

IEA Should Deliver Messages Reflecting Energy Realities

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The IEA has a special position in my mind. When I joined the Ministry of International Trade and Industry (MITI, currently called METI) in 1982, my first task was to translate the IEA's "Natural Gas: Prospect to 2000" and "World Energy Outlook" into Japanese. I worked in the International Affairs Division of the Agency of Natural Resources and Energy (ANRE) four times in my whole METI career and had very close communication and cooperation with the IEA on every occasion. I was the energy advisor at the Permanent Delegation of Japan to the OECD in Paris for liaising the IEA and the Government of Japan. I also worked in the IEA Secretariat as the Head of Country Studies Division. Dr. Fatih Birol, the Executive Director of the IEA, has been one of my best friends since 1996. In short, the IEA is something like "home" for me. Naturally, I feel strong attachment to the IEA and would highly appreciate its analytical skill more than anybody else.

Having said that, I would take issues with the IEA's excessive inclination towards climate change agenda in recent years. On 14 March, Dr. Birol presented a commentary on the IEA website "Put clean energy at the heart of stimulus plans to counter the coronavirus crisis"¹ This commentary states "Large-scale investment to boost the development, deployment and integration of clean energy technologies – such as solar, wind, hydrogen, batteries and carbon capture (CCUS)– should be a central part of governments' plans because it will bring the twin benefits of stimulating economies and accelerating clean energy transitions". Prior to the virtual ministerial roundtable focusing on energy efficiency and renewable energy on 24 April, Dr. Birol and Mr. Jorgenson, Danish Minister for Climate, Energy and Utilities issued a joint op-ed² asserting ambitious agenda setting for job creation and climate change goals, public sector leadership on investing in clean energy and making energy efficiency, renewable and battery storage central to economic recovery.

¹ <https://www.iea.org/commentaries/put-clean-energy-at-the-heart-of-stimulus-plans-to-counter-the-coronavirus-crisis>

² <https://www.linkedin.com/pulse/how-clean-energy-transitions-can-help-kick-start-economies-birol>

Overall, I have no objection to this argument. Notwithstanding the daunting challenges caused by COVID 19, we should still aim at decarbonization and the governments should take a leading role. While mobilizing public finance for alleviating economic doldrums, governments should incorporate measures backed by thorough cost effectiveness analysis for contributing to clean energy transition as well.

On the other hand, I felt a strong doubt about the sentence “We need to make sure 2019 is remembered as the definitive peak in global emissions, and that means taking action now to put them into sustained decline this decade” in the commentary in March. Global CO₂ emissions have been uninterruptedly growing except for such period as the Spanish Flu, the Great Depression, the World War II, the two oil crises and the Lehman shock. Even though global CO₂ emissions would decrease by 8% as indicated in the IEA’s Global Energy Review 2020³, they will inevitably rebound in accordance with economic recovery. In fact, China which claims the exit from the pandemic crisis is recording coal consumption up to pre-COVID-19 level. If global CO₂ emissions did not come back to 2019 level, I would be deeply concerned about the delay of global economic recovery rather than celebrating the success in decarbonization. Environmental NGOs putting CO₂ emissions reduction as the supreme objective might well say “2019 should be remembered as definitive peak in global emissions”. However, I would take issue with such comment coming from the IEA whose mission is to conduct a realistic analysis balancing energy security, economic growth and environmental protection.

More broadly, I sense that, in recent years, the IEA is putting disproportionately high priority on climate change while it was established to overcome the oil crisis and its most fundamental mission is energy security. International organizations mirror their member countries. If member countries are inclined to particular direction, international organizations will also lean accordingly since their action plans are defined by member countries. In the case of the IEA, 22 Member countries are from Europe. The rise of eco-fundamentalism epitomized by Greta Thurnberg

³ <http://ieei.or.jp/2020/05/exp1200522/>

phenomena and strong push of European Green Deal inevitably affects the Paris-based IEA. In addition, the IEA's activities depend not only on the core budget based on assessed contribution from its Member states but also on voluntary contributions. If European countries provide large amount of voluntary contributions for supporting such activities as renewable and staffs are employed for such purpose, the IEA's output will also be affected.

