

IAB E-Impact Workshop Session 2: What do we know
2022-12-12
Webex Chat Log

from Carsten Bormann to Everyone: 6:01 AM
<https://www.tzi.de/~cabo/2022-12-05-e-impact-1-chat.md>

from Carsten Bormann to Everyone: 6:01 AM
This is the chat log from the first meeting as I saw it

from Jukka Manner to Everyone: 6:12 AM
I will dispute some of the summary in my 5min talk. :)

from Chris Adams to Everyone: 6:12 AM
hi folks, I had my hand raised

from Alex Clemm to Everyone: 6:14 AM
I think business model impact is not so much re: advertisting, but having business incentives in place that support greater efficiency (e.g. enabling user carbon awareness)

from Wim Vanderbauwhede to Everyone: 6:17 AM
According to the IPCC, to limit global warming to 1.5°C, within the next decade a global reduction from 55 gigatonnes CO₂ equivalent (GtCO_{2e}) by 32 GtCO_{2e} to 23 GtCO_{2e} per year is needed.

from Chris Adams to Everyone: 6:17 AM
just a quick note - we do have some timelines from the ITU for "well below 2 degrees of warming", but no idea of the assumed investment needed yet, and other what time frame

from Wim Vanderbauwhede to Everyone: 6:17 AM
So 2050 is quite too late.

from Chris Adams to Everyone: 6:17 AM
thanks Wim

from Jan Lindblad to Everyone: 6:17 AM
@Chris: Such cost-messages are notoriously hard to make (since the cost is not linear based on current prices) and usually way off when actually implemented. Very often such numbers are handed out in order to steer policy decisions in a direction suitable for the source organization.

from Jan Lindblad to Everyone: 6:19 AM
We should refrain from using "target years" as it doesn't really matter when we reach zero. That is what greenwashers do when they want to avoid rapid action and leave the issue simmer for another few years. What matters is how much we emitted, not when we get to zero.

from Vesna Manojlovic to Everyone: 6:23 AM
@Jan, if the "target years" are moved forward (let's say, in 2033 = 10 years from now CO₂ emissions of ICT should be zero), rather than "in 100 years" would that make it better, in your opinion?

from Chris Adams to Everyone: 6:24 AM
Hi Jan, I'm not sure we're disagreeing. I'm using target years here, largely because they're used by other researchers advocating for more ambitious action.

I'm referring to the guidance from the science from the IPCC for 1.5, from non profits talking about the trajectory of drops we need and the necessity

of interim targets (new climate institute, zero tracker. When we get to zero really, really does matter, as damage is being done as long as more emissions are happening.

More below:

<https://www.thegreenwebfoundation.org/news/good-net-zero-bad-net-zero-crowdsourcing-company-targets-with-wikirate/>

from Vesna Manojlovic to Everyone: 6:24 AM
@Eva: sustainability best practice document : +1

from Jan Lindblad to Everyone: 6:26 AM
@Vesna, IMO we should use the language of co2-budgets. What happens often now is that organization (govts, corps, cities, ...) say "we will reach zero (far ahead year)". This makes it impossible to follow up their decreases this and next year. This will make someone else responsible when the date is reached. Not a recipe for action. With co2-budgets any delay becomes sorely evident. And it is the total emission that decides what happens to the climate.

from Vesna Manojlovic to Everyone: 6:29 AM
@Jan: yes, I agree the concrete budgets are easier to track & hold organisations accountable.

from Suresh Krishnan to Everyone: 6:29 AM
That was an excellent summary Eve!

from Vesna Manojlovic to Everyone: 6:29 AM
+q

from Colin Perkins to Everyone: 6:46 AM
Time shifting demand affects transport (e.g. LEDBAT) and applications too, of course

from Chris Adams to Everyone: 6:46 AM
LEDBAT?

from Pernilla Bergmark Ericsson to Everyone: 6:46 AM
@Vesna and @Jan: On carbon budget: ITU (jointly with GSMA, GESI, SBTi and in collaboration with IEA) has developed a trajectory which indirectly forms a budget as it includes the emission baseline. It is available in ITU-T L.1470 which is available online. There is also a standard on a guidance of Net Zero for the ICT sector L.1471.

