Sharing Sustainability: Challenges and Opportunities

Carrie Snyder, More Than Sustainability
John Rooks, The SOAP Group

Executive Overview

- Commons-style sharing—such as open source—is seen as having benefits such as spurring innovation and improving access and choice to technology
- We hypothesized that commons-style sharing of sustainability innovation and knowledge could help accelerate sustainability progress and reduce duplicative efforts (save money, time); so we conducted interviews to better understand the challenges and opportunities
- Sustainability professionals shared with us that sharing has changed over time as sustainability has become more central to business strategy and as more third-parties have demanded sustainability progress
- However, as sustainability has become more important to companies (and subsequently seen as a competitive advantage), the perceived risks of sharing have increased, leading to a shutting down of truly open sharing
- There are some more private forums (such as those under Chatham House rules) in which more sharing happens, but this information isn't made widely known; and often is more of the "what" than the "how"
- As the pressure for us to collectively become more sustainable will only increase, we encourage companies to continue to make efforts to share openly and publicly about sustainability knowledge and innovation—not just their accomplishments after the fact
- It is our hope that this preliminary research will catalyze more research, sharing methodologies and interest in developing truly collaborative platforms for expediting sustainable solutions for all.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Background and Overview

Open Source / Commons Sharing

Open source or commons sharing in the intellectual property (IP) space generally refers to developing IP (legally protected or otherwise) and sharing it freely and openly with the public; allowing for anyone to continue to develop, build upon, or alter as they see fit. The term open source is most commonly used in the context of software—e.g. code shared on Github—but the idea of commons sharing of IP is also reflected in legal frameworks like Creative Commons. Outside of the public domain, commons sharing is the most "open" type of sharing of IP generally available.

The benefits of sharing in the open-source / commons approaches are generally perceived to include:

- Spurring and expediting innovation
- Reducing the duplication due to siloed efforts
- Creating shared ecosystems and platforms
- Improving access and choice to technology
- Valuing donated work (as opposed to only paid work)
- Contributing to the democratization of technology

Applying Commons Sharing to Sustainability

As sustainability researchers with a background in technology, we are compelled to explore if commons sharing could be applied more in the sustainability space, bringing about some of the benefits listed above. Our hypothesis is that greater sharing of sustainability protocols, innovations, best practices, procedures, policies—any type of knowledge or innovation, really—will expedite collective sustainability progress.

As one example, we and other sustainability consultants and researchers regularly see examples of duplication of efforts where multiple companies separately commission extremely similar—if not identical—research work. Moreover, in our own consulting work we have seen first hand this duplication of efforts due to lack of sharing or designed competitiveness within departments and between companies.

In this "tide rising all boats" approach, we hypothesize that removing the barriers to sharing sustainability information (broadly defined) can act as a catalyst towards the global progress in sustainability that we all agree is lagging. Secondarily, this is also

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

about resource allocation and the avoidance of duplication of efforts as a cost savings measure. Lastly, we pose the question: is there an ethical obligation, too, for organizations to share sustainability information more freely? If not, then perhaps sustainability is no longer a global imperative as many of us believe and signal, but instead (for companies) should be accepted as a generic corporate strategy, on par with branding, sales, product development, supply chain, and so forth.

Our Research Approach

To explore this topic, we decided the best approach would be to commission ourselves to research commons-type sharing in the sustainability space. We embarked on a set of stakeholder interviews to understand:

- The benefits, challenges, opportunities, and risks of sharing
- Examples of where sharing has already occurred
- To what extent such sharing is "open", i.e. in the commons
- The forums and channels for which sharing did, does, and could happen
- What support might be needed to encourage more commons-type sharing

While the idea of collaboration, as opposed to sharing, between organizations naturally came up in our conversations, we decided to focus only on the sharing of sustainability knowledge and innovation from one party to others, rather than the pursuit of collaborative outcomes. Having said that, collaboration is another very important aspect of sustainability progress which certainly needs further attention.

Shortly after starting our research, we decided to limit our explorations to sharing in the electronics industry by companies, in part given the history of open source in the technology space, but also to generate preliminary findings more quickly through a more limited research scope.

