MSU_Kristin_Blackler_Interview

- Interviewer1: So a lot of these questions Kristin I think we already have the answer to from you but we're sort of using this like a practice interview to get ready for our future interviews with other schools. But to start off can you tell us about your role here at MSU?
- KB: So my title is the Director of the Office of Sustainability and I have a wide variety of duties. I need to revisit what they are because it changes. So I report to the Vice President for Admin and Finance. And then our office that I manage is funded by the ASMSU student fee. So it's a really broad mandate to identify ways to make our operations more sustainable on campus. I guess if I had an elevator pitch on what I think my job is it's really to lessen the disconnect between what is being taught in classes and what you experience when you walk outside that door. Which I think is then also iterative because then it feeds into more research, you know those kind of things. So yeah in a nutshell that's what I wake up every day and try to do.

But on a day to day basis it'll be between helping with student projects or participating in building committee meetings, planning meetings, identifying opportunities to like help people understand climate action, climate action planning, greenhouse gas inventory. My office just recently took the reporting function in house. So we're doing that because I wanted to do that. It was only getting done not even every 3 years and I wanted to make sure we could do that annually to really track progress.

We also do the STARS report for campus through AASHE, that's managed through my office. And then I work with a lot of... staff to identify projects. And then find funding for those projects. And I work with a lot of faculty to help bring that information to the students. In a nutshell, duties as assigned.

I1: So you chose to take on the extra work of doing the yearly reporting?

KB: Yeah. So things have evolved over time. So when I first got to campus, I didn't know it when I was interviewing but I was also in charge of the fledgling recycling program so that took up a lot of my time actually and I had no experience in that because where I had gone to college and where I had worked prior to this that was just part of facilities. And that's where I want to get it to be, just things that happen in the background.

So over time through those relationships, it's finally gotten to the place now where after we did our first STARS report I had really good data. And a road map to how we could make better progress in a number of areas. And then what was a challenge, because STARS is also on a 3 year reporting cycle. So the challenge was after 3 years, every 3 years it's just really hard to get the people reconnected with that data. So I wanted to do it on an annual basis so it's more of an incremental update. And we used to, campus used to use a consultant to do our greenhouse gas report, our inventory and that was quite expensive. So we did some research and the university standard is this program SIMAP out of University of New Hampshire. So knock some zeroes off, so by comparison I was like yeah let's do that. And let me, let us do that inside my office because we were chasing down that information anyway. So I wanted to kind of eliminate the middle man. There isn't a central repository for that so we have to call engineering... well we can get into that if that's some of your questions. So the engineering department has our utility data. And then we work with the facilities department has the fleet data and the waste data, water data.

And then I work with University Business Services because we pull a lot of our scope 3 information from our credit card reports. So you can pull that on the back end with accounting codes and different things that flag how many people, where they flew, how

many people rented cars for business travel, where did they go, mileage and things like that so it's pretty... it's not perfect but we're getting better every year with that. And then if they know we're coming for it every year they're more prepared so we'll see. This is going to be a weird year because of no travel so we'll see. It might be a good year to test and see how accurate we've been.

I1: What is your connection to the development or implementation of our current climate action plan?

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KB: So I positioned so that my office will be responsible for this new update or revision. And I work in partnership with the Campus Sustainability Advisory Council which has a faculty chair who is Julia Haggerty. It has faculty staff and student representation that. It's a pretty good cross section of people who work on sustainability and campus, like that Usual Suspects movie. A lot of the same people but they're knowledgeable. So they're kind of subject area experts for a lot of the things that we're talking about. We're the, I guess you would call it the lead author or the coordinating body for the new climate action plan. However we will rely heavily on the analyses and expert opinion of our engineering staff.

And then the goal for this update that we're gearing up and then we'll start working on this summer is pairing that with a robust financial assessment as well. So that we can look and see these are some strategies that we'd like to pursue. This what the cost would be, this is what the cost savings would be and these are some potential ways to finance and fund it. I really was impressed with the 2011 climate action plan. I think it's a really deep document but there wasn't a way to... there was no champion of it. It didn't really have a home and there was no financial piece that was put to that.