from Mohamed Boucadair to Everyone: 6:47 AM
On the routing, one issue to consider is how to maintain an up-to-date topology even if a node is in an idle state for optimization purposes (such nodes may be removed from adjacency tables if they don't participate in routing advertisements)

from Colin Perkins to Everyone: 6:47 AM
<https://en.wikipedia.org/wiki/LEDBAT> - a low priority version of TCP, for non-urgent background traffic

from Chris Adams to Everyone: 6:47 AM
oh cool! thanks Colin!

from Jan Lindblad to Everyone: 6:47 AM
@Pernilla, very interesting. Thanks.

from Jari Arkko to Everyone: 6:48 AM

Suresh, one thing that is missing from these is that we're mostly talking about protocol things. Which may be natural for us in the IETF. But ... not the only thing we should do. Step 1 in most cases is probably implementations and components.

from Jari Arkko to Everyone: 6:51 AM
.... and one role in the standards is to allow those improvements underneath to happen, e.g., by not constraining too much

from Suresh Krishnan to Everyone: 6:54 AM
Fully agree Jari. FWIW, I think you are totally on-topic. We covered this a bit more in our paper but there is quite a bit of work to do there in this space.

from Martin Flack to Everyone: 6:57 AM
Lost audio

from Chris Adams to Everyone: 6:57 AM
no audio here

from Suresh Krishnan to Everyone: 6:57 AM
A good first step I can think off would be some kind of "focus area" for a hackathon in the near future once we get a good handle on some short term things to do.

from Chris Adams to Everyone: 6:57 AM
its back!

from Martin Flack to Everyone: 6:57 AM
yes

from Vesna Manojlovic to Everyone: 6:58 AM
@Suresh, I'd be interested in co-organising a hackathon, or taking part in one!

from Vesna Manojlovic to Everyone: 6:59 AM
(I have to leave for a while, I hope I can come back -- and if not, thank you so much and see you on the list!)

from Henk Birkholz he/him to Everyone: 6:59 AM
sry for dropping early, conflict with a virtual interim

from Carsten Bormann to Everyone: 7:00 AM
(Time-shifting is a way to reduce carbon impact of energy use.)

from Suresh Krishnan to Everyone: 7:00 AM
@Vesna: Sounds good. Let's keep in touch.

from Colin Perkins to Everyone: 7:06 AM
"Footprint and/or handprint?" - ?

from Pernilla Bergmark Ericsson to Everyone: 7:07 AM
A picture that gives an overview of different types of impacts and how they relate which could be useful:

from Pernilla Bergmark Ericsson to Everyone: 7:07 AM
Not possible to share here - I'll send over the mail reflector

from Jan Lindblad to Everyone: 7:08 AM
@Colin, I suppose handprint = Scope 4, i.e. the emissions avoided by using this system (e.g. reduction in emissions by video conferencing rather than traveling)

from Colin Perkins to Everyone: 7:08 AM
thanks

from Rob Wilton to Everyone: 7:08 AM
Concretely, I wonder whether we should be chartering a WG within the IETF (perhaps a bit like IOTOPS) with a goal of coordinating this work within the IETF. Focus should be on what can be achievable in the short term. It would have a coordination role so that documents are progressed within existing appropriate WGs were possible, but could also progress documents that don't have a better place (e.g., Suresh's proposed document on guidelines, defining/modelling power usage metrics).

from Toerless Eckert to Everyone: 7:09 AM
+q

from Jukka Manner to Everyone: 7:10 AM
@colin, handprint = "scope 4", so benefits brought by a solution

from Suresh Krishnan to Everyone: 7:10 AM
I think we had comments from Akamai but that was probably it.

from Chris Adams to Everyone: 7:10 AM
+q

from Rob Wilton to Everyone: 7:11 AM
+q

from Eve Schooler to Everyone: 7:12 AM
@Jari, Yes, please open up the mailing list to all (not only those who are attending the WS)

from Eve Schooler to Everyone: 7:13 AM
@Toerless, the mail archive already exists

from Pernilla Bergmark Ericsson to Everyone: 7:13 AM
+q

from Suresh Krishnan to Everyone: 7:13 AM
+q

from Toerless Eckert to Everyone: 7:14 AM
@Eve: can you remind me of URL pls. ?