To date, we have spoken with 17 professionals in sustainability roles, including: corporate sustainability practitioners (this constituted the majority of our interviews), academics, third-party sustainability collaboration organizations, sustainability consultants, and sustainability entrepreneurs. While most of the people we spoke with were in North America, many represented multi-national organizations with global sustainability remits. We anonymized all input to encourage honest feedback. All input to this research was generously donated by all the parties involved, including the researchers.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Changes in Sharing Over Time

Sharing in the Past

From our conversations, we learned there's a sense that sustainability sharing used to be different in the earlier days of sustainability. In these early days of modern corporate sustainability—1990s and 2000s—the sharing of ideas was less formal. A lot of it happened at tradeshows and conferences with industry peers. In some cases the sharing was "what we're doing" or "what worked" case studies—much as they remain today in these venues. But in others, there were more open conversations in small group sharing sessions, largely unorganized and ad hoc.

As a nascent business concern for most, sustainability was a bit of a novelty, and people working in it were both hungry for, and willing to share, information. At the same time, most of the people sharing in sustainability at that time were more practitioners, rather than key decision makers, in organizations. So while sharing happened more freely, the ability for the people doing the sharing to actually make change in their organizations, or to collaborate with other organizations to drive change, was limited.

Sustainability as Competitive Advantage

Over time, we heard that sustainability evolved from a "nice to have / feel good" component of corporate operations (primarily in communications, hence the abundance of early greenwashing), to now where it is increasingly viewed as a competitive advantage, even invested in and locked down as Intellectual Property. Understandably, this approach may not be in line with the intentions of the sustainability professionals.

> *"I do not see it as a competitive advantage or do not want to see it as a competitive advantage. I would much rather just see it as you know, this is where the term like corporate social responsibility or whatever the version of this generation could be, where it's like, no, this is just how corporations should be."*

> *"One of the challenges of thinking about it that way is that, as I've tried to say where I work, sustainability is not a feature. It's not a feature. It's*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

> *not something that you're going to put in this product release versus the last one. It's a mind shift that is required in the overall business model. So just as valuing openness because you believe in democratizing technology is not something that you're going to put as a feature spec in a product release. For I think engineers in particular, it can be quite hard to frame the value of something unless it's in those terms."*

So as the corporate strategy of sustainability has matured so have the reins for sharing become tighter. While conferences today are still popular spaces to share information, there's a sense that this flow of information has become more guarded and aligned with formal public announcements—due in part to the fact that sustainability is now seen as a market differentiator, a competitive advantage.

> *"It's funny to me because from where I sit, the executives that are using sustainability as a business opportunity right now and a product differentiating strategy are thinking in exactly the short-term narrative of business that is still needing to be radically rethought. And so that's why I tend to avoid seeing it as a product differentiation strategy because those business notions are precisely what we need to rethink."*

To be fair, this sense of competition seems to be both good and bad for sustainability at large. It is good because it increases competition and establishes a kind of arms race towards more sustainable businesses. Keeping up with the Joneses, and a fear of missing out to participate in various collaborations and group commitments, is a not uncommon business motivator. However, the more competitive the space for sustainability leadership, the tighter the grip has become to sharing the details of implementation.

> *Interviewer: "Do you find that other companies coming to market first with sustainability-related innovation influences your own company? You know what I mean—is the idea that somebody does it first, does that drive a lot of action?"*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Interviewee: "It does, actually. I think it does. I definitely see it to be the case where it becomes easier to drive action on something when you've shown that someone else that is a competitor has done it."

Interviewer: "I'm just curious how companies sort of compare the actions of other companies—if that plays into the analysis."

Interviewee 1: "I did do that with the blog [...]. It was actually in reference to [...] a new goal [...]. So we did look very closely at what peers had put out publicly, what the footnotes look like. I think that's a critical, when it's a public goal. I mean, I think that's a unique category in some ways, but to do due diligence and make sure that the level of transparency matches [... our] philosophy or just how what we want... what our sustainability leadership looks like. And that, again, transparency is key to that."

Interviewee 2: "And using other companies helps a lot. Like [another company] uses a carbon tax to generate money internally to be able to fund. And we absolutely are going to take the page out of the [other company's] pitch and go to [our leader] and say, "Hey, [the other company] is doing this, etc, right?""

