

Movement Strategy Follow-up Discussions

Initiative: Alignment with Environmental Sustainability Initiatives ([cluster G](#))

“A carbon-neutral Wikimedia by 2030”

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Facilitators: Lukas, Deb

Participants: Ming, Blech, Abbad, J. N. Squire, Lydia, Ryan, Andrew, William, Bodhisattwa, Adel

*If participants prefer to contribute on etherpad, please link here.

https://etherpad.wikimedia.org/p/Follow-up_Template_-_Environment_-_carbon_neutral

Key objectives

What are the objectives of this initiative in the next 18 months? What will success look like?

- Make a **self-binding public statement** (such as a board resolution)
 - Committing ourselves to carbon neutrality by 2030
 - Including a roadmap that will get us there

- Guiding principles (such as our definition of what that means, our position on offsets, and a willingness to make “tough choices” such as limiting physical events etc.)
- As an alternative to physical events and travel, develop the **rich socio-technical platforms** and resources for the community to replicate such functions – communications, social, conference, sharing, spatial chat, video sharing, et al. – and are consistent with our free/open ethos or provide low-cost alternatives.
 - If in-person events are reduced, the alternative will need to be online events that turned out to work well in 2020.
 - Different combinations of online meeting and coordination tools were experimented.
 - Find a consistent toolset/platform(s) to be the alternative of in-person events.
 - The problem is really related to the cost of developing and maintaining such software. The idea of purely relying on available open source software seems to be a challenge that everyone would need to face.
 - Developing new open source software isn’t feasible economically for the WMF alone to bear.
 - There will be counter-saving in travel and event costs.
 - Software needs ongoing maintenance, not only initial development and overhead cost.
 - Partner with existing organizations/platforms to develop or acquire software instead of building.
 - This includes publicizing tools such as WM Cloud Jitsi or WM Chat.
 - Make it easy enough to do virtually, that you don’t need to meet in person.
- Decide **what is in-scope** or out-of-scope - what are we counting, and what are we not counting? (e.g., environmental footprint of individual wikimedians; impact of investments of the Wikimedia Foundation including the endowment; impact of hardware production/disposal; investments; other?)
 - Do we aim only at reducing the carbon emissions from data centers or from Wikimedia activities altogether?
 - Firmly commit that when we buy offsets, we do it because there are no alternatives – because buying offsets does *not* actually reduce our carbon emissions, it just mitigates their impact to a certain extent.
- Continuing **efficiency improvement** within servers and offices
- **Sharing of lessons learned** across the Foundation and community as well as with the public
 - Wikimedia needs to set an example to other organizations in aiming to become truly carbon neutral.
- **Carbon neutral data centers**
 - In a region such as Europe, finding a green energy-powered data center has become easier than finding a carbon-powered one. It’s the opposite in the US.
 - Consider the carbon release from building data centers themselves and the carbon footprint for manufacturing the servers themselves
 - Assess the best options and location for eco-friendly servers.
- Reduce carbon emissions created by **transportation**

- Encourage participants to use more eco-friendly transport options, with balance on speed and eco-friendliness
- Trains sometimes cost more money and time than flights, but this “cost” can be worth the savings in emissions.
- **Make software more efficient** and less energy-consuming rather than adding more features

What are some challenges for a successful implementation

- Growing number of physical national, international, or regional events.
 - Increased air travel leads to increased carbon footprint
 - We will need “some” travel as it creates huge value for our work, but will need frameworks for when/if we allow it, also modes of travel (e.g., train vs. plane where available)
- Related to **rich socio-technical platforms** – finding open source platforms that scale in performance and function, to support edit-a-thons, meetings, collaboration, knowledge sharing. Currently experiments with chat.wmcloud.org (Mattermost) and meet.wmcloud.org (Jitsi) are limited and not scalable, though they have shown some glimmers of success.
 - These systems are typically hard to scale globally because they require "last-country" infrastructure, similar to what CDN (content delivery networks) do. Typically dozens of servers around the world help Zoom, Google Meet, et al. do their job to connect users of those systems, something Wikimedia does not have the infrastructure to do.
 - Supporting a wide range of devices, bandwidths and operating systems is non-trivial.
 - We’re distributed, so many of the things we’d typically be able to measure (people in an office) are now spread out (people working from homes), even though that impact is part of our footprint; even after the pandemic ends, our community will always be distributed, and perhaps more so after.
 - Having effective open source software to host online events in place of in-person events
 - The problem is really related to the cost of developing and maintaining such software. The idea of purely relying on open source software seems to be a challenge that everyone would need to face.
 - Developing new open source software isn’t feasible economically for the WMF alone to bear.
 - There will be counter-saving in travel and event costs.
 - Software needs ongoing maintenance, not only initial development and overhead cost.
 - Partner with existing organizations to develop or acquire software instead of building.
 - I think we could find some softwares already show-up, maybe we can use the data centers already used for the wikipedia projects.
- Doing thorough checks to avoid some organisations using the Foundation for greenwashing or pushing ideological agendas and allow the opportunity for any low-carbon energy to be considered from reliable scientific sources only and for the whole carbon footprint.