from Dom Robinson Greening of Streaming to Everyone: 7:14 AM
+1 @chris

from Eve Schooler to Everyone: 7:14 AM
@Toerless, the mail archive is <https://mailarchive.ietf.org/arch/browse/e-impact-workshop-attendees/>

from Eve Schooler to Everyone: 7:14 AM
You of course have to login to get access

from Suresh Krishnan to Everyone: 7:15 AM
+1 Rob

from Toerless Eckert to Everyone: 7:15 AM
@Eve: yes, making it public would be important IMHO.

from Jan Lindblad to Everyone: 7:15 AM
+1 Rob

from Romain Jacob to Everyone: 7:16 AM
@chris: somewhat related. We have been musing about (and will start exploring soon) a network management model where user have a fixed budget for e.g., bandwidth usage.

from Romain Jacob to Everyone: 7:16 AM
Shoot me an email if you are interested. It's called "Karma-based resource sharing"

from Dom Robinson Greening of Streaming to Everyone: 7:17 AM
Perhaps the most useful thing that the IAB could do is simply aggregate information about all the initiatives in a central organised way?

from Pernilla Bergmark Ericsson to Everyone: 7:20 AM
In terms of SDOs I think ITU and ETSI (rather than CEN/CENELEC) are the ones that have worked more consistently on these topics

from Alex Clemm to Everyone: 7:21 AM
@Bruce how would you expect IETF to interact with electricity & grid operators?

from Toerless Eckert to Everyone: 7:21 AM
@Dom I think Jari/Colin have enough to do to write up the workshop rfc ;-) i would fear we need to put ongoing efforts onto more shoulders...

from Eve Schooler to Everyone: 7:21 AM
@Bruce, Count me in on that discussion about how to re-imagine the Electrical grid

from Dom Robinson Greening of Streaming to Everyone: 7:22 AM
@Toerless - totally fair enough! :)

from Bruce Nordman2 to Everyone: 7:23 AM
I think a first step would be an I-D on appropriate lessons on what our experience with network technology might suggest for our electricity systems. This operates at both the LAN and WAN domains in related but different ways. bnordman@lbl.gov

from Chris Adams to Everyone: 7:23 AM
@bruce - I-D ?

from Suresh Krishnan to Everyone: 7:24 AM
@Dom, @Toerless: We probably need something more dynamic in addition to a workshop RFC

from Suresh Krishnan to Everyone: 7:24 AM
@Chris: Internet Draft

from Chris Adams to Everyone: 7:24 AM
ah,thanks

from Marisol Palmero Amador to Everyone: 7:24 AM
@Romain, I will be interested to follow up on your "karma-based resource sharing"

from Alex Clemm to Everyone: 7:24 AM
@Bruce good suggestion - thanks - would definitely be interested in this

from Hosein Badran to Everyone: 7:24 AM
+1 Jari – excellent point on potetial for joint meetings

from Romain Jacob to Everyone: 7:25 AM
@marisol: feel free to reach out :-)

from Vesna Manojlovic to Everyone: 7:25 AM
Is the mailing list open for other people to join?

from Dom Robinson Greening of Streaming to Everyone: 7:25 AM
good to meet you all folks – so happy to know so many good minds are working on this area!

from Toerless Eckert to Everyone: 7:25 AM
@Vesna: i think not yet... i thought it was planned to be opened.

from Vesna Manojlovic to Everyone: 7:26 AM
@Toerless, thanks for the info!

from Vesna Manojlovic to Everyone: 7:27 AM
Suggestion: publish a "IAB recomendation" on e-impact, just like previous ones about privacy etc...

from Jukka Manner to Everyone: 7:27 AM
Well, my contribution to the workshop was discussing the futuristic idea to have an Sustainability Considerations section in RFCs sometime in the future. :)

from Jan Lindblad to Everyone: 7:27 AM
If we want to work in standard metrics, which WG should we go to?

from Eve Schooler to Everyone: 7:27 AM
@Colin @Jari, Do we/ISOC have a budget to fund some research?