In addition, companies are responding to increased external pressure around the topic of sustainability. Shareholders, NGOs, and government regulators are beginning to demand more sustainability information from corporations, with proof to back up claims. The acceptability of companies—e.g. through marketing teams—sharing vague or exaggerated claims about sustainability are ending, as the risks of punishment for perceived greenwashing are real. But this external pressure has further contributed to a gun-shy approach to sharing sustainability knowledge with others.

A Middle Stage in Development?

We would summarize our discussions about the environment of sustainability sharing as follows: if a feature of Early-Stage Sustainability included a more wide-eyed and relaxed format for sharing, and Late-Stage Sustainability could be envisioned as a

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

massive experiment in open-sourcing all sustainability information, data, policies, best practices, etc, in a moonshot to save the planet, then we are certainly in the Middle-Stage today. Corporations have to a large extent locked their safes, protecting much of what they do, how they do it, and, likely most importantly, lessons learned in where they have failed in the sustainability arms race.

This Middle-Stage is perhaps the most dangerous for the sustainability movement in general, as it rewards those who know and appear to do the most, but share the least—usually the largest companies due to their extensive financial resources and power. Middle-Stage sustainability unfortunately in some ways has become more about hoarding information (in the hopes of potentially gaining profit, or at the least, winning the favor of shareholders, employees, customers, and the government) than in supporting global sustainability progress, despite the wishes and aspirations of many of the individual sustainability practitioners we spoke with. And ironically, the thing many of us have wished for in the past—for corporations to care more about and invest more in sustainability—has come with the price tag of the siloing and guarding of sustainability information. The same goes for customers caring more about sustainability.

> *"It's one of those things where as an industry or as a sustainability profession industry, let's say, we're of course always wanting consumers to value sustainability more and make more purchase decisions. And they do to some extent, but we wish that they always did do more. But ironically, the more that they value sustainability, the less it becomes an easy thing to share."*

The Partial Centrality of Sustainability to Business Strategy

We also concluded from our interviews that many companies themselves are at what we would call a middle-stage of sustainability maturity. For while it's common for corporations to make claims that sustainability is a core part of their business strategy—for example, naming Chief Sustainability Officers—discussions about making sustainability announcements seem to be brokered by primarily by legal teams, as opposed to being a business discussion weighing risk and benefits, including other teams like sales and marketing.

Perhaps this is because sustainability in electronics isn't 100% clear as a customer requirement—especially at the product attribute level (where many electronics

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

companies are still treating it). At this stage in many companies' development, the sales teams, for example, do not appear to be a significant player in advocating for greater sustainability transparency and progress, indicating that sustainability isn't yet entirely central to business strategy.

> *"The other thing [...] our company is going through is, the people who are having the risk discussion are all risk-based people, finance, legal, etc. And in the situations, corporations do not intelligently say, I want my risk posture to be here. And they're excluding all the market access people. And so you get this sort of tilted viewpoint and then you're actually working against sustainability, right? Whereas if you had the sales guys in the conversation, they'd be like, "Oh, we're not saying enough." And hopefully, there would be a risk balance, right?"*

The consequence of sustainability information sharing being monitored primarily by teams tasked with managing risk is that requests by sustainability teams are less likely to end with approval, or perhaps with an approval that took months to obtain. Such requests include but are not limited to sharing mechanisms like blog posts, publicly announced goals, as well industry research that could clearly be of benefit to other parties. In short, it's become a lot of work for sustainability teams to share what they know and have learned.

> *"It's painful to get content, to get approved, to share externally. It is not easy."*

Risks to Sharing

Our interviewees shared with us their doubts about whether the risks named by other teams forbidding sharing were actually based on past company history, public stories, or case law, or if they were simply perceived risks.