So up til now for the most part the stuff is hard to calculate often times because it's kind of washed in with a lot with a lot of other projects but up until now we're pretty confident that everything we've done has actually saved campus money. But as we move to the transition off of natural gas that's some massive infrastructure changes that I can't guarantee will save us money so that's what I am fretting about right now. So how do I build the plan and so we're not, either no one is shocked when that happens. When we're like okay we're going to do this and we're going to have to spend \$X, I don't want people being like what the heck, sustainability is supposed to save us money. I want people to be really aware of the kind of phase changes that we might have to go through.

And then also creatively or carefully sort of show over time this is what we've saved with our energy updates and water efficiency programs. So if you just were to put that in a bucket, sort of it's like offsetting your finances in a way. Like I saved this much money over here so don't freak out when we're going to spend that exact money moving forward. That kind of thing. And we haven't really had a good way of tracking that because it gets blended in with a lot of different projects. So that's one area of opportunity or challenge for me.

10:47

- I1: Do you think this financial analysis going forward with a new plan will make, will increase its success?
- KB: I really hope so. It's not that we don't do that with my current projects. It's just that we haven't ever gone out and asked for a dollar amount. It's been in the project realm of anything from like a couple hundred dollars, to thousand dollars, all the way up to the Romney Oval was a few million dollars. Which is tied to, but we knew would save us a lot of money over ti me. If we're talking like \$25M project which it's conceivable, that's something

we would have to take a lot of planning ahead of time. A lot of the stuff that we've done on campus, we've really benefited from... it's been a reaction, I don't want to call it totally reactionary because it's things that we sort of have oh if this happened we would love to do this. But we haven't been the one driving it.

So our first major project that led to us starting to do the energy districting, was Jabbs Hall which was a private donation. So an alumni came in and ponied up \$20M for a building. We weren't expecting that and once we got it we tried to make the most of it with... So a lot of the stuff that we do on campus just so you guys know too and it might be interesting to see how other campuses do this, some form of construction will trigger a bunch of other upgrades. That is also really cost effective so when Jabbs, when we started conceiving about how we would build Jabbs hall that provided the opportunity to install the geothermal wells in between Romney.

Same exact, we made that same thing with Asbjornson Hall, so that triggered some sewer upgrades believe it or not, utility upgrades under Grant St. and then geothermal that was sort of overbuilt because we could in anticipation of other projects that might come online. And then those projects came online a lot faster than we anticipated. So right after that we had American Indian Hall, Romney Hall and now the Wellness Center. And all of those are sort of tied in.

A good example of that is the American Indian Hall. We fund-raised an extra million dollars outside of that project budget. What was donated, in order to make improvements on Roberts Hall, in the parking lot that used to be between Roberts and American Indian Hall. So there's geothermal wells in that area too. So we knew we had to like, we knew we were going to be tearing that up for the geothermal wells. And then when we fundraised an extra

million to upgrade a lot of storm water, make room for more... pedestrian friendly, people friendly, landscaping, all of that other stuff. We can't really plan for that, we just have to be ready. When something like that triggers, we need to be really ready with like how to make that work. Because if we were to go back and do it, it would twice as expensive. So trying to align those costs. This is where you get in real trouble with your home renovations. Oh it's already torn up what's another... kind of thing. But for us on a campus-wide area any time we've had these new buildings that we've been building have really triggered an opportunity to make bigger improvements through campus. So can't plan for that though unfortunately as much as we want.

And that's also a larger problem with how universities are funded. So we have major maintenance that we get funding from the state to do major maintenance but in reality it's a percentage, like a tiny percentage of what we actually need to do on our campus. So I am really fortunate, I feel like we're really fortunate at MSU because the engineering staff and facility staff are so sustainability minded that we tend to look for things that are sustainability projects that we could move to the front of that list so that we're not just... focusing on like repairing things. We're kind of focusing on how do we make a major improvement in our greenhouse gas emissions and make things better instead of just like repainting. You know what I mean? So we try to evaluate the projects like that but it's not an official policy. It's just a philosophy that's really embedded within that department in particular. So there are some really phenomenal people.

I could facilitate an interview, I was thinking about this, or a drop in, the Associate Vice President, so Dan Stevenson, he and I have the same boss so we meet all the time. He's the reason I wanted to work here. He used to be the campus energy manager and when I did the campus tour with him and he talked about the energy districting and what they were doing it was really cool to seen an engineer think that creatively, really thinking out of the box back then. And then he's gone on to hire awesome people beneath him. Megan Stroh is the new campus energy manager and she's brilliant. And Duke Elliot we have a position that they created. He's a resource conservation engineer. So he and I work together all the time. I'll just come up with wacky ideas and Duke will figure out how to do those. (laughs) So it's really fun! For me anyway, I am like can we talk about this.

