repurposing current fossil fuel subsidies and applying them to renewables. Why are those funds necessary to support an industry that is economically self-sufficient?

A: We are not saying that we have to subsidize the renewables as such. What we are saying is that we have to build the infrastructure of the future for facilitating the penetration now. There is no question that renewables are more convenient than other forms of energy production. If you want to accelerate this process in market, make a shift in terms of infrastructure, invest in new research that may provide the necessary push to accelerate our path. Building environment where renewables may better penetrate and fit in the energy systems is important.

Q: Is there anywhere a listing or an easy access of data on fossil fuel subsidies paid by various countries? Where can we get better insights and scope of subsidized fuel subsidies paid by various countries?

A: Regarding the fossil fuels, we have not published our own studies. So I suggest you to go to the OECD and you will have the data.

Q: A lot of countries currently receive significant tax income from taxing fossil fuels. As the use of fossil fuel goes down, it is potentially significant loss source of lost revenue for those countries. What does IRENA think through the implications of that lost fiscal income?

A: It is true that revenue can diminish. At the same time, we can diminish the effort to support the system. We have to work to look at it globally. Globally, we have some gains and some losses. It is obvious that we should make this ship to the right direction.

Q: How do we ensure that the investments made in the next 6, 12, 18 months are sustainable and productive? How is IRENA looking at these various packages, what role are you playing to advise on them or steer them and what are your hopes and fears about what can emerge over the next several months?

A: People in climate circles view this moment as the single most pivotal and crucial one of the last 20 years when it comes to the future direction of the global economy as it relates to climate change and low carbon opportunities.

Q: What role is IRENA playing in the process and what do you see as some of the key dynamics that are developing in these ongoing discussions about targeting of the stimulus funds or recovery funds?

A: The problem is regarding cash. Money should go to the system to make the people suffer less. People should make investment related to the future they want, considering medium and long term plans for policy measures.

Q: What are the types of warnings and recommendations related to stimulus funding? How can we view the situation in a policy perspective and what have we learned in the past about policies that have been particularly effective at serving jobs, equity considerations, supporting socio-economic policy needs, but also driving climate progress? Are there specific recommendations that you can highlight for us that you think might be part of this instead of appeals?

A: I think the trend for is to go for the electrification of the systems. The message we want to give also is that when we talk about the use of force support plant, world's renewables is just one question of technology, not a question of deterrence. It is a question of how we intend the relationship between the human and economic activities. In the global renewable field, we have been seeing the jobs grow in the last few years, from 4 million to 11 million. Now we estimate that this numbers are credible, and we can make the number 4 times bigger in 2050. If we add the people that will work on energy efficiency, we will see that the social impact will be huge. We have seen that the GDP will grow faster and better if we go for renewables, so there are many reasons inside to let the tradition accelerate the path to clean energy system.

Q: To what extent is the responsibility of these new energy systems to have an answer to what a just transition is? Between half and 2/3 of Africans don't have reliable access to electricity today and that's not a very just situation. But people don't look to the fossil fuel industry and say 'You

know that's your fault'. I feel like to some extent it's incumbent upon these industries to come in with an answer to the question of how the energy system transition will be made in clear and equitable manner. Do you see models emerging of successful transitions where legacy industries have been drawn down, renewables have come in? And is there a kind of model you would like to see going forward in developing countries around the world?

A: It differs with the definition of just. If you cannot define what is just, try to define what is not just. That could be easier. So, it's what we cannot accept in our moral. For example, Morocco had a crisis few years ago. They had a deep economic crisis and they went to renewables. Now, they have one of the most modern economies in North Africa. So those the models that we have to show other countries. This is why IRENA is clustering the membership in 14 country's and trying to showcase this example, providing adjust financial flow and resources to invest in poorest part of the world.

Q: There were some intermittency issues. To what extent does the further innovations in battery technology is essential in order to see the level of deployment that IRENA is projecting?

A: 10years ago, people said that the grid cannot support more than 10 percent of the new world, but now, considering the technological aspects, 30 to 35 percent is possible. Germany has demonstrated that we can go 52 percent in this first quarter. Naturally, the penetration of renewables can be facilitated. We have to invest in the infrastructure, what I mean by infrastructure is the charger for electric vehicles. Now is the moment that we can leapfrog and go to a renewal that is building a structure that is compatible with the need of the penetration of the renewable.

Q: Recently, due to COVID-19, there has been a decrease in trust in multilateralism, globalism and international institutions. To what extent do you see that continuing and affecting IRENA's work as a fact-based and a data-driven organization. Do you find or fear that your work has been or will be affected negatively by the concerns about International institutions and global institutions?

A: I think that we not be effected, because we are a very peculiar organization. We have 161 members, but what is important that we have all the components; the actors, the systems, private companies, NGOs, the technicians and the investors. So we are part of a family where we are all working together. We are all working as a part of the organization. We will try to make IRENA not to be affected by the ongoing situation.