

Climate Change Webinar Series

Commentary on the IPCC 6th Assessment Report Working Group 3 Report Part 2

21 April 2022



Q&A

The speakers will answer questions from the audience on the day of the event.

* The secretariat corrected typographical errors in your entry.

Q1	Can teleworking be really one of solution for emission reduction? For those who use public transportation it would not make a large impact?
A1	Answered in the webinar

Q2	Life cycle GHG may have trade-offs to other life cycle social cost. How will you combine them in further research?
A2	Answered in the webinar

Q3	Has METI decided to use LCA for GHG emission estimation, including modal ones?
A3	Answered in the webinar

Q4	There was a mention of the need for legislation. Is it OK to understand that citizens' voluntary transitions are not in time for the necessary reductions?
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A4	Answered in the webinar
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Q5	For EV, I assume there will be a lot of issues/challenges in terms of recycling batteries in developing countries. How this has been discussed and considered in IPCC report? Also, how this issue will be addressed in future? Currently, there is piles of e-waste in developing countries that is damaging the environment and human. Before talking EV, should not we deal with this e-waste garbage first?
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A5	Answered in the webinar
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Q6	Electric vehicles calculations are done considering a replacement of current fleet? or does it assume less/more private vehicles due to different use of public transportation? (basically, how are the trade-offs between private and shared mobility considered?)
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A6	Answered in the webinar
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Q7	Regarding with cost of life-cycle assessment, is it correct understanding that whole picture become the responsibilities of manufactures?
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A7	Answered in the webinar
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Q8	Is Figure 10.4 calculated under the same conditions for the country in which the car was made and the country in which it was used?
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	Is the impact of imports and exports also considered in the data?
A8	Answered in the webinar

Q9	<p>Thank you very much for the summary explanation.</p> <p>Q1 The concept of life cycle GHG intensity is interesting, but how IPCC compared results of life cycle GHG intensity resulted in different countries, especially how did IPCC summarize those data in developing countries?</p> <p>Q2 EV battery cost sharply decreased but about EV efficiency? Did IPCC summarize its data?</p>
A9	Answered in the webinar

Q10	Transportation links to the city planning. Did IPCC discuss such interaction? If so, what kind of implications/outcomes were concluded?
A10	Answered in the webinar

Q11	How do you calculate the GHG emission on recycling or waste management? Also, it has mention as other question, have there any discussion on risk of waste management of each energy?
A11	Answered in the webinar

Q12	When it comes to transportation, not only accessibility but also safety like avoiding car accident and less its impact is important. How would that kind point is included?
A12	Answered in the webinar

Q13	Because second hand cars from developed countries are usually used in developing countries, sometimes they are used as public transportation. In that case, how do you calculate by each country settings and how the regulation would it be?
A13	Answered in the webinar

Q14	For the Well to Wheel concept, do you split in two to do the calculation? For instance, emissions from production (one shot only, like initial cost) and emissions from the usage (like running cost)?
A14	Answered in the webinar

Q15	Question on Slide 19 The slide seems to show the step-wise transition. Could you elaborate further how the each of steps will be enabled/led and joined/followed by multiple stakeholders. In other words, who are the important stakeholders to take the lead of each step?
A15	Decarbonisation transport sector requires a transition of socio-technical system which depends on the combination of technological innovation and societal change as shown in figure

	<p>10.22 of the main report chapter 10. For example, the figure shows innovative demand and efficiency strategy are at regime scale that already moved beyond R&D although they are not mainstreamed yet and have been shown to work much more effectively if combined with technological change which is some of technology already widely available in the landscape scale. While for the other example, electromobility already moved from regime scale to landscap scale and the trend for example shows the manufactures produce an increasing range of EVs in response to the demand, policy and regulatory signals. As these adopted technologies increase throughout the cities and regions, the governments and energy supllier will have to deploy new supporting infrastructure to support them.</p>
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Q16	<p>The road is necessary to use cars and railway is needed for using trains. Is your GHG emission comparison put data of these life cycle GHG emissions including its maintenance?</p>
A16	<p>The assessment doesn't include the data of maintenance roads and railway. Detail explanation and data for calculation are available in the appendix 10.1 of the chapter report. Please visit this link https://www.ipcc.ch/report/ar6/wg3/</p>

Q17	<p>Question on Slide 20 The figure shows the enablers and barriers of each available approach and technology. There seems to be pros and cons of each, but which technologies are promising from your expert point of view. If you could also share any discussion among the authors group, it would be very much appreciated.</p>
A17	<p>The assessment was written in the headline statement C8 of the Summary for Policy Maker (SPM). The copy of the statement as</p>

	<p>follows: Demand-side options and low-GHG emissions technologies can reduce transport sector emissions in developed countries and limit emissions growth in developing countries (high confidence). Demand-focused interventions can reduce demand for all transport services and support the shift to more energy efficient transport modes (medium confidence). Electric vehicles powered by low emissions electricity offer the largest decarbonisation potential for land-based transport, on a life cycle basis (high confidence). Sustainable biofuels can offer additional mitigation benefits in land-based transport in the short and medium term (medium confidence).</p> <p>Sustainable biofuels, low emissions hydrogen, and derivatives (including synthetic fuels) can support mitigation of CO2 emissions from shipping, aviation, and heavy-duty land transport but require production process improvements and cost reductions (medium confidence). Many mitigation strategies in the transport sector would have various co-benefits, including air quality improvements, health benefits, equitable access to transportation services, reduced congestion, and reduced material demand (high confidence). {10.2, 10.4, 10.5, 10.6, 10.7}</p>
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Q18	<p>Transportation policy is a kind of economic policy. Japan chose the bullet-train system as a mass transportation linking Tokyo and Osaka in addition to the road transportation in 1960 (when Japan used to be a developing country). Will you show us such examples?</p>
A18	<p>The enabling conditions was discussed in section 10.8. In the original idea and draft final of the report, we included three example of three different transport modes in different regions and countries. The first case is non-motorized transport development; second about electromobility and third about green aviation in developed countries. We tried to keep the balancing of the diversity of modes and regions, however, in the final version, due to the several reasons, the remaining case study is only one about</p>




	electromobility in Africa.
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Q19	In the feasibility assessment table, how did IPCC quantify “high” , “mid” and “low” possibilities and barriers? What kind of indicators did IPCC use and what kind of methods did IPCC use to quantify “feasibility” in the transport sector?
A19	answered in the webinar

Q20	The choice of transportation is also depending on its geographical, space or other natural background as well as economic and social situation. With considering natural background, will you analyze GHG emission from such point of view?
A20	We analysed existing literatures which cover all those diversity.

Q21	High natural disaster prone country like Japan, risk assessment is also important. Do you think that GHG emission priority have any controversial to disaster related matter?
A21	Close linkage between climate mitigation, adaptation and sustainable development goals was mentioned clearly in the SPM. Chapter 10 discussed specifically on climate adaptation on the transport sector in section 10.1.3. We did assessment of the literature which discuss the issue of climate mitigation and disaster.



Q22	Most researchers from developing countries cannot publish articles on peer-reviewed journals due to financial supports. If IPCC collects only data from literature reviews, this may lead to a biased result? How it was addressed?
A22	In the IPCC process, non-peer reviewed articles still can be used as the grey literature with a certain conditions. We, chapter 10 also use several grey literature due to unavailability of peer-reviewed articles for a certain topic/case. In order to avoid bias, the IPCC use systematic assessment methods.

