

IAB E-Impact Workshop Session 1: The big picture
2022-12-05
Webex Chat Log

from Daniel Schien to Everyone14:56
Hi Everyone

from Daniel Schien to Everyone15:01
I have no sound on my end. Is that because no one is saying anything?

from Suresh Krishnan to Everyone15:01
Jari just talked

from Martin Flack to Everyone15:01
We can hear you Jari!

from Daniel Schien to Everyone15:01
Ok. Then I go bug hunting.

from Colin Perkins to Everyone15:07
Slides for the meeting are being uploaded to <https://datatracker.ietf.org/meeting/interim-2022-eimpactws-01/session/eimpactws> as we get them – they'll migrate to the workshop website later

from Michael Welzl, University of Oslo to Everyone15:14
I'm impressed by this slide. A great effort, Jari!

from Hosein Badran ISOC to Everyone15:15
+1, Jari – great effort!

from Hosein Badran ISOC to Everyone15:18
yes

from Martin Flack to Everyone15:28
looks good now

from Jari Arkko to Everyone15:36
+q (putting myself in queue, for later, but lets get through the presentations first)

from Colin Perkins to Everyone15:38
Is data on carbon intensity of electrical power readily available, at an appropriate degree of granularity, to perform these optimisations?

from Bruce Nordman to Everyone15:40
One provider of marginal GHG estimates is watttime.org – I am engaged in research with them on both estimation algorithms, interpretation, and communication of GHG data

from Dawn Nafus to Everyone15:41
One challenge will be the gap between energy price and carbon intensity-- there will always be incentives for awareness to be tuned to the former more than the latter, which can create some perverse situations.

from Noa Zilberman to Everyone15:41
@Colin in the UK there is information on 30min granularity, regional level (13 regions), e.g., <https://carbonintensity.org.uk/> with past dataset at https://data.nationalgrideso.com/carbon-intensity1/regional-carbon-intensity-forecast/r/regional_carbon_intensity_forecast

from Colin Perkins to Everyone15:41
@noa, thanks – interesting

from Jan Lindblad to Everyone15:42
Using website APIs that compute average GHG intensity for an area/country is often misleading. Operators that care about GHG would usually purchase energy with better specifications/guarantees than the country average.

from Jari Arkko to Everyone15:43
I suspect that most reporting does not take into account your own -- and very common -- solar installations. Or maybe it is taken into account, but in aggregate?

from Toerless Eckert to Everyone15:43
@Colin: i don't think we would know well enough the metrics of e.g.: network pops to build the best "renewable" path. Thats IMHO the most obvious network layer work we could start doing in IETF, defining those metric, measurement points, and then let OPS/RTG figure out how to use them.

from Jan Lindblad to Everyone15:44
@Toerless: +1

from Dawn Nafus to Everyone15:47
so combining the two talks could there be an additional telemetry layer re hardware impacts/time the device is in service/etc..

from Lars Eggert to Everyone15:47
+q

from Jukka Manner to Everyone15:47
+q

from Remy Hellstern to Everyone15:47
Very insightful – thank you to all of the presenters!

from Toerless Eckert to Everyone15:49
The "low carbon" route is not a "hot potato" route ;–)

from Suresh Krishnan to Everyone15:49
+q

from Bruce Nordman to Everyone15:49
For GHG, it is important to use marginal emissions – not average – in most decision-making. With this, one's own generation doesn't matter – it is the marginal producer on the grid one is connected to that matters.

from Pernilla Bergmark Ericsson to Everyone15:49
+q

from Vesna Manojlovic to Everyone15:51
"What is worth sending & receiving", Lars => +1

from Dom Robinson to Everyone15:51
We have to be very careful about correlating energy and traffic. Experiments we have been carrying out show that there is far from a linear correlation...

from Alex Clemm to Everyone15:52
The tricky part is that what is worthy for you may not be the same that is worthy to me

from Chris Adams to Everyone15:52
jukka – renewable energy or carbon free?
from Wim Vanderbauwhede to Everyone15:53
I totally agree with Jukka. Reducing consumption is what matters.

from Vesna Manojlovic to Everyone15:53
@Alex, I love it how we move to philosophy / ethics so quickly = "what is worthy" :)

from Carsten Bormann to Everyone15:53
"worth" = being paid for.