> *"The other thing [that would] be fascinating is to understand, okay, everybody's worried about risk. What are the real events that have happened? When has the meteor struck the earth? Because I don't think there's many."*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Some of the risks they were told as reasons for not sharing included:

- Legal actions by other organizations who incurred damages from using information shared by the company
- Being penalized by government regulators when sufficient support for claims couldn't be provided
- Not sharing smaller details or accomplishments at the risk of it sounding like greenwashing
- Revealing other protected IP directly or indirectly through sharing sustainability information (e.g. sharing about green cleaners for electronics might indicate the technical details of the product itself)
- Violating other company policies in place such as a policy to not share the names of supply chain partners

> *"Especially with sustainability, things that often have supply chain implications, there's also a risk of sharing. The sustainability thing you're sharing may not be the risky part, it's the other things that you learn in the process that then represent a potential risk."*

> *"So all of a sudden, does it become something we're going to get sued for? Or you told us [others] to do this and now we're being sued for greenwashing or who knows what? So I do think legal risk, de-risking the publication of information and getting to the point where [... it] gets more and more absurd."*

In addition, what is seen as IP worth protecting seems to vary between companies (although as mentioned above the bar for sharing is getting increasingly higher), indicating that what can be shared is a question of each company's tolerance for risk. Lastly, one of the most valuable and critical pieces of information to share may be failures and lessons learned, a complicated and uncomfortable effort for organizational transparency.

Sustainability Sharing Today

Where and How to Share

Despite all the hurdles to sharing sustainability information, we found that sustainability professionals have still persisted in sharing a variety of knowledge and

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

information. Here are various approaches to sharing they mentioned (which aren't necessarily exclusive from each other):

- Developing or learning something within a company and then sharing it externally (publicly)—e.g. announcing your recycled material content in your product
- Creating industry databases that house data important to common processes—e.g. green chemistry databases, HIGG index (in the fashion industry), etc.
- Leveraging an industry group (such a trade organization or a sustainability convening group) to collect and share information—e.g. anonymous surveys about sustainability spend and team sizes
- Sharing formally and informally in smaller groups (usually with Chatham House Rules)—e.g. sharing with your peers best practices of employee engagement around sustainability
- Discussing in private conversations what you know or have learned in individual conversations with other sustainability professionals—e.g. explaining the details how you overcame the challenges of to get approval from your executives to fund carbon offsets

Some approaches are more open than others, and not surprisingly, the more protected / closed approaches lead to more details being shared.

> *"I guess I would just say that is why we, me personally and others participate in some of these collaborations because many of them are either Chatham House Rule or even stronger kind of confidentiality. And we're all clear of what can be shared and can't be shared because we work in the same more or less context. It's pretty large [...] companies. And so there's information sharing and I think some innovation inspiring or at least best practice learning."*

While collaboration was out of scope for this research, there were also more collaborative forms of sharing mentioned, including working in a limited group of organizations to get a framework proposed and then inviting others to join and joint efforts to pilot sustainability solutions with consumers.

Shareable and Non-Sharable Information

Types of commonly shareable Information we were told about included:

- Challenges in sustainability

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

- Opinions about regulation
- Perceptions of industry problems to be solved
- Sizeable accomplishments (after complete) and public goals

Types of information that is sometimes shared, sometimes not:

- Supply chain drivers (market creation)
- Common science (carbon calculations, LCAs, etc.)
- Chemical databases (ingredients)
- Unused Intellectual Property

> *"What's been on my mind [...] is some of the work that we did several years ago was done by people that don't even work at our company anymore. And can you imagine how many studies there are like that that are just sitting in files conducted by people who don't even work for the company, about people who don't even remember the person who did the survey."*

More recently, we see the development of industry databases—e.g. green chemistry—as being part of pooled resources and shared within and across industries. Common data sets that an industry uses en masse has become a safer piece of content to share. Often this can also be justified as a way to create a market for more sustainable ingredients sourced through supply chains and support scaling. This sharing may happen immediately, or after some time of one company gaining a first-to-market advantage.

> *"And so a lot of the research on sustainability, innovation I've seen in manufacturing, comes from that fact that there is a certain sense of responsibility to not differentiate on some of these things that are just really unknown at the moment that need to be figured out. We need to find a way to manufacture silicon without this particular gas, and nobody knows how to do that. And so it's almost like the level of awareness of how important that is has led to this approach. Whereas if you think about that in reverse, just about every other feature or manufacturing process is guarded so secretly."*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

In addition, we heard that the "ingredients" but not the "recipe"—i.e. the what but not the how—are often shared. This expression comes from our discussions about safe / green chemistry, where ingredients but not formulations were shared. This was reflected similarly in other conversations where high level accomplishments were shared, but the details of how they got there—or their challenges—were not shared. Individuals would then have to follow up with the sharer to see if they would be willing to provide more informal guidance on the details, to help make the information more actionable. Compare this approach to open source software, where the entire code is made available. Clearly, not all forms of sharing are equally beneficial to others, nor equally commons-like.