I have a little more time. I should've said that too. I feel like that's a big part of my job is to be tracking what other schools are doing, what trends are out there, what communities are doing. And then with an eye towards what might work here. And then one curated some things, Duke and Megan and I meet regularly. At least once a month to talk about what we're doing. And then I can bring them examples and show them hey. For example I was just talking about this with Dan Stevenson yesterday.

So I was at a conference last week and I saw a presentation by University of British Columbia that blew my mind. They're doing a lot of the things that we're doing but then it was like and they had these extra things like bio-methane boilers. To me I was like oh my gosh, we produce so much compost what if we put it right into that and there was no methane from that. It all went to heating our building. So those are the kinds of projects and presentations that I bring to them to get them thinking creatively, because they don't often have the time.

I shouldn't say this, I am guessing they don't spend as much time reading about it. Like I would love to have a different job but I couldn't because this is all I read about all the time. (laughing) In fact I just... I got a brand new book yesterday and I want to be ready to read it,

but it was brand new climate policy book. I was like oh, okay that's the nerdiest thing every. But yeah what else would I do with my time! Especially now, not going out to dinner so might as well read a book!

Yeah so that's really kind of an informal way of working on it. I know other places are a lot more structured and potentially we might get there some day. But there's a whole lot of trust amongst the people that I work with. And with that trust and that sort of short hand... I know that even though we're not in active climate action planning phase for these next couple months I know that they're in their offices identifying all kinds of projects that if we had a plan they would do anyway. So if we didn't have a plan this stuff would happen. The goal of the plan is to kind of bring our policies inline to help accelerate what they're trying to do and to have a better understanding from the financial office, the budget director of why we're trying to do this. So that when those big proposals come before them they're not going to freak out. And then hopefully I can have something public if students are interested in t his too. And I am not a good judge of that but why wouldn't you want to read the climate action plan. What a great way to spend your afternoon! Kidding. You guys have read probably more than I have at this point in time. I read a few...

It's been really cool to see this evolve and grow. At first it was a real niche activity that only a few people did. And now cities are doing it. States are doing it. We'll see this, private businesses are coming up with. I forget the statistic but, because it keeps changing rapidly, but it was something like 90% of Fortune 500 companies have a sustainability report, monitor their greenhouse gas emissions. When you see something become so common place in corporate culture for me it's really sort of promising. That's my hope and that's why the conference is called Second Nature. We were always like oh it needs to be second nature that

you think about climate change and think about your different activities. It needs to be part of the equation. So yeah there have been a lot of changes since I started working in this realm, for the better. It's just way slower than we want. Not keeping track with the science.

- I1: So you were talking about how you have a lot of trust in your office and it's not necessarily a specific policy that you have to push sustainability projects to the top of the list. Is making some sort of policy around that going to be a part of this next plan, so no matter who is working in that office, things will be sustainability focused?
- KB: That's where the committee, the working group for the climate action plan to decide, but that would be a real hope for me that that becomes a factor by which you have to evaluate your projects, What is the impact of what you're trying to do in the climate? Is it (SIRS?) advancing... you know are we able to keep it below 2 degrees Celsius or not and if it's not why. And how can you justify that. And policy is kind of a strong weird word on campus. It's not exactly clear who gets to make policies or how they come to be. You'll see a lot of policy updates on campus if you watch the University (?) meetings but very few new policies. Often most of the policies we have in place have to do with alcohol or different things. So I am not sure that I can get an actual written policy but I am going to try!

And to see that because it will provide a backstop that I think is really necessary too. Right now we've had a lot of success with people being convinced and encouraged to do the right thing. But there's really no reason for them to do that other than peer pressure. (laughs) So like... or you know good PR, those kind of things which we'll take. But there's no other reason why they shouldn't so nothing... Peer pressure is important. A lot of decisions are based on what a small group of people feel is the right decision for the university. So it's a matter of making sure that those small group of people know that the larger group of people

it's really important to them and that's part of that discussion.