Steps for implementation

List 5 to 10 key actions and milestones for implementing this initiative until December 2022. As much as possible, try to think of steps or actions that are specific, realistic, and time-bound.

Step / Action / Milestone	By When?	Notes, details, ...
Identify needs for rich socio-technical platforms	July 2021	
Identify socio-technical platforms as candidates that are consistent with free/open principles	September 2021	
Test implementations of rich socio-technical platforms	December 2021	
Gradually decrease the number of physical national and international conferences requiring flights	December 2022	Alternate suggestion/considerations: Increase/refine the standards for when/if a conference could be held, who can go, where they are held, and how they may travel. This will also need to be balanced with an equity lens as a tradeoff.
Adopt a global policy discouraging flights over other means of travel and encouraging people to take trains		
Develop or find an open source	December 2021	

online meet/webinar platform which can take load of hundreds of participants and contain useful features like that we have on Zoom, Google meet etc.		
Publish an annual sustainability report and discuss it with the community.	Spring 2022 or earlier if possible	
Identify and assist communities that are already doing sustainable activities	ongoing	
Find on a movement-wide consensus defining 'carbon neutrality'		
Make a self-binding public statement on carbon neutrality and how we will get there		

Server side (current platform)		
Identify current system infrastructure operations	March 2021	Access the current (mediawiki) platform software
Branching off current mediawiki software platform (for reference) at testwiki work starts	When software improvement work starts	(Testwiki and one other wiki, e.g. branchwiki) are to be used as one group
Introduce core improvements, e.g.	End of 2022	

implementing CDN networks, on core mediawiki infrastructure (or whatever nearby)		
Either convince existing data centre providers to provide our servers with green energy, or switch data centres to a different providers	This is ongoing, but there should be some voice on that.	

People	
Who would like to take part in this initiative's working group? What are the skills and expertise that each actor will contribute?	
Community, group, affiliate, Foundation team	Optional: Skills / expertise / interest
<ul style="list-style-type: none"> ● WMF events team, devops team, CROW, Wikimania steering committee, regional conference planners, edit-a-thon and training community, educators in the movement ● Wikimedia Israel <ul style="list-style-type: none"> ○ Raising awareness as a key issue, for which Wikimedia projects are ideal. ○ Develop relevant partnerships locally. ● Wikimedia Sweden, France and Italy 	<ul style="list-style-type: none"> ● Supporting rich socio-technical platforms - requires devops experience, UX experience and knowledge of community requirements

OPTIONAL: Coordination

Who is/are interested in having additional responsibilities to coordinate this working group?

- Supporting **rich socio-technical platforms**, the events team of WMF could provide coordination here, as well as the CROW group (<https://meta.wikimedia.org/wiki/CROW>)

OPTIONAL: Is anyone missing who should be part of implementation? Think about who is missing and who was not involved in this area before, but whose presence is needed.

- Just putting it out here: We probably need a full-time sustainability position at the WMF
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Notes from the common room (post report back)

- How can we support working with partners to improve content. What work is needed from the WMF vs affiliates vs community members?
 - Some NGO agendas (e.g. GreenPeace, IPCC) may not necessarily follow the values of Wikimedia.
 - Define criteria for potential partner organizations.
 - WMF can encourage these major organizations to release free content, especially images.
 - Wikipedia tends to collect misinformation or outdated information over time on these topics. Acquiring partner resources helps to update these quickly.
 - The information from these organizations is already available. No particular added value in partnering with them.

- Consider the symbolic impact of Wikipedia, such as the SOPA/PIPA blackout. A similar approach could be “green Wikipedia” once a year.

I think one of the important issue is if we buy 100% of carbon offsets (right now cost around \$1/100kg) for the CO2 we released, would that count as "carbon nature"? If that's the case, we just need to consider how much does WMF would like to pay on the carbon offsets. If we think carbon neutral means we need 0 carbon release for our data centers(I am not sure how would this apply to the air travel), that will be a hard task. (Yes, we need to try our best to get 0 carbon release Data centers)

A side topic maybe we need to think a little bit more, like recycle of the servers, the carbon footprint for our new servers, and the other harmful gases released (like CFCs)