> *"Well, I think a lot of it tends to be very informal, right? And what you're discussing a lot of times is more like not even business process, but more like business perspective, is what I would say. It's kind of, here's our point of view on this sort of thing, and here are some of the problems we see. And I think that ends up being the sort of nature of the discussions in these forums is sort of that level and not so much about, here's exactly how our company deals with that problem, or here's our bit of intellectual property around that. It's more like, you sort of get a sense of people's point of view around it and you can sort of infer how they might be solving it or addressing it internally."*

> *Interviewer: "We're hearing this idea of sustainability as a competitive advantage, which seems in some way to contradict with the idea of sharing information freely. So I was curious to what extent that seems to exist within your company?"*
>
> *Interviewee: "Well, we do think it's a competitive differentiator. I don't know that we would not share our information with the world. But, you know, it's a lot like what we went through with [supply chain] partners. I mean, they were always worried about, this is my innovation. I'm not going to share with everybody. But we're like, look, everybody's going to figure this stuff out anyway. What's really going to differentiate you is how fast you can change and adapt and stuff like that. Easy to say, hard to do."*

Types of information rarely shared:

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

- Failures
- Processes (recipes)
- Anything perceived to be valuable IP

From the examples mentioned to us of what companies have and have not been able to share, we unfortunately didn't see a clear pattern to the types of information best suited for sustainability sharing, especially commons-style sharing. In fact, we heard an example of information that sustainability professionals from multiple companies at first thought could be shared, but which either ran into barriers once they ask for approval from their legal and PR colleagues, or simply became lower on their own priority lists, and the end result was that nothing was shared.

> *"There's not a general consensus around the idea that the company share anything, actually. I mean, there's no categories that companies default always definitely share, right? So I think when it comes to sustainability, there's a lot of stakeholders that you would have to think about to agree before you have an open policy around sharing sustainability insights."*

> *"I would say every category has stuff that we could share. And again, you could think about it like conferences. Do people go to conferences in every category? Yes. Do they have stuff to share? Yes. Does it get shared in a way that's actually interesting and useful? That's where it's debatable. So I think the whole organization, every single topic from human rights to circularity to net zero and everything in between there is shareable information, because I basically believe it's sort of foundational to every subject area."*

If You Want to Share More

We, the researchers, still hold to our hypothesis that more open, commons-style sharing could have benefits to global sustainability progress—not to mention to the sharing and receiving parties—despite the challenges of doing so. To that end, we'd like to provide some reasons for participating in sharing and some ways to go about it.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Why Share (as an organization)

Given the effort and potential cost required to share sustainability information, here's what we learned about why companies may wish to share:

- Credit / public image
- Philanthropy towards other organizations and the industry
- Ethics (question: is it ethical to *not* share best practices in sustainability?)
- Needing standardization of approaches (what we call 'open source by necessity'), including things like alignment to scale purchasing to reduce costs
- Requirements by a third-party such as shareholders, government, NGOs, and customers to be more transparent

> *"If you can demonstrate that you believe in something that helps others, you get a certain kind of credit that is different than the credit of that's my idea, or I'm leading this alone. It's more like [...] a value credit, so to speak."*

Experienced Companies Sharing Helps

We heard about companies (usually smaller, less experienced) asking other companies further along in their sustainability journey about how to do things. At the same time, we didn't hear a long list of "here's what I would love to know from other companies" from the larger companies. After all, the larger companies often have more resources to try and learn on their own.