And more important probably than the policy... just based on my experience at MSU is a written public commitment. Because we report out on those targets so if you're ever really curious the first Wednesday of every month President Cruzado hosts a giant meeting called University Council. And it's not just representatives from MSU. It's actually all the MSU campuses. And every month there's a woman named Chris Fastnell and she the VP from the Office of Planning and Analysis and she reports out on the metrics that are in the strategic plan. So in the last strategic plan I had two metrics that we really tracked. So it was greenhouse gas reduction and waste driven metric. So every year I knew she was going to call and ask for an update and it had to be publicly accountable to where we were and I had to have the data at the ready. And it's not just true of my programs. It's true of every program in our strategic plan is tracked and reported on.

So that's probably the true power behind a lot of the carbon neutrality goal that I want to set. And also I am saying I but it's a we. And also when you're tracking the things that we do, we had to go before a big group of people and the news and say these are our greenhouse gas emissions for this year. Is there a reduction or increase and boy did we not want to have an increase. And so we had to report on that publicly to Chris Fastnell. When you know you've got that test coming up you study for it! (laughs) So that's another thing I think is really important, especially I think that's part of human nature. We want to do well and we want to know how to succeed, so if we have kind of a pathway that will make it much easier to do that. I am always surprised as how important those things are to people. They are to me too but it's just really funny! It's that type A nerd thing coming out, oh God! (laughs) And you're surrounded by them. All your faculty, they were students so it kind of explains why everyone

gets so tracked into how we measure up, how we're graded. So let's use that to our advantage. Sorry these are really good questions!

I1: So do you feel we're hitting the benchmarks of our... of the 2011 climate action plan?

KB: Yes. So that one was a 20% reduction below 2009 levels so basically the first year they did an inventory by the year 2025. We've already surpassed that so that's another reason why we're writing a new goal. And we also want to talk about these things in sort of whole numbers because we can skew the data really well. We've had unprecedented growth in both people and buildings. When we talk about this we talk about certain things overall so that's made it more challenging if I wanted to show what the energy per body on campus or the greenhouse gas emissions per body which some people manipulate that. I would be able to tell a really compelling story, but that's a wash so we want overall numbers.

But no it's not easy and the thing that really were a pain is our atmosphere doesn't care whether those emissions are coming from a power plant or a car, but we track them separately. So I worry constantly that the gains we're making with our buildings, our scope 1 and scope 2 emissions are literally being eaten alive by the increase in people driving to campus and doing other things too. So that's a challenge and we don't have good data about that at all. So that's the next hurdle that I have. We have a transportation survey that I'm really proud of. I spent a lot of time on it. I just need to get it out.

And this is a question for you guys. I was just filling some things, it's tempting to put it out now. But on the flip side it asks you to reflect back to what your behaviors were for the past two weeks. And I think everyone is going to say I sat at home. So I would like to have this not in a pandemic year. So we've talked about delaying that until we return back to a more normal situation, even if it's hybrid. Which a lot of people, some people would like. I

know a lot of staff would appreciate the flexibility to sometimes work from home and sometimes come in. That's probably a more accurate representation in the hybrid mode. We were getting geared up to do that last April and pulled it, because the campus is shut down. This is going to give me the worst data that will mean nothing so we're kind of sitting on that. There has to be a better way than surveys but that's kind of the standard of practice right now so we'll see. Wish me luck! (laughs)

32:37

- I1: What are the biggest barriers that you've run into or the university has run into in terms of implementing the climate action plan?
- KB: It's not a bad thing but it's a reality. We have a lot of competing priorities on campus and a lot of things that need improvement. So when I talked about deferred maintenance for building we have that also for compliance. The bulk of our budget and I'll send you some presentations that I have and some data about this. So the overwhelming majority of the money that comes into the campus, so our overall pool of money we have to make decisions goes to faculty and staff. So that's just like HR. so it just goes back to people. So that's a good thing. But it's also, that's... people look at the overall budget of the university and just think oh we should be able to spent \$X on these different sustainability initiatives. And in reality over overall total including, so we break things out between academics, so that's stated funded and auxiliary which is revenue funded, so fee funded basically. All totaled together our utility budget for campus is about 6% of the overall campus budget. So it's pretty tiny. So we're looking at how we make those big changes.

So when you see that as a whole I think people sort of don't get the sense of urgency maybe... I should probably back up. In a nutshell that's probably the biggest challenge I have

is that not everyone on campus feels the same sense of urgency around these issues that I do. That your teachers do, and several people in engineering do also. And even in engineering and in our office there are things that just collide sometimes with safety issues. So when we're budgeting in a small, in a constrained budget, if I... it's hard for me quite honestly to go out and request \$50,000 or \$100,000 for a climate action planning consultant to come in which is probably what we need. When you have someone from the outside people are honest and more accountable too. They know I am nice and I am going to give them a couple passes if they miss their deadline and I need to stop that. But that's just how it is, at last two but not more than that!