from Jukka Manner to Everyone15:54
Win, exactly. How do we go to "less is more", instead of the ICT sectors
"more is more" goal.

from Carsten Bormann to Everyone15:54
We may need to be more selective in what we pay for...

from Alex Clemm to Everyone15:54
@Carsten @Vesna One mechanism is of course pricing. (other justice issues
such as "who can afford" aside")

from Jukka Manner to Everyone15:55
Chris, renewable != carbon free. Think LCA.

from Brendan Moran to Everyone15:55
Or wood pellet burners

from Vesna Manojlovic to Everyone15:55
@Carsten, worth being measured in payment is too reductionistic for me to
accept... there's so much more to it than "money".

from Carsten Bormann to Everyone15:55
@Alex pricing = supply side. Do we have control on the demand side?

from Laurent Ciavaglia to Everyone15:56
On Eve's presentation, I'm wondering how to align the capability to measure
in near real time vs the capability to control / optimize network mechanisms/
devices vs. capability to use/"mobilize" energy in the same time-frames

from Wim Vanderbauwhede to Everyone15:56
Also, the global proportion of electricity from renewables is projected by
the International Energy Agency to be only 70% by 2040.

from Fieke Jansen to Everyone15:56
+1 to Jukka comment about banking on renewable energy for sustainability. We
have to look at it holistically. In the Netherlands we see increased
conflicts over green energy that is locally produced. Here it is being bought
by data centers over the needs and interest of households, who then remain
reliant on fossil fuel. So an increase in total volume of green energy use
means other parts of society will remain dependent on fossil fuels.

from Alex Clemm to Everyone15:56
@Carsten pricing impacts demand. Putting a price on waste will reduce it

from Vesna Manojlovic to Everyone15:56
+1 to Fieke's comment.

from Wim Vanderbauwhede to Everyone15:57

And what is worse, even in that scenario (70% by 2040), generation from fossil fuels reduces only slightly, so there is only a slight reduction in emissions as a result.

from Bruce Nordman to Everyone15:57

My work is on communicating highly dynamic prices to customer sites – and within them – which relates to how consuming devices use such prices (and GHG) including forecasts

from Carsten Bormann to Everyone15:57

@Alex: Think spam. Demand is already zero.

from Alex Clemm to Everyone15:57

@Carsten not to the spam generators – why is there still so much spam?

from Brendan Moran to Everyone15:57

Fundamentally, the greenest energy is the energy you don't use. I would argue that we have an obligation to consider the cost of all energy use in the worst case scenario (coal?)

from Wim Vanderbauwhede to Everyone15:58

@Brenddan++

from Jukka Manner to Everyone15:58

Fieke, I often ask my students, that if a company claims they are all "green" because use renewables, is that true? Who buys the black energy then, so there are "black" then as there is not enough green for everybody, yet?

from Fieke Jansen to Everyone15:59

I have to run, but thanks everyone for the presentation and debates in the chat! See you all on the next call

from Wim Vanderbauwhede to Everyone15:59

@Jukka, @Fieke, exactly. It's just shifting the emissions away

from Vesna Manojlovic to Everyone15:59

@Carsten, even considering the "price" – it's much more complex, with the governmental subsidies for fossil fuels, and the *environmental* costs being "externalised" ... so if we could change REAL price, the worth would be easier to determine by "money"...

from Jukka Manner to Everyone15:59

right, Wim.

from Colin Perkins to Everyone15:59

@toerless – please send your slides

from Laurent Ciavaglia to Everyone16:00

Suggestion to keep record of the exchanges in the chat in the proceedings. Lots of useful links and pointers.

from Hosein Badran ISOC to Everyone16:00

+ Pernilla – it is quite important to harmonize how footprint and consumption is calculated!

from Brendan Moran to Everyone16:01

The IETF doesn't really deal with energy generation. Our part of this is reduction, not sourcing. Obviously allowing people to choose low-carbon or no-carbon energy sources is interesting, but I think that's less important for the IETF as a whole.

from Dom Robinson to Everyone16:01

I don't know if it is useful but in Greening of Streaming we took a decision

to focus on reducing watts rather than carbon – we felt that was the range of our capability to directly affect. So far at least!

from Michael Welzl, University of Oslo to Everyone16:01
+1 Brendan

from Wim Vanderbauwhede to Everyone16:01
Thank you!

from Brendan Moran to Everyone16:01
Thank you!