> *"I think it does also relate to the health of the company, the age of the company in some ways because if you're on the rise and you're looking to create success for the first time, I suspect that there is more willingness to share and there's more of an openness to doing anything to succeed for the first time. But for a company that's older, I think, again, that fear comes into play of, are we giving away the secrets of success if we share too widely?"*

Experienced and/or large company sharing is important overall, as word of these companies can be important to others having the confidence to take action themselves.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

> *"I think when we first did it, it was like, okay, well, we did some research [...] and we're sharing [...]. When I was first contemplating that, I was expecting a lot of pushback and the opposite was true, which was like, okay, fantastic. It was just taken as gospel truth immediately. And there was almost no critique or concern whatsoever about the fact that this came from [us, a large company]."*

> *Interviewer: "I like this idea of certain people who are trusted in the sustainability space, certain brands—maybe certain people, I don't know—can say "I'm committing to this." And that helps everyone just get over some indecision and maybe move forward faster."*
>
> *Interviewee: "Absolutely. Yeah, absolutely. Whether it's overtly shared or just sort of like you discover it, it definitely gives you confidence that you can move forward."*

Making the Business Case for Sharing

Making the business case for sharing can be tricky. Especially if you put things out in the commons, it's hard to measure its impact, because not everyone will report back to you how they used your information.

Applying for awards from third parties—to get credit for the information you have shared—has been a successful strategy to convince internal stakeholders that sharing was worth it, but again these are often polished learnings and not detailed "how to" case studies.

At the same time, others pointed out their ultimate vision of sustainability not as information that gets hoarded and not being used as competitive advantage in the typical sense. From this perspective, developing a business case for sharing might not be the driving factor anyway.

> *Interviewer: "What are the, we'll say theoretical so that we don't have to say they're actual, ways in which this [open sourcing, sharing] can backfire?"*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

> *Interviewee: "At a basic level, people don't understand that it makes money. So if something is open, then it seems as though it's being given away for free, and that should be something that a company makes money on. Like IP is valuable, therefore it should be traded, with a very brutal understanding of the economic transactions that that entails. [...] The main thing I would say in terms of how it backfires is just creating confusion about the operating business model of the company. If they are trying to use open as a way of differentiating that they haven't sufficiently educated the employee base on how this does translate to business value, and what everybody cherishes is just this constant idea of growth through profit."*

Engage Third Parties if Needed

Often companies need a conveying body to lend credibility to the sharing group, establish ground rules and act as an intermediary between all participants. These may include dues-driven industry coalitions or industry trade associations, and for-hire facilitators or consultants adept at managing the priorities and personalities of corporate players. In addition to someone to facilitate and "get the ball rolling," there is a small but growing opportunity for an after-the-fact manager of information, databases, and idea-flow once sharing has begun.

> *"You need a facilitator sometimes to get that ball rolling. Unfortunately, the person who's going to help; they say 'chop wood, carry water.' In open-source software, there's a group called the To-Do Group, which is... It splits the groups of open source program offices from different companies. But really, until they had their program manager to try to facilitate and get... Everyone's like, "Yeah, we want to share, we want to do stuff." But just could not get the wheels totally. So sometimes it;s really worth it to have someone who's sort of a professional cat herder. But if you give them something, a little nugget, a little framework that they can, "Okay. I took a first pass at doing this thing," and then sometimes it's inertia snowball."*

Consider Anonymization, if Necessary

In order to get past early roadblocks to sharing, anonymization may help. In some cases it may be feasible for a third-party to scrub documents for

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

corporation-identifying marks and to redact certain information that could reveal sources. This provides a safety-guard for corporations that may open up more sharing opportunities, like lessons learned, failures, and other pieces of information important to advancing sustainability.

> *"How do companies try to get factory workers [...] to try to comply with worker safety things? That might be one of those things where if people are going to share, it's going to be anonymized. You know what I'm saying? Versus other things which represent a more clear cut, all-positive technical accomplishment of something else that might be the sort of thing that you might want to share and be known for sharing."*

Anonymization also helps in situations where problems are detailed but the company doesn't yet have solutions in place to address them. Anonymous sharing can avoid difficult questions from the outside while internal work is still in progress.

Ensure the "Receivability" of Information You Share

It would be wasted effort to share something that no one hears about or no one is able to use in an actionable way. For example, if all you want to do is get credit for doing something, then simply making the announcement understandable to others is all that's required. But if you want to support others in generating similar results, then more effort is required.