So it's hard for me to advocate, even myself it's hard to ask for that kind of funding when I know we're struggling to fund the safety technician to make sure we don't have a major chemical accident in our labs. Those are some of the things... I feel like for MSU a lot of what we've been doing over the past few years is building up and catching up to the growth that we've had in all the areas. And once we get those stabilized and truly safe then it frees me up to go okay now that everyone is safe this is our next priority, this is our crisis now.

And so it's probably that I am aware of those things because then I am not seeming insensitive but it's also bad that I am aware of those things because it's sort of I'll wait my turn. We look at all of these budget decisions together as a group and cast our opinions on what needs to be funded. If there are... if we need that chemical safety person, I would prioritize that tomorrow over hiring a consultant. You know things like that, so it just makes more work on a distributive group of volunteers basically. Myself not included in that, like I do get paid to work on this stuff, but Julia she volunteers her time for this kind of stuff.

But that's changing, we've made a lot of progress on some of those more... unsettling

aspects of trying to get enough staff working on campus to do what we need to do safely but we've made real progress on that so now it fees up kind of other ways to do it.

I think this is funny to say this while being recorded but it's really true. It's also can be challenging because like... these people don't report to me. So we can make some sweeping changes in residence life tomorrow, that's ultimately not in my control. It's a lot of encouraging, volunteering, demonstrating. But until they decide that this is their priority it doesn't happen. So those things I always joke when people go into sustainability it's like you have responsibility for everything and authority over nothing (laughs.) So it makes it a little hard. You have to do a lot of empathy work I suppose. I think this would be good for you, do you want to try it! You know those kinds of things.

This is years ago, maybe relevant but it stuck with me. I had been in my first job out of college. I was hired to be a sustainability person at UC-San Diego. And we were hosting a really large sustainability related climate conference and there was a delegate from China. And they gave a presentation unlike anything I've ever seen. Just the scale of pollution in the rivers... part of that we want the conference really close, it was a really tight working group, so we weren't sharing that stuff publicly so they felt kind of free to talk about these things.

So what stuck with me was they made a comment, the researchers, that when two people in the Chinese government decide that this is going to be fixed, it will get fixed. That's the authoritarian side. So there's that way that's expedient but I don't know... that's not our way, so we have to do it a different way. We have to do it democratic. It takes a little bit longer but hopefully it's a little bit stronger and more secure. I don't mean that to sound xenophobic. I don't work in China, I just remember being really struck by that comment and kind of... it hits me a lot because if it was... if we lived in that world and one person decided to change it, it

changes. But we are decision by committee, so that's what I have to work in. I don't know that might be an aside, but some days I wish I had that power I guess to sum that up! Some days I wish I was a dictator!

41:05

- I1: Are there any specific parts of the plan that you think have been more successful than other parts and why do you think those parts are successful?
- KB: Yeah I think our scope 1 and scope 2 emissions story is really compelling. I think it's been successful in large part on the 2011 plan because we had to start tracking that. And that became, so we did the inventory, and then we were reporting out on it. So it became an interesting intellectual exercise almost. It got fun in a way, to kind of figure out how can we keep pushing the envelope? We've learned this much on this building, how can we... and that's the question we ask ourselves every time we're recruiting on a project, it's like how can we go further?

And I had interviewed, I was interviewing Craig Ates, who used to be the dean of the Business School because he was in charge when we built of Jabbs Hall and when we got the funding for Norm I asked him what would you have done differently. And he said the only thing he would've done differently was just more aggressive on all of their sustainability efforts in that building. We learned a lot from that first go round with Jabbs. And I think that kind of drives a lot of the people on our campus. It's like how do we keep pushing forward and learning from what we've done. We don't ever want to take the easy route or boring route or do something we can we do or that we've done before. So that's kind of the fun part for that.

It's challenging, the other metrics that we report on which has to do with our scope 3 is

waste diversion and that's challenging because of our location. So some of those things are challenging.