from Vesna Manojlovic to Everyone: 7:28 AM
RIPE NCC has FUNDING called Community Projects Funt -> ripe.net/cpf

from Jukka Manner to Everyone: 7:28 AM
Scoping would be important, what should the IETF work on, and what is not our agenda and mandate, and even role in the community ?

from Alex Clemm to Everyone: 7:28 AM
@Jan we presented the metrics draft in opsaug (but verdict still out if this can be the landing spot)

from Cedric Westphal to Everyone: 7:28 AM
Feedback: very useful and great talks; nice diversity of point of views

from Vesna Manojlovic to Everyone: 7:29 AM
ISOC Foundation also has different fundings... and here's a collection of other grants: <https://wiki.techinc.nl/MeshNet#Funding>

from Jan Lindblad to Everyone: 7:29 AM
Really, really good initiative! Not a day to early. Now we know we are many and strong. The lasting value is if we can take the momentum forward in the day to day work in IETF.

from Rob Wilton to Everyone: 7:29 AM
@Jan, (1) If it is for an active protocol, the WG that owns the protocol. If nowhere else, then I suggest that you bring it to OPSAWG (in the short term)

from Alex Clemm to Everyone: 7:29 AM
+1 to @Jan

from Hosein Badran to Everyone: 7:29 AM
@ Eve, I recall ISOC Foundation having funding for related research.
from Marisol Palmero Amador to Everyone: 7:29 AM
Is there any clear direction on Telemetry/metrics/YANG modules, if new proposals are coming, which WG we should follow up as new proposals might come in IETF? OPSAWG?

from Vesna Manojlovic to Everyone: 7:29 AM
+1 on Collin's reminder of what Eva said: let's keep in mind *URGENCY*.

from Eve Schooler to Everyone: 7:30 AM
@Alex (and co-authors), I'd be happy to help extend the I-D on metrics to encompass carbon-efficiency related concerns

from Wim Vanderbauwhede to Everyone: 7:30 AM
@Vesna++ on urgency!

from Rob Wilton to Everyone: 7:30 AM
@Marisol, yes I would also suggest that OPSAWG is currently the best place.

from Marisol Palmero Amador to Everyone: 7:30 AM
Thanks Rob!

from Alex Clemm to Everyone: 7:31 AM
@Eve awesome, let's sync up afterwards

from Martin Flack to Everyone: 7:32 AM
Great job Jari for leading

from Vesna Manojlovic to Everyone: 7:32 AM
Thank you, Jari!

from Toerless Eckert to Everyone: 7:32 AM
Thanks Jari, Colin, *!

from Fieke to Everyone: 7:32 AM
Thanks so much for making this workshop happen

from Esther Roure Vila to Everyone: 7:32 AM
Great job! thanks team

from Hosein Badran to Everyone: 7:32 AM
Thank you Jari, Colin and All for a great workshop

from Jan Lindblad to Everyone: 7:32 AM
Thank you Jari, and *

from Pernilla Bergmark Ericsson to Everyone: 7:32 AM
Agreeing on urgency – an implications is the perspective on efficiency and effectiveness. Doing the right thing in the right way is important to move quickly.

from Wim Vanderbauwhede to Everyone: 7:32 AM
Thank you everyone, this was really stimulating!

from Chris Adams to Everyone: 7:32 AM

thanks for inviting the non IETF folks in – this was my first meeting like this and really helpful!

from Hosein Badran to Everyone: 7:32 AM
Much appreciated !!

from Suresh Krishnan to Everyone: 7:32 AM
Thanks Jari, Colin and PC for this awesome workshop! Looking forward to followups and meaningful impact!

from Louis Navarre to Everyone: 7:32 AM
Thank you for the workshop!

from Snezana Mitrovic to Everyone: 7:32 AM
Thank You, this was very useful and much appreciated.

from Stefano Salsano to Everyone: 7:32 AM
thank you Jari and Colin

from Rob Wilton to Everyone: 7:32 AM
Thanks Jari + all

from Pernilla Bergmark Ericsson to Everyone: 7:32 AM
Many thanks Jari and Colin for keeping everything together and working to integrate this important topic into your work!

from Nina Lövehagen to Everyone: 7:32 AM
Thank you!

from Dom Robinson Greening of Streaming to Everyone: 7:32 AM
Thanks folks!