> *"We are committed [...] to renewable energy and circularity and this and that, but I just don't think it's maybe enough or even if it gets out there, does anyone look at it? I don't know."*

Data repositories are a great example of sharing that requires interpretation and support in order to be valuable to the receiving parties. We've heard that almost a full-time person is needed for a database to be actually used by others in a meaningful way. All of this speaks to manpower: to coordinate, to push for sharing, to gather data, to maintain databases, to explain the value of the information, etc...

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

> *"That's a similar issue with open source. I mean, it's one thing to just put your code out there and say, "Here, have at it." It's something else to try to build a community or to explain how it's used to put the instructions, how to compile it, how to make it do something, right, which you'd think is like a no-brainer, but a lot of projects don't. They just put it out there. And that's not a recipe for success. You need to be thinking about how you're going to bring a community along and how to nurture it and reinvest in it. Because yeah, absolutely. Otherwise, it's like you said, it's like, here's the data lake and then it's like, well, great, you [the creator] need to help."*

Conclusion

This research was a preliminary exploration of the opportunity to increase commons-like sharing of sustainability information and knowledge, within one industry. We learned several things of note:

First, as sustainability importance increases occurs at companies—both from third-party requirements for transparency and progress, and the overall change towards incorporating sustainability more centrally into business strategy—the pressure to actually share *less* has unfortunately increased. This is especially true of any knowledge or information that is tentative, unfavorable, or seen as being able to create competitive advantage (which has expanded over time).

Despite these challenges, sustainability professionals have persisted in sharing information in some ways. They do this often in line with a personal vision—which frankly may or may not be shared by the organizations they work for—that sustainability supercedes market advantages, or simply a belief that sustainability progress works better with alignment and collaboration from others.

Almost every sustainability professional at a company highlighted more things they would like to learn about from others, on all kinds of topics: tools and calculation approaches, supply chains partners and sources, lessons learned. And of course, from a 'receiving' standpoint, the more detail that is shared, the better.

While we don't yet have clear solutions to some of the bigger pressures going on at companies that discourage sharing (e.g. legal teams heavily monitoring sharing requests), there are some practical areas that could be addressed today. In addition to

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

us and others continuing research and discussions about commons-like sharing in sustainability, we heard about the potential for more third-party and consultant services to facilitate sharing (the professional "cat herders" as one interviewee called them). In addition, helping companies navigate the legal implications of sharing, perhaps through open source licensing templates was requested:

> *"If I knew that there was a sustainability open source license templated agreement, that all the lawyers got together with their legal nonprofit organization that coordinated all this, I would feel much as a sustainability person, I would feel much more at ease saying like, "Oh yeah, let's make it one of those open source projects. Because I realize this is a template for it and I don't have to go think through all the implications on my own."*

Finally, we would like to thank our interviewees for participating with us in this research. In the spirit of commons sharing, this report is being made available through Creative Commons Attribution Share-Alike licensing. We welcome others to continue this dialogue and exploration, building and sharing their findings for the advancement of global sustainability progress.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

About the Researchers

Carrie Snyder is the founder of More Than Sustainability, a sustainability consultancy helping organizations with insight and research. Before her consulting career, Carrie spearheaded major initiatives for a multinational tech company, developing direct experience in the challenges and opportunities associated with product reuse, repair, and resale. Carrie also created and taught a highly-rated masters degree level course on the Circular Economy at Harvard Extension School.

John Rooks is the Founder and Director of Human and Cultural Insights of Sustainability Organization Advocacy Partners (aka The SOAP Group), a twenty-year old sustainability consulting firm. SOAP provides sustainability culture consulting focusing on consumers, employees, and other important stakeholders. John has a masters in Cultural Theory, and is the author of *More Than Promote—A Monkey Wrencher's Guide to Authentic Marketing* and *EcoHegemony: How Sustainability Influences Pop-cultures Or Vice Versa*. He has consulted with Fortune 10 companies, government organizations, and mom and pops on sustainability initiatives and curious problems.

About this Document

v 1.5 *This document is an initial set of reflections of what we anticipate to be an ongoing exploration. The latest version of this work can be found at morethansustainability.com/opensourceresearch.*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.