There's a lot of tools and regulatory support that other places have that we don't have. And that's just a policy thing so that's a huge hurdle. And we've sort of... we haven't run afoul of that with... sort of like, we're kind of an anti-solar state. So we've been able to do a lot on our own but from a financial standpoint I always question whether or not... Now that we can make that argument because solar photovoltaics are competitive and wind energy is competitive on a pricewise basis, kW hour basis with other types. But a few years ago it wasn't. And so we just sort of lost some time until the market got competitive to keep up with that.

Where as in when I was working in San Diego we never would've bought our own solar panels, no way. Like that's something that you would get a private company to do. They take the tax credit. You agree to buy the power for the next 15 years, everyone is happy. And that's not legal here. So it's kind of looking at those things that get a little bit frustrating at time.

And University of British Columbia is kind of an interesting example, that presentation I talked about. They have several supportive layers of governmental support that helped them get their carbon neutrality status. One is that there's a federal carbon tax so the benefit from that. And there's a state or provincial department trading mechanism. So that means the way they're accounting and paying for their projects, so they impose a carbon tax on every department. So you would get a read out of what your department generated that year in utility bills and below that would be your carbon tax. That goes into a fund that supports either offsets if that's needed or the upgrades to the expansion of their bio-methane pilot or

things like that. So we don't have any of that at a state level. We certainly don't have that at a federal level but there's some enabling, I would call them supportive regulations that we just don't have. So that's the challenge. I think we're truly making the best of everything we can do. It's just hard knowing that there's so much more that would be possible if that was factored in.

So we're exploring in the climate action plan shadow carbon pricing. So just kind of tracking that. So I've been working with our accountant office and I could do that right now. Tomorrow we could look at our overall emissions and just tack a price on that and just kind of see what we could do. The theory behind that is really I wanted to get people to look, to act as if you have this regulation and see how that would guide the decision making processes. So if you knew that you were going to spend \$2M on offsets would that motivate you to spend \$2M on upgrades. So right now we've been investing about \$200,000 a year in energy efficiency upgrades and renewable energy, sustainability projects. Kind of like a revolving green load funds, so we track those. And those initial projects are paying back, so that's really cool to be able to verify that. but you know so if we added, went from \$200,000 to \$2M what would that look like? And that's about what our carbon offsets would cost every year. (laughs)

I don't have this background, I don't have a background in economics, but it's like how do you gameify this. So maybe I should take some econ classes but it's really fascinating to think how do you introduce some things to get people to act as if and plan as if we were doing that. Then if we do we're prepared for it. Then if we don't we don't need to, we're already doing it kind of a thing. So that's some things that I will be introducing into the plan formally and then we'll see.

The plan as it's shaping up is my wish list and we'll just see what gets ripped out! (laughs) So we'll see! I should probably take some negotiation classes before I hire somebody. That's where we should put the money into a negotiations consultant! Anyways it's fine.

And then there's some interesting partnerships that we rely on with the City of Bozeman too. So I am have a really good, she's lovely, working relationship with the Sustainability Manager at the City of Bozeman. And it's really interesting because with MSU we own everything so we have a lot of control over what we can do. As opposed to like for the city they own very little of the building stock but they're responsible again for the overall initiative of the city. So we kind of act as, we try a lot of stuff out, like experiment and see what works, and what doesn't. And then communicate that to the city and try to bring some of their stuff that they don't have capacity to do back to us and turn those into student classes. So that's kind of an interesting too... interesting partnership. MSU represents about 16% of their electricity overall emissions. So we'll see. It's kind of fun for me to watch what they're trying to do with green tariffs and we're in part of the conversations. But they've taken... they have a coalition of cities around the state, so that allows them to take over a leadership role in that. And then we're just sort of waiting in the wings to benefit from it. So we'll see, it's kind of a back and forth like that too.

I hope that that stays true of sustainability forever the sort of friendly competition where you are really open and honest and share what worked and didn't work. I hope you know it's been interesting to watch this field mature a little bit and evolve. And that's been a hallmark of it is just like transparency and openness. Like this worked for me, hopefully it'll work for you. Hopefully you'll be looking at this next year, that kind of thing. But I don't know let's hope it stays that way the whole time! Like that would be a really bizarre world if people were hiding their climate change secrets but I guess it could happen some day down the road. Sorry that's me off track!

- I1: No worries. I have to go at 5:00 so I only have a few minutes left. And I feel like I asked all my questions. I don't know if Nicole or Megan if you guys have any others?
- I2: I had one question. I think it was kind of similar to one of yours Jessie, but is there anything that wasn't included in the 2011 climate action plan that you would like to see within this one implemented?