To be frank, I am rather skeptical about the 450 ppm Scenario and the Sustainable Development Scenario presented in the World Energy Outlook since the gap between these scenarios and the global energy reality is too huge. For example, in these Scenarios, coal will be almost wiped out from global energy mix. However, coal is widely used in Asian countries and will occupy the bulk of their incremental energy demand in next two decades. When I get in touch with energy policy makers in India and ASEAN, they unanimously say "Clean use of coal is crucial for preventing air pollution. However, coal will continue to occupy important share as cheap, abundant, reliable and regionally available energy source". This is in stark contrast to the above Scenarios based on a single value, namely, the achievement of specific temperature target. When 450 Scenario was first presented, I interpreted that the IEA's real intention was to indirectly show how difficult or even impossible to translate 2 degree target adopted by governments at the Cancun Agreement into the actual energy world. However, whatever the actual intention was, the 450 Scenario started to take on life of its own and offered the grounds for coal demonization and renewable idealization. Furthermore, the Sustainable Development Scenario delivers a message that it could achieve 1.5-2.0 degree stabilization, reduce air pollution and enhance energy access simultaneously. This indicates the IEA has come to more actively advocate this scenario. Its "three birds with one stone" type narrative reminds me of the IPCC SR1.5 asserting that pursuit of 1.5 degree target provides more synergies than trade-offs. By the way, this assertion is based on rather illogical ground that literatures indicating synergies outnumber those indicating trade-offs.

We would not need to worry about climate change if such a rosy argument holds. The problem is that the Sustainable Development Scenario calls both developed and developing countries to set three times higher carbon price

compared with the Stated Policies Scenario. The table 8.5 shows that the carbon prices under the Sustainable Development Scenario range from 125 to 140 \$/t-CO₂ in 2040. Given 10 EUR/t-CO₂ increase of carbon tax triggered the strong backlash from the Yellow Vest movement, it is highly questionable whether carbon prices of the above level would be politically, economically and socially realistic.

Table B.5 ▶ CO₂ prices in selected regions by scenario (\$2018 per tonne)

Region	Sector	2030	2040
Current Policies			
Canada	Power, industry, aviation, others*	36	39
Chile	Power	5	5
China	Power, industry, aviation	20	31
European Union	Power, industry, aviation	27	38
Korea	Power, industry	28	39
Stated Policies			
Canada	Power, industry, aviation, others*	36	39
Chile	Power	12	20
China	Power, industry, aviation	23	36
European Union	Power, industry, aviation	33	43
Korea	Power, industry	33	44
South Africa	Power, industry	15	24
Sustainable Development			
Advanced economies	Power, industry, aviation**	100	140
Selected developing economies	Power, industry, aviation**	75	125

Source: World Energy Outlook 2019

In my view, the Advanced Technology Scenario in the Asia and World Energy Outlook⁴ by the Institute of Energy Economics of Japan built on bottom-up assessment of technology deployment potential is far more realistic and plausible than the 450 Scenario or the Sustainable Development Scenario backcasted from specific temperature target.

I imagine that the IEA is feeling obliged to take a “politically correct” posture setting aside its achievability amid general atmosphere such as the Paris Agreement, eco-fundamentalistic trends in Europe and fossil fuel bashing in the financial sector. This would be inevitable so long as the IEA counts on support from its member countries.

⁴ <https://eneken.ieej.or.jp/data/8122.pdf#search='Asia+and+World+Energy+Outlook+IEEJ+2019'>

I would also be remiss if I did not touch on the fact that the IEA is emphasizing the importance of lifetime extension of nuclear power plants and CCS technologies as well as alerting the plummeting upstream oil and gas investment and its implication to the future supply and demand balance. This is a clear distinction from bigoted European environmental NGOs granting only energy efficiency, renewable and green hydrogen while rejecting nuclear and CCS. Perhaps, I should commend that Dr. Birol is well withstanding the pressure from European environmental circle.

I have a deep respect to pragmatism and analytical skill of Dr. Birol. For this very reason, I would expect him to deliver messages based on energy reality such as “phasing out of fossil fuel is not easy as you think” even though such inconvenient truth would not fit in with the expectation of environmentalists. If the IEA degenerated into a mere advocacy organization, the *raison d'être* of the IEA and its reputation would be seriously damaged.