52:16

KB: Two big, big things specifically. A specific carbon neutrality date within the century! Hopefully within the half century, hopefully within a few... So yeah we would like carbon neutrality dates for scope 1 and scope 2 and then I am going to bust my ass to get better data so that we can start tackling those scope 3 emissions as well. So right now I am proud of the fact that we report out on our scope 1 and scope... that we did include scope 3 emissions. A lot of campuses don't always do that, or they didn't. I think that's changing but they didn't use to. And I think it's really important to do... but we have to sort of recognize that that... it decentralized so it's harder to collect the data but I am hopeful that that will get easier and easier too so that we can get reliable data and then start to implement some programs to track that down.

That is truly my one and only goal for this updated climate action plan is a public... carbon neutrality goal that we feel confident. Are you interviewing UM too or not? So it's really interesting because the two schools are so different even though we're in the same state. So they came out with a public carbon neutrality goal in their first climate action plan of 2020. And there's no... I don't mean this harshly, but no plan to do that. And you can see that

this happens quite often with planning exercises. They either are... this is what we've held back and we've been really conservative and studied and we think this is what we can do. Versus people that will come out and say this what we want to do and we'll figure it out later. We are firmly as an engineering school in the former category. It's very hard even now to get, it's hard even sometimes to get some of the most aggressive faculty that are working in this realm to talk about carbon neutrality because they don't fundamentally believe it's possible.

So when you talk about net carbon neutrality and these... and I get where they're coming from, I really do. There's a lot of unknowns. But from a sustainability communication standpoint, I need that language. I need that to soften a little bit on their hesitation and get behind that language. Because you know if we drop our emissions 98% and we struggle with that last 2% hallelujah! As opposed to just saying oh no it can't be done.

I liken it to.. hopefully you guys haven't ever done this but you go on diet and it's always like the last 5 pounds that just won't budge. It's like okay what are you going to do with that. You know you can't focus on just... I don't want people to focus on only the parts that we can't accomplish. We need to try as if we're going to succeed and we need to know that we'll learn and get better as we go. So yeah they came out with that carbon neutrality plan without real... evaluating the steps. And I am not critical of them because they didn't have the expertise on their campus to do that.

We have the benefit of building engineers and campus engineering department that's just different. So I am really excited to have a public target because again that will help us reach our goals. And then the second part is to have the financial side that goes with it. Or at least something that I can hand over to the financial side. So there might be two documents that circulate.

And then make it a little more poster like, a little more user friendly so that people can understand that everyone has a role to play in this in some ways, or to get behind those roles and see what on an individual level you can do. That's a hard part about communicating this and you guys... I am probably preaching the choir of sort of reconciling what is possible at the individual level versus what you really need, someone making decisions that you'll never even know about! Or have no... how we get our... I mean especially given where we are. I used to bike everywhere and like my carbon footprint never radically changed even after 3 years of only driving 600 miles a year to go to Missoula a couple times a year because of where I get my power and my heat. So that's kind of the challenge. I think the individual actions are important but people also need to realize that there's only so much you can do by like... every little thing that we do. All that stuff. So I would love to have every student a little bit more literate about that and I think it would drive better conversations. And hopefully better conversations with their parents and grand parents and whoever has the money to make the decision at that time.

Sorry I know you need to go but hit me up if you follow up questions. I am always here for you. I am kind of sometimes can see what you're see what you're doing in box. And I literally was blown away, I told Julia by the literature review. You captured so much nuance and so much... I was like how did you know this just from a literature review. It blew my mind, and Julia felt the same way too. So please know that you have really inspired us, motivated us. And yeah are doing a lot of the legwork for how we're going to change the conversation around climate action planning on campus. In the words of Paul Aschapel, it's a lot more involved than I thought it was! (laughing) I almost fell off my chair when he said that. He's like this is a lot more involved than I thought it was! (laughing) Like I know! But

that's good too! Anyway happy Wednesday. Or I can stay on later if you guys can but I don't want to keep you too. It has been a week.

- I1: Thank you so much for your time and answering all our questions and all that so...
- KB: Good luck with the rest of your interviews, especially... I hope my impression of sustainability directors being really honest and transparent comes through because we all commiserate at times. My ultimate goal is that someone some day will take a lot of credit for all the work that we're doing! Look what I did, some legislator or president will take a lot of credit for all the work you guys get to do. That will be a secret dream!

1:00:35